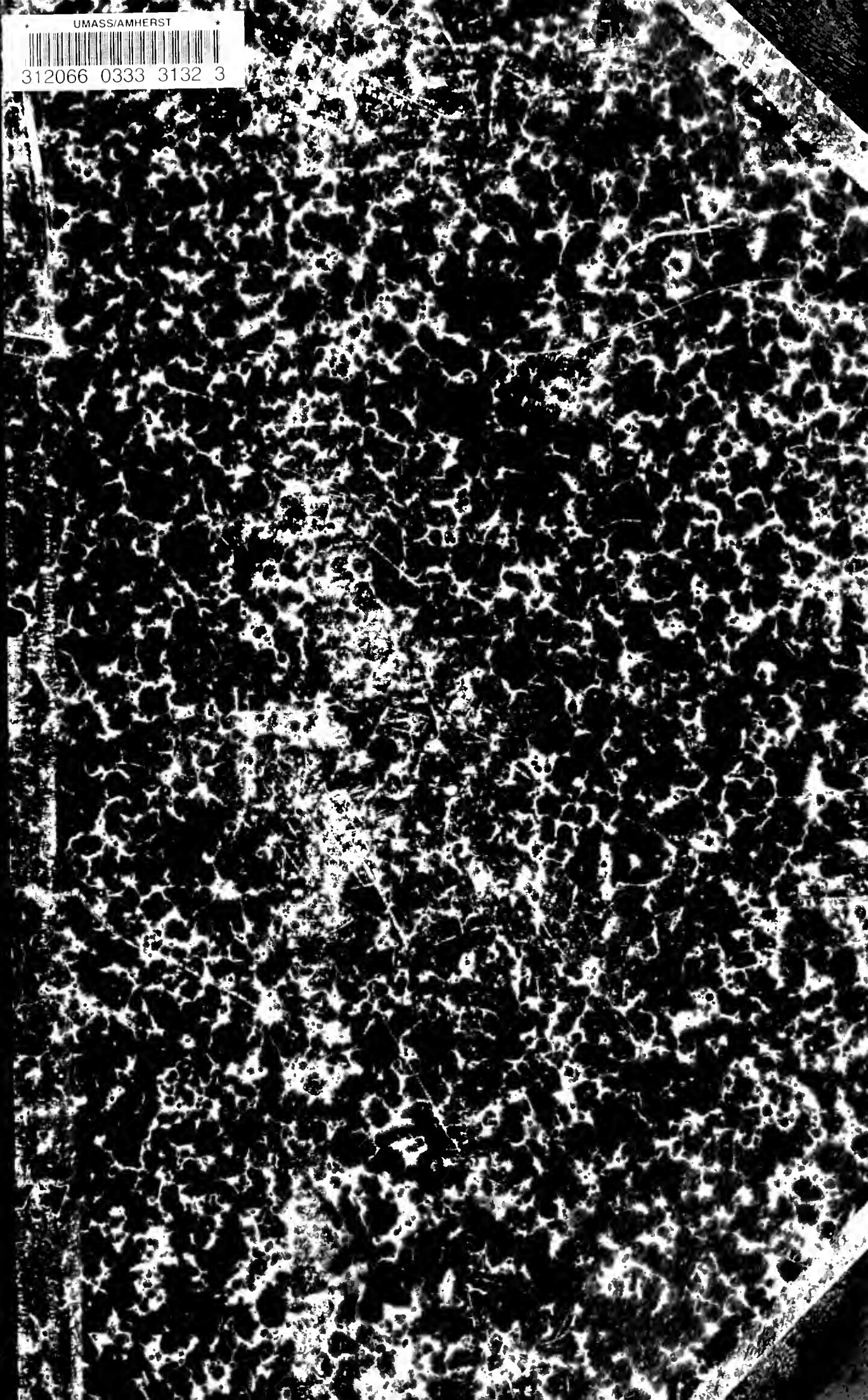


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THE ————*

* AMERICAN *

———*——— FLORIST.

A SEMI-MONTHLY JOURNAL FOR THE TRADE.

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VOLUME IV.

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CHICAGO:
AMERICAN FLORIST COMPANY.

1889.



THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, AUGUST 15, 1888.

With Supplement. No. 73.

THE AMERICAN FLORIST

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SOCIETY OF AMERICAN FLORISTS.

FOURTH ANNUAL MEETING

—AT—

New York, August 21, 22, 23, 1888.

E. G. Hill, president; John N. May, vice presi-
dent; M. A. Hunt, treasurer; Wm. J. Stewart,
secretary.

THE MEETING

Will be held in

COOPER UNION,

At the junction of Third Ave., Fourth Ave. and
Eighth Street, and the

EXHIBITION IN NILSSON HALL,

Fifteenth Street, between Third and Fourth
Aves. See map in Convention Supplement.

Railroad Rates to the Meeting.

The Eastern Traffic Association, or more properly the Trunk Line Association, having refused permission to the various trunk lines to make a reduced rate for the New York meeting, those in Trunk Line territory will have to secure the best rate they can from individual roads, scalpers, etc., or pay full rates. The Trunk Line territory extends west to Pittsburg and Buffalo.

The Central Traffic Association has made a rate of one fare for the round trip in its territory, which extends east to Pittsburg or Buffalo, and the rate will be good only to those points. From there on full fare will have to be paid. To secure this rate tickets must be purchased August 19 or 20, and will be good only on day of sale, as stamped on back by selling agent. Returning they will be good on trains leaving western termini of trunk lines—namely Buffalo, Pittsburg or other cities on line dividing Trunk Line and Central Traffic Association territory—not later than August 25. These tickets will be round trip special excursion tickets and certificates will not be necessary. The remarkably short limit placed on these tickets render them of but little value to those who wish to remain in New York more than one day after the meeting adjourns, August 23.

The Chicago club has succeeded in securing a special round trip rate of \$27.75 from Chicago to New York via Niagara

Falls, and will undoubtedly go by that route. The special train will leave Chicago at 3 p. m. Sunday, August 19, reaching Niagara Falls at 8 o'clock the following morning. The train will lay at the falls until 2 p. m., thus giving all an abundance of time to take in the sights at this famous resort. Leaving the falls at 2 p. m. the train will arrive at New York at 7 o'clock the following morning, Tuesday August 21. A dining car will be attached to the train at Chicago and dinner will be served on the train at 5:30 p. m. Breakfast and lunch may be had at Niagara Falls and 6 o'clock dinner on the train. These tickets will be on sale at the office of the AMERICAN FLORIST, 54 La Salle street, Saturday, August 18, and Sunday, August 19, from 11 a. m. till 2:30 p. m. The train starts at 3 p. m. from the Dearborn station, on Polk street, foot of Dearborn street. The limit on these tickets will be arranged to suit all. The sleeping car diagrams will be at this office after August 14 where berths may be secured. Parties from other points who expect to join the Chicago club may have berths reserved for them by addressing this office. The extra charge for sleeper will be \$5 each way. This may be reduced some by chartering the cars at \$105 a car and dividing the amount pro rata among the occupants. If the number going will warrant it this will be done. Unfortunately no special rate could be secured from points east of Chicago even by this route, but all located west of Chicago would do well to come to that city and go with the Chicago club, as above rate is lower than can be secured by any other route, in addition to allowing a longer time to those who wish to make a stay east after the meeting adjourns. Those west of Chicago can use the rate of one and one third fares on the certificate plan to Chicago, granted by the Western Traffic Association. This rate is good on all the western roads worth traveling on. Certificates may be secured from the ticket agent at time of purchasing ticket.

Convention Notes.

Space in the exhibition hall is in great demand. Every foot will be occupied. A general discussion will follow each essay, and members are cordially invited to take part. Specialists in any subject under discussion are particularly requested to express their views. All members taking part in such debates will be limited to five minutes each.

State vice presidents will be provided with distinguishing badges, marked with the name of their respective states, and strangers desirous of meeting particular members will most readily accomplish their object by applying to the vice presidents of states where such members be-

long. State vice presidents are expected to keep a list of the delegates from their respective states, with hotel at which each is stopping, and to keep their delegations together as much as possible.

New England Delegates.

Delegates desirous of going to the convention via Boston are notified that the Boston party will leave via Fall River Line at 7 p. m. Monday, August 20. A meeting of all those who propose to go at that time will be held at the office of Wm. J. Stewart, 67 Bromfield Street, on Saturday evening, August 18, at 7:30, and all who wish to have state rooms reserved for them must notify Benj. Grey, Malden, Mass., previous to that meeting. A special car will be provided for the delegation with a supper on board the boat, and all who can make it convenient will find it most agreeable to go with the party.

Exhibition Notes.

The New York club will offer premiums as follows:

- Best original floral design. . . . \$50.
- Best funeral design. . . . \$50.
- Best dinner table decoration. . . \$50.
- Best bridal bouquet. . . . \$25.

In addition to the above premiums certificates of merit will be awarded by a committee of the S. A. F. to any other designs or exhibit which may be considered worthy of the distinction. It is hoped that the liberal premiums for cut flower work will induce a lively competition. Designs may be entered "not for competition" if desired. Diplomas and certificates will also be awarded for plants.

Work for the National Society.

At the Philadelphia meeting of the S. A. F. Mr. Halliday made an effort to have a standing committee on nomenclature appointed. Each one of the executive committee agreed that it would be a good stroke of business, but they could not have fully appreciated it for the reason that their time was spent on other matters, some of which I feel were of far less value. As one thinks the matter over many instances occur to mind in which the work of such a committee would be of much benefit, not only to the gardener and florist, but to the public and the society itself as an organization. This committee should be composed of a few of our very best and most careful men. Men who know a fern from a palu, a lily from a richardia, etc.

As I understand it this committee would be required to pass judgment on all plants now being catalogued, giving description, classify them and give each a name. After the work is complete on all plants now in use, we would look for

reports annually on all new introductions. This would work a great benefit besides preventing considerable loss. If I should see quoted in a catalogue a yellow verbenas at \$5 each I must now look to see whose catalogue it is. If it be one of the very few reliable firms which possess my confidence, off goes the \$5, all well and good, but this country now is too large for me to attempt to make the acquaintance of all growers and learn who are to be trusted and who not. The character of a plant is not so difficult to judge. If this party be some one unknown to me I would be apt to say \$5 is worth more to me than a plant I know nothing about, or I may jump at it and get a dirty white verbenas and \$5 worth of experience. This is not an uncommon predicament to find oneself in, and it injures the whole trade. In the first place if the verbenas is really yellow and I do not purchase it for fear of being swindled, the introducer is at a loss and I am deprived of the benefits such a plant would be to me. On the other hand if both plant and introducer are humbugs and I do purchase, I lose \$5 and give it towards the support of a scoundrel that he may live the longer to swindle some one else. If this man, although unknown to me, refers in his advertisement to his certificate given by the S. A. F., I need but to refer to my printed report of the society proceedings and there find it O. K. This would add very much to the value of our annual publication and would help very much to increase the society's membership.

This committee could also change some names of plants and settle some points of difference. Their rulings might not be accepted all over the globe, but there would be very few in the United States who would undertake to discredit the society's rulings in such matters.

If one of your customers orders a "Day Lily" to-morrow, what will you send, a funkia or hemerocallis? Does it not look rather queer to receive an order for a white scarlet geranium? In the August number of *Popular Gardening* I notice a "rose colored white nymphaea." I suppose if a florist wished to have his glass covered with a red wash in place of white he would say put on a red whitewash.

Milwaukee, Wis.

C. B. W.

La Belle France.

Paris Letter.

Probably the most noteworthy features of the florist business, to the American visitor, at the beautiful capital, are her markets; which are held twice each week at three different places, making really a daily market.

One is devoted mainly to plants, the other two to both plants and flowers. Two generally last the whole day while at the other most stock is closed out by the middle of the forenoon. Wholesale growers of plants leave home at about 7 P. M. or in time to reach the market by 9 or 10 P. M. and their trading lasts until about 7 in the morning, making a full night of it, usually twice a week. I am told the French florists are the hardest workers on the continent, and that the Paris greenhouse workmen receives 30 to 40 per cent. better pay than in other parts of France, say about \$35 per month and lodging.

Bouquets, pot plants and large bunches of cut flowers offered at retail in Paris are almost invariably covered with white paper which leaves nothing exposed but the top of the plant or bouquet, covering

the dirty pots and stems, wrapping it for delivery, but the effect is rather odd.

In former years yellow and black immortelle wreaths were much used for funeral purposes but within two or three years those of glass and porcelain have superseded the immortelles. They are largely made of purple and black but white is also used. I saw two cemeteries in the suburbs in which these had been so freely used that the whole general appearance of the plot at a distance was a purplish black. Of course these of glass beads as well as the porcelain retain their appearance for years. I should judge that the business done in the Paris shops in this class of stock is as large as that in fresh flowers. I fear the cut flower growers have no love for it.

The best retail flower stores are well kept in Paris. Handsomely fitted up and decorated with handsome vases, mirrors palms, ferns etc. They sell very handsome large baskets filled with polyantha roses in bloom in pots set in green moss, at from \$6 to \$10 each. As high as \$5000 per year rental is paid. Here as in London cut blooms of orchids have a large sale in the best places. Of plants not much used with us I noticed pot grown dahlias, and *Calceolaria rugosa*. At the unveiling of the Gambetta monument July 13 there were a large number of decorations of which perhaps half were of fresh flowers, large wreaths five to seven feet across but in very poor style; other wreaths and favors were made with bronzed metal leaves (laurel shaped) of glass, of porcelain and of yellow immortelles. Fine grasses are used with bouquet and basket work and sometimes with very good effect. Here as well as in London several kinds of the best grasses are sold in quantity in the wholesale markets, they are but slightly dried.

Lyon has reason to be proud of her horticultural record; she claims the address of many who have made their mark. Lacharme, Sisley, Guillot, Pernet, Crozy, Hoste, Carle, Levet and many others have by years of careful study on a single class placed their productions at the head of the horticultural world. I spent three very interesting though rainy days in looking at the collections and novelties in roses, dahlias, gladiolus, carnations and seed trials; also in Golden Head Park. Messrs. Lille and Bene are doing very careful work in seed trials and the park and Botanical Gardens are very complete; a feature is a palm house sixty feet high. Here I saw a remarkably complete collection of geraniums and coleus in charge of Mr. Jules Christien, and of palms and orchids in the care of Mr. F. Gaulain and the Botanical Gardens were very complete in collections of clematis and roses as well as all plants less known to commerce. The coat of arms of the city of Lyon—a rampant gnaphalium lion on a red alternanthera ground with a border of black coleus and golden feverfew reminded me of home where conversation is easier than through the broken German which I talk to an interpreter to translate into French.

J. C. V.

The Heating Question.

Mr. James D. Reynolds, Riverside, Ill., has undertaken to prepare a paper for the coming meeting of the S. A. F. at New York on "Modes of Heating. Their relative cost of construction and operation," with the object of aiding those who are building or enlarging greenhouses in deciding upon the best system of heating.

As the best possible guide must be the experience of others he requests replies to the following questions:

1. What system of heating do you use?
2. How many square feet of glass (counting roofs, sides and ends, when glazed) do you heat by this system?
3. At what average temperature do you keep your houses during the firing season?
4. State make, size and cost of boiler.
5. If you use steam or water under pressure, state what pressure you run at.
6. What is the total length of piping for distributing, flow and return, and what kind and sized pipe is it?
7. What was the total cost of heating apparatus, including boiler, pipe, boiler-pit and labor of fitting?
8. How low is the floor of your boiler-pit below the floor of house?
9. What kind of coal, at what price, delivered, and how many tons do you use in one season?
10. Give an approximate estimate of the cost per season of labor employed exclusively in firing and looking after the heating apparatus?

It is understood that all the above questions apply only to so much of your establishment as is heated on one and the same system.

Necessarily the experience of one who has tried more than one system, under similar conditions, must be of greatly increased value, hence if two parts of your houses are heated by different systems, or if you have used water and are now using steam (or vice versa), you will confer a very great favor by answering the above list of questions separately, for each system, and also stating which system you prefer, and in what its main advantage consists.

We hope that all will take time to answer above questions, as the deductions to be drawn from a large number of answers from all sections can not but be of great value, and they will be published for the benefit of the whole trade. Mail your answers *at once* to Mr. James D. Reynolds, Riverside, Cook county, Ill.

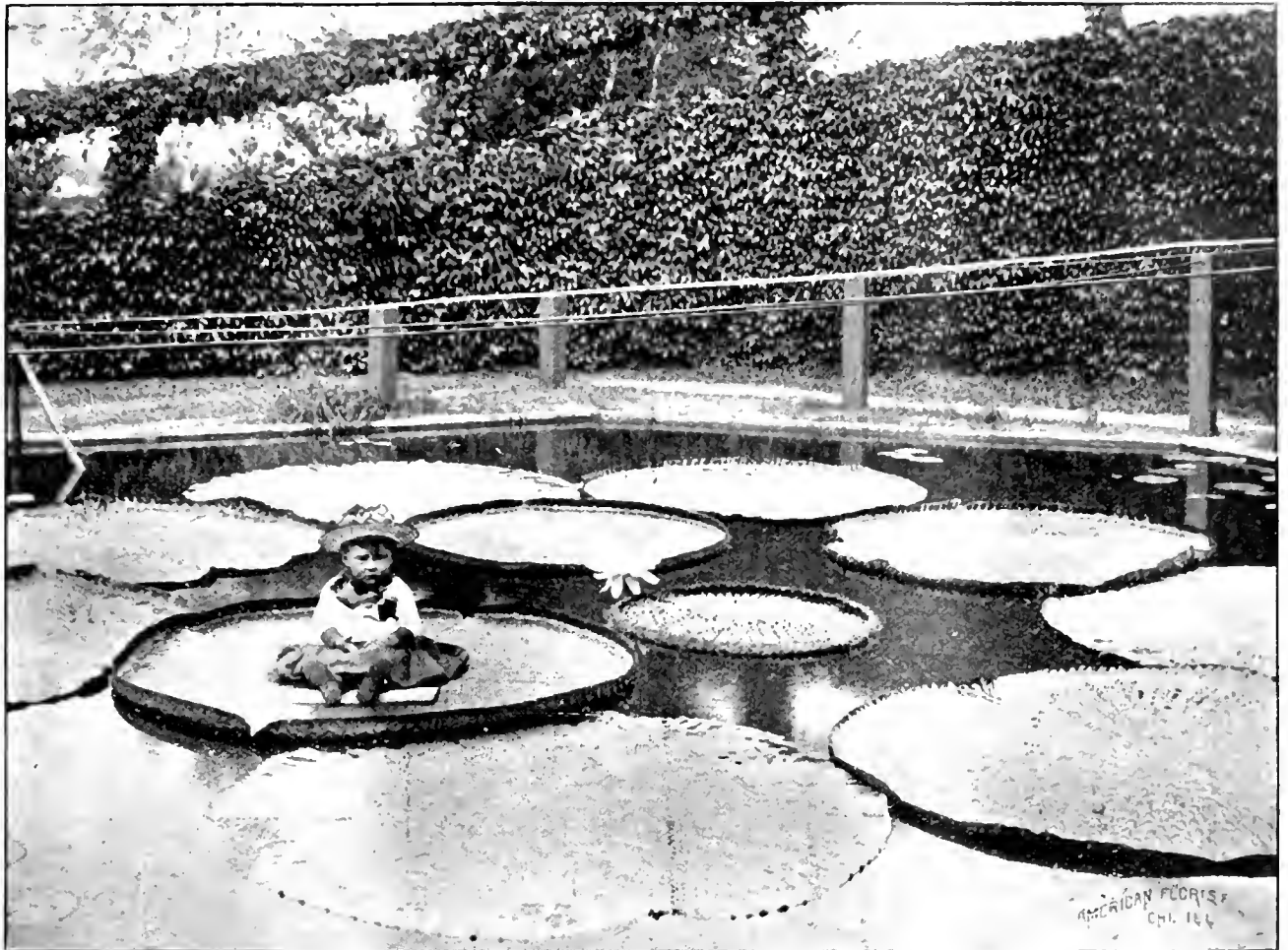
The Victoria Regia.

So much has been written from time to time about this truly magnificent aquatic that to some the subject may have a "chestnutty" ring about it, still I think it may interest some readers of the AMERICAN FLORIST to know that the Victoria Regia has been successfully grown and flowered at "Sandyside," Yarmouth Port, Mass., the residence of Mrs. John Simpkins. That this has been done in the open air, or nearly so, will be of additional interest perhaps, as showing that with a little extra care and attention this queen of lilies can be flowered as far north as Massachusetts.

The plant in question was raised from a seed sown under glass January 13, 1888. Until the seed germinated (which was about February 1), the temperature of the water was kept steadily at 90°, after that time a uniform temperature of 85° was maintained. By May 5 the plant had made rapid progress, having leaves at that time four feet in diameter. It was then decided that the plant should be placed in its summer quarters—a large pond thirty feet wide and two and one half feet deep, artificially heated from the greenhouse. Good rich soil to a depth of twelve inches was wheeled in and the plant carefully planted in the center, care being taken to first well warm both soil and water.

As the mean temperature of the month of May in this latitude is much too low for any plant of a tropical nature, some protection for this lily was necessary for the first few weeks, this was given in the shape of a thin cotton cloth rolled down over the pond, the framework to support the cloth consisting of stout galvanized iron wires stretched from side to side.

By heating the water in the pond to 90° sufficient heat was thrown off to well warm the volume of air under the cloth, and no difficulty was experienced in maintaining a temperature of 65° or 70°, when much lower than either of those



VICTORIA REGIA BLOOMING OUT OF DOORS AT "SANDYSIDE," YARMOUTH PORT, MASS

figures outside. Since warm weather set in we have dispensed with the cloth except on windy days, which, by the way, are very numerous on Cape Cod, and are by far the worst enemy we have to contend with in growing the Victoria Regia.

When once established in its new quarters the leaves rapidly increased in size until they reached a diameter of six feet, and June 17, five months and four days after sowing the seed, the first flower opened. From that date until the present time, July 9, it has flowered every third or fourth night. The flowers are from ten to twelve inches in diameter and of a beautiful creamy white color the first night, while opening on the afternoon of the second day they rapidly change to a deep pink and soon start on their downward journey to the bottom of the pond.

Since flowering no increase in size of leaf has been observed, rather otherwise, still considerable gain is made in the size of the plant, which is now twenty-three feet in diameter and still increasing.

The accompanying illustration is from a photograph of the pond taken June 21, which shows a little boy 3 years old seated on the leaf, his weight making little or no impression on it.

While we had some success last year in our first attempt at growing the Vic-

toria Regia outside, having obtained two or three flowers, this year promises much better results, and bids fair to give us three clear months of continuous flowering.

JAMES BRYDON.

Berlin Markets.

The former manner of using the public squares of the town as markets, with such displays of vegetables, flowers, fish and meat as the day would have to offer, has been discarded for the past two years by the municipality, which has provided public halls where farmers and vendors had to confine their activity under the supervision of the police, who collect the market dues, keep order and inspect the soundness of all goods offered to the public. Although the halls are elaborate in architecture and built with a view to accommodate many, the Berliners do not favor the new order of things, and vendors especially consider their former accommodations in the open air as preferable to present regulations, in fact not a few are outspoken that the new order of things is a failure. The public at large however is glad to see these marauders on public comfort confined to their stalls and are ready to provide for additional market facilities if such should

prove to be required, of which they are to be convinced as yet.

Thus far they say the Central Market supplies facilities for the wholesale business and the seven additional halls scattered through the town afford plenty of room for retailing, especially as the Central market is given to retail business after 9 o'clock in the morning. Wholesale business being transacted from 2 a. m. to 8 a. m. What is left unsold by that time in a wholesale way is turned over to the different auctioneers (six in number, who divide into the diverse line of goods such as eggs, butter and cheese, foreign fruits, fish, lobsters, etc., game and poultry, meats, vegetables and flowers, each one serving in this or the other line) and the remnants are sold at prices which determine for the rest of the day the value of goods sold at private sale for lots to come the following morning. Although auction prices as a rule would be inferior, still the hotel keepers and restaurant owners flock to these auctions expecting to buy there for less money. However they bid each other up and thereby the results are not detrimental to the market interests.

The auction business is carried on more sedately than in the United States. When the auctions commence the respective auctioneers ring the bell to call

the buyers together who are informed already by a blackboard at what hour certain lots are to be offered, and the fun starts. The auctioneer has a clerk with powerful lungs who describes the goods which are shown on a counter behind iron bars, in front of which the buyers congregate, and to facilitate the inspection of merchandise a platform with three steps is built, enabling the rear man to look over the head of the individual in front of him. Then the bidding is started, which is quite active and announced in sonorous voice how it stands but once, until it slackens, when two or three times the bid is repeated until the "gone" is announced by a loud hit with a rattan on the counter. The buyer gets his note of sale immediately after the purchase from the auctioneer who then proceeds with the next lot, whilst the purchaser enforces his bargain by paying out the funds at the cashier's office and turns his order for delivery over to his own servant or a public porter, who has to remove the goods at once. This way, though in a small space, a quick and prompt business can be done without much confusion and absolutely no pilfering on the part of the public. As auctioneer No. 1 is done No. 2 rings his bell and by 9 o'clock the wholesale lots are disposed of and retailing is the order of the day till 2 o'clock, when the halls are closed till five. Then they resume business till 8 p. m., when all retailing must stop.

The Central Market is a building covered with a roof, fully the size of the New York Central Railroad depot, only not with a span roof, but with an ordinary flat roof admitting the light from the four sides in the top structure. Iron columns support the roof. The hall is divided into four grand partitions by three balcony walks extending the entire length of the building, and a balcony walk (or gallery) running all around the building, same as we find it in most churches. These balconies are used for the sale of general goods and are divided into stalls, so that from a broom to a foot stool, from a pin to a carving knife, etc., can be found on sale if the "corridors"—as these balcony walks are called—are visited. The sight from above on the market below is truly grand and imposing, as the flowers are generally sold from the balconies an observer is at once pleasantly surrounded.

Thus far the description has to be applied to Central Market only, where the combined wholesale and retail markets are carried on, because the railroad station enables goods to be carted immediately into the market. The other market halls are less grand in structure but probably more elaborate in architecture. The system of an opened fan seems to have been observed in erecting these buildings which face different streets so as to be accessible from many sides and still offering as much stall room as possible. These side markets open business at 5 a. m., confining their activity to retail business only. It is to one of these the flower market has taken its wings to evade the auction sales which the rules of Central Market insist upon. Possibly to this very reason may be attributed the failure of the Berlin flower market, which, if it looked for healthy competition, might be as thriving as the bustle in other goods indicates the Central Market to be. They complain that Central Market is too small and that ten times its size would hardly be adequate to the wants of a Berlin wholesale market; also that retailing should be carried

on in stores in town entirely, whilst the eight market halls should be given entirely up to the wholesale business, with a branch in each of the eight buildings.

In the Linden Market the combination of Messrs. Chouc, Lackner and Schultz have rented from the municipality a space partitioned off in glass and heated by warm water pipes, which probably is 50 x 100 feet, where they and any who apply for space to them can show off plants and keep them on sale, at a cost of 45 pfennigs per square meter, or about 10 cents per day per square yard in



FLORAL BANNER

American money. The place is filled with palms, decorative plants and garden stuff, but it seems to be idle, at least very little business is going on there. The summer season is not to be blamed for it since the florists' booths outside this reserved space are busy. The rental of said wholesale flower hall is only 18,000 marks, or about \$4,500 a year, therefore not unreasonable. The management of it is however more or less discouraged. "I have sent \$500 worth of palms there," said one, "to see them spoil on my hands. I have carted \$500 worth of plants there and took them back with about 25 cents sales, after spending there my time from 5 a. m. to 2 p. m. I am disgusted; the idea seems to be premature." Another said: "Well we have to wait, the seed is sown, now we must await the germinating. My children may reap the benefit, I despair of seeing it, but did not Covent Garden meet with the same experience? Look at it now. No reason why our enterprise should not flourish in the course of years." The question put to a florist stall keeper, "Why don't you join the flower hall over there?" was answered: "Oh, they retail and I can make more right here than if I am locked up in that hall. There is more passage here and people have it handier." "Where do you get your cut flowers then? Will they sell you any if you run short?" was answered: "Cut flowers are handled here entirely by middlemen. They go to

the nurseries where they buy outright and pay cash for what they cut, then these men come to us and sell us with a moderate profit. They also furnish the stores in town and the very men you see occupy your hall will be only too glad to sell to these middlemen and take their money in preference to lugging their stuff into the flower hall. There are of course a few cut flowers now in that hall but you can go there and buy any quantity as cheap as I could. Why then should I patronize them? Yes, if they would confine their efforts to dealing with the trade only and have their shingle out as wholesalers only who refuse to retail, I and many others would willingly club together and fill a market building which would be bigger than this whole market hall of the municipality and all of us would do prosperous business and could afford to centralize the flower interests. As it is I believe they never will succeed. Why should I pay them any more than I pay to the town? Heated rooms? I don't need them, it is warm enough out here for my wants. Give me length of counter room and I am all right, but just turn around here and look at this 8 x 8 feet stall, I do not need this depth, it is all waste, I can not make a show of any account. Oh these market authorities they have to learn yet a great deal before they will get us reconciled to the new system."

Similar information was gathered at the other florist stalls and now I leave to the reader this subject, who contemplates to do something for his native town in the way of a flower market, to learn what not to do, for experience here tells a story which illustrates how practical workings must differ from theoretical problems. For this Berlin market system when inaugurated was intended to be an improvement over the Halles Centrales in Paris, which had been studied, but, which I have not as yet had the opportunity to examine myself. A. R.

Floral Banner.

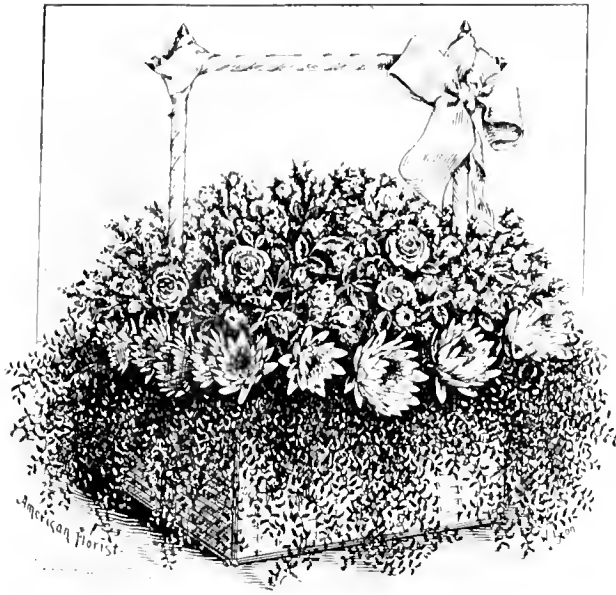
The accompanying sketch represents the famous Labarum or banner borne at the head of the Roman army during the reign of the emperor Constantine, when on his way to attack Maxentius. It is designed to commemorate the miraculous vision in the sky, which is said to have appeared to Constantine, and was the moving cause of his conversion to christianity.

The height of the design was over six feet. On the banner is the Greek initials of the word Christ in scarlet and pale yellow. The crown is bright orange, and is in imitation of the golden crown that was set with precious stones and enclosed the mysterious monogram. The cross at the top of pure white is designed to represent the flaming cross which appeared in the heavens with the inscription "In hoc signo vinces" thereon.

It was designed and made for the Episcopal church at Havana, Ills., by H. A. Collins of that city.

New York Notes and Comments.

It is quite probable that a large private flower show will be held in the autumn in addition to the Horticultural Society's chrysanthemum show. The private show in question will consist of rare and curious plants and flowers, instead of chrysanthemums. A well-advertised novelty in this line usually attracts. People who care but little for flowers as a rule will go to see a peristeria, or giant water lily,



WEDDING BASKET

just as a matter of curiosity. Probably the most successful chrysanthemum show held in New York was during the Mikado craze, when the Japanese mania advertised the flowers. There is every prospect that the display at the convention will be very fine; it is certainly the best opportunity to introduce novelties or show meritorious culture. And a certificate from the national society ought to be a guarantee of value.

Some of the agricultural authorities are discussing the question of patenting new varieties of plants. It often does seem that the raiser gets little credit and much vexation through the lack of some such protection. But how far a patent would protect is an open question; it is often an uncertain matter with mechanical appliances, and it might be still more uncertain with plants.

Some new houses recently visited have the rafters 7 feet 6 inches apart, sash bars but 1 3/4 inches, the idea being to secure as much light as possible. Strength is secured by a slender iron rod running lengthwise, and iron stays at the angles of the roof. The ideal rose house must give plenty of light, especially during such dull winters as we have had for some seasons past.

Rather a novel greenhouse seen recently was a second floor built over the potting shed, with movable benches which could be raised or lowered. The idea of its construction was that of using it to bring on young stuff rapidly in the winter, or blooming pot hybrids.

Mr. Monahan, lately with Mr. Slaughter, of Madison, has started in business for himself at that place. He will go in chiefly for roses.

Mr. T. H. Spaulding, president of the New York Horticultural Society, now issues a catalogue of his chrysanthemums. He is an enthusiastic grower of these plants, and has raised many good seedlings. But it is a little difficult for one making up a list of the trade to decide between amateurs and professionals. Very small is the list of amateur growers in this country who do not try to make

their hobby support itself. One case in point is that of a millionaire, who, by the way, doesn't care a rap for flowers himself, but has a few houses merely because most men in his position do. He built a few new houses on the express condition that they paid for themselves, and then the gardener planted roses and marketed them until he made these expenses. Somehow it seems as if a woman who tires herself out in the garden merely because she loves flowers does more for the benefit of horticulture than the commercially inclined millionaire.

A special meeting of the executive committee of the Florists' Club was held on August 3, to make further arrangements for the August exhibition. They still had a lot of work before them. At the regular meeting of the club August 8, final arrangements were made. Every effort will be made to prevent any "hitch" in the proceedings, but it is a matter calling for much work and consideration.

It is a matter for regret that several of the florists' clubs are reported in a somewhat languishing condition. We hear this of Cleveland and Rochester; and now we are told that the Detroit club is rather debilitated. It is to be hoped that the national meeting will act as a universal reviver. Lack of interest or poor business management is usually responsible in such cases.

The decorative plants grown on tropical plantations are to be brought here and established indoors, the idea being to get at least a year's start in growing them. According to present appearances they are not so shapely when they come from the plantation as when grown inside, but three months inside improves their appearance wonderfully. Some raphis under this treatment looked very nice, so did the perpetually-useful latania. It is the idea of the importers either to grow the plants on in their own houses, or to sell consignments right from the vessel, so that buyers may start them on to suit. *Ficus elastica* is not a success as an importation; it does not bear the transit well.

Some of our growers complain bitterly of the large nurserymen abroad. They say, with some reason, too, that a large amateur buyer is always better treated than a professional; also, that they buy cheap stuff from the continental growers and send it out as their own. They do not pack as well as our nurserymen either; their boxes look as if they were built out of doors, and they appear to think that Americans want the whole earth, judging from the generous amount of soil they throw in. All this increases the expense largely, and causes much dissatisfaction. We must remark in confidence, however, that foreign growers are not the only ones reported to treat amateurs better than professionals.

There is a general housecleaning going on now at all the establishments near New York, and an unwonted lavishness is displayed in flower beds and baskets. Evidently the coming convention is encouraging a love for flowers in professional ranks, and it is to be hoped it will do as much outside of the business.

EMILY LOUISE TAPLIN.

Wedding Basket.

This souvenir to present to brides is a very elegant design. It is a square basket with a high square handle, crossed at the corners. The handle is covered with satin ribbon and has a corner sash. Around the edge of the basket is a band of water lilies, with a fringing of smilax falling from underneath them. Moss roses and buds of both pink and white compose the rest of the filling. The floral combination is simple, but superb. The basket illustrated was arranged by Burnham, of New York.

An American Climbing Hydrangea.

[*Decumaria barbara*.]

The climbing hydrangea illustrated in the last issue of the FLORIST and described by Mr. Wm. Falconer, is a climber having much to recommend it and its merits should be better appreciated.

My object now is to call attention to a native variety. The description of the Japanese variety also accurately describes the American, except that the latter has an added virtue in a delicious odor. Its blooms are pure cream white in lace-like corymbs of large size.

Several years ago in a kindly and instructive letter from Prof. Thos. Meehan, he informed me of this very desirable climber being abundantly found in this portion of the United States and advised my searching for it in my rambles in the woods after botanical specimens. As soon as I read this letter I felt confident that I had seen it often, but was not acquainted with its name, and close alliance with the Japan variety. I mailed him specimen branches and was at once assured that I had found what he alluded to. I had to wait until the following year to see it again in flower. When I did I was greatly pleased with it under my new knowledge of its name. Believing that this variety is not generally known to be native to America, or its merits appreciated, I mailed specimens of both plant and flowers to several prominent botanists and florists hoping to introduce it to the notice of flower lovers.

The illustration in the AMERICAN FLORIST does not do justice to the specimens I find here, lacking age and consequently size. Here trees forty feet high from base to topmost boughs, are one luxuri-

ant mass of cumulative branches. The tree upon which it clammers having its identity almost hidden, and flowers in greatest abundance from base to top. When finding no further room to climb, it branches out in luxuriant masses. It is a wondrously beautiful sight these great forest trees so clothed. Both Mr. Manning and Mr. Murdoch, to whom I sent flowers, wrote me of the pleasing impression the flowers created. I also sent specimens to Dr. Asa Gray, to whom I am under many obligations for naming many botanical specimens, and who asked me to send a specimen for the Harvard Botanic Gardens, which I am sorry I failed to do, other pressing duties crowding it out of mind, now alas, as it is too late I regret my failure to do so.

MRS. J. S. R. THOMSON.

Spartanburg, S. C.



Cattleya Culture in the U. S

BY WM. MATHEWS.

By request of my correspondents I venture to give my experience in cattleya culture. I suppose it will be best to begin with the mode of starting the imported plants, which by all means should be collected in their season of rest, and should in every case have good sound dormant eyes, a condition it is very often difficult for importers to get them in. They should neither be heated or chilled in their voyage from their native home to the salesroom of importers, etc.

I have had good success on many occasions and on other occasions what I will call very bad luck, as I have had some lots that to all appearance looked very fine and healthy, but which I could not establish, and on the other hand I have had a shipment of plants that did not look over inviting that established readily. It is my opinion that plants which have been subject to excessive heat and close confinement, and plants that have been subjected to excessive cold are the ones that are hard to deal with. I think it very hard to recognize such a condition by ocular power. Take them home, pot them up, keep them a few days in a warm moist temperature, and you will soon realize their condition. To any one who intends to invest moderately as a beginning I conscientiously advise them to buy moderate priced, established plants, some that will bloom when the season comes round; he will then feel a satisfaction that he has something for his money and a quicker and better return than he will by buying imported plants with a risk of their growing, and then waiting a couple of seasons for them to bloom. I think perhaps the readers of this will think that I am not nearing the point in prefacing in this way my experience in the culture of cattleyas.

In the first place I will say that it is primarily necessary to give plenty of drainage, filling the pots (which should not be too large) three fourths full of clean broken pots, take the plants, if newly imported cut off all the decayed matter thoroughly, look out for scale, washing the leaves and bulbs thoroughly,

tie some neat stakes to each plant allowing the stakes to be long enough to touch the bottom of pot so that the base of the plant stands about three inches above the top of pot. There will (if a 6-inch pot) be left from the top of drainage to the base of plant four and a half inches to fill up. The best material I have found to keep cattleyas in good health is the roots of native ferns, thoroughly cleaned of all dirt and peaty substance by washing. Tear it up into shreds and with a potting stick of hard maple place the fern root as tightly and evenly as possible, from the crocking to the base of bulbs in a rounded form from top of pot, using at intervals of three or four inches a wad of good sphagnum tops, so that in a little time it will grow over the fern root, and give the plant a fine healthy appearance.

I find that cattleyas potted in this way can be watered in the summer time with the hose (provided the water is free from lime, which will leave a sediment on the leaves). The water I use is what is termed city water and comes from a reservoir two miles distant, about the same quality as ordinary cistern water and is generally warmer in all seasons than either cistern or well water. I use this water at all seasons, in the summer thoroughly drenching them leaf and root from 8 to 10 in the morning on very bright days, and from 2 to 4 in the afternoon. Use water freely under the benches, on the benches, between the pots and on the floor. All cattleyas from Mossie to Dowiana have this treatment. I am never troubled with insects of any kind; do not know that I have ever fumigated my cattleya house. About four times a year they are thoroughly cleaned by a small brush and sponge, using common soap and water with about a tablespoonful of aqua ammonia to a pint of soapy water.

My cattleya house is eighteen feet wide with paths dug out of the ground, consequently the side walls are only two feet above the surface of the ground, which I think keeps down the temperature much better than if elevated as in ordinary greenhouse structures. Ventilators all around the house nine inches above the surface and six feet apart, with sliding shutters 15x6 inches, are kept open at all times when the thermometer outside marks 50°. Ventilators at top in the roof, in summer weather are kept open day and night. Shading is done by brush, with naphtha and white lead in a light degree. From middle of April to October the roof is covered by a shading made by cutting seven-eighths pine board into strips, using three-fourths inch square frames, onto which the strips are nailed. Each frame is made to fit the sash and can be taken off if necessary on short notice; this I find the best kind of shade, it reduces the temperature and at the same time gives sufficient light, which is very important in ripening the new growths, and setting buds for ensuing crop of flowers.

I prefer pot culture for the cattleya. Of course it is all right to have a few of them in cribs, baskets, hanging pots, etc. to hang up for effect, but my experience shows me that they grow very much faster and throw better flowers from pots. Do not over pot them, do not use any material that will become sour, allow no decaying matter in or around them, give plenty of pure fresh air, keeping down the temperature in summer season to as near 70° as you can in the day with 60° to 65° at night.

In repotting established plants, if the

pot is filled with roots do not hesitate to break the pot if it does not come out with one or two sharp taps on the rim of pot. Then repot, just using same material as for newly imported plants. Keep a little dry for a short time. The best time to repot is when the plant commences growth, which is at different times according to species.

I keep all classes in same house, giving Dowiana the warmest position and generally a little higher elevation, but I have some on benches and do not see any difference. Cattleya Skinneri and C. citrina may be grown at the coldest end; the latter I generally remove during their growing season, to a position in some house where a quantity of water can be used without injury to other plants.

As soon as the bulbs of cattleyas are finished and well ripened, gradually withhold water so as to preserve the roots which will also ripen up, take a rest, and will be ready to start when season of growth commences. With all the foregoing points carefully attended to there is very little trouble in growing cattleyas as they will be found eminently satisfactory for cut flowers and commercial use.

I think they have come to stay, not to rival any other flower, but to join socially (as all good flowers and florists should) with the charming rose, the stately camellia, the beautiful carnation and the lovely violet, to elevate, enlighten and æstheticise poor human nature; to feed the eye of those who have a love for the beautiful, to soften the asperities of every day life, to give food to the florist and gardener in whatever capacity he moves in.

Utica, N. Y.

[A view of Mr. Mathews' cattleya house appeared in last issue.]

Cost of Growing Geraniums.

In your issue of June 1, and in several subsequent numbers the question of cost of growing good plants of geraniums in 4-inch pots came up and I shall give you herewith my experience, which may not be far out of the way, as I have tried to find out, some years since, the actual cost of growing these plants and have kept a record from year to year, marking down work performed at different times and putting down at the same time the value of the work, etc., in a little notebook I carry. However I must say that I did not keep any account of cost of marketing or selling, for with me here all my plants are sold inside of about three weeks, at retail only, and it never occurred to me that I should put down anything under the head of cost of marketing.

I believe our prices this season have been fairly good, although there are some florists who are inclined to think we should get more for them, and others who sell at any price without thinking of cost of production. Our prices were from \$1.25 for bedding varieties to \$1.50 for newer and fancy varieties per dozen. I grow a limited quantity of the latter in 5-inch pots, which sell at a considerable higher figure when they have three or four good trusses of bloom on them, and have found it rather profitable. People who want a few extra large plants for vases or who can't wait for smaller plants to grow, will gladly pay the extra charge if they can be accommodated, but these larger plants can not be sold in quantity. I think I am the only one in town who makes a practice of growing these extra sized plants and it is done when repotting the whole crop into larger pots by

merely setting aside a few of the strongest and best plants of any of the most showy varieties, and instead of giving them a 4 inch pot, they are allowed a 5-inch one, all these are placed on a bench by themselves, and allowed a little more room. As to the prevailing cutting of rates all over the country, in my opinion there is no need for excessively low prices, for whoever buys plants for beds or borders will not buy an extra dozen simply because they are cheap; they need so many and no more to fill their beds, and therefore we may as well stick to reasonable rates and make a fair profit on the plants if we possibly can do so.

But the main point is to grow good stocky plants, to have them in bloom at the right time, and then we will be able to compete with any of the cheap growers whose plants are as a rule crowded in their houses and consequently very often are long and shanky and should be sold by the yard instead of by the piece or dozen. To accomplish these points we should not pinch or cut back after the middle of March and should not grow them in too high a temperature. Neither did I take into consideration the growing of stock plants which would also increase the cost of production considerably if you want to gather enough cuttings without potting stock plants, and if you want to grow your plants uniformly and of the same size.

I give you here the actual cost of growing 10,000 geraniums as I have it down now, the original having experienced several corrections, from time to time whenever I found that it was not exactly right.

Preparing propagating benches, cost of sand, etc.	\$ 8 00
Making and putting in 10,000 cuttings, ten days	20 00
Potting and placing on benches, five days	10 00
Soil, etc.	6 00
Wear and tear of 2½-inch pots (estimated)	8 00
Care, watering, etc. from Nov. to Feb.	35 00
Repotting into 4-inch pots and placing, 12 days	24 00
Material used in potting	15 00
Care and watering, etc. from Feb. to May	55 00
10 000 4 inch pots	70 00
Coal during winter, 18 tons at \$5 a ton	90 00
Wear and tear of greenhouses, benches, etc., (estimated)	125 00

Total \$499 00

This would bring them to over 4½ cents each actual cost, to which should be added the expense of marketing, or time expended in the sale of the plants, which may differ in every establishment. We sell them off inside of about three weeks and have not the trouble shifting them from one place to another. When repotting we set pots close together and after Easter, when a lot of stuff is thrown out, we give them more room at once and the plants remain in this position until sold. I do not move them around more than actually necessary.

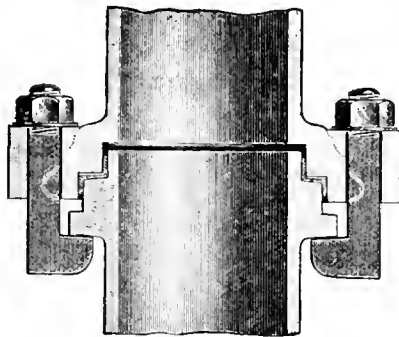
If you have to use frames in the spring for them there is so much more work and consequently more cost. My plants are generally cleaned once while in small pots, the second cleaning they get together with pinching at the time of repotting into 4-inch pots; after that another picking of dead leaves may be needed after Easter, when we set them a little apart and while handling them then the cleaning is done very fast. I do not think that 5,000 geraniums could be grown as cheap as this, but should like to hear from somebody else who has kept an account of cost of growing these plants and should like to see how our figures compare.

Before I kept a record I had no idea how expensive it was to produce the plants and perhaps would, without it, be

of the same opinion as a friend of mine, who said the other day to me, when I alluded to this question: Why, there is no great cost involved in growing any kind of bedding plants. "What is it? a pot and a little dirt, the rest does not cost us anything." J. B. KELLER.
Rochester, N. Y.

Rubber Joint for Hot Water Pipes.

A correspondent of the London *Gardener's Chronicle* writes in regard to the joint illustrated as follows: "It is generally admitted that the India rubber expansion joints, providing the joint is formed on the pipe or connection, and not by loose rings, are safer than the old socket joints caulked with yarn and cement, these latter often bursting in the most awkward positions, and leaking during severe winter weather. In Richardson's universal joint the work of connection may be carried out in any position or angle with the same freedom as



RUBBER JOINT FOR HOT WATER PIPE.

the ordinary socket pipes, and it may be fixed to any existing apparatus without additional special castings, as all the fittings are ready made with a plain seating for the rubber at one end, and a clip flange and hooked bolt lugs on the other and withal so simple in construction that any ordinary workman can fix them. The joint is very durable and will withstand an internal pressure of 125 lbs. to the square inch. We have a range 350 feet long, heated with pipes connected on this system, which has proved most satisfactory, never having had a single leakage or trouble of any kind."

Baltimore Odds and Ends.

In issue of July 1 (p. 516) it is asked why "some florists having a surplus of certain stock will charge a brother florist in the same city more at wholesale than he retails the same stock for?" The same writer might have propounded numerous other queries of like nature and quite as difficult to answer. There is really no accounting for the strange things men will do when under the inspiration of trade jealousy. In our own limited experience we have known men to "go one better" than merely selling to the trade at an advance on wholesale prices, inasmuch as they elected to throw valuable stock on the rubbish heap rather than accommodate some other dealer by selling to him. But of a somewhat different nature was the smart game—a sort of horticultural euchre—by which the writer was quite recently victimized. Happening to need a few roses to finish out some planting, I bought the requisite number

from a neighboring dealer at \$1.25 per dozen—that was the price agreed on. The roses were delivered, all correct, but when the bill came in later, I found them charged at the rate of \$2 per dozen. In my guilelessness I decided that it was simply a mistake, but in a subsequent interview with the dealer he stoutly repudiated our previous agreement, and stuck to his price as per bill rendered. The gentleman got his money, but he has undoubtedly filled the last order he shall ever receive from me. Verily, the consciousness of having outwitted some other fellow; of having perpetrated a piece of smartness by which some rival dealer has suffered the least inconvenience, is ample cause for self congratulation, and must swell us out to exorbitant proportions in our own esteem.

The custom of giving private gardeners a certain discount on their employer's bills, is another "trick of trade" that obtains more or less in all branches of the business, and a very unhealthy practice it is. The dealer who sells good stock at honest prices, can't afford to pay discounts, and will find it unnecessary to adopt the practice as a bait to attract custom. In all cases when it is in operation the gardener's employer suffers for it, and the writer—without waiting to go into details—may simply say, that he regards the system as one under which the gardener virtually lends himself to cheating his employer, with the seedsman, nurseryman, pot manufacturer, etc., as accessories before and after the fact. I do not for a moment mean to suggest that either party has the least dishonest intention. The dealer who adopts the practice does so to advance his personal interests, the gardener accepts it as a convenient method of adding to his income, but the absence of all dishonest intent does not rid the system of its corrupting tendencies. I have known gardeners—I know them now, by the dozen, who, ignoring all other considerations, will trade only with concerns that pay them discount. Such men can't possibly have proper regard as to quality and value of any article purchased on their employer's account, and I contend, that in proportion as a gardener is indifferent on those points, he is unfaithful to his employer. But the dealer occasionally exhibits himself as as adept at getting both the penny and the gingerbread, and isn't always the generous being he would appear to be. Last fall a gardener in my vicinity called at the seed store in which he dealt for the purpose of buying himself a pruning knife. The liberal proprietor emphatically declined to sell it to him, but he would give him a knife—he gave the knife, and with it his fall catalogue, and the most profuse assurance of his unyielding friendship and esteem. My neighbor was tickled to death, he told me all about it, wanted me to trade with that firm, and in short, lauded them to the skies. Three months later he consigned them to another "district" where, according to popular belief, the climate is exceeding torrid, and not without cause either, for the annual seed bill having been received, the knife was found charged to his employer at \$5. In justice to the seedsman, however, it must be recorded that there was no charge entered on the bill for the other items presented with the knife.

One of our leading newspapers has for some time been vigorously booming a scheme for the erection of a permanent exposition building, and some of our florists have been investing in exposition

stock. It is unfortunate that the early erection of the building is not sufficiently assured to warrant our delegates in offering it for the fifth annual meeting of the S. A. F. But whether we are ever fortunate enough to get the convention or not, we have always been, and always will be, happy to "take in" visiting brethren. There are doubtless envious mortals who will assert that Baltimore is a slow town, and that Baltimore floriculture is sadly in need of a good stirring up. Perhaps a revival wouldn't hurt us, but for all that the Monumental city contains much to interest the trade; the commercial places of Cook, Pentland, Fraser, or Halliday, for instance, are always good for something new or instructive; moreover, these gentlemen are invariably prepared to receive strangers in the most hospitable manner. The artistic attractions of Patterson Park and the natural beauties of Druid Hill Park will be at their best about convention time, and in addition to all this we have numerous public squares, in several of which very excellent bedding may be seen. Of the many private places in this vicinity it will suffice to mention those belonging to Robert Garrett, and the late T. Harrison Garrett, as being especially interesting to florists. Therefore, delegates to the New York meeting who may have time and inclination to visit Baltimore, will not be utterly disappointed; they will find much to interest them, and, albeit a little slow, they will find Baltimore florists a pretty genial set of fellows, and we sincerely hope that our proverbial hospitality will be severely taxed during convention week.

A few *Lilium Harrisii* should be started during this month for early flowering—we generally start in 5 or 6-inch pots, using a good rich compost, and afterwards plunge the pots in some convenient position outdoors where they can be protected from heavy rains. We rarely report any of our bulbs, being opposed in a general way, to giving such stock much pot-room. The size pots used at the start must be determined by the size of the bulbs; for a good sized one a 6 inch pot is quite large enough, and the writer would note here that he has demonstrated to his own satisfaction at least, the advantage of using fresh bulbs each season.

Of the four ferns figured on page 545. *Onychium japonicum* and *A. gracillimum* are particular favorites of mine. I had but indifferent success with the former until I adopted the practice of allowing it to get thoroughly pot-bound and feeding it liberally. For my purpose, one good large plant is preferable to several small ones, so that unless I wish to increase my stock of some desirable variety I never divide my plants. Repotting is done by merely shaking away the old soil from the roots, replacing the plants in the same size pots and using a compost consisting of rich, strong loam, with an addition of well rotted cow manure and sand. For commercial or private purposes this plan will be found desirable, in as much as it gives a strong, healthy plant in a comparatively small pot. The writer is a strong advocate of liberal feeding for ferns, some varieties will of course bear more than others, no unvarying rule can be given and the practice is one, like many others, in which the florist must be guided by his own experience and the condition of his plants.

At a meeting of the Baltimore Florist Club held August 1, Messrs. R. J. Halliday and Chas. Campbell were appointed

a committee to make necessary arrangements for the club's attendance at the New York meeting. A. W. M.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

August 16—Tem. morning 70°, noon 77°, evening 69°. Wind N. to NE. Finished taking up tulip bulbs which had been heeled in. Commenced propagating *Alternanthera paronychioides major*, taking cuttings from bedded plants. Potted little primulas which had been pricked out in pans. Continued repairing houses.

17—Tem. 69, 73, 70. SE. to NE. Continued propagating *Alter. par. major* and repairs on houses.

18—Tem. 67, 87, 75. NW. to NE. Same as yesterday. Ladies and gentlemen attending the florists' convention visited the park in carriages.

19—Tem. 63, 77, 72. NE. to ENE. Continued propagating *Alter. par. major* and *versicolor*. Cleaned and trimmed beds.

20—Tem. 68, 81, 72. NE to E. Continued propagating *Alter. versicolor*. Cleaned beds, etc.

21—Tem. 76, 87, 78. E. to S Sunday.

22—Tem. 71, 85, 72. W. to S. Same as Saturday and potted callas which had been kept dry during summer. Sifted sand at lake shore for use in greenhouses. Picked celosia seed.

23—Tem. 57, 62, 64. NW. to N. Potted cyclamens in 2 and 3 inch pots, planted in frame. Potted *Cineraria hybrida* which had been pricked in pans. Repotted for stock variegated alyssums and *Pilea Casei*. Turned compost.

24—Tem. 55, 65, 62. N. to NE. Finished propagating *Alter. versicolor*. Continued picking and cleaning celosia seed. Potted for winter stock pileas and *Achyranthes Lindenii*. Continued repairs and turned compost.

25—Tem. 60, 68, 62. E. to N. Potted for winter stock *Alternanthera aurea nana*. Repaired heating pipes. Picked and cleaned seeds.

26—Tem. 60, 60, 62. NE. Potted for winter stock pileas, *Achyranthes*, *Alter. aurea*, *A. amœna* and alyssums. Sowed seed of *Calceolaria hybrida* and another lot of *Cineraria hybrida*.

27—Tem. 62, 68, 63. NE. Planted two sashes of frame with alyssum for cut flowers. Planted bed of celosias in place of verbenas removed. Tied gladiolus and cannas. Trimmed and cleaned beds, etc.

28—Tem. 60, 70, 65. E. Sunday.

29—Tem. 67, 77, 76. SE. to NE. Commenced potting from propagating frame rooted cuttings of *Alternanthera paronychioides major* in rose pots, three cuttings in a pot. Cleaned beds.

30—Tem. 64, 78, 70. SE. to NE. Continued same as yesterday and collected pots and cleaned frame yard.

31—Tem. 64, 80, 72. S. to SE. Same as yesterday.

Carnations for Summer Bloom.

Messrs. Heim Bros. & Co., of Blue Island, near Chicago, have carnations planted in the open ground, from which they are now (August 6), cutting handsome clean florets daily for market. They have in one bed 2,100 *Pres. de Graw*, from which they gather 5,000 florets per week, expecting to double the quantity soon. Of other varieties "Sport" is very prolific and with them the best dark crimson.

They have a total of 7,000 plants, all January struck cuttings, in due time shifted to 3-inch pots and soon after planted. So soon as they commence to push blooming shoots they are carefully staked and tied. Many plants now have 25 to 30 buds and blooms, with an even growth of about eighteen inches tied to cane stakes all of the same height. There is not a prettier sight around Chicago than these carnations. The soil in which they are growing is a black, sandy loam, very loose and friable.

The Greenhouse in Summer.

July and August are the two months in the year when most all florists may take a vacation, for they are then not overburdened with business, and stock is easy taken care of at this time of the year. Many of the brotherhood will take an opportunity to visit their friends and associates, far or near by, to obtain information, or see what others grow and how they grow things, and generally they profit by the visit in some way, be it either in seeing how a certain plant ought to be treated or else how it should not be treated. Unfortunately, midsummer is a very poor time to look at greenhouses, for we have not much in them and visitors can form no idea of the appearance the houses would present at other seasons, and the visited party may feel a little shy at not being able to show at least one well arranged house with decent plants, for his ability may be doubted by the visitor if there is nothing particular to show.

There are many exceptions of course where a general assortment of stove plants and palms etc. are grown; such places are always worth seeing, but I am speaking of those establishments where cut flowers and bedding plants form the chief feature of the place, and there we often find all the houses empty in summer.

I think it would pay those florists to grow on a bench or two of ferns or flowering begonias for cutting, and by growing a few other plants, such as palms, dracenas, marantas or other foliage plants, to intersperse among the ferns, the house may be made to look very attractive and pleasing. As some may object to the keeping of such plants during the winter months on account of space occupied by them, I would suggest a few fancy caladiums, Rex begonias, alocasias, dieffenbachias or the like. Caladiums can be kept at rest from October to May and still be worth looking at in July or August. Of *Begonia Rex* most of us have to keep stock plants of each variety to propagate from, and if repotted into large pans or pots make capital plants to set off a house, where we may grow ferns or summer blooming begonias. In the fall we may cut up the leaves and throw the plants out or set them under the bench and use them another year for the same purpose. A few plants of *Cissus discolor* will do in the same house and when fall comes the leaves or branches come very handy for designs or baskets and will be cut down even before we want them out of the way and they also can go under the bench for the winter. The several varieties of *Gesneria zebrina* can be grown, a dozen bulbs in a pan in the same atmosphere and with the same winter treatment, even the fittonias and *Cyrtodeiras* may be set under the benches and come out all right in spring to help to color up the house with their beautifully veined foliage. We can grow them either in baskets and suspend them from the roof or in pans

or pots and set among the other plants.

The number of plants and varieties that will submit to such neglect in winter is astonishing and I only mention a few of them. Eucharis I treat in the same way, getting two crops of flowers from them, but have to leave them on the benches until January before the second crop is all cut. It is not much additional work to attend to the wants of six or eight dozen extra plants, even if they are in extra large pots, being set among and over the smaller ferns and forming prominent points in the arrangement. Their wants are noticed at first glance and whoever gives this plan a trial once will not give it up again on account of the little extra work. Aside from the satisfaction it may afford us in showing our summer visitors a few good plants, even if we have no sale for such things, we may find much pleasure in it ourselves if the plants are kept as they should be. It is wonderful how much prettier a bench of ferns will look after we tilt up a dozen or more good sized plants with ornamental foliage over them; try it. J. B. KELLER.

Rochester, N. Y.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By a young man; aged 21; as assistant greenhouse man. Address VANBA, care American Florist.

SITUATION WANTED—By a first class propagator of and rose grower. The best of references given. Address M., care American Florist, Chicago.

SITUATION WANTED—By a good flower and vegetable gardener. Private place preferred. Can give good references. Address B., care American Florist, Chicago.

SITUATION WANTED—As florist and gardener, on commercial or private place. Good references. Address W. B., care J. Weizoraski, 1430 Wolfram St., Chicago.

SITUATION WANTED—By a gardener; age 24; thorough, practical knowledge of his profession. Can give very best of references. Address A. T. PETERSON, box 4, Riverside, Cook Co., Ill.

SITUATION WANTED—As under gardener at private place preferred; possess fair knowledge of general greenhouse work. Can furnish good reference. Address W. C., Backus St., Jackson, Mich.

SITUATION WANTED—By a young married man; as a practical florist, in either a private or commercial place; five years in present situation. Address J. C. V., Exhibit, K. Nilsson Hall, N. Y.

SITUATION WANTED—By a young lady florist; had 4 years' experience in London, Eng., and 1 year in Montreal. References exchanged. E. A. LEY, care W. O'Hara, 337 Antoine St., Montreal, P. Q.

SITUATION WANTED—By young man with 11 years' experience in growing roses, cut flowers and general stock of greenhouse and bedding plants either private or commercial, good references. F. N., care American Florist.

SITUATION WANTED—Private or commercial. S. by a practical florist who has had nine years' experience in present location. References exchanged. Address care J. E. K., Florists' Exhibit, Nilsson Hall, New York City, N. Y.

SITUATION WANTED German, 25 years old; willing to do anything. Good landscape gardener and draughtsman, bookkeeper and salesman. Well up in orchids. First-class references. Address H., 7 Brooks Street, San Francisco, Cal.

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Freesia Refracta Alba and Leichtlinii.

ROSES SOUVENIR OF WOOTTON and ANNIE COOK, 3-in. pots, \$5 per doz., \$5 per 100 4-in. pots, \$5 \$4.00

FREESIA REFRACTA ALBA, \$2.00 per hundred; \$15.00 per thousand.
" **LEICHTLINII**, \$1.50 per hundred; \$12.00 per thousand.

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" " 3-inch	12.00
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Catherine Mermet, 4-inch	12.00
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La France, 4-inch	12.00
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" " 3-inch	9.00
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Niphetos, 4-inch	12.00
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Also have a large stock in 2-inch pots of the following Roses: Miniature, C. de La Barthe, C. Cook, Edith Gifford, M. Margottin, M. David, Marquis Viviers, M. Van Houtte, Sony, G. Drevet, Susanne Blanchet, Louis Richard, Md. J. Schwartz. Price, \$1.00 per 100; \$35.00 per 1000.

SMILAX, 3-inch pots, vigorous young plants, a \$5.00 per 100.

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Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

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OF THE
UNITED STATES AND CANADA.

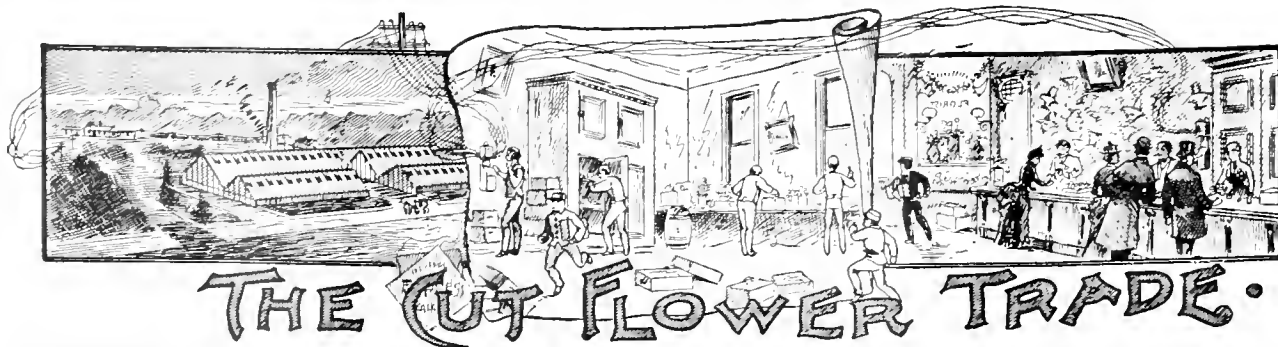
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AMERICAN FLORIST CO.

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New York Floral Styles.

The bouquet de corsage is worn with graceful effect at present both in and out of doors, at summer resorts. It is a spray of roses, asters or pea blossoms, and sometimes only ferns and grasses. It is placed at the edge of the surplice on the bodice on the left side. It is made long, narrow and delicate. Bennett or Papa Gontier roses are the most fashionable, a decided turn in the fitful wheel of fashion from the yellow, pink or white flowers that have so long been favorite. With light attire the crimson spray on the breast is a beautiful ornament, particularly when soft lace fills the open space. It also looks well with a white vest of linen or corduroy, and is conspicuously pretty worn on racing costumes.

Ornamentations with wheat are much in vogue, and are much liked for their rustic effects. A cluster of this golden grain is attached to the fan, to the parasol and the sun hat has one side caught up with it. White felt English walking hats, which are now the newest style for head gear, are trimmed with a band of moire ribbon and a bunch of wheat. Wheat is worn for the corsage spray, in the position described above. Belt bunches have gone out of style.

The blue shaded hydrangea trusses that are sent daily from Newport, are combined exquisitely with the lilac-tipped "butterfly" pea blossoms, which are grown in great perfection at the same place. Funeral wreaths for the casket of the late Courtland Palmer were arranged by Klunder, the blue trusses of hydrangea and the pea blossoms being separated by clusters of ivy leaves. The sentiment of ivy renders it most expressive for funeral pieces.

The new style of bouquet will take precedence of all others the coming season. It is now made up for choice orchids with pink roses, and a fringed center of butterfly pea blossoms. Orchids are invariably used for the center, when funds will allow. To arrange this bunch in its fullest beauty the center must be composed of oncidiums.

The daintiest gown trimmings with natural flowers have been on the sleeves of the Directoire styles of dresses. The open sleeve is edged about with daisies, or any small blossoms, and there is a knot of these on the inside sleeve or cuff just outside where the lace finishes. White surah gowns, or any colored ones made for full dress occasions are easily ornamented in this way and make the costume elegant in the extreme. Yellow daisies are used at watering places for putting about the collar, jacket and around the plastron, instead of gold braid. Flowers are far more beautiful than bullion or tinsel, but, of course, must be daily renewed. However, this

"keeps the maids busy" as one lady remarked.

Baskets of braided silver and gold, vases of rock crystal and Bohemian glass are used for table decoration. These are filled with lilies, roses or any choice blossoms available. They are set on mats of ferns, and look beautifully. Silver, gold or crystal contrasts finely with lacy greens. There are three mats on the table, the center one being the largest. Favors are given at both luncheons and dinners. For breakfasts there is only a center piece and this is usually composed of a collection of flowers harmoniously arranged.

FANNIE A. BENSON.

London Notes.

One of the events of the London season now drawing rapidly to a close, was the evening fete of the Royal Botanic Society of London, held in their beautiful gardens in Regents Park, on July 4, from 8 to 12 p. m. Fortunately the night proved fine and the fete was attended by the elite of London. The grounds were beautifully illuminated with thousands of fairy, French and other lamps, as well as gas jets, and at 12 o'clock on closing, colored fires were displayed to good advantage. Four of the best bands, viz: the First Life Guards, Royal Horse Guards, Colistream Guards and the Victoria Rifles played choice selections of music during the evening. The latter band being stationed on a small island in the lake was peculiarly attractive. The Royal Hand Bell Ringers performed at intervals in the American tent and were much appreciated.

The exhibition consisted of floral decorations for dinner tables, baskets of plants and flowers, bouquets and flowers arranged for personal use; these were in the large tent, while in the museum and corridor, paintings, sculptures and artistic works relative to plants, flowers, trees and artificial flowers were displayed. Among the exhibits we noticed a very good collection of orchids, exhibited by Hugh Low & Co., of Clapton, these were arranged in artistic groups in the tent where the table decorations were shown. Messrs. Paul & Son, of Waltham Cross, exhibited a choice group of roses among which we noticed a new rose of their own raising called the Grand Mogul, its color is a dark velvety red and it looked to us to be a rose of merit.

The first prize for floral table decorations was won by W. L. Buster, of St. Mary Cray, Kent. The principal flowers used were eucharis stephanotis and ferns. A collection of cut flowers shown by Messrs. Barr & Son, of Covent Garden, arranged in small vases was much admired. Some very fine specimens of pelargoniums (pot plants) were shown, among which was a magnificent speci-

men of *Pelargonium delicatum*. Some very fine rhododendrons were exhibited by Anthony Waterer, of Knap Hill.

On the whole the fete was a decided success; it was largely attended and evidently appreciated, the music was excellent and the illuminations of the grounds were very effective. The trees and shrubs were hung with fairy lamps and the floral devices on the lake, in colored lamps were perfection. The weather had much to do with the success of the fete as after the recent rains the grass and shrubs looked their best.

On July 14 the National Rose Society held their annual rose show at the Crystal Palace and a finer display of roses we never saw. They were all well grown and perfect in shape and color. The exhibition commenced at 12 o'clock and lasted until 6; two shillings and sixpence admittance being charged to the palace and grounds during these hours. The roses were arranged in double rows along the center of the palace and were shaded by an awning. They could be seen with some comfort in the early hours of the day but from 4 to 6 o'clock the crowd was so dense that one could hardly get near the tables. They were arranged in green wooden boxes filled with moss and held in small tin holders, twelve roses being shown in each box. Each variety was named and had the address of the exhibitor on a card. It is estimated that over 40,000 people visited this show. After 6 o'clock when the show was over the roses were sold in many cases.

We note on page 499 of the AMERICAN FLORIST the article "Will a rose show in June prove a success." After seeing the Crystal Palace show we should think it would. To be sure the roses most favored in England are those varieties grown out of doors, as the climate favors such. But we should think a collection of roses grown in houses would be equally attractive. Among the winners of first prizes were Geo. Prince, of Oxford, Benj. R. Cant, of Colchester, Chas. Turner, of Slough, Frank Cant, of Colchester—who won the National Rose Society challenge trophy for seventy-two distinct trusses. This display was very fine, each rose being perfect. The apricot yellow colored rose W. A. Richardson exhibited by John House, of Peterborough, was much admired. This firm also exhibited a new strawberry called The Victory, a cross between the President and British Queen. This new variety is said to be very early and prolific. Messrs. Thos. Rivers & Son, of Sawbridgeworth, had a very fine display of hot house peaches, nectarines, figs, grapes and cherries. These were shown as plate specimens and also growing on the trees. This firm grow largely for the London market and have over forty houses in use now averaging 100 feet long and about 20 feet wide each.

July 19.

T.

THE AMERICAN FLORIST

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Orders for less than one-half inch space not accepted.

Advertisements for Sept 1 Issue must REACH US by noon, Aug. 25. Address.

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

J. M. Thorburn & Co., New York, Dutch bulbs; Jacob C. Cassell, Philadelphia, terra cotta ware; E. Benard, Orleans France, roses and nursery stock; C. H. Joosten, New York, ornamental trees, shrubs, roses, etc.; Same, Dutch bulbs; H. A. Dreer, Philadelphia, seeds and plants; W. E. Wallace, Hartford, Conn., roses, clematis, azaleas, rhododendrons and ornamental nursery stock.

WITH THIS ISSUE begins the fourth volume of the AMERICAN FLORIST. Three years have come and gone since the FLORIST was first sent out as a candidate for the favor and patronage of the trade. The result is known to all. The many complimentary letters we receive would indicate that we have achieved considerable success in our efforts to supply a journal which would meet the requirements of the whole trade. But we can still see room for improvement, and shall continue our efforts unabated. The great strides made in the florists' trade within the last few years are certainly remarkable. Progress is the order of the day and we shall exert every effort to keep in the van.

INSECT LIFE is the title of a pamphlet issued by the U. S. Department of Agriculture, division of entomology, Washington. It contains numerous notes on insects injurious to farm products. It will be published as a periodical and will prove a speedy and regular medium for the reports of the progress of investigations. It will be published on an average once a month and is under the supervision of Prof. C. V. Riley, Government entomologist.

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Mention American Florist

Wholesale Markets.

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Roses, Teas	1.00	11.50
" Fancy	3.00	4.00
Asters		1.00
Sweet Peas	15	25
Adiantums	1.00	6.00
Lily of the valley		12.50
Smilax		10.00
Pink pond lilies		4.00
Hollyhocks		

NEW YORK, Aug 9.

Roses, Perles, Niphetos, Solys	\$1.00	\$1.50
" Mermets, La France	2.00	3.00
" Am. Beauty	6.00	10.00
Ghdochus		1.00
Asters		1.00
Sweet Peas		1.00
Longiflorum lilies	6.00	10.00

CHICAGO, Aug 11.

Roses, Perles, Niphetos	\$3.00	4.00
" Bons, Safranos	1.50	2.00
" Mermets, La France	4.00	5.00
Brides		5.00
" Bennetts, Dukes	4.00	5.00
" Am. Beauties	8.00	12.50
Carnations, short	50	75
Carnations, long	80	1.00
Smilax	12.00	18.00
Adiantums		1.00
Tuberose	1.00	2.00
Sweet Peas		25
Pansies		50
Callas		12.50
Hollyhocks	1.00	1.50

PHILADELPHIA, Aug 9.

Roses, Teas	\$2.00	
" Perles, Niphetos, Solys	3.00	
" Bennetts	4.00	
" Mermets, Cooks, Brides	5.00	
" La France, Nels	6.00	
" Parfians	8.00	
" Gontiers	3.00	
Carnations		75
Harrisii lilies		8.00
Callas		8.00
Smilax		20.00

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LILY OF THE VALLEY \$ 6.00 per 100
PINK POND LILIES 10.00 "

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We have made large contracts with the best Rose growers about Boston to handle their entire stock this season. Our stock will consist of Papa Gontier, Bennett, Pierre Guillott, American Beauty, Mermets, La France, Malmaison, Cook, Bride, Niphetos, Perle, Niel, Anna Webb and Grace Wilder pinks, long stems; other flowers in variety. We shall have a particularly large lot of Mermets and Perles, so that in sending to us when you fail to get them elsewhere you will feel reasonably sure of getting them. Unknown parties must give satisfactory reference or let us send C. O. D. Write for information.
Mention American Florist.

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The only establishment in the West growing Roses exclusively. 20000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the consumers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety.
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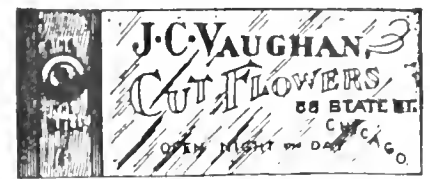
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INCORPORATED 1885,

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Write for price list. Consignments solicited.
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Plant and Cut Flower Grower
— ALL CUT FLOWERS IN SEASON. —
Write for price list.

10000 Colons, Yellow Alternat thorns and Achyran this from 2-inch pots, \$2.00 per 100
5000 Geraniums in good variety, from 4-inch pots \$5.00 per 100. Larger lots, special prices.

London Notes.

Mr. J. B. Fuller, of Jas. Vick, Rochester, is now in London and after a short visit to the continent expects to return to America the end of August.

Mr. C. L. Allen, of the A. B. Cleveland Co., is also in London and expects to leave for home on the 21st.

Mr. J. C. Vaughan, of Chicago, is now on the continent inspecting the seed crop and visiting the leading seed establishments, he is expected in London this week.

Mr. B. K. Bliss, of Boston, is also in London on his way to the continent.

Mr. Oliver Landreth and his nephew, Mr. B. Landreth, Jr., were here a short time since, and left for Philadelphia on June 10.

Reduced Postage.

What one man or ten men can not accomplish may frequently be brought about through the efforts of many. As a result of the constant agitation of the postage question and the thorough organization for the purpose, of the various societies interested, a bill has been passed making the postage on seeds, plants, bulbs and cions one cent for each two ounces or 8 cents a pound instead of 16 cents a pound, the rate which has prevailed for several years. We need not enlarge upon the benefits which will accrue to the seed and plant trade from this reduction, they are known to all.

Cincinnati.

A remarkably fine display of floral work was made on the first "Floral Day" of the Cincinnati Exposition. The entries were made by A. Sunderbruch and B. P. Critchell & Co. Nearly all the designs shown this day were representations of Odd Fellows emblems as the uniform branch of this order was largely represented in the city at a competitive drill.

Sunderbruch's designs were: the three links, heart and hand, altar with incense urn, the bundle of sticks, stump and axe, rod and serpent, bow and arrows, open bible, cross and crescent and an emblem representing a past-officers jewel of in-laced triangles.

Critchell's designs were: the tablets of stone, tent, altar and bible, bee hive, triangle with crown, staff and sword, heart and hand, bow and arrows and two superb banners.

The prevailing flowers in all the designs were roses, carnations and balsams with ivy leaves and fern fronds. The designs were arranged in the grand vestibule of the Music hall and made a fine display.

The prizes were three in number, and were awarded for beauty of design, quality of flowers and excellence of workmanship. The judges awarded the first prize to Sunderbruch and the second to Critchell.

Water Lilies for Fall Bloom.

The increasing interest taken in this lovely class of plants in all sections of the country, warrants the thought that their cultivation will become quite general in the near future. They are easy to cultivate; and when planted at proper intervals may be had in bloom at all seasons.

As our native kinds flower during the summer, the impression prevails that

this is the only time when they may be looked for; but for market purposes, aside from a short watering place trade, they bring better prices at all other seasons from flower dealers and purchasers. The blue ones as a rule, are best for forcing, as they give more blooms than the other kinds; but the beautiful Devonensis is very desirable, for, being a night bloomer, it is very useful for evening wear and decoration; although the ingenuity of the florist comes into play with the other kinds, as they are kept open by placing two or three wires across the center of the flower; and however much this practice is to be deprecated the wires are scarcely observable.

Young plants are best for forcing; they do not give such large flowers at first as old ones, but they come into bloom quickly, and last a longer period in flowering condition. They require three or four inches of good rich compost; and the same depth of water is sufficient, they will bloom more freely than if the water is deeper.

A shallow tank with a hot water pipe running around it is best, but if this is not to be had pans or shallow tubs will grow them first rate, if placed in a warm position in a house with a night temperature of 60°, or the pans may be set on the pipes in a rosary, or other house where the pipes are uncovered, with two strips of wood under the pans to prevent over-heating. The gradual evaporation from the pans of water will improve the atmosphere of the house for most plants. Malden, Mass. BENJ. GREY.

Delphinium California.

This was sent from California by a Chicago lady to the South Park a few years ago, from which I got my start. Is it new? I do not find it described in

any catalogue or encyclopedia of horticulture. It is worthy of wide dissemination. It is a hardy perennial, comes true from seed, seed planted in April comes into flower middle of July, old plants come into bloom in June and continue in profuse bloom until cut down by frost. The flower is a lighter and brighter blue than the D. Formosum and somewhat smaller with twenty or more flowers in a raceme borne on a stiff stem; leaf similar to, but smaller and finer cut than the D. Formosum. The habit is a free growing, stiff stalk, freely branching, about thirty inches high, apparently at home in most any soil, and transplants easily, may be moved at any time, even in flower, makes a beautiful specimen plant for the lawn, fine cut flower and good pot plant. JOHN LANE, Chicago. Amateur florist.

BALTIMORE.—Herman Perlich, the florist and Excelsior fumigator manufacturer, has removed to 606 South Broadway.

FLOWER SEEDS.

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- | | |
|-----------------------------------|-----------------|
| Primula Chinensis "Chiswick Red," | Per pkt. \$1.00 |
| " " "Williams White," | 1.00 |
| " " finest mixed | .50 |
| Cineraria hybrida grandiflora | .50 |
| " " nana | .50 |
| Calceolaria hybrida finest mixed | .50 |
| Cyclamen persicum grandiflorum | .50 |
| " " giganteum | 1.00 |
- and other choice florists' flower seeds for fall planting.

J. C. VAUGHAN CHICAGO Box 688.

CUT FERNS.

NEW CROP 1888.

NOW READY. Used for Bouquet Work, filling Flower Baskets, Decorating Altars, &c., &c. and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN. \$2.00 per bbl. (30 lbs.) or \$6.00 per 100 lbs. Season commences Oct. 1st for holiday trade.

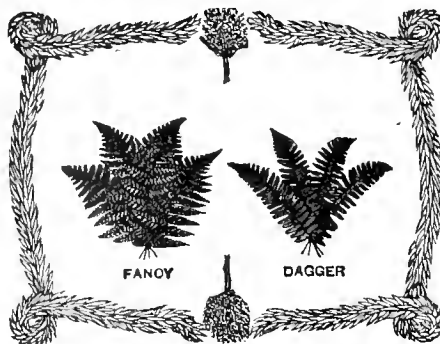
SPHAGNUM MOSS

—Long clean fibre, dry or green, \$1.00 per bbl. or six bbls. for \$5.00. Sample or trial sacks containing 3 bushels of Moss, dry, very light, designed for express shipments, \$1.00 per sack.



L. B. BRAGUE, Hinsdale, Mass.

Mention American Florist.



PALMS, FERNS, ETC.

All sizes from Seedlings up. Large stock of most useful varieties in best condition at lowest prices.

CHARLES D. BALL, Holmesburg, Philadelphia, Pa.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard, High Top Dwarf and Dwarf Pear; Plum, Peach, Cherry, Apple, Quince, Russian and other Apricots. Grape Vines, both old and new. Currants, Gooseberries, Blackberries, Raspberries, Strawberries, etc. In fact a full line of Fruits and Ornamentals, both large and small. Prices Reduced to suit the times. Correspondence solicited.



Price List Free. 34th YEAR. 700 ACRES. 24 GREENHOUSES. Address THE STORRS & HARRISON CO., PAINESVILLE, LAKE CO., OHIO.

PANSIES.

NEW CROP SEED JUST ARRIVED FROM THE GROWERS.

I would call the attention of the trade to the following splendid varieties of Pansies which I have had grown especially for my own home trade by the best French and German growers:

"NEW IMPROVED GIANT TRIMARDEAU"

NEW "BUGNOT'S" FANCY, especially improved, which for beauty of form, good substance, variety of markings, richness of color and enormous size cannot be excelled by any one. These are the very best varieties for market purposes ever grown.

"New CROP SEED" put up in trade packets containing 500 seeds each.

Trimardeau, 50c.; Bugnot, 75c. each. Printed directions for sowing, in English and German.

FRED SCHNEIDER,
ATTICA, WYOMING CO., N. Y.

ROSES.

In order to make room for young stock, we offer the following low inducements:

Mermot, Bon Silene, (from 3 1/2-inch pots).....\$ 8.00
S. d'In Ann, Cook, " 3-inch pots..... 7.00
Saffrano, and Adam, " 2 1/2-in pots..... 5.00
Bride and La France, 3 1/2-inch, \$10.00, 3-inch, \$8.00;
2 1/2-inch, \$5.00, per 100.

Papa Gontier, 3 1/2-in. \$12.00; 3-in. \$9.00; 2 1/2-in. \$7.00.

Smilax, strong plants from 2 1/2-in. pots, \$5.00 Per 100

Ampelopsis Veitchii and Quinquefolia, strong plants, from 3-in. pots, \$6.00 and \$8.00 per 100.

CARNATIONS.—Peerless, Hinze's White, Edwardsii, Philadelphia, Portia, Aleguere, Fred Johnson, Andalusia, etc. Field-grown plants, price \$5.00 to \$15.00 per 100, according to size and variety.

VIOLETS.—Marie Louise and Swanley White. Field-grown. Price on application.

Our Carnations and Violets are grown on new soil, being good size and healthy. Ready Sept. 15th.

I. C. WOOD & BRO., Fishkill, N. Y.

ED. JANSEN,

Importer & Manufacturer

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124 W. 19th Street,
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NEW YORK.



TRY DREER'S

GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER,
Philadelphia

ROEMER'S SUPERB PRIZE PANSIES,

The Finest Strain of Pansies in the World. Introducer and Grower of all the leading Novelties.

Catalogue free on application.

FRED. ROEMER, SEED GROWER,
QUEDLINBURG, GERMANY.

WANTED.

FOR WINTER BLOOMING.

100 Bouvardia President Garfield, 200 Alfred Neuner, 100 Bride, 100 Davidsonii. With full particulars and price address

ALBERT BURT, SYRACUSE, N. Y.

3 000 CARNATION PLANTS.

FIELD GROWN. STRONG CLUMPS.

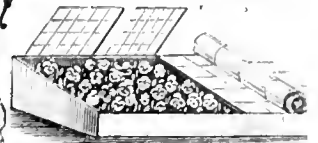
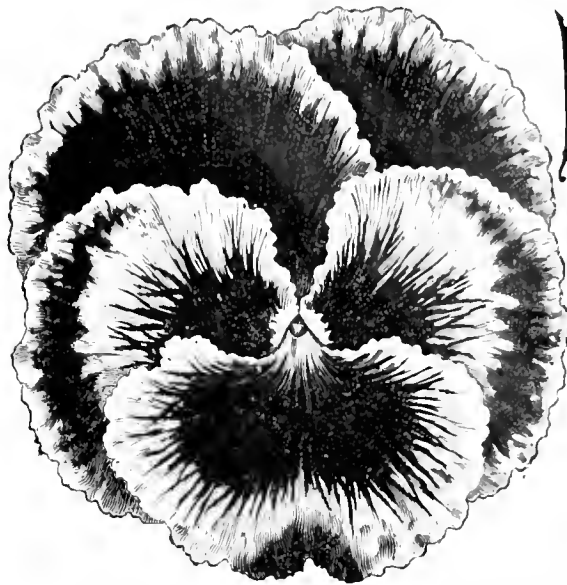
DeGRAW, SNOWDON, HINZE'S WHITE. Ready Sept. 15.
PAUL F. LAU, Turner Park, Ill.

Delegates to the next convention will travel **Pullman Car Line** via the



Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address
E. O. McCormick, Gen. Passenger Ag't, Chicago

HENDERSON'S PANSIES FOR FALL SOWING



We offer for delivery in August, or as soon as our new crops are received, Pansy seed of more than usual excellence in color, size, selection and variety; our contracts having been placed with celebrated specialists in Scotland, England, France and Germany. Our annual exhaustive trials of hundreds of varieties and strains, and the large quantity of Pansy plants we grow for a critical trade, enables us to select probably better than any other house, really high class strains, and the immense yearly increase in our sales show that our customers appreciate our efforts in this direction.

IN COMPARING PRICES REMEMBER THAT ONE OUNCE OF PANSY CONTAINS 30,000 SEEDS.

	Per oz.	PANSY. In separate colors.	Per oz.
Henderson's Fancy, mixed, (Belgian.)		Emperor William, ultra marine blue	\$ 1.25
For rich and varied colors no strain in existence can surpass this.	\$ 6.00	Faust, or King of Blacks	1.00
Henderson's Highland, mixed, (Scottish.)		White Treasure	1.00
This without exception is one of the finest strains of pansy in the world—the flowers being of the largest size, perfect in form, and of a great variety of beautiful colors, 1-8 oz.	\$3.00 22.00	Yellow	1.00
Prenler, mixed, (French), per 1-8 oz.	\$3.00 22.00	Snow Queen, satiny white, no eye	1.25
Giant Trimardeau, mixed, probably the largest flowers grown.	6.00	Striped	1.00
Ozier, or five blotched; mixed.	6.00	Mulogany	1.00
English Show; mixed, a splendid strain.	1.00	Delicite, porcelain, blue and white	1.25
German, finest mixed.	2.00	Fire Dragon	1.25
Good mixed.	per lb. \$8.00 .75	Rex, deep velvety purple	2.00
		Bronzed edged rose	1.25
		Rose marbled	1.25
		Bronze	1.25
		Azure Blue	1.00
		Lord Beaconsfield, violet shading to white	1.50
		Gold margined	1.00

The new Fancy Pansy seed produced a bed of Pansies so beautiful that it attracted the attention of many passers by, and I had many inquiries as to where the seed could be obtained. DR. WM. T. CLARK, HOUSTON, TEXAS.—I get finer and larger flowers from the plants raised from your Fancy Pansy seed than all others. MRS. M. W. WRIGHT, LITTLE FALLS, N. Y.—We received the new Fancy Pansy last year, and had the finest ever grown in this section. MAGILL BROS., Florists, FARMINGDALE, N. Y.—The Pansies I got from you last Spring were magnificent. E. W. WINSOR, NEWARK, N. Y.—Our Pansies and Primulas, got from you last Spring were superb; the Primulas the best we ever had. LEVI A. LOVELAND, Florist

PETER HENDERSON & CO.,

35 and 37 Cortlandt Street, NEW YORK.

Our Florist's Catalogue of other flower seeds for Fall sowing will be sent on application. Our Bulb Catalogue will be ready for the trade about Aug. 15th, and our retail about Sept. 1st.

FOR SALE.

IN DORCHESTER, SIX MILES FROM BOSTON, THE WELL-KNOWN ROSE GROWING ESTABLISHMENT OF MINTON BROS.

The estate contains 35,000 feet of land, on which are two rose houses each 100x20, one 100x15 and one 116x18. Two of these houses are comparatively new and all are well stocked with plants. Heated by hot water, two of the boilers new last fall and all in first-class condition. The houses are supplied with city water, and are located on one of the principal streets, convenient to railroad and horse cars, and land is fast appreciating in value. There are also 200 hothed sash. Price, \$9,000. Sickness only reason for selling. Apply to

WM. J. STEWART, 67 Bromfield St., Boston, Mass.

Climbing Hydrangea, see August 1 AMERICAN FLORIST.
Excelsior Pearl Tuberosa.
Variegated Tuberosa.
Cooperia Drummondii.
Amaryllis, Atamasco, Halli and Sarinensis (true Guetusey lily.)
Eulalias, Japanese variety and Zebrina
Arunda donax var
Roses, best forcing varieties one and two years,
Moon flower, Ipomoea grandiflora, alba and rosea (seed).
Freesia refracta alba
Ampelopsis Veitchii plants and seed.

MRS. J. S. R. THOMSON, Spartanburg, S. C.
State Vice-President Society American Florists.

GOOD STOCK FOR FLORISTS.

ROSES— Per 100 Per 1000
Saffrano, Mermot, Bride, Bon Silene
Mae, Alex. Bernaux, La Pactole, and thirty other good varieties. \$ 4.00 \$30.00
Bouvardia Lehntia, blue, 2-in. pots 5.00 15.00
Honeysuckles, Halleana and Aurea
Reticulata..... 2.00
Fuchsia secundula glauca..... 2.00
Begonia Rubella and semp. Gie. Rosen 7.00
Passifloras, Constance Elliott, Pfordtli, Smith, Trifasciata..... 3.00
List mailed on application.

Address **GEO. THOMPSON & SONS,**
LOUISVILLE, KY.

New York.

Alex McConnell is repainting and generally refitting his store. He has laid a hard wood floor which is a great addition to its appearance.

Editor Stiles of *Garden and Forest* says that David Allan has no right to name an orchid; that only the famous Reichenbach has this right.

John May has his largest rose house filled with Mrs. John Laing, which he intends to give a fair trial. He is not in favor of this rose because it turns a muddy color after it has been cut a day. He intends to "roast" Bennett of London if this flower is a failure, at least, he says so.

Peter Henderson has a new double hydrangea (*H. stellata plena*), which is a deep shade of pink, and each individual flower is imbricated, double and an inch in diameter. The trusses are of the largest size, and the plant is very hardy.

Double hollyhocks are making a gorgeous display in surrounding gardens. They are showing amazing tints—mulberry, white, golden yellow, scarlet and some the nearest to black of any known flower.

A few of a new crop of Perles des Jardin are coming in and sell for \$2 a dozen. Purple asters are appearing early and bring 25 cents a flower.

Ames, of Boston, has purchased Siebrecht & Wadley's new *Cattleya gigas* for a fabulous sum. It was on private exhibition for a fortnight. I understand that Mr. Ames will not sell it for \$3,000.

Arethusa bulbosa grows and blossoms freely on the borders of the Hackensack river.

Mr. Brett, who was gardener several years to James R. Pitcher, has left him, Mr. Manda now taking charge.

There was a magnificent display of flowers at the funeral of the late Courtland Palmer, Esq. A full length picture of the deceased was framed in crimson roses. Robert Ingersoll sent palm leaves clasped by lilies, and there were great quantities of orchids, roses and pea blossoms. One wreath was tied with a sash of No. 30 ribbon four and a half yards long.

Mr. A. D. Cowan, the popular treasurer of the New York Florists' Club, has been laid up for a week with inflammatory rheumatism, but is now around again.

CEMETERY SUPERINTENDENTS.—The Association of American Cemetery Superintendents holds its second annual convention at Brooklyn, N. Y., Wednesday, September 5, 1888. A. H. Sargent, Akron, O., is secretary.

DREER'S OFFER OF PLANTS FOR AUGUST.

<i>Peris Tremula</i> , 2 1/2-in. pots...	per 100	per 1000
<i>Dennstaedtia Davallioides</i> , a most useful fern, like <i>P. tremula</i> . It is a strong grower and useful for cutting or decorative purposes, 2 1/2-in. pots...	6.00	50.00
3-inch pots	8.00	70.00
Azophila Australis . A large stock of this most valuable Australian tree fern. Strong plants, 3-inch pots...	10.00	
Roses Papa Gentier . First class stock in best possible condition for immediate planting, 3-inch pots...	8.00	70.00
4-inch pots	12.00	110.00
5-inch pots	15.00	140.00

Dreer's Mid-Summer Trade List offers the best stock to florists; sent to all applicants.

HENRY A. DREER, Philadelphia.
Mention American Florist.

WE MUST HAVE THE ROOM, and offer 2000 SMLAX at \$17.50 per 1000. Good strong plants. Also surplus roses best sorts in 1-inch pots. **THE FLORAL EXCHANGE**, 614 Chestnut Street, PHILADELPHIA, PA.

WE ARE NOW BOOKING ORDERS FOR HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc. SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of *Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



R. VAN DER SCHOOT & SON.

Bulb Growers,
HILLEGOM, near Haarlem, HOLLAND.



TRADE MARK.

POLMAN MOOY, HAARLEM, HOLLAND.

WHOLESALE GROWERS OF
DUTCH BULBS.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.
HEADQUARTERS FOR FORCING BULBS.
ESTABLISHED IN 1810.

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IMPORTER OF DUTCH BULBS

From P. VAN WAVEREN Jr. & CO., Hillegom, Holland.

ROSES AND ORNAMENTAL TREES AND SHRUBS

From THE BOOSKOOP HOLLAND NURSERY ASSOCIATION.

Roman Hyacinths, Paper White Narcissus, Freesias, Liliun Candidum and Harrisii, Azalea Indica, etc. SEND FOR CATALOGUES.

BULBS WE ARE LARGE IMPORTERS OF FORCING BULBS.
SEND YOUR LIST FOR PRICES.
CURRIE BROS., SEEDSMEN AND FLORISTS.
MILWAUKEE, WIS.

E. H. KRELAGE & SON,
The King's Nurserymen and Seedsmen,
HAARLEM, HOLLAND.

DUTCH BULBS. Newest Wholesale Trade List (No. 401 a) now ready. Sent the trade prepaid on application. **PRICES MUCH REDUCED, AND VERY CHEAP.** Enormous stock of first quality and complete collections of Bulbs of every description. **NO AGENTS.** Please address direct. This catalogue contains two first offers of UNRIVALED COLLECTIONS of fine late Tulips for amateurs, and late ONE-COLORED BREEDERS, never before offered, as well as of STRAWBERRIES. Shortly issued: A new edition of the catalogue of *COLORED PLATES* of Plants, Flowers, Fruits, etc. (No. 395), containing more than 1200 names and prices of plates of all sorts, principally of Bulbous and Tuberous-Rooted Plants. This Catalogue too will be supplied free on application.

ROSES, SEEDS, ETC.

PERLES, 3-inch, \$7 per 100; 2-inch	Per 100	\$4.00
JACOS, 4-inch, \$10	3-inch	6.00
" 2-inch		4.00
FUCHSIA Storm King, 2-inch		4.00
" Phenominal, 4-inch		8.00
" " 2-inch		5.00
BEGONIA Louis Chretien		6.00
" Rex		4.00

SEEDS.

PRIMULA SINENSIS Rubra, 100 Seeds, 15 cents.	
" " Alba, " " 15 "	
SMLAX, New Crop	per oz. \$1.00

J. E. BONSALE,
308 GARFIELD AVE., SALEM, O.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs California Lily Bulbs
Japanese Seeds, Conifers, Palms
Trees, Shrubs, and Bamboos.

H. H. BERGER & CO., 315 & 317 Washington Street,
SAN FRANCISCO, CALIFORNIA.
Send for Estimates. Established 1878.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,
CEDAR RAPIDS, IA.
Mention American Florist.

AUGUST RÖLKER & SONS,
 44 Dey St., NEW YORK,
 Supply the Trade with
SEEDS, BULBS,
 And all kinds of
FLORISTS' SUPPLIES.
 Price List mailed on application.

Bulbs, Immortelles, Etc.
 SPECIAL PRICES ON LARGE QUANTITIES.

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 (Formerly of DeVeer & Boomkamp.)
 183 Water St., New York.
 SOLE AGENT FOR
 THE GENERAL BULB CO., Vogelenzang, (Holland.)
 Ls. BREMOND FILS, Ollioules, (France.)

Fall Catalogues now ready. Free to applicants in the trade.

FORCING BULBS.
 ROMANS AND DUTCH HYACINTHS,
 NARCISSUS, LILIUM HARRISII
 AND CANDIDUM, TULIPS,
 FREESIAS, ETC.
 Send for prices by the 100 or 1000. Special list will be ready in August.
A. GIDDINGS, DANVILLE ILL.

C. H. ALLEN,
 (Successor to C. L. ALLEN & CO.)
BULB GROWER
 TO THE TRADE ONLY,
 JAMESPORT, N. Y.

Catalogues ready in August.

Office during Convention, 36 E. 23rd st., N. Y.

CUT ROSES.
 Leading sorts—H. P. and Tea,
 Purchasers' Selection—white, colored, or
 assorted.
 Cut with long stems, carefully packed.
 Promptly Expresed, \$2.00 per 100.
 Cash with the order.
W. H. SALTER,
 P. O. Box 57. ROCHESTER, N. Y.

HIGH GRADE PANSIES
 A SPECIALTY.
 After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or color:
 Our Improved Giant Trimardeau as the best for market. Package of 1000 seeds, \$1.00.
 And New French Fancies as Extra. Package of 400 seeds, \$1.00.
DENYS ZIRNGIEBEL,
 Needham, Mass.
 (NEW CROP SEED AFTER JULY 1ST.)



KILLS —
 INSECTS
 FISHKILL-
 ON —
 HUDSON, N. Y.

BERMUDA EASTER LILY
(L. HARRISII.)

WE HAVE A VERY FINE LOT OF THE ABOVE LILY.
5 to 7 inches in Circumference @ \$6.50 per 100, \$60.00 per 1000.
7 to 9 inches in Circumference @ \$10.00 per 100, \$95.00 per 1000.

Free on board cars in New York.

—ORDER EARLY.—

V. H. HALLOCK & SON,
 QUEENS, NEW YORK.



READY SOON.

ROMAN HYACINTHS,
 NARCISSUS PAPER WHITE,
 NARCISSUS DOUBLE ROMAN
 Narcissus Paper White new Grandiflora.
 LILIUM CANDIDUM.

Lilium Harrisii,
 Freesia Leichtlini Major,
 Freesia Refracta Alba, } Now Ready

Send for new complete Illustrated Catalogue of Bulbs, Flower Seeds and Florists' Supplies; ready August 20.

J. C. VAUGHAN, ^{BOX 688} CHICAGO.



SEND FOR SPECIAL LIST OF
FALL BULBS.

Roman Hyacinths ready about Aug. 20.
 ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDIDUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS
JAMES KING,
 170 Lake St. CHICAGO.

F. E. McALLISTER,

— WHOLESALE DEALER IN —

Seeds For the Florist Market, Garden and Farmer. Requisites Such as Baskets, Immortelles, Grasses, Mosses, Boquet Papers, Pampus, Plumes, etc. Bulbs For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.



Every Florist! Every Nurseryman! Every Seedsman!
 SHOULD HAVE OUR

DIRECTORY,

Address AMERICAN FLORIST CO., 54 La Salle St., CHICAGO.

Oil the Lumber.

I presume the average life of ten years for commercial greenhouses as expressed by the FLORIST is nearly correct, but houses will easily last twice that time by exercising more care before and after building to preserve the lumber from decay in the most exposed positions.

In permanent houses the first parts to give out are the posts, the sills and the ends of the rafters. Yellow locust posts will last a great many years without any preparation or preservative. But probably iron posts will be cheaper than locust in many localities. The sills and rafters can be preserved by saturating with linseed oil before painting or erecting. After the rafters are cut and ready for position stand them on end in a tub or bucket with a few inches of linseed oil in the bottom. In a few hours the lumber will be saturated to the height of a foot or more. Then reverse them and soak the other end. I have a house that was built twenty-five years ago, in which the rafters were treated in this way and they are good yet while the sills, which were not so treated, have rotted out and had to be renewed several years ago.

I know the necessity which many florists feel of saving expense where they can when building, but think there is a great deal of "penny wise and pound foolish" economy displayed in greenhouse building.
S. C. MOON.
Morrisville, Pa.

WROUGHT WELDED BOILERS.—The claim is made that these possess considerable advantage over those of cast-iron in that the brittle nature of cast-iron is liable to fracture whether any pressure is carried on the boiler or not, while those made of wrought iron and solidly welded without seams, joints or rivets will expand and contract freely without any risk of fracture.

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Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., Govanstown, Md.

WATER LILIES,

All Colors.

Young plants suitable for late flowering NOW READY.

Send for prices.

BENJ. GREY, Malden, Mass.

Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,
BY THE HUNDRED OR THOUSAND,
GEO. WITTBOLD,
Cor. School and Halsted Sts.,
LAKE VIEW, CHICAGO.

F. A. RIECHERS & SOHNE A. G., Florists,
HAMBURG, GERMANY.

Largest stock of Azalea indica, Camellias, Lilies of the valley for the wholesale trade. Price list on application.

DESIRABLE PLANTS.

In 20 years experience the best market colors I have found is "Garland." Fine young plants, from 2-inch pots, 75 cents a dozen, \$3 a hundred. Yellow Single Oxalis. Profuse bloomer, bright yellow, large fragrant flowers. Dry roots 75 cents a dozen, \$5 a hundred.

White Double Chinese Primrose; from 3-inch pots, \$1.50 a dozen, \$10 a hundred.

Red Single Chinese Primrose 60 cents a dozen, \$3 a hundred.
W. T. BELL, Franklin, Pa.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

TEA-SCENTED AND OTHER ROSES,

30,000 IN POTS.

Clematis, 50,000 in pots,

Grand plants, fit for shipment at any time.

200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

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HEREFORD, ENGLAND.

ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

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UTICA, N. Y.

North Star Seed Store.

The emphatic tone of our thousand and one testimonials give indisputable evidence of the superiority of our seed.

Send for Catalogue.

DeCOU & CO., St. Paul, Minn.

CHOICE PLANTS.

We offer in prime quality for Aug. delivery.

	Per Doz.
Oleander, Double White, 4-inch	\$2.00
Pasiflora princeps, strong, 4-inch	4.00
Floxinas in buds, extra fine	2.00
Allamanda grandiflora 4-inch pots	4.00
Tree Mignonette (Lassonia alba), 3-inch	2.00
Bouvardia, Double Yellow, 3-inch	2.00
Melaleuca hypericifolia, fine, 4-inch	2.00
Genista canariense, very free blooming, 4-inch	2.00
Myrtus communis (Bridal Myrtle), 4-inch	2.00

	Per 100
Smilax, 2-inch pots	\$3.00
Pomegranate Legrelle fl. pl. yellow striped red	4.00
Oleander, single white and double pink	4.00
Marechal Niel, 2-inch pots	5.00
Cloire de Dijon, 2-inch pots	4.00
Lamarque, 2-inch pots	3.00
Ampelopsis Royallii, 2-inch pots	4.00
Tritoma Coralina, 3-inch pots	5.00
Agapanthus umbellatus, 3-inch pots	6.00
Cyperium argenteum, 3-inch pots	5.00
Pteris tremula, 2-inch pots	3.00

10,000 Roses assorted, best sorts. Send list for prices from 2½, 3 or 4-inch pots. Illustrated Catalogue of 100 pages mailed Free to all applicants.

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SMILAX FOR EASTER

IN QUANTITY FOR THE TRADE.
STORM KING FUCHSIA—Well rooted Cuttings, \$3.00 per 100, as good as pot plants.

FUCHSIA PHENOMINAL—\$8.00 per 100, or will exchange for Chrysanthemums and Geraniums of some varieties, and dbl. Abut. Thomps.

F. E. FASSETT & BRO.,
Ashtabula, O.

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Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

Delegates to the New York Convention

And all others are cordially invited to visit our Nursery at Riverton, N. J. and inspect our stock of

PALMS, PANDANUS
FERNS, AND

DECORATIVE PLANTS,

For Fall and Winter use. We can show you the best stock in the country, grown by ourselves, and will make prices satisfactory. Come and see for yourself, that we may prove all we say.

Our Mid-Summer Price List mailed to all applicants.

Western delegates traveling via Philadelphia can stop over at Riverton on their tickets. Riverton is on the line of the Pennsylvania R. R. system to New York.

HENRY A. DREER,
714 Chestnut Street, PHILADELPHIA.

PANSIES.

My collection of Pansies has for years attracted a great deal of attention. Florists and amateurs both conceding them to be of the highest quality.

My Collection received Premiums wherever Exhibited.

Pansy seeds, all varieties, mixed, per ounce, \$8.00;

1-8 ounce, \$1.00.

Trimardeau and all the large flowering kinds, mixed, 1000 seeds \$1.00. Send for price list.

OSCAR R. KREINBERG, box 294 Philadelphia, Pa.

THE BEST AND CHEAPEST

DOUBLE PETUNIA SEED

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

G. A. McTAVISH,
NORTH SAANICH, B. C., CANADA.

PRIMULA OBCONICA

IN QUANTITY.

FINE, HEALTHY PLANTS.

PETER FISHER,
Montvale, Mass.

FLOWER SEEDS.

THIS SEASON'S CROP.

ACQUILEGIA, from my collection of over 100 varieties and hybrids. Per pkt. 25c., per oz. \$1.00

Seed saved from only a few of the choicest and rare varieties. per pkt. 50c.

IRIS KEMPFERII from my fine collection. Per packet 25 cents.

CHARLES L. BURR,
SPRINGFIELD, MASS.

Buffalo.

A game of base ball between the florists of the east and west sides of the city on July 27, gave glorious entertainment to the balance of the local florists who officiated as spectators. The stores in general were closed and the "grand stand" contained a convention of the entire local trade—all except one, who it is believed has an especial horror of foul balls.

The battery for the East Siders were Steve Jones, pitcher, Mm. Milley, catcher; for the West Siders Macomber and Cullendon pitchers, Neubeck, catcher. These notes were taken between the innings and refreshments.

Neubeck's coaching failed to rattle the East Siders and his catching was very fine. Several flies were born during the game, but the one gathered in by the old veteran Mepsted was the only one caught. The spectators shrieked and applauded in the regulation style. In one of the last innings Neubeck sent the ball to short stop who managed to hold it and fire it to first baseman Cleaves. Neubeck and the ball arrived together and a cloud of dust obscured the tragedy. When the cloud lifted Neubeck and Cleaves were seen lying on the ground considerably damaged but still alive and game. The umpire declared it an "out" and the spectators tied their lungs loose in the most approved way.

The refreshments "took" well, in fact they were all taken by the crowd. Wm. Scott claimed he was hit by the ball while at bat and tried to get a base, but the hard hearted umpire would not allow it, so Mr. S. assumed a very affecting limp and again struck at the atmosphere. There was some talk of organizing a balloon club for the benefit of Nolan, Christensen and Rebstock. Score 14 to 13 in favor of the East Siders. A few bruises and broken fingers but no deaths as the West Siders have not yet settled with the umpire.

Following are the names of the participants: West Side club—Macomber p, Neubeck c, Wm. Scott 1b, Cullendon 2b, Mac 3b, Nolan cf, Christensen rf, Long lf, Rebstock ss. East Side club—Jones p, Wm. Milley c, Cleaves 1b, Pickelman 2b, W. J. Palmer, Jr., 3b, Bishop cf, Mepsted rf, A. Scott, Jr., lf, Jno. Milley ss. A. P. I.

WASHINGTON, IND.—Meyer & Kronenberg have purchased land here and will build greenhouses on it this fall.



FOR THE TRADE.
FLORAL WIRE DESIGNS.

JAS. GRIFFITH,
THE PIONEER MANUFACTURER IN THE WEST,
305 Main Street, CINCINNATI, OHIO.
SEND FOR WHOLESALE PRICE LIST.



SOMETHING NEW.

Look for us at the Convention.

Philadelphia Immortelle Design Co.,

904 Filbert St., Philadelphia, Pa.



ONLY POTTERY MAKING A SPECIALTY OF

FLOWER POTS
FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,
PHILADELPHIA.

BARBED
GLAZIER POINTS
WITH OR WITHOUT LIPS.

Pat. in April and May, 1888.

No more CLIMBING OVER the glass.

NEW MODE OF SETTING,
Commencing at the top instead of the bottom.
These points hold better than all others.
No. 1 will hold glass 10x15, and No. 2 will hold glass 18x24, not allowing it to slide 1/8-inch in five years.

Glass fastened with them, and the methods of using these points, will be fully shown at the coming

— FLORAL EXHIBITION —

in New York in August next.

FOR SALE IN

BOSTON, MASS., by Wm. J. Stewart, 67 Bromfield St.
NEW YORK, by Peter Henderson & Co., 35 and 37
Cortlandt street.

CHICAGO, by J. C. Vanahan, 146 W. Washington St.
Retail without lip 50c., with lip 75c. per 1000. Pin-
ners 50c. Liberal discount on large orders.

B. B. CHANDLER,

Patentee and Manufacturer,
HYDE PARK, MASS., U. S. A.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

N. STEFFENS,

335 East 21st Street, NEW YORK.



SYRACUSE POTTERY CO.

Ships Greenhouse Flower Pots to Maine, Florida, California and Texas—everywhere—in crates only, but with no charge for crates or cartage. New clay mill, two engines, new revolving moulds turn out finest, smoothest and most perfectly finished pots in the market. No more rough pots. Send for list, rates and prices of 20 sizes (thumbs to 16-inch) packed to order. Our great cut in the prices of our

17 READY PACKED CRATES

has given us an immense trade all over the South and West. No Pottery ships so far, so securely and so cheap as we do it. Our new revolving machines finish pots finer than any hand-made put, and we carry a big stock ready to ship the day the cash comes. No traveling men; no notes or accounts.

GREENHOUSE POTS

are our great specialty. We have three sizes of deep "Rose" Pots at \$3.75, \$4.00 and \$4.35 per 1000. We pack crates of mixed sizes to order. A crate usually weighs 400 lbs. and goes at buyer's risk and frt. We give samples in first crate. We ship on receipt of order and cash and without delay.

PRICES PER CRATE, CASH WITH ORDER:

3,150 Thumbs,	\$8.00;	875 3 1/4-inch,	\$5.50;
2,625 2 1/4-inch,	8.00;	600 4-inch,	4.75;
1,875 2 3/4-inch,	7.25;	300 4 1/2-inch,	3.90;
1,300 special 3-in.,	6.00;	320 5-inch,	4.40;
1,150 3-inch,	5.50;	160 6-inch,	3.50;

J. N. PERKINS, Manager, Syracuse, N. Y.

THE EVANS CHALLENGE
VENTILATING APPARATUS.

WITHOUT A RIVAL, EITHER IN COST, SPEED IN OPERATING OR SECURITY IN CASE OF STORMS.



MANUFACTURED BY —
QUAKER CITY MACHINE CO.,
1108 and 1110 North E Street,
RICHMOND, IND.

WHEN WRITING FOR ESTIMATES, PLEASE GIVE

FOLLOWING DIMENSIONS:

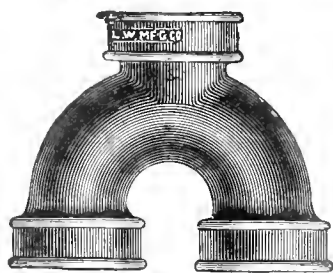
- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

HAND TURNED EARTHEN WARE
Price List for 1888.

2 1/2-inch.... per 100,	\$ 50	8-inch.... per 100,	\$ 5.50
3 1/4-inch.... "	63	9-inch.... "	6.75
4-inch.... "	88	10-inch.... "	8.00
5-inch.... "	1.38	12-inch.... "	23.50
6-inch.... "	2.20	14-inch.... "	50.00
7-inch.... "	3.75	18-inch.... "	100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to
HILLFINGER BROS., Fort Edward, N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

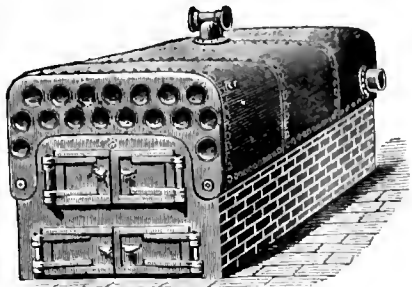
L. Wolff Mfg. Co., 93 to 111 W. Lake St. CHICAGO

ESTABLISHED 1854.

Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Advertisement

Capacity from 350 to 10,000 feet of four-inch pipe. Send for New List.

PETER DEVINE,
387 S. CANAL ST.,
CHICAGO.

Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD N. J.**

Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada Glazed on the

Helliwell Pat. Imperishable System OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY,
HOFTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

HOT BED SASH VENTILATORS. WRITE FOR PRICES.

FULL SIZE OF SASH BARS IN PINE or CYPRESS. WE CARRY A FULL STOCK OF 12 1/2 and 16 foot lengths.

JOHN L. DIEZ & CO.,
530 No. Halsted Street, CHICAGO.

"15 YEARS' EXPERIENCE. THE GURNEY SAVES 33% PER CENT IN FUEL."

Letter from Thomas Gray, of Fitchburg, Mass., in reference to

GURNEY HOT-WATER HEATER.

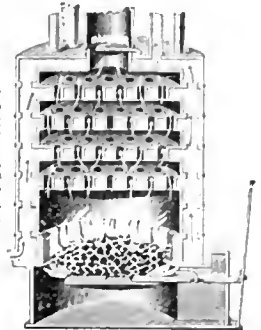
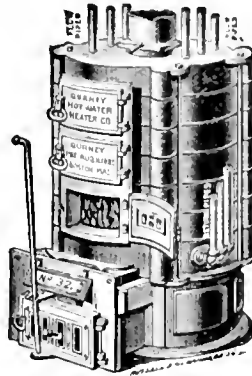
FITCHBURG, MASS., April 11, 1884.
Dear Sirs: In answer to yours, asking my opinion of the Gurney Hot Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.

Yours truly,

THOMAS GRAY, Florist.

Illust. Catalogue & Testimonial Sheet Free.

GURNEY HOT WATER HEATER CO.,
237 Franklin Street, BOSTON, MASS.



SELLING AGENCIES: M. H. JOHNSON, 140 Centre St., N. Y.; G. A. WHITEHEAD, 110, CO. 12, A. W. Monroe St., Chicago, Ill.; T. R. CHASE, 31 Edmund Place, Detroit, Mich.; WILLIAM GARDNER & CO., 34 Third St., Portland, Oregon; J. L. FRISBIE, 526 Phila. St., Covington, Ky.; WALK & MITCHELL, 15, 17 & 20 Hasell St., Charleston, S. C. MENTION THIS PAPER.

ESTABLISHED 1853.

— THE —

O. K. STEAM GENERATOR

Is especially adapted to warming

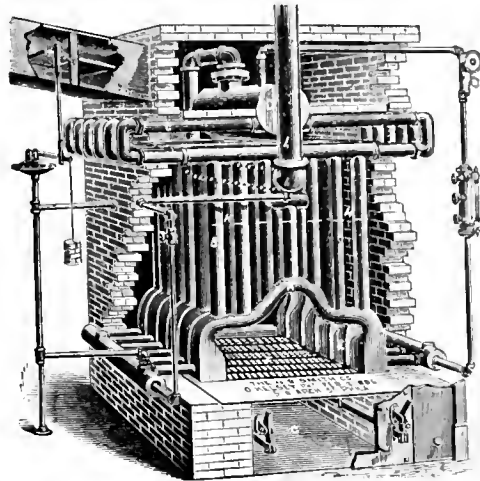
GREENHOUSES, GRAPERIES AND CONSERVATORIES.

Special features insure

Economy, Simplicity, Durability,
BURNS SOFT COAL OR WOOD,
GIVING best results with least labor and fuel.
SEND FOR DESCRIPTION.

THE H. B. SMITH CO.,

510 Arch Street, PHILADELPHIA, PA.
Mention American Florist.

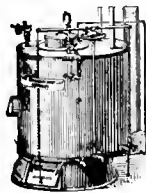


Reduce your Coal Bills

THE FURMAN STEAM HEATER

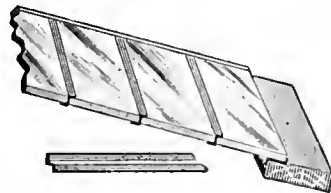
ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a SAVING of fully 20 to 25 Per Cent. in Fuel over any other method. Burns HARD or SOFT COAL. Endorsed by leading florists. Send for full Illustrated Catalogue, Address **HERENDEN MANUFACTURING CO., GENEVA, N. Y.**



IMPROVED GLAZING.

J. M. Gasser's Patent Zinc Joints,



For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

J. M. GASSER,
101 Euclid Avenue, CLEVELAND, O.

SASH BARS

VENTILATORS, RIDGES, GUTTERING AND LUMBER,

NO WIDE-AWAKE FLORIST need be told it will pay him to use Sash Bars, etc. made from

— CLEAR CYPRESS. —

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON Co., OHIO.

FOUND GUILTY!

Of selling the highest priced, cheapest made and largest coal consuming

STEAM AND HOT WATER BOILER

manufactured. If you are interested in the above, and would like to know what your brother florists have to say, send stamp for circulars.

F. W. FOSTER,

25 Beverly Street, BOSTON, MASS.

GOLDMAN'S ATOMIZER AND SPRINKLER

FOR A THOUSAND AND ONE USES. COMMENT UNNECESSARY



Practical and Useful.

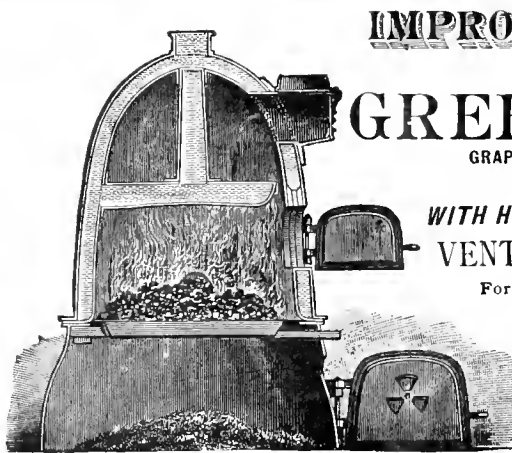
You will not part with it.

For Flowers, Window Gardening, House Plants, Destroying Insects, and for various other purposes. Most natural substitute for fog or dew. By dipping in water while closed, fills instantly. Ball finely perforated; spray controlled by pressure of hand. Size of lemon squeezer. Weight, 5 oz. Exclusive Territory for Agents, sell on their own merits, no talk. Sample by mail, 5 cts. This is the Atomizer that sold so well at the Danbury, Albany and other Fairs. Florists and seedsmen, show it to your customers; sell best; good profit. Excellent for indoor plants. Send for illustrated pamphlet and price to the trade. Mention this paper.

M. GOLDMUN, Manufacturer, Pittsfield, Mass.

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IMPROVED BOILERS
FOR HEATING
GREENHOUSES

GRAPERIES, POULTRY-HOUSES, ETC.

ALSO FOR HEATING

WITH HOT WATER UNDER PRESSURE.
VENTILATING APPARATUS

For Raising Sashes in Greenhouses.

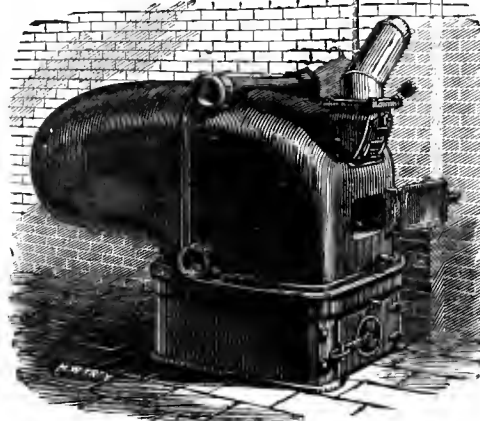
GALVANIZED SCREW EYES

And Wire for Trellis Work.

Send for Catalogue.

Thos. W. Weathered,
46 & 48 MARION ST., N. Y.

Greenhouse Heating AND Ventilating



Send 4 cents postage for Illustrated Catalogue.

HITCHINGS & CO.

233 Mercer Street, New York.

- Five Patterns of Boilers, Eighteen Sizes,
- Corrugated Fire Box Boilers
- Saddle Boilers,
- Conical Boilers,
- Base Burning Water Heaters
- Perfect Sash Raising Apparatus.

WADSWORTH, O.—The afternoon of July 23 a terrible hail storm passed over this place breaking 1,500 panes of glass in the greenhouses of A. P. Steele, in addition to doing a large amount of damage to plants and farm crops in this vicinity. No hail insurance on glass broken.

ROSES.

We have several thousand extra fine plants grown in 4-inch pots from two eyed cuttings at the following low prices: Per 100
 PERLES and NIPHETOS \$12.00
 MERMETS and LA FRANCE 12 00
 BON SILENE and SAFRANO 10 00
 J. L. DILLON, Bloomsburg, Pa.



GREENHOUSE HEATING AND VENTILATING.
Superior Hot Water Boilers.

JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N. Y.
Send for Catalogue.

GREENHOUSE HEATING.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.
 It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.

Improved Hot Water Boilers

For Heating

Greenhouses, Graperies,
CONSERVATORIES, ETC.

ALSO

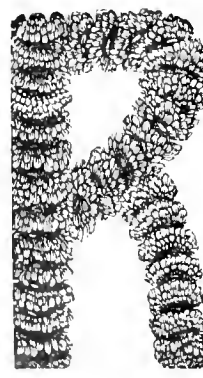
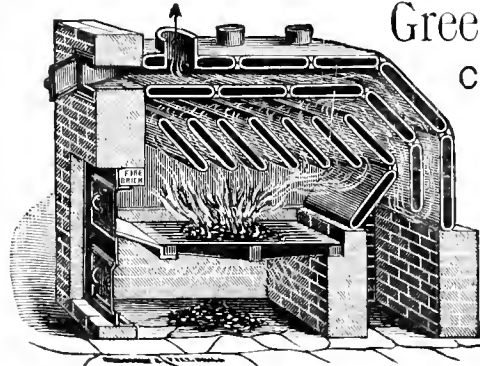
Cast Iron Pipe, Fittings, Valves and
all Material for Heating by
Hot Water.

Send for Catalogue.

MYERS & CO.

1173 So. 9th St.,

PHILADELPHIA.



Florists' Letters,

Emblems, Monograms, Etc
PATENT APPLIED FOR.

These letters are made of the best immortelles, wired on wood or metal frames with holes to insert tooth-picks.

Send for Sample.
2-in. purple, ... per 100, \$3.00
Postage 15 cts. per 100.

Also dealer in Florists' Supplies. Send for Catalogue.
W. C. KRICK,
1287 Broadway, Brooklyn,
New York

M. M. Bayersdorfer & Co.,
Phila., Acts for Penna.
J. C. Vaughan, Chicago,
Agt. west of Penna.
A full line of samples at the Convention.



ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

Write for Latest Prices.
Mention American Florist.

THE AMERICAN FLORIST

CONVENTION SUPPLEMENT.

Vol. IV.

CHICAGO AND NEW YORK, AUGUST 15, 1888.

Supplement to No. 73.

THE AMERICAN FLORIST

Society Headquarters.

Headquarters will be in room F, Fifth Avenue Hotel, where the secretary and treasurer can be found as early as Monday evening August 20. These gentlemen will be pleased to relieve you of \$2 and give you in exchange a receipt and the badge for '88.

THE HEADQUARTERS of the AMERICAN FLORIST during the convention will be at the Fifth Avenue Hotel, room 11. Call and see us.

PROGRAMME.

TUESDAY, AUG. 21, 1888.

FIRST DAY—MORNING SESSION, 10 O'CLOCK.

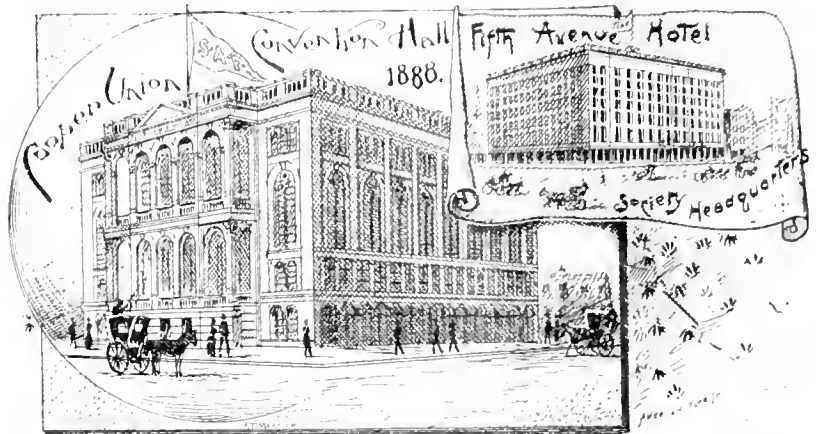
ADDRESS OF WELCOME—RESPONSE—PRESIDENT HILL'S ADDRESS—REPORTS OF SECRETARY AND TREASURER—REPORTS OF STANDING COMMITTEES—REPORTS OF SPECIAL COMMITTEES—MISCELLANEOUS BUSINESS—DISCUSSION OF PRESIDENT'S ADDRESS.

FIRST DAY—AFTERNOON SESSION, 3 O'CLOCK.

ESSAY.—*The Elevation of Our Business.* H. H. BATTLES, Philadelphia, Pa.
ESSAY.—*Ferns, Palms, and other Decorative Plants.* C. D. BALL, Holmesburg, Pa.

FIRST DAY—EVENING SESSION, 8 O'CLOCK.
QUESTION BOX.

1. What benefit is derived by florists from a scientific education? Answered by A. E. Whittle, Albany, N. Y.
2. Is the sale of chrysanthemums an injury to the cut-flower trade? Answered by J. M. Jordan, St. Louis, Mo.
3. Is a wholesale market for the sale of cut-flowers desirable in our large cities; and if so, what is the best manner of organizing and conducting such? Answered by J. C. Vaughan, Chicago, Ill.
4. Horticultural Exhibitions: What is their value to the florist, and what can be done to render them more profitable and popular? Answered by John Thorpe, Pearl River, N. Y.
5. Can ixoras, and other flowering stove plants, be grown so that flowers can be sold at a profit? Answered by John G. Gardner, Jobstown, N. J.
6. What varieties of orchids are of easiest cultivation and most profitable for florists who are not professional orchid growers? Answered by Benj. Grey, Malden, Mass.
7. What are the best varieties of ferns to grow for general retail business? Answered by Robt. Craig, Philadelphia, Pa.
8. Which are the most desirable varieties of chrysanthemums to grow for cut bloom for market, including the earliest and latest varieties? Answered by John Henderson, Flushing, N. Y.



9. What are the best six carnations for the general florist to grow—colors red, pink, yellow, and white? Answered by Chas. T. Starr, Avondale, Pa.
10. What is the best way to propagate *Acacia pubescens*? Answered by Robt. J. Halliday, Baltimore, Md.
11. Is the mail trade in plants an injury to the general business? Answered by Robt. George, Painesville, O.

WEDNESDAY, AUG. 22, 1888.

SECOND DAY—MORNING SESSION, 10 O'CLOCK.
NOMINATION OF OFFICERS FOR ENSUING YEAR.

ESSAY.—*Roses: from the Retailer's Standpoint.* THOMAS CAKTLIDGE, Philadelphia, Pa.

SECOND DAY—AFTERNOON SESSION, 3 O'CLOCK.
ESSAY.—*Roses: from the Grocer's Standpoint.* EDWIN LONSDALE, Chestnut Hill, Pa.

REPORT ON Hail Insurance. J. G. ESLEK, Sadle River, N. J.

SECOND DAY—EVENING SESSION, 8 O'CLOCK.
QUESTION BOX.

1. What varieties of roses introduced within the last two years, if any, are worth growing for winter forcing? Answered by M. A. Hunt, Terre Haute, Ind.
2. What are the best and most profitable varieties of hybrid perpetual roses to grow for forcing for early and late use for general florist? Answered by Ernst Asmus, W. Hoboken, N. J.
3. How many varieties of tea and hybrid tea roses are necessary for the general grower; and which are the best varieties to grow? Answered by J. M. Gasser, Cleveland, O.
4. Does propagating from blind shoots year after year have a tendency to render any plant less floriferous? Answered by Jas. Pentland, Baltimore, Md.
5. Can *La France* and other roses be forced profitably in pots during winter? Answered by W. K. Harris, Philadelphia.
6. Why do certain roses, such as *Perle*,

Souvenir, etc., that used to be favorites for forcing, now seem to grow less satisfactory every year? Answered by M. A. Hunt, Terre Haute, Ind.

7. Will the larva of the rose-bug stand freezing? In other words, is it safe to spread infected soil taken from the greenhouse and grow sod upon it for future use? Answered by Robt. Craig, Philadelphia.

8. Are we not overdoing the rose business for cut-flowers? Answered by B. P. Critchell, Cincinnati, O.

THURSDAY, AUG. 23, 1888.

THIRD DAY—MORNING SESSION, 10 O'CLOCK.
ELECTION OF OFFICERS.

ESSAY.—*Soils and Fertilizers.* J. H. TAYLOR, Bay Side, N. Y.

THIRD DAY—AFTERNOON SESSION, 3 O'CLOCK.
ESSAY.—*Modes of Heating, and their Relative Cost of Construction and Operation.* J. D. KAY, Volusia, Riverside, Ill.

ESSAY.—*Nomenclature.* ROBT. J. HALLIDAY, Baltimore, Md.

THIRD DAY—EVENING SESSION, 8 O'CLOCK.
QUESTION BOX.

1. What is the best method of preserving wood in greenhouses? Answered by S. Kehrman, Jr., St. Louis, Mo.
2. What is the best mode of building horticultural halls, with a view to cheapness of construction, plenty of light, and adaptability to exhibition of plants, flowers and fruits? Answered by J. N. May, Summit, N. J.
3. What has been the result of slate benches the past season; and effect of same on plants planted out on them? Answered by John Smith, Yonkers, N. Y.
4. What is the best insecticide for general use in the market to date? Answered by Robt. Craig, Philadelphia, Pa.
5. Has the use of greenhouses constructed entirely of iron and glass been satisfactory in this country? Answered by P. A. Schmitt, Glenville, O.

6. The uses of the thermometer and the hygrometer in plant houses? Answered by Chas. P. Anderson, Flushing, N. Y.

7. What is the best way to use natural gas in flues and under steam and hot water boilers? Answered by J. B. Ferguson, Pittsburg, Pa.

8. Insuring Greenhouses: What companies assume risks of this kind on stock and houses? Answered by J. N. May, Summit, N. J.

N. B.—The "question box," as heretofore, will form an important part of the proceedings. Most florists have questions to ask. Don't be afraid to write them on your business card and drop them in the box. The president will appoint competent members to answer them at the first convenient opportunity.

FRIDAY, AUG. 24, 1888.
FOURTH DAY

The New York Florist Club will tender an excursion to the society, and hope that every member will so arrange his plans as to accept of their hospitality.

PROPOSED AMENDMENTS TO THE CONSTITUTION.

The secretary has been notified, in accordance with Article X, of the Constitution, that the following amendments will be proposed:

1. To amend Article IV., by inserting the words "Vice-President and Treasurer," so that the clause shall read thus: "Its government between the sessions of the society shall be vested in an Executive Committee of nine, to which the President, Junior Ex-President, Secretary, Vice-President, and Treasurer, as *ex-officio* members, shall be added."

2. To amend Article V., by substituting "second Tuesday in September" for "third Wednesday in August," so that the clause shall read thus: "This society shall hold an annual meeting on the *second Tuesday in September*, etc.

IF YOU can throw any light on any matter under discussion by the convention don't be afraid to speak up. Talk as distinctly as possible and cover the point in the fewest words you can.

CARDS.—Bring along a good supply of cards with your name and address plainly printed thereon. Pass them around and let us know who you are and where you come from. Make as many new acquaintances as you can, this is one of the objects of the meetings.

THE EXCURSION.—The excursion tendered to the society by the New York Florists' Club occurs on Friday, August 24. Arrange matters so that you may remain and accept the generous hospitality of the New York club. This will be a gala day. See complete programme on another page. The steamer leaves from Twenty-first street, North River, at 9:30 a. m.

New York Hotels.

Hotel.	Can accom-	Am. plan.	European
673 Broadway,	100	\$2.50-\$3.50	\$1.00-\$1.50
Morton House, Broadway & 14th 400			\$1.00
Fifth Avenue, Broadway & 23d, 400		\$4.00	
Coleman House, Br'dway & 27th, limited.			\$1.00-\$1.50
Sturtevant House, Br'dway & 28th, 50-75		\$3.00-\$3.50	\$1.00-\$3.00
Gilsey House, Br'dway & 29th, 300-400			\$1.00
Grand Hotel, Br'dway & 31st, 50			\$1.00
Hotel Royal, 6th Ave. & 40th, limited.			\$1.00
Gidney House, Br'dway & 40th, limited.			\$1.00
Rossmore Hotel, Br'dway & 41st, limited.		\$2.50-\$3.00	
St. Cloud Hotel, Br'dway & 42d, limited.			\$1.00



Map Showing Portion of New York City.

- | | |
|------------------------|-----------------------|
| 1. Fifth Avenue Hotel. | 6. Gidney House. |
| 2. Convention Hall. | 7. Rossmore Hotel. |
| 3. Exhibition Hall. | 8. Coleman House. |
| 4. Gilsey House. | 9. Hoffman House. |
| 5. Morton House. | 10. Sturtevant House. |

The Excursion on Friday.

The New York Florists' Club—John N. May, president; Jno. H. Taylor, vice-president; W. S. Allen, secretary; A. D. Cowan, treasurer,—has arranged for a grand midsummer excursion on the Hudson river on the elegant, commodious and newly refitted steamer "Long Branch," in command of Capt. James Lynch.

The steamer will start from Twenty-first street, North River, on Friday, August 21, at 9:30 a. m.

A landing will be made at Iona Island, where a base ball game will be played by teams selected from members of the society, representing Chicago and Milwaukee versus New York and Philadelphia. Music will be furnished by Schaller's Military Band and Melbourne's Orchestra.

Two grand morning and afternoon concerts will be given, in which a number of noted artists will appear. A collation will be served on board. Mr. William Elliott is chairman of the executive committee and director in charge.

PROGRAMME.

Schaller's Military Brass Band.

PART I.

- | | | |
|-----------------|--------------------|------------------|
| 1. March. | Long Branch, | Schaller |
| 2. Overture. | Shamrocks, | Neil Sullivan |
| 3. Galop. | Desperado, | Schacht |
| 4. Waltz. | La Gitana | Bucalossi |
| 5. Medley. | Oh! How Delightful | Catlin |
| 6. Cornet solo. | Selected, | Mr. R. Valentine |
| 7. Overture. | Poet and Peasant, | Suppe |
| 8. Scottische. | Pete, | Braham |
| 9. Violin solo. | Selected, | Mr. A. Schaller |
| 10. Waltz. | Hydropaten, | Gungl |
| 11. March. | Fortuna, | Weigand |
| 12. Galop. | A Merry Life, | Schaller |

PART II.

- | | | |
|------------------|-------------------|-------------------|
| 1. March. | Our Favorite, | Somersel |
| 2. Galop. | Natta, | Nitz |
| 3. Overture. | Salute to Erin, | Lamotte |
| 4. Cornet solo. | Silver Stream, | Mr. R. Valentine |
| 5. Waltz. | Les Patineurs, | Waldtenfel |
| 6. Polka. | Midnight, | Fahrbaeh |
| 7. Violin solo. | Selected, | Mr. Neil Sullivan |
| 8. Overture. | Home Circle, | Schlepegrell |
| 9. Galop. | Inksterious, | Schaller |
| 10. Waltz. | Town Topics, | Wohunka |
| 11. Schottische. | Annie, | Valentine |
| 12. Medley. | All Sorts, | Schaller |
| | "Auld Lang Syne." | |

TWO GRAND CONCERTS.

Tendered in honor of the Society of American Florists, on board steamer "Long Branch".

Director of music, MR. ROBT. CRAIG.
Piano accompanist, MRS. H. D. NORTHROP.

MORNING AT 11 30 A. M.

- | | | |
|------------------|------------------------|-------------|
| 1. Ballad. | Mary of Argyll, | Nelson |
| | Mr. William Riley, | |
| 2. Piano Solo. | Mrs. H. D. Northrop, | Selected |
| 3. Solo. | The Flower Girl, | Bevignani |
| | Miss Nettie McEwen, | |
| 4. Song. | Mr. William Currie, | Selected |
| 5. Solo. | Anchored, | Watson |
| | Miss Maud Dean, | |
| 6. Solo. | Hunting Song, | Mendelssohn |
| | Mr. Henry D. Northrop, | |
| 7. Piano Solo. | Le Carrillonneur, | Bergmuller |
| | Miss Marie Dean, | |
| 8. Solo. | The Last Voyage, | Geibel |
| | Mr. Harry E. Jones, | |
| 9. Motto Song. | Mr. D. Harkins, | |
| 10. Solo. | Romanza—Marguerite, | White |
| | Mr. Harry E. Jones, | |
| 11. Selection. | Prof. George Germaine, | |
| 12. Legendemain. | Mr. Robert Kift | |

AFTERNOON AT 5 00 P. M.

- | | | |
|--------------------|-------------------------|----------------|
| 1. Overture—March. | Prof. Geo. Germaine, | |
| 2. Song. | Cauld Kale, | Old Strathspey |
| | Mr. Archd. Middlemass, | |
| 3. Comic Song. | Mr. Alfred Melbourne, | Selected |
| 4. Song. | Bonnie Dundee, | Nelson |
| | Mr. Henry D. Northrop, | |
| 5. Comic Song. | John Grumble, | |
| | Mr. Robt. Craig, | |
| 6. Song. | Last Rose of Summer, | Old Air |
| | Miss Nettie McEwen, | |
| 7. Comic Song. | The Bold McIntyres, | |
| | Mr. D. D. L. Faison, | |
| 8. Song. | The Village Blacksmith, | Weiss |
| | Mr. Harry E. Jones, | |
| 9. Comic Song. | Hotbed Sash, | |
| | Mr. Robert Kift, | |
| 10. Scotch Song. | Mr. William Frazier, | Selected |

- | | | |
|-----------------|-----------------------------|---------|
| 11. Song. | The Diver, | Rosewig |
| | Mr. Harry E. Jones, | |
| 12. Comic Song. | The Duke of York | |
| | Mr. Edwin Lonsdale, | |
| | Chorus by the congregation. | |

BOUND VOLUMES of Vol. III of the AMERICAN FLORIST are now on sale. Price \$2 25. Copies may be had or orders left at our headquarters at Fifth Avenue Hotel. We can sell you a new volume handsomely bound cheaper than you can have your old numbers bound.

Apple Geranium Seed

Per 100 40c.; per 1000 \$3 00; per 10,000 \$25.00.
Orders filled while stock lasts. First come, first served. Address

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MOBILE, ALA.

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The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

VIOLETS.

Every florist who intends to make a contract for Violets during the winter months, will do well to consult WASHBURN BROS., by letter or at the Convention, before placing their order elsewhere. We have had great success the past few years. This season's plants are far superior to any we have ever had.

WASHBURN BROS.,
MERIDEN, CONN.

Mention American Florist.

100,000 Tuberoses for Fall Delivery.
CLEMATIS CRISPA AND OTHER NATIVE PLANTS.

To expect to be at the Convention, where I will be pleased to meet old friends and make new ones.

JAMES M. LAMB,
Fayetteville, S. C.

Mention American Florist.

W. F. SHERIDAN,
Wholesale & Commission Dealer

CUT FLOWERS.

721 Sixth Avenue, NEW YORK.
Mention American Florist.

Highly Important Sale of Rare Established, Semi-Established and Imported

ORCHIDS.

Messrs. YOUNG & ELLIOTT are instructed by F. SANDER & CO. to sell by auction, at their Salesrooms, 54 and 56 Dey St., NEW YORK, on WEDNESDAY, AUGUST 22nd, 1888,

A grand selected lot of the above in the finest health and condition, comprising numerous winter flowering varieties especially useful for cut bloom and will be placed in lots suitable for the trade and large buyers. At the same time will be offered a very choice and healthy collection of new and extremely rare Orchids, including amongst others fine healthy plants of the following species:

- | | |
|-----------------------------------|------------------------------------|
| Cattleya Skinnerii alba, | Cypripedium praestans, |
| " Trianae alba, | " tonson, |
| " Gaskelliana vestalis, | " Godseffianum, |
| " labiate, true autumn flowering, | Vanda Amesiana, |
| " Schroderae vestalis, | " Sanderiana, |
| " Rothschildiana, | Laelia Eyermanii, new, |
| Cypripedium Morganiae, | Calanthe Cooksonii, |
| " albobupureum, | Lycaste Skinnerii, |
| " vexillarium, | Odontoglossum Warscewiczii, |
| " Leeanum superbum, | Trichopilia suavis alba, |
| " cardinale, | " tortilis alba, |
| " Jo, | " lepida, |
| " cenanthum superbum, | Dendrobium nobile Sanderianum, |
| " bellatulum, | " Ainsworthii, |
| " Petri, | Odontoglossum Alexandrae superbum. |

Anguoa verginalis, together with a fine lot of Phalaenopsis Schilleriana, P. amabilis, Cattleya Lawrenceana, a grand lot of Odontoglossum Alexandrae, Catatum Bungerothii and a fine collection of Masdevallias and many other Orchids very useful for cutting and decorating purposes.

F. E. McALLISTER,

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Garden-er and Farmer. Requisites Such as Baskets, Im-mortelles, Grasses, Mosses, Boquet Pa-pers, Pampas, Plumes, etc. Bulbs For the Green-house or Gar-den.

22 Dey Street, - - - NEW YORK.

Visiting florists are invited to call at my store, and consider themselves at liberty to make it a "Bureau of Information." Letters addressed in my care will be delivered at the Exhibition Hall twice each day.

FLORISTS AND OTHERS

Attending the Florists' Convention in New York are cordially invited to visit our Seed Warehouses, 35 and 37 Cortlandt St., New York, and our Greenhouses and Grounds, located on Ocean and Arlington Aves., Jersey City N. J.

The Greenhouses can be reached by ferry and horse cars from our office in Cortlandt Street in 40 minutes.

PETER HENDERSON & Co.

ROSES

FOR IMMEDIATE PLANTING

I have prepared a very fine stock of the following sorts in 4-in. pots which I offer as follows:

Bon Silene, Mad. Cusin and Souv. d'un Ami, at \$12.00 per 100.

The Bride, C. Mermet, Duke of Connaught, La France, Marquis de Vivens, Niphotos, Papa Gontier, Perle des Jardins and Sunset, at \$13.00 per 100.

American Beauty, at \$15.00 per 100.

W. F. Bennett, at \$16.00 per 100.

I also offer some fine plants of Meteor, Souvenir of Wootton, Mrs. John Laing, Miss Edith Brownlow, Earl of Duferin, Lady Helen Stewart, and other choice Hybrids; and a fine stock of H. P.'s on their roots for fall delivery.

My place is one hour's ride on D. L. & W. railroad from New York city. Delegates to the convention who favor me with a visit can see for themselves what I offer.

JOHN N. MAY,

SUMMIT, Union Co., NEW JERSEY.

Ficus Elastica and Chauvieri.

We offer of this the best of their class, all vigorous and healthy plants.

No. of leaves, 6 to 8, 8 to 10, 9 to 12, 10 to 15, 16 to 20, 22 to 26
 Size..... 10-in., 12-in., 18-in., 24-in., 36-in., 42-in.
 Per dozen. \$3.00, \$4.00, \$7.50, \$11.50, \$23.00, \$25.00

Large Palms—Brahea Filifera.

No. of leaves, 10 to 12, size 11x14 in., 18 to 20 in. high.
 Size..... 3x4 feet, 4x5 feet.
 Price, each.... \$6.75 \$10.00

Washingtonia Robusta Compacta.

No. and size of leaves, 10, 12 to 14 inches, 12, 15 to 18.
 Size, height and width, 3 x 3 4 x 4
 Price, each..... \$6.75 \$10.00

CORYPHA AUSTRALIS, AND CHAMÆROPS EXCELSA.

In 5-inch pots, 8 to 10 diameter leaves, each \$1.25
 In 8-inch pots, 10 to 15 diameter leaves, 1.75

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FLORISTS,
 NEW ORLEANS, LA.

Roses.

I have a surplus stock of the following varieties of Roses. Strong, healthy plants grown in 4 and 5-inch pots that I will sell until September 15, at the following low prices:

Per 100
 MERMETS, PERLES, BRIDES, NIPHOTOS and COOKS at..... \$8.00
 BON SILENE and DUCHESSE at..... 6.00

JAMES HORAN,

Florist,
 Bridgeport, Conn.

ROSES FOR SALE.

Per 100
 Perles, Niphotos, La France, 4-in. pots \$10.00
 Souv. d'un Ami, 4-in. pots..... 9.00
 Papa Gontier, 4-in. pots..... 12.00
 3-in. pots..... 7.50
 La France, Perle, Souv. d'un Ami, 3-in. pots..... 7.00
 and Niphotos,
 2½-inch pots..... 4.25

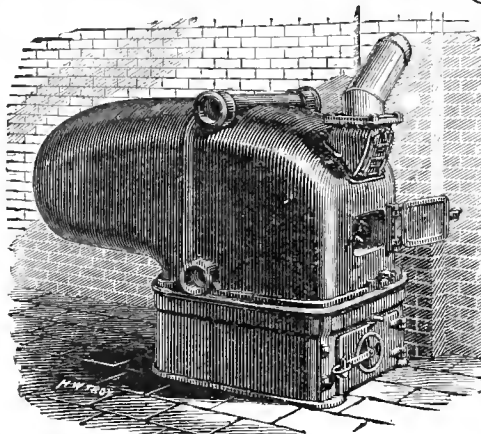
Also large plants of Magna Charta, Diesbach, and Jacq., in 5½ and 7½-in. pots; prices on application.

J. A. COSCROVE, Sparkill, Rockland Co., N. Y.

WE MUST HAVE THE ROOM, and offer 2000 SMILAX at \$17.50 per 1000.

Good strong plants. Also surplus roses best sorts in 5-inch pots. THE FLORAL EXCHANGE, 614 Chestnut Street, PHILADELPHIA, PA.

Greenhouse Heating AND Ventilating



HITCHINGS & CO.

233 Mercer Street, New York.

- Five Patterns of Boilers, Eighteen Sizes,
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- Saddle Boilers,
- Conical Boilers,
- Base Burning Water Heaters
- Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

CARNATIONS FOR FALL PLANTING.

2,000 Plants New Carnation *WHITE GEM*, positively the best pure white, PRICE, \$3.00 per dozen.

2,000 New Carnations *ORIENT, FLORENCE and CARLE*, PRICE, \$10.00 per hundred.

5,000 Plants *SNOWDON, GRACE WILDER, ANNA WEBB and CENTURY*, PRICE, \$8.00 per hundred.

A GUARANTEE.—In offering these plants to the trade I do not hesitate to offer a guarantee that the plants sold will be strictly first-class stock, free from all disease.

GIVE US A TRIAL.

GEO. E. BUXTON, Nashua, N. H.

MAY'S

COLOSSAL MIGNONETTE



We have the pleasure to announce that we have been appointed the sole agents for the grower, MR. JOHN N. MAY, Summit, N. J., for distributing this season's crop of

"MAY'S COLOSSAL MIGNONETTE."

The seed was saved from the most select spikes, measuring from nine to thirty inches. For Florists' use, May's strain

HAS NO EQUAL,

and is the only large variety which retains its fragrance when fully developed. Sealed packets only 25 cents each.

No order accepted unless accompanied by a remittance in cash or postage stamps.

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J. A. DE VEER,

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Importer of Bulbs, Seeds, Plants, Immortelles, Etc.,

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HOOPER & CO., London, W. C., England, etc.

Begs to call the attention of Delegates to the New York Convention

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Catalogues free to applicants. Estimates cheerfully given. Prices reasonable.

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TO THE TRADE ONLY,

JAMESPORT, N. Y.

Catalogues ready in August.

Office during Convention, 36 E. 23rd st., N. Y.

ROSES.

We have several thousand extra fine plants grown in 4-inch pots from two-eyed cuttings at the following low prices:

PERLES and NIPHETOS.....	Per 100	\$12 00
MERMEIS and LA FRANCE.....		12 00
BON SILENE and SAPRANO.....		10 00

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BULBS AND SUPPLIES

— AT THE —

NEW YORK MEETING.

Our representatives *Do Not* visit the convention to interfere with or detract from the *PUBLIC BUSINESS* of that body; on the contrary, we shall do as we have done, all we can for the

GENERAL GOOD OF THE SOCIETY OF AMERICAN FLORISTS.

and shall attend all business sessions.

We ask the opportunity to estimate on the needs of such members as approve of this course, before they place their orders for goods in our line.

J. C. VAUGHAN,

146 and 148 W. Washington St., CHICAGO.

Asparagus Plumosus.

THE LARGEST STOCK OF THE ABOVE IN THE U. S.

Fine, Strong Plants. Price on application to

J. TAILBY, FLORIST,

WELLESLEY, MASS.

20,000 Double Tiger Lily, blooming bulbs.	Per 100	\$25 00
25,000 Hyacinthus Candicans, 2 and 3 years.		10 00
10,000 Lemolie's Hybrid Gladiolus, 25 sorts, named.		10 00
5,000 Iponera Palmata, 1 year.		10 00
Four other choice Iponeras		10 00
10,000 Spirea Van Houttei, pots and open ground.		25 00
25,000 Jessie Strawberry plants, per 1000, \$10 00		10 00
Haverland, Logan, Itaska, Warfield, &c.		

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J. M. THORBURN & Co.,

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Wholesale * Florists

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BULBOUS ROOTS

- Lilium Harrisii,*
- Lilium Candidum,*
- Roman Hyacinths,*
- Dutch Hyacinths,*
- Etc., Etc.*

The most complete assortment ever imported. Price list upon application.

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ENGRAVER FOR FLORISTS.

LARGE STOCK OF ELECTROTYPES OF PLANTS AND FLOWERS FOR FLORISTS' CATALOGUES, ETC.

Catalogue of electros of plants, flowers, designs, etc., with '87 and '88 supplements, 35 cts., with vegetable, 50 cents, which deduct from first order. Electro of this Cut, \$1.50.

* PANSIES. *

I make a Specialty of Pansy plants for planting cold frames; also transplanted plants for forcing.

Adding all novelties of merit every season and growing my own seed so that I can recommend it knowingly. I offer my strain of

MIXED PANSIES

as the equal of any grown. Have also in separate colors

WHITE, YELLOW, BLUE, AND DARK PURPLE.

PRICES:—Good, stocky plants from seed-bed, per 100, \$ 75; per 1000, \$5.00. Transplanted, per 100, \$1.25; per 1000, \$10.00.

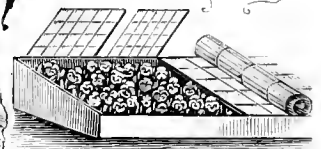
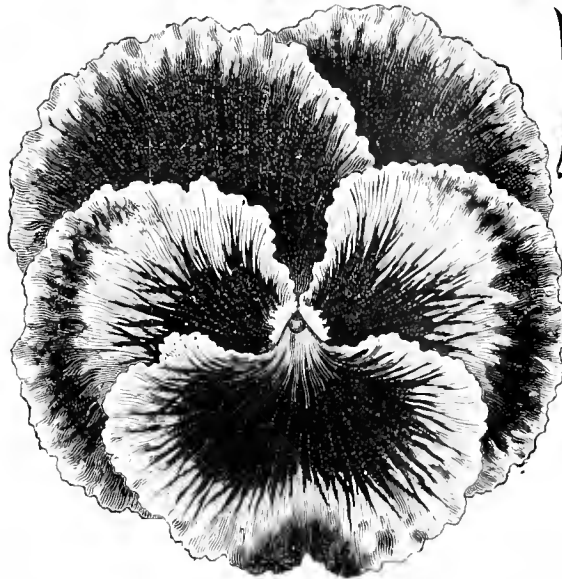
Send for Pansy and Smilax Special.

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HENDERSON'S PANSIES FOR FALL SOWING



We offer for delivery in August, or as soon as our new crops are received, Pansy seed of more than usual excellence in color, size, selection and variety; our contracts having been placed with celebrated specialists in Scotland, England, France and Germany. Our annual exhaustive trials of hundreds of varieties and strains, and the large quantity of Pansy plants we grow for a critical trade, enables us to select probably better than any other house, really high class strains, and the immense yearly increase in our sales show that our customers appreciate our efforts in this direction.

IN COMPARING PRICES REMEMBER THAT ONE OUNCE OF PANSY CONTAINS 30,000 SEEDS.

	Per oz.	PANSY. In separate colors.	Per oz.
Henderson's Fancy, mixed (Belgian.) For rich and varied colors no strain existence can surpass this.	\$ 6 00	Emperor William, ultra marine blue.	\$ 1.25
Henderson's Highland, mixed. (Scotch.) This without exception is one of the finest strains of pansy in the world—the flowers being of the largest size, perfect in form, and of a great variety of beautiful colors, 18 oz.	\$3.00 22 10	Faust, or King of Blacks.	1.00
Premier, mixed. (French), per 1-8 oz.	\$3.00 22 10	White Treasure.	1.00
Giant Trimardeau, mixed, probably the largest flowers grown.	6 00	Yellow.	1.00
Older, or five blotched; mixed.	6 00	Snow Queen, satiny white, no eye.	1.25
English Show; mixed, a splendid strain.	4 00	Striped.	1.00
German, finest mixed.	2 00	Mahogany.	1.00
Good mixed.	per lb. \$5 00 .75	Delicata porcelain, blue and white.	1.25
		Fire Dragon.	2.50
		Rex, deep velvety purple.	2.00
		Bronzed edged rose.	1.25
		Rose marbled.	1.25
		Bronze.	1.25
		Azure Blue.	1.00
		Lord Beaconsfield, violet shading to white.	1.50
		Gold margined.	1.00

CHICAGO, ILL. The new Fancy Pansy seed produced a bed of Pansies so beautiful that it attracted the attention of many passers by, and I had many inquiries of where the seed could be obtained. DR. WM. T. CLARK.

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LITTLE FALLS, N. Y.—We received the new Fancy Pansy last year, and had the finest ever grown in this section. MAGILL BROS., Florists.

FARMINGDALE, N. Y.—The Pansies I got from you last Spring were magnificent. E. W. WINSOR.

NEWARK, N. Y.—Our Pansies and Primulas, got from you last Spring were superb; the Primulas, the best we ever had. LEVI A. LOVELAND, Florist.

PETER HENDERSON & CO.,

35 and 37 Cortlandt Street, NEW YORK.

Our Florist's Catalogue of other flower seeds for Fall sowing will be sent on application. Our Bulb Catalogue will be ready for the trade about Aug. 15th, and our retail about Sept. 1st.

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From the well known and extensive Bulb Farms of

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[MENTION AMERICAN FLORIST.]

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"HYBRID REMONTANT AND BOURBON" FROM

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Offers the following "Very Select" Trade Collection for Fall or Spring Importation

Price for 500 to 1000, per 100, \$10, delivered in New York. For smaller quantity, extra charge for boxing. Special rates on orders of 5,000 to 10,000.

ANNA DE DIESBACH. Brilliant rosy pink.
ANNA ALEXIEFF. Rosy pink.
BARONESS DE ROTHSCHILD. Light rose, shaded white.
*COQUETTE DES ALPES. Flesh white.
CAPTAIN CHRISTY. Delicate rose.
COUNTESS OF OXFORD. Bright rose, shaded carmine.
*DUCHESS OF VALLAMBROSA. Soft rose; large, free bloomer.
FISHER HOLMES. Velvety crimson.
GENERAL JACQUEMINOT. Scarlet crimson.
GENERAL WASHINGTON. Crimson.
HERMOSA. Clear pink.
JOHN HOPPER. Rose, with crimson centre.
LA REINE. Rose; very large.
LA FRANCE. Lilac rose; the most popular rose grown.
MARIE BAUMANN. Bright carmine.
MAGNA CHARTA. Bright pink, with carmine.

MARQUIS DE CASTELLANE. Clear rose.
MABEL MORRISON. Pure white.
MADAME ALFRED DE ROUEMONT. White.
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PAUL NEYRON. Dark rose; a very large and fine sort.
PRINCE CAMILLE DE ROHAN. Superb velvety crimson.
PIERRE NOTTING. Dark red, tinged violet.
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ULRICH BRUNNER. Cherry red, large; a first-class rose.
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And other good varieties.

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THOMAS S. WARE,

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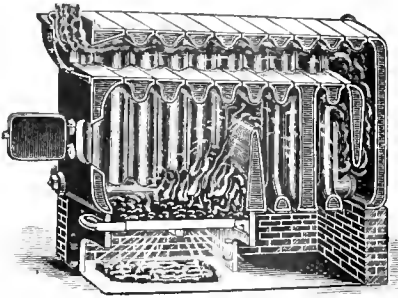
SPECIALTIES:

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" Martagon Album per doz 7 50		
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A lovely Indian lily with large white flowers, Lilium Auratum Platyphyllum, the most beautiful lily in cultivation, flowers 12 inches across, per doz 10 50 @ 21 00		

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EDITED BY **GEO. NICHOLSON,**
of the Royal Botanic Gardens, Kew, England.

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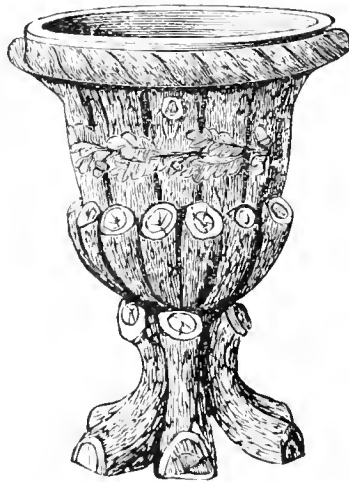
Endorsed by leading Seedsmen as

THE BEST AND MOST RELIABLE.

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Fancy Rustic Terra Cotta Ware

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GLASS SHADES, FISH GLOBES, AQUARIA, &C.

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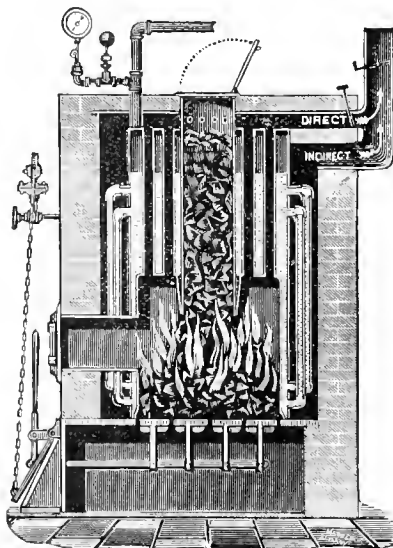
Cypress Sash Bars.

Much has been written concerning the building of durable Greenhouses, and recommending the use of slate, iron and cement. Admirably as these answer the purpose they increase the cost to beyond the means of the average florist, and it follows that some variety of wood will remain the chief material used in such structures. It is our firm belief that no wood fills all the requirements as well as CLEAR CYPRESS, and that it will be the favorite wood for GÜTTERS, RIDGES and BARS, there can be no doubt. Reasonable in first cost, and extremely durable, it is now within the reach of every one to construct a durable house.

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The Best Steam Boiler

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STEADY FIRE NIGHT AND DAY.

EASILY CONTROLLED.

AUTOMATICALLY REGULATED.

SEND FOR CIRCULAR.

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DON'T FAIL TO SEE

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Sells Flower Pots by the crate only, and ships all over U. S. Try a crate. Samples in first crate.

PRICES BY THE CRATE, CASH WITH ORDER.

3150 Thumbs.....	\$3.00	875 3/4-in.....	\$5.50
2025 2 1/2-in.....	8.00	600 4-in.....	1.75
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1300 Spl. 3-in.....	6.00	320 5-in.....	4.40
1150 3-in.....	5.50	100 6-in.....	3.50

A crate weighs 100 lbs. and goes at buyer's risk and freight. Send for freight rates and prices of twenty

READY PACKED CRATES,

And of mixed crates packed to order. Our new machines make the finest and smoothest pots in the world. We have immense stock all sizes hand made pots from 7-inch to 16-inch. We ship same day cash comes, and our sales to the far west have been very large. Send P. O. money order to

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FOURTH ANNUAL EXHIBITION,

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— Do not fail to examine the —

"IMPROVED HOSE COUPLING,"

The Invention of JAMES DEAN, a practical florist.



Greenhouse Glass.

ALL SIZES OF SINGLE AND DOUBLE THICK

GLASS

— FOR —

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ALL GLAZIERS' SUPPLIES.

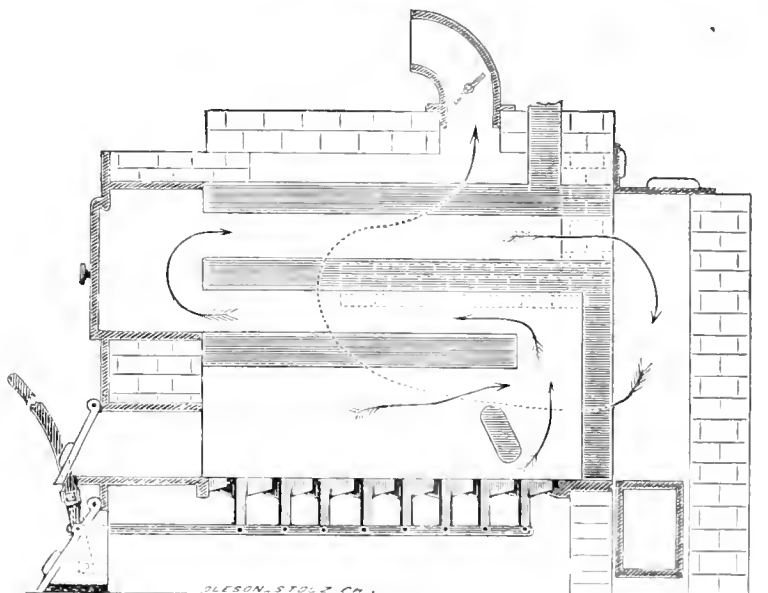
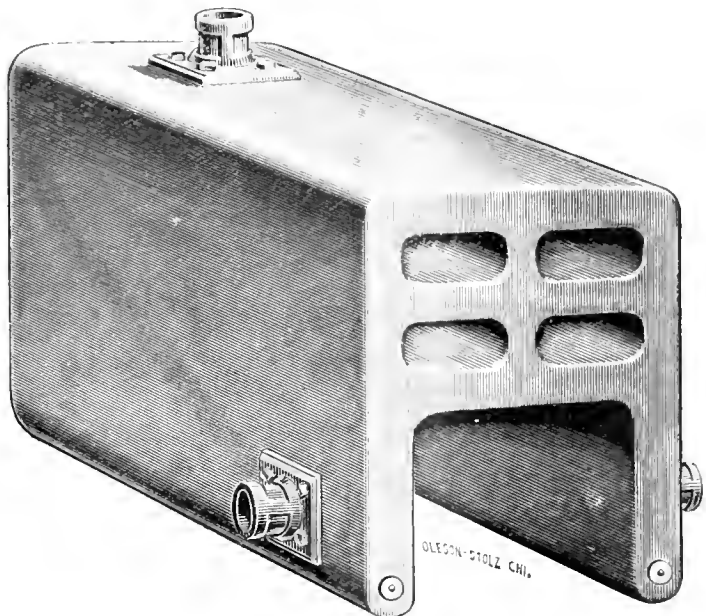
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FOR GREENHOUSE HEATING.
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Our Wrought Welded Boilers are the most SIMPLE, RELIABLE and DURABLE Water Boilers in existence. The plates are solidly welded together, the heads are welded into the shells and the flues welded into the heads, thus the entire boiler is without Seams, Joints or Rivets. They will expand and contract without any risk of fracture, and making them red hot will not cause leakage.

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28 PRIZE MEDALS AWARDED DURING THE LAST 12 YEARS.

Numbers of Testimonials prove this boiler to be THE BEST in the market for Greenhouse Heating.

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THE ECLIPSE MFG. COMPANY,

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NOVELTIES IN BASKETS

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Between Sixth and Seventh Aves.



CONVENTION.

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No. 44 DEY STREET, (Between Church and Greenwich.)

Examine *The many Novelties in Fancy Flower Baskets; the new Palm and Fern Stands, for room and table decoration, highly elegant and not expensive; the new Designs in Memorial Wreaths and Crosses, of Porcelain and Metal, in true imitation of nature; and the many other articles that combine to make up the finest line of assorted Florists' goods.*

You Reach the Store By down town car on Sixth Avenue Elevated R. R. at 14th Street to Cortlandt St. Station, and walk back one block; or by Broadway car to Dey St., and walk one block and a half to the right, or west side; or by Third Avenue Elevated, Third or Fourth Avenue surface road to City Hall, cross City Hall Park and Broadway to Church St., and down Church to Dey St. Church is the first street running parallel with Broadway toward the west side.

Respectfully,

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AT THE CONVENTION.

Ives' Putty Machine.

Patented Jan. 8, 1887.
The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.
Sent by Express on receipt of price, \$3.00
J. H. IVES, DANBURY, CONN.

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NOW READY.
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BEST TYING MATERIAL.
 LARGE OR SMALL LOTS at Low Rates!
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 GET THE BEST AND MOST PROFITABLE.
 1 1/2 acres produced, the past summer,
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 Order at once, as stock may be exhausted soon.
 \$5.00 per 500; \$10.00 per 1000, 1 o b. Send for circulars.
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 — 4 to 8 FEET.—
WHITNEY CRAB, 2 AND 3 YEARS.
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FOR NURSERYMEN.
 Prices on application.

SAMUEL C. MOON,
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MORRISVILLE, Bucks Co., PA.
 Ornamental Stock a Specialty.
 Evergreens, Shade Trees, Purple Beech, Flower-
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 Autumn Price List will appear in AM. FLORIST in
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IMPORTED M. P. ROSES,
 Worked low on the Manetti Stock, offer the best re-
 sults to the florist, blooming freely and giving plen-
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 Price Lists to applicants. Address
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PHILADELPHIA,
ENGRAVER for NURSERYMEN.

ELECTROTYPES OF
New Strawberries, Blackberries,
Raspberries, Gooseberries,
Cherries, Pears, Peaches,
And other Fruits,
Trees and Shrubs,
AT LOW PRICES.
 I can offer great inducements to parties desiring
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NEW FRUITS
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 Catalogue C, illustrating all fruit cuts in stock
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TEAS' * WEEPING * RUSSIAN * MULBERRY.



This most remarkable tree
 will undoubtedly, when
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And all who see it appre-
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If you need any Cherry Trees, 1, 2 or 3 years old
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PLENTY OF
ENGLISH RICHMOND, ENGLISH
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YELLOW SPANISH.

And others. Have also a general supply
 of Nursery Stock.

Address **F. S. PHOENIX,**
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BLOOMINGTON, ILL.
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PIKE CO.
NURSERIES,
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ESTABLISHED OVER 50 YEARS.

400 ACRES.

No Larger Stock in America; No Bet-
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WRITE FOR TRADE LIST.

THE LAKE SHORE NURSERIES,
OF ERIE, PA.,

Have a Complete Assortment of
Apple, Cherry, Pear, Peach, Plum,
AND SMALL FRUITS,

Which they would be pleased to give prices on

NURSERYMEN'S SUPPLIES
 Box Clamps, COOPERATIVE CATA-
 LOGUES, Agents' Private Guide, Knives,
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 Introducers of Jessie Strawberry and Shar-
 fer Raspberry. Surplus of Grape, Currant,
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 A full line of Nursery Stock. Send for free sam-
 ple of FRUIT GROWER, OR GREEN ON THE GRAPE.
GREEN'S NURSERY CO.,
 CHAS. A. GREEN, Manager, Rochester, N. Y.

Bloomington Phoenix Nursery.

WE OFFER A FINE STOCK OF
FRUIT AND ORNAMENTAL TREES,
SHRUBS, VINES, SMALL FRUITS,
FRUIT TREE SEEDLINGS,
FOREST TREE SEEDLINGS
AND HEDGE PLANTS,

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NEW ROSES AND CLEMATIS

A Large Stock of
AMPELOPSIS VEITCHII, 2 YEARS.
 And a General Stock of
GREENHOUSE PLANTS.

✉ CORRESPONDENCE SOLICITED.

SIDNEY TUTTLE & CO.,
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Japan Snowball.

Both imported and home grown,
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Large stock of
JAPAN SNOWBALL,
WEEPING DOGWOOD,
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 Trees and Shrubs.
 Send for new price list.

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LOOK FOR
SAMUEL C. MOON'S

AUTUMN PRICE LIST

IN SEPT. 1 ISSUE.

THE AMERICAN FLORIST

NURSEYRYMEN'S DEPARTMENT.

Vol. IV.

CHICAGO AND NEW YORK, AUGUST 15, 1888.

Supplement to No. 73.

THE AMERICAN FLORIST

Copyright, 1888, by American Florist Company
Entered as Second-class Mail matter.
Published on the 1st and 15th of each month by
THE AMERICAN FLORIST COMPANY.
GENERAL OFFICES, 54 La Salle Street, Chicago.
EASTERN OFFICE,
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the
general office at Chicago.

THE AMERICAN ASSOCIATION OF NURSEYRYMEN.

GEORGE A. SWEET, Danville, N. Y., president;
G. J. CARPENTER, Fairbury, Neb., first vice-pres-
ident; CHARLES A. GREEN, Rochester, N. Y., sec-
retary; A. R. WHITNEY, Franklin Grove, Ill.,
treasurer. The next annual meeting at Chicago
the first week in June, 1889.

THE AMERICAN FLORIST has begun
the publication of this supplement for the
purpose of giving nurserymen a trade
medium such as the AMERICAN FLORIST
now is to the florists of the country. The
supplement will be published with each
issue during the months of August, Sep-
tember, October, January, February and
March. Appearing twice each month dur-
ing the heavy buying and selling seasons
it will prove a very valuable medium for
trade advertisements, surplus stock can
be readily brought to the attention of the
whole trade and much correspondence be
thereby avoided.

Current news and notes of interest to
the trade are solicited. This is intended
for a nurseryman's newspaper. If you
know of anything of interest to anybody
besides yourself, send it in.

AT DETROIT there was some talk of
chartering a steam boat at Chicago next
year and holding the meetings out in the
lake, in order to secure quiet and com-
fort. This may be a good scheme, but if
there should happen to be a sea running
—which sometimes happens even in
June—some of the essayists might be
obliged to insert painful pauses in their
delivery. Again a man does not present
a very imposing appearance holding to a
post with one hand and attempting to
read an essay held in the other. Even
Albough would quail before such an
ordeal. The lake will be there if wanted,
but we believe that nurserymen will have
better success planted on mother earth.

THE DETROIT CONVENTION.—The an-
nual report of the proceedings of the last
meeting of the American Association of
Nurserymen is now in press and may be
secured from Secretary Chas. A. Green,
Rochester, N. Y. Price \$2 a copy.

ROCHESTER, N. Y.—Mr. Chas. A.
Green and family are sojourning at Cha-
taqua, N. Y.

BONNER SPRINGS, KANS.—Business
has been excellent and we expect a great
increase as Kansas crops will be simply
immense. By all odds the largest crop
ever raised in the state, and to day in
best condition. You ought to see the
cornfields. It would do you good.

ADVERTISING RATES in the supple-
ment will be the same as in the body of
the paper, viz., 10 cents a line agate, 14
lines to the inch; discounts 3 months 5
per cent, 6 months 10 per cent. No
special position guaranteed nor reduc-
tion for large space.

OUR ADVERTISING RATES are so low
that you can publish lists of surplus stock
in the SUPPLEMENT for less than the
postage alone would cost you if you
should print and mail a list yourself to
5000 addresses. A full page for one in-
sertion costs only \$12, half page \$21, col-
umn \$14, half column \$7. We will print
additional copies from type after being
set at a nominal charge if you should
wish additional copies to enclose in let-
ters, etc.

RUSSIAN APPLES.—The report upon
the Russian orchard at the Experiment
Station of the College of Agriculture at
St Anthony's Park, Ramsey Co., Minn.,
in Bulletin No. 3 should be of consider-
able value to nurserymen. The table
shows the condition of the trees after the
last three winters, when the trees were
planted, number of trees originally
planted, number of trees now alive and
height of same. Both the Russian
names and the names as revised by the
committee of the American Pomological
society are given. The orchard was
planted in the spring of 1885, to demon-
strate how far the Russian apples are
adapted to the climate of Minnesota.
The same bulletin contains a very inter-
esting and instructive report upon the
condition of trees, shrubs and vines in
the nursery after the winter of '87-'88.

Notes From the "London Garden."

ELLA GORDON is a hybrid perpetual
rose of a bright crimson color, with the
shape somewhat of the noble Ulrich
Brunner. It is a large, well-built glo-
bular flower, the shell petals smooth and
with plenty of substance. Some half
standards of it are blooming freely in the
Waltham Cross Nursery.

DUCHESS OF ALBANY has strong re-
commendations. Imagine a full, large,
fragrant flower, much deeper in color
than the lovely La France, and then one
can form an idea of this new acquisition
of Messrs. Wm. Paul & Son. The
plant was seen to better advantage in the
intensely hot summer of 1887.

SILVER QUEEN we noticed at the Na-
tional rose show as a promising flower.
We could judge of it better at Waltham

Cross, where it is flowering freely. It is
a good companion to the variety Queen
of Queens, a delicate peach color, full,
large, and of excellent globular shape.
In a better season than this its fullness
and fine character would be brought out
more clearly.

EARL OF DUFFERIN (Dickson, 1887).—
A fine bloom of this splendid dark rose
was exhibited in one of the prize-winning
seventy twos staged in the championship
class at the Crystal Palace on the 7th
inst. That so new a rose should be at
once occupying a position in such com-
pany is good evidence of the beauty of
its blooms, and the plant is certainly a
very vigorous grower.

ROSE MRS. JOHN LAING, a seedling
from Francois Michelin, and with which
the raiser, Mr. H. Bennett, of Shepp-
erton, won the gold medal in 1885, was
shown splendidly this year at the Crystal
Palace. It is of a charming rose tint,
something like that of Mme Gabriel
Luizet, the flowers large and finely
shaped, and possessing all the qualifica-
tions of a first class exhibition rose. The
excellent stand of twelve blooms from
Messrs. Paul, of Cheshunt, gave rosarians
a good idea of its worth.

ROSE GRAND MOGUL.—In this season
of dark colored roses this variety has
proved its extreme value for the garden.
In the nursery of Messrs. Paul & Son,
Waltham Cross, there is a large batch of
it full of flower and in vigorous growth.
It is a seedling from A. K. Williams, and
has the same deep crimson ground color,
but this is shaded with almost black and
scarlet, a brilliant blending of dark colors.
It has also an admirable form, full, sym-
metrical and large, though finely finished
such as to raise it amongst the best of
exhibition roses. It was well represented
at the National Rose Society's exhibition.

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Vol. IV.

CHICAGO AND NEW YORK, SEPTEMBER 1, 1888.

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In considering the fourth annual meeting of American Florists at New York, he who has been a close observer of its beginning and growth is tempted to say, verily "nothing succeeds like success." The attendance and membership of scores who represent only kindred interests of the florist verifies the above axiom and shows in no uncertain light the fact that attendance at these annual meetings is necessary to every one whose vocation touches that of the grower of flowers. The remarkable yet steady growth has continued even beyond the large attendance at Chicago and with the close of these sessions Secretary Stewart claims an active membership of over twelve hundred. Of interesting matters given consideration it cannot be denied that our executive committee has given us the best programme ever furnished, and the subsequent careful attention of the secretary has insured the presentation of all these subjects by the essayists chosen and the regular order of the same maintained; a most desirable end never so well accomplished. The result has been a meeting creditable to our highest aims. No little credit is due the New York Club in leaving entirely free our working days and thus securing a good attendance, though they were seriously handicapped by lack of suitable central halls and hotels.

And has any one whispered, "Will it last?" Is there no fatal blight on the leaf or deadly rot at the root of this fair flower? Let us hope and believe not. With a central city like Buffalo for our meeting in 1889 and a worker like Mr. John N. May as president, may we not safely predict a further strong growth of this favorite American plant.

Our columns give a general account of the transactions which will be supplemented in greater detail in future issues.

The Hail Insurance Association.

The second annual meeting was called to order at 4:30 p. m., August 22, in the convention hall. Secretary Esler's report showed a membership of over 100, with over 900,000 square feet of glass in-

sured. Two losses have been paid the past year and \$800 remain in the hands of the treasurer.

Following the discussion of the report new members were admitted representing over 300,000 square feet of glass, and Secretary Esler feels confident that he will take double that amount before the meeting closes. The following were elected directors for the ensuing year: J. M. Jordan, Edwin Lonsdale, J. C. Vaughan, J. D. Carmody, Peter Henderson, B. F. Dorrance and James Horan. Former officers of the company were re-elected, and Secretary Esler's efficient work highly commended. The experiment can not now fail of a thorough trial and will show a great gain the coming year, as the general sentiment is now certainly strongly in favor of the movement.

The New York Convention.

FIRST DAY.

With enthusiasm undampened by a drizzling rain some 800 members of the Society of American Florists were assembled in Cooper Union at the opening of the fourth annual meeting, Tuesday, August 21.

Mr. John N. May's hearty address of welcome was responded to on behalf of the society by Hon. C. C. Cole, Des Moines, Iowa, in a manner which left no room for criticism and which further endeared him to all.

Then followed President Hill's address, which will be found in full in another column.

A large flag bearing the national colors and the name of the society was presented to the society by Mr. Wm. Elliott, on behalf of the New York Florist Club, which was accepted by President Hill for the society. Mr. J. D. Carmody, Evansville, Ind., declared that the flag was incomplete without a blossom of some kind upon it, and suggested that the society at a later time should decide upon a flower to be known as the national flower and have the same painted upon the national colors just presented.

Secretary Stewart's report showed that the membership roll now contained about 1,000 names, and that seven deaths of members had occurred. Treasurer Hunt reported that expenses of over \$1,400 had been paid during the year, leaving a small balance in the treasury.

A recommendation from the executive committee that the annual dues be raised to \$3 was met by a resolution covering the recommendation for action before adjournment. A further provision regarding dues was that if the annual dues were not paid within eighteen months after notification by the secretary the name of the delinquent should be dropped from the membership list.

Mr. J. N. May spoke on the question of substitution and asked that the sum of \$200 be devoted to defray the expense of a thorough investigation of complaints and to suppress this blot upon the trade.

In the discussion of the president's address Mr. Calder, of Boston, thought that it was complete and needed no discussion. Mr. Cole, of Des Moines, Ia., believed that the necessity for a scientific education as expressed in the address was not so urgent as was there implied. He would rather have the practical experience of actual working florists than the most elaborate chemical analysis. Mr. Peter Henderson expressed the view that as far as a scientific education was concerned, life is too short to acquire it. He considered the majority of the professors who are the heads of agricultural colleges to be inexperienced and incompetent, and that a boy with a few years practical experience could beat them out of their boots in securing paying results.

"The Elevation of Our Business," an essay by H. H. Battles, of Philadelphia, was read in his absence by Mr. C. F. Evans. As we shall print the essay in full a synopsis will not be necessary here. Mr. C. D. Ball's essay on "Ferns, Palms and other Decorative Plants," was also very instructive and will appear in another issue. The essay was discussed by Messrs. Harris, Craig, Taylor and others, and a vote of thanks was tendered to the essayist.

"What benefit is derived from a scientific education" was ably answered by Mr. A. E. Whittle, Albany, N. Y., who convinced all that if a young man desired to reach the upper rounds in the profession, he must have a scientific education in so far as science was applied to horticulture and have the ability to make a practical application of it to his business.

As to the sale of chrysanthemums being an injury to the general cut flower trade, Mr. J. M. Jordan stated in substance that he did not believe such was the case. Regarding their being an injury to the sale of roses during the chrysanthemum season he related how he had been unable to secure enough first class roses at that time to supply the demand for the same, though the market was at the time heavily stocked with chrysanthemum bloom. Other questions were answered by those to whom they had been assigned with the exception of a number which had been assigned to gentlemen who were absent. These were set for a later time.

SECOND DAY.

The programme was changed and the nomination of officers set for 12 o'clock and some of the questions omitted from the first day were answered. Regarding the advisability of having a wholesale market for the sale of cut flowers in our large cities, Mr. J. C. Vaughan stated

that it depended largely upon the local needs. He mentioned the markets of London and Paris as the only successful ones.

A report from a committee recommending a style of rim pot to be used as a standard pattern and to request all potters to conform to it and manufacture in uniform sizes was received after considerable discussion as to the pattern recommended by the committee. In the discussion Mr. James Hendrick created much merriment by remarking: "unless we succeed in securing more uniformity than now exists, we may all go to pot."

The question of increasing the annual dues to \$3 was again taken up and after considerable discussion the resolution was adopted.

Mr. Thomas Cartledge's essay on "Roses from the retailers' standpoint," was well received. He expatiated on the importance of long stems, cutting and packing, and told of the increased sales due to care in these details. In the afternoon Mr. Edwin Lonsdale treated the same subject from the growers' standpoint. The evening was again devoted to the question box.

THIRD DAY.

Officers for the ensuing year were elected as follows: Jno. N. May, Summit, N. J., president; W. J. Palmer, Buffalo, N. Y., vice president; Wm. J. Stewart, Boston, Mass., secretary; M. A. Hunt, Terre Haute, Ind., treasurer. Buffalo, N. Y., was decided upon as the place for the next annual convention.

Mr. J. D. Carmody, Evansville, Ind., offered a resolution recommending that a committee of five be appointed to devise means to protect the members of the society from the frauds who purchase on credit and fail to pay their bills and that the committee be composed of men who had been victimized. The resolution was adopted and the chair appointed Messrs. J. C. Vaughan, Chicago, M. A. Hunt, Terre Haute, Ind., Robt. J. Halliday, Baltimore, Robert Craig, Philadelphia, and W. C. Wilson, Astoria, N. Y., as the committee.

"What can this society do to encourage the study of systematic botany?" was a question referred to the Hon. Wm. R. Smith, Washington, who replied that while a knowledge of elementary botany was desirable he did not see where very great advantage would accrue to the florist from its study. He related how a very distinguished botanist had called upon him and referring to the plants in the houses had asked: "Well! How is your truck getting along?" Mr. Peter Henderson believed that a study of botany was a great help to the florist and offered a prize of \$100 for the best herbarium of native plants, not less than 500 species, arranged in their natural orders, the plants to be gathered between now and the next annual meeting, and the competition to be confined to members of the society. He offered the prize knowing that the best knowledge of systematic botany was obtained through the work of collecting and arranging such an herbarium.

Mr. John Thorpe was here introduced and enthusiastically received. He withdrew after making a few remarks. A vote of thanks was tendered him by a unanimous vote for his able conduct of the exhibition.

In the absence of Mr. J. H. Taylor the programme was changed and Mr. Robt. J. Halliday of Baltimore read his essay on "Nomenclature," which can not be too highly praised. He covered the

many abuses in the naming and renaming of plants and whipped the dust from a good many floricultural skeletons. He raised his voice for fewer names and more distinct kinds. He related how Heliotrope Mme. Blonay had been renamed "White Wreath" by an American firm who sold some plants to Henry Camell, of England, who was so disgusted that he sent it back to them at a higher price under the name of "White Lady." He mentioned the case of the rose Boule de Nieve, which had been placed on the market here under the name of Ball of Snow, a literal translation of the name, but tending to confusion. He mentioned numerous other cases such as the geranium "White Sevan," the "Siberian lily and the ipomoeas." He closed with a resolution recommending that a committee of twelve be appointed to revise the names now in use and pass upon new ones, and that nine of the committee must concur to render a decision. After some discussion the resolution was adopted with an amendment that Mr. Halliday be chairman of the committee. A vote of thanks to the essayist was unanimously carried.

Mr. Antoine Wintzer, West Grove, Pa., wished to know what could be done regarding French roses sent out as new, but which were identical with old varieties, and mentioned an alleged new one which he had found to be identical with Appoline.

In response to a query Mr. Peter Henderson expressed the belief that the "Excelsior Pearl" tuberose was simply the well known "Pearl," and nothing else. Regarding the rose Boule de Nieve which he had sold as "Ball of Snow," Mr. Henderson regretted that in cataloguing it under this name he had not placed the original French name of "Boule de Nieve" after it in brackets.

At the afternoon session the essay by Mr. J. H. Taylor on "Soils and Fertilizers," was read, a very able paper from a practical as well as scientific standpoint. This was followed by Mr. J. D. Reynolds' essay on "Modes of Heating, and their relative cost of construction and operation." The essayist leaned strongly to steam except for very small places, or those where a boiler pit of considerable depth could not be had. Further notice of these papers will be taken later.

The evening session was devoted to the question box with excellent results. As a general rule the discussion was freer upon the items taken from the question box than upon the essays read. All of the essays were of unquestionable value and all will be quoted from or given in full in subsequent issues.

The printed report containing all the essays with the discussions on each may be secured by becoming a member of the society. Extra copies may be secured by members only at a cost of \$1 per copy.

NOTES.

Hail insurance has had a very considerable boom.

It is much to be regretted that there was not a "lynching" at Iona Island Friday.

The score of the ball game at Iona Island was 14 to 4 in favor of the New Yorkers.

Peter Henderson & Co made a beautiful exhibit of cut gladioli at their store during the convention.

None can withstand Mr. Robert Craig's logic, especially in regard to the advantage of a uniform size of pot.

Who would have thought that so much discussion could have been had as to the

advantage or disadvantage of pots with rims?

Reed & Keller, New York, originated the funeral design entitled "Immortality," described in our account of the exhibition.

August Rolker & Sons made a handsome display of florists' supplies at their store on Dey street, in addition to that at Nilsson Hall.

At Ed. Jansen's dinner on Wednesday everything was served in baskets; even the punch bowls were set in baskets made for the purpose.

While headquarters were officially at the Fifth Avenue Hotel, the largest crowd of florists was to be found registered at the Morion House.

Robert Craig puts the average life of a flower pot as used at most commercial places at 4½ years. Here is a point in estimating the cost of production of plants.

When the flag was presented the band struck up the "Star Spangled Banner," and one member asked "what tune is it they are playing now?" There is still work for the society.

Mr. John Thorpe is entitled to great credit for the able manner in which he handled the details of the exhibition. All the exhibitors were much pleased with his management.

Ed Jansen, the basket manufacturer, fed some 600 delegates at his warerooms, the second day. He had his stock of novelties very handsomely arranged for inspection, but would take no orders.

Erastus Wyman, Esq., a Staten Island amateur, presented to the ladies of the convention and their escorts 250 tickets to Kiralfy's "Nero; or the Fall of Rome," at Staten Island for Wednesday evening.

Mr. Evans thought that dealers would object to rim pots because they would not set well into a pot cover, but Mr. Farson thought store keepers wouldn't kick on that account as he had found them very decent sort of people to get along with.

Mr. J. M. Jordan, of St. Louis, seemed to think that the size of the pot did not always govern the size of the plant as he had ordered plants in 4-inch pots, which when received looked as though they had been shifted from 3-inch pots after the order was received.

One of the daily papers told how Mr. Asmus secured his pyramid of blooming lily of the valley for an August exhibition. According to the reporter the plants were forced into bloom last March and kept in perfect condition in an ice box till placed in the exhibition hall August 20. Mr. Asmus should tell us all about this new method of handling lily of the valley.

Secretary Stewart was called away the evening of the first day by a telegram conveying the sad news that his brother was very low with typhoid fever at Denver, where he had been taken down while returning from a pleasure trip to California. A later telegram brought more hopeful news and a dispatch was sent to intercept Mr. Stewart, who had taken the fast train for Denver.

Floral Decoration for the Casket of the President of the Arion Society N. Y.

The sides of the coffin were covered with roses and the top with Liliun longiflorum, roses and spirea. A coil of smilax and deep red roses was made around the head of the casket. This was an elegant style of finish. Plants of hydrangea surrounded the casket. Palms were on the platform and two serpent lyses. Hanft Bros. made this rich arrangement.



FLORAL DECORATIONS FOR THE CASKET OF THE PRESIDENT OF THE ARON SOCIETY, NEW YORK

President's Address.

LADIES AND GENTLEMEN:—We enter upon the pleasant duty of opening the proceedings of this, the fourth annual meeting of the Society of American Florists. It is a sure augury of success when we see evinced such interest and so marked a determination to make the present meeting of real benefit to all classes in attendance.

We meet to consult, to exchange ideas, to compare experiences, to "learn wisdom," if I may so put it. To further this end, it may not be amiss for your presiding officer to call attention to some few things which seem to him worthy of your thoughtful consideration. Probably three-fourths of the gentlemen assembled are either plant growers or growers of cut flowers, or of both combined. It is recognized that the success of the profession rests in a large measure upon these men. My first suggestion shall be directed to this class in our society, of which I am one.

It should constantly be our study to broaden and deepen the lines of our practical knowledge of the things pertaining to the growth and culture of plants. We have learned much and have made commendable progress in the art of growing plants and of producing bloom in the last few years; and the years since the formation of this society have witnessed a marked and definite change for the better in plant growing. It is freely granted that the knowledge imparted at these annual gatherings has been an important factor in this advanced culture. The intelligence and energy that has wrought so well, what could it not have accomplished had it been better trained and more enlightened?

Fellow members, what we need, and what our profession demands, is a training school for our children and the young men who are to follow in our footsteps, where shall be taught a scientific and technical knowledge of the things pertaining to plant life, and plant growth, in their relations to soil, and heat, and

water. Our need, and the need of the young men who are to follow, is such an education as will enable us to analyze soils, and to know scientifically their constituent parts, and their relation to the fibre and tissue of a plant; to be able to detect deleterious and injurious substances, to check and control the chemical action in soils, to adjust to a nicety the things termed heat, food and water. Our most successful men are often confounded and amazed at their own failures, and can seldom assign an intelligent reason for the same. Often in the same house, under apparently similar conditions, with the same kind of soil, failure attends where in former years was had abundant success. Instances of the kind abound on every hand, and we are all familiar with them. This need not be, for with a right education and proper training—such as I hope awaits the young men of the future—these problems so serious and difficult to ourselves will to them disappear as the dew before the morning sun. This knowledge, so

desirable and important, can only be imparted by specialists and teachers devoted to such work. If we would have our profession keep pace with the industrial and material development of our country, it is incumbent upon us to dig deep and lay wide the foundations on which the future of our profession is to rest. Industrial and scientific education is making remarkable progress the world over, and we, who have the good of the profession at heart, must see to it that it is kept abreast of the times. With all our boasted achievements in plant growing and flower production, the fact remains that it has been wrought out by an enormous waste of time and physical force. How to correct this, by what means, is the question uppermost in the minds of many thoughtful florists.

Mr. Thorpe, in his address to you at Philadelphia, expressed a desire that at no distant date there might be established a National Experimental Garden; if to that could be united a school for the special training of persons for our vocation, where a practical and scientific education would be imparted, such an institution would prove of incalculable benefit to every member of the trade.

A profession that would win for itself esteem and position must show that it has some inherent claim upon its countrymen to be thus honored. In no way can this esteem be won by us better than by the production of new forms, new colors, and more beautiful flowers than those we already possess. If we would keep pace with the material development that is in progress we must, with more zest and greater zeal, apply ourselves to raising these new forms of plant life. Essays have been written, much valuable information has been given, and yet, comparatively speaking, we, as a profession (with one or two notable exceptions), have accomplished but little in this advanced line. Our most noted additions have come to us in the form of sports from varieties already in cultivation.

Pecuniary consideration, if nothing else, should stimulate to action in this line, for there can be no question but that novelties of real merit will always be heartily welcomed and well paid for, both by the trade and by the amateur flower grower, especially when they run in the popular line of roses, chrysanthemums, geraniums, etc. We spend large sums annually in foreign lands for the product of the hybridizer and the specialist. I have only words of commendation for so doing; but if we would only study the economic principle involved, it would provide us an additional incentive for action in this department of our work. Would it not be well for this society to offer liberal prizes for new plants of American origin, in order to stimulate and encourage efforts of this character?

Among the large membership of this society there are necessarily kindred interests, that are yet in a measure distinct, one from the other: We have the growers, both wholesale and retail, the men who sell by catalogue; the florist-supply men; the wholesale and retail dealers in cut flowers; the gardeners; and the employes of all the classes mentioned above, these are all eligible to membership, and each class has a right to insist on a proper and equitable representation in the executive board and to the offices of this society. If the larger growers have seemed to occupy too prominent a place in the management of the society's affairs, it has come not by design but rather by the force of circumstances. Complaint has been made that the retail

florists have not had proper recognition. Whether the charge be true or not, the fact remains that it is not through any wilful action on the part of the promoters of this society. It would be well for us to so arrange the management of this society as that all affiliated interests shall have due consideration and proper representation.

Untold good can be rendered by a free and cordial exchange of views regarding the use and abuse of the credit system as it now prevails among us. This is an important and somewhat delicate subject for us to discuss, but it is of such moment as to demand consideration at our hands. Kindred associations have their protective unions for preventing the dishonest from imposing upon the unsuspecting; this is accomplished by publishing, under judicious limitation, the financial standing, liability and integrity of its members and their patrons as furnished by those having commercial transactions. The organization of such an auxiliary is, perhaps, open to criticism, liable at times to do injustice to worthy and deserving men who have been unfortunate, but still deserving consideration. The ledgers of many of the gentlemen present to-day could testify to the need of some measure of relief being adopted by the society. I might suggest that it be made the province of the society, through the medium of the secretary, to post, on information furnished by reputable members, dishonest and unreliable men whether they be members or not. It certainly is and should be the duty of the officers of this society to drop from membership, on a written complaint of a given number, men who persistently refuse to honor their just obligations.

Those desiring the good of the profession, and who have its welfare at heart, have entered solemn protest against the dissemination of plants under false names. This abuse, which has grown out of avarice and a lack of moral principle, must be checked. We must not, we can not afford to pass this matter by; the fact remains that the most unblushing frauds have been perpetrated on an unsuspecting and over-confident public. Commercial probity, uprightness in our dealings with the patrons of floriculture, is one of the things this society must insist upon, until this blight which has fastened itself upon one of the noblest callings in the land is eliminated and destroyed. Great good has accompanied the utterances and action of this society taken at its former meetings. There must be no uncertain sound issue from this body of men on this particular subject.

The renaming of plants must not be overlooked. We must hold inviolate and sacred the right of any man or woman to name the plant through whose skill, patience, and care it has been produced; and not only that, but we must by the moral force of this society, render secure his or her right and title in the same forever. No one has the right, either through caprice or malice, to change or attach any other name save that given it by its disseminator.

Another suggestion in connection with this subject may with propriety be referred to. Where the translated name from a foreign tongue is used, the original should follow in parenthesis. I question the expediency of using translations, but if it must be done, it is only right and proper that the original shall follow. To do this will certainly allay suspicion, and would prevent the unsuspecting from making duplicate purchases.

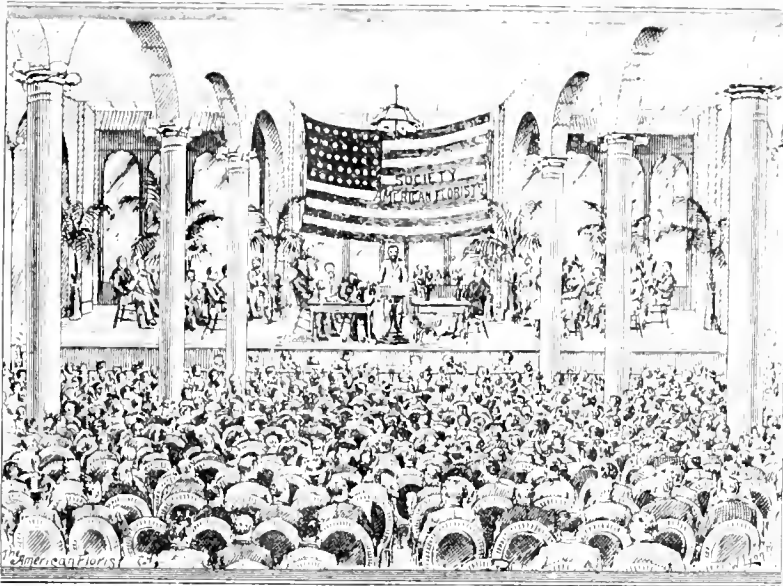
As a society we must set our faces resolutely against any practice that shall tend to destroy the dignity, or that may reflect dishonor upon the profession. If we shall refuse to act on these moral questions that confront us, then, as a society, we are doomed, and we shall deserve no better fate. In the progress which this profession shall make in the next generation, our present attainments will probably seem insignificant. Be that as it may, we want posterity to say of us in the language of the prophet of old—if they can say nothing else—"These were honorable men in their day and generation."

I would recommend that this society, through its officers and executive board, administer directly the affairs of what is known as the Hail Protection Society. This action is recommended by Mr. Jordan, the president of the Hail Insurance Company, and also by other prominent members. If this were done, it would obviate the necessity of a distinct organization, such as now exists. This step is urged that expenses may be reduced and that its affairs may be better understood by the members of this society. The organization of our national society was based upon the principle of furnishing insurance to its members against losses by hail. It is the opinion of your executive that greater confidence would be had were this matter an integral part of the organization. The hail insurance plan as adopted at Philadelphia has passed beyond the experimental stage, and it affords a reliable and practical solution of this whole question. The forthcoming report of Mr. Esler will set at rest any misgivings regarding the financial standing of this "foster child."

It is a well-known axiom that in "union there is strength." Let us by our efforts seek to unite for our common good all the forces and interests that are represented in our membership. The divine law indicates that we are made to co-operate together and thus to be helpful one to the other. The value and need of associated effort is recognized in all professions and in all lines of trade, and none need it more than we do as a profession. Associated effort incites our aspirations; begets fellowship; promotes harmony; destroys ignorance; removes differences; prevents misunderstandings; encourages trade. These are some of the fruits of thus associating together. Then let us this morning renew our fealty to this organization and seek anew to extend its usefulness.

Associated effort should be put forth to encourage exhibitions, which are potent factors in educating the public mind and which excite an interest in nature's beauties. Time spent in arranging these flower shows is time well spent, and we hope to hear of them in every town in the Union and in Canada. The formation of Florists' Clubs at the trade centers is of inestimable value to every member of such club, doing away largely with trade jealousies and bringing the profession more prominently before the public. We hope to hear of many new organizations of this character, and also of the conserving and building up of those already in operation.

AUGUSTA, GA.—The Augusta National Exposition, 1888, opens October 10 and closes November 17. In the division of plants and flowers classes are provided for amateurs and for professional florists. In addition to the regular premiums, \$50 in specials is offered by P. J. Berckmans of this city.



INTERIOR VIEW OF NILSSON HALL, NEW YORK, DURING CONVENTION

The Exhibition.

Not the least interesting feature of the convention was the exhibition in Nilsson Hall. Every foot of space was utilized and neither quantity nor variety were wanting. Following is a list of the exhibits:

M. M. Baversdorfer & Co., Philadelphia—a large display of baskets and general florists' supplies.

W. C. Krick, Brooklyn, N. Y.—Immortelle letters and monograms.

Wilhelm's Basket Works, New York—baskets and supplies.

N. Steffius, New York—florists' wire work of all descriptions.

Wm. H. Koehler, Philadelphia—stuffed white doves, a large and very attractively arranged exhibit.

J. C. Vaughan, Chicago—bulbs, tools and florists' supplies.

Reed & Keller, New York—florists' wire work, a large exhibit including a number of novel designs.

F. E. McAllister, New York—a large and very complete collection of florists' supplies and bulbs.

Philadelphia Immortelle Design Co., Philadelphia—a large show of immortelle designs, wheat sheaves and artificial flowers.

C. H. Joosten, New York—Dutch bulbs and Michel's seed tester.

J. A. DeVeer, New York—bulbs and florists' supplies.

August Rolker & Sons, New York—novelties in florists' supplies including wreaths of metal flowers.

C. S. Ford, Jr., Philadelphia—immortelle letters and monograms.

V. H. Hallock & Son, Queens, N. Y.—a large exhibit of cut gladioli blooms, including the new Argenteal type, a cross between the Gandavensis hybrids and Saundersonii, with remarkably large flowers and strong habit of growth, also a new pure white which will be introduced next year and of which they are working up a large stock.

Marschuetz & Bacharach, Philadelphia—a large display of baskets and supplies.

Geo. W. Childs, Esq., Philadelphia—a

dozen magnificent plants of fancy caladiums of remarkable size and beauty.

J. A. Penman, New York—copies of the "Dictionary of Gardening"

Jas. Vick, Rochester, N. Y.—a grand show of gladioli blooms.

Sam'l. C. Moon, Morrisville, Pa.—cut gladioli and young evergreens.

Wm. S. Kimball, Esq., Rochester, N. Y.—cut blooms of orchids, nymphæas and velumbiums. A most beautiful and interesting exhibit. The orchids in great variety for the season.

Kemble Floral and Seed Co., Oskaloosa, Ia.—appliance for watering plants.

Jno. Schmidt, Rochester, N. Y.—flower pots.

Peter Henderson & Co., New York—cut blooms of roses, new French cannas of large size and good colors, double and single petunias and geraniums.

F. R. Pierson, Tarrytown, N. Y.—seedling geranium

A. B. Howard, Belchertown, Mass.—cut blooms of verbenas.

Jno. Henderson, Flushing, N. Y.—some excellent cut blooms of roses of standard sorts.

Jno. N. May, Summit, N. J.—some fine cut blooms of roses, usual forcing varieties.

Ernest Asmus, West Hoboken, N. J.—pot lilacs in full bloom and a huge pyramid of blooming lily of the valley, a grand exposition of the florists' art in forcing flowers out of season.

John Fine, New York—an excellent display of decorative plants.

W. C. Wilson, Astoria, N. Y.—orchids and decorative plants.

J. L. Lockwood, Stamford, Conn.—geranium, a sport from Mme. Sallerioi.

Chas. Hurn, gardener to Mrs. W. Adams, Scarsdale, N. Y.—three magnificent bunches of Black Hamburgh grapes.

T. Griffin, gardener to Alfred Lully, Esq., Hackettstown, N. J. three grand bunches of Muscat of Alexandria and three of white Tokay grapes.

Geo. Grant, gardener to Mrs. M. A. Osborn, Manarotock, N. Y. two immense bunches of Muscat of Alexandria

and two wonderfully large bunches of Barbarossa grapes.

John G. Gardner, Jobstown, N. J. blooming heaths and specimens of the "Lorillard" forcing tomato, very smooth and handsome.

Jno. H. Taylor, Bayside, N. Y. cut blooms of roses including Mme. Watteville and Cusin.

W. A. Bock, N. Cambridge, Mass.—new bouvardias

H. A. Dreer, Philadelphia—cut blooms of petunias, gloxinias and verbenas, and young plants of ferns and palms.

Geo. Krick, Elmont, N. Y.—new carnation "Elmont," light crimson in color and robust habit.

Jacob C. Cassell, Philadelphia—terra-cotta ware for florists.

Lockland Lumber Co., Lockland, O.—cypress sash bars and gutters.

H. W. Hales, Ridgewood, N. J.—mole trap.

James Dean, Bay Ridge, N. Y.—hose coupling.

R. F. Lawrence, Buffalo, N. Y.—bouquet holder.

N. J. Hayes, New Haven, Conn.—wire for florists.

J. M. Young & Co., New York—Jardinieres and flower vases in Leeds babotire and clouded gold.

M. Goldman, Pittsfield, Mass.—Goldman's atomizers.

H. S. Miller & Co., Newark, N. J.—fertilizers.

Whillim Pottery Co., Philadelphia—flowers pots in all sizes from thumbs up to two feet in diameter.

Rose Manufacturing Co., New York—tobacco insecticide soap.

Jules Jugl, Brooklyn, N. Y. wooden hose menders.

J. M. Gasser, Cleveland, O.—patent glazing points and crude oil burner.

J. Horace McFarland, Harrisburg, Pa.—specimens of printing for florists.

Beatty & Vatteler, New York—specimens of lithographs of floral subjects.

L. B. Brague, Hinsdale, Mass.—cut hardy ferns, bouquet green, wreathing, mosses and Christmas trees.

J. D. Carmody, Evansville, Ind.—model of the Carmody hot water heater.

A. H. Hews & Co., North Cambridge, Mass.—flower pots in all shapes and sizes, also vases and window boxes.

John A. Scollay, Brooklyn, N. Y.—hot water boiler, flat sprinklers and putty bulbs for glazing.

Quaker City Machine Works, Richmond, Ind.—the Evans Challenge ventilating apparatus.

J. H. Ives, Danbury, Conn.—machine for applying putty.

Hitchings & Co., New York—the Hitchings hot water boilers and ventilating apparatus.

Wm. H. Diven, Laurel, Md.—ventilating apparatus.

Richardson & Boynton, New York the "Perfect" hot water heater.

Herendeen Manufacturing Co., Geneva N. Y. the Fuhrman steam heater.

E. Hippard, Youngstown, O. ventilating apparatus.

Robt. C. Reeves & Co., New York—machine for cutting sod.

Thos. W. Weathered, New York the Weathered hot water boiler.

In addition to these exhibits at the hall Ed Jansen and August Rolker & Sons turned their stores into special exhibition halls and were visited by large numbers.

THE FLORAL DESIGNS.

The premiums offered by the New York Florists' Club, being \$50 each for "best original floral design," "best fun-

eral design," "best dinner table decoration," and \$25 for "best bridal bouquet," were all won by C. F. Klunder, of New York.

Mr. Klunder's entry for "original floral design," was a large, low, round basket with very high handle, containing a mass of adiantum ferns into which were set three sun-hats, one containing long-florum lilies and lily of the valley, another pink hydrangeas and Watteville roses while the third held blue hydrangeas and Perle roses with a variety of orchids. From the center rose a handsome bunch of long-stemmed American Beauty roses, and a beautiful spray of orchids was tied to the handle with a large bow of very wide white ribbon. The piece was very handsome. Among the other entries worthy of notice were an elaborate design representing a pair of scales arranged by A. Le Mout, and a design by James Weir & Son which bore the inscription "Immortality"; from a base of ferns rose a frame supporting first a caterpillar of white carnations, above which appeared a cocoon of crimson carnations while at top was a butterfly of roses, ferns, orchids and aratum lilies being used with effect at the sides and on the base.

The funeral design which received first prize was a large crown of white roses on a base of ferns and roses with a pair of cypas leaves crossed in front and tied with very wide cream colored ribbon. The other entries were an anchor fashioned after the modern all iron anchor rather than the form usually followed by the designer, and a design apparently intended to represent golden steps leading to a gates ajar at top, immortelles and Cape flowers were however very freely used in the latter.

The center piece of the prize dinner table decoration was a low round basket of the yellow blooms of Allamanda Schottii interspersed with adiantum ferns. The favors were a dozen Perle roses held in very small straw bonnets tied with pale yellow ribbon on which appeared in raised letters the name of the lady who was to occupy the seat at which the favor was placed, while the gentlemen's names were stamped in gilt on a leaf of the single Perle rose provided for them. Another entry was a very handsome plateau of ferns and small palms with a block of American Beauty roses placed at each end. This was much admired and would undoubtedly have received first prize had the awarding committee felt that it could be admitted as a "table decoration," rather than simply a center piece.

There was but one entry for bridal bouquet. The one entered was composed of lily of the valley with a mass of orchids in the center, much like the one illustrated in a recent issue of the FLORIST. The handle was tied with wide cream colored ribbon.

THE RIVER PIRATES who so outrageously swindled the New York committee on their bill of fare and then robbed them under threat of not landing passengers should have been thrown overboard. A committee of safety could have been organized in fifteen minutes who would have done the job effectually. If our members in whose state such a swindle was perpetrated do not seek redress in the courts then we mourn their lack of spirit or lack of faith in the law of the land, for no clearer case of highway robbery was ever seen in our wildest west on coach or train. This in no manner reflects on the New York club, its com-

mittees or members, but is our view of the swindle perpetrated upon them and the call for prosecution.

The Trip From the West.

The Chicago Club, with a number from various western points, who had centered at Chicago to go with them, left that city at 3 p. m. August 19.

A number of members came to the depot with a large quantity of flowers with which to decorate the cars, but the train pulled out before their labors were half completed. One car in which they had a fair start looked very flowery. The rods on which the curtains to the berths are hung were covered with gladioli with bunches of asters at intervals. The bell cord was twined with smilax and asters, but the decorations on the cord had a sad accident. One of the train men in another car gave the cord a jerk and away went the decorations. The dining car was late and appetites were sharp when it was finally coupled on.

At Niagara Falls, which was reached at about 9:45 a. m., breakfast was secured by waiting in a restaurant for an hour or so and the men who "swindle" people by charging "\$5 for a little basket of flowers," went out and fell into the hands of the Niagara Falls pirates, who know more about swindling in five minutes than the average florist does in a life time. But every one enjoyed themselves and those who had never before seen the Falls made the usual exclamations. The rapids and the whirlpool were visited and the places where lives had been lost in foolhardy attempts to swim the rapids, the place where the honest and conscientious hackman had refused to accept more than \$5 for driving around the block, as well as numerous other places of lesser interest were pointed out by the gentle natives at a cost of 50 cents per point for each person in the party. One small boy pointed out an object at a cost of only 10 cents for a party of four, but on account of his extreme youth and evident inexperience he was forgiven.

New York was reached in a drizzling rain and at the ferry the spirits of the party were considerably dampened as well as their wearing apparel, but the meeting of old friends and the forming of new acquaintances on arrival soon occupied the minds of all and the trip was declared a most enjoyable one.

NOTES.

Flint Kennicott donated the flowers to decorate the cars.

John Lane and Chas. E. Hay, the two "amateur florists," were friends at once.

The Milwaukee crowd saw fit to flock all alone by itself and came by another route.

The large number of ladies along kept the boys very sedate. They were jolly but never boisterous.

It is worth \$2.87 to see George Miller get into an upper berth. He disdains the steps and makes it in one grand leap.

Both Hartwig and Gallagher stayed at home. It is rumored that they wanted an upper berth together but had to give it up as they could get no one to take the lower berth.

A rate of one fare for the round trip was secured in spite of the refusal of the Trunk Line Association to make any concession. The look of glad surprise which spread over the ticket buyer's face when he was informed of the last reduction was worth framing, but it was different when the cost of the sleepers was pro-rated.

Aug. S. Swanson was the only Minnesota man aboard. Wm. Clark, of Colorado Springs, represented Colorado, A. Donaghue and wife, of Omaha, Nebraska; L. A. Casper and wife, of Council Bluffs; H. G. Higley and wife, of Cedar Rapids; J. T. Temple, Davenport, and J. C. Renouison, of Sioux City, Iowa; E. Haetze and wife, of Fond du Lac, Wisconsin; R. S. Brown and wife, of Kansas City, Missouri; and H. L. Phelps and Chas. E. Hay, of Springfield, Illinois, other than Chicago.

Our Home Cut Flower Market, as Viewed by the Retail Dealer.

BY F. E. BENTHEY.

[Read before the Chicago Florists' Club July 26.]

In producing cut blooms for market there are two things the grower aims at; quality and quantity; both very desirable if they can be had together, but the great trouble is that too often quantity is produced at the expense of quality.

There was a time some years ago that everything in the shape of a flower could be sold readily at good prices. The grower of inferior stock had rather the advantage in those days; his stuff brought the same price as that of his neighbor who prided himself on producing a superior grade of flowers. Many a grower was heard to make the remark: "What is the use of producing a first class article if it does not command a better price than a poor one." To any intelligent observer it is apparent that the aspect of the flower trade is radically changed and still is changing every year as the art of gardening advances, and the public taste for flowers is educated. The highest standard of excellence is what the market demands and what every grower will do well to remember.

The time has passed when the grower could dump his box on the florists' counter and just hand in his little bill. The latter is now apt to look the stock over and if he finds it unsatisfactory he quietly informs his man that he has no use for second class stuff. This proceeding when first practiced was a stunner to our friend the grower; he could not see any use in being so very particular. But I am happy to say that the wide awake gardener soon "tumbled to the racket," as the boys would say; he began to pay more attention to the quality of his stock. Not satisfied with this alone he also gave his attention to marketing his flowers in a careful and attractive way, which is almost as important as to produce them. A fact which many a gardener would do well to paste in his hat.

In packing his stock he first sorts it over carefully, throwing out all culls as useless, well knowing that by mixing in a half dozen poor blossoms in a lot of fifty it injures the sale of the whole lot. This certainly is a step in the right direction, it is only to be deplored that the number of this class of growers is sadly in the minority.

That a better quality of stock is required to satisfy the flower buying public of to day than of ten years ago, no one will doubt. I am not here to-night to tell you how to manage your establishments to produce these flowers; every one of you probably know more about this subject than I do, but I will say that the supply of this class of goods is entirely inadequate for the demand. A good flower always sells at good prices, a poor one is a drug on the market. Most of us cater to our local market, it is therefore but natural that we should study the wants of that market.

Now is the time the grower is getting in shape for the coming winter season. Rose houses have been stocked with new plants; carnations, violets and a host of other stuff is being nursed along. Let us hope with the view to quality as well as quantity, so that in the coming season good stock will be the rule, not the exception.

But it is not simply the winter season for flowers that we should prepare for, though of course the most important; summer as well brings demand for good flowers, which is provided for by very few. There is a time the grower is fond to designate as the season "between hay and grass," meaning that one crop is off and the next isn't quite ready. Well, if the farmers' season "between hay and grass" was one quarter as long as the gardeners, his cow would be a beautiful corpse long before the hay was cured, unless she had the gift of being able to subsist on wind. The grower cuts his grass in June, but the hay won't be ready until October, meanwhile the dealer is expected to graze on the stubble, unless he prefers wind pudding. In other words the old rose crop is gone by the end of June and the new supply will not be ready until October.

If you believe what the grower says, why, he is going to have the finest lot of stuff you ever laid your eyes on. Everything is doing finely. "Just you wait." It is just "between hay and grass now you know." But we can't wait, our patrons don't relish the stubble, the leavings of last season's exhausted stock, puny, mildewed stuff not fit for any earthly use; they demand something better. Can not Chicago and the territory tributary thereto produce good roses in summer? I should hope so. Will it pay the gardener to grow roses just for summer and early fall supply? We are led to believe it would. Good American Beauties sell readily at 8 to 10 cents, good fancies from 3 to 5, providing the stock is first class and free from mildew. Of course suitable varieties should be selected for summer growing, excluding all kinds that have a tendency to mildew. Some of the best winter sorts are entirely worthless for summer culture, and again there are many superb varieties that can be grown to perfection in our summer heat if properly cared for.

One half of the growers' houses stand empty from the first of June until the end of September. If parts of these houses were planted with young vigorous stock we should have an ample supply, and thousands of extra dollars would find lodgment in the pockets of our home producers.

The rose, though the leading flower, is not the only one that should receive attention, we want variety, the market is entirely barren of good flowers at this season of the year. Why not grow a few of our choice varieties of carnations such as Buttercup, Grace Wilder, Grace Farden and others of this class. Long-stemmed blossoms of these kinds sell readily at fair prices. The list might be extended to include a good many kinds not thought of heretofore, with the mistaken idea that it would not pay to grow them.

New Chrysanthemum Walter W. Coles.

This new Japanese chrysanthemum is said by some good judges to be one of the most valuable varieties Mr. W. K. Harris has raised. The flower is very large, brownish orange or terra cotta in color and semi-double.

Plant Notes.

BY WM. FALCONER.

THE WHITE flowering variety of *Cattleya gigas* called *Rochelliana* and recently held by Siebrecht & Wadley, has been bought by Mr. F. L. Ames, North Easton, Mass. for \$1,000. Besides being an extraordinarily fine large-flowered variety, it is unique in being the only white one ever seen. The price seems high, but the specimen is a fine plant and had it made its way to any European nursery the chances are that it would have been divided into several parts, each one costing half as much as the whole plant has cost Mr. Ames.

SISYRINCHIUM ARIZONICUM from the mountains of Arizona is now in bloom in the Botanic Garden, Cambridge. It is a showy yellow-flowered species worthy of garden cultivation.

CALAMINTHA GLABELLA is also in bloom at Cambridge. It is a dense low-growing fragrant perennial with small lilac purple flowers, and indigenous to rocky banks, Tennessee. Desirable for rockwork, but not showy enough for use as a border flower.

UNDER THE NAME of *Anemone polyantha* I also observed at Cambridge a white-flowering species with moderately small blossoms but large handsome divided foliage. As it now appears, not good enough to become a garden favorite.

PLATYCODON MARIESI as seen at Cambridge and Brookline does not appear to me to be distinct from *P. grandiflorum*, the species now so common in our gardens.

MR. CAMERON, a young man from Rothiemurhus, Scotland, and recently with Mr. Harris at Wellesley, has been appointed foreman at the Botanic Garden, Cambridge, and started on his duties there on August 1. Prof. Goodale advertised in most all of the July and several of the August horticultural journals, together with several daily papers, and up to August 2, he tells me he had only 45 applications.

WHITE AND PINK water lilies are quite plentiful in the Boston florists' windows, but very few orchid blossoms are exposed for sale. Sweet peas are abundant.

IT IS REPORTED about Boston that E. L. Beard, a newspaper man, has bought an interest in the *American Garden* paper and also associated himself with F. L. Temple in the tree nursery business.

PROF. SARGENT has a number of Chinese wistaria plants grown as standards and in tubs. When in bloom these are arranged about the verandas, in winter they are cared for in a shed-cellar. These standards bloom very freely; indeed some that we grow as out door permanent plants are more profuse than are those we let run as vines.

IN THE Boston Public Garden is a bed of columbines, now of course out of bloom and with the old flower stems cut over. If *Hyacinthus caudicatus*, *gladiolus* or *Montbrieta coccinea* had been planted in this bed as soon as the columbines had done blooming, they now would be well up and soon in bloom and that too without injuring the columbines.

MR. HEWS, of Cambridge, is completing an extensive addition to his flower pot factory. The new building is of brick, 81 feet long by 45 feet wide and four stories high.

ZIRNGIBEL'S WHITE ASTERS.—"Hold on there," shouted Z. the other day as a

young man was skipping upstairs in Stewart's store with a basketful of white asters. "These are my asters, bought in to-day now they are off. You see how solid and white they are and they don't show any yellow center, and they are still stemmed. I get them in now when other white flowers are scarce. Sowed them last December, grew them in pots till spring when I planted them out. They are a selected cross between *Victoria* and Truffant's *Pocoma Perfection*."

QUISQUALIS INDICA, the Rangoon Creeper, is a woody vine of vigorous growth and very floriferous nature; its flowers are red or reddish brown and profusely borne during the summer months. It is in capital bloom in Prof. Sargent's greenhouses.

ALLAMANDA SCHOTTII is one of the most vigorous of all our warm greenhouse vines, and under favorable circumstances always in bloom. Kept rather dry in winter and moist in summer it bears an enormous flower crop at that time when our greenhouses are pretty well emptied of plants and we can afford to give it full liberty. It is much grown about Boston.

NYMPHLEA TUBEROSA.—A dozen years ago Professor Sargent planted a few roots of this native species in the lake in his grounds. It has now spread immensely and almost become a weed, but it flowers very freely and the blossoms are large, white and beautiful. We have always regarded it as a scentless lily, but Charles Sander, Prof. S's gardener, insists that it is quite fragrant; well, it has a peculiar smell, but I certainly would not call it fragrant.

SPIKED LOOSESTRIPE (*Lythrum Salicaria*).—Prof. Sargent uses this in quantity along the margin of his lake and between it and the neighboring trees with capital and natural effect. It is a vigorous perennial which in July and August displays to much advantage its long spikes of rose-purple flowers. Easily raised from seed, blooms the second year and lives "forever."

AT MR. J. L. GARDINER'S one greenhouse is filled with nymphaeas, Cherokee roses and Southern jessamine (*Gelsemium sempervirens*). It is a lean-to structure. The nymphaea tank is lengthwise nearer the back wall than the passage-way, and along the front of the house is a raised bench filled with earth as if for carnations, and in this the jessamine and Cherokee roses are planted to be trained up along the roof.

GOLDEN FLEECE is the name of a very large yellow-flowered abutilon I saw at Mr. Gardiner's; introduced from England they told me.

MR. ATKINSON has his plants of *Cypripedium insigne* in pots and set outside under the partial shade of some trees. They like this sort of summer treatment and, he thinks, flower all the better for it.

DAVID ALLAN has the finest grapes and Fred Harris the best peaches, nectarines and figs under glass about Boston.

PHAJA'S *GRANDIFOLIA* when well done is a noble orchid, but when poorly done an indifferent sort enough. Mr. Atkinson grows his during the summer months in deep sunk frame-pits which are kept close and warm by sunheat. The plants have the luxuriance of small cannas.

SORVALIA MACRANTHA.—Mr. Atkinson has a splendid specimen now in full bloom, this is somewhat late. It is now growing in a north-facing cool house.

Mr. Harris summers his *sobralias* out of doors under the thin shade of an apple tree. The pots containing the plants are set in pans of water but raised up out of the pans enough so that they are only about an inch deep in the water.

GRAMMATOPHYLLUM ELLISH.—Of this handsome Madagascar orchid I saw several fine specimens, the largest ones at Mr. Ames'. David Allan has it in bloom. The flowers are large, numerous, glossy, and arranged in a pendant raceme, and in color are tawny yellow marked by transverse bars of reddish brown and otherwise blotched and streaked.

New York Notes and Comments.

Mr. C. L. Allen has returned from England much improved in health. He reports a very agreeable trip.

The *American Garden* is likely to pass into the hands of a stock company, now in the process of organization, which will contain several well-known names. Mr. E. H. Libby will remain in control of it, and intends to add to its attractiveness by several new features. The October number will be a chrysanthemum special.

The practice of summering palms, *Pandanus* and the like outside is more extensively followed than formerly, and there is no doubt it is an improvement on keeping them under glass during the hottest months. At some places the pots are plunged in manure, but this plan is not without some objectionable features. It is very liable to be much too wet, for one thing, and it gets filled with earth worms, which get into the pots. It is a much better plan to plunge the pots in ashes. Where it is desirable to start the plants growing briskly a layer of good manure may be put under the pots, the spaces then being filled up with ashes. The plants need some shade in such a position, or some of the leaves will get scorched. When practicable they will do well under a spreading tree, instead of any artificial. There is no doubt that a lattice house of laths is a very useful place to summer cool-house stuff; it is almost a necessity for camellias, azaleas and the like. The late William Bennett, of Flatbush, was, I think, one of the first to try this plan. Something similar is useful for cool-house orchids. We all know how difficult it is to keep *odontoglossums* cool enough during the summer, and the artificial means which have been tried to produce an equalable temperature. It is certainly satisfactory to hang them out of doors in a shaded spot; in fact, all cool-house orchids do well under such treatment. Captain Snow, a Maryland amateur, used to hang them on the trees around his place, and this plan is followed by others.

It would not be surprising to hear of the discovery of more white *Cattleya gigas* (*C. Rochelliana alba*), though we only know of the one plant now. It was not long before several plants of the rare *Vanda Sanderiana* were discovered and imported, and there is always the strong possibility that no variety is confined to a single specimen. Still, it will be remembered that some of our noblest orchids have been so scarce in their native habitat that we owe our present stock to increase in cultivation, rather than importation. Orchids are not extravagant luxuries now, whether bought at auction or not. One importer offers large masses of *Odontoglossum Rossii* majus, 40 to 50 bulbs, 75 cents; *Oncidium sarcodes*, from 40 cents up, and grand masses of *Laelia autumnalis* for \$1.50. Of course these are

not established plants, but they are cheap enough in any case. If we don't take care, one of these days the bottom will fall right out of the orchid market, and it will be rather rough on some of us. It is some consolation to know that the cut flower market can not go any lower. There is one place in the shopping district where they sell sewing machines, paper patterns and cut flowers, where they recently offered *Bon Silenes*, *La France* and *Perles* for 10 cents a dozen in the morning, 5 cents a dozen in the afternoon. It was a spectacle calculated to reduce a grower to tears. When trade is dull, as it is all summer, it is better to sell stuff for small prices than not to sell it at all, but it does not tend to improve the trade when it is given away like that. Some of the growers have a strong belief that the commission dealers get more out of their flowers than they do themselves; as a rule the growers who run a store in addition do best. If we hear all sides—the growers, the retailers and the middlemen, we are forced to the conclusion that there is not much money in flowers anyway. Decorative plants seem likely to be our best hold at present.

Some of the seeds sent out by the government seed shop at Washington this year prove very interesting to those testing them. One packet of melon seed, supposed to be one sort, has developed about eight different varieties, according to present calculation, smooth, netted, round, oval and everything else a melon may be. Little things like this somehow disturb our confidence in the accuracy of the government institution. In fact, a good many farmers have looked coldly on the department since the occasion some years ago, when they sent out for trial seeds of the Bermuda grass, one of the weeds almost impossible to eradicate in some soils.

Talking of botanical mistakes, a recent (and authentic) anecdote is of an English orchid grower, recently arrived in this country, who was sent out in the woods in one of the eastern states, to collect *Cypripedium spectabilis*. He wasn't up in native flora, and he came back proudly accompanied by a wagon-load of skunk cabbage! The comments with which he was favored are not given, but he is expected to recognize skunk cabbage the next time he meets it.

EMILY LOUISE TAPLIN.

Tuberous-Rooted Begonias.

The development of the double flowered begonia during the past few years is astonishing. I presume it is not too much to say that there was seen at the recent exhibition at Regent's Park in the collections staged by Messrs. Laing & Co., Stanstead Park Nurseries, Forest Hill, and Messrs. H. Cannell & Sons, nurserymen, Swanley, the latest outcome of the double-flowered begonia. The visitor could not help being struck with the great size and symmetry of the blossoms and the difference in shape they presented. Some have close, compact, double corollas—in their general appearance looking very like a ranunculus; others take the character of hollyhocks, while others are cupped like a rose, and some have broad, smooth petals, imbricated in form like those of a camellia. Then there are to be noted their varied colors, from pure white and blush, through shades of pink and yellow, to the richest crimson, their compactness of growth and remarkable freedom of bloom. It seems as if it would be impossible to excel in point of size, symmetry, and color; but then this was thought of the double

forms of a few years ago, and there appears to be no limit to the extraordinary development of which the double-flowered begonia is capable. The development of the white varieties, both single and double-flowered, is one of the features of begonia culture in these days. In both the Forest Hill and Swanley collections there are to be seen very fine varieties, and especially among the double-flowered forms.

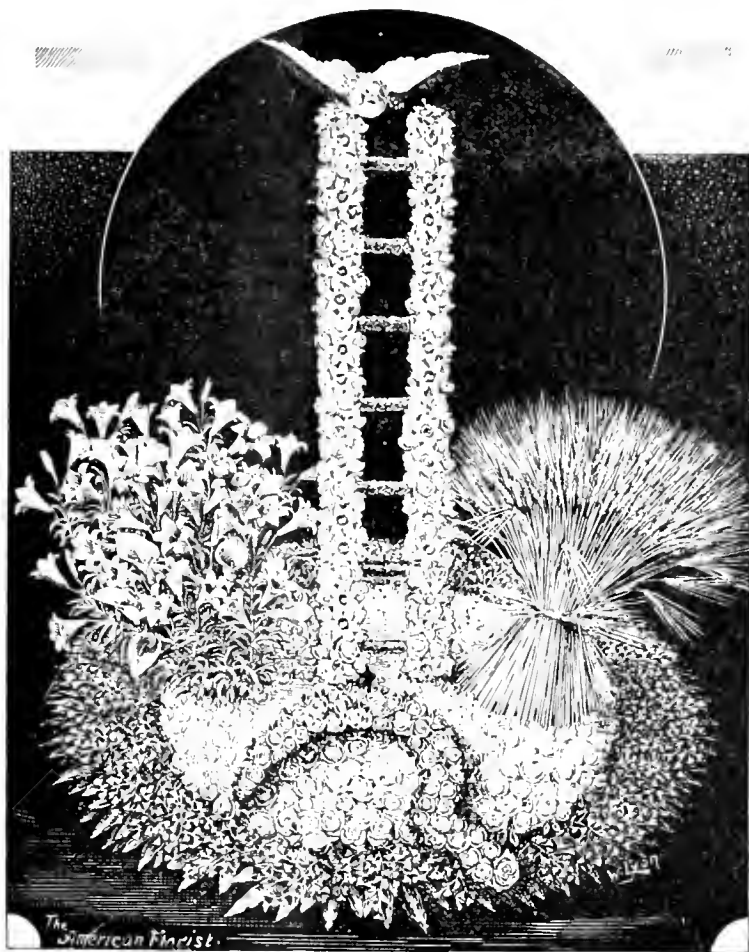
The comparatively short time which elapses from the time of sowing the seed until the plants come into bloom is another of the remarkable features about these plants. I recently saw at the Swanley nurseries a batch of very fine plants raised from seed sown in the middle of January, 1887. They bloomed the same season, and, showing marks of undulced quality, were carefully labeled to grow on for further proof another year. In the autumn of 1887 the tubers were shaken from the soil and well preserved during the winter, and in early spring laid out upon a bed in a propagating house, much as one would seed potatoes. As soon as the bulbs showed signs of growth they were placed in pots just large enough to take them. Some break into growth much earlier than others, which is an advantage, as it provides a succession of bloom. The next shift was into 4½-inch pots, then to 6-inch, and finally to 9 inch pots, in which, by the beginning of June, they had formed very fine specimens. The first tubers are potted in February, and the potting goes on until all are in the soil.

Tuberous-rooted begonias are fast becoming popular exhibition plants, and at some flower shows they are remarkably well done, the specimens being large, finely grown and bloomed. It was at one time said that begonias would not travel for any distance; because the shaking to which the plants would be subjected would inevitably cause the flowers to drop. But some years ago, when Messrs. Laing & Co. sent some plants all the way from London to Torquay in very fine condition, the supposition of danger in traveling was abandoned. They are now taken long distances, and with but very little harm. Even at small country shows begonias are found, and they are generally among the best grown and bloomed specimens.

The single-flowered varieties may be adverted to in a few words for the purpose of pointing out how circular the flowers are becoming. The side petals—at one time small—have become large and rounded, and now rival in size and roundness those at the top and bottom of the blossoms. In Messrs. Laing's as well as Messrs. Cannell's collections at Regent's Park could be seen large flowers of great substance, and as nearly circular as it seemed possible to become. The advance of late years from the florist's point of view has indeed been both rapid and surprising.—*R. D.*, in *London Garden*.

LONDON, ONT.—Everything is dull here at present, there is no demand for flowers with the exception of a few funeral designs. The markets are glutted with vegetables and fruit of all kinds. Mr. E. Meredith, one of London's most prominent lawyers, has come to the conclusion that there is money to be made in growing flowers for the trade. With that end in view he has bought the boilers, pipe, stock, etc., of A. Negler, and will build two rose houses 100x20 each, and one 100x10, which he proposes to fit up and stock with the very best.

W. G.



FUNERAL DESIGN. JACOB'S LADDER OR GOLDEN STAIR.

Funeral Design of Jacob's Ladder or Golden Stairs.

The base is a circular bed of white carnations three and a half feet in diameter and heavily fringed with ferns. A sickle made of pink roses lay in the foreground. Just back of the center rises the ladder or stairs, composed of *Eucharis amazonica*, white roses and carnations. There are seven steps or rounds which in this piece are made of purple flowers, but can be formed of gold colored flowers. There is a sheaf of wheat on one side of the base and a cluster of *Longiflorum* lilies and callas on the other side. The ladder is five feet high. A dove holding a sprig of grain in its mouth surmounts the ladder. This piece was made by Fred Gordon for the funeral of a venerable lady.

Cannas.

It seems that quite a revolution has taken place with regard to the cannas. The large, tall-growing varieties that have been the fashion are about to give place to a different type in the Continental kinds that are being grown in many English nurseries. These are much neater, as robust in their way as those of the other race, and though, perhaps, not so useful for giving great masses of foliage in the flower garden, are of more value for the house. We want both classes of canna, in fact. We could ill afford to lose such a lovely form as the crimson flowered *Canna Ehemanni*; but varieties of this class take

far too much room except where bold views are required. The smaller growing cannas can also be used with the best possible taste in sub-tropical gardening. In the nursery of Messrs. Hooper & Co., Maida Vale, there are several varieties of the new Continental canna. One named *Petite Jame*, bright red, with an edge of gold, was carrying a spike of flowers, although the plant was only about eighteen inches high. There is also a charming variation in color in the Continental cannas. Some are brilliantly showy, especially those with scarlet flowers and edges of gold and spottings of vivid hues.—*London Garden.*

Gas Tar.

Is there anything better than gas tar for painting greenhouse gutters? If so, what is it? How should gas tar be applied? Cold and crude as received from gas works or boiled and put on hot? I have been told that if gutters are painted with gas tar once or twice a year for a few times they will be entirely water tight and last for years without further attention. Do all agree to this? If not, what is better? SAMUEL C. MOON,

Morrisville, Pa.

New Chrysanthemum Elk's Horn.

This new chrysanthemum is so named on account of its peculiarly shaped florets. It is pearly white in color, full and globular in form, quite distinct and extra fine.

The Elevation of Our Business.

BY H. H. BATES.

Published by the New York Florist.

John Ruskin has defined fine art as any occupation in which the head, heart and hand work together. To make a success of our business it is particularly necessary that all three of these powers are exerted.

How often we see men that work constantly, and at the very hardest kind of drudgery, from morning until night, but never seem to make any headway, or get any pleasure from their occupation or life; they either have not the disciplined mind to direct the hand, or have not their whole heart or interest in the business; these men are plodders and work only with their hands. Then again we see men who are just the opposite, who have bright minds, and take a very great interest in their occupation, always alive to new ideas and suggestions, know just how things should be done, but never can do it themselves; their whole life is made of theory and visions; their head and heart are not balanced by good hard physical work; develop the two so that they may be of some practical use, by the third power, the hand.

Political economists tell us that labor is the only source of wealth, but the labor of the hand, that is turrel into a "fine art," by the other two powers, the head and heart, undoubtedly give the greatest returns: First, the head or mind we all realize and a great many of us to our sorrow, should be cultivated in childhood, but those of us who did not have the opportunity then can console ourselves by knowing that by giving our attention to our business and studying the principles of it, our case is not hopeless.

I feel that every person engaged in growing plants, should know the first principles, at least, in botany. Take the seed, examine how wonderfully it is constructed, containing as it does not only a minute plant, but substance on which it can exist and develop when the proper conditions are offered. Then the stem, leaves, buds and finally the flowers which produce more seeds. Take a lily or rose, dissect it, and learn the name and use of each part, this will excite a deeper interest in botany; we shall find that we are more observing, looking for the same organs in different plants; then not content with our own observation, we may be led to take up a good book on botany and we will have put before us on three or four hundred pages what has taken hundreds of men many years of thought and study to accomplish; and in time the ideal grower will become a botanist and be inspired with such thoughts as Darwin expresses in his book on the "Movements and Habits of Plants."

Last winter while talking to a grower who had been in business all his life, and his father before him, I asked him a few questions about hybridizing, thinking I would try to post myself by getting some good practical ideas; he said "he did not take much stock in it, and thought it better to let nature take its course and let them cross themselves." It occurred to me that an argument like this was on a par with advising faith cure to a disabled man when the most skilled and advanced surgical operation was necessary. Darwin was hardly of this gentleman's way of thinking, he made a great many experiments in hybridizing, he speaks of the seventh generation of plants and crossing them when grown under different conditions, also of the struggle for existence among them, the

effect of climate on reproduction, the sleep of the plants, self-production during sleep, influence of gravitation upon them, the power of digestion, the movement in relation to their wants and the diverse means by which they gain their subsistence. I know there are a number of gentlemen here who are perfectly familiar with these researches; a great many of the subjects seem to be of no practical use, but putting our minds in this channel is what elevates, not only ourselves, but those with whom we come in contact, and in order to do this we must first become interested in botany. On this subject there is no better teacher than the late Prof. Asa Gray, of whom it is said no one has ever yet approached, in the rare art of making purely scientific theories and dry details popular and interesting. From his charming elementary work, "How Plants Grow," to his more elaborate "Manual," there is one simple, concise, and yet exhaustive method of treating the various grades of the science. Flowery rhetoric, beautiful figures, lofty speculations and romantic fancies are discarded, and in place is given a simplicity of statement, a transparency of language and an enthusiasm which lights up every page, and causes the student to enter readily into the author's spirit. The leading scientific men of this country and Europe have awarded the highest place in the galaxy of botanists to Prof. Gray.

Now for the dealer to know the habits and requirements of plants would be very useful and interesting; but there are other subjects which demand his attention first. He comes directly in contact with the consumers, not only caters to their wants, but stimulates the demand for flowers by the judicious handling of them; and the progressive grower is the one who first feels the pulse of the market through the intelligent dealer.

Surrounded as we are by the most beautiful colors, the most exquisite forms, and the most delicious fragrance in nature, one of the first thoughts of the dealer should be the artistic arrangement of flowers. Taste to a very great degree is a matter of education, and the study of color, form and position should be carefully considered; the knowledge of a few of the laws of color are absolutely essential to the intelligent arrangement of flowers. For instance let us take the artist's primary colors, red, yellow and blue; mix the red and yellow, we get orange, red and blue, we get purple, and yellow and blue we get green, which gives the secondary colors, orange, purple and green. Blue is complimentary to orange, red to green, and yellow to purple. Then there is a harmony of tone, that is by reducing any of these colors with white; we will take a deep red, reduce it with white until you get a delicate pink, then we have harmony of tone; for instance, take a Jacq. with its own foliage, both are deep colors, reduce them both with white and you have possibly the *La France* and light lily of the valley leaves. Violets and daffodils which are purple and yellow, reducing them both with white, does not take them out of their scale, and possibly we have a violet orchid (*Cattleya*) and acacia which is a delicate yellow, then a pink orchid with light green ferns; cornflowers and marigold, two strong colors but harmonious. So it is with vases, if you have a blue one use orange tints, or green, use red, etc. If you are obliged to use flowers that do not harmonize, separate and relieve them with white ones. Be careful of reds which I consider

the most trying color with which we have to deal. It is not an unusual sight for us to see an expensive design or basket with some choice tone of red in, say *Jacqs.* or *Beauties*, and the effect is entirely destroyed by a few bright red carnations or *bouvardia*, which would have been much better thrown away than put into the design.

There is no business so rich in color as ours. Do we take the advantage of it and get all the profits and pleasure from it that we might? It is a beautiful and interesting study and does not lack text books; should any gentleman's interest be stimulated by anything I may say, he can find the subject exhaustively treated by Chevreul on Color; who is at the head of "Gobelins Tapestry" works, and has made this subject a life study; also G. Field's "Chromatograph," which has been modernized by J. S. Taylor, London, and a delightful book on color by A. H. Church. There are not many of us who have the time to go into the subject deeply, nor have we even the desire, yet there are a few points which we should know, that when our advice is asked we can speak with authority. For instance, we are consulted about a table decoration, possibly there are some pronounced colors about the room or on the table, we can decide what flowers will give the guests the most pleasure, and give us the greatest amount of credit. If the colors are all neutral we can use flowers that will be most complimentary to the hostess' costume, and our thoughtfulness and knowledge will not go unappreciated. When we are asked about the best flowers to wear with a certain dress, after knowing the color and tone of same we then can select the most suitable flower.

In speaking of flowers for ladies to wear, I would suggest that often when a gentleman wishes to send a very large and expensive corsage bouquet, that the salesman advise sending the flowers loose in a box (which can be arranged prettily) that the lady may select the ones she wishes to wear; in this way you will avoid being blamed for poor taste, and not lose any part of a good sale. Another practice which is not quite extinct, is that of making handles on corsage bouquets, and covering them with tin foil, the sooner this is done away with the better. Using a number of colors in a corsage is a great mistake.

Funeral designs have not grown in favor the last few years, for this, the florists to a very great extent are to blame; how many people have very unhappy recollections of funerals where they have been surrounded by ghastly designs and stifling odors; to avoid this, let us be careful how we use the most fragrant flowers, such as *jessamine*, *tuberoses*, etc. Most of the designs should be arranged loosely, using some of the most delicate pinks, yellows and violets to relieve the white. Lettering on designs has been greatly overdone. I would advise strongly against it; often customers insist, then it would not be policy to say too much, but if left to your taste decide against it. Apropos to funeral designs, I can not say too much in condemnation of the custom of some florists in soliciting orders for this kind of work, the people so approached are apt to cast a reflection on the whole trade.

In arranging hand bouquets it is well to avoid stiff effects; when you know that there are a great many to be used, study to make some striking and pleasing contrast. Orchids which are rapidly growing in favor, and have no doubt a great

future in our business, should be arranged with the most delicate foliage and flowers that can be had.

The cultivation of the love for the beautiful in nature, and a knowledge of the harmony of color will make much of our work lighter and give us a great deal of pleasure. We should not lose sight of the great advantage to be derived from these conventions where we can meet men that have had years of experience, and have made the best use of their time; we can study their methods and be advised by them. I could enlarge upon the great advantage derived from the AMERICAN FLORIST, which is another power that deserves our hearty support; it helps us to make rapid strides, and the gentlemen connected with it deserve great credit.

In conclusion, gentlemen, allow me to thank you for the honor, you, through the executive committee, have conferred upon me. I regret not being able to be with you, but in this short and hurriedly composed essay, if I have planted any seeds of thought in your minds, and should they develop into flowers of thought, I shall consider myself very fortunate. I feel sure that you all will agree with me on that point, and that is that education is the best lever by which our business can be elevated and we all should study the best means to that end.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Sept. 1—Tem. morning 72°, noon 89°, evening 73°. Wind WSW. to N. Finished potting from propagating frame rooted cuttings of *Alternanthera paronychioides* major and commenced potting rooted cuttings of *Alter. versicolor*.

2—Tem. 72, 72, 68. SW. to NE. Placed in propagating frame cuttings of coleus and rose geraniums. Cut off the lower part of *Echeveria metallica* kept in pots and placed the tops in sand to root. Cleaned and trimmed beds. Cleaned frame yard. Continued cleaning seeds.

3—Tem. 68, 78, 72. ENE. to E. Continued propagating coleus.

4—Tem. 65, 80, 77. E. to SE. Sunday.

5—Tem. 72, 79, 72. SE. to NE. Potted from propagating frame rooted cuttings of *Alter. versicolor*. Turned soil pile. Cleaned beds.

6—Tem. 72, 94, 85. SE. to SW. Same as yesterday.

7—Tem. 64, 74, 64. NW. Same as yesterday and cleaned glass.

8—Tem. 61, 74, 66. ESE. to WSW. Finished potting *Alter. versicolor* from propagating frame. Potted for stock *Alter. aurea*.

9—Tem. 68, 76, 66. SW. to NE. Cleaned rose beds. Pricked in pans a late lot of *Cineraria hybrida*. Potted *Alter. aurea* for stock.

10—Tem. 56, 62, 60. NE. Repotted *Primula chinensis* into 3-inch pots.

11—Tem. 60, 72, 65. E. to SE. Sunday.

12—Tem. 62, 70, 71. SE. to NE. Sifted sand and placed on benches in No. 2 for propagating geraniums. Potted *Alocasia odorata* started in old frame from pieces of the stalk. Potted up more *alternantheras* for stock.

13—Tem. 76, 81, 67. WSW. to WNW. Commenced potting coleus from propagating frame. Sifted sand on lake shore for houses.

14—Tem. 57, 77, 62. WNW. to WSW. Same as yesterday.

15—Tem. 63, 68, 62. NW. Finished potting and plunging coleus. Repotted *Begonia Saundersonii* into 4-inch pots. Continued cleaning glass and glazing.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a young man, aged 21; 28 assistant greenhouse man. Address: VANDA, care American Florist.

SITUATION WANTED—First-class greenhouse man. Best of references; single. Address: Box 474 Matleawan, New York.

SITUATION WANTED—By a gardener of 10 years' experience. Can give first-class references. Address: R. H., care American Florist, Chicago.

SITUATION WANTED—Young man with three and a half years' experience with English florist aged 30; single; sober. W. K. H. A., Am. Florist.

SITUATION WANTED—By a young florist in a store or with a dealer in flowers. Speak English, German and French. Address: TH. W., 21 E. 60th St., New York City.

SITUATION WANTED—By a practical florist to represent and travel for a thoroughly established concern in connection with the trade. Address: C., care American Florist, Chicago.

SITUATION WANTED—By a thorough experienced seedsman, 15 years' experience, knowledge of plants, etc. Best of references. Address: JAMES SPENCE, 1220 River St., Des Moines, Iowa.

SITUATION WANTED—As landscape gardener. I have had many years' experience in several countries in Europe, and first-class draughtsman. Address: G. L., 23 Englewood Ave., Chicago, Ill.

SITUATION WANTED—Florist's foreman or gentleman's gardener. Fully competent; 25 years' experience. First-class English and Canadian references. Address: J. H. Niagara Falls, Ont., Can.

SITUATION WANTED—As gardener or florist by a young Scotchman, aged 24. New England states preferred; disengaged Sept. 1; good reference. Address: GEO. SUTHERLAND, Winchendon, Mass.

SITUATION WANTED—By thoroughly practical man as superintendent of private or commercial establishment; good salary required; married. Address with particulars: R. care American Florist.

SITUATION WANTED—By a young married man, as gardener. Private place. 10 years' experience in greenhouse, landscape and all its branches. Address: JOHN GREENHALGH, Box 111, Woodbury, N. J.

SITUATION WANTED—By gardener who understands his business in all branches; gave good satisfaction to last employer. Good references. Address: ROBERT ENGLISH, care P. R. Pyne, Riverdale, N. Y.

SITUATION WANTED—By German florist, understands the cut flower trade in all its branches; roses a specialty; good designer. Capable of taking charge of commercial place. Address: FLORIST, care Mr. Wellmers, 215 24th St., Brooklyn, N. Y.

SITUATION WANTED—By a young man; single; 11 years' experience, both in commercial and private gardening; competent to take charge or assistant. Well recommended. Address: PLANTSMAN, care American Florist.

SITUATION WANTED—A first-class gardener. German; single; competent in all its branches; wants situation in a commercial or private place. Can give best of references. Address: FRANK BELT, 245 Buttonwood St., Philadelphia, Pa.

SITUATION WANTED—By English gardener and florist, first-class rose grower; 8 years growing roses for New York market; disengaged Sept. 1; good wages expected. Best of references; married; age 35. Address: W. H., Yonkers, N. Y.

SITUATION WANTED—As foreman or manager of a nursery or large florist place, having 25 years' experience; married; no family. No. 1 rose grower; good grafter and blinder. Disengaged Sept. 1. Address: W. W. B., care American Florist.

SITUATION WANTED—As gardener, by Scotchman of 11 years' experience in Gardening; 5 yrs. in this country. Well recommended from past and present employers. Married. Private place preferred. Address: C. D. S., 400 Thames St., Newport, R. I.

SITUATION WANTED—By a young man of eight years' experience. Good grower and propagator of roses and general greenhouse stock in private or commercial place. Can come at once if particulars in answer given. Address stating wages, etc.: A. M., care American Florist, Chicago.

SITUATION WANTED—The writer having had a large experience in management of catalogue plant business (fruits and flowers) wants a salaried situation with established house, or a partnership with person of sufficient means to work up new business. W., 231 Alexander St., Rochester, N. Y.

WANTED—A small second-hand saddle-back boiler suitable for 500 or 600 feet 4-inch pipe. Address: WM. YERBUKY, Rock Island, Ill.

WANTED—A florist to take charge of my greenhouses, at a moderate salary and commission on sales. Address with references: WM. SMITH, Sioux City, Iowa.

WANTED—A young man practically conversant with the seed business, especially the market garden and retail department. Must be thoroughly competent to take charge of same, and to write and speak German. Address, stating reference: A. Z., care American Florist, Chicago.

WANTED—We are in want of a first class seedsman to take charge of our seed department. Must be a good judge of seeds, and especially understand the retail catalogue trade. Apply, stating experience, references and salary. Only first-class men need apply. Address: L. L. MAY & Co., Nurserymen, Florists and Seedsman, St. Paul, Minn.

FOR SALE—A good second-hand wrought iron saddle boiler, 3 feet wide, 2 feet long, 1.2-inch flues and pipe connection for 4 inch pipe. Address: H. MUMFON, Morris Ave., Bloomington, Ill.

FOR LEASE—8 acres land, 5 greenhouses, lot hot bed sash, dwelling house, all necessary out buildings. Trees established 17 years. For particulars, apply to: E. McNALLY, Anchorage, Ky.

FOR SALE—Greenhouse, stock and fixtures at Marshall, the only seat of Sabine county, Mo. The wealthiest county in the state; population 35,000. The only stock of the kind here. A rare opening for the right man. Address: W. M. ELROD, Marshall, Mo.

\$250 CASH WILL BUY SMALL GREENHOUSE STOCKED. Thousands of pots. Full line of requisites. Town of 10,000 inhabitants. No other commercial greenhouse within 30 miles. Cause, sickness. Address: W. D. BASTOW, Wellington, Kansas.

FOR SALE. A large size Smith & Lynch Greenhouse Boiler, in good condition. Capable of heating 1,500 feet 4-inch pipe; cost \$225. Will sell for \$100, F. O. B.

J. NEWMAN & SONS, 51 Tremont St., BOSTON, MASS.

FOR RENT OR LEASE, For a long term, eight Greenhouses, nearly all heated by hot water (Hitchings & Duck's boilers), a large lot of cold frames and sash, with six acres of good land, dwelling house of seven rooms, stable, etc., situated near Waverly, in the Northern suburbs of Baltimore. A large part of the houses now planted with Roses of the best sorts. Perle des Jardins, Niphetos, La France, Pierre Guillot, C. Mermet, Bennett, etc.

There is also a good stock of Roses in pots: Azaleas, Palms, Ferns, Eucharis, Picus, Asparagus and other plants of most salable kinds. Chrysanthemums, Bouvardias, Gladioli, Tuberoses, etc., and plants for spring stock in the open ground, Strawberries, Grapevines, etc. Ample supply of water from tanks in greenhouses and cistern and wells outside. This is an opportunity for a competent man with small capital to secure on very favorable terms, a good established business, now in the dull season paying expenses. Address: ERNEST HOEN, of A. Hoen & Co., Baltimore, Or ALEX. SCOTT, Waverly, Md.

JOHN CURWEN, Jr., GENERAL GREENHOUSE STOCK AND ROSES. Villa Nova P. O., Delaware Co. Pa. Money Order Office: Bryn Mawr, Pa.

PANSY SEED. Crop 1888, my own growing, from select blooms ODIER, TRIMARDEAU and New French varieties. This splendid collection is offered on its merits, and as to richness of color and markings, comparisons are invited. 1/2 oz. 80 cts.; 1 oz. \$5.50.

DANIEL K. HERR, Lancaster, Pa. Mention American Florist.

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New American Roses.

Freesia Refracta Alba and Leichtlinii. **ROSES** SOL VERNER of WOOTTON and ANNIE COOK, 25th. pots, 25 per doz., \$35 per 100 4 in. pots, \$5 " " \$40 " "

FREESIA REFRACATA ALBA \$2.00 per hundred, \$15.00 per thousand
LEICHTLINI \$1.50 per hundred, \$12.00 per thousand.

Address: **JOHN COOK, Florist,** BALTIMORE, MD. Mention American Florist.

IMPORTER AND GROWER HYBRID PERPETUAL ROSES **WILLIAM H. SPOONER,** Jamaica Plain, Boston, Mass.

E. BENARD, ORLEANS, FRANCE. **ROSES ON THEIR OWN ROOTS** A SPECIALTY. **NURSERY STOCK OF ALL DESCRIPTIONS** For particulars apply to: **E. BENARD, Jr.,** P. O. Box 1400 San Diego, Cal.

NOVELTIES IN ROSES. All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals. Novelty in Chrysanthemums. Catalogue specialties at lowest rates. Trade List now ready, mailed on application.

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PLANTS FOR SALE. About the 20th of October a very fine collection of **PALMS, FERNS, CROTONS, DRACAENAS, AZALEAS AND ALOCASIAS, FOR DECORATING PURPOSES.** Florists will never have a better chance to purchase specimens at such a low figure. Plants will be on exhibition at Columbus Centennial.

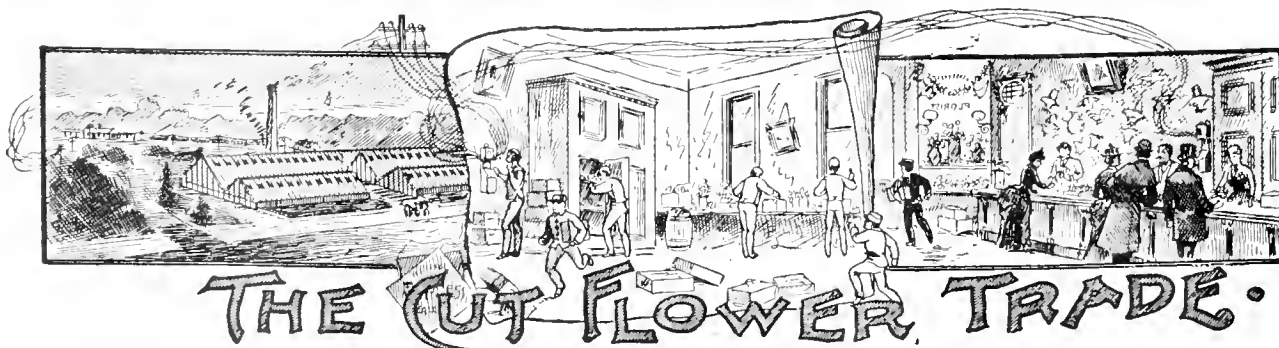
MAURICE EVANS, Florist, COLUMBUS, OHIO.

JAMES L. BOYSON, CAEN, (CALVADOS) FRANCE. 1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW **EUROPEAN ROSES** will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale. Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

— **ROSES.** — Mention American Florist.



THE CUT FLOWER TRADE.

Early Fall Fashions.

Many modifications of old ideas characterize early autumn styles, but there is one fact of general interest in the floral world, and that is that flowers of all colors are being worn and again used in the make up of choice designs. Exquisite taste is displayed in shading; pink shaded into crimson; dark reds shaded into the blossoms that are nearly black, purples elegantly blended from delicate lilac to the "noir" heliotrope; all the yellows from cream to old gold, and the different white tints, all distinctive, the paper white, bluish white and ivories. Simple flowers have never been more popular. Some of the handsomest luncheon arrangements at Newport are being made with single hollyhocks, these being placed among ferns in flat cut glass dishes.

Rich effects are made on tables with double hollyhocks, dahlias and asters, these blossoms being made in mounds just high enough so that all the flowers may be seen from every side, as they present a solid blaze of color. A mound of shaded crimson, shaded golden or purple flowers is splendid. Shaded chains around the table are also laid, rosette like fall flowers, as above mentioned, appearing among coils of fine foliage. Delicate traceries of foliage have given way to denser garlands, the show of lovely greenery nearly eclipsing that of the flowers.

While every imaginable rustic effect has been worked out for table covering for seaside feasts, such as mats made of braided grasses and curling mosses, yet the prospects are that as the season advances the richest fabrics will be the vogue for the foundation of floral decoration on boards spread for dinner. Luncheon cloths, on the contrary, will appear of lace, gauze and Florentine silk. French cottage effects will be copied for this meal which is the one most suitable for the "rose buds" and debutants of society. These light fabrics are puffed on the table so that flowers and foliage laid between the shirrs have a charmingly dainty appearance. More and more is there opportunity for the left hand of the seamstress in the floral shop to work with the decorating staff. The lovely effect of a luncheon where rose colored tulle is held in place wherever effective in the room decoration by long stem Grace Wilder carnations, and the table is covered with shining pink gauze, among the irregular puffs of which are clusters of the same flower, is a Parisian novelty this season. Potteries, silver and cut glass, as well as flowers, show off beautifully in a cushioning of these materials.

A general collection of flowers decorate rooms arranged for entertainments. Gladiolus, hydrangeas and asters with trusses of bright geraniums, are the flowers that were prominent in the rich

display made in the grand mansion trimmed by Klunder for the Van Alen ball. Spikes of gladiolus rayed around every window cornice and curious arch ways of the quaint Louis VI style of architecture. Shaded gladiolus (and there is a fine opportunity for good work with this flower of many colors), were most artistically placed with blazing and setting sun effects, over mantels, mirrors and cabinets. The setting sun worked out at the end of a corridor, music room, picture gallery, or library is an elegant device, easily put up with fall flowers. Some of the fine workers with foliage will use autumn leaves later for forming some portions of this effect.

Baby baskets are trimmed prettily with flowers for gifts to new babies. Sometimes they are made entirely of blossoms and foliage. The basket is first covered with green surah silk, on which asparagus is laid, a valance flounces the basket, and this is formed of the same vine. Cushion and pockets are made of small pink rose buds, and the entire basket is trimmed around and in regulation style with pink begonia bloom.

FANNIE A. BENSON.

Stephanotis and Rhynchospermum.

No florist should be without these, for they both are very useful, are good keepers and are very fragrant, they should be grown more extensively for the trade. I am sure it is easy enough to grow them, requiring no special culture, nor a separate house to grow them in. The stephanotis may be planted against an end wall of a rose house or at the end of a center bed or bench and a few wires stretched to support the vines. The frequent syringings in such a house will keep down mealy bug—the only insect which may cause trouble in growing this plant. They however should not be planted on the benches with the roses, for if you follow modern style of growing roses you have to remove the soil and replant every season, and in doing so your stephanotis would either be destroyed or at least seriously injured, but have a separate box made for them, if you can not plant in a solid bed of earth and they will do for years in such boxes, provided they get an occasional top dressing. If small plants are set out you will not get a great many flowers the first season, but as they make wood and grow stronger an abundance of the delicate, waxy white clusters will reward the little extra care you may bestow on the plants. There are many corners in greenhouses which may be utilized in this manner without interfering with other stock and without taking up hardly any room, as they are planted against the wall and the box, containing soil and plants, may be placed below and even with the bench, if you can not conveniently find room

enough on top of it. As to the rhynchospermum it will do well under the same treatment and in a like atmosphere, but they may also be planted close to the upright supports of the ridgepole or purlins in any house no matter what temperature the house is kept at, be it 40° or 75°, it will do well anywhere, the only difference being, the cooler you keep it the later your flowers will appear. By planting some in a warmer and others in a cooler place you will have a succession and I know both you and your customer will like the baskets or floral pieces you may choose to trim with these lovely and delicate sprays, emitting such jasmine-like odor; a plant in bloom will perfume a whole house, and when not in that state will still be an ornament to the house, with its glossy, dark green foliage. Scale and mealy bug may attack this plant also, but as a rule it is a comparatively clean plant. Both stephanotis and rhynchospermum are generally classed among hothouse plants, but will do in ordinary greenhouse temperature as long as they are not overwatered while at rest in midwinter. Stephanotis may be had in flower from July to November, while rhynchospermum will bloom in a warm house as early as February and continue to bloom for two months, and if kept in a cool place would come in correspondingly later.

Rochester, N. Y. JOHN B. KELLER.

Foreign Notes.

Mr. Oliver Landreth, in company with his son and nephew, is visiting Norway and Russia. They will return in October.

Mr. Daniel De Cou, who has been pushing the Planet Jr. goods on the continent sails for home September 15.

Mr. Jos. B. Fuller, with James Vick, sails for home September 18.

Mr. V. Lemoine, of Nancy, is said to have a blue gladiolus.

The meetings of the London seedsmen twice a week at the corn market affords them excellent opportunities to compare notes on crops and stocks.

The very wet summer on the continent is likely to make the lily of the valley pips very late this season.

African tuberose bulbs are not in favor in England.

English pea growers were much discouraged over the prospects August 5. Some estimated the yield as low as one half crop. Many acres in Kent being under water and other crops growing in the pods from excessive rain.

In general the seed crops of Europe though making rank growths, do not seem to be setting the quantity of seed which they would do with dry weather.

A new class of single dahlias, quite dwarf, will be offered to the trade within a year or two.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for Sept. 15 issue must REACH US by noon, Sept. 10. Address.

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

Oscar R. Krienberg, Philadelphia, pansy seed; Jas. B. Wild & Bros., nursery stock; Albert Benz, Douglaston, N. Y. pansies; Fred W. Kelsey, New York, nursery stock; J. M. McCullough's Sons, Cincinnati, O., bulbs, plants and seeds.

Our Ancient Order.

In response to the statement of a gentleman that he belonged to the most ancient existing order, which originated in the time of Solomon, namely, the Free Masons, Mr. Geo. Field, of Washington, responded: "I belong to an order still more ancient. It is the Free Sons of Gardeners and it originated in the Garden of Eden."

WILMINGTON, DEL.—The prospects for the floral exhibition in connection with the exhibition of the Peninsula Hort. Society this month are very flattering. All local florists and amateurs will exhibit, and Mrs. T. Harrison Garrett, of Baltimore, will send two car loads of plants from her private conservatories,

"THE WATER HAWTHORN" is what the editor of the Otago, (N. Z.) *Witness* calls the *Aponogeton distachyon* and surely this is a prettier and happier name than "Hawthorn scented Cape Pond weed" or "Winter Hawthorn," the names applied to this sweet and lovely little water plant by writers in England. Although a native of the Cape of Good Hope it is hardy in outdoor ponds as far north as Boston, providing the roots are beyond the reach of ice, and as an outdoor plant it blooms from September till May except during the icy season of winter. As a greenhouse plant it will grow in vessels in very shallow water and bloom all winter long. It rests in summer. A generous bloomer. May be increased by division or seed. W. F.

EDWARD C. HORAN,
WHOLESALE FLORIST,
36 WEST 29TH STREET.

The Bride, Mermets, and Am. Beauties. SPECIALTIES. NEW YORK.
Mention American Florist

A. S. KIMBALL,
WHOLESALE CUT FLOWERS,

170 Lake Street, CHICAGO.

I give Special Attention to Shipping Orders.

Consignments solicited.

Wholesale Markets.

Cut Flowers.

NEW YORK, Aug. 26.

Roses, Bonn, Gontiers, Bennetts	2.00	60
" Perles, Niphotos, Souys	2.00	60
" Mermets, Cushi, Brides	2.00	60
" La France	3.00	60
" Am. Beauty	6.00	60
Snulax	10.00	60
Lily of the valley	6.00	60

BOSTON, Aug. 26.

Roses, Teas	\$1.00	60
" Fancy	3.00	60
Asters	1.00	60
Sweet Peas	1.50	60
Adiantums	1.00	60
Lily of the valley	6.00	60
Snulax	12.50	60
Pink pond lilies	10.00	60
Hollyhocks	4.00	60

PHILADELPHIA, Aug. 26.

Roses, Teas	2.00	60
" Perles, Niphotos, Souys	3.00	60
" Bennetts	1.00	60
" Mermets, Cooks, Brides	5.00	60
" La France, Nels	6.00	60
" Puritans	8.00	60
" Gontiers	3.00	60
Carnations	75	60
Harris lilies	8.00	60
Callas	8.00	60
Snulax	20.00	60
Gladiolus	1.00	60
Asters	1.00	60
Sweet Peas	1.00	60
Longiflorum lilies	6.00	60

CHICAGO, Aug. 28.

Roses, Perles, Niphotos	\$3.00	60
" Bonn, Saltrados	2.00	60
" Mermets	4.00	60
" La France Brides	5.00	60
" Am. Beauties	10.00	60
Carnations, short	50	60
Carnations, long	50	60
Snulax	20.00	60
Adiantums	1.00	60
Alyssum	25	60
Callas	12.50	60
Taberosas	1.50	60
Hellotrope	1.70	60
Mignonette	50	60
Gladiolus	4.00	60
Margolds	40	60
Hollyhocks	1.50	60
Aratum	12.50	60
Asters white	50	60
Asters colored	50	60

WM. J. STEWART,
Cut Flowers & Florists' Supplies
WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

REMOVAL.
Owing to the rapid increase in business
N. F. MCCARTHY & CO.
Wholesale Florists and Florists' Supplies,
63 Bromfield St., BOSTON, MASS.,
Removed Aug. 15th to the new and spacious store
1 MUSIC HALL PLACE, off Winter St.,
where they shall be prepared to meet any and all demands

CUT ROSES AT WHOLESALE.
The only establishment in the West growing Roses exclusively. 2000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the consumers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety. Also all the leading varieties of young Rose plants for sale.

GARFIELD PARK ROSE CO.,
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Corner St. Louis Avenue. CHICAGO

W. F. SHERIDAN,
Wholesale & Commission Dealer in
CUT FLOWERS,
HAS REMOVED TO
50 West 30th Street, NEW YORK.

VOLUME III OF THE
AMERICAN FLORIST,
BOUND IN HALF LEATHER PRICE, \$2.25
AMERICAN FLORIST CO., CHICAGO.

Thos. Young, Jr., & Co.,
Wholesale Florists,

INCORPORATED 1885,

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WHOLESALE DEALER IN CUT FLOWERS,
36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

LaRoche & Stahl
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Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST

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WHOLESALE ROSE GROWERS,
Telephone 377. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermets.
And other Standard sorts

WELCH BROS.,
WHOLESALE FLORISTS.
165 Tremont Street BOSTON MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points of Western and Middle States.
Return Telegram is sent immediately when it is impossible to fill your order.

HAMMOND & HUNTER,
Wholesale dealers in
Cut Flowers and Florists' Supplies
61 West 30th Street, NEW YORK.

KENNICOTT BROS.,
WHOLESALE FLORISTS.
ALL CUT FLOWERS IN SEASON.
Write for price list. Consignments solicited.
27 Washington Street, CHICAGO.

CUT FLOWERS
The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc Address,
J. L. DILLON, BLOOMSBURG, PA

N. STUDER,
WHOLESALE GROWER OF
PLANTS AND CUT FLOWERS.

ROSES A SPECIALTY.
Decorative Plants, as Palms,
Dracenas, Crotons, Ferns, etc.
Write for price list.

N. STUDER,
ANACOSTIA P. O.,
Washington, D. C.

The American Florist Company.

Haupt Office: 51 LaSalle Str., Chicago.

Westliche Office:

Zimmer 15, Vanderbilt Building, New York.

Alle Correspondenzen sollten an die Haupt Office in Chicago geschickt sein.

Die Zeitschrift "The American Florist" erscheint monatlich zwei Mal. Im fünften einjährigen Jahrgange überschreitet sie gewöhnlich 24 Seiten in einer durchschnittlichen Auflage von 5000, von denen 4000 an regelmäßige Abonnenten versandt werden. Im Interesse der Floristen Amerikas herausgegeben, zählt sie unter ihre Mitarbeiter die praktischsten Männer im Fach, was für die Leser von großer Wichtigkeit ist.

Ein Theil der Zeitung wird den Floristen gemeldet.

Um den Fortschritt des Gartenbaues in Amerika richtig kennen zu lernen, ist die Zeitschrift "The American Florist" unbedingt notwendig. Der Preis derselben ist portofrei 6 Mark jährlich.

Convention amerikanischer Blumenzüchter.

Die vierte Jahresversammlung der Gesellschaft amerikanischer Blumenzüchter fand in der Stadt New York am 21., 22. und 23. August statt und stellte sich als die größte heraus, die je gehalten wurde. Diese Gesellschaft zählt jetzt über 1100 active Mitglieder und nicht weniger als 70 derselben betheiligten sich an der New Yorker Versammlung, welche in Cooper Union Hall an der Achten Straße tagte. Es wurden täglich drei Sitzungen abgehalten und eine an Abwechslung reiche Reihe von Gegenständen zur Verhandlung gebracht, welche sich nicht allein auf die Cultur aller unter Glas gezogenen Pflanzen erstreckte, sondern auch auf die Art ihres Transportes, den Klein-Verkauf von gepflanzten Blumen und ansiebige Debatten über alle vorgelassenen Arbeiten. Im Anschluss an die eigentliche Convention war eine große Ausstellung von Pflanzen, Blumen, Blumenkörben, Zwiebelgewächsen und allen Treibhans-Maschinereien, Kesseln und Geräthen arrangirt worden. Mehr als 75 verschiedene Firmen stellten ihre Erzeugnisse in der Halle aus und 1000 Mark in Geldpreisen wurden für die schönsten Blumenstücke ausgeben. Nach Schluss der Sitzung am 24. August nahmen alle Mitglieder der Versammlung mit ihren Damen an einer großen Dampfer-Excursion auf dem Hudson Theil, welche von dem Blumenzüchter-Verein der Stadt New York zu Ehren der Gesellschaft arrangirt worden war; zwei Concerte und ein reiches Banquet bildeten wesentlich angenehme Theile der Excursion.

Das war ohne Zweifel die größte Versammlung von Männern, die sich mit dem Gartenbau beschäftigen, die jemals in der Welt stattgefunden hat. Einzelne Mitglieder hatten über tausend deutsche Meilen zurückgelegt, um an den Verhandlungen theilzunehmen zu können und viele derselben sind über 700 Meilen weit gereist. Die ganze Affaire war eine äusserst angenehme, die den Betheiligten lange im Gedächtnis bleiben wird.

Die nächste Jahresversammlung wird in Buffalo, im Staate New York im August 1889 stattfinden. Blumenzüchter in Deutschland oder Frankreich, welche eine Reise nach Amerika beabsichtigen, sollten es so einrichten finden, daß sie zur genannten Zeit im Lande sind. Neue Pflanzen, die in den amerikanischen Handel eingeführt werden sollen, können bei dieser Gelegenheit ausgestellt werden.

William A. Stewart, 67 Bromfield St., Boston, Mass., ist Secretär dieser Gesellschaft und ein vollstäudiger (in Englisch) gedruckter Bericht von 1887 kann gegen Einzahlung von 5 Mark erlangt werden; der Bericht der jüngsten Versammlung wird, wenn fertig, bei Empfang von 8 Mark versandt werden.

News Notes.

HAMILTON, ONT.—E. G. Brown has built two new houses 72x13 each.

INDIANAPOLIS, IND.—The Indiana State Fair opens here September 17.

WEST TROY, N. Y.—T. S. Strickler has built two new houses 76x18 and 40x18.

BOWMANVILLE, N. Y.—S. M. Smiley has built a new house 70x18 for carnations.

ELMIRA, N. Y.—E. M. & H. N. Hoffman are doubling the capacity of their greenhouses here.

BROOKLYN, N. Y.—W. C. Krick succeeds his father, Chas. Krick, in the florist business here.

COHOES, N. Y.—Ansel Carpenter has invested in twenty-one acres of land and built two rose houses 100x18 each, heated by hot water.

NEW CASTLE, PA.—Paul Butz & Son are erecting two new rose houses, each 20x100 feet, same to be heated with steam and natural gas.

ELMIRA, N. Y.—The state fair which will be held here September 17-22, promises to be among the largest and best ever held in the state.

GHEENT BELGIUM.—The firm of C. Petrick and Weygandt has dissolved. The business will be continued by C. Petrick in his own name.

KANSAS CITY, MO.—Probst Bros. have opened a floral store in the Coates House, corner of Tenth and Broadway, in connection with their greenhouses on Prospect avenue.

LANSINGBURG, N. Y.—Herman Liederly is overhauling his houses and adding three new ones, two 100x25 and one 100x12. Geo. B. Lucas is working on repairs and has built a new office 26x19.

SARATOGA, N. Y.—S. F. Terwilliger expects to dispose of his greenhouses here and accept the position of treasurer of the Ferguson Boiler Co. of Albany.

CHICAGO.—Foreman Bock of the Forest Glen Floral Co's greenhouses at Jefferson was probably fatally stabbed by a discharged employe named Mincho, the night of August 16.

BUFFALO, N. Y.—Jos. H. Rebstock has built two new houses 50x20 each. Bishoff & Sprissler are building two new houses, 25x18 and 20x16, also an office 14x20. W. J. Palmer has now 75,000 feet of glass at Lancaster and is making room for more.

SPRINGFIELD, ILL.—Mayor Chas. E. Hay, who is an enthusiastic amateur florist, has caused the county court house square to be neatly sodded and laid out with flower beds. C. A. Gehrman, another amateur, assisted in the good work and the result is certainly gratifying.

MILWAUKEE.—The two Clark brothers who have been with Currie Bros. for some years, have rented the greenhouses at Pierce and Fifteenth Aves. of A. Laing & Son, and will conduct a general florist business. It is stated on good authority that a new commission house will be opened about October 1.

MINNEAPOLIS.—Cut flower trade has been very dull the past month. The Minneapolis Exposition opened August 22 and will continue thirty-four days.

The sum of \$350 has been appropriated for premiums for plants, flowers and floral designs. This is the first time premiums for plants and flowers have been offered and it is due to the efforts of the Society of American Florists.

TROY, N. Y.—James W. Gemmill, formerly of Cohoes, has located here. He has bought two and a half acres of land near Oakwood cemetery and built three greenhouses, one 100x20, another 120x12 and the third 30x22. J. Young is overhauling his houses and adding a small new one. S. Walsh expects to leave soon for Trinidad, West Indies, to superintend a nutmeg plantation.

MONTREAL.—Edward Graves has added two new houses, one 77x10 and the other 70x18. S. S. Bain is refinishing his store in a very attractive manner. Wilshire Bros. have added a new house 50x10 at their Park avenue nursery. John Murray is preparing to overhaul some of his houses. The city florists had a grand picnic July 25. W. O'Hara has now a six-acre garden giving more room for hybrids, etc.

PITTSBURG.—Florists A. M. and J. B. Murdoch have a telephone which can be used on any floor of the building they occupy. An ordinary telephone is fastened to a board which slides in grooves on the plan of an elevator. A weight equal to that of the "phone" enables one to send the instrument to the top of the building by a slight push. One of their employes lives on one of the upper floors and when in his room he slides up the "phone" and is prepared to take night messages. The attachment is made midway and the connecting wires merely follow the course of the instrument.

THE SCHEDULE OF PREMIUMS for the chrysanthemum show of the New Jersey Floricultural Society, to be held November 7-9 at Orange, N. J., is received. The premiums are liberal and numerous. In addition to the large chrysanthemum list classes are provided for cut roses, carnations and violets, as well as decorative plants in pots, orchids and fruits and vegetables. A special orchid premium consisting of the first volume of Reichenbachia—a handsome work on orchids—is offered by Mr. J. Fosterman, agent for Sander & Co., St. Albans, England. Schedules and entry blanks may be had on application to P. J. Fay, secretary, 172 Prospect street, East Orange, N. J.

NEW BEDFORD, MASS.—Robert Woodhouse, formerly gardener to Dr. Abbe, is erecting new greenhouses principally for roses and carnations for wholesale trade only. He will put up about 5,000 feet of glass this summer and as much more next. He will try a new style of hot water boiler. The houses will be 14 feet wide and covered with 3x8 sash made of selected pine, with double thick glass. Mr. W. thoroughly understands his business which is an assurance of success. Chrysanthemum growing is at fever heat here now, there being about 5,000 plants in the city under careful cultivation, some of which stand six feet high and some of a spread of four feet at this date. If nothing befalls them there will be some of the finest and largest plants exhibited at the fall show ever seen in the state.

WILL SOME florist who is using steam for heating, please state what kind of boiler would be the best, also what sized pipe to heat two houses 100x18 each.

Pleasant Hill, Mo. G. M. KELLOGG.

PANSIES.
NEW CROP SEED JUST ARRIVED FROM THE GROWERS.

I would call the attention of the trade to the following splendid varieties of Pansies which I have had grown especially for my own home trade by the best French and German growers:

"NEW IMPROVED GIANT TRIMARDEAU"

NEW "BUGNOTS" FANCY, especially improved which for beauty of form, good substance, variety of markings, richness of color and enormous size cannot be excelled by any one. These are the very best varieties for market purposes ever grown.

"NEW CROP SEED" put up in trade packets containing 100 seeds each

Trimardeau, 50c., Bugnot, 75c. each
Printed directions for sowing, in English and German.

FRED SCHNEIDER,
ATTICA, WYOMING CO., N. Y.

PANSIES.

PLANTS A SPECIALTY.

All novelties of merit are added annually, and I grow my own seed, carefully selecting the best only. Therefore I recommend my strain of

MIXED PANSIES

either for forcing or planting cold frames for spring sales, knowing that they will give the best of satisfaction as to size, variety and brilliancy of colors.

PRICES—Good, stocky plants from seed-bed, per 100, \$ 75; per 1000, \$5.00. Transplanted, per 100, \$1 25; per 1000, \$10 00.

Send for Pansy and Smilax Special.

ALBERT M. HERR,

L. B. 338. LANCASTER, PA.

PANSIES ONLY!

The BEST STRAIN and the most COMPLETE COLLECTION in the market.
Send for new circular and price list to the Trade.

ALBERT BENZ, Douglaston, N. Y.

ED. JANSEN,

Importer & Manufacturer

— OF —

NOVELTIES IN BASKETS,
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Bet. 6th & 7th Aves. NEW YORK.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

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ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World.
Introducer and Grower of all the leading Novelties.

Catalogue free on application.

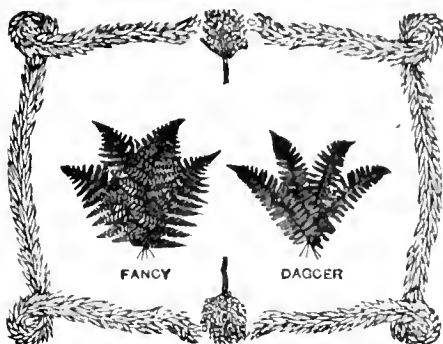
FRED. ROEMER, SEED GROWER.
QUEDLINBURG, GERMANY.

3000 CARNATION PLANTS.

FIELD GROWS. STRONG CLUMPS.
DeGRAW, SNOWDON, HINZE'S WHITE, Ready Sept. 15.
PAUL F. LAU, Turner Park, Ill.

Delegates to the next convention will travel via the Pullman Car Line TO AND FROM

MONON ROUTE
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address
E. O. McCormick, Gen. Passenger Ag't, Chicago



Mention American Florist.

CUT FERNS.
NEW CROP 1888.

NOW READY. Used for Bouquet Work, filling Flower Baskets, Decorating Altars, &c., &c., and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN \$2.00 per bbl. (30 lbs.) or \$6.00 per 100 lbs. Season commences Oct. 1st for holiday trade.

SPHAGNUM MOSS Long clean fibre, dry or green, \$1.00 per bbl. or six bbls. for \$5.00. Sample or trial sacks containing 3 bushels of Moss, dry, very light, designed for express shipments, \$1.00 per sack.



L. B. BRAGUE, Hinsdale, Mass.

PALMS, FERNS, ETC.

All sizes from Seedlings up. Large stock of most useful varieties in best condition at lowest prices.

CHARLES D. BALL, Holmesburg, Philadelphia, Pa.

IT is a conceded fact that there is no better place in the U. S. for Nurserymen to sort up, Dealers to Pack, or Planters to order, than at the Painesville Nurseries, the aim of THE STORRS HARRISON CO. being to carry a full line of Fruit and Ornamental Trees, Bulbs, Shrubs and Roses. Have a remarkably fine stock of Standard, High Top Dwarf and Dwarf Pear; Plum, Peach, Cherry, Apple, Quince, Russian and other Apricots. Grape Vines, both old and new. Currants, Gooseberries, Blackberries, Raspberries, Strawberries, etc. In fact a full line of Fruits and Ornamentals, both large and small. Prices Reduced to suit the times. Correspondence solicited.



Price List Free. 34th YEAR. 700 ACRES. 24 GREENHOUSES.

Address **THE STORRS & HARRISON CO.,** PAINESVILLE, LAKE CO., OHIO.

FOR SALE.

IN DORCHESTER, SIX MILES FROM BOSTON, THE WELL-KNOWN ROSE-GROWING ESTABLISHMENT OF MINTON BROS.

The estate contains 35,000 feet of land, on which are two rose houses each 100x20, one 100x15 and one 116x18. Two of these houses are comparatively new and all are well stocked with plants. Heated by hot water, two of the boilers new last fall and all in first-class condition. The houses are supplied with city water, and are located on one of the principal streets, convenient to railroad and horse cars, and land is fast appreciating in value. There are also 200 hotbed sash. Price, \$9,000. Sickness only reason for selling. Apply to

WM. J. STEWART, 67 Bromfield St., Boston, Mass.

ROSES.

In order to make room for young stock, we offer the following low inducements:
Per 100
Mermel, Bon Silene, from 2 1/2-inch pots, \$ 8 00
S. d'un Ami, Cook, " 2-inch pots, 7 00
Sufrano, and Adam, " 2 1/2-in. pots, 5 00
Bride and La France, 3 1/2-inch, \$10 00, 3-inch, \$8 00;
2 1/2-inch, \$7 00, per 100.
Teas and Hybrids from open ground, 25 to \$12 per 100
Per 100 Per 1000
Smilax, strong plants from 2 1/2-in. pots, \$3 00 \$25 00
Ampelopsis Veitchii and Quincifolia, first size \$8 00, second size \$6 00 per 100.

CARNATIONS.

Peerless, Edwardsii, Hinz's White, Portia, Crimson King, Philadelphia, Hinsdale, Jas. Garfield and Mrs. Garfield, 1st size \$10 00, 2nd size \$8 00 per 100
Alegreite, Fred. Johnson and Andalusia, 1st size \$12 00, 2nd size \$10 00 per hundred.

VIOLETS. Marie Louise and Swanley White, strong plants, 1st size \$8 00, 2nd size \$6 00 per 100.
Our Carnations and Violets are grown on new soil. They are large and perfectly healthy.

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GOOD STOCK FOR FLORISTS.

ROSES— Per 100 Per 1000
Sufrano, Mermel, Bride, Bon Silene, Md. Alex. Bernaix, La Pactole, and thirty other good varieties, \$ 4 00 \$30 00
Bouvardia Lemaitre, fine, 2 1/2 in. pots, 5 00 15 00
Honeysuckles, Thulleam and Aurea 2 00
Keteleata, 3 00
Echeveria secundiflora 3 00
Begonia Rubra and Semp. Gig. Rosea 7 00
Passiflora, Constance Elliott, Florida, Smith, Trinitaria, 3 00

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Variegated Tuberosa.
Coeperia Drummondii
Amaryllis, Atamasco, Halli and sarinensis (true Guernsey lily)
Eulalias Japanese variety and Zebra
Arunda donax var
Roses, best forcing varieties one and two years.
Moon flower, Ipomoea grandiflora, alba and rosea (seed)
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Ampelopsis Veitchii plants and seed

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Aquatic Plants in Artificial Basins.

To grow aquatics successfully water is an absolute necessity of course, but one need not seek a water course or a pond to produce good and satisfactory results in the attempt to cultivate them.

Four years ago I constructed out of ordinary brick and cement a basin about seven feet across by fifteen inches deep and planted it with the beautiful *Nymphaea odorata*, which commenced to bloom the first season, and has continued to throw up hundreds of large perfect flowers every season, and has bloomed continuously this season since the middle of May to the present time and at this writing (August 6) there are quantities of flowers.

Two years ago I constructed two more of these basins and had them planted with *Nymphaea flava* and *N. caerulea*, all of which do well. Last season I cleaned out one of these basins, put in about six inches of very rich earth, and planted a single root of the *Nelumbium speciosum*, which has grown until the little basin is completely filled with it, furnishing this season so far, twenty-six exquisitely colored flowers, from eight to ten inches across, and borne upon foot stalks standing five and six feet above the water and many of the leaves reaching a diameter of eighteen to twenty inches. My interest has so increased in this beautiful gem of the aquatics that I intend to give them more space another season and perfect cultivation.

Our winter season is so mild that no care of the roots is required except to mulch and cover with water. In one of my other basins I deposited last season a single root of *Pontederia crassipes*, which in a short time covered the water, giving some flowers late in the season. A few of the roots were wintered in the tank in the greenhouse and transferred this spring to the basin again, where it has grown into a solid mass, and we have hundreds of the beautiful lavender flowers, short lived it is true, but it blooms so abundantly that we are never without them.

From my experience it will be seen that a number of aquatics can be grown without an aquatic garden, and those who attempt the cultivation of them in half barrel tubs, even, I am sure, will be well rewarded for their trouble.

Macon, Ga. D. B. WOODRUFF.

Dutch Bulbs.

The weather in Holland this summer has been in general cold and rainy like in other countries, and so the season is more backward than ever. The harvesting of bulbs, in consequence, takes place much later than usual, as one of the principal objects in cultivation is to have the bulbs well ripened before taken up, for the flowering qualities may be injured by taking them from the ground at a too early period. So the time that the bulbs and especially hyacinths and narcissus, will be ready to be sent out in a well-ripened and sufficiently dried stock, may be a fortnight later than in other years, when the shipments used to begin early in August. It is reported that several of the leading firms in the bulb trade will not begin sending out their bulbs until they are perfectly fit for the purpose, although it may be at a later period than in former years. This resolution is taken in the interest of the buyers, to supply them with a perfect article. It is to be hoped that this system will be adopted more generally by the growers of bulbs.

Haarlem, Holland, Aug. 1, '88.

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Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



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From 6-inch pots.....	\$6.00	\$45.00
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 Free on board cars in New York.

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 5 to 7-in. \$8 per 100, \$75 per 1000
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Roman Hyacinths
 EXTRA SELECTED,
 \$3.50 per 100, \$33.00 per 1000.

PAPER WHITE
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Boston.

The annual election of officers of the Gardeners' and Florists' Club will take place on the first Tuesday in September.

E. V. Whitten, of Dorchester, is making large additions to his greenhouses.

Jas. Tucker, of Dorchester, has tired of the greenhouse business. His houses have been torn down and the land cut up into house lots.

Mrs. Brooks, of Milton, is going to build large greenhouses and try the florist business. Mr. Thos. Clarke is her gardener.

The greenhouses and other buildings on the estate of the late C. M. Hovey, together with several acres of land have been bought by Wm. E. Doyle, who proposes to rebuild and improve and run the place in connection with his store business.

S. A. B. Rogers has bought Lyman Davenport's greenhouses at Readville. On account of building improvements Mr. Rogers has also moved his florist business from Temple Place to Washington street near the Boston Theater. The greenhouses in the rear of the Art Museum recently occupied by John Gormley, are to be torn down.

The annual excursion of the Gardeners' and Florists' Club took place July 24, and was one of the most enjoyable occasions which the florists have ever attended. Possibly on account of the unfortunate ending of last year's trip, and possibly on account of the coming visit to New York, the number attending the excursion was comparatively small—104 in all—but this did not dampen the spirits of those who went. An enjoyable sail down the harbor brought the excursionists to Long Island, where Mr. John Galvin was taken on board amid much cheering and enthusiasm. Mr. Galvin proceeded to show his appreciation of this flattering reception by performing a jig on the spot, and the band played "Auld Lang Syne." The trip was continued to the outer bay and Minot's Ledge light house and returning to Long Island where a dinner was served on board the boat, after which the city institutions on the island were visited and the younger members engaged in a game of base ball. David Allan and some of his friends undertook to fish for sculpins from the lower deck, but a few well directed volleys of water melon and biscuits soon convinced them of the folly of the undertaking and for a few minutes anarchy reigned. In the meantime the band played, the dancers executed their best steps, and the singers joined in the chorus. Everything went lovely till on the return trip when a stop was made to leave Mr. Galvin at Long Island, and it was found that the boat was stuck fast in the mud. Visions of a tedious wait for high tide were conjured up with much mourning, but in a short time the quarantine boat was seen approaching and soon with a strong pull and a long pull the boys were afloat again. A purse was made up for the good natured captain, who complimented the florists highly and hoped to give them another sail next year. W. J. S.

BURLINGTON, VT.—A floral design received by a graduate of the medical college July 16, from an I. O. O. F. lodge of which he was a member, was the most beautiful ever seen in this city. It was three and one half by four and one half feet, the ground work being a solid bed of white lilies. The three links were worked in different colored flowers and

the letters F. L. T. at the top in blue blossoms. It was placed on an easel at the left of the stage and was greatly admired. Mr. Geo. Cook, of St. Albans, designed and arranged it.

ETHEL BROWNLOW, the new tea-scented rose sent out last year by Messrs. Dickson, is flowering well out of doors, and owing to its erect sturdy habit, is withstanding the rough weather which is disfiguring and dirtying most of the varieties whose flowers are pendulous. The flowers are large, well formed, with petals of great substance and of a pleasing shade of rose with yellowish base.

MRS. GEORGE PAUL.—A bloom of a new seedling Bourbon under this name was staged in their seventy two at the Crystal Palace by Messrs. Paul & Son on the 7th inst. As shown, the flower was large, well finished and of a very pleasing flesh tint, quite distinct. If only the novelty is worthy of its name, it will prove an invaluable acquisition.

MRS. JOHN LAING.—I notice quite a number of this rose planted in many places. I think it will prove a very profitable rose for both grower and retailer. It is a good healthy grower, free bloomer and of a color that pleases everybody. Lansdowne, Pa. W. W. COLES.

ROSES FOR SALE.

Must have room. Nice Plants, in 4-inch pots, at \$5.00 per hundred. BRIDES, MERMETS, LA FRANCE, Etc. Also 200 CALLAS and BOUVARDIAS, Cheap.

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Also fine large plants of Vinca Harrisonii from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of SINGLE PRIMROSES, at \$8.00 per hundred.

— STEVIA SERRATA. —

Fine, large plants in 4-inch pots, at \$10.00 per 100.

— VIOLETS, —

MARY LOUISE, at \$8.00 per 100

GOOD STRONG SMILAN, 3-in. pots, \$5.00 per 100

I also have a large stock of Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus, at \$30.00 per 1000. Strictly our selection; clean, strong plants in 2 and 2½-inch pots.

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ALSO FOR THE FULL LINE OF DUTCH BULBS.

JAMES KING,

170 Lake St. CHICAGO.

A French Flower Girl.

One of the prettiest girls I saw in France was selling flowers on the grand balcony. Her beauty won her many buyers as well as admirers. Her hair was as dark as a raven's wing, her eyes flashed and softened by turns, her features were as clean as from a sculptor's chisel, her cheeks red roses. However she might be addressed, she answered with a smile, a melodious laugh of pleasure following if she were pleased, a frown clouding her face but adding to her beauty if she would reprove. But she did not lose the evenness of her temper. "I do so want to sell all ze genteelmen flowers," she would say in broken English, with a delicious French accent that stole right through the hearts and into the pocketbooks of some American gentlemen I knew, and to whom she of en turned during the evening, "but I want them to buy for their own goot, not mine. I love ze flowers. They are sweet flowers, lovely flowers;" and her face raud red with blushes like her roses. I gave up thinking of her when I heard next morning that she had a husband whom she regularly whipped twice a day.—*D. A. Orr in Chambersburg Valley Spirit.*

A Gardener Causes a Strike.

Strikes, or "walk-outs," as they are called, are becoming a feature of domestic life. The story goes that Mr. George Westinghouse sent for his gardener one day to do something. The reply came back that the gardener was busy and could not come. Subsequently it was discovered that the confining work upon which he was engaged was a game of poker in the stable. Thereupon the man of culture was summarily discharged. This action brought on a strike in the kitchen, and every servant threatened to quit work unless the gardener was reinstated. This crisis, so unexpected, brought on a compromise, and a truce was proclaimed. But it is plain to see that there is a vast deal of trouble in store.—*Pittsburg Daily.*

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PHILADELPHIA,



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I have surplus stock of the following plants for sale:
Stevia Nana Compacta, 5-in. \$3.00 per doz.; 3-in. \$2.00 per doz.; 4-in. \$1.00 per doz.
Chrysanthemums in var. 6-in. \$3.00 5-in. \$2.00 per doz.
Bonardia in four varieties, 7-in. and \$1.20 per doz.
The Bride and C. Mermet, 7-in. \$2.00 per doz.
Am. Beauty and W. F. Bennett, 3-in. \$3.00, \$10.00 and \$12.00 per 100.
All other leading varieties in 4-inch pots.
L. A. CASPER, Council Bluffs, Iowa.

CARNATION PLANTS
Strong Clumps from Open Ground.
EDWARD-SH, SCARLET KING, PHILA RED DE GRAW, FASCINATION, KING OF CHIMSONS, \$6.00 per 100; \$4.00 per 100.
PORTIA, JUCKE GI ORANGE, CHESTER PRIDE, HUNZE'S WHITE, GRACE WIL DER, Etc., \$8.00 per hundred.
A few extra strong SMILAX, 3-in. pots, \$4.00 per 100.
W. R. SHELMIER, Avondale, Chesler Co., Pa.

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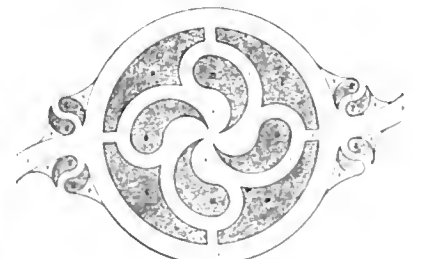
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Carpet and Ornamental Flower Beds.
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This, our SECOND EDITION, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent pre-paid to any address on receipt of Price, \$3.
GEO. A. SOLLY & SON,
SPRINGFIELD, MASS.

Burnt Earth.

I can recommend this for general use. The first illustration of its value which came in my way was when engaged in carrying out a new garden a short time ago. I was greatly surprised upon entering the glass-houses to see the luxuriance and beauty of the young stock of plants, especially of gloxinias, ferns, palms, foliage plants, and cucumbers, and on inquiry I was told that, owing to dearth of silver-sand and leaf-mold, burnt earth had been added liberally to the soils. The most delicate-rooted plants luxuriated in what was little else than crude top-spit loam with a liberal admixture of the burnt earth. It may be well to add that only the very finest siftings had been used. It would seem, therefore, that owners of old town gardens, in which the soil has lost its ordinary mechanical properties, may benefit themselves by partially burning and remixing the soil.

WILLIAM EARLEY.

[The value of this material in promoting root development was shown experimentally by the editor some years ago.—ED.]—*Gardeners' Chronicle*.

The New Zealand Mountain Lily.

(Ranunculus Lyallii.)

A year or two ago Harry Waterer, of Philadelphia, imported and sold a lot of these in this country. At that time it was causing quite a stir in Europe on account of its massive proportions and uncommonly handsome large white anemone like flowers. But few people succeeded in growing it to perfection and mostly because, they now admit, they coddled it too much. And it was a scarce plant because it is a difficult subject to import alive, and the seeds take from one to three years to germinate; in the case of home grown seed that had been sown as soon as ripe, however, we are informed by English growers that it has germinated in four to six weeks. The *London Garden* of December 31, 1887, contains a well executed colored plate of this handsome species.

Nicholson calls it the "N. Z. Water Lily," Robinson the "N. Z. Shepherd's Water Lily," and Miller mentions these two names and also that of "Rockwood Lily." Now in an excellent article on the New Zealand buttercups in the *Otago (N. Z.) Witness* of June 15, and just to hand, it is called the "Mountain Lily," and judging from the accompanying description this surely is the most appropriate name.

"Foremost among the species (ranunculus) in size is the well known "Mountain Lily" (R. Lyallii), the largest known member of the family. It occurs plentifully in the mountains of Canterbury and Otago at altitudes varying from 2,000 to 4,500 feet, according to the climate. It is most often found covering old moraines, growing in peat between rocks in situations where the water from melting snow trickles down nearly all the summer. Often it covers many acres of ground showing a fine sheet of white blossoms at the flowering time. In cultivation it is easily grown in any shady situation where a peaty soil can be obtained and abundance of water during early summer. It is not in any sense a bog plant, as so many have supposed, and is easily injured by too much water when not in leaf. The splendid pure white flowers and large saucer-like leaves render this a very attractive plant."

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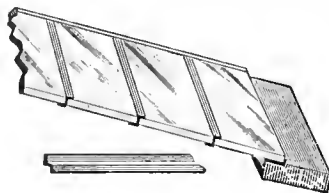
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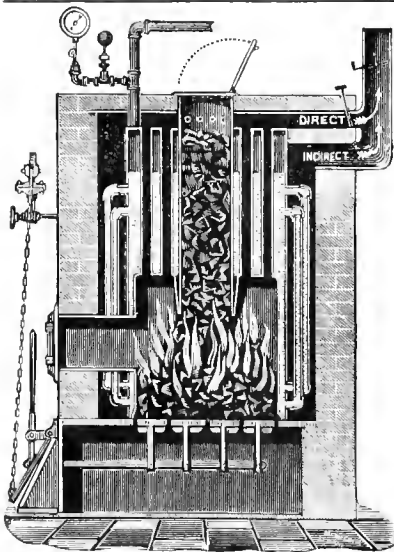
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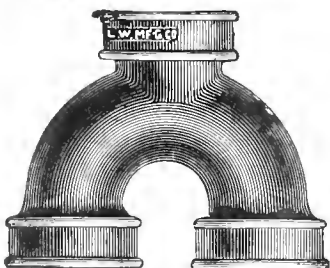
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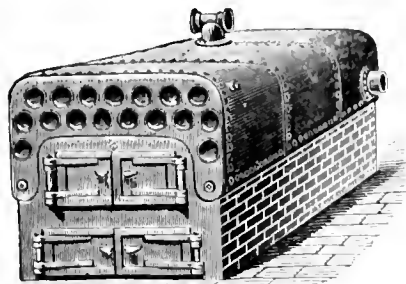
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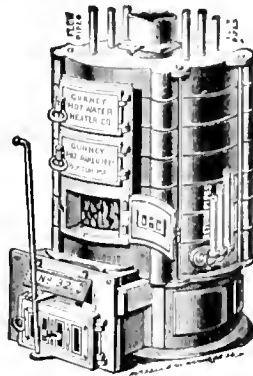
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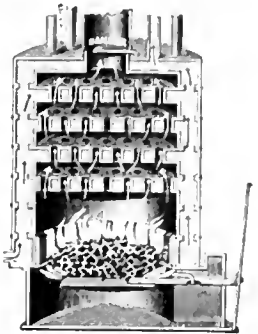
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Dear Sirs: In answer to yours, asking my opinion of the Gurney Hot Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.
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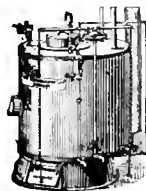
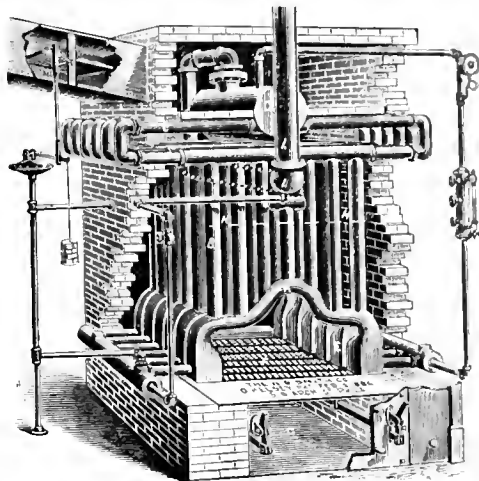
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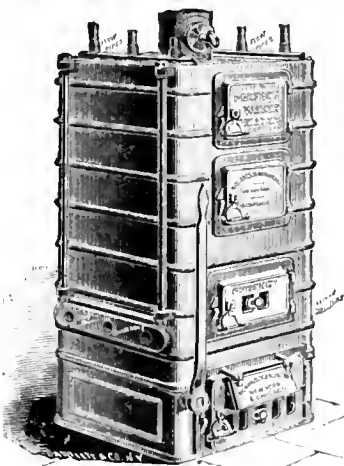


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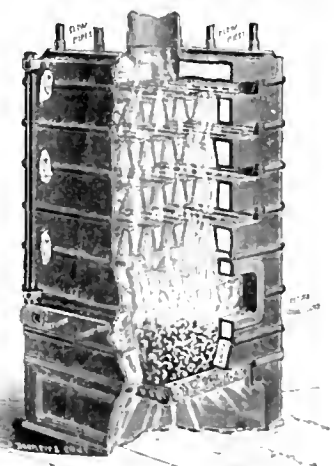
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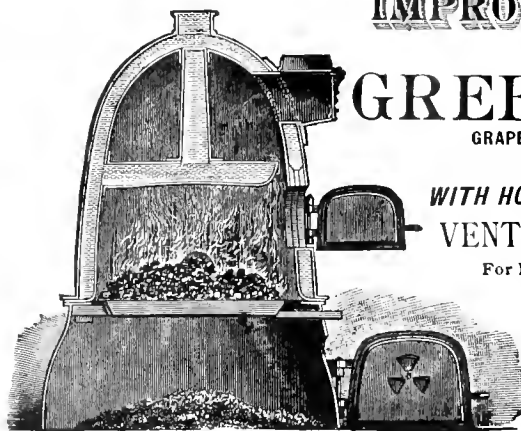
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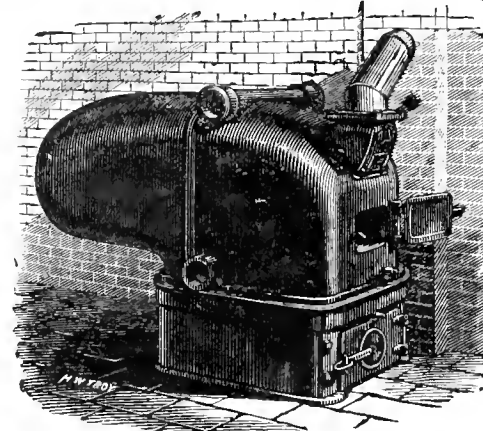
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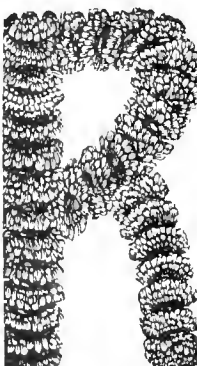
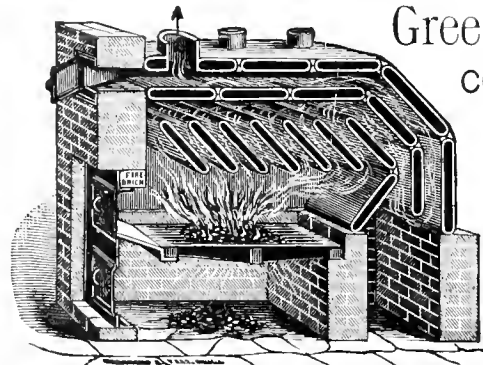
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NURSERYMEN'S DEPARTMENT.

Vol. IV.

CHICAGO AND NEW YORK, SEPTEMBER 1, 1888.

Supplement to No. 74.

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THE AMERICAN ASSOCIATION OF NURSERYMEN.

GEORGE A. SWEET, Danville, N. Y., president;
G. J. CARPENTER, Fairbury, Neb., first vice-president;
CHARLES A. GREEN, Rochester, N. Y., secretary;
A. R. WHITNEY, Franklin Grove, Ill., treasurer.
The next annual meeting at Chicago the first week in June, 1889.

THE PRINTED REPORT of the proceedings of the thirteenth annual meeting of the American Association of Nurserymen, held at Detroit June last, is received. It is a neat volume of 91 pages, well printed on excellent paper and contains the many valuable essays read at the recent convention with the discussions on the same and other business. It is ornamented with the portraits of a number of prominent horticulturists. The report can be secured by remitting the membership fee of \$2 to Secretary Chas. A. Green, Rochester, N. Y.

BULLETIN NO. 3 from the Experiment Station of the College of Agriculture, St. Anthony's Park, Minn., is received. It contains reports on "Our Russian apples at the opening of their fourth season; nursery stock; natural and artificial fertilization of plants and report on the Rocky Mountain locusts in Otter Tail county, Minn." The report on Russian apples and condition of trees, shrubs and vines in the nursery after the winter of 1887-1888, should be of considerable interest to nurserymen. Edward D. Porter is the director in charge.

The Purple Beech as an Avenue and Shade Tree.

The merits of this tree are gradually becoming more fully appreciated as one of the most effective ornamental trees for lawns, parks and avenues. The high prices at which they sold for many years deterred planters from using them freely, but within the last few years prices have been reduced so that they are now within the reach of all. The cost of production has been very considerably decreased through propagation by inarching instead of by indoor grafting and by this method it is possible to grow good standard trees 10 to 12 feet high in a very few years, suitable for avenue planting and large

enough to intermingle with other deciduous trees on the lawn. A well grown avenue of Purple Beech would certainly be a magnificent novelty, and as single specimens it is one of the most symmetrical trees that we have.

They are slow in recovering from the check of transplanting and therefore require careful handling, but after getting well established they grow as rapidly as Norway or sugar maples. A specimen tree on our grounds about forty years old is two feet in diameter of trunk, fifty feet high and forty feet in spread of branches, and is fully as large as a Norway maple near by of about the same age. The richness of coloring in the foliage of the Purple Beech depends largely upon the thriftiness of the tree and the surrounding circumstances. For the finest development they require full sunlight and to be in vigorous growing condition. Therefore conditions which contribute to the health and vigor of the tree help to develop the rich dark color. Bone dust or other animal fertilizer, rotten manure, water and sunshine are the best tonics for Purple Beech. SAMUEL C. MOON.

Morrisville, Pa.

Kelsey's Japan Plum in California.

In my wanderings up and down, through and across this, the Golden State, as an old gray head student of Horticulture, I lately was so fortunate as to stumble into the Kelsey orchard where this most remarkable and most valuable fruit—where it well withstands the winter's cold—was first fruited on this continent.

This orchard is located on the great plateau, on which are situated the cities of Oakland and Berkeley, on the east coast of the Bay of San Francisco, about one and a half miles southeast of the buildings of the University of California, two miles from the bay, back to and partly on the foot hills 300 feet above the bay. There I found 200 to 300 of Kelsey's Japan plum trees six to eight years in orchard, loaded with fruit, ripening and being gathered for market. I spent hours carefully studying the fruit and trees. It so happens that they are a perfect object lesson of the variety—low heads, high heads, pruned and unpruned, on stocks (roots) of nearly every species of the almond family, all doing nicely. I could not see but what it was thriving on one root as well as the other. It seemed best both in tree and fruit on the lighter, drier soil. It seems to withstand light, rather poor, dry soil better than any other stone fruit. The tree is a slender twiggy straggling grower, in looks half way between the peach and Chickasaw plum.

The fruit is about the size of good eastern Crawford peaches, broad at the nose

and narrowing to the eye, or round of pear shape, the point always curving to one side. Skin without acerlity, thin, uneven, covered with a thin bluish white bloom, color green, nearly entirely covered with a dull mauve purple when fully ripe. Flesh meaty, somewhat coarse, greenish yellow, very juicy, sweet, sub-acid, rather thin flavor, with an acceptable flavor peculiar to itself. It is considered a very good fruit by people generally to eat from hand, personally I should prefer a good peach, but would accept the Kelsey I think before any other plum. Stewed or canned it is said to be excellent.

It has proven one of the very best shipping fruits for the eastern market of this state. Prof. Higgard says: "It is the only plum I am acquainted with that may be gathered before quite fully grown that will ripen up to perfection in the house. It is the best shipping store fruit we have, and I think it has a great and most profitable future in this state. So far as I can learn it does finely everywhere in the state where the soil is not too heavy and moist."

It is selling to-day at three times the price of the best plums at wholesale, but this is I think owing to its being somewhat of a novelty as yet. But this plum is "not for Jacob," or those who live where it is too cold for budded peaches to be a success. It possibly might do top worked on hardy Chickasaw plum a little farther north.

The Kelsey plum was imported from Japan, the native name was lost, I understand Mr. Kelsey procured the whole stock, propagated and disseminated it. So soon as he had it in fruit it created widespread attention, since it has been recognized as Botai kio of the Japanese. There are about five other Japanese plums varying widely in character that it is hoped will prove of value. But I can learn where none of them are in fruit.

This Kelsey orchard of fourteen acres all in bearing is as it stands to-day a splendid object lesson in which to study California horticulture. Being a nurseryman, Mr. Kelsey gathered here a large collection of fruits of all species that would grow here except peaches. The collection of cherries is very large, also plums. Here one can learn how he should prune and how he should not prune for the best results, and many other lessons. The orchard of fourteen acres was sold a year ago to be cut up into 114 tracts for \$30,000. It was finely well cultivated last spring, but the trees were not pruned, as they call cutting back the exuberant growth here made in eight months of fine growing weather in very rich soil. From not having been properly cut back nearly every branch in the orchard had to be propped up to prevent them breaking down with their load of fruit.

Young orchards here on the rich valley soils, having eight months of splendid growing weather, will make shoots six to eight feet, yes, often ten to twelve feet in length in a season. The climate exactly suits a great development of fruit buds and fruiting, then if these shoots are not cut back in winter leaving only sixteen to thirty inches, they set fruit their entire length, like a string of onions, and as the fruit develops, down go the branches. They put props under them and they break across the props. Oh, they have lots of fun, but don't have much fruit or tree left. Therefore a thorough cutting back of these branches each and every year so long as such growths make it necessary, is the first great lesson for the tenderfoot fruit grower to learn in California.

On this Kelsey place there are five acres in cherries of many varieties giving this season fifteen tons of fruit, which sold at six cents, or \$300 an acre. If they had three-fourths of them been "Royal Ann," as the Yellow Spanish is known here, the rest Black Tartarian in full bearing the crop would have paid from \$600 to \$800. Apricots, nectarines and peaches yield from \$150 to \$600 an acre. Bartlet and Winter Nelis bring \$100 to \$600. These are simply good average commercial results. An orchardist should, as things look now, and in the far away future, with an orchard of ten to twenty acres surely count on a gross return yearly of \$300 an acre, or \$250 net of any or all the leading commercial fruits. Yet these figures are often doubled. As I said, this Kelsey orchard runs a little way up the foot hills, there the trees and fruits as I saw them were markedly better, and so they would be on up for 1,200 to 1,500 feet, where not too steep to plow and the soil was rich, which it is as a rule on the hills and mountains of this state, I saw just as rich and deep soil yesterday on the mountains back of Berkley 1,200 feet up as one need ask for.

It is just beginning to dawn on the minds of a few in this state that this rich, high mountain soil in the finest and healthiest climate in the world, where mountain springs, brooks, trout, game, squirrels and flowers abound, is the best for fruits. There are millions of acres of it everywhere that can be had very cheap. Uncle Sam has millions of acres that he will make you a present of. I say let these old fossil valley men have their valleys, give me the hills, the rounded glorious immortal hills. Those who may want further general information of the Golden State by the courtesy of the State Board of Trade I am enabled to mail free, a bulletin of 75 pages describing the state by counties with a good new map. Stamps not refused. No chromos.

D. B. WIER, 415 Montgomery St.
San Francisco, Cal.

Damage to Street Trees From Gas.

I would like to know the extent of the liability of city gas companies in cases of the death of street trees caused by the escape of gas from leaky pipes. It is a subject of importance to nurserymen and property owners. Can some one who has had experience in such cases tell what the law is in Philadelphia and in other cities? Also what is the proper course of procedure to establish a claim against such loss, if any.
S. C. MOON,
Morrisville, Pa.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. If you want employment; if you want help; if you want to sell your business; if you want a partner, or if you want to buy a nursery, advertise under this head and you will get it. The cost is slight, try it.

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See **SAMUEL C. MOON'S**
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In one of above spaces for our next issue. Copy should reach us by Sept. 10 at latest.

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the best to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, SEPTEMBER 15, 1888.

With Supplement. No. 75.

THE AMERICAN FLORIST

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HERE ARE a few words we wish to say to our friends who have been paying good money for our advertising space; and though the topic is an old one we urgently ask a reading of the few points below. We are printing EVERY issue 5,000 copies and do furnish affidavit to that effect. We are sending four-fifths of these to paid subscribers, most of whom have been with us two or three years and who are interested in and read every line of the paper. These readers are florists and buyers and if you sell to such people and have what they buy, we claim to be the best medium in America to reach them, and we can prove it, and have proved it, to every advertiser. Our regular circulation with extra editions of 1,000 or more copies at least ten times per year, and our circulation among seedsmen and nurserymen (who READ it) give it a power and influence few papers can claim. This circulation question is one on which the seedsmen's committee investigated among the horticultural press and gained but little satisfaction. When you are asked for the kind of an advertisement which belongs to the columns of the FLORIST ask when you compare terms with ours what number of READING, BUYING SUBSCRIBERS who need your goods, they can swear to. We know you will find double value in our columns.

The New York Meeting.

Another convention is over and the question will probably be asked by many, what good has been accomplished? Here has been considerable individual expenditure, and with what adequate return?

Various motives inspire the numbers that attend. Some are there purely from love of pleasure; there is the chance of meeting many comrades of convivial habits, "a good time" generally will be the result. These, of course, look upon the business of the convention as purely a secondary affair, in comparison with the pleasures that may be offered for their participation. Others, again, have quite as selfish an object, but still one that may probably tend to the benefit of the society. In common parlance, "have an ax to grind." This is all right and commendable enough when it is kept,

for the time at least, subordinate to the welfare of the society. But when any man seeks to use the gatherings of florists from the country at large, only that he personally may be benefited, he will be of little use in advancing the interests of general horticulture. However, it is to be hoped that the majority attend with the desire of imparting and receiving information; of giving an impetus to professional pursuits and elevating horticulture above its present standard. No better illustration of this can be had than by citing the example of the ex-presidents and the last vice-president of the society. Better men could not be found to occupy these positions; for, combined with ability there is a bona fide love of horticulture as a profession, (not looking upon it merely as a business for the accumulation of money;) also a zealous desire to do all in their power to further the best interests of the international society; and they endeavor, by practical work, to establish all efforts upon a firm and progressive basis. I, for one, take this means of personally recording my gratitude to these gentlemen for the advantages derived, and for the inspiration given, by witnessing their unselfish labors.

Each person must answer the question of recompense individually. The good accomplished depends, in a great measure, upon our own outlook. Go to these meetings with the single thought, "well I am not such a fool as to give persons information that I have gathered by hard labor, let them do as I have done, find it out for themselves," and the answer will surely be, "the whole thing is a farce." But let mutual help be the object, and how much broader is the vision with which we view the work of the society. It is by looking at results in the aggregate and not by criticising details that the question of benefit can be satisfactorily answered.

The good of the whole is the good of the individual. Elevate the body and the members must gain proportionately. With this thought in our minds surely we all can say that great good has been accomplished. The discussion of the many essays stimulates thought, and thought means action. Before the light of knowledge darkness must flee away. Already there is visible greater professional pride. The public denunciation of trickery will ultimately wash away this blot from our reputation. Free and full exposition of the merits of the innumerable varieties of florists' flowers constantly placed upon the market is a means toward a just discrimination. The organization of committees for the examination and selection of the most useful insecticides, pots, fertilizers and other specific essentials for the right practising of the florists' art, is of incalculable benefit to us all.

This limited enumeration but betokens the drift of the society. Its purpose is not to place money *directly* in our purses. In common with all similar societies its aim is improvement—the improvement not alone of the individual but of the class. The society is supplying a long-felt want, and as long as horticulture is practiced, so long will this service be needed. May it continue to meet with the assistance of all the progressive men of the profession—then assuredly will it flourish and become an aid to all inquiring workers.

For future meetings, local committees should take more into consideration the acoustic properties of the hall in which the convention is held. When these are in fault the meetings become tedious to the many. A few around the platform can hear, enjoy and take part, but the majority fails to follow the essayist and therefore soon becomes tired.

Why should all the essays be given to men? Many ladies are excellent horticulturists, and in all matters of taste are competent to be our teachers. We have several ladies who attend the meetings and if one or two of their number should speak to us upon any subject, much additional interest will be given.

Instead of a free excursion, which entails great expense and sometimes is apt to give but little satisfaction, why cannot Friday and Saturday be established as days for the delegates to visit the leading florists of the city and vicinity? There would be much to instruct as well as interest. Many now attend the conventions, and on account of limited time, leave without seeing anything of the standard to which the trade has attained in the city they visit. Those florists desirous of having visitors could furnish the means of transportation, either in some separate way, individually, or collectively, and thus give pleasure as well as profit to both their visitors and themselves. Some will say that such a plan would give rise to jealousy. If properly managed nothing need be done to excite this feeling in any one.

ALFRED E. WHITTLE.

Convention Comments.

Certainly there is a lot of floating wisdom about a florists convention which is not embalmed in the annual report, in the form of casual talk between members. This free exchange of ideas is as valuable in its way as the regular programme. Just notice how much was said—and thought—at the New York convention, about the necessity for thorough education, both practical and theoretical. Mr. Hill, in his admirable address, speaks of the inexplicable failures which sometimes afflict the grower, and for which there seems no remedy. There is no doubt that increase of knowledge will

bring failure to a minimum, though we all know there is no such thing as a dead certainty in the flower trade. One of the greatest advantages of what is termed scientific education is the close and accurate observation it teaches. But I fear a person trained in an experimental garden would hardly keep up with the procession as a florist, until he had gained much actual experience in a commercial place.

Some very good things were said about the apprentice system in educating growers. Very few men want nowadays to take inexperienced boys into their houses—they think, as one speaker said, that one boy is a boy, two boys half a boy, and three boys no boy at all. If they are paid decent wages, their employer cannot afford to teach them the business thoroughly into the bargain, and he always has the fear that as soon as they begin to know enough to be of much use, they will go off and leave him in the lurch. Most of our cleverest growers of the older generation began work as apprentices in some of the famous old world nurseries, on a salary of six or eight shillings a week. Their living was not actually luxurious, but they acquired an all round knowledge of plants and how to grow them, such as it is difficult to get now, because growers are apt to run to one specialty. It seems as if the best education for a florist or grower could be acquired in a big commercial place, with sufficient leisure to study scientific authorities and—be it said—attend horticultural conventions. A good many seem afraid lest this talk about science should lessen the belief in practical work, but you will notice that the men who strenuously urge the former add to it the industrious practice of the latter.

Everyone declares that this convention could not be improved upon in harmony and sociability. The fact that the social part of the occasion was so arranged that it did not interfere with the business added much to the general satisfaction. Mr. Jansen's luncheon was a delightful event; his many guests feel that they cannot sufficiently express their thanks for the courtesies extended by the host and his charming wife, who received them with such frank cordiality. The unique arrangements in basket work used on the table were very much admired, and everyone present felt that Messrs. Craig, May and Jordan expressed the general sentiment in their impromptu speeches.

The trip to Staten Island, where about one hundred delegates interviewed "Nero," was much enjoyed in spite of the chilly night.

The exhibition, though not over remarkable, may really be considered unusually good for the season—August is the most trying month of the twelve for a flower show. The floral designs were really the most disappointing part, but it seems almost impossible to obtain a large display in this department. There is no doubt that the awards were made with great fairness and discretion; but while much of the work was good, little of it was remarkable for originality. Some of the exhibitors would have been much benefitted by a careful study of Mr. Battles' essay. Mr. John Hughes' caladiums took a good share of attention; they were superb show plants.

Several of the outsiders seemed to labor under the impression conveyed by a daily paper, that Mr. Asmus had refrigerated the blooming plants of lily since last December. Someone expressed a doubt whether we should commence the blooming of these flowers at such an unnatural

season. Why not? Wherein does it differ from the right to produce Jacqu roses at Christmas? At any rate, if buyers insist on lily of the valley in August, progressive growers like Mr. Asmus will endeavor to supply them. It always saddens a person with any artistic feeling to see aniline immortelles, tin wreaths and such truck at an horticultural exhibition, but there is a certain demand for such things, and, as one dealer said, "If we don't supply them someone else will." These tin designs are not nearly so hideous as they used to be, but they can't be called beautiful, and they certainly hurt the flower trade. One large dealer says he always discourages florists from buying such things, telling them that they certainly spoil the trade for cut flowers, but until the public is educated above using them they must be sold. Some imported designs in French artificial flowers exhibited by W. C. Krick were certainly beautiful, though suggestive of Palais Royal millinery. They were not expected to come in competition with natural flowers, being intended as souvenirs of special occasions. Certainly the dealers in florists' supplies excelled themselves in their exhibits; they were without exception both extensive and well arranged. Mr. Vaughan's holly had a very pretty effect; it was a little surprising to see it in August.

Philadelphia made a fine showing in the presentation of the official programme, and the delegates from that placid city display an amount of brotherly love in their treatment of one another which commends them very warmly to their friends.

The society is to be much congratulated on its selection of officers. There is no doubt we shall see an equally interesting meeting next year, probably with even larger attendance.

EMILY LOUISE TAPLIN.

Scientific Education for Florists.

In a report of the recent convention of the Society of American Florists, published in the New York *Sun* of August 22, appears the following, which I quote:

"Nearly all the speakers pitched into the agricultural chemists during the discussion that followed the paper on the benefits of a scientific education for a florist." "If ever there was a set of humbugs," said Mr. Allen, "it is the agricultural chemists. These men pretend to analyze a soil and tell you what you must put in it to grow each kind of plant."

It is not unlikely that Mr. Allen was incorrectly reported, certainly I hope so. I think I am reasonably familiar with the views entertained by agricultural chemists, and I am sure that the above statement entirely misrepresents the views of any of them. I know of no one of this class who will pretend, by analysis of a soil, to tell what must be put into it in order to grow any kind of plant. We, however, can confidently predict that, without the addition of certain constituents to certain soils certain plants cannot be successfully grown, but this is quite another thing, as your readers, I think, will admit. It is unfortunate, however, that a body so intelligent as the Society of American Florists, who have already accomplished so much by methods which, whether they acknowledge it or even know it, are, in the highest degree, strictly scientific, should permit those who are disposed to pitch into a scientific education for the florists to apparently have a monopoly of the discussion, as

would appear from the *Sun*. This is the more regrettable, especially since the president of the society, in his admirable address, takes such an enlightened view as to the necessity for science as a guide to the solution of the problems besetting the practical florist.

PERIN COLLIER.

Geneva, N. Y., Aug. 29, 1888.

[While Mr. Allen did use the language quoted, he afterward qualified it when Mr. Taylor reminded him that the chemists did not pretend to be able to tell what to add to a soil to grow certain plants—and acknowledged that he had erred in that statement. The *Sun's* statement that "nearly all the speakers pitched into the agricultural chemists," is incorrect. To the best of our recollection Messrs. Allen and Taylor were the only ones who referred to them in any way.

The great benefits of a scientific education in connection with a thorough knowledge of all practical details of our business were admitted by nearly all present. No man in his right mind will deny that education is a benefit; the question is upon the best manner of securing it and what branches of science it will best repay the florist to acquire a knowledge of. As the writer stated during the discussion, "If you want to be \$25 or \$30 a month employes all your lives, make no effort to acquire a thorough education; but if you want to rise, if you want to get near the top and be somebody, spare no effort."—E.D.]

John N. May.

John N. May, the fourth president of the Society of American Florists, was born in Middlesex, England, where his father was a gardener. He is a descendant of an old Yorkshire family, who for several generations have been nurserymen and florists in that county.

At the early age of 9 years the subject of this sketch displayed his love for the queen of flowers in a rather peculiar way. His father one day brought into the house a fine bloom of Souvenir de la Malmaison—then a new rose—to show his mother. After listening to their praises of its lovely color and fragrance he resolved to have one of his own, and after watching carefully the *modus operandi* of budding, as practised by one of his father's assistants, he "borrowed" two eyes of the rose named (the time for returning them was, we understand, never mentioned), and finding a stock of the dog-rose in a hedge near by, he managed to set and bandage both eyes, and strange to relate one of them grew and bloomed the following summer.

From that day to this, the rose has been his favorite flower, and we doubt if any have surpassed him in its cultivation, particularly in the forcing of bloom under glass.

At the age of 14 years he was apprenticed to the late J. B. Whiting, of the Deepdene Dorking, Surrey, who was at that time well known as one of the best practical gardeners in England. After serving his time there, he served in several large places, principally in the north of England, in various capacities—as journeyman, foreman and head-gardener, till in 1869 he landed in America. After working in various places in Canada and Vermont he finally located in Madison, N. J., where he shortly took charge of the rose growing establishment of the late E. V. Haughwont, and where he remained till April, 1880, when



W. A. MANDA.

he started in business for himself at Summit, N. J.

Mr. May is a very busy man, attending personally to the details of his large rose growing establishment at Summit, and has often remarked to his friends that he has never been idle or out of employment a single day since he was 17 years of age. The unceasing care and attention to his business is undoubtedly what has brought him success.

Mr. May has been an enthusiastic worker for the Society of American Florists ever since its birth. He has spared neither time nor money to advance its interests, and we are pleased to record that he was elected to the most responsible and honorable office in the gift of the society by a large plurality on the first ballot, which was afterwards made a unanimous vote.

H. B. GRIFFING, the well known implement dealer of New York, died suddenly August 18.

A Farewell Dinner at Boston.

It does not often happen that a young man makes by his own ability and high personal qualities in so short a time such a host of warm friends as has Mr. W. A. Manda during the few years in which he has been connected with the Harvard Botanic Garden. It is particularly noticeable here because of the conservatism which is so strongly marked in these older communities. That a young man of but twenty-five could come here and creditably fill such a position and at once win the respect and good will of all our most prominent horticulturists, most of them being much older and all of different nationalities from his own, is a record of which Mr. Manda may well feel proud.

Never in so short a time has any man done more for the Botanic Garden, and what he has done has been accomplished with but slight encouragement and wavering support from those in control, and too often, indeed, in spite of actual opposition. It was evident some time ago

that the man was greater than the place he was expected to fill, and through short sighted policy he has been allowed to go. It will be conceded by his predecessors, whoever they may be, to say that Harvard College may have to wait a long time before a man can be found with equal ability to carry forward the work and to do as well his share toward making the Botanic Garden a place worthy of the name. It was a thorough appreciation of the worth of the man, and of the loss which Boston and its floral interests sustain by his leaving here, that prompted a large number of the gardener and florist friends of Mr. Manda to tender him a farewell dinner Aug. 11.

The occasion was a success in every way, and it must have been most gratifying to Mr. Manda to receive such a spontaneous and hearty testimonial of friendship and esteem. All branches of the business were represented, and every one present had a word to say of regret at the loss of one of their number and of sincere good wishes for his future prosperity. Gardeners almost always manage to look at the bright side of everything, and although all felt keenly the separation about to take place, yet they succeeded in making the occasion a most enjoyable one, which will be long remembered by all who were fortunate enough to be present.

The undertaking in which Mr. Manda is interested, and which will, in due time, be brought to the attention of the profession throughout this country is one which, with his ambition, experience and energy, and the assurance of abundant capital, promises well, and no doubt every effort will be made to make it worthy to rank with some of the famous establishments of the old world. There is a splendid field in this country, the work will be in good hands, and it is to be hoped will meet with a generous and hearty support from the American trade.

WM. J. STEWART.

Les Halles Centrales of Paris.

The market halls of Europe's second largest city, afford a subject of interesting study to the visitor of the great French capital, especially when watched from the hour of opening in the morning at 2, until 8 a. m., when the wholesale business for the day is done and the retailing to the public begins.

Even Paris is asleep for a few hours of the night in some of its quarters and the traveler when winding his way from the hotel to the Halles Centrales at this early hour, is often for blocks the only living being seen, and feels isolated in the dark streets where every other lantern only sends a ray of light to show him the way, and policemen belong to the realm of imagination, until the rue de Turbigo is reached, where voices and the noise of passing vehicles assure him that the town is not owned by him alone. A walk the entire length of this street for about ten minutes reveals to him on his left an open space illuminated with electric lights and a building of imposing size, surrounded by farmers' wagons and mounds of garden truck, assuring him that he has reached the looked-for spot where Paris is supplied with food.

Waiting to take in the imposing sight of bustling humanity behind ramparts of carrots, built three and a half and four feet high, as many feet wide, and the head of one or two French farmers' daughters peeping from behind a pile, ready to sell to whoever may come.

with similar fortification works compiled of either cabbages, artichokes, radishes, lettuce or beans and other vegetables of the season, but all presided over by females; thus lining the sidewalks leading to the Halles as well as the sidewalks around the entire buildings. The visitor takes his time, and needs time, for this is a sight to be beheld only in Paris, and no where else but in Paris.

What ruddy faces, what healthy forms in simple dress contrasting to the languid, pale looks of the humanity which fill the streets later in the day, after 1 p. m. It seems that women are the salesmen in France, for the business must be done with madame or mademoiselle whilst the husband or father, in his blue blouse, of well-fed stature, attends to the loading or unloading of his vehicle and then starts a chat with a neighbor over his pipe and leaves the sale entirely to his ladies, who apparently know more about selling them than he does. How attractively is everything offered by them; with the peculiar taste belonging to the Frenchmen, every one strives to outdo his or her neighbor in the presentation of the goods they offer, and even an American could, for a moment, be tempted to invest in garlic, if only to buy because the nasty but healthy article is offered in such a pleasant manner and inviting style, which the French call "chic."

However, the moments fly, and if, before the halls are filled, ideas of their size are to be formed, it is time to examine closer and start measuring. The principal street dividing the Halles into two wings, is the rue des Halles. It would be called in the states an avenue, for its two sidewalks measure each thirteen paces, the width of the street twenty-three paces (as taken in ordinary gait). To the right and left of this avenue are on each side five city blocks with the streets separating each block, showing sidewalks eight paces and the width of the street twenty paces; but all these streets and blocks are covered with a spanned glass roof and iron frame work, forming in all ten pavilions used for the accommodation of the sundry articles. Meats, fowls and fish occupy one wing of five pavilions. Butter, eggs, cheese and fruit fill the other wing. The wide sidewalks are used by the garden truckers, and the entrances to the Halles have been captured by the flower trade, who, for a block in either direction of the many entrances, usurp the covered sidewalk traffic. And what amount of flowers does Paris use!

Here in the dim dawn of morning—for it has become 4 o'clock and the lights are extinguished—are seen endless rows of wicker baskets about four feet long and three feet wide by one and a half feet high, and women and men busy undoing them and revealing their contents, which prove to be roses done up in bundles of twenty-four of a kind, cut fully ten to eighteen inches long according to variety, and bundled into square—not round—shape, thus using every cubic measure contents of their basket without waste, for it is 10 centimes or two cents American money, market fee they pay for each basket, and the market regulations call for baskets of a half cubic meter in size, no larger. The rosieristes (about forty on an average a day, I was told by one of them) cluster together as near as they can so as to watch the prices better, and observe the available stocks easier. They evade getting mixed in between the florists or dealers in miscellaneous flowers. These likewise try to centralize according to the goods they

have to offer for the day, and they also bring their goods in square shaped bunches into market, fifteen of which will fill a basket as described above (or about 6x8 inches each bunch) be they myosotis, mignonette, phloxes, carnations, asters or other varieties of flowers.

Truly a number of flowers are brought here to market and find their buyer which would never sell in the New York market. However, the French are fond of flowers, they know how to make a show; flowers and plants are indispensable for a successful show and this accounts for the fact that according to the station in life of the individual, he will buy for his show window the choicest of Paul Neyron roses for \$2.50 the bundle to a pack of myosotis for 60 centimes. It is the butcher, the baker, the restaurant keeper and hotel clerk, who with the florist, who keeps shop and arranges floral pieces, are the first to buy their roses, mignonette, myosotis, chrysanthemums, phloxes, gladioli, pansies, dahlias, stocks, gypsophilas, etc., etc., in assortment of packs or bundles of each, to make their shops or tables more attractive.

Besides the thirty to forty rosieristes, the Halles have a daily custom of 100 to 120 florists (growers we should call them) who run from six to ten baskets into the Halles each. "What do you do with your unsold stocks of flowers," I asked a man, "when the hour of retailing strikes?" "That never happens, all of us are sold out before that time. Why, those who tie the bouquets during the day need material and we never get left. It is only the growers of plants who come here on Wednesdays and Saturdays who occasionally have to take some of their stock back home." "Well how do you get along with the rest of your brothers in trade, does it not inconvenience you to stand almost shoulder to shoulder and basket to basket and compete?" "Why, no sir; we understand each other perfectly, and when one is sold out it is not at all unusual for the other if the goods are worth anything to help the one who still has unsold goods on hand. Of course every one likes to dispose of his goods first, but we live as if we were one family. A pipe of tobacco or an occasional drink together squares up for the service we owe to each other; every one of us may come in the unlucky boat, and if we keep and stick together none of us need be a loser."

This plain talk convinced me that unity of purpose carried out to the exclusion of selfishness, must be a safeguard against loss in all mutual undertakings, such as flower markets, horticultural societies, etc., and the question to florists in the states will be: How to exclude selfishness from their midst; also the natural generosity weakens with advancing luck and fortune in the individual, who longs for more and more and will never be satisfied.

But the bustle of the market does not stop at reflections; with the advancing hours new industries open their departments and they resume the activity of the day before, and with the facteurs or commission men. We find that these immense buildings, covering ten city blocks—none smaller than sixty-five paces in breadth by eighty paces in length, are supplied with cellar room giving storage facilities to the height of twelve feet! No wonder that with such dimensions the place has acquired a world-wide reputation. Still fearing that with increasing population the market halls may prove inadequate, the municipi-

ality is erecting a new building of similar size to the present one but more ornamental, which it will take, however, many months before this can be turned into public use. The increasing rush and humdrum of the vendors in the street as the day advances, proves that more accommodations are but acceptable.

If ever a city feels the necessity of enlarging its market facilities, it will not go amiss if the commission having matters in hand are sent to Paris to study up this model market in the world as seen by a
TRAVELER.

Philadelphia.

At a recent meeting of the local Florists' Club Sept. 4, John Westcott, Edwin Lonsdale and John Nesbit were appointed as a "committee on club house," the intention of the society being to purchase a house in an eligible location and alter and fit it up for the purposes of the club.

Thomas Cartledge, Robert Craig and William K. Harris were selected as a committee to take steps towards having the club incorporated. It was determined to discuss at the next meeting "whether or not a wholesale market for the sale of cut flowers and plants would be a benefit to the trade in general," the discussion to be opened by Edwin Lonsdale. The present officers—Robt. Craig, president; C. D. Ball, vice-president; D. D. L. Farson, secretary, and Thomas Cartledge, treasurer, were re-nominated, the election being fixed for the October meeting.

The chrysanthemum show to be held by the Germantown Hort. society will be held in Germantown Nov. 8 and 9. The premiums amount to \$200. Thos. B. Meehan is secretary.

Boston.

Massachusetts sent sixty delegates to the New York convention.

There were heavy frosts all over this section on the night of Sept. 6. Coleuses and other tender plants were badly injured.

The annual exhibition of the Massachusetts Horticultural society will be held at Horticultural Hall, Boston, on Sept. 18, 19, 20 and 21.

The floral establishment of the late Alex. Greenlaw at Braintree has been sold to Thos. Waterworth. Mr. Waterworth will grow roses, carnations, smilax, etc., for the Boston market.

E. G. Hill, M. A. Hunt, J. M. Jordan and several others of the Western fraternity, made a flying trip to Boston previous to the New York meeting. This was Mr. Hill's first visit to the hub, but, after his experience with an old-fashioned Nantasket Beach clam bake, he declares he will be a frequent visitor henceforth, and we hope he will.

The annual meeting of the Gardeners' and Florists' club was held on Sept. 4. Officers for the ensuing year were elected as follows: Pres., Benj. Grey; Vice Pres., Jas. Morton; Treas., Jas. O'Brien; Rec. Secretary, J. H. Dillon; Fin. Secretary, W. H. Elliott; Executive Committee, M. H. Norton, W. J. Stewart, A. P. Calder, Thos. A. Cox. A committee was appointed to arrange for a fitting observance of the second anniversary of the formation of the club next December.

On Saturday, Aug. 11, the garden committee of Mass. Hort. society paid a visit to the beautiful estate of R. M. Pratt, Esq., at Watertown, over which Mr. David Allan presides as gardener. This trip, coming immediately after the dinner



PRIZE "ORIGINAL FLORAL DESIGN" AT THE NEW YORK EXHIBITION

given to Mr. Mauda, an invitation was extended to the gentlemen present at that dinner to visit Mr. Allan at the same time. The garden committee proceeded in horse cars, but Mr. M. Norton, who is always on hand when a good time is in progress, proposed that a coach and pair would be about the proper thing for the boys to indulge in. This plan met with unanimous approval, and in a short time a conveyance was secured with Mauda, Dawson and Fostermann outside and Norton, Harris, Becker, Greaves, Grey and Stewart on the inside, a start was made. The weather was perfect and the ride through the Back Bay Park, Brighton and Watertown was hugely enjoyed. No opportunity for fun was missed, and the boys on the outside whose legs formed a prominent part of the view through the front window, became the object of much attention from the inside passengers, and the way those legs did dance was a marvel. The party arrived at its destination just in time for a delicious lunch at Mr. Allan's house. Heaping dishes of Black Hamburgs and Muscats are not encountered every day, and this part of the entertainment received its full share of attention, but there was enough for all. After the lunch Mr. Allan conducted his guests through the beautiful grounds where the well-trimmed lawns and rich flower beds were duly admired, and into the greenhouses where masses of choice ferns, groups of showy odontoglossums, and gorgeous crotons attract the eye; to the graperies, where the tempting clusters hang in profusion, and those other houses so uninteresting to the uninitiated, but so full of meaning to those who understand, where, on the benches, the stumpy looking orchids are perfecting their bulbs, and up above the *Deudrobium Wardiaum* are reaching out their slender arms with a vigor which promises great results for next year. The return trip in the evening was a repetition of the ride out, excepting that Mr.

Fosterman judiciously pre-empted a seat on the inside this time. The party inside was farther augmented by the addition of Jim Barrett, whose massive proportions almost filled up one end of the coach, but who atoned for the space he occupied by his interesting reminiscences of old times, and by Mr. Storer, the orchid painter, whose rotund little figure was squeezed into about half size in the corner seat, and who opened his blue eyes in wonder at the youthful animation displayed by his gray-headed fellow-passengers. He had been induced to join the party on a promise that they would reach town in time for his early train home; but, alas, the station was reached just in time to see the train slide out. But if some of them did have to take late trains that night it was a consolation to feel that some good had been accomplished; for, according to Ben. Grey, who is always deferred to as an authority, "If somebody did not patronize the late trains once in a while, the railroads could not afford to run them." And that is pretty good logic. W. J. S.

Prize "Original Floral Design" at the New York Exhibition.

This was a large, low, round basket with high handle, containing a mass of adiantum ferns into which were set three sun-hats, one containing longiflorum lilies and lily of the valley, another pink hydrangeas and Watterville roses while the third held blue hydrangeas and Perle roses with a variety of orchids. From the center rose a handsome bunch of long-stemmed American Beauty roses, and a beautiful spray of orchids was tied to the handle with a large bow of very wide white ribbon. The piece was very handsome. It was arranged by C. F. Klunder, New York, and received the prize of \$50 offered by the New York club.

Baltimore Odds and Ends.

The cut flower trade in Baltimore has been excellent this summer, according to the testimony of our principal dealers. Prices and the volume of trade have been more satisfactory than in previous years, while the prospects for a good fall and winter trade are very encouraging. The increasing demand for pot plants during the past two or three seasons has given an impetus to this branch of the business, and our growers are making special efforts to meet the demands of the coming season. One trouble heretofore has been that a good many of the plants offered for sale by our florists were too large to answer the desired purpose—the generalty of buyers don't care about a big specimen; they much prefer a clean, healthy and medium sized plant. Last winter one of our wide awake florists had on hand a splendid stock of palms, ferns, pandanus, dracaenas, etc., in 4, 5 and 6-inch pots. They were mostly grown in the two former sizes, however, and, although he carried a large stock, he found it entirely inadequate to the demand. A very respectable plant may be grown in a 4 or 5-inch pot, with the additional advantage that they can be sold at a reasonable price—quite an object with the average customer.

A veteran florist, talking with me on the past, present and future of floriculture, deplored the over-crowded condition of the trade; but, my masters, the florist business is only over-crowded in the same sense as all other vocations; that is, at the bottom. There is always room at the top, and there is plenty of room in the trade to-day for the specialist. I do not believe that any florist is equally capable in all the departments of his business; there is always some particular branch for which he possesses especial fitness and talent, and it would—in many cases—be better for the trade in general, and himself in particular, if he were to confine his efforts to a thorough working up of that special line whatever it may be. Let a man confine himself to growing a certain class of plants; let him even take up two or three things, and if he does them well he is certain to establish a successful business. The florist trade is over-crowded with men striving to transact a general business from which too many of them derive but a scant income and a majority of whom might easily acquire an enviable reputation and a comfortable independence by simply restricting their practice to that branch of the business for which they possess most aptitude. We have in the trade to-day living examples of the success which may be achieved by those who devote themselves earnestly to attaining prominence and excellence in some particular department, and we are satisfied that an increase in the number of trade specialists would be a very decided advantage to all concerned.

It isn't pleasant to look forward to some notable event for a whole year and in the end to miss it, so that a good many Baltimore florists who had been anticipating the New York meeting were much disappointed that for one reason or another they could not attend, and the convention reports thus far received only serve to increase the disappointment. The S. A. F. may well congratulate itself on its choice for president. There are few men better fitted for the position, and in view of Mr. May's elevation to the presidency the following may not be out of order: Some time ago Mr. May happened to be present at a meeting

of the Baltimore Florist Club, and just before the meeting adjourned he made a very pleasing and appropriate address. As I was leaving the building after the meeting a member of the club said to me: "Say, who was that stranger that spoke last?" I informed the brother that the gentleman to whom he referred was the notorious J. N. May, of Summit, N. J., vice-president of the S. A. F., &c., &c., &c. My friend fortified himself with a piece of "three-ply," and then remarked, "Well, he doesn't look overly smart, but he's a fine talker."

Sept. 4, 1888. A. W. M.

Boston Plant Notes.

BY WM. FALCONER

LAPAGERIAS.—At Mr. Gardiner's I noticed a handy way of treating the lapageria. The cool orchid house is a north-facing lean-to structure, and against the south side of the wall is another lean-to greenhouse. In the orchid house the pathway is along side of the wall. The lapagerias are planted in boxes in the south-facing house and the vines introduced to the cool house through a long narrow aperture near the ground in the wall, and they are then spread out along the face of the wall also along the roof over the pathway but not over the orchids.

KEMPFER'S IRISES.—At Mr. Gardiner's these are grown with the utmost care and in Japanese fashion. An oblong square bed has been made for them on the side of a hill. The bed is level, and sunk some ten inches below the level of the ground and consists of good loamy soil annually enriched by a coating of rotted cow manure. The irises are set out in rows across the bed, each row consisting of one variety. A perforated water-pipe is laid along the back of the bed, and beginning in May, and lasting through the summer season, the water is turned on for several hours a day, enough to flood the bed a few inches deep. Of course when I saw them (August 1st) the flooding season was about past and I could form no idea of the size, magnificence and perfection of the blossoms produced under this generous care, still judging from the blossoms that I did see I am convinced that we need not go further than the nursery fields at Queens or Passaic to find as good varieties, single or double, white, purple, marbled or pencilled as we can import from Japan.

DAVID ALLAN grows the soft-wooded Cape Heaths extensively for cut flowers and dwells particularly upon *Wilmoreana* and its variety *superba*, also *hyemalis*. They are now planted out in the open garden on a gentle slope in strong gravelly loam. By planting them out in summer he gets stockier and healthier plants and with less trouble than he did by summering them in pots.

AT OAKLEY *Lilium auratum* and *L. Batemanii* are considerably used as pot plants, and are now in bloom in the conservatories. So far as *auratum* is concerned I am inclined to believe that the only way we can depend upon them is as pot plants, for in the open garden they are apt to die out or become diseased, which is not the case when grown in pots. But *Batemanii*'s lily has always behaved itself well with me as an out-door lily, neither dying out nor becoming diseased.

DEEP SUNK frame pits are used a good deal around Boston for growing young and moderate sized plants of crotons, dracenas, marantas and some other tropical plants, also *encharis*, and David

Allan likewise uses them for gymno-gramma ferns. In the early summer a hot bed is made in these frames to help start the plants, but by this time the manure heat is all gone. The plants are raised too near the glass or lowered as growth demands. The sashes are shaded and although tilted up a little during warm sunshine, the frames are kept rather close and warm to encourage growth.

PRIMULA OBCONICA.—"As soon as I can get up stock enough of that primrose I'm going to give up growing the other Chinese sorts," said one of the Boston gardeners. Everybody seems to have gone into raising it for cut flowers in winter. Peter Fisher has it in thousands and Manda has sent large quantities of it ahead of him to Jersey.

AMONG THE many handsome ferns I noticed at David Allan's I first saw the crested form of *Pteris cretica albo-lineata*. *Nephrolepis Bausei* is also a distinct new sort with the pinnae of the fronds bi-pinnatifid instead of entire. It makes a handsome pot or basket plant. A more vigorous species is the handsome *Nephrolepis rufescens tripinnatifida* from the Fiji Islands. The fronds are tufted, erect or sub-erect, two to three feet high; the stipes and rachides are red-brown and covered with rusty hair, and the pinnae much divided.

AMONG Mr. Hunnewell's ferns nothing pleased me more than did *Davallia tenuifolia Veitchiana* grown as a basket plant in a warm greenhouse. The fronds are long, airy, graceful and bend over the basket with a fine lace-like elegance. The stipes are redder and the pinnae longer and more slender than we find them in the species. The specimen was about five feet across.

CHEENOSTOMA HISPIDA is a little South African plant, somewhat fragrant throughout and bearing a perpetual crop of small white flowers. A few years ago our florists introduced and pushed it, but the enthusiasm soon died out. I see it used by Mr. Harris with pretty good effect; he plants or plunges it out of doors in summer and where it forms neat little blossom-studded clumps.

THE VARIEGATED leaved box elder is one of the brightest and most distinctly variegated of all trees, but, unfortunately, towards the end of July its foliage always gets sun-scalded; but the plants are hardy enough. There are a good many of them, some a dozen or more feet high and bushy, planted at Wellesley, but "it is always the same; after this time of year they never escape," said Mr. Harris.

MR. HARRIS has grown the yellow lantana known as *L. Californica* in standard fashion about three feet high. In this way it forms very dense yellow heads and shows no inclination to burst forth into heavy vigorous shoots as we often find the grosser lantanas do. He uses them in his flower beds and carpets under them with other plants in like manner as he does with taller standards of other sorts.

"Do you see that Norway Spruce tree in the lawn over there? Well, four years ago it looked sick enough, but since that time I have given it twelve loads of manure, three every year, and spread broadcast on the ground. Now it looks well and vigorous enough. I believe most of the sick spruces in the east are suffering of starvation," said Mr. Harris.

DRACENA MONSTROSA is one of Mr. Harris' seedlings, of very dense, at the same time, robust habit; the leaves are

dark copper colored, seven inches wide and recurved. Mr. H. regards it as one of the finest he ever raised. He also has got the variegated leaved *D. fragrans* very fine. He says it will remain in good condition as a house plant as long as will the plain-leaved sort, and in order to bring out its variegation in its most pronounced state, keep the plants well pot-bound.

ONE OF THE PRETTIEST new features about Mr. Hunnewell's beautiful garden is an out-door tropical water-lily tank. It is an oblong square, cement-walled tank built to the ground level on a sunny bank out side of but alongside one of the greenhouses, and heated with a hot water pipe from this greenhouse. It is fifty feet long, twelve feet wide and three feet deep, and although only one year in use already suggests the fact that it isn't big enough to accommodate the many noble nymphæas and nelumbiums now common to our gardens. About a foot deep of rotted pasture loam and cow manure is the compost used in the tank, and this fresh earth together with the warm water have given the aquatics an impetus and vigor seldom exceeded.

THE CONSERVATORIES attached to Mr. Hunnewell's mansion consist of two parts partitioned off for orchids in bloom, a tall house for ferns, palms and fine-leaved plants and a spacious area open on the sides and with a cloth awning over the top. Herein are arranged a large assortment of plants in bloom and growing in pots. Regular successions of plants are produced at the greenhouses for supplying these gay conservatories. Just now the chief plants in flower are tuberous begonias, fuchsias, hydrangeas, lilies of sorts, gloxinias and achimenes. *Caladiums*, *dracenas* and other fine-leaved plants add to the display of color. Along the outer margin and by the stone edge of this open conservatory the yellow leaved *nasturtium* is used to better advantage than I ever before saw it; it is arranged to form one unbroken dense yellow edging resting on the stone curbing. No flowers are allowed to grow. Among the many orchids in bloom *Cattleya superba*, *gigas* and *Dowiana* and *Dendrobium Jamesianum* were particularly fine.

THE ITALIAN garden, or garden of clipped trees, at Mr. Hunnewell's, is the most extensive and pronounced garden of the sort that I know of in the country, and the one shown in the right hand corner of the illustrated heading of the *FLORIST*. This garden is arranged on the steep slope of a very high bank, with the beautiful Waban Lake at its base and the wooded hills near Wellesley College across the lake. In order to better accommodate the trees the bank has been laid off in a series of narrow terraces. The trees and shrubs are clipped into many forms, and some of them are as high as forty feet. Among the trees used in this topiary work are the hemlock, white and Norway spruces, white pine, *Retinospora pisifera* in variety, also *R. obtusa* and *R. squarrosa*, American arbor vitae, and the Craow juniper. Deciduous trees include European larch, beech, Norway maple, box elder and linden. The white pines are the highest and some of them have light distinct green collars above the pedestal; the hemlock spruce is most used for hedges, and near the top of the bank weeping beeches have been planted on the slope. Irish yews in tubs are disposed along the terrace walls, and on the wall at the top of the bank agaves in vases are arranged.

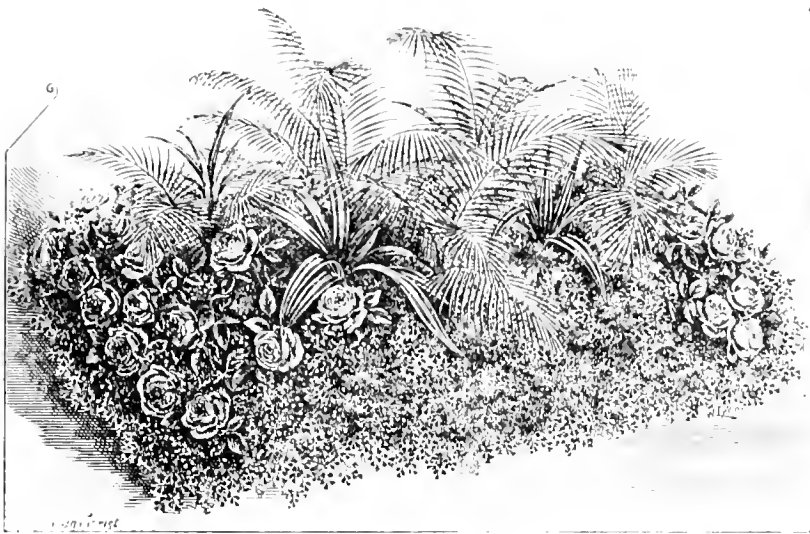


TABLE CENTER-PIECE

ers—but all without a fixed purpose.

THE CARPETING PLANTS mostly used in the gardens about Boston are alternantheras of sorts, crimson-leaved oxalis, variegated-leaved Mesembryanthemum cordifolium and Sedum carneum, white and blue dwarf lobelias, santolina, dwarf sweet alyssum, the dwarf pilea, the silvery-leaved dwarf antennaria, dwarf blue kleinia (senecio), echeverias and houseleeks. Mr. Robinson uses Sedum Hispanicum a good deal, he had it under the name of S. Mehani, but there is no such a species as S. Mehani, notwithstanding how often we find this name in recent works. I didn't notice Leucophyta Brownei anywhere, and I am glad of it, for I never yet have seen a patch of it in real good condition. Mr. Robinson also uses Crassala Bolusii with good effect. All manner of cactuses and other succulents are used individually or in groups in carpet beds.

Table Center-Piece.

The table center-piece of which we give an illustration was exhibited, at the New York show, held in connection with the recent convention.

It was about three feet long by eighteen inches wide, the base a mass of adiantum ferns—plants plunged in moss—with a number of small palms in the center as shown. At each end long stemmed American Beauty roses were gracefully interspersed, so as to allow each individual rose to show its full beauty. It was a very handsome piece of work, showing most excellent taste in arrangement. Mr. John Finn, of New York, was the exhibitor.

We believe that this style of arrangement, while not new in eastern cities, is destined to have a long run with the purchasers of floral decorations throughout the country, and that those who have not yet used it will benefit both their customers and themselves by introducing it in their city. People of taste at once appreciate a departure from the stiff formal designs so long in vogue, and could see far more real beauty in a graceful arrangement of this character.

We do not believe in endeavoring to

force any special arrangement upon a customer, rather consult his taste as fully as possible, but we do believe that in offering an arrangement of this kind it will be greatly appreciated by a majority of the best flower buyers in preference to any set table design. Show your customers our illustration and ask if they would not like something of this kind.

A decoration of this character is also more satisfactory to the buyer, from the fact that the ferns and palms can be kept in fair condition for a week at least after the flowers have faded and been removed, or the palms could be returned and the cost thereby reduced to some extent.

How Shall We Judge the Merits of Designs at Exhibitions?

In a short time the different horticultural societies in all parts of the country will be giving their fall exhibitions, and there will be the usual amount of competition among the dealers in the arrangement of cut flower designs. To be a judge of these is a very trying and thankless position. I have never heard the honesty of the judges questioned, but have frequently heard of, and seen many cases, where they have undoubtedly erred in judgment. It is a fact that "Men may be honest though they differ." But if we can strike upon some plan which will prevent such a constant and great difference of opinion it will be an advantage to us all. A florist who has had years of experience, and spends a good deal of thought, time and money on a design, sends it to an exhibition, and thinks a great injustice has been done him if he does not get the anticipated prize.

Several times when there has been great rivalry and considerable hard feeling, I have been asked to act as one of the judges, but have always declined, because I realized the difficulties we had to contend with. There being no fixed standard of taste, one gentleman would be influenced by the size of the design, another by the brilliant coloring, possibly without regard to harmony. Another would take the quality of flowers into consideration this is often the case with practical grow-

In selecting a judge of floral designs it is not always safe to infer that because a gentleman is a good judge of plants he will do equally well with designs. He may know that the plant is true to name and color, free from disease, well grown, etc., but he has lived such a wholly practical life, giving all of his time to the growing of plants, that he has not cultivated his taste for the beautiful or devoted much thought to the artistic side of our business. This is by no means always the case, as there are a great many growers that could teach the dealer how to arrange flowers.

In any case it is important to select gentlemen of refined taste and those that can decide between the work of a carpenter and an artist. To avoid these mistakes let us decide upon the best points to be considered; for instance, the harmonious arrangement of colors; the graceful arrangement of flowers; the quality of flowers; the general effect of the design, and, possibly, the practicality of the same, that is, how far would it be useful in our business. This point, I think, would generally be entitled to ten, but when we find a florist who attempts to perpetrate a monstrosity on a confiding public and expect them to look upon it as a work of art, the judges instead of allowing him ten points, which should be the standard for all, they would allow say two or possibly zero. If the judges see anything in the arrangement of color that they think could be improved upon, allow eight, six or whatever they may think just. Often the general effect will be good, but on critical examination the quality is hardly up to the mark and vice versa; mark the different points accordingly. In this way not only the florist will have something to work for, but the judges will have the same advantages in deciding on the merits of the designs.

The exhibitors should always be assigned a number, and this number strictly adhered to. There should not be more than one gentleman in the room with the judges, he to be there simply to give any information that they may require, but in no way to advise as to merits.

A good plan would be for the society offering prizes to have slips printed in form similar to the following, each judge to have one for each class, and finally strike an average which will show the winner.

THE AUTUMNAL EXHIBITION OF THE PENNSYLVANIA HORTICULTURAL SOCIETY.

PHILADELPHIA, Sept. 15, 1888.

In examining the entries for Class, Original Design, I deem the exhibits made worthy of the following points:

	Possible Points	Exhibition No. 1	Exhibitor No. 1	Exhibition No. 2	Exhibitor No. 2	Exhibition No. 3	Exhibitor No. 3
Color	20	8	10	8	10	8	10
Gen. Effect	10	8	10	8	10	8	10
Color	10	10	8	8	10	8	10
Practicability	10	10	8	8	10	8	10
Quality Flowers	10	8	8	8	10	8	10
Total	50	44	44	44	44	44	44

Remarks. No. 1 deserves credit for handling such ordinary flowers in a masterly way.

Signed, J. GEORGE M. BLANK, Judge.

Blank forms could be printed, which would do for any society or any season by filling in such spaces with pen and ink. The subject, I feel, should have the attention of all horticultural societies, and, if some plan can be adopted, it will be a great satisfaction to all concerned.

H. H. BARRETT, Philadelphia.

New York Notes.

BY WM. FALCONER.

GOOD NEWS FOR PHILADELPHIA—At New Rochelle, on August 23d last, the spirit descended on Dan.

"SERMONS IN STONES"—As did St. John in the wilderness, so cried out the very rocks by the wayside to Rose Hill. But it was known that the florists would pass that way.

SHADING—Siebrecht & Wadley use benzine and whitening for shading their greenhouses. "Yes, kerosene will do as well but benzine is cheaper."

SAGO PALMS (*Cycas revoluta*) FOR CEMETERIES—"There is a growing demand for Sago palms for cemetery work. When their pots are plunged in the ground it doesn't matter if they don't get water for a few days at a time. Then in fall the owners can lift them, tie up their leaves, pay \$5 a pair to a neighboring florist for wintering them and they will be all right again for use next year."

DECUMARIA BARBARA mentioned by Mrs. Thompson, page 5, isn't very hardy at Boston; it lives well with us here on Long Island and flourishes in New Jersey, but to see it in its glory we have got to go south.

"THERE IS A GENERAL house-cleaning going on now at all the establishments near New York," writes Miss Taplin, page 5. That's true, if the way in which I scrubbed and sweated and tore around is any indication of how other folks did. But then, how did those palms upon the stage in convention hall escape?

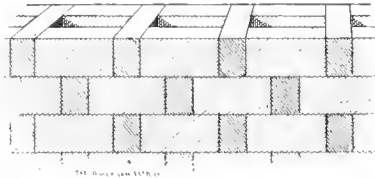
WE CANNOT PROPERLY say *Cattleya Rochelliana alba*, because no recognized species is named *Rochelliana*. If the new white flowered *gigas* has been named *Rochelliana* we must say *C. g. Rochelliana*. And we cannot call it *Rochelliana alba* unless the *Rochelliana* is some already fixed, recognized variety and this new white variety is a distinct form of that *Rochelliana*. As the case stands just now the name given to this new *Cattleya* is *C. gigas Rochelliana*, and this only. But even now I am not sure that the name is settled.

Seasonable Notes.

No time should be lost in getting violets into their winter quarters, whether in the greenhouse or in cold frames. In the latter case it is particularly important that they should have ample time to get established before the sash are put on for the winter. When removing from their summer quarters, all runners and weak crowns should be cut away but the plants ought never to be divided at this season. One effect of the violet disease will probably be to reduce the number of growers. We don't claim to be any smarter than the rest of mankind, but we are very much inclined to believe, that a good deal of this violet disease is the result of propagating from plants forced during winter. We are strengthened in this opinion by our experience, for since exercising a little care as to the stock used for propagating purposes our violets have been perfectly healthy. A sufficient number of good plants are selected in the fall, kept in a healthy growing condition, and from them the necessary stock for the following season is propagated in January. The young plants are carried over in boxes or 3 inch pots until planted out the following April, and with proper cultivation, they are fine plants in fall. I have followed above method for the past three years and shall keep to it until I

learn of a better. I know at least one Baltimore brother who will disagree with what I have said, because he propagates from cold frame plants, and all the same, has violet disease "in lots to suit customers." I have certainly seen very sick plants, the offspring of stock grown in cold frames and never subjected to the least forcing; but it does not follow as a matter of course that such stock was healthy, for a very little lack of proper attention will suffice to make any plant, in cold frames or elsewhere unhealthy.

It is always well to take "time by the forelock," therefore let fall work be pushed ahead with all possible expedition. If there is any glazing, painting, or other repairs yet to do, let them be attended to at once. See that boilers and furnaces are all ready to fire up in case of cold nights, which we may now reasonably expect. Callas, carnations, bouvardias, poinsettias, etc., still out doors, should be housed as soon as possible. Callas grown during summer in the open ground will have made a strong growth; cut away a little of the rankest foliage, and crowd the plants into as small pots as possible in order to hasten and increase the bloom. Poinsettias, if to be grown on benches, should properly have been in by the first of the month;



HOLLOW BRICK WALL.

plant them pretty closely and keep the shoots tied down. A corner planted with rose geraniums will give a supply of foliage that comes in very nicely through the winter, and by no means neglect to store an abundant supply of potting soil in some convenient place where it will be protected from the weather.

Baltimore.

A. W. M.

Hollow Brick Wall.

We give herewith a sketch of a hollow brick wall as used at the greenhouses of the Dingee & Conard Co., West Grove, Pa. Their superintendent, Mr. Antoine Wintzer, states that walls of this construction have stood on their place for nearly twenty years in good condition. The sketch shows plainly how the wall is constructed. The great advantage of a hollow wall is admitted and it would seem that such a simple manner of construction as that illustrated should commend itself. To make doubly sure it would be well to give such a wall an extra strong foundation and sink it well into the ground to prevent heaving by frost in any latitude north of that of Philadelphia.

Growing Pansies.

Pansies are grown here in large quantities for the seed and to furnish plants for spring sales. From my own observation I am satisfied that there were more pansy plants sold in this city than all other varieties of flowers combined.

In raising plants in large quantities the seed is sown from July 15 to Aug. 20

in beds covered with boards, with a thorough watering once a day. Great care is taken that the boards are removed as soon as the seed commences to sprout through the ground, which is usually from seven to eight days—three or four days quicker than by any other process. If the weather is very dry the bed is shaded from the sun with lath raised from the ground and three or four inches apart. When large enough the plants are transplanted to the field, and are wintered without any covering, great care being taken that the ground is well drained, as it is sure death to the plants if the water settles on them. In this way large quantities are raised with perfect success where the thermometer goes as low at times as 15° and 20° below zero. Plants raised in this way are more stocky and give better satisfaction to the purchaser than when grown in greenhouses or cold frames.

The varieties mostly used are the German from the great pansy specialist, Luneburg, who sends out fifty-four distinct varieties. These pansies are able to withstand our winters without covering, and have the most beautiful colors, combined with substance and shape, of any pansies in the world with the exception of the Buguots. The latter is the finest of all when well grown, but is hard to germinate, and has to be wintered in a cold frame. The Trimardean is perfectly hardy and finds a demand among those who regard size and do not care for color, substance or shape.

It is a beautiful sight to see a large field of pansies in bloom, and interesting to examine the trial grounds of the seed of different seedsmen.

CHARLES L. BURR.

Springfield, Mass.

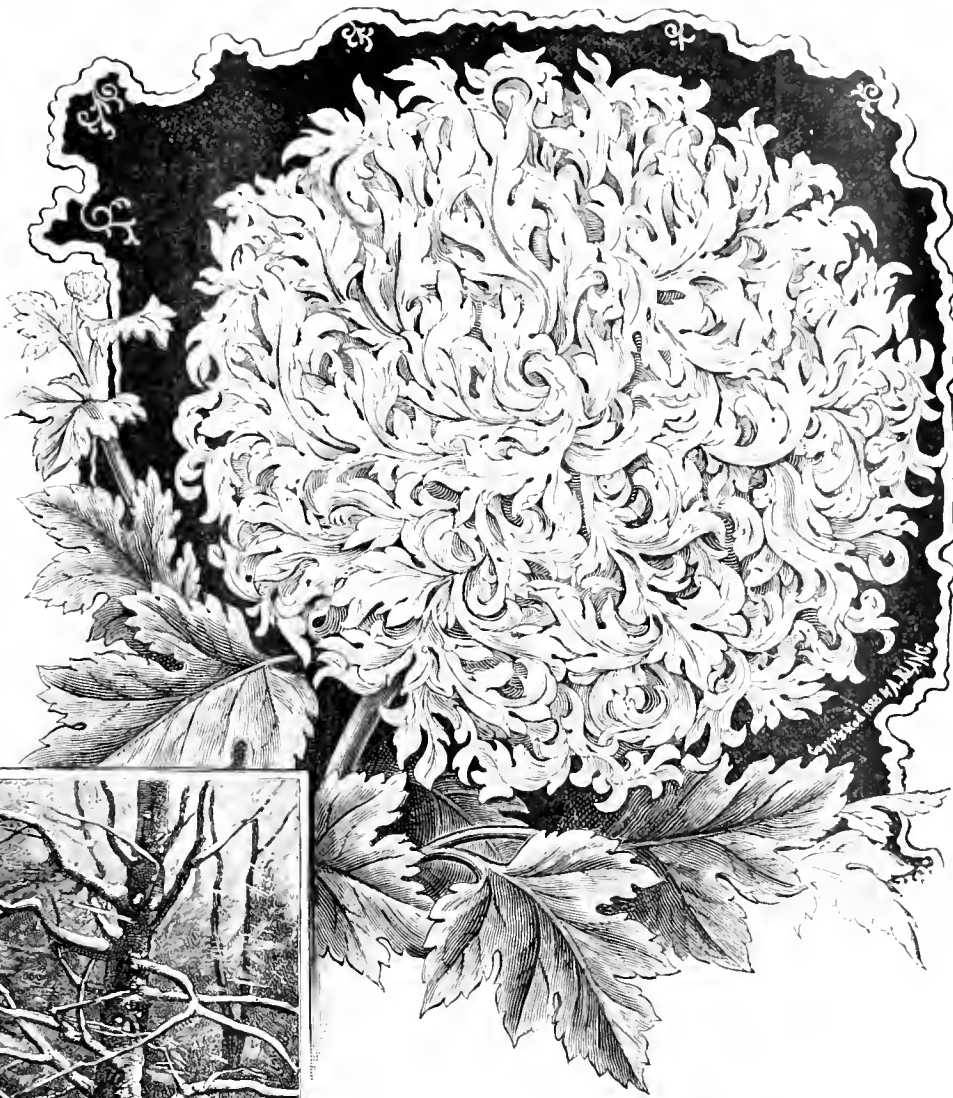
New Chrysanthemum Elk's Horn.

This new chrysanthemum is so named on account of its peculiarly shaped florets. It is pearly white in color, full and globular in form, quite distinct and extra fine.

Steam Heating.

In your issue of July 1, Mr. A. B. Ellsworth, of Allentown, Pa., writes for a few points on steam heating, which as yet have not been answered in any of your subsequent editions, so I send this account of what has been my experience regarding the subject in question. Some two years ago I started to build at Lansdowne a couple of greenhouses; the size of each being 120x17 feet with shed in addition, the latter being 50x12 feet and although strongly advised to the contrary I decided to try heating by steam in preference to any other method. I have found it to be satisfactory thus far, and would not now make a change under any circumstances.

In placing the boiler it is very important that you should put it as far below the surface as possible, say from six to ten feet, although unfortunately I was unable to get lower than four feet on account of water, yet, notwithstanding this drawback in my case, I have found it to work very well when I used but a low pressure. Now as to the particular kind of boiler. This is a point which is open to discussion, but from observations which I have made from time to time I would say that if one has but a small place (three or four houses not more than 120x20 feet) a locomotive boiler is the best, as it is by far the cheapest, in the first place, and secondly it is the most



NEW CHRY ANTHEMUM, E. H.



economical as regards fuel, while if a return tubular boiler is used it often costs more to brick it in than the original price of the boiler, and thus creates an item of expense which must necessarily be a question of importance to one who is just starting in business in a small way with the intention of following same to make a livelihood.

The locomotive boiler which I use is

about 20-horse power, as near as I can judge, with a fire-box 3x3 feet. The flow pipe is taken from the highest point directly over the boiler, and is two and a half inches in diameter, being connected with four pipes, each one and a fourth inch, which run around the house and on each one of these pipes there is a valve, making it a matter of convenience to use either one, two, three or the whole four pipes according to the weather. The pipes have a gradual fall from the boiler. My business is specially that of forcing cut flowers for the Philadelphia market and (the houses are three-quarter span with a high back bench) consequently the houses have to be kept up to a pretty high temperature, and during the coldest weather I have maintained 55° without much trouble, thus proving that in my case at any rate steam heat is by far the best. I think that if a person has only two or three houses and puts in steam he will never regret it.

The cost of my whole apparatus was not more than two-thirds of what it would have been had I put in hot water. I would never advise a florist to use a cast iron boiler for steam as it is much more liable to crack than one of wrought iron.

Mr. A. L. Pennock, of this place, has met with two accidents with his cast

iron boiler this last winter. The first time through one of the pipes in the greenhouse having a bend, the pipe burst and consequently the water backed out of the boiler. When the night fireman saw the water low, he at once ran more in and a split in the boiler soon followed. Fortunately Mr. Pennock's boiler is composed of sections, and he has it so arranged with valves that he can run a part or the whole at the same time. If Mr. Ellsworth could make it convenient to call on me I would take pleasure in showing and explaining our method of laying the pipes.

W. W. COLES.

Lansdowne, Pa.

Steam Heating.

In reply to Mr. Kellogg, of Pleasant Hill, Mo., I would say that he asks an exceedingly difficult question. Every man has his own idea as to which boiler is the best. We are all so liable to think that the article we use must be superior because our own wise discernment has discovered its excellent qualities. To ascertain which of the many boilers in the market is the best, there must be comparison of results. These can only be determined by experience, and this experience purchased, as many of us

know, at considerable cost. I have had several years practice with steam, and after having used several boilers we have come to the conclusion that the Ferguson boiler, advertised in this paper, is the most economical as to both fuel and labor that we have yet tried. I could state many points why this is believed to be the case, but the trouble is, that in so doing, some will at once think that there is money in it for me in advertising it.

The best thing for Mr. Kellogg to do is to communicate with all the makers of boilers advertised in the FLORIST and those with whom he makes the contract will be best able to advise him as to the size and quantity of pipe to be used. It is a great mistake for any florist to look only at the first cost of his heating apparatus. From the erroneous idea of economy no end of mistakes are made both in the buying of too small a boiler and in the arrangement of the pipes for the circulation of either hot water or steam.

Do not be gulled by specious promises, nor let any man persuade you into putting in a so-called cheap job, for in the end it will prove a dear one. By having an efficient boiler and proper circulation, many tons of coal can be saved. Everything that causes friction should be avoided, for with this fault an increased consumption of fuel can certainly be looked for, and it is in such essentials that an expert's advice is of inestimable advantage. ALFRED E. WHITTLE.

Albany, N. Y.

Overhead Heating.

HAS ANY FLORIST, who has actually experimented with overhead heating noticed an increase of red spider in houses heated in that way, which may be attributed to that cause? E.

IT IS ABSURD for stripling florists to assert that overhead heating increases red spider. Prove it! JAKE.

IS THE POPULARITY of *Myrsiphyllum asparagoides* (smilax) really on the wane? What can be grown that will likely be profitable to take its place? L.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Sept. 16—Tem. morning 57°, noon 61°, evening 57°. Wind NE. Commenced propagating geraniums, taking cuttings from bedded plants. Put heating pipes in working order and filled with water.

17—Tem. 58, 68, 65. SE. to NE. Made cuttings from geraniums Clifton and Gloire de Carbonay. Mended leaks in heating pipes.

18—Tem. 49, 72, 63. E. Sunday.

19—Tem. 55, 72, 65. E. Made cuttings from geraniums Clement Boutard and Queen of the West. Continued cleaning glass on houses.

20—Tem. 62, 74, 69. E. Put in cuttings of geraniums Queen of the West, Rev. A. Atkinson, Ralph and Dr. Jacoby. Removed gloxinias and dracaenas from frames to houses. Carried sand in houses and prepared additional benches for propagating.

21—Tem. 72, 86, 70. WSW. to NE. Put in propagating bench cuttings of geraniums Guillaume Mangelte and Emilie de Girardin. Removed colens and Alter. par. major from frames to houses. Cleaned up frame yard emptying all pots containing superfluous plants and stored pots.

22—Tem. 58, 64, 61. NE. Put in cuttings of geraniums Ernest Lauth, Pres.

Leon Simon and Sapeur Pompier. Removed Alter. par. major, poinsettias, abutilons, tuberoses, linnus and cytises from frame yard to houses.

23—Tem. 45, 54, 51. NW. to NE. Had fire in some of the boilers over night. First firing of the season. Put in cuttings of geraniums Wonderful and Mme. Thibaut, also heliotropes, trapaeolums and pilogynes. Removed from frame-yard to houses plants of *Alternanthera versicolor*, *amœna* and *aurea*, intended for stock. Took inside rubber and coffee trees, also azaleas and chrysanthemums.

24—Tem. 44, 60, 56. S. to SE. Put in cuttings of gnaphaliums and bronze geranium Earl Roslyn. Prepared additional benches for propagating.

25—Tem. 54, 64, 61. SE. to E. Sunday.

26—Tem. 57, 59, 54. SE. Put in cuttings of geraniums Mme. Salleroy and Mme. Phitzer. Removed shading rolls from back part of conservatory. Continued replacing broken glass and otherwise preparing for winter.

27—Tem. 57, 57, 55. E. to NE. Put in cuttings of maurandias, cupheas, lophospermums, double alyssums, German ivies, nierembergias, lobelias and rose geraniums. Cleaned and tied chrysanthemums. Moved tuberous begonias from No. 1 to No. 3.

28—Tem. 57, 62, 56. SE. to NE. Commenced potting abutilons which had been planted outside during summer and took inside. Cleaned up No. 4. Continued repairs.

29—Tem. 60, 69, 65. S. to SE. Last trimming of foliage beds. Wheeled tanbark from frames. Prepared empty benches for pot plants and cleaned under the benches in houses. Arranged plants in No. 1.

30—Tem. 59, 60, 59. SW. to SE. Same as yesterday and picked celosia seed. Continued preparations for winter.

Burning Natural Gas in Flues.

I wish to know whether I can burn natural gas instead of wood in my brick flues to advantage? My house is 75x20 with flue running all around the house and chimney built on top of the furnace. I am anxious to use the gas but have not heard that anyone has used gas in flues and thought had best enquire and learn the experience of any who may have used it that way. Is any change in the furnace necessary in order to use gas?

Toledo, O. SUBSCRIBER

SIoux CITY, IOWA—W. E. Jones, of the Sioux City Seed & Nursery Co., died August 25.

SIoux FALLS, DAKOTA—Mark H. Wetherbee has gone into business here at 105 West avenue, south.

YOUNGSTOWN, O.—Gus A. Geug is building several new greenhouses, and wishes wholesale catalogues to select stock from.

HARTFORD, CONN.—The Hartford County Horticultural society will hold its fall exhibition in this city, Sept. 19 and 20. Extensive arrangements are being made to make it one of the finest ever made in this section.

REDWOOD CITY, CAL.—Mr. N. J. Britton is preparing to build four rose houses 150x20 each and will grow roses for the San Francisco market. The frames of three of the houses will be of iron. Mr. Sidney Clack, a former Chicago grower will be in charge.

COLUMBUS, O.—An effort will be made to make a feature of the floral display in the department for women's work at the Ohio Centennial exposition to be held in this city September 4 to October 19. Liberal premiums are offered for plants, flowers and floral designs. The floral department is in charge of Mrs. E. G. Campbell, of Cleveland, O.

RICHMOND, IND.—Beach & Co. are building five new greenhouses 75x12 each, and one 75x22, all for cut flowers.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advts. not admitted under this head.

SITUATION WANTED—By a young man; aged 21; as assistant greenhouse man. Address VANDA, care American Florist.

SITUATION WANTED—Good plant grower for commercial place; 14 years' experience; single. Box 474, Mattewan, New York.

SITUATION WANTED—As assistant foreman in Chicago or vicinity; seven years' experience. Address D., care American Florist.

SITUATION WANTED—By a German gardener; competent in all branches of gardening; private or commercial. Single. H. care Am. Florist.

SITUATION WANTED—By a gardener; aged 28; fully competent in all kinds of greenhouse work, decorative plants specially. Address H. C., care American Florist.

SITUATION WANTED—By a young florist in a store or with a dealer in flowers. Speak English, German and French. Address TH. W., 24 E. 6th St., New York City.

SITUATION WANTED—By a practical florist to represent and travel for a thoroughly established concern in connection with the trade. Address C., care American Florist, Chicago.

SITUATION WANTED—By a thorough experienced seedsman, 15 years' experience, knowledge of plants, etc. Best of references. Address JAMES SENECA, 120 River St., Des Moines, Iowa.

SITUATION WANTED—Seedsman. A young man; age 21, 4 years' experience in the seed business; can give best of references. Address C. H. R., 28 Montgomery St., Jersey City, N. J.

FOR SALE OR RENT—Six greenhouses; business increasing every year. Carnoly water boiler, everything in good fix. For particulars inquire of JOHN SOEREGEL, Charlestown Rd., New Albany, Ind.

SITUATION WANTED—As foreman or propagator in a commercial place. Thoroughly versed in cut flower growing and plant business; the best of references. Address M., American Florist.

SITUATION WANTED—As landscape gardener. I have had many years' experience in several countries in Europe, and first class draughtsman. Address G. L., 323 Englewood ave., Englewood, Ill.

SITUATION WANTED—By thoroughly practical man as superintendent of private or commercial establishment; good salary required; married. Address with particulars B., care American Florist.

SITUATION WANTED—By a practical designer and decorator by October 1st. Best of references as to reliability and steady habits. Address F. E. COLLAWN, P. O. Box 26, Govanstown, Baltimore Co., Md.

SITUATION WANTED—By young man with large experience in growing roses, cut flowers and general stock of greenhouse and bedding plants; can come well recommended. Address F. W. N., care American Florist.

SITUATION WANTED—As florist and gardener on commercial or private place; experienced in cut flower work, propagating and rose growing. References from first-class commercial place. Address M., care American Florist, Chicago.

SITUATION WANTED—By middle aged German florist and gardener, posted in all its branches; 20 years practical experience. Can come at once if particulars in answer are given. Address Wm. K. care J. O. Thilow Drees's seed store, Philadelphia.

SITUATION WANTED—By English gardener and florist; first class rose, violet and carnation grower; 8 years growing roses for New York market, now disengaged; good wages expected; best of references; married. Address W. H., box 18, Tarrytown Heights, N. Y.

SITUATION WANTED—By a middle aged German, gardener and florist; single; long experience. Best of references. Can come at once if particulars are given in answer. First-class private place preferred. Address FLORIST, P. O. box 965, Delaware, Ohio.

SITUATION WANTED—By a young man of eight years' experience. Good grower and propagator of roses and general greenhouse stock, in private or commercial place. Can come at once if particulars in answer given. Address stating wages, etc., A. M., care American Florist, Chicago.

WANTED 300L of 4-inch pipe in good condition. J. PALMER GORDON, Ashland, Va.

WANTED To buy cheap, vols. Gardeners' Chronicle, and The Garden, W. A. WEAVER, Emmetsburg, Iowa.

WANTED—Several hundred spikes double Tuberoses last week in Sept. State price. A. B. ELLSWORTH, Allentown, Pa.

WANTED All florists to send for our new circular of Greenhouse Pots and prices, and read our "ad" in this issue. S. H. W. FOSTER & CO., PERKINS, Mgr., Syracuse, N. Y.

WANTED A single middle aged German of sober industrious habits, that understands growing roses and cut flowers, good designer preferred; a good home with board and lodging. Address, stating wages, Bernhard Beyer, N. La Crosse, Wis.

WANTED A good thorough florist acquainted with the business in all branches. A German American or German preferred; a man not afraid to work will have a permanent position, and only such need apply. R. MAIRE, 10 Canal street, New Orleans, La.

WANTED A young man practically conversant with the seed business, especially the market garden and retail department. Must be thoroughly competent to take charge of same, and to write and speak German. Address, stating reference, A. Z., care American Florist, Chicago.

FOR SALE At half price, vols. of Gardeners' Monthly. W. A. WEAVER, Emmetsburg, Iowa.

FOR LEASE—8 acres land, 5 greenhouses, lot hot-bed sash, dwelling house, all necessary out-buildings. Business established 17 years. For particulars, apply to E. McNALLY, Anchorage, Ky.

FOR SALE Rare chance for an energetic man with capital. The established business of the undersigned consisting of the following lots: Lot 1 contains one acre land with greenhouse 34x22, one propagating house 50x12, glazed with large double thick glass; 6-roomed dwelling house; wind mill; close to cemetery on the line of horse cars. Lot 2 contains 7 1/2 acres land in a high state of cultivation; 6 large greenhouses 125 to 175 ft. three planted with roses; two with sash, glazed with double thick glass; good 8-room brick dwelling house; 4-room wooden dwelling house, large barn. This is five minutes walk from first lot. Lot 3 7 1/2 acres land with large brick and large wooden dwelling house; conservatory, large greenhouse. All the above is in excellent order and will be sold in one or more lots to suit purchaser—stock may be taken on valuation. Only responsible parties need apply. The object of selling is to give the whole of my time to my new boiler. ALBERT BERT, 20 Oakwood Avenue Syracuse, N. Y.

PANSY SEED—Vaughan's International Prize, made up from selections from the choicest strains grown by European and American specialists and we believe can not be excelled, price 1/2 oz. \$1.50. J. C. VAUGHAN, P. O. Box 688, Chicago.

FOR SALE.

A large size Smith & Lynch Greenhouse. Boiler, in good condition. Capable of heating 1,400 feet 4-inch pipe; cost \$225. Will sell for \$100, f.o.b.

J. NEWMAN & SONS, 51 Tremont St., BOSTON, MASS.

FOR SALE.

Five acres of land in a high state of cultivation 1/4 miles from center of city, two greenhouses 60 feet long; good building, plenty of water, three forcing pumps; fruits of all kinds; 400 bearing grapevines. Good market for flower and vegetable plants. This is a good chance for young beginner in the flower business. Address

E. WEBB, Real Estate, Agt., YOUNGSTOWN, OHIO.

FOR SALE.

Four Greenhouses sixty-two feet long each, one fifteen feet wide, three twelve feet wide, heated by hot water; situated on six building lots, with one two-story house of twelve rooms heated by furnace, all in first-class order. Will sell stock including 1000 Roses, Mermet's, Perles and Niphotos, 2000 Carnation plants for winter blooming, etc. A good chance for the right party. Enquire at the

BANNOCKBURN GREENHOUSES, Cor. Clinton and Norton sts., ROCHESTER, N. Y.

FOR RENT OR LEASE,

For a long term, eight Greenhouses, nearly all heated by hot water (Hitchings & Dick's boilers), a large lot of cold frames and sash, with six acres of good land, dwelling house of seven rooms, stable, etc., situated near Waverly, in the Northern suburbs of Baltimore. A large part of the houses now planted with Roses of the best sorts: Perle des Jardins, Niphotos, La France, Pierre Guillot, C. Mornet, Bennett, etc.

There is also a good stock of Roses in pots, Azaleas, Palms, Ferns, Eucharis, Ficus, Asparagus and other plants of most salable kinds. Chrysanthemums, Bouvardias, Gladiolus, Tuberoses, etc., and plants for spring stock in the open ground, Strawberries, Grapevines, etc. Ample supply of water from tanks in greenhouses and cistern and wells outside. This is an opportunity for a competent man with small capital to secure on very favorable terms, a good established business, now in the dull season paying expenses. Address

ERNEST HOEN, Of A. Hoen & Co., Baltimore. Or ALEX. SCOTT, Waverly, Md.

ROSES FOR FORCING.

We have a fine stock of the following varieties in 4 and 5-inch pots BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHOTOS, PERLE DES JARDINS, SOUVENIR D'UN AMI, SUNSET, and many other choice kinds. Write for prices.

ELLWANGER & BARRY, Mount Hope Nurseries, ROCHESTER, N. Y.

ROSES. PLANTS.

Table listing various rose plants with prices per 100. Includes Gardenia Florida, Pteris Tremula, Serrulata Cristata, Tree Mignonette, Tritoma Corallina, Agapanthus Umbellatus, Same Sorts, 10,000 Assorted, and Best Winterblooming sorts.

Send your list to be priced. Illustrated Catalogue to all applicants.

Address N. N. & NEUNER, LOUISVILLE, KY.

FORCING ROSES

SURPLUS STOCK.

I have on hand a few

NIPHOTOS, SUNSET, PERLE AND LA FRANCE ROSES

that were prepared from selected wood for my own planting. These are strong 4-in., ready for immediate bedding.

PRICE, \$12.00 per 100.

Also MARIA LOUISE VIOLETS, Large Stools, \$7.00 per 100.

MYRON A. HUNT,

TERRE HAUTE, IND.

Mention American Florist.

NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application. JACOB SCHULZ, LOUISVILLE, KY.

PLANTS FOR SALE.

About the 20th of October a very fine collection of PALMS, FERNS, CROTONS, DRACAENAS, AZALEAS and ALOSIAS, FOR DECORATING PURPOSES.

Florists will never have a better chance to purchase specimens at such a low figure. Plants will be on exhibition at Columbus Centennial.

MAURICE EVANS, Florist, COLUMBUS, OHIO.

JAMES L. BOYSON,

CAEN, CALVADOS' FRANCE.

1st Prize for Cut Blooms, Paris, May, 1887.

My CATALOGUE of the NEW

EUROPEAN ROSES

will be ready January 1, 1888, and will be sent FREE on application.

A large stock of the last two years varieties, as well as all the older kinds for sale.

Send for my complete Catalogue of over 1,200 varieties, with raisers' names and date of sending out

ROSES.

Mention American Florist

New American Roses.

Freesia Refracta Alba and Leichtlinii.

ROSES SOUVENIR of WOLTON and ANNIE COOK, 3-in. pots, 25 per doz., \$5 per 100 4-in. pots, \$5

FREESIA REFRACTA ALBA, \$2.00 per hundred; \$1.00 per thousand. LEICHTLINII, \$1.50 per hundred; \$12.00 per thousand.

Address JOHN COOK, Florist, BALTIMORE, MD. Mention American Florist.

IMPORTER AND GROWER HYBRID PERPETUAL ROSES

WILLIAM H. SPOONER, Jamaica Plain, Boston, Mass.

E. BENARD, ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS For particulars apply to

E. BENARD, JR., P. O. Box 1400, San Diego, Cal.

ROSES.

GROWN IN OPEN GROUND.

Sombreuil, Hermosa, Mad. Lambert, Adam, Duchess de Brabant, Souvenir de Charles Montault, Mignonette, Louis Phillip, Malmaison, Satriano, Isabella Sprunt, Luxembourg, Marie Guillot, La Pactole. Price, \$10.00 per hundred; \$80.00 per thousand

Our selection from above named varieties. Buyer's selection, prices will be given as low as possible on application.

Dr. Grill, Mad. Scipion Cochet, new and fine outdoor Roses, from open ground, \$15.00 per hundred.

ROSES IN POTS.

Table listing various roses in pots with prices per 100. Includes Malmaison, Adam, Mermet, Satriano, La France, La Pactole, Ophele, Bon Silene, Cook, Mad. Honori Delrenee, Mad. Scipion Cochet, Lucile, The Bride, Duchess of Brangance, Duchess of Edinburgh, Clematis flammula, and others.

A. LAUER, 1218 East Broadway, LOUISVILLE, KY.

FINE ROSES.

We offer for sale to the trade this Fall a fine healthy lot of out-door grown Roses, strong, 1 year old dormant plants on their own roots, including the following single varieties and others. Price, \$12.00 per 100; \$100.00 per 1000.

Viz: Gen'l Jacqueminot, Diebsch, Paul Neyron, Baron Bonstetten, Jules Margottin, Pierre Nolting, Comtesse de Serenye, La Reine, Prince Camille de Rohan, Magna Charta, Marie Bauman, Fisher Holmes. Also, Gen'l of Prairies (always scarce) at \$12.00 per hundred.

N. B.—We carry a full line of Fruit and Ornamental Trees, Shrubbery, 2 year Roses, Clematis, etc.

ADDRESS W. S. LITTLE, Commercial Nurseries, ROCHESTER, N. Y.

PERLE DES JARDINS.

SURPLUS STOCK IN FINE CONDITION, 3-inch pots \$5.00 per hundred.

GEORGE H. BENEDICT, UTICA, N. Y.

JOHN CURWEN, JR., GENERAL

GREENHOUSE STOCK AND ROSES, Villa Nova P. O., Delaware Co., Pa. Money Order Office Bryn Mawr, Pa.



September Floral Styles.

Fall designs for decoration are very bold, and they are, of course made up with bright material; for more and more are wild flowers utilized during their season, particularly for room decoration. The desire for field flowers in winter time has been nearly a rage for several years. Clover, daisies, and buttercups at midwinter, are the most fascinating novelties, and if had in any quantity, would pay roundly. The shrub bloom brought in last winter was received very cordially, and now in summer and autumn, reasonable blossoms and foliage is demanded for all decorations that are on a large scale.

Pale tints no longer predominate; this will be a season of rich coloring in floral make up, and the florist will have more scope, certainly, when not confined to a trio of colors. A new wedding arrangement that is extremely novel and aesthetic will be introduced in October in time for the grandest fall nuptial decorations. It is called "The Merry Thought." A picture of this will soon appear. For the present, a very rich arrangement is made with golden rod, and one which will remain popular as long as this elegant flower that now gilds meadow and suburban waysides, can be obtained. The semi-curtains, generally known as French curtains, screen the windows. These are made by stalks of golden rods, which are so placed and trimmed, that the top blossoms form the gilt rod in appearance. A line of the bloom is spread across at the base on a wire, to simulate the lower rod. The head of the room, arch, or bay window, where the ceremony is to take place, is decorated more splendidly than customary. First a crescent of lacy greenery is formed by tall plants, and just in front of that the same curving line is carried out by a lattice or irregular fence made of wire or reeds, (the latter being firmly held together at the back by wire), and covered with the golden bloom. If the reed fence or screen is made, the top can be picketed, or finished in any irregular way that will show well against the foliage background. The new styles of vase baskets formed of raffia, are filled with golden rod and placed in fire places, and also on mantels and cabinets.

Bouquets grow less round, and very much longer from the end of the stems to the end of the center flowers, which are still fringing. This style grows in favor, and as a new shape in bouquets was very much in request, it will probably rule through the winter. The choicest arrangement for a wedding bunch at present is a center of lily of the valley without foliage; so that the sprays fall loosely. The surrounding flowers are odontoglossums, and there is a wide, deep fringing of Farleyense fern fronds.

The style for the reception bouquet and favor cluster is not yet defined. It will either be a small loose bunch such as is now carried at Newport, and is made of single pink hollyhocks, roses being substituted for the blossoms so singularly brought into prominence, or it will be a novel arrangement of Eucharis amazonica of long stems, which Mr. Klunder is likely to introduce. Florists of rustic ideas and modest endowments in their ability to make up will make a hard battle to still foist the big close circle of roses, with foil covered stems on the public, but people of taste are tired of being weighted down, and would prefer quality or artistic make up.

Wedding bouquets, worn at noon weddings by bridesmaids are charmingly trimmed with the natural flowers. Six were made lately by a milliner, who called upon a neighboring florist for the blossoms and some assistance. White, pink, and blue tulle covered the small frames. The flowers were placed around and right up the crown to meet a large front cluster.

The season of dinners has not yet opened. The latest affair at Newport was a mixed arrangement of flowers and vines. Wild honeysuckle was laid in graceful curves over the board. Bubble glasses (introduced last spring), stood here and there, being filled with selected American Beauty roses. The favors were small bunches of pink hollyhocks and adiantums. FANNIE A. BENSON.

New York.

New York.

Russian violets are coming in from College Point and are in good demand for the boxes of cut flowers ordered from fall watering places, such as Lenox and vicinity.

Business begins to stir perceptibly in floral stores. There is a good list of orders for wedding decorations and dinners.

Bird of New Jersey intends astonishing the trade with his array of forced hardy shrubs the coming season.

The gifted widow of the late James Reid, who is the only daughter of Peter Henderson, Esq., is engaged to marry a gentleman prominent in Philadelphia circles and associated in business with the Heckers.

"You may break, you may ruin the vase if you will, But the scent of the roses lingers there still."

Field mushrooms have been so scarce in this vicinity for the past two seasons, that unusual exertions are made to bring in early crops from hothouses. Some are already in market selling for one dollar a pound.

Wm. Smith, superintendent of the Botanical Gardens at Washington, gives the credit of the passage of

the bill reducing the rates of postage on seeds and plants to his famous collie, named after the donor, Peter Henderson. It seems that when Peter Henderson Esq., appeared before the sub-committee in Washington to make a speech in favor of the bill, he was somewhat frustrated, as speech-making is out of his line. A member of the committee arose and inquired of Mr. Henderson if he was acquainted with Peter Henderson of the Botanical Gardens. Mr. Henderson assured him that he was, when there was a hearty laugh all around. Mr. Henderson became jolly, and made a telling address, and the bill passed.

I heard a well posted gentleman say that no paper had been so thoroughly read and so popular among the florists, who are not great readers, (as it has probably occurred to many) as the AMERICAN FLORIST. Even the small boy in the greenhouse, the printer's devils' of these establishments, look eagerly for each number. F. A. B.

Chicago.

The West Park Commissioners will build conservatories in Douglas Park costing \$20,000.

Mr. Sidney Clack, for several years superintendent of the McCormick rose houses at Lake Forest, has removed to Redwood City, California, where he has charge of the rose houses of N. J. Britton, and will grow roses for the San Francisco market.

The father of Henry Hansen, the Rose Hill florist was probably fatally injured by having his wagon run into by a north side grip car on the 4th inst., while bringing his son's flowers down town. The wagon was turned completely over with Mr. Hansen under it. He sustained severe internal injuries as well as external bruises. At last report there was some hope of his recovery.

THE TUBEROUS BEGONIA ITS HISTORY AND CULTIVATION is the title of an admirable little book published by the *Gardening World*, 17 Catharine street, Covent Garden, London, England. The history of this plant, which has made such great strides within a few years is very interesting, and the cultural directions covering all methods of growing are very complete. As the tuberous begonia is undoubtedly destined to take a prominent place among florists' flowers this little work is very acceptable at this time.

J. A. PENMAN alias "Jim the Penman, the florist's friend," will discontinue his raids upon American florists for a short time. He sailed for England on the City of Rome, on the 5th inst., in company with F. L. Temple of Somerville, Mass.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.
 Advertisements, 10 Cents a Line, Agate;
 Inch, \$1.40; Column \$14.00.
 Cash with Order.
No Special Position Guaranteed.
 Discounts, 3 months, 5 per cent; 6 months, 10 per
 cent; 12 months, 20 per cent.
 No reduction made for large space.

The Advertising Department of the AMERICAN
 FLORIST is for Florists, Seedsmen, and dealers in
 wares pertaining to those lines ONLY. Please to
 remember it.
Orders for less than one-half inch space not accepted.
Advertisements for October 1 issue must
REACH US by noon, Sept. 25. Address.

THE AMERICAN FLORIST CO., Chicago.

THE PREMIUM LIST for the second
 annual chrysanthemum show of the
 Society of Indiana Florists, at Indianap-
 olis, Nov. 13 to 17, is received. Premiums
 to the amount of \$550 are offered by the
 society, in addition to a large number of
 liberal specials by individuals and firms.
 Among the latter are \$25 offered by Sie-
 brecht & Wadley, New York; \$10 by F.
 C. Huntington & Co., Indianapolis; \$25
 by Hill & Co., Richmond, Ind.; \$15 by
 M. A. Hunt, Terre Haute, Ind.; a silver
 cup valued at \$20 by the Indianapolis
 Florists' Club, and \$15 by Henry Michel
 & Co., St. Louis.

GEO. MULLEN,

17 CHAPMAN PLACE, (near Parker House),
 BOSTON, MASS.

**WHOLESALE AND COMMISSION DEALER IN
 Fresh Cut Flowers & Florists' Supplies.**

Flowers carefully packed and shipped to all points
 in Western and Middle States.
 Orders by Telegraph, Mail, Telephone or Express
 promptly attended to.

ROSE BUDS WHOLESALE.

THE OAKLEY ROSE HOUSES.

FOURTH SEASON.

This establishment, with over 20,000 feet of glass
 devoted to forcing buds for the trade, is now in bet-
 ter condition than ever, and is prepared to supply
 buds to the trade direct, either on transient orders
 at lowest market prices, or upon contract for any
 length of time at fixed prices.

VARIETIES :

BEAUTY, NIPHETOS,
 BENNETT, PAPA GONTIER,
 LA FRANCE, BON SILENE,
 MERMET, PERLE,
 BRIDE, SUNSET.

Telegrams via W. U. Tel. direct to greenhouses.
 Send for price lists, terms and contract prices.

CHAS. L. MITCHELL, Mgr.,

P. O. Box 188, CINCINNATI, OHIO.

Telegraph Address (via W. U. Tel. Co.) Cincinnati, O.

EDWARD C. HORAN,

WHOLESALE FLORIST,

36 WEST 29TH STREET,

The Bride, Mermet,
 and Am. Beauties.
SPECIALTIES. NEW YORK.

Mention American Florist.

A. S. KIMBALL,

WHOLESALE CUT FLOWERS,

170 Lake Street, CHICAGO.

I give Special Attention to Shipping Orders.

27th Consignments solicited.

Wholesale Markets.

Cut Flowers.

NEW YORK, Sept. 10.	
Roses, Perles, Niphetos, Bennetts	\$1.10
" Gontiers, Mermets	2.40
" La France	1.00
" Am. Beauty	7.00
Carnations	1.00
Lily of the valley	5.00
Gladolus	1.00
Violets	1.00
Smilax	15.00

BOSTON, Sept. 10.	
Roses, Texas	\$1.10
" Perles	3.00
" Mermets	4.00
" Niphetos	3.00
" Brides	1.00
" Gontiers	1.00
Lily of the valley	5.00
Carnations	1.00
Asters	1.00
Tuberose	1.00
Gladolus	2.00
Adiantum	1.00
Smilax	12.00

PHILADELPHIA, Sept. 10.	
Roses, Texas	\$2.00
" Perles, Niphetos, Bennetts	3.00
" Bennetts, Gontiers	3.00
" Mermets, La France	4.00
" Am. Beauties	10.00
" Puritans	5.00
Carnations, Bourvardia	75
Smilax	20.00
Callas	8.00
Harris lilies	8.00
Tuberose	1.00
Tuberose stalks	4.00
Single violets	25

CHICAGO, Sept. 11.	
Roses, Perles, Niphetos	\$5.00
" Bona, Safranos	2.00
" Mermets	1.00
" La France, Brides	5.00
" Am. Beauties	10.00
Puritans	12.50
Carnations, short	60
Carnations, long	80
Smilax	18.00
Adiantum	1.00
Alyssum	25
Callas	12.50
Tuberose	1.50
Heliotrope	1.00
Mignonette	50
Gladolus	1.00
Marigolds	60
Asters white	60
Asters colored	70

WM. J. STEWART,

Cut Flowers & Florists' Supplies

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

REMOVAL.

Owing to the rapid increase in business

N. F. MCCARTHY & CO.

Wholesale Florists and Florists' Supplies.

63 Bromfield St., BOSTON, MASS.,

Removed Aug. 15th to the new and spacious store

1 MUSIC HALL PLACE, off Winter St.,

where they shall be prepared to meet any and all
 demands.

**CUT ROSES
 AT WHOLESALE.**

The only establishment in the West growing Roses
 exclusively. 20,000 square feet of glass devoted to
 the growth of the Rose. We cut, pack and ship the
 same day; thus enabling the consumers to get fresh
 Roses without being handled the second time. We
 ship Cut Roses all over the country with perfect
 safety.

Also all the leading varieties of young Rose plants for sale

GARFIELD PARK ROSE CO.,

1688 West Madison Street,

Corner St. Louis Avenue, CHICAGO.

W. F. SHERIDAN,
 Wholesale & Commission Dealer in

CUT FLOWERS,

HAS REMOVED TO

50 West 30th Street, NEW YORK.

VOLUME III OF THE
AMERICAN FLORIST,

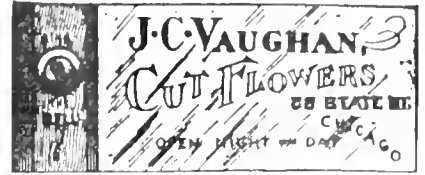
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INCORPORATED 1888,

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1237 Chestnut Street, PHILADELPHIA
 Consignments Solicited. Special attention paid to
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**C. STRAUSS & Co.,
 WHOLESALE ROSE GROWERS,**

Telephone 957. WASHINGTON, D. C.

Roses planted for Winter 1888-9
 Souvenir de Woolton, The Gem, Puritan,
 American Beauty, Annie Cook, Mad. Cusin,
 Papa Gontier, The Bride, La France,
 Bennett, Perle, Mermet.
 And other standard sorts

**WELCH BROS.,
 WHOLESALE FLORISTS.**

165 Tremont Street BOSTON MASS.
 We make a specialty of shipping choice Roses and
 other Flowers, carefully packed, to all points in
 Western and Middle States.
 Return Telegram is sent immediately when it
 is impossible to fill your order.

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Wholesale dealers in

Cut Flowers and Florists' Supplies

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KEXNICOTT BROS.,

WHOLESALE FLORISTS.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited

27 Washington Street, CHICAGO.

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The choicest Cut Flowers at lowest market rates
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 Address,

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N. STUDER,

WHOLESALE GROWER OF

PLANTS AND CUT FLOWERS.

ROSES A SPECIALTY.

Decorative Plants, as Palms,

Dracenas, Crotons, Ferns, etc.

Write for price list

N. STUDER,

ANACOSTIA P. O.

Washington, D. C.

Berlin Flower Basket.

I noticed an odd but showy basket in Berlin. It was an oval, deep plateau, two and a-half feet long with a handle one foot high, square at the corners. The body of the basket was of yellow, in marigolds, chrysanthemums and nasturtiums. A bunch of Jacq. roses was fastened on the side and a band of pink balsams covered the outer surface of the handle. For a yellow basket it was good.

OIL CITY, PA.—O. H. Strong & Co. have just completed three rose houses 300x12 and are preparing to build two more of same size—70,000 feet of glass in all—also a new cold storage basement 56x62 for plants and an ice reservoir 120x30. N. A. Ingham has built two small houses 30x11 each.

NEW DWARF WHITE DAHLIAS, SAGO PALMS, ETC.

Dahlia Camelliaflorabunda, full of buds, in 5-in. pots, \$3 per doz.; \$20 per 100; 4-in. pots, \$2.50 per doz.; \$15 per 100. Sago Palms, finest stock in the West; 1 to 2 leaves, \$7 per doz.; 2 to 3 leaves, \$12 per doz.; 3 to 4 leaves, \$24 per doz.; extra large plants from \$3 to \$10 each. Vucaea Alcolfolia Var. and Pandanus Veitchii, fine plants, 3-in. pots, \$6 per doz. Also a few hundred very fine Roses for Winter blooming, 4-inch pots at \$12 per 100. Brides, Nipetos, American Beauty and Paris. Address

JOHN G. HEINL, Terre Haute Ind.

Hughes' Soluble Fir Tree Oil.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, in kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants—such as ferns, etc., it used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

Dog fanciers should not be without it! It makes a silky Coat and produces healthy Skin Action; kills fleas, and is excellent for washing dogs.

Housewives should not be without it! Used with ordinary household soap it is an effectual disinfectant, BLEACHER AND CLEANER OF FABRICS. It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

Put up in 1 gallon tins, \$1.25; Full directions & trade put up in 1 quart tins, \$1.00; mark on each package.

E. GRIFFITH HUGHES,

Operative Chemist,

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AUGUST ROLKER & SONS,

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BARBED GLAZIER POINTS WITH OR WITHOUT LIPS.

Pat. in April and May, 1888.

No more CLIMBING OVER the glass.

NEW MODE OF SETTING,

Commencing at the top instead of the bottom.

These points hold better than all others. No. 1 will hold glass 10x16, and No. 2 will hold glass 16x24, not allowing it to slide 1/4 inch in five years.

Glass fastened with them, and the methods of using these points, will be fully shown at the coming

— FLORAL EXHIBITION —

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FOR SALE IN

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NEW YORK, by Peter Henderson & Co., 35 and 37 Cortlandt Street.

CHICAGO, by J. C. Vanahan, 116 W. Washington St. Retail without lip 50c., with lip 75c. per 1000. Pinners 30c. Liberal discount on large orders.

B. B. CHANDLER,

Patentee and Manufacturer,

HYDE PARK, MASS., U. S. A.

ONLY POTTERY MAKING A SPECIALTY OF

FLOWER POTS FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

713 & 715 WHARTON ST.,

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THE EVANS CHALLENGE VENTILATING APPARATUS.

WITHOUT A RIVAL EITHER IN COST, SPEED IN OPERATING OR SECURITY IN CASE OF STORMS.



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WHEN WRITING FOR ESTIMATES, PLEASE GIVE FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

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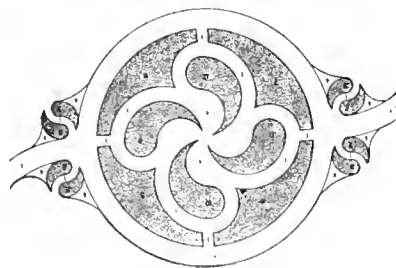
I had on Exhibition at the NEW YORK FLORISTS' CONVENTION

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Second Edition.

GEO. A. SOLLY & SON'S BOOK OF PLANS

For

Carpet and Ornamental Flower Beds.

With many it is a difficult task to lay out a carpet bed, or fancy design on the lawn, and perhaps more difficult to choose the proper plants to harmonize, so as to give the best effects. The object of these drawings is to assist gardeners and amateurs, and to enable them to choose the proper plants for their work. It is expected that this book will supply a long felt want, as it is the first and only publication entirely devoted to Fancy Flower Bed Designs.

This, our SECOND EDITION, consists of over 100 designs, finely engraved, on good paper, nicely bound, sent pre-paid to any address on receipt of Price, \$3. GEO. A. SOLLY & SON, SPRINGFIELD, MASS.

FOR WINTER FORCING. Per 100

- Bouvardias—Davidsoni, Neuner, etc., strong clumps \$8.00 and \$10.00
 - Carnations—Hinz's White, ext. strong clumps 6.00
 - Proz, Garfield and others, best sorts. 8.00
 - Begonia Rubra, strong, 3-in., blooming plants. 6.00
 - Callas—strong, blooming plants, 5-in. pots. 12.00
 - Double Primulas, 3-in. pots. 12.00
 - Smilax, extra strong, bushy, 3-in., \$30 per 1000. 3.50
 - Violets—M. Louise and Swanley White, \$6.00 & 8.00
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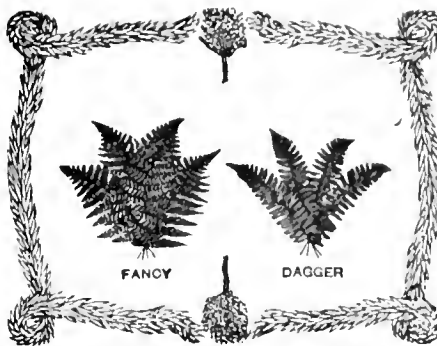
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 Strong Clumps from Open Ground.
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 \$6 00 per 100, \$4 00 per 100.
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 A few extra strong SMILAX, 3-in. pots, \$4.00 per 100.
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 Maria Louise, Swanley White and Czar.
 All strong, healthy plants, true to name, \$7.50 per 100
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 Cash must accompany order from unknown parties.
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 In order to make room for young stock, we offer the
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 Bride and La France, 3 1/2-inch, \$10.00, 3-inch, \$8 00;
 2 1/2-inch, \$5 00, per 100.
 Teas and Hybrids from open ground, \$4 00, \$8 00 and
 \$10 00 per 100. Per 100 Per 1000
 Smilax, strong plants from 2 1/2-in. pots, \$3 00 \$25 00
 Ampelopsis Veitchii and Quin-
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CARNATIONS.
 Peerless, Edwards, Hinze's White, Portia, Crim-
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That Ball Game.

I wish to correct an error in the last issue of the FLORIST. It is stated that the ball game at Iona Island was won by New York. Now there were five players from Philadelphia in the nine, and Philadelphia originated the game, and we Philadelphians believe that at least one half of the credit is due us. Please correct and save the flow of gore. PHILLIE.

The National Flower.

While a party from the New York convention were on their way to Queens, Saturday, the train passed a field containing wild carrots and golden rod and the following conversation was overheard:

She—There seems to be an abundance of the national flower here.

He—Yes, why, I never saw carrots so plentiful before.

She—(Contemptuously). Carrots! Why, it would take eighteen karats to equal even the color of our national flower.

"CUT RATE" FLOWERS.—The Cincinnati Floral Co. relates that a young man called at their store lately and stated that a young lady had requested him to get to cents worth of "cut rate" flowers. They had experienced several demands for to cents worth of smilax or M. Niel roses, but feel that a demand for "cut rate" flowers breaks the record.

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Roman Hyacinths ready about Aug. 20.
ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDIDUM, LILY HARRISII, AND ALL FORCING BULBS.

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" " Flore Pleno.	6.00	50.00
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J. HORACE McFARLAND, Harrisburg, Pa.

Chestnuts.

Look out for frost.
Is your winter supply of fuel in?
Are your boilers and heating pipes ready for instant use.

Have you a good supply of sand and potting soil under cover?

Take cuttings of all soft stuff now from bedded plants.

Label all stock plants and see that the plant is what the label calls for.

All plants from which you desire early flowers should now be under cover.

If broken lights of glass are not all replaced attend to it at once.

Be ready to fire as quick as cool nights come. Don't wait for frost.

Don't let your work get ahead of you now. Don't permit any delays at this season, when delays are especially dangerous.

Prepare to take an inventory of your stock as soon as things are safely under cover.

If you do not already keep a diary of work done, start one now. You will find it of incalculable value next season.

Get a blank book and keep accurate record of all expenses for coming season.

Ascertain what your plants cost you to grow, and, when the price drops below cost, you know what to do. Let the other fellow grow that stock and buy from him, if necessary.

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L. L. LAMBORN and WM. SWAYNE, 50 cents each.

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200 Callas, 3 & 4 year old bulbs, 5 & 6-in. pots \$15 per 100. M. R. SAUNDERS, Bradford, Ill.

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JAPANESE PLANTS.

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Plants.

	Per doz	Per 100
Begonia Rex, 15 varieties, 4-in. pots.	\$2.50	\$15.00
Begonia Louis Chretien.	1.50	10.00
" Semp. Gigantea, fine 3-in. pots		8.00
" Semp. Gigantea fine young plants		5.00
" Rubra Rubella, Robusta, Sandersonii and Weltoniensis, clean and thrifty, 4-inch pots.	1.25	8.00
Callas, 5 and 6-inch pots.		15.00
" nice blooming plants.	1.50	10.00
5,000 field grown Hermosa, ready Oct. 1st, 1000	\$90.00	1,50 10.00
5,000 field grown Geraniums, Happy Thought, Distinction, Mt. of Snow and Mad. Sallerol		1.00 6.00
2-in. pots from same, \$25.00 per 1000, 3 00		
Nice stock Geranium Fernifolia odorata 2 and 3-inch pots, \$5 and \$8 per 100.		

General Greenhouse Stock, low. Write for what you want. We can please.

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Surplus Stock of Carnations.

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500 Portia, fine scarlet	5.00
200 Grace Wilder.	6.00
500 Henderson.	4.00
200 Mrs. Carnegie.	5.00
300 Garfield.	5.00
The above all fine, healthy, stocky plants from open ground.	
500 Maria Louise Violets.	6.00
Pansies, an extra fine strain. They can't be beat for size and color.	1.00
50 Callas, blooming plants, pot grown.	5.00
100 Smilax, strong plants, 3-inch pots.	4.00

E. B. JENNINGS, Carnation Grower, Southport, Conn.

NEW CARNATIONS.

New White Carnations Wm. Swayne and L. L. Lamborn. Fine field-grown plants, \$35.00 per 1000.

New Dark Crimson Carnation, FIELDS OF KENNETT, \$25.00 per 100. Prices of other leading varieties on application.

Also 2,500 SMILAX, 3-inch pots, prices low.

WM. SWAYNE, Kennett Square, Pa.

CARNATIONS.

SNOWDON, strong, healthy plants, \$8.00 per hundred, \$70.00 per thousand.

R. J. DONOVAN,

HAVELOCK, COOK Co., ILL.

HILL & CO.,
Novelties and Plants

— OF —

INTEREST TO EVERY FLORIST.

Many never Before Offered either in Europe or this Country.

Abutilon Caprice—Handsomely formed, bright purplish red flowers with a rich luster, free blooming. Foliage marbled and blotched cream and golden yellow. Price 30 cents each; \$3 per dozen.
The New Orange Oleander X. Luteum—A decided novelty both in color and freedom of bloom. Price 50 cents each; \$5 per doz.

Plumbago Capensis Alba—The exact counterpart of Plumbago Capensis, with cream white flowers. This will be one of the leading new plants of the year. Do not confound this variety with the old worthless white variety. Electrocs of this by Blanc. Price per plant 25 cents; \$20 per 100.

New Begonia Argenteo Guiltata—A cross between B. Olbia and B. Alba Pieta. A handsome banded plant with rich green leaves, spotted with silver. A remarkable Begonia. Price 75 cents each; \$6 per doz.

Wood cuts of this fine novelty by Miss Stigleman.
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New Begonia Mirabunda—A cross between B. diadema and the Rex family. This is one of the finest ornamental leaved varieties ever introduced. A good strong growing vigorous variety. Must be seen to be appreciated. Price 70 cents each; \$6 per dozen.

Electros of this variety by Miss Stigleman.
New Begonia Lucy Closson—A seedling from Louis Chretien raised by M. Jacob Makoy of Ghent. This is one of the sterling novelties of the year and is a grand improvement on Louis Chretien. Rich in color and of a deep metallic hue. Price \$1 each.

Begonia Countess Louis-Erudy—This is one of the most beautiful of the Begonia family, and is destined to have an immense sale. For description see cut. It is one of the most curious and interesting plants grown. Of Rex parentage and growth yet so distinct as scarcely to resemble the Rex.

We have prepared an immense stock of this magnificent variety. Price 25 cents; \$20 per 100.
We have a number of other new Begonias which will be found described and priced in our wholesale list, which will be mailed on application. We will however, mention M. Lionnet's crosses between B. Subpeltata and the Rex type, viz: M. Lionnet, M. Hardy, Noemie Mallet, President de Bonneville.

These elegant Begonias scored special premiums at the Ghent show as being the finest ornamental leaved [new] plants of this year.

We have among Rex, Brant's new variety Liesondsii. Price 30 cents each.

Rex varieties—Scarce and new Mad. Luizez, Perle de Poitiers, Prof. Heide, President Desanny, Perle de Paris, Madam Malineta, Walter Reid, Von Aretia, Ed. Kennedy, Lienna, Ed. Andre and Paul Payonnet. Price \$1.20 per doz.; \$8 per 100; \$75.00 per 1000.

Rex varieties—Old but choice—Queen Victoria, Rex Duchess Brabant, Golconde, Grandis Rex Magnifica, Mad. Alwardt, Quadricolor, Lord Palmerston, Khissing Sohn, Silver Fleecce, Van Hannover and Abel Carrier. Price \$1 per 100; \$45 per 1000.

Begonia Sem. Glz. Rosen. Fine for winter.

\$1.00 per doz. \$8.00 per doz. 8.00 per 100

" " Elegans 3.00 " 20.00 "

" " Amelia 1.50 " 10.00 "

Novelties in Geraniums for 1888. The finest and best of the new single and double varieties of the year from Europe. Send for description and price.

We have to offer the finest new Geraniums of 1887, and some of them are exceptionally fine.
Geranium Brantii—The most remarkable Geranium of the day. Quite distinct from Heteranthe or double Gem. Grant, as it was called by some. There is no finer Geranium grown than Brantii. Price \$1 per doz; \$8 per 100.

A selection of finest named varieties, both double and single, for \$8 in 50 varieties all named.

Novelties in Roses for the current year—We have all the new Roses and have flowered and tested upward of 40 varieties—introductions of this year. The following show good points and are worthy of trial. Mad. Hoste, Tea; Gloire des Polyanthus, Poly; Madam Georges Brant, Rugosa, Tea; Princess Sagan, Tea, Countess Anna Thun, Tea, Dr. Pasteur, H. Tea; Madam Andre Duron, H. tea; Madam Georges Fernet, Polyantha.

All the fine novelties in Roses of last year now ready at \$10 per 100.

Promrose Dame, Folkestone, Pierre Guillot, Antoin Verdier and other choice Roses in great quantity at low prices.

Forcing Roses—Perle, Sunset, Niphetos, Mermat in various sizes.
New Chrysanthemums—novelties of last year both English, French and American.

New Chrysanthemums for 1888—These have been imported without regard to cost, and we shall offer the finest collection of new Chrysanthemums in the country.
We want you to send for our fall descriptive list which will be ready by September 15.

HILL & CO.,

RICHMOND, INDIANA.

SUPPLEMENT TO

THE AMERICAN FLORIST

NURSERYMEN'S DEPARTMENT.

Vol. IV.

CHICAGO AND NEW YORK, SEPTEMBER 15, 1888.

Supplement to No. 75

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THE AMERICAN ASSOCIATION OF NURSERYMEN.

GEORGE A. SWEET, Danville, N. Y., president;
G. J. CARPENTER, Fairbury, Neb., first vice-president;
CHARLES A. GREEN, Rochester, N. Y., secretary;
A. R. WHITNEY, Franklin Grove, Ill., treasurer. The next annual meeting at Chicago
the first week in June, 1889.

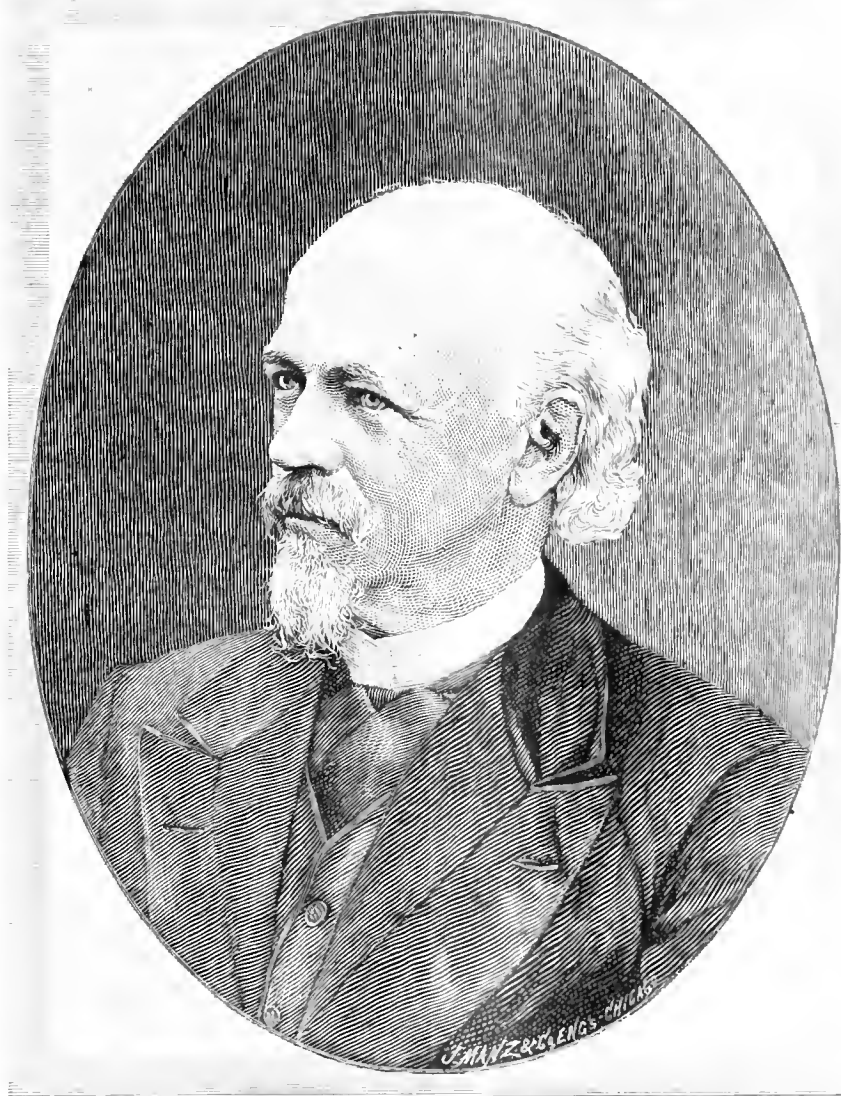
THE PRINTED REPORT of the proceedings of the thirteenth annual meeting of the American Association of Nurserymen, held at Detroit June last, is received. It is a neat volume of 91 pages, well printed on excellent paper and contains the many valuable essays read at the recent convention with the discussions on the same and other business. It is ornamented with the portraits of a number of prominent horticulturists. The report can be secured by remitting the membership fee of \$2 to Secretary Chas. A. Green, Rochester, N. Y.

OBITUARY.

D. WILMOT SCOTT, for many years secretary of the American Association of Nurserymen, died at his residence in Galena, Ill., August 28, of paralysis, aged 60 years.

Mr. Scott was born in Chenango county, New York, and remained there until of full age, when he came west and settled in Wisconsin, near Geneva Lake. After a year or two he went to Janesville, Wis., where he engaged in business for several years and in 1852 removed to Galena, where he has since resided up to the time of his death. In partnership with Dr. Roy he published the *Evening Jeffersonian* for some years. In December, 1885, he was appointed by President Cleveland, postmaster at Galena, and filled that office up to the time of his death.

Mr. Scott was well known to nurserymen from his long incumbency of the office of secretary of their association, which dated from the birth of the society, fourteen years ago, up to last year. He was a man of ability and untiring energy, always projecting new schemes of business in addition to those in which he was engaged. He was a good practical printer, and was connected with newspapers most of his life. The *Press* was his latest venture, and he did much hard



work in establishing it. His connection with it ceased in November of last year since which he has devoted his entire attention to his office and the nursery business, which was always his favorite hobby. He was genial in disposition and made friends easily and had many bitter enemies. Had it been possible for him to devote himself exclusively to a single business he would unquestionably have been successful.

Mr. Scott leaves a large family to

mourn his loss, and their sorrow will be shared by a large number of his trade associates, to whom the annual convention will seem indeed strange without the familiar face of their old friend. The funeral occurred August 30, at 3 o'clock.

The Seventeen Year Locust.

I want to know whether to believe this story or not. Will some one in the business either deny or indorse it? I do not

lack confidence in the party who told it to me as far as honesty is concerned, but he may have taken others say-so, and it may have been written up by that reliable editor who explained how to sow red cedar berries.

Last week, business took me into the country, and along the road side I noticed that the ends of most of the branches on oak trees were dead and hung straight down, as though broken and hanging by a thin piece of bark. In places other trees were affected, but it was seldom that the dead branches were noted on any but the oaks. A few of the residents explained that the damage was done by the "17-year old locust." They said: "The locusts come out of the ground in early spring and kick up a great clatter until the trees send out soft, young shoots, when they climb the trees and pierce the new growth about eight or ten inches from the end and deposit their eggs. In a few days or weeks the branch dies between the wound and the end, hangs down, finally drops to the ground and becomes covered up. In just seventeen years—to the minute, allowing for leap-years—these eggs are hatched and the trees catch it again."

I would like to ask Mr. Editor, if among your acquaintances there is one who has set on the fence for seventeen years to watch these things? C. B. W.

[We know of only two acquaintances who have been on the fence for any length of time. One is still there, but the other is not, for the top rail broke and he decided to at once set on the ground. But neither of these gentlemen were interested in insects.—Ed.]

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. If you want employment; if you want help; if you want to sell your business; if you want a partner, or if you want to buy a nursery, advertise under this head and you will get it. The cost is slight, try it.

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BEST TYING MATERIAL.

LARGE OR SMALL LOTS AT LOW RATES!
Importation of RAFFIA and STOCKS for Nurserymen a Specialty. *Sample FREE.*
H. S. ANDERSON,
Union Springs, N. Y.

The Pearl Strawberry.

GET THE BEST AND MOST PROFITABLE.

1 1/2 acres produced, the past summer, \$743.87 worth of berries under good ordinary culture.

order at once, as stock may be exhausted soon, \$5.00 per 500; \$10.00 per 1000, f.o.b. Send for circulars.

WEST JERSEY NURSERY CO.,
BRIDGETON, N. J.

SAMUEL C. MOON,

WHOLESALE NURSERYMAN,

MORRISVILLE, Bucks Co., PA.

Ornamental Stock a Specialty.

Evergreens, Shade Trees, Purple Beech, Flowering Shrubs, Vines, Gladiolus, etc.
Autumn Price List appeared in AM. FLORIST in Sept. issue. Write for list of SURPLUS STOCK with special low prices.

IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

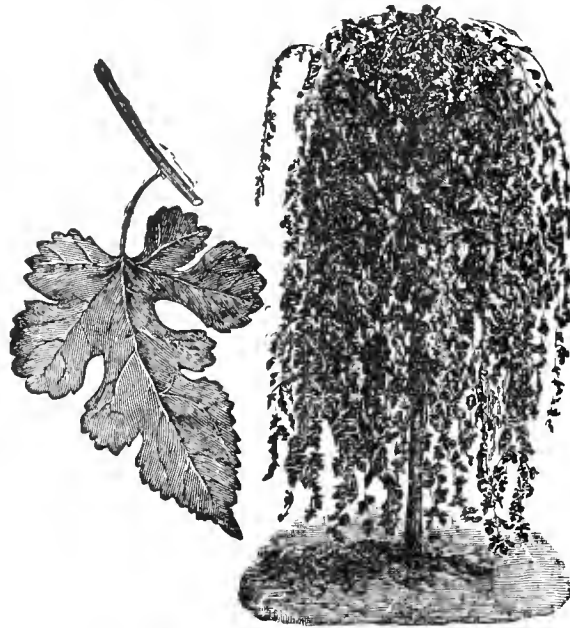
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WILLIAM H. SPOONER,

JAMAICA PLAIN, Boston, MASS.

Mention American Florist.

TEAS' * WEEPING * RUSSIAN * MULBERRY.



This most remarkable tree will undoubtedly, when known, take the foremost place among Weeping Trees.

And all who see it appreciate at once, that it is not only a

FIRST-CLASS NOVELTY, but at the same time a tree of *sterling merit and value.*

For further information, address as below.

Our semi-annual Price List ready August 1st, in which we offer a full line of general Nursery Stock.

—: LIST FREE. —:

JAMES B. WILD & BROS., Sarcoxie, Mo.

CHERRY TREES!!

If you need any Cherry Trees, 1, 2 or 3 years old in 100 lots or by car-load send in your orders to the undersigned.

PLENTY OF

ENGLISH RICHMOND, ENGLISH MORELLO, OLIVET, MONTMORENCY, OSTHEIM, WRAGG, MAY DUKE, GOV. WOOD, YELLOW SPANISH,

And others. Have also a general supply of Nursery Stock.

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Nurseryman,
BLOOMINGTON, ILL.
Mention American Florist.

PIKE CO. NURSERIES,
LOUISIANA, MO.

ESTABLISHED OVER 50 YEARS.

400 ACRES.

No Larger Stock in America; No Better; No Cheaper.

WRITE FOR TRADE LIST.

THE LAKE SHORE NURSERIES, OF ERIE, PA.,

Have a Complete Assortment of

App.e, Cherry, Pear, Peach, Plum,
AND SMALL FRUITS,

Which they would be pleased to give prices on.

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Box Clamps, COOPERATIVE CATALOGUES, Agents' Private Guide, Knives, etc. Publishers of Green's Fruit Grower. Introducers of Jessie Strawberry and Shafter Raspberry. Surplus of Grape, Currant, and Gooseberry Vines.

A full line of Nursery Stock. Send for free sample of FRUIT GROWER, or GREEN ON THE GRAPE.

GREEN'S NURSERY CO.,
CHAS. A. GREEN, Manager, Rochester, N. Y.



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Florists and Seedsmen Engravings of NEW FRUITS made at a nominal price. Catalogue of fruit cuts FREE. Complete set of all cuts 50 cts. (Deduct from first order.)

A. BLANC,
Horticultural Engraver,
Philadelphia.

1843.

1888.

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ROCHESTER, N. Y.
Fruit and Ornamental Trees.

Shrubs. Roses. Small Fruits. &c.

Prices on application.

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FRUIT STOCKS AND SEEDS

Both imported and home grown, for fall and winter delivery.

Large stock of

JAPAN SNOWBALL,
WEeping DOGWOOD,
JAPAN MAPLES,
and other Ornamental Trees and Shrubs.

Send for new price list.

THOMAS MEEHAN & SON,
Germantown, Phila., Pa.



Japan Snowball.



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Contains over

6,000 Names of (Live)

Florists, nurserymen and seedsmen, in the United States and Canada.

PRICE ONLY ONE DOLLAR.

AMERICAN FLORIST CO., Chicago.

UNPRECEDENTED PREMIUMS.

GRAND

CHRYSANTHEMUM SHOW

From OCTOBER 22nd to OCTOBER 27th, 1888,

— AT —

THE CENTENNIAL EXPOSITION, CINCINNATI, OHIO.

THE CENTENNIAL SHOW OF THIS COUNTRY.

BEST DISPLAY, COMPRISING THE LARGEST NUMBER OF WELL-GROWN PLANTS, ALL KINDS.

First premium	\$250 00
Second premium	150 00
Third premium	50 00

BEST FIFTY PLANTS, ALL KINDS.

First premium	\$100 00
Second premium	50 00
Third premium	25 00

BEST TWENTY-FIVE PLANTS, ALL KINDS, NO DUPLICATES IN COLOR OR KIND.

First premium	\$50 00
Second premium	25 00
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	FIRST.	SECOND.	THIRD.
Best Ten White.	\$10 00	\$7 00	\$5 00
Best Ten Yellow.	10 00	7 00	5 00
Best Ten Pink.	10 00	7 00	5 00
Best Single Specimen Yel.	5 00	3 00	
Best Single " White.	5 00	3 00	
Best Single " Pink.	5 00	3 00	

BEST SPECIMEN GROWN AS STANDARD.

First premium	\$15 00
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BEST SPECIMEN GROWN IN BUSH FORM.

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CUT FLOWERS.

BEST DISPLAY IN VARIETY, NOT LESS THAN THREE HUNDRED VASES OR GLASSES.

First premium	\$100 00
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BEST DISPLAY OF SINGLE BLOOMS OF THE MOST SORTS. ALL TO BE EXTRA FINE FLOWERS.

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Second premium	10 00

BEST GENERAL DISPLAY OF CUT FLOWERS.

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Send for Catalogue or other information to

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CHAIRMAN HORTICULTURAL COMMITTEE,

Centennial Exposition,

CINCINNATI, OHIO.

Early Firing.

A rule with a very successful Boston grower is to begin firing by September 15, regardless of the weather. He maintains a little heat in the pipes at night even if ventilation has to be done to reduce the temperature. This applies to all plants requiring a temperature of 55° and above.

It is not the few degrees lower temperature on these nights that does the damage, but the cold, clammy, dead atmosphere which is to be noted in unheated greenhouses, especially from midnight till morning, at this season. A very little fire heat remedies this, starts the air into circulation, sweetens the atmosphere and avoids a set back which is sure to result otherwise. A ton of coal used judiciously at this season will pay a larger return on the investment than any other a grower can make, and it is remarkable that there are so many penny-wise and pound-foolish growers who do not seem to grasp the situation.

2000 SMILAX PLANTS
at \$4.00 per hundred.

ROSES at \$8.00 per 100, 3½-in. pots, consisting of *Perles*, *Mermets*, *The Bride*, *Bon Silene*, *Niphetos*, etc. Also for September delivery, *Carnation Pinks*, *Bonvardias*—including *President Cleveland*—*Primroses*, etc.

W. A. Bock,
NORTH CAMBRIDGE, MASS.

8000 STRONG
FIELD-GROWN CARNATION PLANTS.

HINZE'S WHITE, GARFIELD and other choice varieties, \$8.00 per 100, \$50.00 per 1000.
GERANIUMS in var., 3 and 4-in. pots, \$4.00 per 100.
CYCLAMEN PERSICUM, strong bulbs (dry) \$8. 100
RICHARDIA ALBA MACULATA, dry bulbs, first size, \$8.00 100. Second size, \$5.00 per 100.

E. HALL & SON, CLYDE, O.

CHEAP AZALEAS.

The fine collection belonging to the estate of the late A. N. CURTIS. These plants are well grown, in from 10-in. to 18-in. pots, and

MUST BE SOLD THIS FALL.

Write for particulars to

M. I. O'BRIEN, Florist,

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HIGH GRADE PANSIES

A SPECIALTY.

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors.

Our Improved Giant Trimardeau as the best for market.

And New French Fancies as Extra.

Trade Packages of either variety at \$1 each. Seed of our own growth.

We have proved these to be the highest quality of Pansies at the present day, and are the same as we exhibited in Boston in May last.

DENYS ZIRNGIEBEL,
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SMILAX AND CARNATIONS.

Smilax from 3-inch pots; strong, healthy plants now ready.

Carnations, Excellent, stocky, healthy plants, ready Sept. 1st and after.

STOCK UNEXCELLED, and PRICES LOW

Address **ANDREW WASHBURN,**

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THE BEST AND CHEAPEST
DOUBLE PETUNIA SEED

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

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PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

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409 FIFTH AVENUE, NEW YORK.

TEA-SCENTED AND OTHER ROSES,
30,000 IN POTS.

Clematis, 50,000 in pots,

Grand plants, fit for shipment at any time.

200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

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KINGS ACRE NURSERIES,

ESTABLISHED 1785.

HEREFORD, ENGLAND.

ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

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Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

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NEW AND RARE PLANTS, ETC.

A very extensive Stock of Orchids:

EAST INDIAN, MEXICAN, CENTRAL and SOUTH AMERICAN, ETC. PITCHER PLANTS, a large Collection.

NEW AND RARE HOTHOUSE AND GREENHOUSE PLANTS, carefully grown, at lowest rates.

Finest Winter Blooming Roses, Clematis, etc.; DUTCH BULBS, large importations from leading growers in Holland. Fruit and Ornamental Trees.

Send Catalogues on application.

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WATER LILIES,
All Colors.

Young plants suitable for late flowering NOW READY.

Send for prices.

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NILES CENTRE, ILLINOIS.

Again offer a large stock of

CARNATIONS, HINZE'S WHITE AND SUNRISE.

Fine healthy plants, at \$8.00 and \$10.00 per 100.

SMILAX.
STRONG, STOCKY PLANTS.

3-inch pots, \$4.00 per 100; \$35.00 per 1000

2½-inch pots, \$3.00 " 25 00 "

500 Strings of Smilax, \$15 per 100 strings.

BRENNEMAN & PETTERSON,
HARRISBURG, PA.

Mention American Florist.

Ferns, Palms, Orchids.

FERNS FOR FLORISTS' PURPOSES,
BY THE HUNDRED OR THOUSAND,

GEO. WITTBOLD,

Cor. School and Halsted Sts.,

LAKE VIEW, CHICAGO.

Mention American Florist.

CHINESE PRIMROSES.

White, Crimson, Pink, Double Pink and Striped. Seedlings from selected plants of Rupp's, Veitch's and Covent Garden strains. Strong, 2½-inch pots, \$3.00 per hundred.

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HAMBURG, GERMANY.

Largest stock of Azalea indica, Camellias, Lilies of the valley for the wholesale trade. Price list on application.

PRIMULA OBCONICA
IN QUANTITY.

FINE, HEALTHY PLANTS.

PETER FISHER,
Montvale, Mass.

WESTERN FLORISTS

I NOW OFFER

BOUARDIA.—A. Neuner and Garfield, strong plants, 4-in. pots.....	\$15 00
VINCAS.—Rosea and Alba, fine for winter blooming, 2-in.....	3 00
AMPELOPSIS VEITCHII.—2½ and 3-in.....	5 00
Asparagus tenuissimus, 2-inch.....	3 00
Geraniums, 10 choice varieties, 2-inch.....	3 00
Rose Geraniums, fine plants.....	3 00
Oxalis, pink.....	3 00
Perennial Phlox, 8 varieties.....	5 00
Hibiscus, 5 varieties, 2-inch.....	5 00

Address **N. S. GRIFFITH,**

JOHN CO. INDEPENDENCE, MO.

(Independence is well located for shipping, being 8 miles east of Kansas City.)

PANSIES.

My collection of Pansies has for years attracted a great deal of attention. Florists and amateurs both conceding them to be of the highest quality.

My Collection received Premiums wherever Exhibited.

Pansy seeds, all varieties, mixed, per ounce, \$8.00; 1-8 ounce, \$1.00.

Trimardeau and all the large flowering kinds, mixed, 1000 seeds \$1 00. Send for price list.

OSCAR R. KREINBERG, box 294 Philadelphia, Pa.

ESTABLISHED 1837.

ROBT. J. HALLIDAY'S

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OF ALL GARDEN SUPPLIES

For the Autumn of 1888.

	each	dozen	hun.		each	dozen	hun.
Abutilon Golden Fleece, new rich golden yel. tree flowering.	\$ 15	\$1 50	\$10 00	Geranium, Ivy leaved, fine assortment.	15	1 50	10 00
" Eclipse, new foliage variegated for baskets, vases etc.	15	1 50	10 00	Hydrangea Rosea, flowers satin pink, coming plant	20	1 80	12 00
" Thompsonii plena, new double flowering	1 00	8 00		Hoya Variegata, the variegated leaved wax plant	25	2 40	
Acacia Pubescens, flowers yellow foliage drooping handsome	1 00	9 00		Hibiscus, assorted good kinds.	15	1 50	10 00
Acalypha Musinea, foliage beautifully marked	15	1 50		Inga Pulcherrima, scarlet flowers	30	3 00	
Antheicum Undulatum Striatum, new foliage finely variegated	30	3 00		Isoplepis Gracilis, grass like foliage for baskets, vases, etc.	15	1 50	
Antigonon Leptopus (mountain rose) rose colored flowers.	25	2 40		Ipomea Grandiflora, the new improved moon flower, true	15	1 50	8 00
Anthemis Coronarium, new golden Marguerite	10	1 00	8 00	" Ficifolia, tuberous rooted, front like a Dahlia, flowers violet crimson	15	1 50	10 00
Allamanda Schottii, flowers yellow, tubular, a coming plant	30	3 00		Ipomea Learii, rich violet blue	15	1 50	8 00
Alocasia Macroriza variegata, foliage white and green	50	5 00		" Mortonii, all colors combined	15	1 50	8 00
Aspidistra Larida, variegated (parlor palm) excellent house plant	50	5 00		Ipomoea are all perennials, cuttings should be grown now they will be in great demand next season.			
Asparagus Tenusissimus, the new smilax	1 00	9 00	6 00	Impatiens Sultanii, a desirable plant, crimson flowers	15	1 50	10 00
" Plumosus nana, handsome spreading green	1 00	9 00		Jasmine Gracillimum, white flowered in clusters	30	2 40	
Anthurium Crystallinum, ornamental leaved plant	1 00	9 00		" Catalonian, well known sweet scented white	15	1 50	
Ampelopsis Veitchii, true grown from cuttings, strong plants	1 50	10 00		Lemon Verbena, foliage scented, strong plant	1 00	6 00	
Azalea, assorted kinds from 6-inch pots, good heads, flowering plants	1 00	10 00		Lycopodium, assorted kinds	15	1 50	10 00
Azalea, assorted kinds from 5 inch pots, good heads, flowering plants	75	9 00		Lagerstromia Indica (crape myrtle) pink flowered	15	1 80	
Azalea, assorted kinds from 4-inch pots, good heads, flowering plants	30	3 00	20 00	Linum Tryginnii, flowers yellow, profuse blooming	15	1 50	
Azalea, assorted kinds from 3-inch pots, mailing size	15	1 50	10 00	Lantana Californica, flowers yellow, very dwarf	15	1 50	
" " 2-inch pots	1 00	8 00		Leonotis Leonaris (Iron's tail) flowers orange scarlet	1 00	8 00	
Begonia Rex varieties, variegated foliage	15	1 50	10 00	Mahernia Odorata (honey bell) flowers yellow	15	1 50	
" Metallica foliage green, metal like	15	1 50	10 00	Metrosedros Sempervirens (bottle brush) scarlet flowers	4	3 00	
" Louis Chretien, finest of all variegated kinds	15	1 50	10 00	Myosia Erecta, flowers tube shaped, 9line, yellow throat	15	1 50	
" Glaucophylla Scandens, drooping habit, flowers orange scarlet	1 20	8 00		Nepenthes (pitcher plants) without pitcher	1 00	9 00	
Begonia Rubra, Rosen and Alba	1 20	8 00		" " with pitchers	8 to 5 00		
" Manicata Aurea Maculata, handsome, foliage green and yellow	1 50	6 00		Physianthus Albens (cruel plant) flowers white sweet	15	1 50	
Begonia Brunatii, white excellent for cut flower trade	15	1 50	10 00	Pandanus Urtifolius (screw pine) from 5-inch	60	6 00	
Bouvardia Elegans, Leiantha, Davidsonii and A. Neuner	1 50	10 00		" " 3-inch	15	1 50	10 00
Coleus, the new set of 12 from New Orleans	1 50	10 00		" " Veitchii, foliage striped yellow and green	75	9 00	
Campidium Filicifolia, the fern like climber	15	1 50	10 00	Passiflora Quad., variegated foliage beautifully marked, a coming plant	25	2 40	15 00
Cape Jasmine (Gardenia) Florida, Fortunii and Camelliaflora, strong	1 50	10 00		Passiflora C. Elliott, white hardy	10	1 00	6 00
Camellia Japonica, assorted kinds	1 50	10 00		Peperomia in three kinds, lovely dwarf growing plants	15	1 50	
" " 2 feet with buds	2 00	18 00		Ruellia Juncea, flower scarlet, a popular plant	15	1 50	
" " 18 to 20 inches with buds	1 25	12 00		Rhynchospermum Jasminoides (Chinese Jessamine) flowers white, grand plant	15	1 50	10 00
" " Alba Plena, old double white from 3-inch pots without buds	25	1 50	15 00	Smilax, strong plants from 3-inch pots	30	3 00	4 00
Camellia Japonica Alba Plena and assorted kinds, fine for mailing 2 inch	15	1 20	10 00	Stigmaphyllon Ciliatum (Brazil) butterfly	30	3 00	
Cestrum Parqui (night blooming jessamine) a coming plant for next season	15	1 50	10 00	Stephanotis Floribunda, flowers white, popular plants 6-inch	1 50	12 00	
Cissus Discolor, foliage beautifully marked	30	1 80		" " 3-inch	30	3 00	
Chrysanthemums, all the leading kinds, small plants	1 00	6 00		Sonerila Hendersonii, very attractive foliage	30	3 00	
Cyperus Alternifolius (umbrella plant)	15	1 50		Torenia Asiatica, blue flowered for baskets	15	1 50	
Cyclamen Persicum, strong flowering bulbs	30	3 00		Thunbergia Fragrans, white climbing, grand plant for white flowers	15	1 50	
Cyanophyllum Magnificum, grand exhibit plant, lovely foliage	1 00	10 00		Violets Maria Louise, blue from 3-inch	1 20	8 00	
Cycas Revoluta Sago Palm, good young plants	1 00	10 00		" Swanley White, white from 3-inch	1 20	8 00	
Daphne Odorata, well known popular plant very fragrant	25	2 40	15 00	Spherogyne Latifolia, grand foliage	1 00	9 00	
Diellenbachia Bowmanii, Bauseii and Dieta, foliage plants	50	5 00					
Euphorbia Jacquinaeflora, flowers scarlet, scarce plant	25	2 40					
Echites Nutans, foliage beautifully marked	50	5 00					
Ficus Elastica (India rubber tree) 12 inches high	75	7 50					
" Macrophylla, more inclined to bush than F. Elastica	75	7 50					
" Parcelli, foliage variegated	50	5 00					
" Repens, foliage small ellings like ivy	20	1 80					
Fargugium Grande, foliage spotted	30	3 00					
Ferns assorted, my selection from 46 to \$10 per hundred							
Fittonia in three kinds, low growing attractive plants	20	1 80					
Fuchsias Frau Emma Topfer, best double white	1 20	8 00					
" Phenomenal double purple very large	1 50	10 00					
Geraniums Gloire de France, best double parti-colored	15	1 50	10 00				
" Le Cygne (White Swan) best double white	15	1 50	10 00				
" Glory of Belgium, best single white	15	1 50	10 00				
" scented foliage nutmeg, lemon and rose	1 00	6 00					

ROSES FOR FLORISTS.

FROM FOUR INCH POTS. Perle des Jardins, Bon Silene, Marechal Niel, Niphotos, Cornelia Cook, Etoule de Lyon, Gen. Jacqueminot, Sunset, Sistrano, Hermosa, Marie Guillot, La France

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NEWER SORTS. Papa Gonthier and The Bride, 3-inch, American Beauty, 3-inch, W. F. Bennett, 3-inch, Paritan

Hyacinths, Tulips and other bulbs, prices on application.
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ADDRESS

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Baltimore City, Md.

A Potato as Big as a Cow.

Here is a story from the Albina (Oregon) Courier, beside which all accounts of big steers, pumpkins, etc., at county fairs pale into insignificance. The story appears under the head "A Big Spud," and reads as follows: "There is a big potato on exhibition down at the Continental hotel bar that is perhaps the most immense vegetable grown in this country or any other. It was raised by A. Lapelle, ten miles north of this city, and measures 11 feet in length, 3 1/2 feet in diameter, and 9 1/2 feet in circumference, and when weighed on a pair of hay scales was found to tip the beam at 838 pounds. When Mr. Lapelle was digging his potatoes last fall and came across this monster he thought at first he had struck the root of the giant yamahe-tus, a tree of the eucalyptus order now extinct. Further investigation, however, proved it to be a potato. It took three men and a span of horses a day and a half to dig this potato out of the ground. It was then swung upon a big logging truck and brought to town. Though it may seem curious, this potato is as fine grained as its smaller brethren, and when sliced up and fried cannot be distinguished from an ordinary potato of good quality. The above figures may not be exact, as the editor lost his notes on the subject, and is compelled to rely on memory, but they are near enough for all practical purposes."

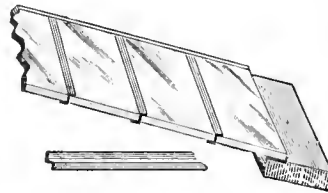


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THE PIONEER MANUFACTURER IN THE WEST,
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J. M. Gasser's Patent Zinc Joists,**



For putting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil burners for steam boilers. Send for sample and price list.

J. M. GASSER,
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Mention American Florist

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Manufactured by
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335 East 21st Street, NEW YORK.

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GREENHOUSE POTS

are our great specialty. We have three sizes of deep "Rose Pots" at \$3.75, \$4.00 and \$4.33 per 1000. We pack crates of mixed sizes to order. A crate usually weighs 40 lbs. and goes at buyer's risk and frt. We give samples in first crate. We ship on receipt of order and cash and without delay.

PRICES PER CRATE, CASH WITH ORDER:			
3,150 Thumbs.	\$8.00	875 3 1/2-inch.	\$5.50
2,625 2 1/4-inch.	8.00	600 4-inch.	4.75
1,875 2 3/4-inch.	7.25	560 4 1/2-inch.	4.90
1,300 special 3-in.	6.00	320 5-inch.	4.40
1,150 3-inch.	5.50	160 6-inch.	3.50
1,500 No. 1 Rose.	\$6.50	108 7-inch.	\$4.00
1,000 No. 2 Rose.	6.40	60 8-inch.	1.60
1,900 No. 3 Rose.	7.00	30 7-inch.	
100 4-inch.		20 8-inch.	4.00
125 5-inch.	5.00	15 9-inch.	
80 6-inch.		15 10-inch.	

From our new Circular just issued I clip this:

SAN ANTONIO, FLA., March 7, 1888.
SYRACUSE POTTERY CO.
J. NEAL PERKINS, Mgr., DEAR SIR—Please accept my thanks for flower pots which came in perfect order, not one having been broken, and of sizes and make entirely satisfactory.
Yours very truly, J. F. CORRIGAN.

He had paid in advance for his pots, and his letter was entirely unexpected by me, as also was this from one well known everywhere:

JOHN THORPE,
Florist, PEARL RIVER, N. Y., March 19, '88.
SYRACUSE POTTERY CO.,
The pots arrived safely and are very satisfactory. I must congratulate you on your very efficient packing, and the very substantial and handy crates you use. The crates are A-1 in the packing department.
Yours respectfully, JOHN THORPE.

Send cash by Express Money Order or N. Y. Draft to J. N. Perkins only. Checks cost 10c. each.

J. N. PERKINS, Manager, Syracuse, N. Y.

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VENTILATORS, RIDGES, GUTTERING AND LUMBER,

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CLEAR CYPRESS.

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

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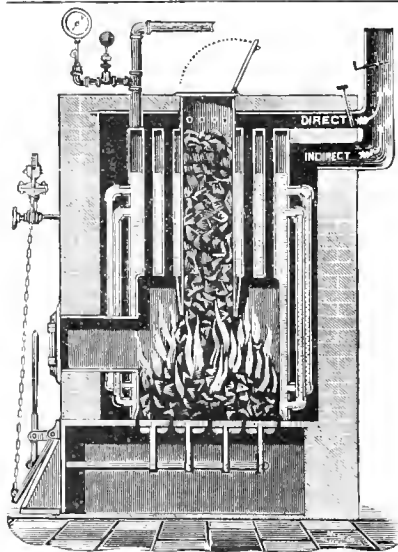
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HAND TURNED EARTHEN WARE

Price List for 1888.

2 1/2-inch... per 100,	\$ 30	8-inch... per 100,	\$ 5.50
3 1/4-inch... "	65	9-inch... "	6.75
4-inch... "	88	10-inch... "	8.00
5-inch... "	1.38	12-inch... "	23.50
6-inch... "	2.20	14-inch... "	50.00
7-inch... "	3.75	16-inch... "	100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to **HILLFINGER BROS., Fort Edward, N. Y.**



The Best Steam Boiler

For Greenhouse Heating,
STEADY FIRE NIGHT AND DAY.

EASILY CONTROLLED.
AUTOMATICALLY REGULATED.

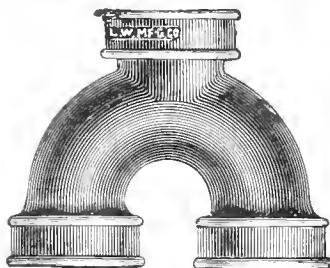
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FERGUSON BOILER COMPANY,

No. 1, 3 and 5 Church St.,

ALBANY, N. Y.

Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

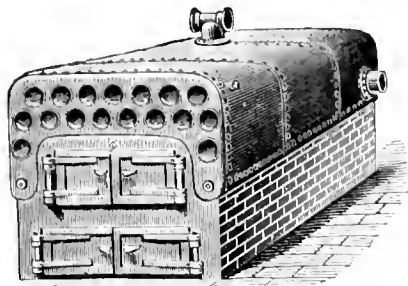
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Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe. Send for New List.

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The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in building glass.

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For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD, N. J.**

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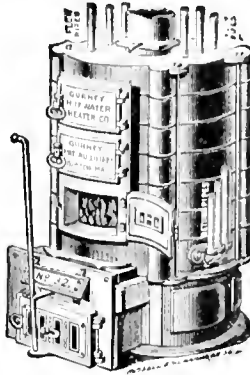
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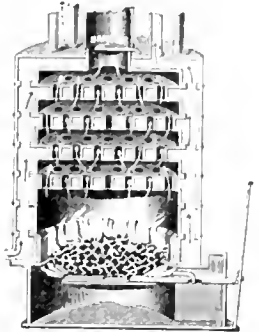
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Letter from Thomas Gray, of Fitchburg, Mass., in reference to

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FITCHBURG, MASS., April 13, 1884.
Dear Sirs:—In answer to yours asking my opinion of the Gurney Hot-Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.
Yours truly,
THOMAS GRAY, Florist



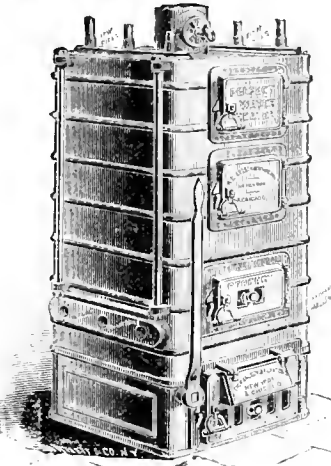
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GURNEY HOT WATER HEATER CO.,
237 Franklin Street, BOSTON, MASS.

SELLING AGENCIES: M. H. JOHNSON, 110 Centre St., N. Y.; R. C. A. WHITEHEAD Mfg. Co., P. O. Box 117, Monroe St., Chicago, Ill.; T. R. CHASE, 31 Edmund Place, Detroit, Mich.; WILLIAM GAUBERT & CO., 63 Third St., Portland, Oregon; J. L. FITZGERALD, 526 Fifth St., Covington, Ky.; VALE & MURDOCH, 25, 1-3, Hasell St., Charleston, S. C. MENTION THIS PAPER.

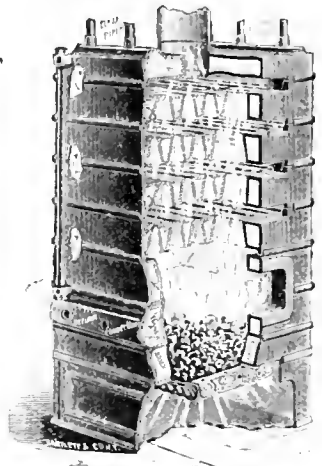
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These Heaters contain more features for saving fuel and labor, and are better adapted for heating Conservatories, Greenhouses, Dwellings, Offices, Schools and Public Buildings than any other makes of Hot-Water Heaters. By reason of their enormous heating capacity and increased square feet of boiler surface, and positive circulation, they are the only rapid circulating Hot-Water Heaters made. At a test made the 19th of January, 1884, at the works of the A. A. Grilling Iron Co., Jersey City, N. J., manufacturers of the "BUNDY Radiators"—where all the leading makes of Hot-Water Heaters have been tested—more power was developed, with less fuel, than any heater ever tested there. SEND FOR CIRCULARS.

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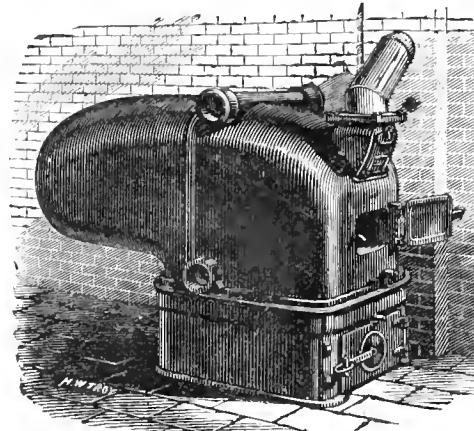
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For Raising Sashes in Greenhouses.
GALVANIZED SCREW EYES
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Send for Catalogue.
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Sectional View.

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HITCHINGS & CO.
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Five Patterns of Boilers,
Eighteen Sizes,
Corrugated Fire Box Boilers
Saddle Boilers,
Conical Boilers,
Base Burning Water Heaters
Perfect Sash Raising Apparatus.

Send 4 cents postage for Illustrated Catalogue.

CINCINNATI—The Oakley Rose Houses under new ownership and the old management are preparing to extend their business the coming season.

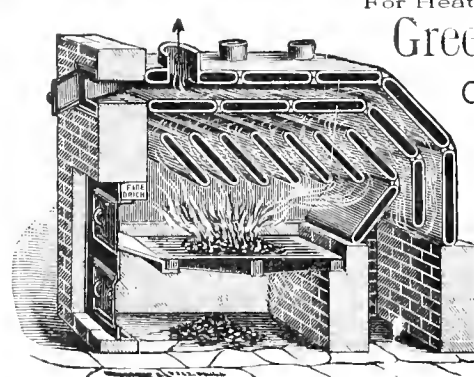
MINNEAPOLIS.—Trade is improving, as there have been several receipts lately at which flowers have been used profusely. All the local florists were busy during the recent flower show at the Exposition Aug. 28. Mendenhall of this city received 1st premium, Venske Bros. of St. Paul 2nd, C. A. Smith of this city 3rd, and Wessling & Wasaltry 4th. All the displays were excellent and many flowers were used.



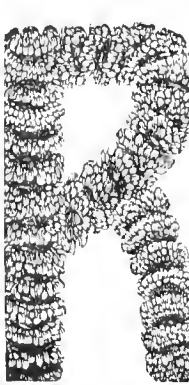
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Superior Hot Water Boilers.
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Of selling the highest priced, cheapest made and largest coal consuming
STEAM AND HOT WATER BOILER
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Improved Hot Water Boilers
For Heating
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THE AMERICAN FLORIST



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THE FLORAL DECORATIONS on the occasion of the lunch of sea food tendered to the S. A. F. at Queens the Saturday after the convention by V. H. Hallock & Son, consisted of some thirty acres of blooming gladioli, with a few acres of blooming tigridias, dahlias and lilies on the side. No grander decoration was to be seen anywhere.

CONVENTION PHOTOGRAPH.—We have received a copy of the photograph of the members of the S. A. F. taken in a body at Iona Island, August 24, from Messrs. Rile & Co. of Philadelphia, the photographers. It is an excellent photo for one showing such a large number of persons for it is rarely that every one in such a crowd can be kept quiet long enough for the purpose. In this case, however, absolute quiet seems to have been attained, and a very distinct photo was the result.

Your Fall Trade List.

Print your FALL TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

Leaves of Advice From a Limb of the Law.

(*For Young Florists.*)

I.

Thanks for the roses, they are superb. They prove that the temperature and humidity of your greenhouses are most skillfully regulated; they show that you understand your calling very thoroughly; but a man may be a most excellent workman and yet fail to prosper simply because his "business methods" are defective. Young men especially are very apt to treat "business methods" with contempt. They are so intent upon making sales that they utterly neglect to keep a record of the business of the day. Now, the law expects a man to be most careful with his books of original entry. It matters little what system of book-keeping he may follow, for a ledger is not admitted as evidence in a court of justice. The law calls for your *books of original entry*, mark my words.

What, you never expect to go to law? Nonsense, you may be sued for a bill of goods to-morrow; the seller claiming that he delivered 3,000 geraniums in 3-inch pots at \$5 per 100, while you maintain that you only received 2,000. Now if your books of original entry are in perfect order you will be safe; otherwise judgment may be given against you. The question at once arises: What did you order? Where is the record of it? If your order book or letter book shows that you ordered 2,000 instead of 3,000 all is well; but if you have kept no record of it and the seller has, why it is plain he has you at a disadvantage. He can come into court with written proof and you with nothing but word of mouth. At once appearances are against you.

You ask me whether a receipt is conclusive evidence of payment. No, only presumptive. That is, it may be shown that the receipted bill was left at your store by some stupid messenger who failed to collect.

Are you obliged to give a receipt? Yes, the law holds that when the *exact sum of money* is tendered a man must deliver a receipt, but there are decisions which hold that a man is not obliged to make change.

Now, you can't be too careful in giving receipts. If on account, state that fact plainly. A receipt is looked upon by the law as proving satisfaction of all debts due at the date it bears. As far as possible pay all debts and claims by check to order. This is the only safe way. But of course you will now and then pay small claims in cash over the counter. In such cases, you must be careful of three things; one is to know whether you have not a claim against the same house in your favor; another, to verify the correctness of the bill, and a third to be sure you are paying the only authorized agent of the creditor.

The moment a shipment of goods reaches you examine it, with a view to ascertain whether it comes up in quantity and quality with your order. If not, or if any of the goods have become damaged by unskillful and insufficient packing, make your claim for rebate by return mail and ask for advice as to whether the shippers are ready and willing to make good the loss; if not, the goods must be returned at once. This is the safest way. Of course it is optional with you to hold the goods and give notice to the seller of the deficiency in count or weight, or of the damage through bad packing and that you will hold him for all loss accruing to you. If, however, it is evident that the damage to the goods was the result of carelessness on the part of the carrier, make your claim at once at the proper office, setting forth the nature and extent of the damage.

I come now to the terms of purchase. This is very important. If you expect only the usual credit it doesn't so much matter; but if you ask for any variations state the terms upon which you expect to make the purchase in full and in plain language. The cash part of the payment you may make as you see fit; but the giving of a note is something which every young business man should do with the greatest care and discretion. The moment some young men find that they can throw their business paper around they are lost. They rush into a credit business far exceeding the limits of their financial strength and meet their ruin.

Ask yourself, what is a promissory note? It is a promise to pay a sum of money for some value received absolutely and without excuses or counterclaims at a fixed date. It is the easiest thing in the world to give a note and often the hardest thing in the world to pay one. Once given, the young business man feels so relieved that he often fails even to make a note of its maturity and is almost knocked senseless when the bank messenger walks into his store and asks for the money! He has forgotten all about it.

Make this a rule of your business life: Ask no more credit than your business can carry. Resist the temptation to turn your legitimate business into a mere game of chance! But, having given the note, see that it at once makes its appearance in all books of original entry, day book, bills payable, business calendar and in your private memorandum book. Keep it before your eyes. You can't tell who will be the holder of it when it becomes due. It may be your business rival will step into your store and present it. Think of the mortification, to say nothing of your loss of credit, should you be obliged to make the humiliating confession: "No funds to meet it."

But you must bear in mind that there is another way to work into a credit sys-

tem besides giving notes, and that is to indorse them. You are just beginning business, you are anxious to make sales. Some one wants 5,000 rare bulbs. You take his note indorse it and your bank discounts it. Everything looks bright and promising. You have cleared a hundred dollars. You increase your glass several hundred square feet, put out your own note for necessary materials. Like a bolt out of the clear sky comes word from your bank that the discounted note has gone to protest and that your account is two or three hundred dollars short. What's to be done? A cold perspiration gathers on your forehead. The hole must be filled at once, cost what it may. You rush off to some money lender who slaves your note at a ruinous rate and probably insists upon a chattel mortgage on your whole establishment as security for the loan.

I look on the dark side, do I? Well, perhaps I do; but ask yourself this question: "Who are the successful men of the day?" While you may find here and there business men who have made a fortune by a series of brilliant speculations, you find hundreds who have lost fortunes by a turn of the wheel of chance. Money easily made is easily lost. It is the careful business man who is satisfied with legitimate profits that wins in the end.

To resume: If at any time you find that you shall be unable to meet a note don't wait until it is presented. Take time by the forelock. If you know where the note is confer with the holder, state the case frankly, make a partial payment and get an extension. See to it that the payment is indorsed on the back of the note in the handwriting of the owner and holder, and above all, upon taking up the note don't fail to tear your signature from it; but don't destroy it; file it away among your papers.

In concluding this first talk let me impress upon your mind the necessity of preserving your business letters and papers—not in bundles regardless of date and contents; but properly indorsed and filed away alphabetically each year by itself. These are a few of the business methods which I hope you'll adopt and adhere to most tenaciously. By so doing you'll be saved from a vast amount of annoyance, to say nothing of a great saving in money.

UNCLE BLACKSTONE.

From Pittsburg.

The convention was a success. The papers read and discussed were valuable additions to practical horticultural literature, and can well be profitably studied by each member when he gets his printed volume of reports of the convention. Here I would say that it will pay any live florist to remit \$2 and become a member for this year in order to procure a copy, which can be procured in no other way.

The ribbon badges for the V. P.'s, etc. could have—in better taste—been secured by the emblematic silver rose leaf than with the more expensive but meaningless method adopted; the aforesaid rose leaf meanwhile has waxed fat and presented a bloated appearance when compared with the original adopted at Chicago.

It looks odd to see the committee on a national flower made up of two Scotchmen, Henderson and Gray, and one Englishman, Hendrick, although it is true a Yankee girl, Miss Taplin, was afterwards added. I hope she can hold them even.

To the courtesy and kindness of the

New York Club many of the members and their friends enjoyed their first trip on the Hudson river and reveled in the sight of historic Stony Point, West Point, Tarrytown, Sleepy Hollow, Tappan Zee, Spuyten Duyvel, Irvington, etc. From the deck of the steamer the location of the residence of Washington Irving was pointed out. J. Gould's residence was conspicuous, as were many of the grandest private establishments on the continent. Exclamations of delight were frequent as friend P. pointed out the places of interest when steaming up the beautiful river.

The executive committee deserves great credit for the labor they bestowed in digesting the matter to be brought before the meeting; next time, however, they should take steps to secure prompt opening at the hours advertised. M.

September 11.



Notes.

ONCIDIUM PAPILIO.—This beautiful species is a native of Trinidad and Central America, and consequently requires a warm atmosphere. It will do well on a block, but I have succeeded best by growing it in a comparatively small pot filled to the top with small potsherds and charcoal with a little coarse sphagnum pressed firmly around the roots. It requires plenty of water when growing and should never be allowed to dry out even when at rest. The compressed pseudo-bulbs bear a single green and brown spotted leaf, and send up their spikes during summer from the matured bulb. The flowers are borne singly and are pale golden yellow interspersed with brown; the same spike continues to bloom for several years and should therefore not be cut. There are several varieties of this species, the white one (*O. P. Album*) being the rarest.

ONCIDIUM LANCEANUM.—This is a lovely species with large fleshy leaves and scarcely any pseudo-bulb. I have seldom seen it in a flourishing condition, but it is by no means a hard plant to grow. It should be grown on a block of wood placed in a pot filled with charcoal and potsherds, the pot set in a saucer of water, in fine weather syringing over head once or twice a day is very beneficial during its period of growth, when at rest however, it should be kept almost dry, watching that the plant does not shrivel. The temperature of the East Indian house suits it best and it should on no account be placed in a cool house, even when at rest, or it will spot. It is found in New Grenada and Guiana on the branches and bare trunks of trees. The flowers are large and fragrant, sepals and petals pale green, barred and marked with brown, lip rose and violet. There are several varieties but all are handsome and worth growing.

CATLEYA ELBORADO.—This species is easily grown by placing it on a block with a little sphagnum, and giving a position in a warm moist house with copious syringing during the growing season, after the growth is finished

enough water should only be given to keep the bulbs plump; the flowers are pale rose with an orange spot on the base of the lip. I have at present the white variety *C. E. virginalis*, in bloom. The flowers with the exception of the orange spot, are pure white, it is a native of Rio Negro and Rio Japura, Brazil.

LÆLIA PRÆSTANS is a pretty dwarf species, growing six or eight inches high. The bulbs are slender and the leaves bright green, if grown in a warm moist house it will bloom twice a year. It does best in a pot filled with small potsherds and a little coarse sphagnum pressed firmly around the roots. The flowers are comparatively large, sepals and petals broad, pale rose color, lip crimson, throat white with crimson crest, resembling lines, it is a native of Brazil.

All of the above species will do well in the moss used for filling wire forms (*Dicranum scoparium*) where coarse sphagnum is unobtainable.

Pittsburg, Pa. R. M. GREY.

Long Island Notes.

BY WM. FALCONER.

PRIMULA OBCONICA doesn't set as many seeds as our growers could sell by a very great deal.

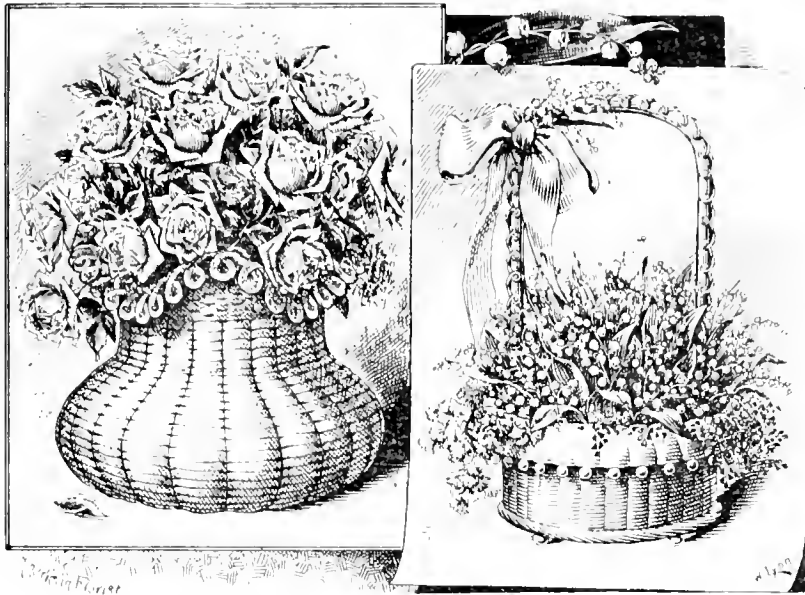
EUPHORBIA HETEROPHYLLA will boom next year. This is an annual species indigenous to Texas and Mexico, leafy after the fashion of a poinsettia, and which from the first of August onwards, displays brilliantly blazed orange-scarlet bracts or flower leaves. It is not as showy as the poinsettias of winter hot-houses because the leaves are not altogether red as in the case of the poinsettia, but instead are smaller and green bordered and with the broad scarlet marking in the middle of them. I used to grow this plant ten years ago, but like many another old foggy had to wait for some better business man to give it to the people.

DOUBLE FLOWERED ABUTILONS.—Andrew S. Fuller tells me that he hybridized and succeeded in getting the double flowered Abutilon Thompsoni to set seeds with him, and from these seeds raised and grew some 4,000 plants and bloomed every one of them. He expected to get some other double forms, a departure from the mother, but to his chagrin among all of his 4,000 seedlings not one at all had double flowers, but they presented a great variety of different colored blossoms.

WHAT A FUSS these new French cannas are raising in England. For short we call them gladiolus-flowered. Some are tall-growing, some dwarf, some yellow, terra cotta, cherry, crimson, and crimson-scarlet flowered, and others streaked and spotted. Some have pale green, deep green, glaucous green, bronzy and crimson foliage. Hallock's folks at Queens have lots of them in bloom now, I saw them there the other day, and I believe Dreer also grows a lot of them.

YOUNG & ELLIOTT's people have devised a shute by which they slide the boxes and hampers of plants from their upstairs auction rooms down and out into the wagons on the street.

I HAD *IPOMÆA BONA-NOX* seed from two sources last spring and in both instances they have turned out to be *I. muricata*, a purple-flowered evening blooming sort. Mr. Miller tells me that this is the same kind he grew under the name of *I. Bona-Nox* at Wading River last year. But I also have got the gen-



TWO NEW BASKET.

vine article and from seed too, got it from my old friend, Wm. Thompson, of England. It is now in bloom and lovely. The expanded flowers are 6½ inches across, white, fragrant and the tube 3½ inches long. These are moons in earnest. Although we may treat it as an annual it will bloom earlier and more abundant if treated as a perennial. Of course it is tender. The *I. muricata*, although not showy, is an extremely free bloomer and it begins to bloom early in summer and continues in flower till killed by frost.

CHINA ASTERS.—Between Burpee, Veitch and Germany I thought I had got hold of a pretty good lot of asters, but L. W. Goodell, of Dwight, Mass., who came to see me at convention time tells me he can beat me. About the first of September he had 40,000 asters in bloom! He believes in Comet, which was a novelty a year or two ago.

MR. SANDER, the great orchid merchant, of St. Albans, England, is now in this country, having arrived here a week ago. For the past two years he has had a permanent agency in New York with temporary quarters in Jersey City. He has now completed arrangements for a large property at Summit, N. J., and is to begin immediately to build a permanent orchid establishment there. Before returning to England he intends visiting Albany, Rochester, Chicago, St. Louis, Cincinnati, Easton, Philadelphia, and all other places where orchid collections are being formed. He has now gone on to Boston. Between 16 and 17 years ago when I first knew Mr. Sander he was foreman to Carter's people at Forest Hills, near London; to-day he is the largest orchid merchant on the face of the earth. Just see what business capacity, vim and perseverance can accomplish! Much of Mr. Sander's success in America is due to Mr. Fosterman, his agent here; and who is one of the most ardent, gentlemanly and popular men in the business.

Two New Souvenir Baskets.

The vase shaped basket on the left hand side is composed of nearly white braided raffia, woven with fine reddish brown cane and is thirteen inches wide. The top edge has fine scallops. It is filled with *La France* roses.

The long handle basket is eleven inches wide and is bronze and gold in color. It is filled with lily of the valley and clusters of *adiantum*—*A. Parleyense* one side and *A. cuneatum* the other. The rolled edge with ball trimming is very unique. Both baskets are designed by Jansen and filled by Hanft Bros.

Floriculture at the White House.

While going through the White House conservatories at Washington last June, I particularly noted superb collections of fuchsias and fancy caladiums, both of which are extensively used here for decorative purposes. The collection of fuchsias, containing between 300 and 400 plants, in fifty varieties, was by long odds the best I have seen for many a day, and through the courtesy of Mr. Pfister, the genial, capable head gardener at the White House, I am enabled to present readers of the *FLORIST* with the following brief outline of his cultural methods. Fuchsia cuttings are put in during November and December, potted off as soon as well rooted and shifted on from time to time until they are in 8 or 9-inch pots. Mr. P. prefers the latter size for decorative purposes, some few, however, he grows in 6 inch pots. In order to get plants of different sizes some are pinched back, the others being allowed to grow ahead, these latter make fine pyramidal plants, those grown by Mr. Pfister being perfect beauties, ranging from four to seven feet in height, according to variety and covered with flowers from the pot to the top of the plant. They are kept in a temperature of 45° to 55°, with plenty of air and room. For potting soil Mr. Pfister uses a compost consisting of two

parts well rotted sod and one part rotted leaf mold with sufficient sand to lighten the soil. To an ordinary wheelbarrow full of this compost a 10 inch pot full of crushed charcoal is added with a view to keeping the soil sweet and pure.

Mr. Pfister's caladiums are started early part of April in 5 and 6-inch pots according to size of bulbs, using the same compost as for fuchsias, minus the charcoal. As soon as the pots are well filled with roots the plants are shifted into 7 and 8-inch pots, a liberal supply of well rotted cow manure being placed over the drainage of each. They are then kept in a temperature of 55° to 70°, given plenty of room and by middle of May are ready for decorative purposes. The bulbs are kept dry from November to April. Both the fuchsias and caladiums are grown with a view to having them in condition by May, to take the place of such decorative plants as crotons, dracaenas, etc., which are then placed under treatment for next season. I also noted a nice batch of coleus grown—if I remember right—in 6 and 7-inch pots. They were not the largest specimens I have ever seen, but they were most unquestionably the cleanest and neatest grown.

I saw some excellent examples of carpet bedding in the White House grounds, but I find in my note book particular reference to two immense beds of crotons that in themselves amply repaid me for my visit. The beds were twenty-five feet in diameter, with about 350 plants in each, seventy-five varieties being represented altogether. The crotons were planted with such strict attention to height and color as to produce a most charming effect, none the less pleasing because this style of bedding has not yet been overdone. Mr. Pfister considers that the crotons best adapted for bedding purposes are, of the high colored varieties: Baron de Rothschild, Multicolor, Queen Victoria, Interruption, Evansianum and Disraelii; and of the light or yellow marked varieties: *Acubafolia*, Mooreana, Cornutum, Ovalifolium and Elegans. Baron de Rothschild he considers the brightest and best variety of all. A bed of it alone would make a fine show. A. W. M.

California Notes.

A Chicago florist traveling in California writes: "I have been sight-seeing in San Francisco, Oakland and Alameda, also at the California Rose Co.'s place on Vernon Heights. Rose growing is here done in a very crude manner, at least that which I have seen so far. Everything out of doors looks very barren except where irrigation is done, still the trees seem to keep green and stand the dry season remarkably well. Fruit is very abundant and large but I consider the flavor very inferior to eastern grown fruits. Vegetables are the same. Good sweet corn cannot be had here. There are many other things which are new and interesting to me and I hope at some future time to write you further."

PHLOX ROYALTY.—This hardy phlox bears flowers of a beautiful crimson-scarlet shade which makes it very desirable. If the first heads of bloom are cut away new ones will come from the side buds.

CALIFORNIA PRIVET makes a handsome hedge in the eastern states. It grows quick and its glossy compact foliage is very attractive.

A Pennsylvania Rose Plant Factory.

In the greenhouses of the Dingee & Conard Co., West Grove, Pa., probably more young roses are grown than in any other single establishment in America, sixty-four greenhouses being used for the purpose.

A visit to their place and an inspection of its appointments and the system with which work is there conducted suggests at once the idea contained in the heading. It is a rose plant factory conducted on factory principles. One of the first things to impress the visitor is the cleanliness and neatness of the houses, sheds, etc. No dirt, decaying foliage or rubbish of any kind is permitted to accumulate anywhere. Everything is kept sweet and clean. The walks are of clean sand, taken from the propagating beds after being once used, and muddy walks are not encountered anywhere, though there are neither board nor cement walks.

The ranges of houses are divided into sections, each section being under the care of a man who is responsible to the general superintendent for their condition. So thorough is the system employed that all the houses without exception presented the same neat appearance and with the plants all in vigorous health.

A curious fact in connection with this large establishment is that all the houses are heated by old-fashioned flues and the watering done with the watering pot, going to assure the small florist that the secret of successful growing does not depend upon the possession of modern heating apparatus, and that the flue may still be used to advantage even with the vigorous competition of the present time. Through the houses are open cisterns without number, all the rain water from the roofs of the houses being carefully saved.

In the potting sheds were noted portable potting benches which could be placed as required to save the most labor in carrying plants when potting or repotting. They were similar in construction to the one illustrated on page 6 of No. 49 of the FLORIST.

Summer propagation is done in the houses the same as in winter. The sand used is a very coarse bank sand, which is used for but one crop of cuttings. Mr. Wintzer states that he uses the same sand for rooting two crops of cuttings of shrubs, but will not risk a second crop of rose cuttings in the same sand. The sand after having been once used in the propagating bench is taken out and fresh substituted for the next crop. We mention this fact particularly, not as new, but in view of the fact that many propagators of the rose do not seem to appreciate the value of the point, though it has been thoroughly demonstrated. The changing of the sand prevents to a great extent the formation of the fungus, so destructive to rose cuttings. The fungus is always more likely to be troublesome with sand which has been used several times than with that which is fresh. In all our practices it will be found that "an ounce of prevention is worth a pound of cure." Common roofing slate is used for the bottoms of the benches. The first cost is said to be but little more than that of boards and in durability and freedom from fungus are of course far superior.

Only virgii soil is used for potting, the object being to produce a small, hard well-matured plant for mailing.

The entire product of this establishment is shipped by either mail or ex-

press. Their system of handling mail orders differs somewhat from that of most similar places. When the orders are sent to the packing house printed wooden labels for each of the plants in the order are selected from a case laid out much like a printer's case, with another label bearing the name and address of the customer, and the one who fills the order attaches the labels to the plants as he selects them. The plants, with the address label, go to the packer. In this way the order is retained at the desk and is handled by but one man, who is familiar with the stock, and keeps check on those who gather the orders.

A number of novelties in roses were noted, but none gave at present any indication of being of unusual value. A sport from Souvenir d'un Ami with a white flower, which originated here, is being grown for trial. The flowers seen were on rather small plants and the blooms were but of medium size, but if the sport should have blooms equal in size and the plants have the vigorous constitution and freedom of the Souvenir it will undoubtedly be of value.

Several houses filled with young plants of the hardy hydrangea (*Hydrangea paniculata grandiflora*) were noted, and several acres of the same valuable shrub in nursery rows were to be seen in full bloom. They are propagated from cuttings taken in July from plants growing out of doors, and rooted in the propagating house. They are then potted, five cuttings in a 4-inch pot, kept inside until they start, then hardened off outside and kept dormant over winter in a root-house. In the spring they are planted out in nursery rows and grown till fall when they are lifted and again stored until wanted to fill orders. From the stock of this popular shrub seen at this place we believe there will be no shortage the coming season.

The office of this concern is presided over by Messrs. Dingee, Conard and Leahy, while Mr. Antoine Wintzer is superintendent of the factory, and Mr. Benj. Connell of the packing department.

Best Roses for the General Florist.

In response to a request for the names of a dozen roses which were in his opinion, the most profitable for the general florist to grow, to sell as pot plants and for bedding, Mr. Antoine Wintzer, of the Dingee & Couard Co., West Grove, Pa., gave the following:

Of teas, Marie Guillot, white; Coquette de Lyon, light yellow; Etoile de Lyon, deep yellow; Comtesse de la Barthe, pink; Mme. de Watteville, light blush yellow; petals bordered with bright crimson; Mme. Welch, amber yellow, coppery yellow in center; La Princess Vera, white shaded with rosy crimson at base of petals, and Aline Sisley, light cherry red; of Bourbons, Hermosa, bright rose; Souvenir de la Malmaison, flesh color; of Bengals, Queen's Scarlet, rich scarlet; of hybrid-teas, La France, peach color.

With one exception all of those named are comparatively old and well known roses, which have been thoroughly tried.

In starting to grow pot roses for market the florist is generally puzzled to know which are best adapted to the purpose and will return the most profit, and it was with the view of assisting such in their selection that the above list was secured. A mistake made by many is to select a large number of varieties among which are usually many not at all adapted to the purpose in view. For the average florist a dozen varieties is all sufficient,

while if only a limited number of plants are to be grown even this list could be cut down with advantage. Confining yourself to a few varieties and doing them extra well will pay the best.

Queries.

ARE THE classes of roses known as polyantha, likely to prove valuable for winter flowers? K.

IN A RECENT NUMBER of the AMERICAN FLORIST rose "Mme. G. Bruant" was figured. Would you, Mr. Editor, or any of the readers of these pages recommend it for winter blooming? T.

[From what we have heard of the rose we should not recommend it for that purpose. Mr. Hill probably has an opinion to advance.—ED.]

WHO WAS the first man to force the now very popular La France for winter blooming? And in what year was it? Positive dates are what is needed. No guessing. Don't too many speak at the same time. BOO.

PRIMROSE DAME rose was recommended by M. A. Hunt at the convention as being the only variety introduced within the past two years that was worthy of trial for cut flowers in winter. Has it been tried in the critical eastern cities—Boston, New York or Philadelphia? E.

JELLY made from the fruit of *Rosa rugosa* is said to taste something like peach jelly, only more so.

Autumn Planting of Trees and Shrubs.

The advantages of planting deciduous trees and shrubs during the autumn are so great that we would invite their careful consideration.

Transplanting makes inevitable the cutting or disruption of a large portion of the roots. These cannot throw out new fibres and grow again until the broken roots become callused. This process requires some time, and if it is not completed before the spring drought comes, there is great danger that the plant will either die or have a struggle for life during the heats of the first summer. If planted late in the autumn the broken roots will have abundant time during the winter to become callused, and will thus be ready to throw out fibres in the spring and to withstand its dry weather. If planted early in the autumn, in October, the broken roots will not only have time to form a callus, but may throw out small fibres which will permanently establish the tree or shrub and make it safe against the cold of the following winter or the heat and drought of the ensuing spring and summer. The experience of the last spring, with the possibility of its recurrence shows the importance of fall planting.

Those who desire trees are accustomed to think that vegetation will not prevent transplanting until the first of May, and delay their orders accordingly. Even if they do not delay their orders, the rush in the spring makes it impossible for any grower of trees to finish delivery before that time; some purchasers must inevitably be among the last.

In the spring of 1886 there came in April unprecedented heat. From the 19th to the 25th, the thermometer ranged from 77° to 88°, and deciduous plants sprang at once into full leaf. Many who had large grounds to plant, and had not yet sent in their orders were deterred, and with new houses occupied, were obliged to look upon naked grounds for a year.



NEW CHRYSANTHEMUM MRS. JOHN N. MAY

Had they ordered the previous autumn and, if not ready to plant, heeled in carefully until spring, they would not have been in this position.

While the tree or shrub will callus and form roots, as well if carefully heeled in, as they will if planted permanently, yet, if everything is ready, it is better to plant permanently in the autumn, because the ensuing rains will settle the soil firmly about the roots, and thus prevent access to them of the hot air of a spring drought. We would emphasize the statement that even if purchasers are not ready to plant until spring, it is better to obtain their deciduous trees and shrubs in the autumn, heel them in carefully in a slanting direction, when the callus will form and they will be ready for planting as soon as the ground is open in the spring. Autumn planting is especially necessary with roses, larches, Japan quince, evergreen thorn and other plants which become excited by the first mild days of spring, and in that condition may die by transplanting. The exceptions to these remarks are magnolias, tulip trees, etc., in which there are certain structural conditions which make them succeed best in spring planting.

Rhododendrons can always be planted to advantage during September. Coniferous trees can also be planted during the last days of August and the first days

of September, provided the season is a moist one, and the ground in which they are planted is sufficiently near to the nursery for them to escape heating in transit.

Another argument in favor of fall planting is that then gardeners and laborers are all at leisure, there is none of the pressure inevitable in spring, and the planting can receive better attention. For all these reasons autumn planting of deciduous things is the bridge between effort and success. S. B. PARSONS.

New Chrysanthemum, Mrs. John N. May.

This is a large Japanese variety resembling Mrs. Frank Thompson, but the flowers are more incurved and there is more color, being of a delicate though lively shade of pink. In growth it is vigorous but dwarfer in habit than that well known variety. It is a free bloomer, fine either for cut flowers or as a pot plant.

Hardy Ornamental Shrubs.

Many florists already carry a limited stock of these, and we believe that it will pay every florist who sells bedding plants to carry a well selected stock of ornamental hardy shrubs, always provided he has room for a little nursery. We do

not believe that it will pay the average florist to grow this stock, but merely to buy and sell. A small plot of ground holding what might be called a sample lot would be sufficient. He could arrange with some reliable nurseryman to send each fall or spring stock sufficient to fill the orders he had taken during the previous summer. We believe that florists could in this way add quite an item to their income and at the same time further foster the love for natural beauty. If it could possibly be so arranged, by far the best way would be to lay out your own place with shrubs in as attractive a style as possible, keeping each tree and shrub labeled and you can then soon tell a customer whether a certain shrub will do well in your locality or not, as well as having a standing advertisement which would be of great value to you.

It must be admitted that very many florists places are anything but attractive after the first frost, as all tender stuff is housed and there is nothing to break the monotony except the piles of dirt, old boards, broken glass and other rubbish which generally abounds. A very small quantity of ornamental shrubs with a few evergreens, would do much to relieve the barrenness of the place and inspire a respect in the minds of your customers which in many cases is not now felt. A person can not be blamed

for feeling doubtful about intrusting the beautification of his grounds to one whose own place looks like a desert.

Don't be so narrow minded as to imagine that your sales of hardy stuff will lessen those of bedding plants. This has been proved a fallacy. In fact the reverse is true, for the shrubbery will be used merely as a beautiful background for your bedding plants, and as the customer begins to grow interested in the various and beautiful effects he may produce with both together he will increase his purchases of both. The large buyer of one will invariably be the large buyer of the other.

We believe that the florist can in this way largely supplant the "tree agent," who in many cases merits the abuse he receives. A customer invariably prefers to deal with one who is known to be responsible and one who can be found again if the goods prove to be not as represented. In addition the florist who dealt in shrubs in this way could for a small charge send his men to do the planting and in that way avoid many complaints which come to the distant nurserymen from inexperienced buyers, who simply dig a hole, drop the tree in haphazard and expect it to grow like a weed without further attention. The florist being in closer connection with his customers could also give them many "pointers" on caring for their shrubs, of which the average tree agent is as innocent as a babe. There are a large number of reliable nurserymen from whom supplies can be had at prices which will allow of a very good profit to the florist who deals in them. Now is a good time to plant a sample lot. Why not begin now and give the matter a fair trial. We firmly believe it will pay you well.

We append a list of stock which would be most desirable for a florist to handle in the manner named.

DECIDUOUS SHRUBS.

Daphne Mezereum, red flowers, small bush, blooms in April.

Magnolia conspicua, white, large shrub, May.

Forsythia Fortunei, yellow, flowing bushy habit, April and May.

Cydonia Japonica, scarlet, also white, dense bushy habit small to large, April and May.

Lonicera fragrantissima, medium sized bush, very fragrant white flowers, March to May.

Spiraea Thunbergii, airy bushy habit, not large, white flowers, May.

Spiraea Van Houttei, upright and arching habit, medium size, white flowers, late in May and early in June.

White Persian lilac, large shrub, May. Common Lilac, Marie Legraze, white, May to June.

Exochorda grandiflora, white, end of May, large open bush.

Pyrus Parkmani, small to large shrub-tree, blooms when quite small, crimson and white, May.

Deutzia gracilis, white, dense bushy low-growing, end of May or first of June.

Diervilla candida, white, small to large open shrub, June.

Diervilla rosea, blooms when quite small, but eventually becomes a tall flowing shrub.

Viburnum plicatum, small to large shrub, pure white, June. Best of the snowballs.

Philadelphus grandiflorus, large shrub, white, June.

Deutzia crenata, double-flowering variety, white, June, medium to large sized shrub.

Stnartia pentagyna, strong bushy habit, large white flowers, June and July.

Spiraea Bumalda, pink, in terminal umbels, June and all summer. A small shrub often with partly variegated foliage.

Lespedeza bicolor (not *Desmodium penduliflorum*) purple pea flowers, July, medium size.

Hydrangea paniculata (the typical form) white, showy, July and August.

Hydrangea paniculata grandiflora, white changing with age to rose purple, a large shrub, but in order to have good flowers cut it hard back every year, August and September.

Althaea, double-flowering red. Cut it hard back every spring, August and September.

Chinese Tamarix, rosy spray in August and September. Tall shrub. Old unpruned plants bloom most a month ahead of those cut hard back last winter.

EVERGREEN TREES.

These, if need be, for 20 years may be maintained in the proportions of shrubs. Nordman's Fir (*Abies Nordmanniana*).

Concolor Fir (*Abies concolor*) Colorado mountain stock only.

Douglas Fir (*Pseudotsuga Douglasii*), Colorado mountain stock only.

Colorado Blue Spruce (*Picea pungens*), get the blue-colored varieties and of Colorado mountain stock only.

Engleman's Spruce (*Picea Englemanni*), with same observations as applied to Blue Spruce.

Blue White Spruce (*Picea alba* var. *cerulea*).

Red Pine (*Pinus resinosa*). One of our most beautiful native trees.

White Pine (*Pinus Strobus*). Our common eastern pine, but unsurpassed in beauty by an exotic species. There are compact and dwarf forms of it too and all very fine.

Swiss Stone Pine (*Pinus cembra*). Very hardy and of somewhat dwarf columnar form.

Retinospora obtusa, arbor-vitae-like and one of the finest evergreens we have had from Japan.

Retinospora pisifera, more feathery-like and spreading than the last.

American Arbor Vitae, George Peabody, the finest of the golden variegated sorts.

American Arbor Vitae, Douglas' silver-tipped, a very hardy thrifty form, white variegated.

Japanese Yew (*Taxus cuspidata*), the hardiest of the yews.

Among lesser evergreens for massing, *Yucca filamentosa*, grand in early July. *Rhododendrons* *Everestianum*, *Roseum Elegans*, *Lee's Purple*, *Abraham Lincoln*, *Album Elegans* and *Gloriosum* are among the hardiest of the hybrids.

All evergreens, no matter how hardy they may be, require shelter, especially from the biting winds of winter. In the case of some of our western firs and spruces it is imperative that we get Colorado mountain stock, as this is perfectly hardy, whereas the same species raised from Californian or Oregon stock are not hardy in our northern states.

Another Bug.

"What, what's the matter, Charlie?" I asked when I met Charlie Sander, Prof. Sargent's gardener, and a couple of Harvard scientists tearing up the road towards the garden like an engine company to a house on fire. "Bugs, sir, bugs. My chrysanthemums are ruined." So I turned and joined in the chase. In the tips of the shoots we found a smart little

silvery-winged blackish insect not unlike a chinch bug, also two immature stages of the same, and all in considerable quantity. Their movements were very quick, but the learned men gathered and bottled enough of them to submit them to the eminent entomologist, Dr. Hagen, for his opinion. I afterwards learned that it is "A minute hemipterous insect, *Triphleps insidiosus*, closely related to the chinch bug." The mischief it did consisted in searing the opening and unopened tips of the young shoots and disfiguring and deforming the young flower buds. When I returned home I examined my own chrysanthemums, for I grow 1,200 plants and was very anxious about them, and I found the very same insect and in about the same numbers at work on my own plants. Still I don't see anything to be alarmed about, the mischief done so far isn't enough to disfigure the plants or spoil their blooming to any great extent. W. F.

New Chrysanthemum Walter W. Coles.

This new Japanese chrysanthemum is said by some good judges to be one of the most valuable varieties Mr. W. K. Harris has raised. The flower is very large, brownish orange or terra cotta in color and semi-double.

Boston.

The cut flower trade, both local and shipping, has started up in earnest. Such an early start speaks well for the coming season's business.

Two recent deaths, that of Col. Wellington, of the 1st Massachusetts regiment, and the veteran comedian, Warren, have given our florists a big boom of funeral work. These two funerals called for some of the most elaborate designs ever seen here.

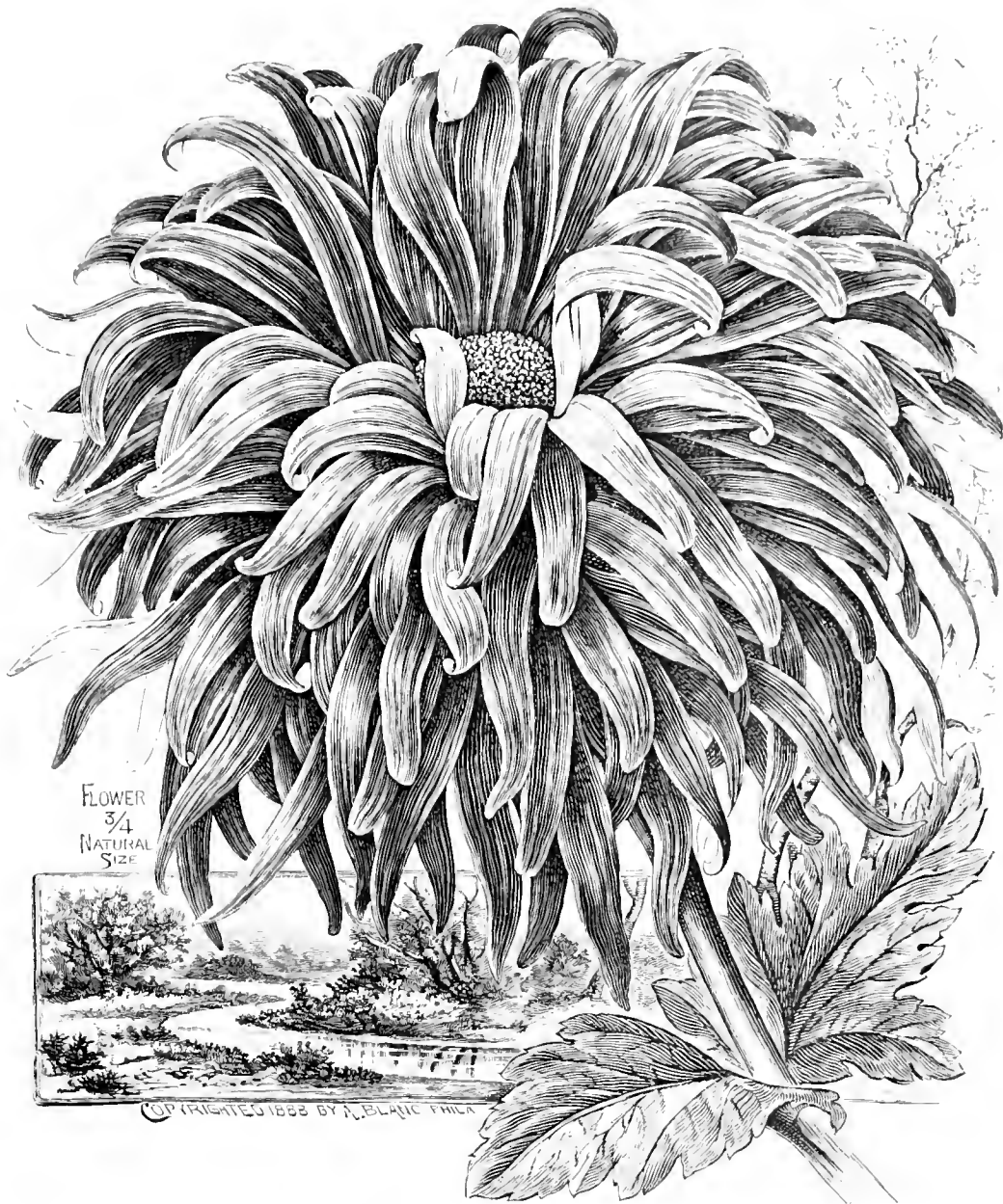
Peter Henderson was seen in Boston a few days ago. It was only a chance view however for it was unheralded and he turned neither to the right nor the left, but when the smoke had cleared away it transpired that he had bought the whole stock of Mr. Bock's new dwarf white bouvardia.

The stock of the Riverside Conservatories has been sold at auction. Auction sales of plants from W. C. Wilson and R. J. Halliday, and of orchids from F. Sander & Co., have been held during the past week. Attendance good and prices fair.

The sixtieth annual exhibition of the Massachusetts Hort. Society took place on September 18-19-20-21. The weather was very unfavorable and the attendance light. The display of fruit and vegetables was surpassingly good, that of plants very small, and that of flowers disgraceful. Detailed account of the exhibition will appear in next issue. W. J. S.

New York Notes and Comments.

Three big orchid sales in succession; F. Sander & Co., of St. Albans, F. Man, of Weehauken, and W. Matthews, of Utica. The first two realized ridiculously low prices: as for the third it is now a thing of the future. There were fine plants in both these former sales; some specimen *Laelia purpurata* in Mr. Man's lot were really magnificent. One mass with 67 bulbs and 35 leaves brought \$26. Another plant, described as a splendid variety, with sepals and petals pure white and dark lip, was sold for \$5. A large proportion of the plants were cer-



NEW CHRYSANTHEMUM, WALTER W. COLES.

tainly sold much below their value, unless we think that an orchid is only worth what it will bring.

It appears as if there will be plenty of orchid flowers in the market this winter; the growers will have a chance of deciding whether they pay or not. The retailers, in many cases, say they can't make much money by them. One large uptown florist who handles a good many fine flowers, declared that he lost money in orchid blooms. He received few direct orders for orchids; when he used them they were put in without previous directions to give a finishing touch to some basket or the like. The impression was given that the people who would make orchid flowers pay are the growers who have stores of their own. It would not make so much difference to them if they did not always sell the blooms, because they still have the chance of realizing by selling the plant. Doubtless the market for such flowers will increase, and such increase should make them more lucrative, but few retailers believe that any

man will realize a fortune by raising orchid blooms only. And mighty few commission dealers express a wild longing to handle these flowers; during past seasons the growers have usually found that the only way to dispose of such stuff was to apply directly to the retailers. It is pleasing to know that such flowers as *odontoglossums* and the like are appreciated in bouquets; the plants may be purchased for a mere trifle, and as they take up little room and require comparatively little attention a grower can't lose very much by them, even if the blooms bring small prices.

It is interesting to know that *La France* which had been grown in the open air down south appear free from liability to black spot when forced. At one well known growers these plants were perfectly healthy and vigorous, while the same variety raised here were sorely afflicted with the pest. Of course the spot may yet appear on the southern plants, but so far they seem clean enough.

Julius Roehrs is going in for palms,

like a great many others. If he is as successful with them as with his hybrid roses he will be a formidable competitor for those already in the field. He is growing on a lot of West Indian palms. Mr. Roehrs has just returned from a trip to Europe.

One Philadelphian, who recently imported 10,000 seeds of *Areca lutescens*, proudly states that the result is over 10,000 young palms. However, the excess is due to there having been a number of seeds thrown in, but the grower says that at least 98 per cent of the seed germinated. A pretty good showing, is it not?

Just now the trade in decorative plants is tolerably brisk, the various trade palms and pandanus being in demand. Perhaps there is much more *Pandanus utilis* sold for trade purposes than *P. Veitchii*, yet the latter has two good qualities in a higher degree than the former. It does not become rusty when grown in the house, and it will get along quite comfortably in a water-tight pot without any

drainage, or at least with very little drainage.

How many growers raise *Ardisia crenulata* in any quantity? Very few, and yet what a useful thing it is, clean looking, handsome and easy to manage. Around the holidays it is much to be admired when well berried. A good house plant, too.

A good many out-of-date plants are being revived nowadays; there is for example, the old-fashioned *Linum flavum*, which is suggested for forcing. Doubtless it would flower freely enough, and its bright yellow hue is decidedly pleasing, but it is not likely to stand very well after being cut.

There has been an effort during the past year to give a little "boom" to gardenias—"it's English, you know"—but few florists really look upon them with favor. They soon turn yellow, and they show an ugly brown bruise almost if one looks hard at them, and they usually have short stems. So retailers just keep a few to satisfy a very small demand, but there is little money in them, either for grower or retailer.

EMILY LOUISE TAPLIN.

Wilmington, Del.

The first annual exhibition of the Peninsula Hort. Society held in this city September 18 to 21, was of undoubted excellence. The floral display was very large and meritorious. Among the exhibitors in this department were Geo. W. Childs, of Philadelphia; Benjamin S. Turner, of Baltimore; Wm. Bush, Chas. S. Horn, M. F. Hayden, J. W. Lewis & Bro., J. L. Brown & Co., L. E. Baylis and John Brinton, of this city. An exhibit of aquatics was made by E. D. Sturtevant, Bordentown, N. J.

A table decoration by Chas. Fox, of Philadelphia, was very handsome. In the center of the table was a miniature lake of water an inch deep with a mirror at bottom which reflected the mossy banks, on which were growing small fancy caladiums, adiantum ferns and other plants. The outer edge was studded with Beuett, Meteor and American Beauty roses. At the ends of the lake were bunches of American Beauties. At the ends of the table were horns of plenty of roses, while the corners of the table were draped with clusters of roses. Other handsome floral designs were shown by H. C. Sheaffer, of Philadelphia, and J. L. Brown & Co., of this city. R. W. Hargadine, of Felton, Del., exhibited 75 varieties of cut roses all labeled.

Premiums were awarded to J. L. Brown & Co., L. E. Baylis, M. F. Hayden, J. W. Lewis & Bro., G. W. Brinton & Son, Benjamin F. Turner, John M. Hughes, H. Hanuum, R. W. Hargadine, Chas. S. Horn, Mrs. James Dilworth and Mrs. Jos. Graham.

Chicago.

Numerous changes have been occurring among the wholesale florists recently. A. S. Kimball and Fisk & Randal are new concerns which have started into this branch. Kenicott Bros. have increased their store room considerably and fitted it up in much better shape than before. E. H. Hunt is again forcing roses (into boxes) under electric light at J. C. Vaughan's, and S. Pieser, formerly with Kenicott, has migrated to St. Paul and will endeavor to establish a wholesale business there.

Gallagher is again established in his

old store which was thoroughly refitted during the summer, and now presents a very attractive appearance.

The debate at the Florist Club meeting as to the advisability of elevating prices to the seventh floor at the holidays was rather warm and the spirit moved many who had never before ventilated their opinions in open meeting. Some extremely amusing arguments were advanced and considerable fun was had though possibly the convictions of the opponents were not changed to any alarming extent.

Cemetery Superintendents Meet.

The Association of American Cemetery Superintendents held their second annual meeting at Brooklyn, N. Y., September 5, with fifty members present representing the states of Connecticut, Georgia, Illinois, Massachusetts, Michigan, Minnesota, New Jersey, New York, Ohio, Iowa, Pennsylvania and Rhode Island. The larger cities were fully represented.

The business of the meeting was almost wholly given up to the following papers and discussions thereon:

An Ideal Cemetery—F. Eurich, Woodlawn, Toledo, O.
Landscape Gardening in Cemeteries—R. D. Cleveland, Lakewood, Minneapolis, Minn.
Monuments and Headstones—J. W. Lovering, Mt. Auburn, Boston, Mass.
Vaults—L. J. Wells, Greenwood, Brooklyn, New York.
Cemeteries Within City Limits—A. W. Blain, Elmwood, Detroit, Mich.
Funerals—J. C. Cline, Woodlawn, Dayton, O.
Cremation—Geo. Troup, Forest Lawn, Buffalo, New York.
Lawns—Wm. Salway, Spring Grove, Cincinnati, O.
Roads—O. C. Simonds, Graceland, Chicago, Ill.
Management of Laborers—F. W. Higgins, Woodmere, Detroit, Mich.
Lot Enclosures—Geo. W. Creesy, Harmony Grove, Salem, Mass.
Greenhouses and Flowers—John E. Barker, Forest Hills, Boston, Mass.
Country Cemeteries—A. H. Sargent, Glendale, Akron, O.
Question Box.

The following officers were elected for the ensuing year: President, Charles Nichols, Fairmount, Newark, N. J.; Vice President, F. W. Higgins, Woodmere, Detroit, Mich.; Treasurer, L. J. Wells, Greenwood, Brooklyn, N. Y.; Secretary, A. H. Sargent, Glendale, Akron, Ohio. Time and place for next convention is Tuesday August 20, 1889, at Detroit Mich.

A full report of proceedings together with papers presented will be published in pamphlet form in November.

Youngstown, Ohio.

During the summer the cut flower trade has kept up well and promises to continue.

The weather has been all that could be desired for the growth of stock plants during the summer and at present carnations and violets are free from disease. We housed our Catharine Paul and Hinze's White carnations about the first of the month, as we find by doing this early they get well rooted and established on the benches before any fire heat has to be used. Chrysanthemums are also housed, such as were in the open ground during summer, and a good many of them have their buds well set, they are ahead of last year in this respect.

N. B. Stover, who has been foreman for E. Hippard, leaves next week for Grand Rapids, Mich., where he starts in business for himself. Mr. Stover is a first class florist in all branches, especially in the culture of roses, and while we regret his departure from our city, we look upon it as a change in the right direction and wish him all success.

Gustave A. Geng has entered upon his duties as gardener for Mrs. Todd, widow of the late Gov. Tod. She intends building a range of greenhouses to take the place of some which were burned down nearly two years ago. "Gus" knows how to grow plants and gardening generally, and if the old "Ted Home" does not get a renovation we are greatly mistaken.

MANSFIELD MILTON.

A Florist's Song.

While on the excursion at New York, during the convention, Mr. Robert Kift, the talented Philadelphia song writer and prestidigitator (no flies on that word), sang a song of his own composition which took his hearers by storm. We give the song in full below:

PROCRASTINATION.

(Air—Climbing up the Golden Stairs.)

You may talk about the good old times, the grand old days of yore,
But the good times a coming next year,
When for every good thing in the past we'll show you full a score,
Oh! the good times a coming next year.

CHORUS:

The good time's a coming, the good time's a coming,
The good time's a coming next year;
Oh! then we'll live in clover and have lots of dollars over,
In the good time that's coming next year.

I suppose I'll have to start it with some words about the market,
The market that is coming next year;
The committee's been appointed and several times anointed,
And will bring in their report next year.

CHORUS:—
The good time's a coming, the good time's, etc.
Now, twelve four-inch for one dollar has occasioned so much squaror.

That they're going to make a change next year;
And to make the cash more plenty they will charge you one and twenty,
Oh, they're going to whoop'er up next year.

CHORUS:—
The good time's a coming, the good time's, etc.
But I've special information as will bust the combination
Of this grasping growers' trust next year;
Oh! how we'll make them holler when we get them for one dollar
In the good time that's coming next year.

CHORUS:—
The good time's a coming, the good time's, etc.
Now just for the fun of taking, there'll be no more decorating
With a load of plants next year;
For although it may be funny, yet there isn't any money,
And it won't be tolerated next year.

CHORUS:—
The good time's a coming, the good time's, etc.
There's a deal more I could tell you, but you'd think I was trying to swell you
About the good things a coming next year,
So just go and take a rub at the minutes of your club,
And you'll find out all about next year.

CHORUS:—
The good time's a coming, the good time's, etc.

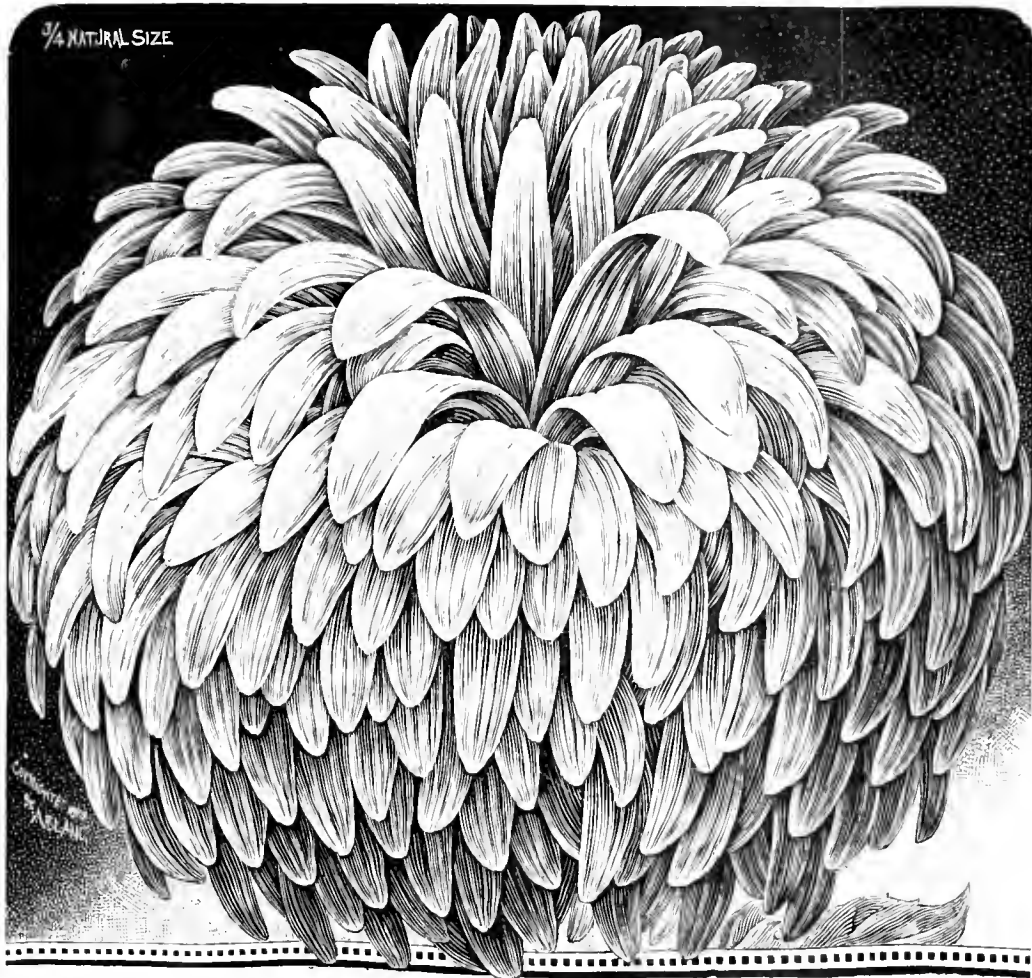
New Chrysanthemum, Mrs. A. Blanc.

This is an extremely showy and distinct sort. The inside florets are erect, outside reflexed and pendulous. Color a rich lavender.

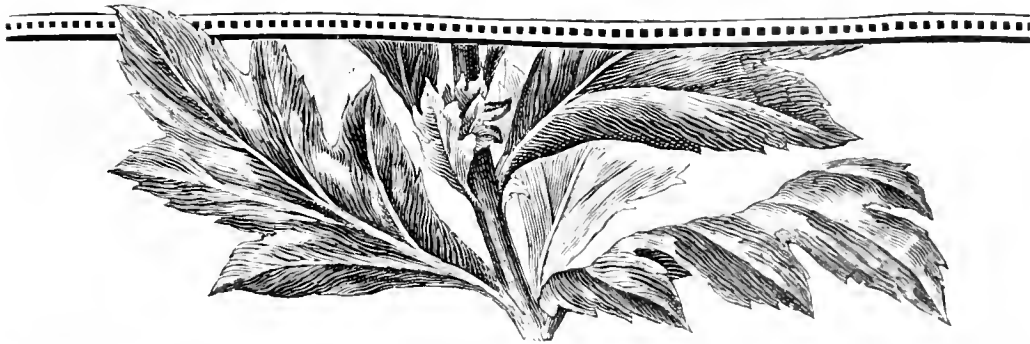
A Convenient Boiler Pit.

Messrs. Siebrecht & Wadley have been making numerous improvements at their place in New Rochelle, N. Y., the past summer. A new feature is a handsome little building to be used as an office, which is very neatly designed and ornamented, connected with a new palm house, a rooey and substantial structure, beneath the whole length of which is the boiler pit. This is a model in its way.

The floor of the palm house, which is



NEW CHRYSANTHEMUM, MRS. A. BLANC



the ceiling of the boiler pit, is supported by iron beams set about three feet apart and brick arches extend from beam to beam. Thus there are no supporting columns and the whole cellar is clear. The boilers are all ranged on one side and a tramway is being built the whole length of the pit so that coal can be easily carried in a small car from the main coal bin, which is located at one end of the pit, to within shovel reach of each boiler as required. The floor of the palm house is cemented evenly over the arches making a smooth floor in which are set at intervals plates of heavy glass to admit light to the cellar below. The pit is certainly fire proof and for general convenience, where a large number of boilers are to be attended to, it is ahead of anything we have yet seen.

Natural Gas in Flues.

In answer to "Subscriber," (page 64), we would state that we are using natural gas in flues in several houses, each 70 feet long, but in no case does the flue return. The furnace being at one end, the chimney at the other. They give perfect satisfaction, and were we in "Subscriber's" place, would introduce gas and make no change in furnace. Our other houses are heated by hot water, the fuel being natural gas, and nothing could work nicer and give less trouble.

A. M. & J. B. MURDOCH,
Pittsburg, Pa.

Natural Gas in Flues.

I have used natural gas as fuel in flues to heat greenhouses for two years, and

believe that there is no better fuel, provided the supply is full and equal at all times. I turn on the gas in winter as soon as the sun goes down and in about two hours the houses will be warm enough. I then turn it off all but a little and the temperature will be maintained evenly during the whole night unless there should be a remarkable change in the weather. During cloudy winter weather I have maintained the same temperature for several days without looking after the fire in that time.

No change is necessary in the furnace except taking out two of the grate bars to let the supply pipe through. Use a mixer so you will not have any soot, and broken fire brick for filling. The broken bricks will spread the fire in the furnace.
Bellevue Pa. F. BURKE.

News Notes.

DALLAS, TEXAS.—The seventh annual meeting of the Central Texas Horticultural society was held in this city, August 15.

DES MOINES, IOWA.—W. M. Elrod, formerly of Marshall, Mo., has leased the greenhouses owned by A. W. Prater and located here.

PERU, Ind.—F. B. Tinker, formerly of Painesville, Ohio, has purchased the greenhouse property of G. C. Lange here and will succeed him in business.

PROVIDENCE, R. I.—The annual exhibition of the Lonsdale Botanic society was held August 25. There was a very creditable display of flowers and plants.

JANESVILLE, WIS.—At the recent fair the floral display was very fine. The majority of the first premiums were awarded to W. H. Hill and Walter Helms.

ST. PAUL.—August S. Swanson has purchased the florist business formerly conducted by E. V. Beales, at corner of Cedar and Second streets, and will carry on the same.

RICHMOND, VA.—A Florists' Club has been organized here with the following officers: President, John R. Hooper; Vice-President, William A. Hammond; Secretary, J. Harry Harvey; Treasurer, T. W. Wood.

FRANKLIN, PA.—T. W. Bell is preparing to erect a new greenhouse 100x18. The Venango County Agricultural Society held its annual exhibition Sept 4-7. Premiums for plants and flowers were offered in eighteen classes.

PITTSBURG.—John R. & A. Murdoch have just completed three new houses each 150 feet long, using wrought iron gas pipe for columns and purlins. Steam generated by natural gas furnishes the calorific when the sun is off duty. Trade was dull during July and first part of September but is picking up with prospects of continuing to improve steadily. Palm leaves (*Cycas revoluta*) are likely to be in demand for funeral work.

CLARKSVILLE, TENN.—The Evergreen Lodge Flower Garden has just completed two handsome houses, one 120x20, another 85x20, to keep up with the rapid growth of their business. This concern has not been in active operation more than five years and is now favorably known throughout the whole south. There is twenty acres devoted to the garden, with 25,000 feet of glass. J. J. Crisman is proprietor. Jas. Morton, manager.

NEW JERSEY.—Several greenhouses have been put up in the northern portion of Bergen county, N. J., this summer. At Ridgewood, N. J., Henry Hales is building new houses and putting in a steam heater for his whole plant. Herbert Forbes has built two houses, and Andrew Snyder one. At Ramseys, N. J., George Welch has completed three new houses and Wm. J. Thurston has rebuilt some of his old ones. At Saddle River, N. J., the J. G. & A. Esler Co. have completed an additional house.

ALBANY.—Louis Menaud, the well-known florist, was 81 years old July 1, and is in excellent health. He has built up a beautiful place about midway between Albany and Troy, known as Menaud Station, easily reached from

either city. Jno. Dingwall has built on Troy road three new houses each 100 feet long by 18, 12 and 6 feet wide. John Murnane has built a new house 60x14. George Porter has erected two new houses—one 72x13 and the other 54x20. C. W. Brown, formerly with James Hendrick, has opened a floral store in Maiden Lane. A. F. Chatfield is demolishing his houses and expects to build dwellings in their place. Mr. Sam Goldring is now one of the firm of H. G. Eyres & Co., who are now succeeding Mr. James Hendrick at his Pearl street store.

MONTREAL.—The Florists' and Gardeners' Club held its first annual excursion and picnic to Otterburn Park August 1. More than 150 joined the excursion and passed a very enjoyable day at this favorite resort, and as all the members are bent on making the club a success, everything passed off very satisfactorily. Games were prepared for the juvenile members of the party and thoroughly entered into, and all were well pleased with the day's outing. The membership of the club shows a steady increase and that, together with the unanimous working of the various committees, augurs much for the future success of the club. Business is not very brisk at this season, but as several of the florists are making additions to their greenhouses it is evidently expected that there will be an increased demand for flowers this winter.

New York.

Alex. McConnell was married the last day of August to a young lady from Maine.

Kluuder is importing several choice basket designs in willow.

Mr. Charles Henderson has lost his youngest child, a baby 20 months old.

Mr. John Thorpe intends bleaching the tops of Russia turnips, which are considered finer than sea kale, for a novelty next winter, and will bring these in market about Christmas.

The report of the treasurer of the New York Florists' Club, Mr. Cowan, read at the September meeting, shows a balance of \$856.76 in the treasury. A motion was carried to give a dinner to members.

Thomas H. Spalding, Esq., president of the New York Hort. Society, has returned from Europe.

A large combination auction sale of palms and other ornamental plants the 18th ult., brought out but little interest and poor prices.

It is very dull in the seed stores at present. New catalogues are about completed. I have been privileged to see some of the covers to these books. They are very elegant and artistic.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Oct. 1—Tem. morning 54°, noon 59°, evening 63°. Wind W. Carried primulas, cinerarias, etc. from frame yard to houses. Repotted part of cinerarias into 3 inch pots and some out of pans into 2 inch pots.

2—Tem. 64, 72, 65. SW. Sunday.

3—Tem. 44, 60, 50. NW. to W. Removed offsets from echeverias, cleaned them and placed in sand to root. Continued carrying plants from frame yard to houses.

4—Tem. 44, 60, 50. NW. Wheeled sand and tan bark out of frames in order to get at the manure. Continued propagating echeveria offsets. Pricked in

paus seedling calceolarias. Repotted winter begonias.

5—Tem. 49, 56, 54. NW. to SW. Same as yesterday.

6—Tem. 54, 66, 64. SW. to E. Same as yesterday and removed lath shading from No. 1.

7—Tem. 64, 82, 75. SE. to S. Continued propagating echeverias from offsets, also glazing and arranged No. 1. Continued wheeling sand and tan bark from frames and placing in piles.

8—Tem. 67, 73, 68. S. Same as yesterday.

9—Tem. 65, 72, 67. W. Sunday.

10—Tem. 54, 58, 48. N. to NW. Took cuttings from another lot of geraniums. Lifted vincas which were planted outdoors, potted and placed them in No. 7. Commenced potting stock geraniums for vases, etc.

11—Tem. 44 54, 46. NW. Continued potting stock geraniums, also Begonia semperflorens rosea, etc. Potted from outside Achyranthes Lindeni and metallica. Commenced carting manure out of frames.

12—Tem. 34, 54, 50. NW. to SW. Same as yesterday.

13—Tem. 41, 54, 50. W. to NW. Cleaned up most of the faucy beds outside for the season. Potted for stock Mt. of Snow geraniums. Gathered seed of Verbena venosa and portulaca.

14—Tem. 36, 51, 45. N. Potted Mt. of Snow geraniums, fuchsias, thymus and vincas. Continued propagating echeverias from offsets. Cut down caladiums and dahlias and took roots inside.

15—Tem. 41, 57, 53. S. Potted and plunged in frame 300 hyacinth bulbs. Commenced spading tulip beds. Took in side remainder of caladium and canna roots.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By a competent young gardener and florist; single; 11 years' experience. Best of references from here and the continent. Address H. care American Florist, Chicago.

SITUATION WANTED—By competent German florist, with family; has been in the business for 20 years. Prefer New York State along the Hudson. Address C. HATHLE, Saugerties, N. Y.

SITUATION WANTED—Private place by married man, 45 years of age; thoroughly posted in all branches, and has highest Chicago references. Address G., care J. C. Vaughan, Chicago.

SITUATION WANTED—By a practical florist to represent and travel for a thoroughly established concern in connection with the trade. Address C., care American Florist, Chicago.

SITUATION WANTED—By thoroughly practical man as superintendent of private or commercial establishment; good salary required; married. Address with particulars B., care American Florist.

SITUATION WANTED—As gardener by a single Scotchman who has had 18 years' experience in this country, and understands gardening in all its branches. Only those having glass need answer. ALEX. JEFFREY, 1325 Saybert St., Philadelphia, Pa.

SITUATION WANTED—By married man, age 27, 1 child, as headgardener on a small place with private family. Understands all branches of the stove, greenhouse, fruit forcing, flower and vegetable garden; had 14 years' experience. Good references from previous and present employers. Address ENGLISH, care American Florist.

SITUATION WANTED—By a practical florist and gardener. German; married. Understands the care of gentleman's place, greenhouse, rosehouse, flower carpet beds, grapes, fruits, vases, etc. Best of references. Age 34, small family. Would take charge of place near Pittsburg, Cleveland or big city. Address CH. R., care American Florist, Chicago.

SITUATION WANTED—By an experienced florist as greenhouse foreman, propagator, etc., in a commercial establishment; thoroughly posted in rose growing, carnations, forcing of bulbs and growing of general stock for production of flowers for cutting at all seasons; also the most rapid production of plants for marketing. Address stating wages, FLORIST, box 655, Delaware, Ohio.

SITUATION WANTED—By first-class gardener; English, age 30, married, one child; thoroughly understands growing flowers, fruit and vegetables.

early and late forcing, cultivation and propagation of hard and soft wooded plants. Good references; also 1st, 2nd and 3rd class certificates from horticultural shows in London. Address: GARDENER, 1255 Wollman St., Lake View, Chicago.

WANTED, BREDSMAN Married man, to take charge of a mailing department and stock. References. Lock Box 165 Philadelphia Pa.

WANTED—Catalogues of seedsmen and nursery-men, especially nurserymen in the south. G. W. McCLEER, Asst. Horticulturist, Agr. Experiment Station, University of Ill., Champaign, Ill.

WANTED—A first-class man to take charge of three greenhouses. Must understand rose growing thoroughly and floral design work, as this business won't pay but one good man. Must be well recommended. B. F. MILLARD, Chippewa Falls, Wis.

WANTED—A young man familiar with general greenhouse work, to include the propagation of roses and bedding plants. State wages expected with board etc., and give references. EVERGREEN LODGE FLOWER GARDEN, Clarksville, Tenn.

WANTED—A good thorough florist acquainted with the business in all branches. A German American or German preferred; a man not afraid to work will have a permanent position, and only such need apply. R. MATTHEW, 110 Canal street, New Orleans, La.

WANTED—A young single man who understands growing plants and flowers for retail trade, doing floral work, bedding, and keeping greenhouses in repair. A practical florist for a small place. Must have good references. Address: JAYNE & COLE, Painesville, Ohio.

WANTED—A young man practically conversant with the seed business, especially the market garden and retail department. Must be thoroughly competent to take charge of same, and to write and speak German. Address, stating reference: A. Z., care American Florist, Chicago.

WANTED—For my establishment of 80,000 feet of glass, to grow for the wholesale trade, cut flowers, plants, etc.—principally roses, decorative and bedding plants and bulbous flowers—a manager for the whole, or foreman for each department, and some assistants; also a competent man or lady to work up cut flowers and decorations packing and shipping of cut flowers, etc. Only first-class and competent persons, with best of references, need apply. Steady employment for the right persons. N. STUBER, Anacostia P. O., Washington, D.C.

FOR SALE—100 feet 4-inch pipes, some manifolded, and one boiler; all in good condition. N. STUBER, Anacostia P. O., Washington, D.C.

FOR SALE—A well paying florist business can be bought for less than \$200, dwellinghouse stable, three greenhouses 12x50, nice stock of plants 3/4 acre of ground, and hydrant for watering. Address: Q, care American Florist, Chicago.

FOR SALE—Five well stocked greenhouses and contents, near entrance to one of the principal cemeteries of Cincinnati, O., with a lucrative fall trade. Average amount of fall trade sales to the cemetery alone is \$300. Reason for selling, bad health of owner. For full particulars address: C. A. PETERS, Price Hill, Cincinnati, O.

PANSY SEED—Vaughan's International Prize, made up from selections from the choicest strains grown by European and American specialists and we believe can not be excelled, price 1/2 oz. \$1.50. J. C. VAUGHAN, P. O. box 688, Chicago.

FOR SALE.

A large size Smith & Lynch Greenhouse Boiler, in good condition. Capable of heating 1,500 feet 4-inch pipe; cost \$225. Will sell for \$100, f.o.b.

J. NEWMAN & SONS, 51 Tremont St., BOSTON, MASS.

WANTED.

A thoroughly competent man who can attend to the details of my florist business. One who knows how to run a business himself, can think for himself, and can relieve me of many of the details of an increasing trade.

Address: HENRY MOORE, 54 Beal Street, MEMPHIS, TENN.

FOR SALE.

Five acres of land in a high state of cultivation 1/2 miles from center of city, two greenhouses 10 feet long; good building, plenty of water, three forcing pumps; fruits of all kinds; 200 bearing grapevines. Good market for flower and vegetable plants. This is a good chance for young beginner in the flower business. Address:

E. WEBB, Real Estate, Agt., VOENGTOWN, OHIO.

FOR SALE.

Four greenhouses sixty-two feet long each, one fifteen feet wide, three twelve feet wide, heated by hot water; situated on six building lots, with one two-story house of twelve rooms heated by furnace, all in first-class order. Will sell stock including 1000 Roses, Mermets, Perles and Niphetos, 2000 Carnation plants for winter blooming, etc. A good chance for the right party. Enquire at the:

BANNOCKBURN GREENHOUSES, Cor. Clinton and Norton sts., ROCHESTER, N. Y.

ROSES FOR FORCING.

We have a fine stock of the following varieties in 1 and 5-inch pots BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PERLE DES JARDINS, SOUVENIR D'UN AMI, SUNSET, and many other choice kinds. Write for prices.

ELLWANGER & BARRY,

Mount Hope Nurseries, ROCHESTER, N. Y.

JOHN CURWEN, Jr., GENERAL GREENHOUSE STOCK AND ROSES. Villa Nova P. O., Delaware Co. Pa. Money Order Office: Bryn Mawr, Pa.

IMPORTER AND GROWER HYBRID PERPETUAL ROSES WILLIAM H. SPOONER, Jamaica Plain, Boston, Mass.

TO THE TRADE. CLEMATIS CRISPA, ARUNDO DONAX VARIEGATA, EULALIA ZEBRINA. H. STEINMETZ, Raleigh, N. C.

NEW DWARF WHITE DAHLIAS, SAGO PALMS, ETC. Dahlia Camelliaflora alba, full of buds in 5-in. pots, \$5 per doz., \$20 per 100; 4-in. pots, \$2.50 per doz., \$15 per 100. Sago Palms, finest stock in the West; 1 to 2 leaves, \$6 per doz.; 2 to 3 leaves, \$12 per doz.; 3 to 5 leaves, \$24 per doz.; extra large plants from \$3 to \$10 each. Yucca Aloefolia Var. and Pandanus Veitchii, fine plants, 4-in. pots, \$5 per doz. Also a few hundred very fine Roses for Winter Blooming, 4-inch pots at \$12 per 100. Brides, Niphetos, American Beauty and Perles. Address:

JOHN G. HEINL, Terre Haute Ind.

CARNATION PLANTS.

Strong Clumps from Open Ground. EDWARDS, SCARLET KING, PHILA. RED DE GRAW, FASCINATION, KING OF CRIMSONS, \$3.00 per 100; \$50.00 per 100. PORTIA, DUKE OF ORANGE, CHESTER PRIDE, HINZE'S WHITE, GRACE WILDER, Etc., \$8.00 per hundred. A few extra strong SMILAX, 3-in. pots, \$4.00 per 100. W. R. SHELMIER, Avondale, Chester Co., Pa. Mention American Florist.

PANSIES.

PLANTS A SPECIALTY. All novelties of merit are added annually, and I grow my own seed, carefully selecting the best only. Therefore I recommend my strain of

MIXED PANSIES

either for forcing or planting cold frames for spring sales, knowing that they will give the best of satisfaction as to size, variety and brilliancy of colors.

Prices—Good, stocky plants, per 100, \$ 75; per 1000, \$5 00.

Send for Pansy and Smilax Special.

ALBERT M. HERR,

L B. 338 LANCASTER, PA

VOLUME III OF THE AMERICAN FLORIST.

Containing 586 pages, handsomely bound in half leather, may now be had from this office, post-paid, for \$2.25.

With the very complete index this makes an exceedingly valuable reference book.

VOLUME II BOUND IN SAME STYLE AT SAME PRICE.

AMERICAN FLORIST CO., 54 La Salle St., CHICAGO.

EVERY FLORIST SHOULD HAVE OUR TRADE DIRECTORY Price only One Dollar.

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E. BENARD, ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS A SPECIALTY. NURSERY STOCK OF ALL DESCRIPTIONS For particulars apply to E. BENARD, Jr., P. O. Box 1100 San Diego, Cal.

ROSES.

GROWN IN OPEN GROUND. Sambreuil, Hermosa, Mad. Lombard, Adam, Duchess de Brabant, Souvenir de Charles Montaut, Mignonette, Louis Phillip, Malmaison, Safrano, Isabella sprunt, Luxembourg, Marie Guillot, La Paetole. Price, \$10 00 per hundred; \$30 00 per thousand. Our selection from above named varieties. Buyer's selection, prices will be given as low as possible on application. Dr. Grill, Mad. Scipion Cochet, new and fine outdoor Roses, from open ground, \$15 00 per hundred.

ROSES IN POTS.

Per 100 Malmaison, 5 inch 15.00 Adam, 5 inch 6.00 Mermet, 3 inch 6.00 Safrano, 2 inch 3.00 La France, 2 inch 6.00 La Paetole, 3 inch 6.00 Ophelia, 3 inch 6.00 Bon Silene, 3 inch 7.00 Cook, 1 inch 9.00 Mad. Honor Delresne, new yellow Tea, 4 inch 12.00 Mad. Scipion Cochet, new Tea, 4 inch 12.00 Lucile, 4 inch 15.00 The Bride, 2 inch 3.00 Duchess de Braganze, new Tea, 3 inch 12.00 Duchess of Edinburgh, 4 inch 2.00 Clematis Bammula 4.00 Chrysanthemums, outdoor grown, very strong, mostly of the newer varieties. 15 00 Hibiscus in variety, strong, from open ground 18 00

A. LAUER,

1218 East Broadway, LOUISVILLE, KY.

FINE ROSES.

We offer for sale to the trade this Fall a fine, healthy lot of out-door grown Roses; strong, 1 year old dormant plants on their own roots, including the following staple varieties and others. Price, \$12 00 per 100; \$100 00 per 1000.

Viz: Gen'l Jacqueminot, Desbach, Paul Neyron, Baron Bonstetten, Jules Margottin, Pierre Notting, Comtesse de Sorency, La Reine, France Camille de Rohan, Magna Charta, Marie Bauman, Fisher Hobbes. Also, Gen of Praries (always scarce) at \$12 50 per hundred.

N. B. We carry a full line of Fruit and Ornamental Trees, Shrubbery, 2 year Roses, Clematis, etc.

ADDRESS: W. S. LITTLE, Commercial Nurseries, ROCHESTER, N. Y.

FORCING ROSES

Special Offer of Leading Varieties.

BON SILENE, CATHERINE MERMET, COUNT-ESS FRIGNFUSE, LA FRANCE, MAD. DE WATTEVILLE, NIPHETOS, PAPA GONTIER, PERLE DES JARDINS, SAFRANO, SUNSET, SOUV. D'UN AMI, THE BRIDE.

Strong, thrifty plants, 4-inch pots, \$5.00 per 100, 4-inch pots, \$12 00 per 100.

HENRY A. DREER, PHILADELPHIA.

NOVELTIES IN ROSES.

All the latest new varieties; also the leading forcing varieties Teas, Hybrid Teas and Hybrid Perpetuals.

Novelties in Chrysanthemums. Catalogue specialties at lowest rates.

Trade List now ready, mailed on application.

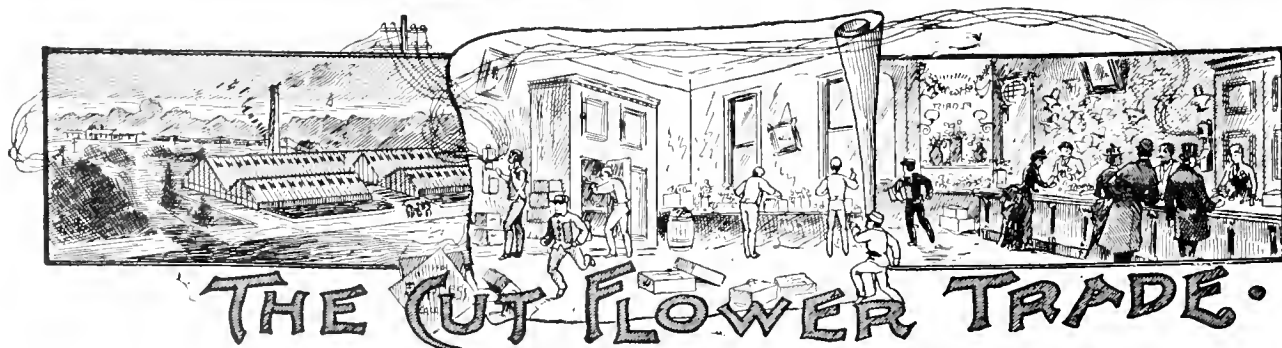
JACOB SCHULZ, LOUISVILLE, KY.

Largest Collection of Roses,

Including all the Latest Novelties—Lowest possible prices—Complete general catalogue and Special Wholesale Price List free on application (German or French edition)

KETTEN BROTHERS, Rose Growers.

LUXEMBURG, (Europe)



October Floral Fashions.

The colors of all floral designs are still very gorgeous, but the inclination is to return to the old loves, the pink and yellow tints. American Beauty and La France roses are now more used than any other. Orchids are in lively demand for rich designs. During the summer when choice flowers were so scarce orchids were introduced into all expensive pieces. Growers are putting them down in price so that they will probably enter in more fully to all the fine floral work. Lily of the valley is very popular and in baskets suitable in shape for this flower, it is much used with a bordering of adiantums.

A number of large weddings are on the tapis. The room decoration for these will consist mainly of autumn leaves, but for the large effect where the nuptial pair stand Klunder arranges a new design. It is very elegant in effect. A frame covered with adiantums is placed across the mirror arch or wherever the chief effect is to be and in a high position a bridal wreath is pendant. This is composed of white flowers, usually roses, orchids and lily of the valley. Attached to this wreath is a bridal veil which spreads out gracefully over the ferns showing here and there the background of greenery. This veil is formed of slender silver wire upon which small white blossoms are fastened. Each side of the green frame are palms and other fine foliage plants.

There is an effort to introduce logs of agatized wood, such as a leading jeweler has brought from Arizona. This is very curious and beautiful, showing many colors to the heart of the tree. The logs come in many sizes and are quite expensive. They will only be used when there is a *carte blanche* order.

Autumn leaves are made into lambrequins for the windows and into large shades and fans for the fire-places. The fan-shaped leaves of the maiden hair tree are used in designs to cover fire-places and yellow roses to match this lively color when it throws off its green, are bedded on mantel-pieces in the golden tipped variety of lycopodium.

In table ornamentation for dinners the newest arrangement is an imported design of plate glass and white willow. A large oval of plate glass is surrounded by a white willow gutter which holds a pan. This is filled with adiantum plants which reflect very handsomely in the glass beneath. In the center of the glass oval there is a place for a crystal or silver vase in which long-stemmed roses are put. The roses are distributed as favors after the dinner. Designs for favors will be used more or less, but in certain circles a single rose is presented. Several of the new gilded straw vase baskets are used for center pieces on the table. The one pictured that is filled with La France

roses is now being used frequently, filled with *Hydrangea paniculata grandiflora* with a fringing over the edge of the basket of variegated euphorbia. Vines and loose flowers have disappeared from the table envelopments.

Bridal bouquets are made of lily of the valley with an orchid center in the same shape as lately described. The orchids are not always white. Bridesmaids' bouquets are made almost entirely of La France roses. There is no ribbon used either on brides' or bridesmaids' bunches.

Hand bouquets for coaching parties are formed of Russian violets and heliotrope, a fragrant combination. They are finished at the edge with ivy leaves and are quite small. It is not likely that large hand bunches will be revived this winter. Corsage bunches are not worn by ladies on driving parties. They carry a small bunch of flowers in the hand instead. Men wear large boutonnières on these occasions however. The boutonniere for full dress is very small. A few violets being the rule.

Florists are kept quite busy decorating houses for the return of tourists. The main corridor of the house is trimmed with foliage and groups of plants and usually the dining-room. Simple bouquets of flowers are placed in the drawing-room and chambers, but no especial decoration is put up in the parlor unless there is to be a gathering of friends. Floral gifts for engagements are very elaborate, the baskets gotten up to be filled with flowers for these presents are beautiful. These are elaborately gilded, silvered and bronzed. They are very prettily trimmed with ribbon. Pictures of these will appear shortly. Most of them are made to accommodate long-stemmed flowers and as the season advances they will be filled with the hardy shrub bloom that growers have promised. They are all designs to be used as scrap baskets, or sewing baskets after the flowers are faded.

Nothing particularly new appears in the way of funeral work. A great deal of ribbon is used on all pieces and it is quite fashionable to have the wide satin ribbon scarfs stamped at the jeweler's in gold letters with some appropriate motto. For the funeral of the late Lester Wallace a broken column five feet high made up by McConnell had a wide white satin scarf bound around the shaft which was very handsomely inscribed. The white caskets so much in use for those who die young are exquisitely trimmed with pink flowers. An edging is made inside of these caskets of pink rosebuds and the inside of the casket cover is entirely bedded with roses where this is left open at the funeral. Bright flowers are not placed on the caskets of old people. Palm leaves or a wreath of green is all that is considered suitable.

New York. FANNIE A. BENSON.

A Novel Funeral Design.

The friends of an old gentleman, lately deceased, desired something different from the usual funeral offering, and the thought came to their florist that a pillow of satin, handsomely studded with white roses, would be a chaste and appropriate design.

A thirty-inch pillow frame was covered with rich white satin, both underneath and over, with the edge outlined by heavy silk and chenille cord, forming on each corner a triple loop, from which hung handsome silk and chenille balls. Printed in black and gold on the center of the pillow were the words, "Resting in peace, amidst flowers, you will ever live in the memory of your friends." This inscription was surrounded by a broken wreath of ivy, whilst on each corner was festooned a handsome bunch of Niphetos roses. Here and there over the pillow single choice buds were fastened by small bows of ribbon. The wire stard of the pillow was gilded and wound with heavy chenille cord, and on the back of the frame was fastened a large flat sheaf of wheat, caught up by a spray of white roses.

The effect of the design was chaste and elegant in the extreme, and reflected much credit on the Floral Exchange, of Philadelphia, who executed it. C.

The Pansy.

Pansies seem to have well-founded claims to become the American national flower. First, they are the favorite flower of the first lady of the land, and I am quite certain with the ladies in general. Pansies are and always have been great favorites; and then, those noble ladies which fight the gallant battle of the pansy societies, with their thousands of young American soldiers all over this great country will all and every one be loyal to the flag they have chosen. Circumstances create such as a national flower, and are not those most important ones? And then, which other flower can do what pansies do:

"I know they can't talk,
Though they sometimes look like they wink,
But I tell you this for a secret,
I really believe they think"

O. R. K.

The National Flower.

This question has stirred up considerable comment. The *Camp News* of Philadelphia, the organ of the Patriotic Order Sons of America tells its readers of the action taken at the New York convention and adds: "To the P. O. S. of A., being distinctively American, we recommend that they take action upon this subject, and convey such action to the Florists' Convention committee."

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for October 15 issue must REACH US by noon, Oct. 9. Address.

THE AMERICAN FLORIST CO., Chicago.

Coming Chrysanthemum Shows.

- Philadelphia, November 13-16.
- Boston, Mass., November 14-16.
- New York, November 13-15.
- Orange, N. J., November 7-9.
- Cincinnati, O., October 22-27.
- Indianapolis, Ind., November 13-17.

IN ANOTHER COLUMN appears the first of a series of papers entitled "Leaves of advice from a limb of the law," prepared for the FLORIST by a lawyer, which we commend to our readers, and especially to those who have not yet found it "worth while" to keep any books.

GEO. MULLEN,

17 CHAPMAN PLACE, (near Parker House), BOSTON, MASS.

WHOLESALE AND COMMISSION DEALER IN Fresh Cut Flowers & Florists' Supplies.

Flowers carefully packed and shipped to all points in Western and Middle States. Orders by Telegraph, Mail, Telephone or Express promptly attended to.

ROSE BUDS WHOLESALE.

THE OAKLEY ROSE HOUSES.

FOURTH SEASON.

This establishment, with over 30,000 feet of glass devoted to forcing buds for the trade, is now in better condition than ever, and is prepared to supply buds to the trade direct, either on transient orders at lowest market prices, or upon contract for any length of time at fixed prices.

VARIETIES :

- BEAUTY, NIPHETOS,
- BENNETT, PAPA GONTIER,
- LA FRANCE, BON SILENE,
- MERMET, PERLE,
- BRIDE, SUNSET.

Telegrams via. W. U. Tel. direct to greenhouses. Send for price lists, terms and contract prices.

CHAS. L. MITCHELL, Mgr.,

P. O. Box 188, CINCINNATI, OHIO.

Telegraph Address [via. W. U. Tel. Co.] Cincinnati, O.

KENNICOTT BROS.,

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TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.

THE WISCONSIN FLOWER EXCHANGE, WHOLESALE CUT FLOWERS.

Consignments Solicited. Send for price list.

133 Mason St., MILWAUKEE, WIS.

Wholesale Markets.

Cut Flowers.

	NEW YORK, Sept. 25.
Roses, Gontiers	\$ 00
" Perles, Niphetos	2 40
" Mermets, Bennets	5 00
" Am. Beauty	8 00
" La France	5 00
" Bon Silene	1 00
Carnations	75 00 1 00
Ghudiolus	1 50
Smilax	15 00
Lily of the valley	6 00
	BOSTON, Sept. 25.
Roses, Teas	11 50
" Finney	4 00
" Am. Beauties	12 00
Lily of the valley	6 00
Carnations	75 00 1 00
Ghudiolus	1 00
Japan Lilies	4 00
Smilax	12 50
Tuberose	1 00
	PHILADELPHIA, Sept. 25.
Roses, Teas, Perles, Niphetos	\$2.00
" Brides	5.00
" Bennets, Gontiers	4.00
" Mermets, La France	5.00
" Am. Beauties	10.00
" Puritans	5.00
Carnations, Bouvardia	.75
Smilax	20.00
Callas	8.00
Harris Lilies	8.00
Single violets	.25
Double violets	.50
	CHICAGO, Sept. 25.
Roses, Perles, Niphetos	\$3.00 00 4.00
" Bons, Safranos	2.00
" Mermets	4.00 00 5.00
" La France Brides	5.00 00 6.00
" Am. Beauties	12.00 00 15.00
Carnations, short	.75
Carnations, long	1.50
Smilax	18.00
Adiantum	1.00 00 1.50
Callas	15.00
Tuberose	1.50
Heliotrope	1.50
Mignonette	.50
Margolde	.50
Chrysanthemums	1.50 00 2.00
Bouvardia	1.00

WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

REMOVAL.

Owing to the rapid increase in business

N. F. MCCARTHY & CO.

Wholesale Florists and Florists' Supplies.

63 Bromfield St., BOSTON, MASS.,

Removed Aug. 15th to the new and spacious store

1 MUSIC HALL PLACE, off Winter St.

where they shall be prepared to meet any and all demands.

CUT ROSES AT WHOLESALE.

The only establishment in the West growing Roses exclusively. 20,000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the consumers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety. Also all the leading varieties of young Rose plants for sale.

GARFIELD PARK ROSE CO., 1688 West Madison Street, Corner St. Louis Avenue, CHICAGO

CHAS. E. PENNOCK, WHOLESALE FLORIST, 38 So. 16th Street, Philadelphia, Pa.

EDWARD C. HORAX, WHOLESALE FLORIST, 36 WEST 29TH STREET,

The Bride, Mermet, and Am. Beauties, SPECIALTIES. NEW YORK.

Thos. Young, Jr., & Co., Wholesale Florists,

INCORPORATED 1885,

20 W. 24th St., NEW YORK



W. S. ALLEN, WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

LaRoche & Stahl, Florists & Commission Merchants

CUT FLOWERS, 1237 Chestnut Street, PHILADELPHIA

Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST

C. STRAUSS & Co., WHOLESALE ROSE GROWERS,

Telephone 977. WASHINGTON, D. C.

Roses planted for Winter 1888-9. Souvenir de Wautton, The Gem, Puritan, American Beauty, Annie Cook, Mad. Cusin, Papa Gontier, The Bride, La France, Bennett, Perle, Mermet. And other Standard sorts

WELCH BROS., WHOLESALE FLORISTS,

165 Tremont Street BOSTON MASS. We make a specialty of shipping choice Roses and other flowers, carefully packed, to all points in Western and Middle States. Return Telegram is sent immediately when it is impossible to fill your order.

HAMMOND & HUNTER, Wholesale dealers in Cut Flowers and Florists' Supplies, 61 West 30th Street, NEW YORK.

FISK & RANDALL, WHOLESALE FLORISTS, 116 & 118 DEARBORN STREET, CHICAGO.

Store Open Night and Day.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc. Address, J. L. DILLON, BLOOMSBURG, PA.

A. S. KIMBALL, WHOLESALE CUT FLOWERS,

170 Lake Street, CHICAGO. Give Special Attention to Shipping Orders. Consignments solicited.

VOLUME III OF THE AMERICAN FLORIST, BOUND IN HALF LEATHER PR. \$2.25 AMERICAN FLORIST CO., CHICAGO.

The Seed Trade.

EMERALD GEM musk melon is exquisite in taste.

W. S. PENFIELD seed and implement dealer of Detroit, is dead.

CHILD'S CELESTIAL PEPPER is certainly most productive and beautiful.

IT IS ASSERTED that Mr. Burpee is testing 3,500 samples on his trial ground at Dylestown.

HENDERSON'S green and gold water melon is one of the most taking novelties of this year's introduction.

JOHN GARDINER & Co., (the Philadelphia brewers) will embark in the mailing business on a grand scale.

MR CHAS. BATES, representing Vilmorin-Andrieux & Co., seedsmen, of Paris and London, was in Chicago September 22.

Prospects for vine seeds, Nebraska grown, are reported bad.

The A. B. Cleveland Co. report heavy pea orders from England.

English houses are buying all the wrinkled peas they can get.

D. M. Ferry & Co. shipped 1,100 bushels extra early peas to France recently.

B. K. Bliss is now in Europe and is no longer connected with W. W. Rawson & Co.

Crossman Bros., of Rochester, will probably increase their wholesale facilities the coming season.

The reduction of postage will probably result in offering all seeds free by mail in the retail lists for 1889.

John A. Gardiner & Co., seedsmen, have begun business at 21 North Thirtieth street, Philadelphia.

The Hort. Art Journal supplement contains a photo portrait of President Haskell of the Seed Trade Association.

The new bush Lima bean shown at the florists' convention at New York by Messrs. Henderson & Co., should have a large sale.

The crop of retail fall bulb catalogues will be much finer than usual this fall. Should this double cropping of the retail buyers be encouraged.

TORONTO, ONT.—Steele Bros. & Co. have purchased the seed business of W. H. Marcon, Niagara Falls. The amalgamated business will be carried on under the name of The Steele Bros Co, limited, in this city. They have doubled the capacity of their premises

Catalogues Received.

Wm. C. Wilson, Astoria, N. Y., plants; John Kready, Mt. Joy, Pa., grapes; Hiram Sibley & Co., Rochester, N. Y., seeds; Richardson & Boynton, Chicago, the "Perfect" hot water heater; Fred. W. Kelsey, New York, nursery stock; F. W. Ritter, Jr., Dayton, O., bulbs and seeds; Frank Whitnall & Co., Milwaukee, Wis., bulbs and plants; Ketten Bros., Luxemburg, Europe, roses; John C. Teas, Carthage, Mo., nursery stock; W. P. Simmons & Co., Geneva, O., plants; L. Green & Son, Perry, O., nursery stock; Julius Jugl, Brooklyn, N. Y., hose coupler; Robt J Halliday, Balimore, bulbs, seeds and plants; P. J. Berckmans, Augusta, Ga., nursery stock; R. & J. Farquhar, & Co., Boston, bulbs and seeds; B. B. Chandler, Hyde Park, Mass, glaziers' points; R. Maitre, New Orleans, La., bulbs and seeds; Parker & Wood, Boston, Mass., bulbs, seeds and plants; Jno. R. & A. Murdoch, Pittsburg, Pa., trees, plants and bulbs; C. J. Alberts, Boskoop, Holland, plants, trees and shrubs; H. A. Dreer, Philadelphia, bulbs, seeds and plants; James King, Chicago, bulbs, seeds and supplies; E. Bonner & Co., Xenia, O., plants; Michel Plant & Seed Co., St. Louis, bulbs and supplies.

GARDEN AND FOREST for September 19 contains an excellent engraving, from a photograph of Pseudo-platanus Sargentii, a palm discovered on Long's Key, Florida, in 1886.

A BLANC'S third supplement to his catalogue of electrotypes is received. It is elegantly printed and contains many new engravings. We may here state that the chrysanthemum cuts which appear in this issue were loaned to us by Mr. Blanc.

THE J. G. & A. ESLER Co. have several seedling carnations of great promise, hybrids of some of the best varieties grown. They think of naming one of them "The Pirate," in honor of Captain Lynch.

ORANGE JUDD, for the last four years editor of the *Prairie Farmer*, is now the editor of a new weekly agricultural publication to be known as the *Orange Judd Farmer*, published at Chicago.

SEED OF EVENING GLORY.

(White seeded var.) i. e. Moonflower. Pink Moonflower is a novelty not yet offered the trade. Eulalia Jap. var. and Zebina.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

CUT FERNS. NEW CROP 1888.

NOW READY. Used for Bouquet Work, filling Flower Baskets, Decorating Altars, &c., &c. and are preferred by many to smilax.

\$1.50 per thousand Ferns.

BOUQUET GREEN. \$2.00 per bbl. (30 lbs.) or \$6.00 per 100 lbs. Season commences Oct. 1st for holiday trade.

SPHAGNUM MOSS—Long clean fibre, dry or green, \$1.00 per bbl or six bbls. for \$5.00. Sample or trial sacks containing 3 bushels of Moss, dry, very light, designed for express shipments, \$1.00 per sack.

L. B. BRAGUE, Hinsdale, Mass.

Mention American Florist

ANNUAL REPORT OF THE FLORISTS' HAIL ASSOCIATION.

The Florists' Hail Association was organized in the State of New Jersey, June 1, 1887.

On the 25th day of August, 1888 the books of the Secretary calls for insurance upon 811,951 square feet of glass, of which 441,044 square feet is double thick, and 370,907 square feet single-thick. Of this, 327,276 square feet is located east of the Alleghanies, being in the States of New Hampshire, Massachusetts, Connecticut, New York, New Jersey, Pennsylvania and Delaware. 484,675 square feet is west of the Alleghanies, being in the States of Ohio, Kentucky, Indiana, Illinois, Michigan, Wisconsin, Arkansas, Missouri, West Virginia, Minnesota, Colorado, and Kansas. Since the organization of the Association up to the present time the Treasurer has paid two losses. That of Albert M. Herr of Lancaster, Pa., on July 6, 1887, and of Frederick Bills, of Davenport, Iowa, on June 7, 1888. Mr. Herr's loss was 905 square feet of single-thick glass, for which the Association paid him \$45.25. Mr. Bills' loss was 456 square feet of double-thick glass, for which the Association paid him \$31.92. The total amount of membership fee received has been \$490.43, of which sum \$73.60 has been refunded to members who advanced money to organize the Association, which leaves \$415.83 membership fee on hand. The total amount of assessment fund received has been \$566.77. Of this \$77.17 has been paid for losses.

After fourteen months of practical working the Directors have no hesitation in recommending a membership in the Florists' Hail Association as an investment which every florist should make. As to the frequency of assessments it is still impossible to form any definite conclusion from the fact that during the whole of its existence no assessment has been needed. Your Secretary also believes the Association has sustained a fair proportion of the loss by hail, since its organization, based on a ratio of the insured and uninsured greenhouse structures of the country, and it is to be regretted that the florists of the United States have not more generally availed themselves of the benefits of an association, the success of the practical workings of which has exceeded the most sanguine anticipations of its projectors.

In addition I have been requested, as far as I could, to give localities where hail has fallen during the past six months. Hail may have fallen in many more places than here enumerated, but if reports are correct, the following localities have suffered since the 1st of April last: Philadelphia, Pa.; Davenport, Ia.; Little Falls N. Y.; Scranton, Pa.; Albany, N. Y.; Baltimore, Md.; between Geneva and Lyons, N. Y.; Glen Cove, N. Y.; Elgin, Ill.; Marlboro, Mass.; St. Louis, Mo.; Wadsworth, O.; Lockport, N. Y., and Hackensack, N. J. In connection with the latter storm which occurred a few weeks ago, I will relate an incident. Last winter I visited Mr Bonhomme the noted grower of strawberries under glass, I urged him to insure his glass, but he replied that hail storms never visited that section of the country. Here is a moral for those who own glass structures where it never hails.

JOHN G. ESLER, Secretary.

TREASURER'S REPORT OF THE FLORISTS' HAIL ASSOCIATION.

AUGUST 16, 1888.	
Advanced assessments	\$560.20
Membership fees	497.23
	<hr/> \$1,057.43
Overpaid (J. Tracht) and my check returned for same	\$1.25
	<hr/> Total
Guarantee Fund, 1st assess.	\$100.00
2nd	26.25
3rd	6.25
	<hr/> \$132.50
Guarantee Fund applied on Insurance Policies	\$73.00
Balance of guarantee on hand	\$58.00
Interest on \$455.73 at 6 per cent. for 6 mos.	13.67
	<hr/> Total Receipts
Checks allowed to cover losses and exp.	\$1,122.75
	<hr/> \$232.28
Balance on hand	\$890.47

E. G. HILL, Treasurer.

CARNATIONS, VIOLETS, BEGONIAS, ROSES,

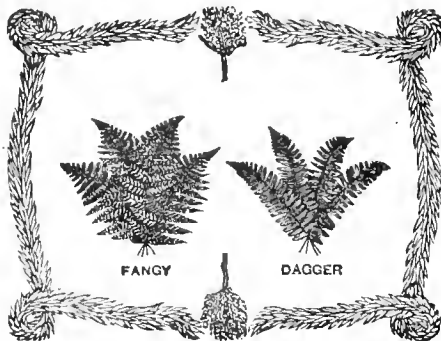
And other Greenhouse Stock.

Plants in fine condition, and prices lower than ever before offered.

— SEND FOR PRICE LIST. —

E. BONNER & CO.,

Maple Grove Greenhouses, XENIA, OHIO. Mention American Florist.



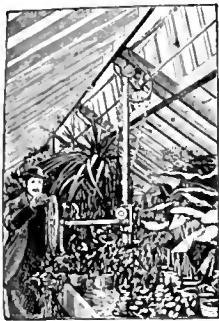
PALMS, FERNS, ETC.

All sizes from Seedlings up. Large stock of most useful varieties in best condition at lowest prices.

CHARLES D. BALL, Holmesburg, Philadelphia, Pa.

THE EVANS CHALLENGE VENTILATING APPARATUS.

WITHOUT A RIVAL, EITHER IN COST, SPEED IN OPERATING OR SECURITY IN CASE OF STORMS.



— MANUFACTURED BY —
QUAKER CITY MACHINE CO.,
1103 and 1110 North E Street,
RICHMOND, IND.

WHEN WRITING FOR ESTIMATES, PLEASE GIVE FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be fitted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

Mention American Florist.

VENTILATING.

THE PERFECTION Ventilating Machine

I had on Exhibition at the **NEW YORK FLORISTS' CONVENTION** was pronounced by able judges the **LEAST COMPLICATED, SAFEST, STRONGEST, EASIEST,** and most rapid working machine ever offered to the public.

Send for Illustrated Circular before throwing your chance away.

E. HIPPARD,
Youngstown, Ohio.
Mention American Florist.

ED. JANSEN,

Importer & Manufacturer

— or —

NOVELTIES IN BASKETS,

124 W. 19th Street,

bet. 6th & 7th Aves., **NEW YORK.**



TRY DREYER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

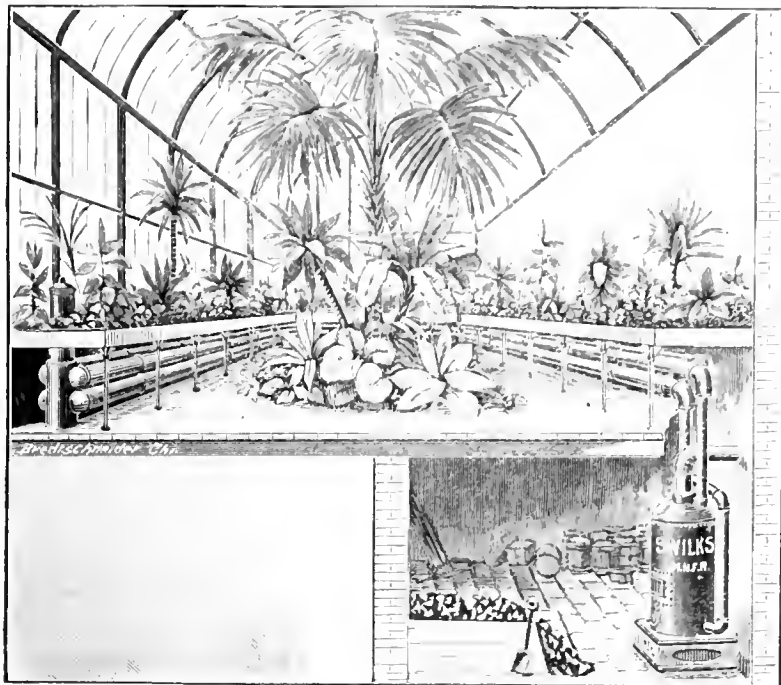
HENRY A. DREYER,
Philadelphia

ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World. **Introducer and Grower of all the leading Novelties.**

Catalogue free on application.

FRED. ROEMER, SEED GROWER.
QUEDLINBURG, GERMANY.



SAVE COAL BY USING THE CELEBRATED WILKS' WATER HEATER, FOR HEATING Poultry Houses, Greenhouses, Stores, Dwellings, Bath-tubs; etc. SEND FOR CIRCULARS. S. WILKS MFG. CO., Monroe and Clinton Sts., CHICAGO, ILL.

PLANTS. A. BLANC, PHILADELPHIA.

Cautions for Winter Blooming; good, strong plants from the open ground, of the following varieties:

ROBT. CRAIG, SNOWDON, PRES. GARFIELD, SNOW WHITE, HENZE'S WHITE. Price, \$10.00 per 100.

Also fine large plants of **Vineca Harrisonii** from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of **SINGLE PRIMROSES,** at \$8.00 per hundred.

— ISTEVIA SERRATA. —

Fine, large plants in 6-inch pots, at \$10.00 per 100.

— VIOLETS. —

MARIA LOUISE, at \$8.00 per 100

GOOD STRONG SMILAX, 3-in. pots \$5.00 per 100

Also have a large stock of **Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus,** at \$30.00 per 1000. Strictly our selection; clean, strong plants in 2 and 2½-inch pots.

GEO. W. MILLER,
WRIGHT'S GROVE, CHICAGO.

TOBACCO STEMS FOR FLORISTS.



FOR SALE, packed in bales 200 to 250 lbs.

No CHARGE for delivering to depots

PRICE:

\$10.00 per ton, \$1.50 per single bale

At Address

P. C. FULWEILER,
716 Arch Street, PHILADELPHIA, PA.

TOBACCO STEMS.

\$4.00 A BALE, THREE BALES FOR \$11.00.

Average 500 lbs. to the Bale.

Delivered Free on board.

We claim to have the Best, Cleanest and Strongest stems in the market.

STRAITON & STORM,
204 East 27th St., NEW YORK.



ENGRAVER FOR FLORISTS.

LARGE STOCK OF ELECTROTYPES OF PLANTS AND FLOWERS FOR FLORISTS' CATALOGUES, ETC.

Catalogue of electros of plants, flowers, designs, etc., with 'S' and 'SS' supplements, at 5 cts., with vegetable, 50 cents, which deduct from first order. Electro of this Cut, \$1.50

SEND ORDERS NOW FOR **WHEAT SHEAVES, Immortelle and Cape Flower Designs And all Florists' Supplies, Philadelphia Immortelle Design Co., 904 Filbert St., Philadelphia, Pa.**

Gas Tar.

I noticed an inquiry in the September FLORIST under the above title and would say: I have used gas tar for the past twenty years, not only on greenhouse gutters but on the benches and other parts exposed to dampness as well, and find it a great preservative of the wood. For gutters I have found nothing better for making them tight. My method of application is to heat it over a very gentle fire and apply with a paint brush while warm. The heating facilitates the work, as it spreads and penetrates the wood more readily, besides forming a hard and glossy coat when cold. Care should be observed not to fill the vessel too full, as it is liable to foam and rise over the side and communicate with the fire. I give my gutters a coat once a year, generally in August, as a warm still day is to be preferred.

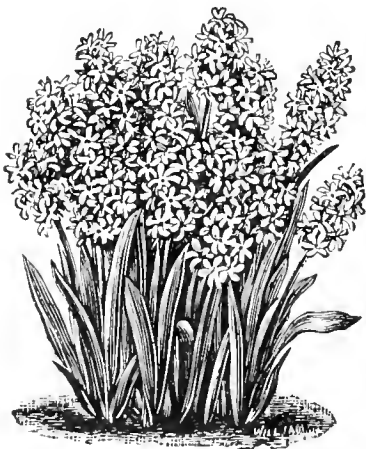
While on this subject it occurs to me that possibly some of your many readers might be glad to know that crude petroleum is also a great preserver of wood. I have found it invaluable for greenhouse stages, etc., as a prime coat for all wood-work where exposed to the weather. It prevents warping and checking and at the same time repels water. I consider it just so much lead and oil saved. If followed with a coat of paint it remains on the surface and forms a solid body. Buildings treated in this way will suffer no harm for several years without other paint.

J. G. BURROWS.

Fishkill, N. Y.

THE FALL SHOW of the Pennsylvania Hort. Society occurs at Philadelphia October 2 to 5 inclusive.

GERMAN BULBS FOR FLORISTS' TRADE.



We have large quantities of HYACINTHS, TULIPS, DAFFODILS, and all the leading bulbs, for forcing, grown for us on contract in HOLLAND, GERMANY and FRANCE. We quote strictly true, selected, first quality bulbs only; delivered free of all charges, duties, or packing expenses. Send a list of your wants for estimate. No advances required on orders booked now; and by so doing you can save money and secure extra fine stock. Address,

Z. DEFOREST ELY & CO., Wholesale Bulb Growers & Importers 1301 & 1303 Market Street. PHILADELPHIA, PA.

VAUGHAN'S BOOK FOR FLORISTS, FALL 1888, NOW READY. J. C. VAUGHAN, Box 688, CHICAGO.



SEND FOR SPECIAL LIST OF FALL BULBS.

Roman Hyacinths ready about Aug. 20. ORDERS TAKEN NOW FOR ROMAN HYACINTHS, LILY CANDIDUM, LILY HARRISII, AND ALL FORCING BULBS.

ALSO FOR THE FULL LINE OF DUTCH BULBS. JAMES KING, 170 Lake St. CHICAGO.

Bulbs, Seeds, Immortelles, Porcelain Flowers, Florists' Supplies, Etc.

J. A. DE VEER,

(Formerly of DE VEER & BOOMKAMP,)

183 Water Street, NEW YORK.

SOLE AGENT FOR

THE GENERAL BULB CO., Vegelenzang, (Holland), Bulbs. [Flowers, HOOPER & CO., LIm., London, W. C. (England), Flower Seeds, Porcelain Ls. BREMOND FILS, Ollioules, (France), Bulbs, Immortelles, A. H. HALLENSLEBEN, Konigsberg, (Germany), Vegetable Seeds.

Catalogues of Prime Hyacinths, Tulips, Roman Hyacinths, and all leading fall Bulbs, Florists' Supplies, Porcelain Flowers, and Vegetable Seeds will be mailed free to all applicants IN THE TRADE.

SPECIAL OFFERS:

	Per 1000	Per 100	Per doz.
Paper White Narcissus, large bulbs	\$ 12 00	\$ 1 50	\$.25
improved bulbs	14 00	1 75	.30
Chinese Narcissus bulbs	100 00	11 00	1.50
Lilium Candidum, (home-grown), extra selected	30 00	3 50	.50
imported, extra size	25 00	3 25	.45
second size	23 00	2 75	.40
Freesia Refracta Alba, (home-grown), extra size	22 00	2 50	.40
first size	17 50	2 00	.30
second size	15 00	1 75	.25
Calla Ethiopica (home grown), extra size		12 00	1 75
medium size		7 50	1.00
Gladiolus Colvillii alba, "The Bride"	20 00	2 50	.40
Lily of the Valley, true Berlin pips—in original cases of 2,500, \$24.00.	11 00	1 50	
strong Dutch clumps	22 00	3 00	
Dielytra spectabilis clumps	40 00	5 00	
Spiraea Japonica clumps	40 00	5 00	
Tuberose, Pearl, Northern grown, extra selected	18 00	2 00	
second size, 3 to 4-in. in circum.	10 00	1 25	
Pandanus (utilis seed fresh)		10 00	1 25
Cycas Revoluta stumps in all sizes at moderate prices.			

TERMS: Net Cash, without engagement. Correspondence solicited.

FOR SALE, 50,000 VIOLETS,

Maria Louise, Swanley White and Czar,

All strong, healthy plants, true to name, \$2.50 per 100 or \$22.00 per 1000, or 500 at 1000 rates.

ECHEVERIAS, \$3.50 per 100. Also fine double white, yellow, pink and variegated Hollyhock Seed at 25c. per half ounce package. Cash must accompany order from unknown parties. M. TRITSCHLER & SONS, Nashville, Tenn.

FOR WINTER FORCING. Per 100

Bouvardias—Davidsonii, Neuner, etc., strong clumps. \$5.00 and \$10.00
Carnations—Hinz's White, ext. strong clumps 6 00
Pres. Garfield and others, best sorts. 8 00
Begonia Rubra, strong, 3-in., blooming plants. 6 00
Culias—strong, blooming plants, 5 in. pots. 12 00
Double Primulas " 3 1/2-in. pots. 12 00
Daisies, large-flowered, white, red and pink 1 50
Violets—M. Louise and Swanley White. 80 00 & 8.00
PAUL BUTZ & SON, New Castle, Pa.

Delegates to the next THE Pullman Car Line convention will travel TO AND FROM

via the MONON ROUTE Louisville, Indiana, Cincinnati and the winter resorts of Florida and the South. For full information address

E. O. McCormick, Gen. Passenger Ag't, Chicago.

1843. BULBS. 1888.

Lilium Longiflorum and Candidum. NARCISSUS, Double White Fragrant, — AND — POETICUS, HEMEROCALLIS FLAVA.

IRIS GERMANICA.

Also a large and complete assortment of

NURSERY STOCK.

GEO. MOULSON & SON, Rochester, N. Y.

PANSIES ONLY!

The BEST STRAIN and the most COMPLETE COLLECTION in the market. Send for new circular and price list to the Trade.

ALBERT BENZ, Douglaston, N. Y.

AUGUST RÖLKER & SONS,
 44 Dey St., NEW YORK,
 Supply the Trade with
SEEDS, BULBS,
 And all kinds of
FLORISTS' SUPPLIES.
 Price List mailed on application.



**"DUTCH FLOWER ROOTS
 AND BULBS."**
 HYACINTHS,
 TULIPS,
 LILIES,
 ETC.

SEND FOR FALL LIST.

MICHEL PLANT AND SEED CO.,
 718 Olive St., ST. LOUIS, MO.

FORCING BULBS.
 ROMANS AND DUTCH HYACINTHS,
 NARCISSUS, LILIAM HARRISII
 AND CANDIDUM, TULIPS,
 FREESIAS, ETC.
 Send for prices by the 100 or 1000. Special list will
 be ready in August.
A. GIDDINGS, DANVILLE, ILL.

C. H. ALLEN,
 (Successor to C. L. ALLEN & CO.)
BULB GROWER
 TO THE TRADE ONLY,
 JAMESPORT, N. Y.
 Catalogue now ready.

GLADIOLUS, LILIES, TUBEROSES, DAHLIAS, TIGRIDIAS,
 AND OTHER SUMMER FLOWERING BULBS.

BULBS AND PLANTS
 IMPORTED BY
C. H. JOOSTEN,
 3 COENTIES SLIP, NEW YORK.

FOR SALE, in FINE CONDITION
Adiantum Cuneatum

	Per doz.	Per 100
From 6-inch pots.....	\$6.00	\$45.00
" 5 " "	5 00	36 00
" 4 1/2 " "	4 00	30 00
" 4 " "	3 00	22 00
" 3 1/2 " "	2 50	18 00
" 2 1/2 " "	1 00	
Per 1000, \$75.00.....		

WM. BENNETT,
 FLORIST,
 FLATBUSH, L. I.

CALIFORNIA GROWN FLOWER SEED
 — TO THE TRADE —
 Carnation, Verbena and Hollyhock.
JOSEPH SEXTON,
 GOLETA, Santa Barbara Co., CALIFORNIA.

OUR WHOLESALE CATALOGUE
 — OF —

BULBS

Of all Sorts,
CHRYSANTHEMUMS, &c.

Is now ready. Will be sent to all applying that we know
 to be engaged in the trade—or to any furnishing us
 evidence, as cards, letter-heads or bill-heads.

V. M. HALLOCK & SON,
 QUEENS, NEW YORK.

WE ARE NOW BOOKING ORDERS FOR
 HYACINTHS, TULIPS, Single and Double NARCISSUS, Etc.
SEEDSMEN AND FLORISTS

Importing direct should write us for prices. Special rates to large buyers. Largest stock of
*Hyacinths, Tulips, Polyanthus, Single and Double Narcissus, Narcissus Bicolor
 Horsfieldi, Poets Ornatus, Trumpet Major, Double Von Sion.*



R. VAN DER SCHOOT & SON.
 Bulb Growers,
 HILLEGOM, near Haarlem, HOLLAND.

P M POLMAN MOOY, HAARLEM,
 HOLLAND.
 WHOLESALE GROWERS OF
DUTCH BULBS.

SEE OUR GENERAL LIST FOR NOVELTIES AND SPECIALTIES.
 HEADQUARTERS FOR FORCING BULBS.
 ESTABLISHED IN 1810.

F. E. McALLISTER,
 — WHOLESALE DEALER IN —
Seeds For the Florist Market, Gardener and Farmer. **Requisites** Such as Baskets, Im-mortelles, Grasses, Mosses, Boquet Pa-pers, Pampas Plumes, etc. **Bulbs** For the Green-house or Gar-den.
 22 Dey Street, - - - NEW YORK.

BULBS **HYACINTHS, TULIPS, ETC.**
 FINEST QUALITY! LOWEST PRICES!
CURRIE BROTHERS,
 Seedsmen and Florists, - - MILWAUKEE, WIS.
 Illustrated Catalogue FREE on Application.
SEEDS AND PLANTS.

THE SYRACUSE NURSERIES,
 OLD AND RELIABLE,
Are still offering the most complete assortment of young, smooth, thrifty Stock in America.
BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Headed)
PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN APRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of
 Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality.
 Special Inducements to Buyers in large quantities. Trade List out August 1st.
SMITHS, POWELL & LAMB, Syracuse, N. Y.

GET A BETTER CATALOGUE FOR '89

Than you had for '88, if possible. Have it clean, correct, and pretty with pictures; tell the truth in it about your goods. You can command the best facilities for doing all this by corresponding with the undersigned, the "florist printer," who is thoroughly ready to make better work than ever, and more of it. Write him NOW—he don't expect to be able to serve all who want him to this season. He is

J. HORACE McFARLAND, Harrisburg, Pa.

Washington.

A part of this city had experience with a young cyclone September 16. At the botanic gardens serious damage was done.

The cyclone came from the southwest and swept over the garden in a diagonal direction toward the northeast. At the southwest corner, just outside the garden several large shade trees were uprooted. A section of the iron fence was thrown down, and the storm, passing over the brick house used for offices, struck the dome of the main conservatory. It tore off the top, which was of iron, capped with asbestos, being the flue through which smoke escaped. The iron framework was torn to pieces and the fragments scattered to the earth. Whole tiers of the ribbed or fluted glass covering the dome were destroyed. The contents of the conservatory escaped serious injury. One or two of the palms suffered slight disfigurement from pieces of broken glass cutting the foliage, but no harm was done to the trunks. A section of tin roofing lifted from a house outside the garden near the southwest corner was carried entirely over the conservatories and deposited on the ground near the main east and west walk.

The Garfield memorial tree, being an acacia in the south of the main conservatory and between it and the smaller hothouses, was laid flat. A few steps further south and on the border of the walk fronting the row of hothouses the Garland memorial tree, and elm, was split clear down the trunk. On the north side of the main conservatory a buckeye, taken seventeen years ago from the grounds of the late Hon. Thos. A. Hendricks, and known as the Hendricks memorial tree, was thrown down with such violence as to tear the roots from the trunk. The Garfield tree was planted as a memorial of the late President, and the Garland tree was planted by the present Attorney-General. All three are destroyed.

Several sashes were lifted from the smaller greenhouses, and, carried over the main conservatory, were lodged in trees. One of these was recovered from the topmost limbs of a tree, with only half a dozen of the panes of glass broken. Some of the largest trees in the garden, among them a black walnut that had stood for years, were uprooted. On the north side of the large conservatory a large tree was lifted bodily from the earth and laid across the walk ten feet from where it had stood. But the power of the cyclone was most forcibly shown by the removal of that portion of the main conservatory between the rotunda and the east wing a distance of 12 inches out of plumb. The entire frame-work of the structure is of iron, and hence could not be torn about, but it was moved from its base northward at least a foot. A number of the palms in the grounds were overturned, but it is believed all but one of them can be saved. It is estimated that the damage to the conservatory is about \$1,000; that it will cost that much to make repairs. But as there is an appropriation of \$5,000 in the pending sundry civil bill, which it is believed will be passed in a day or two, for the garden, the work of repairs will be carried forward as rapidly as possible.

PANSY PLANTS,

from first class seed, ready for immediate delivery, 75 cents per 100, \$5.00 per 1000.

JOHN J. CONNELLY, Bryn Mawr, Pa.
Mention American Florist.



NEW DOUBLE PETUNIA DAISY DEAN

In offering to the trade this new variety of double Petunia, I feel sure that I am sending out a real acquisition to this deservedly popular class of plants. Trial is the test of merit, and I will simply state that having sold it in my retail trade for the last two years, side by side with other varieties, although held at fully 25 per cent. higher price than the general collection, I sold more of this kind than of all others combined. It has the following

THREE STRONG POINTS IN ITS FAVOR.

1st. **ITS COLOR** being a soft shade of rich lavender pink, free from the magenta color so objectionable to many. It always attracts the attention of customers, many having said to me they never liked Petunias till they saw this variety.

2nd. **ITS HABIT**, dwarf, short jointed, and bushy, making a model pot plant for the retail trade.

3rd. **ITS PROFUSION OF BLOOM**. Equaled by few if any varieties in the market.

These combined merits make it a plant that no one who has a retail plant trade can afford to do without it. And to give all a chance to possess it for next spring's trade, I have put the price so low that all may buy now and raise their own plants for spring. Orders booked now and filled in rotation as soon as plants are well established, beginning about October 15th.

PRICE, by mail, \$1.50 per dozen; by express, \$1.25 per dozen, \$10.00 per hundred.

All orders must be accompanied by cash, and no order accepted for less than one dozen.

I ALSO OFFER

	Per doz.	Per 100	Per doz.	Per 100
CARNATIONS, field grown—Hinze's,				
Peter Henderson, Mrs. Joliffe.....	\$1.00	\$8.00		
HARDY PINK—Snow.....	1.00	6.00		
BEGONIA—Louis Chretien, 2-in.....	.75	5.00		
BEGONIA—Rex, 2-in.....			\$.60	\$4.00
FUCHSIA—Phenomenal, 2-in.....			.75	5.00
Storm King, 2-in.....			.50	3.00
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Address all orders to

JOSEPH E. BONSALE,

308 Garfield Ave., SALEM, OHIO.

CARNATION

	Per 100
De Graw, from open ground.....	\$ 6.00
Colored Carnations in variety.....	8 00
Primula Obconica.....	\$12.00 to 35.00
Primula Double White.....	10 00
Single Primulas, good strain, 2-inch, at.....	3 00
New Coleus of 1888 now ready. Send for price list, and mention American Florist.	

I. N. KRAMER & SON,
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MARIA LOUISE, Strong Plants,

ABSOLUTELY FREE FROM DISEASE.

First Size, \$7.00 per 100. Second Size, \$5.00 per 100.

Also Carnations, most popular sorts, fine, healthy stock. First size \$8 per 100; Second size, \$6 per 100.

ADDRESS **J. G. BURROWS,** Fishkill, N. Y.

Bouvardias, Roses, Etc.

	Per 100
BOUVARDIA BOCKII, the finest pink variety yet sent out, 3-in. pots.....	\$15.00
" " 2-inch pots.....	8.00
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ROSES, fine collection, 2 1/2-inch, fine.....	4.00
VERBENAS and COLEUS, 2-inch.....	2.00
Rooted Cuttings of Coleus and Verbenas.....	1.00

FALL LIST NOW READY, AND WILL BE MAILED FREE TO ALL APPLICANTS.

Address **GEO. THOMPSON & SONS,**
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Mention American Florist.

100 Vinca major variegata..... at 7 1/2 cents.
225 Dianthus Quertier..... at 7 1/2 cents.
225 Dianthus Mrs. Sinkins or Snow..... at 7 1/2 cents.
Strong, field grown plants.
JOHN CURWEN, Jr.,
Villa Nova P. O., Delaware Co., Pa.



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IMPORTERS AND DEALERS IN

ORCHIDS, EXOTIC AND HARDY PLANTS.

The stock of Orchids includes the choice collections of Jas. R. Pitcher, W. A. Manda, Benj. Grey, Chas. H. Snow, J. Cartwright, Wm. Bennett and W. W. White. The Cypripedium embrace over two hundred varieties, including the rarest hybrids.

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The collection of stove, greenhouse and hardy plants includes varieties and sizes to suit all purchasers. All plants warranted true to name.

Catalogue ready November 1st, 1888, and mailed free to all inquiries.

CUT FLOWERS ALL SEASONS OF THE YEAR.

Address **W. A. MANDA, Gen'l Manager,**
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ROSES.

In order to make room for young stock, we offer the following low inducements:

Per 100
 Mermet, Bon Silene, (from 3 1/2-inch pots)..... \$ 8.00
 S. d'un Anl. Cook, " 3-inch pots..... 6.00
 Safrano, and Adam, " 2 1/2-in. pots..... 5.00
 Bride and La France, 3 1/2-inch, \$10.00, 3-inch, \$8.00;
 2 1/2-inch, \$5.00, per 100.

Teas and Hybrids from open ground, \$6.00, \$8.00 and \$10.00 per 100.

Ampelopsis Veltchii and Quinquifolia, first size \$8.00, second size \$6.00 per 100.

Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots, \$10.00 per 100.

CARNATIONS, Strong Clumps.

Peerless, Edwardsii, Hinze's White, Portia, Crimson King, Philadelphia, Hinsdale, James Garfield, Mrs. Garfield, Alegatiere, Fred Johnson, Andalusia, Annie Webb, J. Gould and Century.

1st size, \$8.00 per 100; \$65.00 per 1000.
 2nd size, \$6.00 per 100; \$50.00 per 1000.

VERBENAS.

Perfectly healthy out-door rooted cuttings. Mammoth set XX collection, \$1.25 per 100, \$10.00 per 1000.
 General collection, variety unsurpassed, \$1.00 per 100, \$8.00 per 1000.

VIOLETS.—Marie Louise and Swanley White, strong, healthy plants. 1st size, \$6.00 per 100; \$55.00 per 1000. 2nd size, \$5.00 per 100; \$40.00 per 1000.

Our Carnations and Violets are grown on new soil. They are large and perfectly healthy.

I. C. WOOD & BRO., Fishkill, N. Y.
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NEW CARNATIONS.

New White Carnations Wm. Swayne and L. L. Lamborn. Fine field-grown plants, \$35.00 per 100.

New Dark Crimson Carration, PRIDE OF KENNETT, \$25.00 per 100. Prices of other leading varieties on application.

Also 2,500 SMILAX, 3-inch pots, prices low.

WM. SWAYNE, Kennell Square, Pa.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,
 CEDAR RAPIDS, IA.

Mention American Florist.

HUGHES' SOLUBLE FIR TREE OIL.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants: such as ferns, etc. If used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

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Housewives should not be without it! Used with ordinary household soap it is an effectual DISINFECTANT, BLEACHER AND CLEANER OF FABRICS. It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

Put up in 1 gallon tins, \$3.25 Full directions & trade Put up in 1 quart tins, \$1.00 mark on each package.

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Operative Chemist,

MANCHESTER, ENGLAND.

New York Depot with

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WHOLESALE GROWER OF

PLANTS AND CUT FLOWERS.

✽ ROSES A SPECIALTY. ✽

Decorative Plants, as Palms,

Dracenas, Crotons, Ferns, etc.

Write for price list.

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LADY PLYMONT,

Variegated Rose Geranium, ready now, 2 1/2 and 3-inch pots, at \$10.00 per 100.

Begonia Louis Christien Per doz. Per 100
 \$1.50 \$10.00

" Semp. Gigantea, fine 3 in. pots 8.00

" Semp. Gigantea fine young plants 5.00

" Rubra Rubella, Robusta, Sandersonii and Welltoniensis, clean and thrifty, 4 inch pots. 1.25 8.00

Callas, 5 and 6-inch pots 15.00

" nice blooming plants. 1.50 10.00

5,000 field grown Hermosa, ready Oct. 1st, 1000 \$90.00, 1,50 10.00

5,000 field grown Geraniums, Happy Thought, Distinction, Mt. of Snow and Mal. Salleroi 1.00 6.00

2 in. pots from same, \$25.00 per 1000, 3.00

Nice stock Geranium Pernifolia odorata 2 and 3 inch pots, \$5 and \$8 per 100.

General Greenhouse Stock, low. Write for what you want. We can please.

WILSON BROTHERS,
 SPRINGFIELD, OHIO.

CARNATIONS.

Large clumps from open ground.

Hinze's White Portia, Pres. Garfield, Scarlet Gem, Crimson King, Mrs. Jolliffe, \$8.00 per hundred.

Grace Wilder, Lady Chastin, May Queen, Chester Pride, J. J. Harrison, \$10.00 per hundred.

American Wonder, Dawn, Grace Fardon, James Perkins, Mrs. Mangold, Mrs. Garfield, Robert Craig, B. A. Elliott, Columbia, Jean Sisley, Lydia, Sunrise, Sensation, and Astoria, \$2.00 per dozen

L. L. LAMBORN and WM. SWAYNE, 10 cents each

L. L. LAMBORN, ALLIANCE, O.

Hail Notes.

Occasional dashes of hail in the vicinity of New York city is teaching some of the incredulous florists great respect for the Florists' Hail Association. Flatbush was treated to a lively sprinkle on August 28 that broke several thousand lights of glass. Short Hills, N. J., got a round on August 31, while at Saddle River, N. J., a lively little dash of small hail fell about two miles north of the secretary's home, and extended across the line into New York state. This latter storm may be looked upon as an official greeting.

The secretary of the Florists' Hail Association is desirous of presenting to the next meeting of the association and the Society of American Florists full statistics of points at which hail has fallen for the year. Florists, whether members of the association or not, will confer a favor by notifying John G. Esler, Saddle River, N. J., of the time and place where hail storms have or may occur.

A MOST EXCELLENT PICTURE OF THE DELEGATES TO THE NEW YORK MEETING OF THE SOCIETY OF AMERICAN FLORISTS, TAKEN AT IONA ISLAND, N. Y., AUG. 24, 1888. SIZE, 15 X 20 THIS IS THE BEST PICTURE OF THE KIND YET TAKEN. PRICE, \$1.00 BY MAIL PREPAID.

RILE & CO., 106 N. 10th St., Philadelphia.

8000 STRONG

FIELD-GROWN CARNATION PLANTS.

HINZE'S WHITE, GARFIELD and other choice varieties, \$8.00 per 100, \$30.00 per 1000.
GERANIUMS in var., 3 and 4-in. pots, \$1.00 per 100.
CYCLAMEN PERSICUM, strong bulbs (dry), \$8.00 per 100.
RICHARDIA ALBA MACULATA, dry bulbs, first size, \$8.00 per 100. Second size, \$5.00 per 100.

E. HALL & SON, CLYDE, O.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs  California Lily Bulbs
Japanese Seeds, Conifers, Palms
Trees, Shrubs, and Bamboos.

H. H. BERGER & CO., 315 & 317 Washington Street,
SAN FRANCISCO, CALIFORNIA.
Send for Estimates. Established 1878.

HIGH GRADE PANSIES

A SPECIALTY.

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors:

Our Improved Giant Trimardeau as the best for market.

And New French Fancies as Extra.

Trade Packages of either variety at \$1 each. Seed of our own growth.

We have proved these to be the highest quality of Pansies at the present day, and are the same as we exhibited in Boston in May last.

DENYS ZIRNGIEBEL,
Needham, Mass.

Florists, save expressage, save in cost, by getting Pansy plants now, to set in frames for forcing and for early spring sales. I have stocky seedlings from the open field, of my own seed, grown from most distinct and best marked only, of Trimardeau, Olden, and various other famous fancy novelties, so PANSIES each variety and shade is properly proportioned, forming a complete mixture. Price, \$5.00 per 1000 prepaid. Also strong plants of the fine curled Emerald Parsley, 5c. per 100 free. Send postal at once for method of Wintering Pansy Plants, to DANIEL K. HERR, Lancaster, Pa.

THE BEST AND CHEAPEST
DOUBLE PETUNIA SEED

(*P. hybrida grandiflora fl. pl.*)

in the market. For sale to the trade by the grower.

G. A. McTAVISH,
NORTH SAANICH, B. C., CANADA.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

TEA-SCENTED AND OTHER ROSES,
30,000 IN POTS.

Clematis, 50,000 in pots,

Grand plants, fit for shipment at any time.

200,000 Dwarf Roses for Fall Delivery.

Our collection is unequalled, and the plants promise to be exceptionally fine.

20 ACRES FRUIT-TREES. 10 ACRES RHODODENDRONS.

Descriptive and Priced Lists mailed on application.

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ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

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Send 8 two cent stamps for Catalogue and Plate.

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NEW AND RARE PLANTS, ETC.

A very extensive Stock of Orchids:
EAST INDIAN, MEXICAN, CENTRAL and
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PLANTS, a large Collection.
NEW AND RARE HOTHOUSE AND GREENHOUSE
PLANTS, carefully grown, at lowest rates.

Finest Winter Blooming Roses, Clematis, etc.;
DUTCH BULBS, large importations from leading
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Send Catalogues on application.

JOHN SAUL, Washington, D. C.

WATER LILIES,
All Colors.

Young plants suitable for late flowering
NOW READY.

Send for prices.

BENJ. GREY, Malden, Mass.

SCHILLER & MAILANDER,

NILES CENTRE, ILLINOIS,

Again offer a large stock of

CARNATIONS, HINZE'S WHITE AND SUNRISE.

Fine healthy plants, at \$8.00 and \$10.00 per 100.

WANTED.

SPIRÆA VAN HOUTTEI, CATALPA JAPANESE
HYBRID, PYRUS MALUS PARKMANII,
HOLT'S MAMMOTH SAGE, EVER-
BEARING TREE BLACKBERRY,
AMPELOPSIS VEITCHII

Parties having the above for sale—true stock of
good mailing size—will please quote prices in quantities, to

JOHN S. PEARCE & CO., Seedsmen,
LONDON, ONTARIO.

Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,

BY THE HUNDRED OR THOUSAND,

GEO. WITTBOLD,

Cor. School and Halsted Sts.,

LAKE VIEW, CHICAGO.

Mention American Florist.

CHINESE PRIMROSES.

White, Crimson, Pink, Double Pink and Striped.

Seedlings from selected plants of Rupp's, Veitch's
and Covent Garden strains. Strong, 2½-inch pots,
\$3.00 per hundred.

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F. A. RIECHERS & SOHNE A. G., Florists,
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Largest stock of Azalea indica, Camellias, Lilies
of the valley for the wholesale trade. Price list
on application.

PRIMULA OBCONICA
IN QUANTITY.

FINE, HEALTHY PLANTS.

PETER FISHER,

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1000 ROSES, 4-IN. POTS.

ERMETS, PERLES, BON SILENE, FRIGNEUSE, THE
BRIDE, NIPHETOS, SAFRANO, ETC.,

at \$10.00 per 100. All in good condition for winter
blooming.

1000 Bouvardia A. Neuner, Pres. Garfield, \$10 per 100.

1500 Carnations, leading kinds, \$10.00 per 100

1000 Violets, Maria Louise, Swanley White, \$6 per 100

All the above are fine clumps from open ground.

EVENDEBROS., Williamsport, Pa.

CARNATIONS.

Field grown clumps, specially for Winter flowering;
strong, healthy plants of best varieties.

BUTTERCUP, CENTURY, PORTIA, SEA-

WAN, CHESTER PRIDE, JEANETTE,

HINZE'S WHITE, SILVER LAKE,

DAWN, AMERICAN FLORIST,

WM. SWAYNE, L. L. LAM-

BORN, and other fancy vars.

Prices by dozen and hundred given on application.

CHAS. T. STARR, Avondale, Chester Co., Pa.

PANSIES.

My collection of Pansies has for years attracted a
great deal of attention. Florists and amateurs both
conceding them to be of the highest quality.

My Collection received Premiums wherever Exhibited.

Pansy seeds, all varieties, mixed, per ounce, \$8.00;
1-8 ounce, \$1.00.

Trimardeau and all the large flowering kinds,
mixed, 1000 seeds \$1.00. Send for price list.

OSCAR R. KREINBERG, box 294 Philadelphia, Pa.



THE TRUE BERMUDA EASTER LILY.

HEADQUARTERS FOR THE TRUE BERMUDA EASTER LILY

(Lilium Harrisii.)

We are probably the largest growers and dealers of this famous lily in the world, our acreage in Bermuda being double that of all other growers combined. The bulbs we offer are invariably larger, stronger and heavier than those usually sold, for the reason that no expense is spared in manuring and cultivating the fields, experience having shown us that bulbs so grown are greatly superior to bulbs grown on impoverished and unfertilized land year after year as is the general practice.

THE TRUE BERMUDA EASTER LILY

Is one of the grandest acquisitions to our list of forcing bulbs. Its popularity and sales have increased annually two fold and deservedly—for it can always be depended upon to yield an abundant and profitable crop of flowers.

PRICES OF THE TRUE BERMUDA EASTER LILY BULBS:

	Per 100	Per 1000
Extra Large Bulbs (averaging 7 to 9 in. in circum.)	\$15.00	\$140.00
First Size Bulbs (averaging 5 to 7 in. in circum.)	8.50	75.00
Second Size Bulbs (averaging 3 to 5 in. in circum.)	7.00	60.00

SEND FOR OUR FALL FLORISTS' CATALOGUE, NOW READY, containing Descriptions, Illustrations and Prices of EVERYTHING NEW AND RARE IN PLANTS, BULBS AND SEEDS.

PETER HENDERSON & CO.,

35 & 37 Cortlandt St., NEW YORK.

WESTERN FLORISTS I NOW OFFER

- DOUBLE BOUVARDIAS. Very strong, well-shaped plants, ready for 6-inch pots.....\$15.00
 - HINZE'S WHITE CARNATION. strong clumps from open ground..... 10.00
 - PRIMROSE. Single Pink and White..... 5.00
 - HIBISCUS. 5 varieties, strong, 2 1/2 inch..... 5.00
 - MOON VINE..... 4.00
 - PERENNIAL PHLOX. 8 var, strong 2 1/2 in. 5.00
 - AMPELOPSIS VEITCHII. Strong, 3 1/2 in. 5.00
- Write for prices on Cyclamen, Begonias, Asparagus, Geraniums, Coleus, Passifloras, Violets, etc., etc.

Address **N. S. GRIFFITH,**

JACKSON CO. INDEPENDENCE, MO.
(Independence is well located for shipping, being 8 miles east of Kansas City.)

ORDERS TAKEN

- For Rooted Cuttings of COLEUS, CARNATIONS, VINCAS, GRANT GERANIUMS, Etc. \$2.00 per 100; \$15.00 per 1000.
- METALLICA BEGONIA, 2-inch..... \$4.00 per 100
- ROSES, H. P. and Teas, 2-inch..... 1.00 "
- DRACENAS, INDIVISA..... \$1.50 to \$3.00 per doz.

W. W. GREEN SON & SAYLES,
WATERTOWN, N. Y.

MILDEW.

An Interesting Inquiry, and an Answer thereto.

MR. BENJ. HAMMOND, SING SING, N. Y., Sept. 19, 1888.
DEAR SIR:—I wish to enquire if your "GRAPE DUST" has ever been experimented with as a preventive of mildew on roses in greenhouses? This mildew is perhaps the most troublesome pest the rose-grower has to contend with, and sulphur is about the best remedy we know of at present. Great care must be observed in the application of any powerful remedy on account of the very tender foliage of the rose. If you think this preparation of yours would be more effective than sulphur in destroying mildew on roses under glass, and would not injure the foliage, I should like to give it a trial. Please let me know what you think about it.

Yours very respectfully, JOHN HOAG.

EFFECT OF USING "GRAPE DUST" ON MILDEW, IN LARGE GREENHOUSES.

NEWBURGH, N. Y., Oct. 28, 1887.
MR. HAMMOND, DEAR SIR:—I must thank you for the prompt delivery of the keg of "GRAPE DUST" to Mr. Wm. C. Wilson. I was at Mr. Wilson's place, Astoria, L. I., the other day, so I recommended your "GRAPE DUST," and he ordered me to send him a hundred pound keg for trial. If it was not good I should not have recommended it.
Now, in regards to your "GRAPE DUST" I must say that when I first heard of it I had but little faith in it, because I had tried all the remedies for Mildew I had ever heard of, but they were of little value. It seems that my location favors Mildew especially. When other florists are but little troubled, my houses are generally well covered with the Mildew, so when I sent for the first keg of "GRAPE DUST" my roses were almost worthless, but since using the "GRAPE DUST" my roses are the picture of health. There is not a vestige of Mildew to be seen on my place, and my roses fetch double the price, besides I have saved a month of firing, which I used to be compelled to do to kill Mildew.
Yours respectfully, F. J. A. SCHAEFER, Florist.

THE PAST YEAR "GRAPE DUST" HAS PROVED INVALUABLE AS A FUNGUSCIDE.

To better introduce, we will send samples free if applicants will pay postage or expressage.

HAMMOND'S PAINT & SLUG SHOT WORKS, FISHKILL-ON-HUDSON, N. Y.
SOLD BY THE SEEDSMEN OF AMERICA.

SMILAX. To the Trade at all Seasons.

F. E. FASSETT & BRO.,
ASHTABULA, OHIO.

Boilers Again.

We would like to ask W. W. Coles what would have become of his wrought-iron boiler if the water had got out of it, and then had cold water turned into it the same as the cast iron boiler he writes about in last issue of the FLORIST. It does not look reasonable to condemn a boiler because the piping was not as it should be. There are a great many cast-iron boilers in use, and they are giving, in most cases, the best of satisfaction; we are using them. We pipe overhead and are not troubled as much with red spider as when we used hot water under benches. Have taken out all our hot water boilers and pipes and put in steam, we find a saving in fuel and time and get better results.

W. W. GREENE SON & SAVLES,
Watertown, N. Y.

MODERN GREENHOUSE HEATING.—Under this title the Herendeen Manufacturing Co., of Geneva, N. Y., the manufacturers of the Furman steam boiler, publish a neat pamphlet. It presents arguments in favor of steam over hot water for greenhouse heating, with directions for laying pipe, etc.

THE FLORAL HOME is a new monthly devoted to floriculture, published at St. Louis and edited by A. A. Sherman. Volume 1, No. 1 is under date of September, 1888.

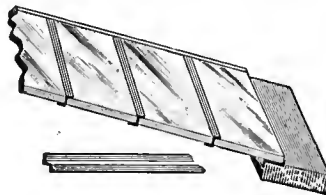


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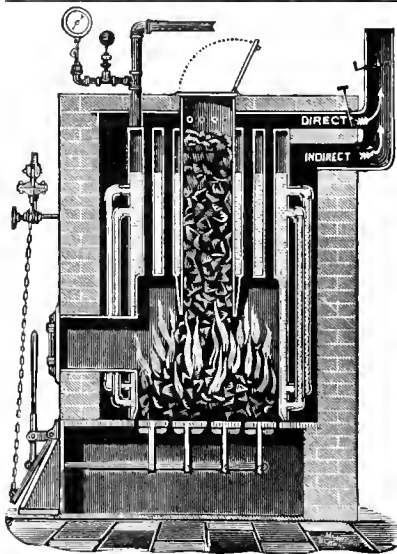
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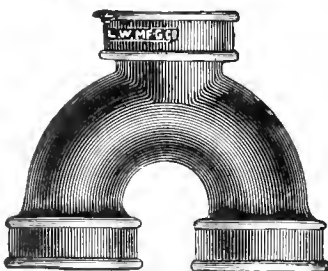
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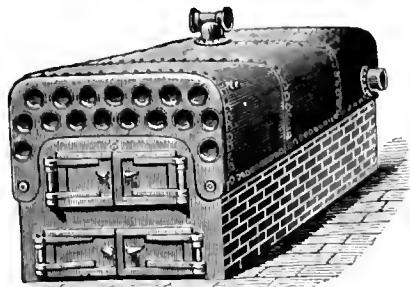
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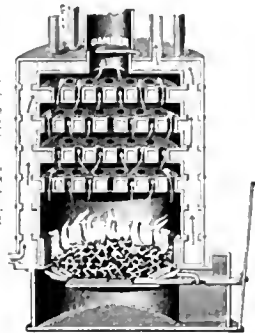
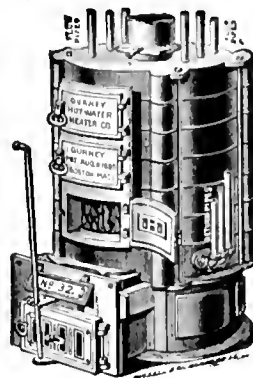
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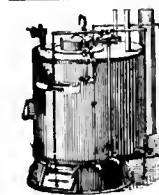


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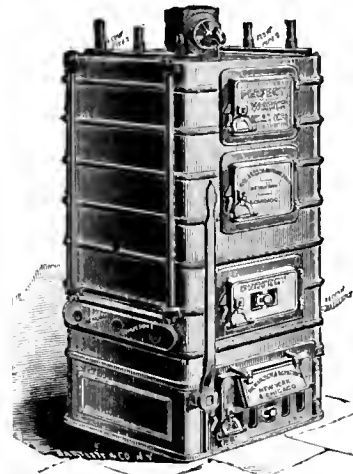
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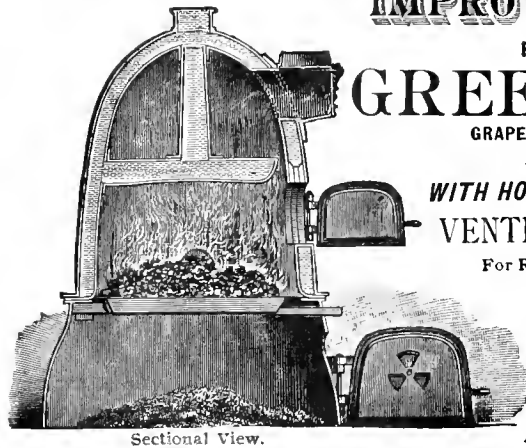
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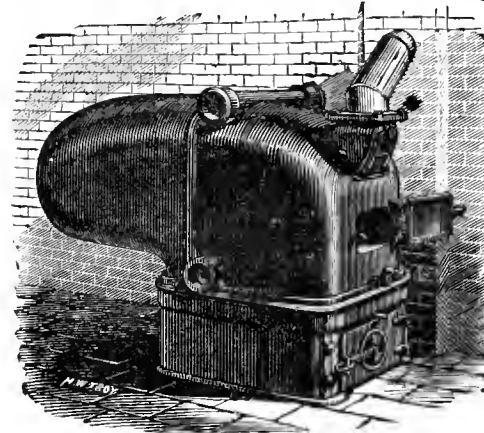
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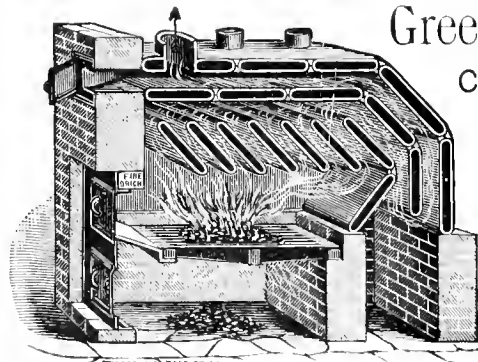
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THE AMERICAN FLORIST

NURSERYMEN'S DEPARTMENT.

Vol. IV.

CHICAGO AND NEW YORK, OCTOBER 1, 1888.

Supplement to No. 76.

THE AMERICAN FLORIST

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Entered as Second-class Mail matter.
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EASTERN OFFICE,
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the
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ident; CHARLES A. GREEN, Rochester, N. Y., sec-
retary; A. R. WHITNEY, Franklin Grove, Ill.,
treasurer. The next annual meeting at Chicago
the first week in June, 1889.

Long Island Notes.

BY WM. FALCONER.

THE WEEPING RUSSIAN MULBERRY.—I am down on mulberries. I don't like the trees and I don't like the fruit. But Andrew S. Fuller was here the other day and he assured me that this Weeping Russian is a mighty fine thing. And as Mr. Fuller has it himself and is mighty good authority, I've decided to get one.

EUONYMUS LATIFOLIUS.—During the first fortnight of September this is the most ornamental fruited shrub in cultivation, and this is saying a good deal. With us it is perfectly hardy, and the young plants fruit abundantly. Like most other euonymuses it is a good rooter and a good feeder, but although a strong wooded plant it is not a rank grower.

POPULUS ALBA V. BALLEANA isn't meeting with much favor here, but by shortening in the branches early and in this way giving them increased strength and better furnished bodies, we have got them to become pretty solid silvery pillars.

CORNUS ALBA VAR. SPATHII is a golden variegated leaved dogwood. We had it from Berlin a year ago and it has grown beautifully this summer and retained its highly gilded foliage untarnished. The variegation is very much deeper than in the silvery-variegated *C. Sibirica*. But one season's trial is not enough by which to speak authoritatively. In an editorial in the *Gardeners' Chronicle* a few weeks ago it is called *Cornus sanguinea* var. *Spathii*, but the name that I have retained is the one by which we received it from Spath himself.

HYDRANGEA PANICULATA is the "single" or fertile flowered typical form of the grand fall-blooming shrub now common in our gardens. It is beautiful and desirable. It comes into blossom in July and is done blooming about the time the *grandiflora* variety begins to flower. We must have both.

ROSA RUGOSA AND THE ROSE BUGS.—It is generally believed that rose bugs never prey upon this rose; now this year rose bugs were unprecedentedly numerous here, and they not only completely destroyed the rugosa blossoms, but also skeletonised much of their foliage. The white rugosa is fruiting as well with us as is the red-flowering one.

CLADRASTIS AMURENSIS now is perfectly leafless. It is always the same, it loses its leaves about the end of August or first of September, but, at the same time, seems to be healthy enough. Of course it blooms late, but its flowers are of a dirty purple color and not at all showy. Good enough as a variety but of very little use as an ornamental tree.

RHODODENDRON VASEYI is well set with flower buds for another season. It flowered beautifully with us last summer and seems perfectly hardy.

THE RECENT wet weather has almost defoliated our golden elder.

YOUNG'S GOLDEN JUNIPER "burns" too much in summer.

WE HAVE two forms of *Dimorphanthus Mandschincus*, one that bloomed in August and is now laden with black fruit, and one which was in finest bloom about the 10th of September. The cat-birds and robins are as fond of the fruit as they are of elderberries.

FOUR YEARS AGO we set out a hundred seedling hybrid rhododendrons along with a lot of grafted plants. The seedlings are now more than double the size of the grafted rhododendrons.

AZALEA MOLLIS is very beautiful, somewhat monotonous in color, may be, but unfortunately not absolutely hardy.

AZALEA AMOENA although evergreen is perfectly hardy here, but barely hardy at Boston.

CRATEGUSES with us are a complete failure on account of fungus. It has also attacked several of the *Pyruses*, notably *P. coronaria*.

IF YOU WANT big flower heads on *Hydrangea paniculata grandiflora*, get very stout young plants to begin with and in spring cut these back to the first joint of the young wood. Young, vigorous plants, stout wood, hard pruning, few shoots at a time and fat living are what give the bunch-heads big enough to fill a peck measure.

OUR GOLDEN PINES.—Two years ago I became very solicitous about our golden pines (*P. Massoniana aurea*) as a resinous exudation seemed to cover their whole bodies more especially the young wood. By way of experiment I made a lath shading and set this up over them, and now they have completely recovered and never looked better than they do to-day. It would appear that the thin shading helped them. These two specimens are

the parents of all the golden pines in cultivation east of California, at least. When Trumpey used to come here with his wagon for "grafts" of these and other things I used to tell him "go help yourself, but don't show me what you take." When I would look around after he had gone, really, I could hardly tell where he had been cutting, so skillfully and rationally would he use his knife.

FILBERTS—What's the use of talking about soft-shelled hickories, big chestnuts and English walnuts to plant in our little yards, when we may just as well set out a lot of cob and filbert nut trees in a corner of the garden and begin picking nuts in a couple of years afterwards, and every year after continue to pick. We have made such a plantation in a sheltered place thinly shaded, by neighboring trees, and get lots of most excellent nuts.

PARKMAN'S FLOWERING APPLE.—About the 20th of May this was the loveliest plant in bloom in our grounds. It was loaded down with semi-double deep pink to crimson tinted apple blossoms, and the bright crimson pointed unopen buds were prettier than the expanded flowers. And now it is bearing a crop of the tiniest apples, about $\frac{1}{4}$ inch in diameter. Nurserymen catalogue it as *Pyrus Parkmani*, *Pyrus Halleana* and *Malus Halleana*, and the proper botanical name of it is *Pyrus baccata floribunda semiplena*. Well, what are you going to do about it? You all have agreed upon a price, viz., 50 cents a plant; now agree upon a name. Now, nurserymen, don't you think there is some need of you getting together and straightening out the names of these shrubs in like manner, as the florists get together to straighten out the names of their flowers, and the pomologists with their fruits, and do away with duplicate names and prevent piles of trouble and expense to yourselves and annoyance to your customers?

THE OAK-PRUNER (*Stenocorus putator*) is more likely to be the real cause of the mischief referred to by C. B. W. than is "The Seventeen Year Locust." This oak-pruner has been extremely busy this year and hasn't spared any species of oak we have got, providing the plant has attained a tree size, and the woods are full of it. It is particularly noticeable in July and August. It cuts off the ends of the branches two, three or four feet in length, and these occur all over the trees to their topmost pinnacle. Most of these cut-off branchlets drop to the ground at once, but a number of them hang on by a little bit of uncut wood or bark and give the trees a very broken up appearance. If you examine any newly fallen ones of these branches you will find the grub inside a little burrow it had made for itself beside where it had cut off the branch. This is the way it has of reach-

ing the ground; it cuts off the branch and then falls to the ground in the branch.

DUNREITH, IND.—E. V. Teas has sold his nursery business to A. T. Hudelson.

SAN FRANCISCO.—On September 14 we had a hanging, a circus and a nice little thunder storm all in progress at once. Thunder is a *rara avis* here. The florists' business here seems to be very good, especially in the newer progressive towns. There seems to be no trouble for well posted men to get a situation, but proprietors are more wanted. The nursery business is good everywhere, but pays best when backed by quite a little wad of money. The professions of all kinds are generally full to overflowing.

A GOOD WAY to clean up clumps of Erianthus Ravenna when the foliage has died down and become dry, is to touch a match to it and burn it over. No injury will be done to the roots and the cleaning is quick and effectual.

DON'T FORGET that you can print your fall price list in the nurserymen's department and have it circulated to the whole trade for much less than the cost of printing and mailing a list yourself. Try it now.

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 I offer to the trade this fall an unusually fine lot of
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 Send for price circular. Also including price for root grafts. Orders for root grafts should be received by November 10th.
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 Which they would be pleased to give prices on.

THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

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Leaves of Advice From a Limb of the Law.

(For Young Florists.)

II.

Your cold frames certainly do look very well. You seem to feel instinctively the coming of a cold storm and to know exactly at what point the keen, destructive air must be headed off. Yes, that is a capital idea to protect your glass by coarse wire netting.

No, I hadn't given the matter much thought, but now that you call my attention to the fact, of course I see that your arrangement of plants at different distances from the hot water pipes is very skillful and also your disposition of the flowerless growths which require to be shielded from the sun, is based upon experience gained by close application. But while you take all these wise precautions to shield the valuable stock of your greenhouse I would like to ask whether you are taking equal care of your business in general and whether you know in fact the exact extent and the exact weight of the burdens resting upon it?

Always reminding you that you are mortal, am I? Well, I don't want to see you get intoxicated upon the perfume of your own roses.

Suppose I ask you whether there are any liens on your business.

Liens! What do you mean by liens?

Ah, that's good. I like this inquiring mood better than a contemptuous shrug of the shoulder at the mention of practical every day business matters.

Permit me to ask a few questions: Weren't the masons repairing the brick work of your greenhouses last week? Yes; well, then they have a lien on the whole property.

Didn't you sign a bond for a hundred dollars yesterday to enable your friend Stump to take out letters of administration on his wife's estate? Yes. Well then, that's lien number two on your real and personal estate.

You have two or three small notes outstanding, I believe? Yes. Well then, each one is a lien on your estate.

Pardon me, I think you said you borrowed a hundred dollars a few weeks ago,

but that your old aunt refused to accept any other security than a mere "memorandum" of the transaction. Well, that "mem" is a lien on your worldly possessions.

Excuse me, you owe fifty or seventy-five dollars in the town don't you? Yes? Well, here too, are more "liens" on your estate.

What I mean by a "lien?" Good. That is getting down to hardpan. I wanted you to ask that question. By the term "lien" I mean any "legal hold upon or claim against your property." In plain language it means that you have in possession property which doesn't belong to you. True, the title is in you, but "paper titles" are not always what they purport to be. Therefore, don't get puffed up with vanity when you look over these long roofs of glass which shield so many delicate and costly plants.

Ask yourself: Do I own them? Would not the "liens," which now rest upon my property, were they to be foreclosed or collected, wipe out my whole equity, or interest in it? No, I am not an alarmist. I merely want to impress upon your mind the fact that for every dollar you owe or for which you have obligated yourself, there is a corresponding lien of dollar for dollar upon your estate. True, when you signed that bond for Stump you only created a conditional liability against yourself; but it is a condition which you must always hold yourself in readiness to perform. It may never arise, but you must be ready nevertheless. Therefore it is in reality an absolute lien and if you are a careful and honest business man you must always reckon that hundred dollars as spent when called upon to assume new liabilities.

Suppose we look at this matter for a moment and see how these "liens" may arise. You may give your note, you may accept a draft, you may indorse for a friend, you may make a loan, you may give a due bill, you may insure your life or your property, you may buy a bill of goods on credit, you may execute a bond or become security for some one, you may lease a piece of property, you may give a mortgage on your personal or real property, you may employ mechanics to build or repair, you may guarantee the payment of a note or of rent by some friend, etc.; in each and every case where you enter into such an obligation you create a lien on your estate.

In other words, you manufacture creditors. And in the eye of the law as well as in accordance with the moral code, a man holds his property in trust for his creditors. He may not waste or squander it, he may not use it as if it was absolutely and unconditionally his own.

Now there are still other liens of which I desire to say a word. As you are aware the village, town, county and state are

authorized to collect certain taxes upon your real and personal property. These taxes, the moment they are due, become liens upon your property. A good business man pays his taxes cheerfully and promptly. If you have the cash on hand it's a good investment. Above all don't waste time and energy grumbling about the size of the tax collector's bill. If you want to avoid taxes go up into the mountains or seek out an uninhabited island and live a hermit's or recluse's life. Some few prefer this.

Now the last lien of which I shall speak this morning is the judgment lien. It is quite possible that the most careful business man in the world should have a judgment docketed against him. It attaches immediately to his real property and follows it in most of our states for ten years, or until paid and discharged. It also constitutes a lien on your personal property while the execution is in the sheriff's hands. As you are well aware a judgment lien can only arise when a court has heard and passed judgment against you; or if you don't choose to appear, without hearing you.

As a general rule I would say to you, "Agree with thine adversary quickly;" but by this I don't advise you to humiliate yourself or suffer a wrong from any man's hand. If a man begins an action at law against you either go to a good lawyer or to an intelligent business friend of experience and talk the matter over calmly and coolly. If you determine that your adversary is right pay the claim at once, for lawyer though I am, I say keep out of the law except as a last resort.

If the matter goes to trial and you are worsted don't attempt to settle the matter yourself. Let your lawyer do this, for there are certain formalities to be gone through which are unknown to an outsider; and it frequently happens that long after a judgment has been paid in full the lien still rests upon your property. This arises from the grossest carelessness. Make it a rule of your business life never to discharge any kind of a lien which is recorded without taking good care that the proper memorandum of discharge is entered in the office where the lien is on record.

UNCLE BLACKSTONE.

New York Notes and Comments.

The many friends of Mr. William Court, traveler for Messrs. Veitch, will be deeply pained to hear of his sudden death at Chelsea. He was very greatly respected in trade circles here, as in England, and it is a question whether the Chelsea Nurseries will ever replace his loss, as far as the American trade is concerned. Mr. Court was among the many strangers storm-bound in New York during the memorable March blizzard, and was in

ill health at the time, but his death was sudden and unexpected.

How many growers here have made any experiment with Christmas roses? The few who have tried them previously report lack of success, but the United States Nurseries at Short Hills, is about to try flowering some 10,000 plants. The flowers are certainly very attractive; the next thing to do will be to give them a boom. The general public does not seem interested in novelties, however pretty, until they have been well advertised in some way. These hellebores are very popular abroad.

Asparagus plumosus nanus, seems likely to take precedence of *A. tenuissimus* in popular estimation. It is a beautiful pot plant when grown in full bushy form. Mr. Falconer says it is very satisfactory in the house, does not mind a little abuse. He spoke of the pretty effect obtained in a hall, where the feathery strands of this plant were draped over a deer's antlers. It does not propagate any too readily, though many growers increase it by layering.

Nothing is sweeter at this season than the flowers of *Hedychium coronarium*; one or two of the blooms will scent a whole room. It is a plant easily grown, requiring little attention, and certainly not without its value in a general utility greenhouse. It would never pay to grow it for the market, but a grower who is also a florist would find a few of the flowers very handy.

This is the season when the tuberose fiend is everywhere; these flowers are sold by the bushel on the street. They are quite out of date in the flower stores, and yet a great many are grown in New Jersey. Probably there will always be a certain demand for them, even though they have ceased to be a regular florists' flower.

The question to be demonstrated during the next season or two: will the various other shrubs pay when forced as well as lilacs? *Pyrus*, *viburnum*, *cydonia*, *kalmia* and so on can doubtless be forced readily enough if they will bring sufficient price to make it an object. The question with most commercial growers must of necessity be, not so much what they can do, as what will people pay for. There seems an increase of favor in the direction of forced shrubs, as in the case of most novelties. The *viburnum* brought in last winter were very highly commended; a few double cherry and almond were also admired. An easily forced and very attractive thing is the double black-berry; its wreaths of bloom suggest tiny white roses. Certainly, we do want a few novelties in flowers this winter; something a critical public will be willing to pay well for.

That surplus in the treasury of the Florists' Club is something to be proud of; a pleasant little surprise also. It is not very often that a horticultural society is troubled by the same question as the national government—what to do with the surplus.

At the sale of F. Sauder's orchids October 2, one of the most interesting plants disposed of was a handsome semi-established specimen of *Sobralia xantholeuca*, which sold for \$48. This is one of the rarest of the species, having very showy yellow flowers. This was the largest price realized by any one plant at this sale. Next to this was a splendid specimen of *Epidendrum prismatocarpum* about two feet across, said to be one of the largest specimens in cultivation. This was sold for \$25. Mr. Kimball paid the same price for a plant of the new

Laelia Eyermanii, which is supposed to be a natural hybrid between *L. majalis* and *L. autumnalis*. It is not only rare, but strikingly handsome according to Prof. Reichenbach's description.

More palms and decorating plants will be sold at auction soon; the last sale was decidedly encouraging. Every grower who has the necessary room is adding to his stock of such stuff; it gives a fine scope for specialties.

Mr. W. C. Wilson has been busy all summer repairing and rebuilding after his experience of the great storm. His stock of ferns was especially crippled by the exposure of that time. A good many are looking anxiously for a good season this winter to repair past losses.

Several growers are now preparing to stun the trade with something unusually fine in the way of cyclamens; each one is ready to swear by his own particular strain. Siebrecht & Wadley showed what they could do in this line last spring and their plants were certainly unusually fine; Messrs. Pitcher and Manda are now preparing to eclipse all previous cyclamens. Theirs is a Scotch strain. The ideal cyclamen for trade purposes must have large, richly-marked leaves and large distinctly colored flowers of good substance, borne on long stems. Short stems or thin texture render the flowers of little value, while the worth of the plant largely depends on the decorative effect of the leaves.

Single dahlias—are they likely to receive as much attention here as abroad? Some of the newer English sorts are strikingly handsome, rich in color and velvety in texture. They show all the most gorgeous reds and crimsons as well as pale yellows. They make a fine show in the autumn garden, and are effective in decoration. Infinitely more handsome than the double form like many other flowers.

It was a little surprising to find that good plants of William Francis Bennett were very scarce this autumn; no one seemed to have any, and there were numerous inquiries for them. It appeared as if less had been propagated than usual.

Cypripedium Harrisonianum—that appears to be even more useful than the old stand-by, *insigne*, for cutting. It is a very handsome flower to begin with, it blooms profusely and keeps on blooming for such a long time. Another good florist's orchid is *Oncidium Jonesianum*, a very distinct and comparatively new species. It has slender round leaves hanging downward; the flowers are in drooping racemes, pale straw color and white with numerous dark blotches. The flowers are lasting like most of its species. Quite a lot of this orchid has been sold at the recent auctions.

Among the chrysanthemum wonders to be shown this autumn in New York will be that wonderful Mrs. Alpheus Hardy, which is described as being more like a white ostrich plume than anything else. It will be remembered as having made its American debut at Boston last year under the care of Mr. Fewkes.

EMILY LOUISE TAPLIN.

Philadelphia.

Judging from present indications there is every probability that the supply of roses around Philadelphia this winter will exceed all previous years.

Mr. W. K. Harris, whose greenhouses are located on Woodland avenue, West Philadelphia, has many thousands of roses in 6-inch pots which are in a very

fine condition. He intends forcing about 2,500 of the *La France*, which rose he says paid him very well last winter. His specialties are, however, chrysanthemums (18,000 in stock), azaleas (some 15,000), and *Pandanus Veitchii*; the latter being the finest I have ever seen and I doubt if their equal is to be found anywhere in the country. Mr. Harris has also an enviable reputation as a grower of primulas, and this year his stock of the same is very fine and will in no way detract from his popularity as a specialist. During his past summer he has erected a sash house and is growing some 1,600 of primulas in same. His plan of ventilating this house is by having the sash fastened at the top and tilting them at the bottom, and by putting a little shade on the glass he is able to get the mean temperature inside of this house lower than outside in the open air and, thus for his purpose (growing primulas), is one of the best houses I have yet seen. In addition to the above Mr. Harris has built another fine improved greenhouse 20 x 100 feet, in which he has planted chrysanthemums, and the old reliable Jack house which proved so valuable to him in past years, has had to go to make room for chrysanthemums, to which plant he proposes to give great attention, thus assuring (barring unforeseen accidents), results which he will no doubt be proud of.

Mr. George Anderson has eleven greenhouses in the neighborhood of Mr. Harris which he has planted all in roses. His *Perles* and *La France* are in good condition and of the latter variety he grows more than any one else in this vicinity. He has not added to his greenhouses this year but is erecting a dwelling house of ten rooms and that he may live long to enjoy it is the wish of his numberless friends.

In close proximity to the above places is that of Mr. J. William Colflesh, which is always a model for neatness and in this respect is worthy the imitation of all florists, nor is this the only lesson to be learned from a visit to his houses as one can not help being impressed with the systematic manner in which all his work is done, even to the smallest details. This has no doubt been one of the means of enabling him to achieve his great success in floriculture. He has added one more house this summer and has a fine lot of asters in 4-inch pots for which at this time of the year there is always a great demand. His chrysanthemums (which are in pots ranging from 4 to 12 inches) are the finest I have ever seen. I have been growing chrysanthemums for the past ten years and it puzzles me to see how Mr. Colflesh has produced such fine healthy plants in 6-inch pots. His specimen plants with which he proposes to contest for the \$100 premium at the coming fall exhibition of the Horticultural Society of Philadelphia are something extraordinary. I have been informed that Mr. John Canere, of Delaware county, has also some very fine chrysanthemums, and indeed, some say they are the best in this vicinity, but as I have not seen them I must withhold at this writing further mention of them.

One of the most interesting places for florists to visit around Philadelphia is the immense establishment of Messrs. Craig & Bro., 49th and Market streets, and with such a collection of roses, palms, ferns, etc., one can surely interest himself for hours and very often pick up information which proves in practice to be almost indispensable. Their roses are in good condition and one large house

is occupied solely by American Beauties and La France. Of their Perles and Bennetts too much can not be said as they are undoubtedly the best around the city. Mr. Robert Craig informs me that his Perles were taken from cuttings of imported stock and he attributes the strong and healthy growth of these roses to this cause, but I for my part think that equally healthy plants can be grown from our own stock, providing as a matter of course, that the cutting is perfectly healthy, and ere long I trust we will have testimony proving the accuracy of my opinion.

From present appearances Messrs. Craig are going to have one of their old time crops of Dukes, as they are most certainly making the foundation for same. Their Mrs. John Laing house (22 x 100 feet) fully substantiates all that has been said in favor of that rose regarding its fine color and free blooming, they however do not expect to bring on the main crop until February. Messrs. Craig are growing two houses of exactly the same dimensions of Papa Gontier; one being planted with young stock and the other with the old plants which were forced last winter and at present one is not able to judge which will produce the best results this coming winter. Princess Beatrice is grown at their places to perfection and as a summer rose it is certainly a good one, but during the winter it does not grow so finely. It is interesting to note the different opinions as to the right name of the so-called "Gem" rose. Mr. Ernest Asmus says it is Marie Van Houtte, Mr. Hill claims that it is Comte de Grivel, Mr. John Thorpe would like to bet his hat that it is one of two old roses, but is not prepared to say which. Mr. Robert Craig has quite a number planted and they are making a gigantic growth, but he will not say what it is except that it is not Marie Van Houtte.

Mr. Craig has evidently great faith in the future of the palm, that is if one is to judge from the immense number he has in stock. The *Kentia Belmoreana*, *K. Australis*, *K. Forsteriana*, *K. Macarthurii* and *Latania Borbonica* he has by the thousands. The latter is grown successfully in cold frames as well as in the greenhouse. They have also a number of the rarer ones, such as *Areca Sanderianum*, *A. Geonoma*, *Jumanii*, a very compact growing variety, *Verschaffeltia splendida*, *Phœnicophorum Sechellarum*, *Livistona rotundifolia*, *Rhapis humilis*, *Kentia Canterburyana*, *Latania glaucophylla* and *Cycas Neo Caladoniae* in 5-inch pots.

Among the newer ferns worthy of special mention are *Nephrolepis rufescens tripinnatifida*, *Adiantum O'Brienii*, (a distinct form of *A. cuneatum*), *A. Furgessoni*, in general appearance not unlike a *Farleyense*, but a better grower and one that will multiply freely from seed, giving it advantage over *Farleyense* from a commercial view, *Lomaria gibba platyptera*, a magnificent decorative plant when it is grown to a large size, and *Adiantum Craigii*, originated at their place, not yet sent out. The latter is a variety with exceedingly long graceful fronds quite distinct from *cuneatum* and makes a fine specimen. It is evidently going to be a valuable acquisition to our list of ferns.

W. W. COLES.

HARTFORD, CONN.—The exhibition of the County Hort. Society September 20, was one of the best in the history of the society.

Philadelphia.

It is the custom of many of the society people to spend September and a part of October at their suburban residences, or at the many fashionable inns a short distance from the city, and during this time to entertain their friends at these places, which causes quite a flutter among the fashionables. Lawn parties, Germans, hops, etc. being in order. For this reason a number of the down town florists report a marked increase in their business, and on several occasions have sent quantities of flowers to both Wissahickon and Devon Inns. These same florists have booked a number of wedding orders for October.

The custom of dry goods merchants decorating their stores for fall and spring



A REMINISCENCE

openings is a good one. If the florists thus employed would charge a legitimate profit for such work they would not only be able to please the merchants, but reflect credit on the whole trade.

Mr. Fosterman, representing Messrs. F. Sander & Co., made arrangements for their first sale of orchids in this city, which took place at Thomas & Sons' auction rooms. They offered 350 lots. Among them were fine plants of *Laelia amanda*, the recently introduced *Laelia Eyermanii* and the *Oncidium Fostermanianum*, which was offered for the first time. The gentlemen interested were well pleased with the results of the sale and promise another for next fall.

Mr. John May and Mr. Rudolph Asmus were in town October 2.

The Peninsula Hort. Society held its first annual exhibition at Wilmington, Del. One point at least is worthy of imitation by other societies, and that is they have a ladies' committee, composed of some of the best known ladies in and about Wilmington. The local papers speak of the exhibition as being a great success, and say "That the floral display at the exhibition has seldom been surpassed for beauty and arrangement." On looking at the schedule we see that the prizes offered for cut flowers are: for best hand and table bouquets, \$2 each; mantel design, marriage bell and display of cut blooms, \$5 each; and on turning to the prizes offered for fruit we find that there are four premiums alone of \$100

each, for the best display of peaches, pears, apples and grapes. The great difference in amount of premiums would hardly bring out the best efforts of the florist.

I made a very hurried visit to Mr. Chas. Ball's place at Holmesburg, and one of the first things that impressed me was the perfect order and neatness that is everywhere before you, from his dwelling house, which is a very pretty bit of architecture, to the coal pit. Under these conditions, with his own experience and assisted by Mr. Taplin, it is needless to say that his plants are well grown, clean and healthy. I will not attempt to say much about ferns and palms as Mr. Ball's valuable essay is so fresh on our minds and will soon be printed in the society's annual report.

I beg leave to differ with your correspondent "C" in regard to the good taste of the "Novel Funeral Design," described in the October 1 issue of the AMERICAN FLORIST.

There has been a very limited demand for orchids in the city during the past year, notwithstanding several florists have tried to push them. This year a number of growers have gone into them, and we predict that this beautiful flower will receive a hearty welcome by a great many dealers who realize the value of giving "tone" to some expensive arrangement of flowers.

The Pennsylvania Hort. Society opened their fifty-ninth exhibition at their hall on the 2nd of October. The amount of credit the society deserves I will leave for some other correspondent to fix. The local papers are very kind in their notices, and few enterprises receive as much gratuitous advertising. This was also the regular meeting night of the Florist club, but as a great many of the members were actively connected with the Horticultural Society it was found necessary to make the meeting as brief as possible. The following officers were elected: Robert Craig, president; Chas. Ball, vice president; Thomas Cartledge, treasurer, and D. D. L. Farson, secretary.

Mr. Sander spent October 1 and 2 in Philadelphia sight seeing. He expressed himself as very much pleased with the city. He of course is very enthusiastic about orchids and says that one of the most important features in growing orchids is that they should have proper rest, the *odontoglossum* being the one exception.

H. H. BATTLE.

A Reminiscence.

The strictly original design illustrated was an inspiration executed by Mr. John Thorpe for the edification of the S. A. F. while at Iona Island, August 24. This novelty was hugely appreciated by all who had the opportunity of seeing it and we present an illustration as a memento of the occasion.

London Notes.

After a long dreary and wet summer, such as has not been known for years, September has arrived and we are sorry to say, so far has not proved any better than its predecessors, July and August. The continued rain and cloudy skies has worked wonders on the grass, which looks like one field of moss green velvet, but has been far from beneficial to many of the flower crops.

On a recent visit to one of the large flower seed growers here we were informed that many of the crops would be

short owing to the wet and cloudy weather, which would render it most difficult and almost impossible to harvest and dry the seeds. So far there have not been four consecutive clear and sunny days all summer.

In speaking of the London flower trade we think we can safely say that the cut flower designs and decorations are much behind those of the leading florists in the United States. From what we have seen we think the designs are more formal and lack the ease, grace and warmth of color which characterize the American florists' productions. In plant decorations there is no doubt but that the English florists and decorators excel, but in cut flower designs they are far behind their French and American cousins.

Maiden Hair fern is largely used here in all cut flower decorations. Now this is all very well in a pot, when shown as a pot plant, but not to be compared with smilax for cut flower designs and decorations, and yet, strange to say, smilax is almost unknown here. Perhaps it is not the fault of the florist, that it is not better known, as the British public is slow to take up new ideas and likes to cling to old ways and fashions. To the best of our knowledge there is not a single commercial florist growing smilax for the London market to-day. That is, growing it in any quantity and growing it as grown for market in America. We doubt very much if thirty yards of it could be bought in Covent Garden Market to-day.

The annual show of the Dahlia Society was held on Friday and Saturday, Sept. 7 and 8, at the Crystal Palace. The flowers were arranged in the central aisle of the main building, in the same manner and place as the roses were exhibited at the rose show.

Some of the best dahlia growers in England, both professional and amateurs, took part, and the show from all points of view was a success. Besides dahlias, some choice specimens of hollyhocks, summer chrysanthemums, begonias, gladioli and hothouse fruit were shown.

A number of new dahlias were exhibited, and where warranted, received certificates from the society. Among those who received certificates were Messrs. Hynes, Williams & Co. of Salisbury, for their new pompon dahlia "Eilen," a regular and well shaped flower of a deep maroon color; also for their yellow pompon dahlia "Whisper," and pale crimson pompon dahlia "Fairy Tales."

"Little Ethel," a pompon dahlia of a white color tipped with purple, was one of the finest shown.

Chas. Turner of Slough had a fine collection, and received a certificate for a deep purple shaded to pale rose pompon dahlia called "Rubens." Messrs. Cheal & Son of Crawley, had a fine show of single dahlias, and Messrs. Cannell & Son of Swanley, had a fine show of their varieties, among which the "Charming Bride," of a pink and white color, was noticeable. This firm also exhibited some fine begonias, the yellow and white varieties being particularly fine.

The finest flowers in the show were undoubtedly the group of Comet asters, shown by Mr. Frank Glasscock of Bishop Scottford. These were grown to perfection; each flower being alike as to size and color, and averaging six inches in diameter each.

Messrs. J. Burrell & Co. of Cambridge, won the prize for gladioli with a fine exhibit of 130 different spikes. They also received a certificate for their new gladiolus "Snowdon," a fine large white flower with purple throat. Messrs. Bur-

rell's exhibit of pompon dahlias was also fine, for which they received a first prize. Mr. W. H. Aphorpe of Cambridge, had a fine show of hollyhocks, much the finest we have seen this season; the flowers were perfectly shaped, and the colors distinct and true. Mr. J. T. West of Brentwood, had a new cactus dahlia for which he received a certificate. This is said to be one of the best cactus dahlias yet introduced. He also received a certificate for his new pure white pompon dahlia "Dolly Keith."

On Thursday and Friday of last week the National Chrysanthemum Society held their second show at the Royal Aquarium. The chrysanthemum shows here are extremely popular, and draw together some of the best growers in England. Gladioli, dahlias, lilies and fruit were also exhibited, and many of those mentioned as taking part in the Crystal Palace show, won prizes here. Messrs. Cheal & Son were again to the front with a first prize for twenty-four bunches of single dahlias. Messrs. Hawkins & Bennett received a certificate for their new early blooming variety named "Mrs. Hawkins."

The weather has been quite a treat the last week, bright, clear and warm, with plenty of sun. This may help the seed crop some, but we are afraid it has come too late to do much good.

September 21. T.

The St. Louis Exhibition.

The offer of prizes amounting to \$1,000 by the St. Louis Exposition for floral displays on the 9th and 10th insts, called out a lively competition from St. Louis florists and an excellent show was made.

There were seven entries for "best and most tastefully arranged decoration of greenhouse plants." In this class first prize, \$100, was awarded to the Jordan Floral Co.; second prize, \$75, to the Elbeard Floral Co.; third prize, \$50, to Carl Beyer; fourth prize, \$25, to C. Young & Sons. Many excellent decorative plants were shown, but while some were very tastefully arranged, the arrangement of most of the entries lacked grace.

For "best arrangement of cut flowers and plants for a parlor," prizes were awarded as follows: First prize, \$125, Jordan Floral Co.; second, \$100, C. Young & Sons; third, \$75, Wm. Ellison; fourth, \$50, J. Kunz and Carl Beyer, joint exhibit.

Among the features of the Jordan Floral Co.'s exhibit were the excellent quality of the plants used; a mantel banked with roses, while a mantel shelf above held a very elegantly filled basket of roses in the center with a small specimen palm on each side, the pots in white and gilt basket covers and then draped with smilax, the fireplace filled with specimen adiantums and at each side a specimen Pandanus utilis with a large Adiantum Farleyense hiding the pots; all sides of the space were filled with decorative plants very gracefully arranged and several handsomely filled baskets stood on pedestals among them.

C. Young & Sons' arrangement was also very handsome. Among the most attractive features were two handsome panels of laurel bearing in relief a fan and basket of roses respectively, both were of decided merit, as was also a wedding canopy with the top in the shape of a coronet.

The main feature in Wm. Ellison's entry was a table with the cloth worked out in carnations, flowers of varied colors being used to create figures in the cloth; the corners were white and the folds in

the "cloth" there were well executed. Each of the white corners was relieved by a garland of crimson roses. In the center stood a vase of crimson carnations filled with pink roses. A handsome basket of American Beauty roses was also a feature in addition to a very tasteful mantel decoration.

J. W. Kunz and C. Beyer's entry was a wedding decoration of conventional form.

For "best table decoration," Wm. Ellison received first prize, \$75; C. Young & Sons second, \$50; Jordan Floral Co. third, \$25. The center piece in Ellison's decoration consisted of a four-leaved clover of La France roses, and the decorations at the corners were of the same roses gracefully arranged with ferns and tied with ribbon of the same tint as the roses. It was a simple but elegant arrangement. Young & Sons' center piece was of American Beauty roses, ferns and small palms very effectively arranged. Jordan's table was a large round one with a seven pointed star of roses for a center piece.

For "best floral design of any kind," Wm. Ellison received first, \$50; Jordan Floral Co. second, \$25; C. Young & Sons third, \$10.

For "best handle basket" there were four prizes, \$25, \$15, \$10 and \$5, taken by C. Young & Sons, Wm. Ellison, Jordan Floral Co. and J. W. North in the order named. For "best vase-shaped basket" there were three prizes, \$25, \$15 and \$10, awarded to Wm. Ellison, Jordan Floral Co. and J. W. North respectively. For "best bride's bouquet and best bridesmaid's bouquet," four prizes of \$25, \$15, \$10 and \$5, taken by Jordan, Ellison, Young & Sons and North in the order named.

The judging was done on the point system, Messrs. Anthony, Gallagher and Grant, of Chicago, acting as judges. These gentlemen were afterwards dined by the exhibitors at the Mercantile Club.

Scientific Education for Florists.

EDITOR AMERICAN FLORIST:—No one regrets more than the writer the fact that the few remarks he made at the late convention in New York did not convey the thought intended. I was greatly surprised when a friend told me the general impression was that I ridiculed all education in connection with the florist and gardener. Certainly I endeavored to impress upon the minds of all present the necessity of an education, and that science was a result—in fact it is education.

The objectionable part of my remarks in regard to "agricultural chemists," in classing them as "humbugs," I intended to apply only to manufacturing chemists, those who would have us believe that a perfect analysis can be made of the soil and all vegetable products, and that fertilizers can be formulated to supply the necessities of all growing crops. We believe this simply impossible, and that when such pretensions are made "it is with intent to deceive."

We could wish every tiller of the soil, every grower of plants so well educated that there could not be a possible chance of his being deceived by the many relatively valueless varieties of plant food that is constantly being urged upon him. A high type of education is as essential to the florist as to any other business man, and there is no class of men that so thoroughly enjoy the knowledge pertaining to their business as the florist.

I should not have given this matter any notice but for the letter from Mr.

Collier on page 56 of the FLORIST, preferring to leave the matter until there should be a suitable opportunity to express my views at length on the necessity of the scientific education of florists.

Garden City, N. Y. C. L. ALLEN.

Long Island Notes.

BY WM. FALCONER.

THEY ARE FOREIGNERS every one, I mean that national flower committee (page 80). No, not even "a Yankee girl" is native born. Miss Taplin is an English girl.

LOBELIA SUBNUDA is a little gem of a plant whose foliage grows in tiny rosettes of silvery green and olive as pretty as an *amœtophilus*. Suitable for the finest kind of mosaic bedding and easily raised from seed. The plants are very small and should be three months old before set out, but they stand the summer's sun gallantly. Cut off the flowers if you wish to enjoy its pretty foliage which does not rise more than an inch above the ground.

OF THE China Asters sown June 9 all varieties except Triumph have been in good bloom for several weeks, but it has not yet emerged from its rosetted form.

AMONG BLUE flowers *Salvia Pitecheri* is now one of the brightest and best. Barely hardy, but planted out in summer and lifted and potted in early fall it forms an excellent pot plant, and without any of the grossness peculiar to *splendens*, *rutilans* or *involutrata*. Propagated from seeds or cuttings but not with the same freedom that we do other *salvias*.

COREOPSIS CORONATA is an annual species very common in gardens. It has large bright yellow flowers on long stems and which are well fitted for cut flowers. But as the crop sown in spring will not endure in good condition till fall, I made a sowing again June 9 to succeed early flowers. These have grown well and been in profuse bloom since, over a month. This together with China asters, zinnias, Meteor marigolds and mignonette is one of the plants we can make a very large show of bloom with in fall and that too at very little expense.

THE GLADIOLUSES I am now (Oct. 4) cutting were planted first week in July. Some planted June 26 are also in good bloom still.

JAPANESE ANEMONES. — Why don't you plant more of them? From the end of August till cut down by frost in October what have you more beautiful among hardy flowers than the white variety? If it isn't quite hardy with you a heavy mulching will save, or better still, lift the roots and winter them in a cold frame. No, it isn't of much use among cut flowers, it will last a day or two pretty well. Isn't this one of the amateur's plants that would give tone to your business? Any one seeing it now in bloom and perfection, and who has not got it already would surely want it.

FLORISTS must eat. When you folks in Chicago drive wheat to \$2 a bushel it is some consolation to know that the Jersey farmers can raise 1,076 bushels of potatoes to the acre. Why, 583 bushels are only an average crop.

SOLANUM JASMINOIDES GRANDIFLORUM is the prettiest vine in our grounds to-day (Oct. 3). Raised from cuttings last spring, planted out end of May and given the support of a trellis, it is now some six or seven feet high, very bushy,

viney and full of large lax heads of pure white really beautiful flowers. They last well as cut flowers. A tender vine, native of South America. One of the easiest of plants to grow and propagate, a capital window plant and a perpetual bloomer.

EULALIA GRASSES have recently become immensely popular and deservedly so. They are now (Oct. 3) in their finest condition, foliage five to seven feet high with flower heads two feet higher still. It is odd but true, the *zebrina* form is more vigorous than is the plain green-leaved plant, but the ordinary variegated form is less luxuriant than either of the other two. As soon as they are cut down



MUSA SAPIENS VITATA

by frost I cut them over, clear away the straw and mulch about and over them with leaves or litter. Florists complain that if they lift and divide *eulalia* clumps in fall the young stock invariably perishes. You can not reasonably expect anything else, as the plant is ready to go to rest for the winter you mutilate it and then hope to see it mend and grow at once. Oh no, first let it rest, then lift and break it up and the young divisions will grow well enough.

THE LONDON CORRESPONDENT OF GARDEN AND FOREST writes October 1: "I do not know whether *Gladiolus Gandavensis* is grown much in America. If they are not they should be."

Well, if he had been here August 25 and attended the Florists' party at Queen's he would have found himself surrounded by thirty acres of *gladioluses* in full bloom. *Gladioluses* in America? Why, of all places on earth to see *gladioluses* by the million Long Island is the place. And if we can not satisfy your appetites in Queens county we can send you a few miles further into Suffolk county to Jamesport, where you will find the million repeated. No need of going to England to Kelway's, nor to France to Lemoine's, if you wish to see *gladioluses*

in quantity. And we grow them in a wholesale sort of way in this country. We don't grow them in rows one to two feet apart and six to ten inches asunder in the row, but our rows are three feet apart and opened five inches wide in the drill and the bulbs planted therein about one to two inches from each other and so as to fill up the whole width of the opened drill. By planting so thick perhaps you think we cannot get as big bulbs as we would did we plant thin. Now, what good loam, a subsoil plow, plenty of New York manure and clean cultivation by horse and hand power, won't produce in the way of fine bulbs can not be approached in Europe.

ARUNDO DONAX is the noblest reed in our grounds. We have a mass of it a rod and a half square. It was nearly killed out last winter, the first time for years that I have known it to be injured in winter. By the middle of June a few shoots appeared above ground, and in order to fill up the bed I had it studded all over with banana and blue gum trees. This was too much for the *arundo*, it buckled up its strength and grew as I never knew it to grow before upward and outward and now it has choked and destroyed both bananas and blue gums, and by actual measurements the reeds are 17 feet 6 inches high and tasseling out into bloom. It is a native of the south of Europe, but we treat it as a perfectly hardy perennial. Cut it over about the first of November and cart on a few loads of straw litter to spread over the crowns. The variegated form is also hardy with us, but it does not grow as luxuriantly as does the typical green-leaved plant. In English gardening works it is spoken of as growing ten feet high, but last year ours were fully eighteen feet high. This year they are shorter by a few inches because they have had so much branching to do and carry. Propagated by division of the root stocks, also from the sprouts that issue from the joints along the stems when these stems are laid down flat.

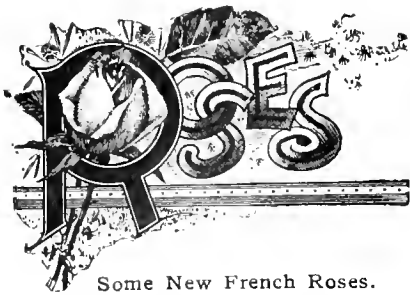
Musa Sapiens Vittata.

This elegant banana will probably take a prominent place as a decorative plant for florists. It propagates readily, grows well and can now be obtained at a very reasonable price, while it vies in beauty with the higher priced and tender *dieffenbachias*.

Dwarf Cannas.

I notice in the AM. FLORIST a mention of dwarf cannas. I once planted a canna seed in a small pot, about 3-inch, and left it there, putting the pot on an upper shelf in the greenhouse. It grew during the winter into a complete little plant, and sent up three or four flower spikes, about sixteen inches high in all, flowering in January and February. The next spring I planted it out, and it grew about six feet high. If the small pot was the cause of the dwarfing, it is easy to get in that way a very pretty house decoration. Boston. T. M. CLARK.

PALMS.—We have some large palms in tubs which are full of roots, but we do not wish to put them in larger tubs for another year. Will some experienced grower kindly tell us what to do with them to keep them in good condition till next summer? Would sphagnum and bone dust placed on the top of the roots do any good, or is there any better preparation? GARDENER.



Some New French Roses.

As in former years I send you a list of the best new roses raised in Lyon and which will be sent out November 1.

A few others will then be sent out for the first time, but I have described only those that I have been able to see in bloom again this month, showing conclusively that they are decidedly *remontant*.

I use the term *remontant* because there are no *perpetual* blooming roses, and also the term *sarmentous* because there are no true climbing roses, nature not having endowed any rose with the necessary organs for climbing. In my opinion it is time that all erroneous and misleading terms should be abolished.

FROM F. DUBREUIL.

President Dutailly. Provence Remontant (Gallica). Strong grower and very hardy; foliage of the specie dark green; flowers medium size, cup shaped, nearly full; flower stems of three to four blooms; color fine dark crimson, slightly tinted purplish brown, lighter in center; very free bloomer, very remarkable as being the first remontant of its class.

Madame Carmen. Tea. Sarmentous. Style of Gloire de Dijon; seedling of Madame Berard; brilliant foliage; flowers solitary, very double, medium size; petals very dense and crumpled; color very light flesh rose, slightly tinted with yellow; very remontant.

FROM ALEXANDRE BERNAIX.

Joseph Metral. Tea. Very vigorous; foliage small and dark; flowers very abundant, sometimes twenty to twenty-five on the same stalk, bright crimson, very full, good size.

Blanche Rebatel. Dwarf Remontant Polyantha. Plant about twelve to eighteen inches; exceedingly free bloomer, flowers of about one inch; bright crimson, slightly striped white, the first of that color in its class, exceedingly pretty.

Madame Cambon. Tea. Foliage small and dark; plant of ordinary size; flowers bright yellowish pink, sometimes half white or totally white on the same stalk; very curious; medium size, semi-double fine buds; free bloomer.

FROM PERNET PERE.

Monsieur Desir. Tea. Sarmentous. Foliage dark; flowers solitary, dark crimson, tinted purplish brown; medium size, nearly full, free bloomer; strong grower. Souvenir de Joseph Pernet. Hybrid Remontant. Strong grower; dark foliage; flowers large, fine shape, nearly full, very round petals; very brilliant light crimson edged with very dark purple; very free bloomer.

FROM PERNET FILS—DUCHER.

Comte Henri Rignon. Hybrid Tea. Plant rather dwarf and bushy; small dark foliage; flowers solitary, large, fine shape; very light rosy salmon; very free and abundant bloomer, very hardy.

FROM J. B. GUILLOT.

Madame Pierre Guillot. Tea. Strong grower; fine foliage; flowers rather large,

nearly full, fine shape, solitary, yellowish petals shaded white edged vivid pink; new color.

Ernest Metz. Tea. Strong grower; free bloomer; flowers large, very full, fine shape, solitary, fine buds, very tender rose, center vivid cherry.

JEAN SISLEY.

Monplaisir, Lyon, France.

PURITAN AND LAING.—Last May I set a plant of Puritan and one of Mrs. John Laing side by side in the open ground and have watched them closely ever since. Puritan did handsomely until a hot, dry spell set in, after which it didn't amount to much. Mrs. Laing, however, has done well right up to date, it has grown and bloomed freely, its color and exquisite fragrance being the delight of all who have seen it.

A. W. M.

Baltimore.

Begonia Rex.

How rarely do we find a well grown specimen of any variety of Begonia Rex in any of the commercial places and how very easy it is for any body to grow them to perfection. Why not grow a few specimen plants during the summer months? And if you cannot dispose of them at a reasonable price before winter sets in, you would have at least plenty of leaves to propagate from, aside from the satisfaction they would give during summer and autumn in brightening up a greenhouse.

A few years ago I had a lot of small plants left over in June, and after a liberal repotting placed them in a little lean to house with a northern aspect and it was astonishing how fast they grew. Keeping the house close and moist, in four or five weeks they needed another repotting and required more room, and as we gave them what they wanted we had the gratification of being able to show a little house full of Begonia Rex in their different varieties, which you do not find very often and the consequences were, that we sold them nearly all before cool weather set in.

I always was in the habit of growing one or two specimen or stock plants of each variety of these plants; generally took young plants in June for that purpose, repotting them whenever they needed it and by September they would be in 10 or 12-inch pans or pots and have made such luxuriant growth as to cover the pots and extend their foliage far beyond the rim. These large pans come in very handy for decorating and may be used five or six times over for such occasions before we cut them down for propagating and by that time will have paid for the trouble of growing them. I have heard many florists say that they experienced rather poor success with this class of plants in their houses, but it is only because the plants do not get what they want—a moist warm atmosphere with a slight shading of the glass. The notion among old gardeners that whoever could grow a good Begonia Rex would be able to grow anything to perfection, is not true in my opinion, for I can grow them well, but there are a great many things I have no luck with, as they call it, instead of saying: things I don't know much about and can not grow.

I suppose most everybody knows that Begonia Rex is propagated from the leaves, either cut in pieces and inserted in sand or by laying the leaves whole on the propagating bed, cutting the ribs in different places and pegging them down;

the young plants springing up from the base of the cuttings, or where the knife was run in the ribs and the same cuttings or leaves may be used over several times after removing the young plants from them. They require a temperature of 50° to 60° in winter to do well, but it is not necessary that they should have a place near the glass, in fact I often set them under the benches when cramped for room during winter, but always have them on the benches again by Easter so as to get them in great demand for urns, lawn vases or veranda, and window boxes. We use ordinary sandy loam and about one third well decayed manure, but most any loose soil will answer. If grown in a shaded house during the summer months the atmosphere should be kept moist by frequently dampening the walks and benches and in hot days the plants also should have liberal syringing, although many good plantmen recommend not to wet the leaves at all. I think that in hot weather they are benefited by plenty of water on them, provided they have porous soil and good drainage. The colors and markings of the leaves will come out more distinct under such treatment as also the foliage will be of a larger size.

The indifferent success some florists have experienced with these plants I attribute to an unsuitable and dry situation, too much direct sunlight and a heavy compact soil. If they would try the reverse I am sure the result would be more favorable.

J. B. KELLER.

Rochester, N. Y.

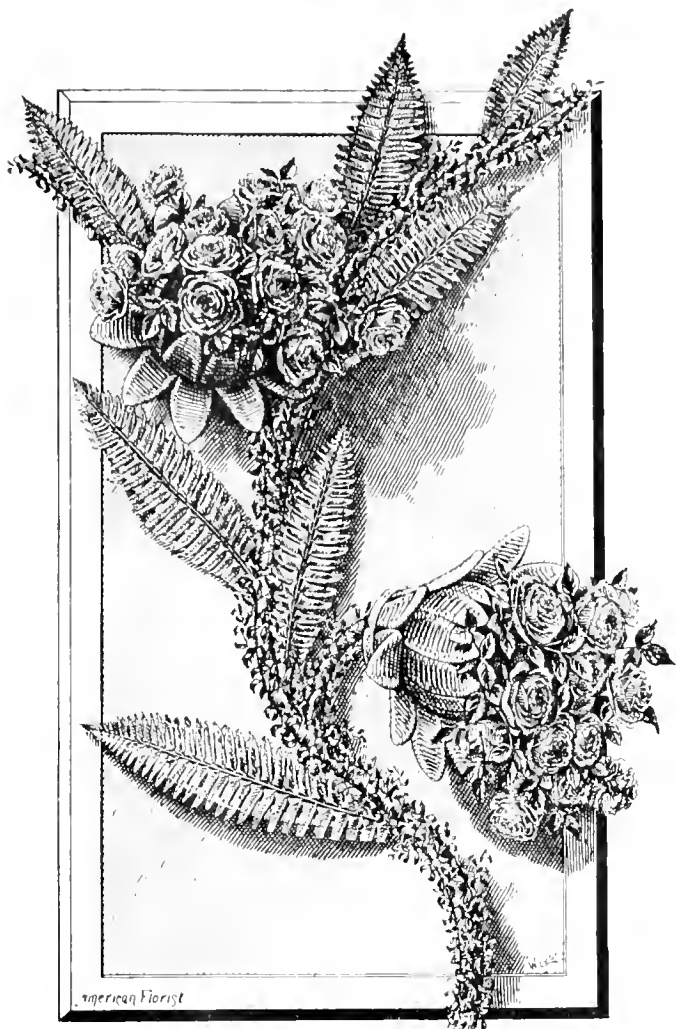
Greenhouse Climbers for Cut Flower Decorative Purposes.

LAPAGERIAS ROSEA AND ALBA.

For decorative work these beautiful climbers are invaluable, and when grown as I recently saw them with Mr. David Allan, gardener to R. M. Pratt, Esq., Watertown, Mass., they will certainly pay. Mr. Allan's treatment appears simple enough to suit any one who has an abundance of water at command. The plants are placed in side benches, in rough peat and kept deluged with water at the root. Mr. Allan calls them ditch plants, but it must be acknowledged they are very handsome ornaments for any ditch, for they were completely covered with beautiful bloom, some on short stems, others could be cut in clusters, which every decorator who has ever had the good fortune to use them, knows how beautifully they blend with other subjects in general use for such purposes, their beautiful bell-shaped drooping flowers showing well in any kind of light.

Another climber which is invaluable for this work is Bougainvillea glabra. This is also of easy culture. A large plant of it was in full bloom at Messrs. Norton Bros.' greenhouses at Dorchester, Mass., and is very highly esteemed by them for such work. To get the best results from this plant it requires to be planted out in a greenhouse and have plenty of room to grow. When well established it can be had in bloom six to nine months of the year. The period for the largest crop can be regulated by withholding water at the root and judicious pruning. Ordinary greenhouse temperature suits this plant best, as too high a temperature makes it run to wood instead of bloom.

Allamanda Schottii is another favorite, and justly so, with Norton Bros. Its glorious color would commend it to any one and when in addition to this its free-



PANEL DESIGN

blooming qualities are considered it will the more readily commend itself to the florist. This plant to obtain the best results, requires considerable more warmth than either of the preceding. The same firm have also in their houses *A. nerifolia* but this variety is hardly worth growing in comparison to the first named.

For those who have use for such class of flowers and room to grow them, these plants would well repay them. The pure white of *Lapageria alba*, the beautiful pale red of rosea, and the delicate mauve color of the bougainvillea all blend and harmonize so well with the bright clear yellow of the allamanda, which has in addition a wealth of clear, glossy green foliage that greatly improves the whole, particularly when reflected by gas or electric light at night. But the best green for using with any or all of the above is the light, feathery *Asparagus plumosus*, though in many sections there is a certain antipathy to it, possibly because it is called asparagus. Certainly it cannot be because it lacks beauty, grace, or good keeping qualities. One florist calls it *A. plumosus*, dropping all of asparagus except the first letter. This, as he remarked to me, took the culinary sound away and his customers thought it elegant. There is

no denying its elegance call it what we may, and in the near future it will be found in the front rank as an evergreen climber.

Summit, N. J.

JOHN N. MAY.

Panel Design.

This design for wall panels is an elegant and imposing piece, and will prove a great assistance to florists who decorate on a grand scale. It represents a spray of flowers and leaves in straw or rush work which is gilded and bronzed. It is one of Ed. Jansen's latest styles, and was festooned with ferns and roses by Alex. McConnell in a wedding arrangement made last week.

F. A. B.

Callas.

Callas are grown by most everybody and everywhere without much trouble. Often we find them even in private houses in a perfect state of health and blooming freely, and it seems unnecessary to write anything on that subject. But as we should aim to accomplish the best possible results with the least labor, a few hints on the treatment may after all do good to many men who are in the habit of growing among other winter

blooming plants a few callas, from which they may or may not get a fair share of flowers.

To begin with, I do not plant my callas out in the open ground as is the general habit among florists, unless I have a lot of small bulbs which I want to grow on. After the house gets too hot for them in June I take the old plants, pots and all, and set them in some convenient place outdoors, where they remain without water until about September 1. If it rains on them occasionally it will not hurt them. Then I shake all the soil from the roots, if there is any left, for they generally have completely dried off, and repot in very rich soil, giving a 6, 7 or 8-inch pot, according to the size of the bulbs, and set them in the same place again outdoors until danger of frost compels me to have them taken in the house. They get a good watering every day and the plants will commence to grow in a short time, many of them showing buds at the end of the month, while if I had planted them out as I did years ago, the roots of my plants would have to be disturbed by lifting and it would take them three or four weeks before they had fairly recovered, besides I save all the extra work of planting out and lifting, shading and syringing, etc. True, the plants from the open ground look stronger and larger at the end of September than the dried off plants do at the same time, but I have flowers on mine when they only have made three or four leaves and the flowers are what we are after.

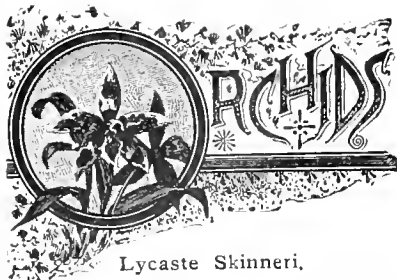
Another thing to be observed is, always to set your callas together on a bed or bench and they will flower more freely than by mixing them up with other plants, especially if the plants are set middling close together, as most of us are in the habit of doing in winter to save room. I have watched my plants closely for the last five or six years and have had no plant in a 6-inch pot or over from which I did not get at least five good flowers or over in a season, that is from September to the following June. Many plants in 8 or 10-inch pots produced in the same period over a dozen blooms. In some places it is the habit to plant callas in a prepared bed in the house, but the objection I have against this treatment is, that a good share of the flowers produced will be of too large a size to be used conveniently in designs, etc., and that the rank growth of the leaves is not in favor of producing many flowers, while pot plants make only moderate leaf growth and furnish more flowers.

As the season advances and the soil in the pots becomes exhausted I usually repot a lot of the plants into other pots one or two sizes larger and the plants so treated come handy for Easter decoration. I found six or seven weeks about the time required to get them in good salable condition with leaves enough on them to present a decent appearance, if set singly, while those plants left in the original pots and without repotting may not present the healthy appearance nor as luxuriant foliage as the plants which got the extra treat of a little fresh soil, although in my opinion it does not at all affect them as to the number of flowers they produce.

JOHN B. KELLER.

Rochester, N. Y.

MR. W. C. WILSON of Astoria is said to have at least 100,000 *Latania borbonica* in thumb pots. Craig & Bro., Philadelphia, are believed to have the largest stock of salable plants.



Lycaste Skinneri.

For general cut flower purposes this orchid will be found one of the very best and when properly grown will be found a very paying investment. It can be bought comparatively cheap and in large quantities. Plants recently imported will be found the best. If strong healthy pieces are secured in the spring they will quickly establish themselves and make good flowering bulbs the same season. The bulbs will produce all the way from two to thirteen flowers according to the treatment the plants get.

A system of culture which we adopt here with good success, is to use as small pots as possible and these well drained. The potting compost consists of fibry loam, sphagnum moss and rotten leaves chopped fine and in equal parts, with a liberal addition of sand. When the plants are first started the soil need only to be kept moist until the roots have got good headway. After this too much water can scarcely be given them provided they have plenty of air and sunlight, but the leaves must not be scorched. As soon as the growths are so far advanced that the bulbs are seen to be forming, the water is best applied overhead, this being a sure preventive of insect pests, especially the red spider. It is better not to allow the plants to become dry even in winter, as the roots will be found to be active all through the flowering season.

It is not necessary to repot the plants every year, but they may be heavily top-dressed with chopped leaves and moss. Manure water is very beneficial when judiciously applied. The early flowers will appear in December and flowers may be had from this time till late in the spring. The individual flowers will last on the plant about two months and for a very long time in water when cut. Care should be taken in handling the flowers, as they are more easily bruised than many of the popular species. A minimum temperature of 50° with a rise of 10° to 15° during the day in the winter will be found the best. F. GOLDING.

Kenwood, N. Y.

Hardy Ornamental Shrubs for Florists to Sell.

In last issue we expressed the belief that it would pay florists to plant a sample lot of hardy ornamental shrubs and deal in the same, and we now take pleasure in calling the attention of the trade to a liberal offer on page 123 by one of the most reliable nurseries in the country, to furnish a sample lot of fifty kinds of shrubs most suitable for the purpose for \$10. The list of kinds with descriptions may be found on the page named. Mr. J. R. Trumpy, an acknowledged authority on this class of plants, has marked with an * such as may be suitable for forcing.

As fall is the best time to plant we recommend that those who have decided to give the matter a trial order at once.

Even if you do not sell a single shrub from the lot the investment will be an excellent one, for there are few florists' places that will not be vastly benefitted by the planting of such a lot upon it. But that sales, and many of them, will follow we do not doubt.

OBITUARY.

PLINY WARD REASONER, the senior member of the firm of Reasoner Bros., Manatee, Florida, died September 17, of yellow fever.

He was born in Princeton, Ill., May 6, 1863, came to Florida in 1881, and two years later founded the business since known as the Royal Palm Nurseries.

He was an active worker in the cause of horticulture and wrote for many periodicals. He was the horticultural superintendent at the sub-tropical exposition last year, and Florida commissioner to the Cincinnati exposition.

The business will be continued by the surviving member of the firm, Egbert N. Reasoner, for the following year under the old firm name.

WILLIAM COURT, the genial agent of Veitch's nurseries, London, and who for the past thirteen years has made annual business visits to this country, died at his home at Chelsea, London, on the 17th of last month at the age of 45. Not only was Mr. Court an excellent business man, but also one of the best plantmen, hybridists and propagators in the London nursery business.

The Convention of National Flowers.

"Once upon a time" "a grower and a dealer," while traveling in the tropics in search of orchids, were surprised to see a beautiful rose surpassing anything they had ever seen; the grower said: "This is remarkable to see this rose in the tropics. I believe it is a hybrid tea, and would do well for winter forcing." "Yes," said the dealer, "if you can give us that rose in quantities at Christmas you can get big prices for them. Let us take it home." They were struck speechless by hearing the rose speak: "Gentlemen," it said, "I know from the way that you speak of my family, that you are from America; several of my relatives have been taken there, and have been treated very badly; they say all manner of unkind things about us, always talking about our not being profitable. I beg of you gentlemen not to detain me; I had rather die here in this dreadful climate, than to be taken to America and treated as a great many of my friends have been."

"But where did you come from?" asked the grower. "From England, where I am loved very dearly." "Then why are you so far from home?" "Pardon me, gentlemen, for the moment I forgot that you are Americans, not having a national flower you naturally would not know that there is to be a convention of national flowers. Many years ago England honored my ancestors by appointing them England's national flower, and today we are acknowledged as such the world over. We hold our convention in the tropics that we may not be disturbed by man. Since you have been kind to me in allowing me to go my way, I will use my influence, which is not slight, in your behalf, that you may be present at our meeting." After giving minute directions as to where the meeting was to be held, the rose inclined her beautiful head, and said "I hope to see you gen-

tlemen there, and if I can be of any service to you, ask for the 'Queen of Flowers,' and I shall be yours to command."

You can imagine the surprise of the grower and dealer when they heard a rose talk in this manner; but they congratulated themselves on their good luck and started out at once in search of the place of meeting, feeling sure that they would be able to get some valuable specimens. Finally they heard the music of many birds singing in concert, without one discordant voice; as they approached the music gradually died away until the soft, sweet voice of the canary, that had never known a cage, seemed to be alone; then the delightful odors came to them, not oppressive, but intoxicatingly ravishing; and at last they came in view of a beautiful lake. On its banks were collected the grandest plants and flowers that were ever seen; the canary who had been singing alone was now joined by other birds, making the whole scene so grand, something so far beyond their imagination, that the men threw themselves on the ground overcome with rapture; they seemed to lose all their selfish thoughts and desires, and to give themselves up to the enjoyment of their senses as completely as though the poppy had done the work. The music continued to increase in volume, until the men felt that they would lose their reason with rapture; when it ceased, then they wished it might go on forever. As they lost their selfish desires, a new sense seemed to come to them; the flowers were no longer merchandise and these two men who had always looked upon them as such, now saw them with different eyes; how tenderly they would now handle and love them for their wonderful beauty, their purity, their delicious odors and their marvelous coloring. These men could now understand the language of flowers, and by listening attentively could hear their innocent gossip; the heliotrope and violet were telling of their many messages of love that they had carried; the pansy thought that it could not be outdone in this respect. The romantic azalea and the sympathetic camellia had different stories to tell. The little coquettish morning-glory was flirting with the egotistical narcissus.

Finally the rose called the meeting to order: "My dear friends, I can not express the great happiness I feel in being here, and I assure you that there is never a moment in my life when I am unconscious of the double honor of being the 'Queen of flowers,' and of having been chosen by the grandest nation on the earth to represent it. My one prayer is that we may always deserve these honors; that my sister's delicate pink cheek will always blush with modesty, and never with shame; that the wild rose may always be innocent, and the sweet-briar as sympathetic; that our dear little sister who asked the fairies for moss, may never be led into false pride and vanity, because they granted her her wish; and that our brother the Hybrid may never be pompous, but always grand and noble." She ended her remarks by saying: "I take great pleasure in introducing to you our oldest member, the Egyptian Lotus."

This beautiful flower then raised its lovely head from the lake and said: "Our sister, 'The Queen,' in introducing me said I am the oldest member; I hope no flower here will think that I am older in years than they are, but it is a fact that I was the first member of the society; before the pyramids were built I was the



VASE AND BASKET OF ORCHIDS (REPRODUCED FROM GARTEN FLORA)

national flower of Egypt, the 'Sacred Flower of the Nile.' If I had the power to communicate to men, I could tell them of people and nations that they have never dreamed of; the writings on the obelisks are plain to me; all my life I have been loved and worshipped by the Egyptians. The rose is justly proud of the nation she represents, but for me to look back on the centuries that I have held the office, England seems to me but a child. One of the greatest pleasures of my life is to float on the beautiful river and dream of my past life. Of the generations and generations of men that I have known, how they fret away their short lives in petty contentions, but to me they have all been loyal; on the buildings of which they have been the proudest they have copied my shape; in the Egyptian column they have used my flowers for the capital and my stem for the column.

"On the finest ornaments and conventional designs, all of which are copied to-day (and I am often amused by men calling these designs original) you also see my shape. When I think of how men worry through their short lives my mind always goes back to several years ago when a Roman called Marcus Antonius came to our country and fell desperately in love with our beautiful Queen Cleopatra; he was thought to be great among men, a brave warrior, an eloquent orator, etc., but with all he was very weak. Often has he plucked my flower for the

lovely queen to caress; she was one of the most beautiful women that I have ever seen, richly educated and ambitious as the word was used then, but with all they were not happy; often in her petty anger she has crushed my tender frame and cast me aside, and as often has one of her slaves picked me up and tried to repair the wrong done me. I do not complain, however, my life has been a very happy one, I frequently regret that men in seeking happiness so seldom take the right paths; but as I have noted this all my life I presume it can not be helped. I fear in my remarks I have drifted on rather unpleasant subjects, but my country has seen so many changes that I am apt to look back and sometimes I do feel a little old; but I assure you that I am very, very happy and thankful to be with you."

The rose then got up and said: "We have a little friend with us who has come a great distance and is anxious to get home again, the Edel Weiss of Switzerland." "I must first," said the Edel Weiss, "apologize for speaking before so many of my friends who have lived broader lives and represent grander countries, and the rose does express my wish when she says I want to get home. You all know that I live high up on the mountains in Switzerland, where the air is delightfully cold, and this torrid heat is oppressive; I have known nothing of the life and history of which the lotus spoke. I have known nothing but pure love and

devotion all my life; I have been sought often for years by lovers that they might give me to their sweet-hearts. The greatest unhappiness that I have ever known has been when that often cruel little fellow Cupid has induced lovers to take such great risks to climb so high in search of me, that I have often feared for their safety, and frequently have seen them led on to their destruction; how gladly I would have reached out my hands to help them had it been in my power; but my life has been all happiness, with but these few exceptions, and if, my dear friends, I never again venture so far from home in all the years to come, when I am alone on my quiet mountain the pleasure of these few hours will never for a moment leave me." This simple little story so pleased all present that they all bowed, and even the palms and oaks bent their stately foliage and limbs in approval; the forget-me-not and violet rushed to their little sister to congratulate her.

The rose then introduced the palm and laurel; they both told of the part that they had taken in the history of man, the victories they had proclaimed, and how they had always been associated with the noblest of men; the palm spoke of how centuries ago it had directed men in the search for water and in this way it indicated victory and a resting place on their journey.

The laurel spoke of the favors it had received from Apollo; the palm said it

had received equal honors from Cupid and Venus. The acanthus had many tales to tell of how it had been honored by the Greeks. The chrysanthemum discoursed prettily about Japan. The thistle was as loyal to Scotland as the best of Scotchmen. The shamrock had never known a prouder moment since the day St. Patrick plucked a leaf and used it to illustrate the doctrine of the trinity; proud because it had a voice among the national flowers, but grieved with her lovers that her country had no voice among nations. The rose stooped down to the shamrock and said, "Do not grieve, little sister, justice will be done some day."

There was a rustling among the trees, the flowers looked up and the oak gave a stately bow. It said: "I have not the honor of being a member of this society, but I have the great honor of being a candidate of the grandest nation on the earth; I trust that I shall not give offense and I should not, because the nation I speak for has offered and given shelter to men from every country that is represented here to-day. When the lotus spoke of the youth of England, it came very forcibly to my mind how young my country was; it seemed to me but yesterday, when a Puritan youth and maiden carved two hearts and the year 1620 on my bark. My little friends, can you imagine a country so large that if England, Ireland, Scotland, Japan, France, Germany and Switzerland were all five times as large as they are, you could put them all in my country, and still have space left to put five or six Switzerlands? It has been said that my country has no history; the history of the world is ours; our nation is made up of men from all others, and by following one fixed purpose and maintaining the union, they have developed the grandest model the world has ever known. Another mistake that has often been made is—a number of flowers think—that my people lack sentiment. It is true they have been obliged to put up with many hardships, and at times they have appeared too practical and hard hearted, but these same hearts have been hearts of oak and their nature like my own thrived under adversity, and from a small beginning have grown in these few years to be the monarch among nations, as I am often spoken of as the 'Monarch of the forest.'

"I could talk for hours of the love my people have for flowers and plants. A great many pretty little romances happen under my boughs, and the whispering pines tell me the rest. The water lily and golden rod have also been nominated to represent our country, and would have been with us to-day, in fact we started together, but the poor little water lily, as darkness came on, grew very sleepy, so when we came to a pretty little pond we laid her there, and after bidding us good night she fell peacefully to sleep. The golden rod, a bright yellow, which we all know indicates a jealous and unhappy disposition, quarreled with a farmer on the road and was killed. For these reasons I feel that they will not be considered proper emblems for our country. For myself I cannot imagine greater honor or happiness than being selected as a national emblem by the United States and the proudest day of my life would be when a wreath of my leaves would be placed around our motto, 'E pluribus unum,' and to me it would not only mean many states, but many nations in one."

As the oak finished the flowers and trees applauded, and the birds sang, and

all agreed that if the oak was elected they would hold their next convention in the United States. The grower and dealer who had been listening with great attention resolved that when they reached home they would give their hearty support to the oak. H. H. BATTLES.
Philadelphia.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

October 16—Tem. morning 51°, noon 70°, evening 62°. Wind SW. to S. Sunday.

17—Tem. 50, 57, 50. W. Continued spading tulip beds. Commenced potting rooted geranium cuttings. Wheeled manure out of frames.

18—Tem. 45, 57, 46. WNW. to S. Continued potting rooted geranium cuttings. Finished spading tulip beds. Dug up and took inside canna roots.

19—Tem. 40, 58, 53. S. Continued potting rooted geranium cuttings. Continued digging canna roots. Cleaned up frame yard for winter and spread leaves a foot deep over the whole yard to keep frost out of the ground, so can conveniently start early hotbeds in the frames in early spring.

20—Tem. 50, 58, 45. WSW. to NW. Finished digging and taking inside canna roots. Cleaned vases and stands of plants. Continued potting rooted geranium cuttings.

21—Tem. 35, 42, 33. NW. Prepared pansy frame for spring use. Potted rooted cuttings of heliotropes, maurandias, tropeolums, gnaphaliums and Mme. Pfitzer geraniums. Potted some strong pansy seedlings.

22—Tem. 27, 45, 42. NW. to S. Potted rooted cuttings of cupheas, alyssums, lophospermiums, lobelias, nierembergias and Mme. Salleri geraniums. Continued preparing pansy frame for spring use. Lincoln statue unveiled this afternoon.

23—Tem. 50, 58, 42. S. to W. Sunday.

24—Tem. 34, 44, 34. NW. Commenced planting tulip bulbs. Potted rooted cuttings of Mme. Salleri geraniums.

25—Tem. 18, 29, 26. NW. Covered out door beds of roses temporarily with leaves. Continued planting tulip bulbs. Continued potting rooted cuttings of geraniums.

26—Tem. 27, 42, 27. SW. Continued planting tulips. Took up erythrias. Continued potting rooted geranium cuttings.

27—Tem. 29, 48, 45. W. to S. Same as yesterday.

28—Tem. 43, 55, 50. SW. to S. Finished planting tulips. Commenced potting echeverias taken in from outside. Arranged chrysanthemums in No. 1. Continued potting rooted geranium cuttings.

29—Tem. 38, 38, 38. N. to NW. Continued potting echeverias from outside and rooted geranium cuttings. Took inside rhododendrons.

30—Tem. 34, 44, 40. SW. Sunday.

31—Tem. 34, 55, 45. W. to SE. Same as Saturday, and moving plants to make room for little geraniums. Chrysanthemums now at their best.

DOUBLE AURATUM LILY.—Mr. E. F. Siegenthaler, of Wooster, O., sends us a stalk of *Lilium auratum* bearing two flowers with double perianths. There are two rows of segments in each flower, looking much as though one had been set inside of another.

Washington.

The charges which the seedsmen of the country are making against commissioner of agriculture Colman are very severe, and a Senate investigation will undoubtedly be ordered in accordance with Gen. Hawley's resolution presented to day. The memorial to Congress from the Seedsmen's Protective Association is signed by many of the leading firms all over the United States. They claim that Commissioner Colman spends the whole appropriation made by Congress for seeds for distribution to farmers with one or two firms, and that they repeatedly ship him worthless seeds which they have bought up of small dealers, because they had not enough to fill the big orders from the Agricultural Department. The seedsmen claim also that it is the intention of the law to have the department distribute new varieties of seeds to farmers for the purpose of testing them, and adding to the supply and variety of vegetables, and not to simply send so many seeds each year to every farmer without regard to quality. The charges against Colman upon which the proposed investigation is asked go into details, to show that vast quantities of seeds were bought up by the favored firms and resold to the department at three and four times the market price. The investigation will probably be conducted by the Senate committee on agriculture.—*New York Sun, Sept. 21.*

Coming Chrysanthemum Shows.

Philadelphia, November 13-16.
Boston, Mass., November 14-16.
New York, November 13-15.
Orange, N. J., November 7-9.
Cincinnati, O., October 22-27.
Indianapolis, Ind., November 13-17.

Some Queries.

Will some one kindly inform me through the FLORIST the mode of treating *Fritillaria imperialis*? Is it best grown in pots?

When should *Lilium candidum*, *L. Harrisii* and the fritillaria he brought into the house in order to have them in bloom for Easter? Will the same temperature do for all?

When should *Deutzia gracilis* be started for same purpose? E. H. Baltimore.

VERBENAS.—Mr. Yates, of Ellicott City, Md., showed me some seedling verbenas the other day that I unhesitatingly declared to be the poorest I had ever seen. Close by, however, he had another lot grown from different seed and as good as the others were inferior. The first batch was from seed costing at the rate of \$12 per ounce, while the seed from which lot No. 2 was produced cost him \$2.50 per ounce. The latter seed was purchased from a Philadelphia dealer, and I mention this fact in order that the Quaker City brother may have an opportunity to "hump" himself in piling on the price to his verbeua seed before issuing his next catalogue. The finest verbenas, however, that I have yet seen I grew last spring from seed purchased from Hallock & Son. It has proved the finest strain I ever handled, and my verbeua beds have been a pleasure to myself and the admiration of visitors all summer.

A. W. M.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED Gardener and florist; will take charge or assist in greenhouses. Address FLORIST, box 145, Fishkill-on-Hudson, N. Y.

SITUATION WANTED By practical gardener and florist; married. Private place. Best references. JOHN GREENHALGH, box 144, Woodbury, N. J.

SITUATION WANTED By a competent gardener, 12 years' experience, good propagator roses, ferns and palms a specialty; best of references. Address M. S. Z., Philadelphia P. O.

SITUATION WANTED By a young German florist, aged 26; 10 years' experience. In a commercial place in either Oregon or North California. Address E. B. KIEFER, 35 Racine ave., Chicago.

SITUATION WANTED Gardener; Scotch; married; capable of taking care of greenhouses, fruit, flowers and vegetables. Good references. JOHN GOLLAN, High St., Long Branch, N. J.

SITUATION WANTED By a competent young gardener and florist; single; 11 years' experience. Best of references from here and the continent. Address H. cure American Florist, Chicago.

SITUATION WANTED Private place by married man, 45 years of age; thoroughly posted in all branches, and has highest Chicago references. Address G., care J. C. Vaughan, Chicago.

SITUATION WANTED By a practical gardener and florist; over 30 years' experience; understands the business in all its branches. First-class references. Address CHAS. W. SPRED, 21 Laocok Street, Allegheny City, Pa.

SITUATION WANTED As gardener by a single Scotchman who has had 18 years' experience in this country, and understands gardening in all its branches. Only those having glass need answer. Address ALEX. JEFFREY, 1325 Saybert St., Philadelphia, Pa.

SITUATION WANTED By a practical gardener and florist; private or commercial; thoroughly understands the management of gentleman's place. Early and late forcing, the propagation and growing of roses, carnations, chrysanthemums, bulbs and general stock; aged 45; 30 years' practical experience; married; no family; first class references. Address W. C. H., 29 Colvin St., Rochester, N. Y.

WANTED, SEEDSMAN—Married man, to take charge of a mailing department and stock. References. Lock Box 1618 Philadelphia, Pa.

WANTED—A first-class man to take charge of three greenhouses. Must understand rose growing thoroughly and floral design work, as the business won't pay but one good man. Must be well recommended. B. F. MILLARD, Chippewa Falls, Wis.

WANTED—A young man familiar with general greenhouse work, to include the propagation of roses and bedding plants. State wages expected with board, etc., and give references. EVERGREEN LODGE FLOWER GARDEN, Clarksville, Tenn.

WANTED A good thorough florist acquainted with the business in all branches. A German American or German preferred; a man not afraid to work will have a permanent position, and only such need apply. R. MAITICE, 110 Canal street, New Orleans, La.

WANTED—A young single man who understands growing plants and flowers for retail trade doing floral work, bedding, and keeping greenhouses in repair. A practical florist for a small place. Must have good references. Address JAYNE & COLE, Painesville, Ohio.

WANTED A young man practically conversant with the seed business, especially the market garden and retail department. Must be thoroughly competent to take charge of same, and to write and speak German. Address, stating reference A. Z., care American Florist, Chicago.

WANTED A strictly first-class, steady, sober gardener for a large private place. Must thoroughly understand all vegetables, stock, and how to take care of the place. Must have best of references, and name them. Take to hear of John Osborn. Address T. R., care American Florist, Chicago.

FOR SALE—A well paying florist business can be bought for less than \$200, dwelling house, stable, three greenhouses 12 x 50, nice stock of plants 1/2 acre of ground, and hydrant for watering. Address Q., care American Florist, Chicago.

FOR SALE—Five well stocked greenhouses and contents, city water, near entrance to one of the principal cemeteries of Cincinnati, O., with a lucrative fall trade. Average amount of fall trade sales to the cemetery alone is \$300. Reason for selling, bad health of owner. For full particulars, address C. A. PETERS, Price Hill, Cincinnati, O.

FOR SALE In one of the best neighborhoods in the city of North Chicago, two new greenhouses heated by water, sales office and hotbeds. Stock of chrysanthemums, balsms, dracemas, lilies, carnations, ferns and all kinds of good selling and decoration plants, 1,000 by 100 planted in pots, and boxes all ready. All are in good condition. Will be sold reasonable for cash. Address P. KROHN, 15 N. Clark St., Chicago.

100 Vinca major variegata, at 7 1/2 cents. 25 Dianthus Quercifolius, at 7 1/2 cents. 25 Dianthus Mrs. Sinkins or Snow, at 7 1/2 cents. Strong field grown plants.

JOHN CURWEN, Jr., Villa Nova P. O., Delaware Co., Pa.

LARGE ROSES FOR FLORISTS.

POT GROWN PLANTS, ONE YEAR OLD, STRONG THRIFTY PLANTS, MOSTLY IN 4 and 5-INCH POTS, AND READY TO BE REPOTTED INTO LARGER POTS.

1,050 Catherine Mermet, 80 Hermosa, 250 Bon Silene, 50 Auguste Mie, 53 La Reine, 16 Mad. J. Swartz, 56 Mad. Villermoz, 330 Isabella Sprunt, 34 Emperor of Russia, 80 Mad. Margottin, 75 Lawrenceiana, 216 Marie Van Houtte, 70 C. Cook, 97 M. Lambert, 90 Mad. Camille, 30 Mad. Maurin, 115 Mad. Falcot, 15 Souv. Mad. Pernet, 18 Mad. Welch, 135 Safrano, 17 Coquette de Lyon, 30 Mad. Plantier, 104 Baltimore Belle, 57 Tennessee Belle, 168 Pride of Washington, 16 White Micropilla, 19 Prairie Queen, 76 Russell's Cottage. Can put in some other good kinds if assortment is left with us. Price \$1.75 per doz., \$12 per 100.

MOSS ROSES.

100 Alice Leroy, 45 Perpetual White, 120 Zebra, 100 Henry Martin, 36 Elizabeth Rowe, 168 Mad. Rochlambert. Price \$15 per 100. Fine lot 3-inch pot roses at \$8 per 100, 2 1/2 inch pots, \$5 per 100, \$40 per 1000.

Chrysanthemums, large open ground plants assorted \$10 per 100. Hydrangeas large plants 5-inch pots, Hogg and Otaksa, \$3 per doz.—Carnations, Hinze's White and Garfield, open ground plants, \$8 per 100.—Tuberose bulbs, extra selected, \$18 per 1000.—Geraniums, 4 inch pots, \$5 per 100.—Begonias, a fine assortment, large plants, \$1.50 per doz.

F WALKER & CO., FLORISTS, LOUISVILLE, KY.

PANSIES ONLY!

The BEST STRAIN and the most COMPLETE COLLECTION in the market. Send for new circular and price list to the Trade. ALBERT BENZ, Douglaston, N. Y.

CARNATION PLANTS.

Strong Clumps from Open Ground. EDWARDSII, SCARLET KING, PHILADELPHIA, De GRAW, FASCINATION, KING OF CRIMSON, \$7.00 per 100, \$50.00 per 1000. PORTIA, DIKE OF ORANGE, CHESTER PRIDE, HINZE'S WHITE, GRACE WILDER, Etc., \$8.00 per hundred. A few extra strong SMILAX, 3-in. pots, \$4.00 per 100. W. R. SHELMIER, Avondale, Chester Co., Pa. Mention American Florist.

PANSIES.

PLANTS A SPECIALTY.

All novelties of merit are added annually, and I grow my own seed, carefully selecting the best only. Therefore I recommend my strain of

MIXED PANSIES

either for forcing or planting cold frames for spring sales, knowing that they will give the best of satisfaction as to size, variety and brilliancy of colors.

PRICES.—Good, stocky plants, per 100, \$ 75; per 1000, \$5 00.

Send for Pansy and Smilax Special.

ALBERT M. HERR, L. B. 338 LANCASTER, PA.

NOVELTIES IN ROSES.

Also the leading forcing varieties, Teas, Hybrid Teas and Hybrid Perpetuals, and Novelties in Chrysanthemums.

Per 100 Tabernamontaniana \$5.00 to \$8.00 Stephens Florida, per doz., \$2.00 and \$3.00 Gardenia Radians and Florida 8.00 Bouvardias, from 2, 3 and 4-inch pots, \$5.50 and 8.00 Carnations Sunrise, P. De Graw, President Garfield, Queen of Whites, Century, Hinze's White. Open ground plants 8.00 2 1/2" Trade list mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

FOR SALE.

PRIMEROSSES, ass'd, the plants, 4-in. pots, \$5.00 SMILAX, stocky plants, 2.00 CALLA BULBS, 1.00 Also one Douglas' force pump, new, worked either by hand or steam, in perfect order, no further use as I use steam force pump. A rare chance.

W. B. WOODRUFF, Westfield, N. J.

FOR SALE.

Five acres of land in a high state of cultivation 1 1/2 miles from center of city, two greenhouses 60 feet long; good building, plenty of water, three forcing pumps; fruits of all kinds, 400 bearing grapevines. Good market for flower and vegetable plants. This is a good chance for young beginner in the flower business. Address

E. WEBB, Real Estate, Agt., YOUNGSTOWN, OHIO.

FORCING ROSES

Special Offer of Leading Varieties. BON SILENE, CATHERINE MERMET, MOUNT'S FRIGNEUSE, LA FRANCE, MAD. DE WATTEVILLE, NIPHETOS, PAPA GONTIER, PERLE DES JARDINS, SAFRANO, SUNSET, SOUV. D'UN AMI, THE BRIDE. Strong, thrifty plants, 3-inch pots, \$5.00 per 100 4-inch pots, \$12.00 per 100.

HENRY A. DREER, PHILADELPHIA.

OUR NEW TRADE DIRECTORY

Contains over 6,000 Names of (Live) Florists, nurserymen and seedsmen, in the United States and Canada. PRICE ONLY ONE DOLLAR. AMERICAN FLORIST CO., Chicago.

Largest Collection of Roses,

Including all the Latest Novelties. Lowest possible prices. Complete general catalogue and special Wholesale Price List free on application (German or French edition).

KETTEN BROTHERS, Rose Growers, LUXEMBURG, (Europe.)

E. BENARD, ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS

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THE HORTICULTURAL TIMES

AND COVENT GARDEN GAZETTE.

THE BEST POPULAR GARDENING PAPER IN ENGLAND.

ANNUAL SUBSCRIPTION S. F. POST-FREE

ADDRESS PUBLISHER, 127 Strand, LONDON, ENGLAND



Seasonable Floral Styles.

Although large roses will never be superseded in favor, there is a boom in small flowers which are made up in hand bunches and which find their way in clusters in most designs. Center pieces of roses entirely are not arranged for the most stylish decorations, but these have a section of lilies, larkspur, or daisies. As long as they are to be had wild flowers will appear in rose designs. Baby daisies, purple asters and golden rod are brought daily to the florists and are used among rich flowers with charming effect. Very small specimens of the new crop of Bon Silene roses with knots of Faust pansies make pretty contrasts in the rose baskets, those having scalloped borders being so arranged that at least two scallops are filled in with small flowers. The small pink roses referred to are used almost solely in ornamenting the baby baskets so fashionable at present for gifts to new comers. A picture will appear shortly of these baskets, which are more convenient and decidedly more ornamental than the regulation kind without a handle.

More flowers are used this fall for the embellishment of breakfasts than have heretofore been seen in this decoration which has ranked among the simple ones. Mrs. Irwin, of Wall street, arranged the flowers for the breakfast of Mr. Depew on the morning of his arrival from Europe. A large center circle was formed on the table with La France roses and clusters of lily of the valley. At each plate there was a cornucopia containing a bunch of roses very daintily combined with Eucharis Amazonica on long stems. At breakfasts it is now the style to have an extra-favor for any one who happens in. This piece is placed near the cover of the hostess. Floral rugs are used considerably in breakfast rooms when there is no attempt at banking the mantel pieces or garlanding. Cape flowers are introduced in the rugs to define Persian patterns, and they are rather an improvement than otherwise.

Room decorations are still made with colored leaves, and choice flowers for the table and cabinet ornamentation. The bunches of colored leaves are very artistically arranged and have a graceful and gorgeous effect when finishing chains or garlands over doors, windows or mirrors. Particular attention is being given to the trimming of candlesticks and candelabra. The stems of these are surrounded with long stemmed flowers such as spikes of larkspur or tuberose, and these are fastened with a sash and bow. Foliage and flowers trail from the base of candlesticks when these are placed at the end of the mantelpiece. Fireplaces are decorated very elegantly just now. Andirons are made of calendulas and Faust pansies, the latter representing the dark

metal. The flame from the pine sticks is represented by tritomas and salvias. After the autumn leaf decorations are over it is predicted that styles will be much less elaborate and more severe for room embellishment. Orders are being received for late fall weddings when rugs and cushions worked out in chrysanthemums will be the only floral ornaments. Straw panel pieces will probably be the vogue for ornamenting walls at the fashionable balls of the winter.

Branches of gilt laid on a background of greenery will be among wall decorations. On the branches will be hung favors for the cotillon. Favors for dances are elegant, it is a little early to introduce them. FANNIE A. BENSON.
New York.

New York.

Henry Siebrecht is having elaborate drawings made of Rose Hill conservatories.

Some of our leading florists are projecting flower shows which will be on a grand scale.

There is a very handsome crop of Grace Wilder carnations offered at present.

Rufus Abbott has again opened a floral stand in the Erie station, where he keeps fine flowers and is well patronized.

There is a great deal of competition and estimating in progress for coming entertainments.

Peaches preserved by a secret chemical process in storage houses in Baltimore are now the finest in market. They are of all late kinds such as Crawfords, late Rarripes and White Heath, and sell for \$4 a crate and from 75 cents to \$1 a doz.

Pickling cucumbers are in excess of last year's amount. Those raised on Long Island and in Westchester county excel in flavor and keeping qualities.

New Orleans hothouse mushrooms are the only ones to be had here at present

Floral Atrocities.

Among the floral "designs" entered at a recent exhibition was one described as "a column about six feet high, around which was coiled a green snake, his mouth red with blossoms from the geranium, wide open."

We really must call a halt. We do not believe in refusing to make what a customer orders if he is willing to pay well for it, but for goodness sake don't feed the fire by exhibiting such atrocities as that described.

If a customer wants a floral beer barrel with a floral glass of beer on top—a "design" which we understand was ordered some time since for the funeral of a brewer—and a liberal amount of cash accompanies the order, make it, (softening the outlines as much as you can), for

our bread and butter must come from the business, but whenever you can do so without giving offense, discountenance the spoiling of good flowers in the construction of such monstrosities. Tolerate them but don't attempt to lead the public deeper into the mire.

Exhibitions should be educational. Make them so by showing something which pleases your own eye rather than that of the butcher who has suddenly acquired some wealth but is a butcher still.

SINCE our expose of a firm whose business methods were apparently somewhat shady, we have received many letters intimating approval of our course, which were duly appreciated. We do not intend that any rogues shall use our columns and should any creep in unawares we shall promptly expose them as soon as discovered. But, we have also received a number of letters complaining of treatment received from various reputable houses of which we can not take cognizance in print. We do not undertake to adjust trifling differences between buyer and seller, or to publish a reputable house to the trade for some trifling error. When such occur first make your complaint to the house direct, and be governed by the advice in Uncle Blackstone's letter in last issue.

Catalogues Received.

I. N. Kramer & Son, Marion, Iowa, plants; Kennicott Bros., Chicago, florists' wire designs; J. A. Simmers, Toronto, Ont., bulbs; Societe Anonyme L. Horticulture Internationale, Brussels, Belgium, orchids and new plants; Armand Colombe & Sons, Ussy, (Calvados) France, nursery stock; A. M. C. Jongkindt Coninck, Dedemsvaart, near Zwolle, Holland, bulbs and plants; H. Cannell & Sons, Swanley, Kent, England, bulbs, plants, seeds; H. H. Sanford & Co., Thomasville, Ga., plants and nursery stock; E. H. Krelage & Son, Haarlam, Holland, bulbs; R. S. Brown & Son, Kansas City, Mo., plants and bulbs.

The Golden Rod.

Never a king can statelier nod
Than the glorions August golden rod!
No crowns are richer with hammered gold

Than those which its strong green stalks uphold.

And yet we can pick the carriage full
In a twilight drive by the river cool—
So common, so thick, are its shining crowns

Over the uplands and over the downs.
And the farmers say this beautiful thing
Is only fit for the harrowing.
Alas! that the truth must aye be told,
"All that glittereth is not gold!"
—Kate Upson Clark in *The Congregationalist*.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for November 1 Issue must REACH US by noon, Oct. 25. Address.

THE AMERICAN FLORIST CO., Chicago.

HOLLOW BRICK WALL. — Regarding the wall illustrated on page 62 of Sept. 15 issue, we are advised by Mr. Wintzer that such walls should always be built on a good stone foundation.

CHAS. E. PENNOCK, WHOLESALE FLORIST,

38 So. 16th Street, Philadelphia, Pa.

GEO. MULLEN, 17 CHAPMAN PLACE, (near Parker House), BOSTON, MASS.

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Flowers carefully packed and shipped to all points in Western and Middle States. Orders by Telegraph, Mail, Telephone or Express promptly attended to.

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THE OAKLEY ROSE HOUSES.

FOURTH SEASON.

This establishment, with over 30,000 feet of glass devoted to forcing buds for the trade, is now in better condition than ever, and is prepared to supply buds to the trade direct, either on transient orders at lowest market prices, or upon contract for any length of time at fixed prices.

VARIETIES:

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- BENNETT, PAPA GONTIER,
- LA FRANCE, BON SILENE,
- MERMET, PERLE,
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ALL CUT FLOWERS IN SEASON.

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170 Lake Street, CHICAGO.

I give Special Attention to Shipping Orders.

I want consignments of Am. Beauties, Violets and Bouvardias.

Wholesale Markets.

Cut Flowers.

	NEW YORK, Oct. 10
Roses, Gontiers, Souvs.	2.00 @ 3.00
" Perles, Niphotos	2.00 @ 3.00
" Am. Beauty	10.00 @ 20.00
" Mermets	7.00 @ 8.00
" Cash, Dukes, Bennetts	4.00 @ 5.00
" La France	2.00 @ 4.00
" Brides	1.00 @ 1.00
Mignonette	1.00
Smilax	15.00 @ 20.00
Carnations, fancy, long	1.50
Carnations, short	1.50
Lily of the valley	8.00
Violets	1.00

	BOSTON, Oct. 10
Roses, Teas	2.00
" Perles, Sunsets	6.00
" Mermets, Brides	8.00
" Niphotos	6.00
Lily of the valley	6.00
Carnations	2.00
Tuberose	1.50
Violets	.75
Smilax	12.50
Adiantum	1.00
Ivy Leaves	.50

	PHILADELPHIA, Oct. 10
Roses, Teas, Bons	2.00
" Bennetts, Mermets	4.00
" Perles, Niphotos	3.00
" La France, Brides	4.00
" Am. Beauties	10.00
" Gontiers, Souvs.	3.00
Carnations, Bouvardia	1.00
Lily of the Valley	8.00
Harrisii, Calla	10.00
Smilax	20.00
Ferns	15.00
Single violets	.25
Double violets	.50

	CHICAGO, Oct. 11
Roses, Perles, Niphotos	\$3.00 @ 4.00
" Bons, Safran	2.00
" Mermets	4.00 @ 5.00
" Bennetts Dukes	4.00 @ 5.00
" Papa Gontier	2.00
" La France, Brides	5.00 @ 6.00
" Am. Beauties	10.00 @ 15.00
Carnations, short	.75
Carnations, long	1.00
Smilax	18.00
Callas	1.00 @ 1.50
Adiantum	12.50
Tuberose	1.50
Hellotrope	1.00
Alyssum	.25
Adiantum	1.00 @ 1.50

WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO., WHOLESALE FLORISTS

and Jobbers in Florists' Supplies,

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Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

Mention American Florist.

CUT ROSES AT WHOLESALE.

The only establishment in the West growing Roses exclusively. 20,000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the consumers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety.

Also all the leading varieties of young Rose plants for sale.

GARFIELD PARK ROSE CO., 1688 West Madison Street, Corner St. Louis Avenue, CHICAGO. Mention American Florist.

EDWARD C. HORAN, WHOLESALE FLORIST,

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The Bride, Mermets, and Am. Beauties, SPECIALTIES. NEW YORK. Mention American Florist.

Thos. Young, Jr., & Co., Wholesale Florists,

INCORPORATED 1885,

20 W 24th St., NEW YORK



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Roses planted for Winter 1888-9. Souvenir de Wootton, The Gem, Puritan, American Beauty, Annie Cook, Mad. Cusin, Papa Gontier, The Bride, La France, Bennett, Perle, Mermets. And other standard sorts

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165 Tremont Street, BOSTON, MASS. We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

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M. OLSEN, WHOLESALE FLORIST, CHICAGO.

THE WISCONSIN FLOWER EXCHANGE, WHOLESALE CUT FLOWERS. Consignments Solicited. Send for price list 133 Mason St., MILWAUKEE, WIS.

News Notes.

PORTAGE, WIS.—J. Beau is completing two small houses.

GOSHEN, IND.—E. N. Burt has built another new rose house 60 x 20.

NORWICH, CONN.—Joseph Smith has built a new palm house and office.

LINCOLN, NEB.—L. C. Chapin has completed two new houses 100 x 22, heated by steam.

RUTLAND, VT.—H. De W. Boidner, formerly of New York, has opened a floral store here.

OSHKOSH, WIS.—John Nelson has added a new rose house 75 x 18 and a carnation house 75 x 11.

YOUNGSTOWN, O.—The people of this city are agitating the question of securing land for a public park.

COUNCIL BLUFFS, IA.—L. A. Casper has just completed a new greenhouse 140 x 12 and a packing shed 140 x 10.

SPENCER, MASS.—F. F. Myrick has retired from the firm of Myrick & Hoyle. The business will be continued by A. W. Hoyle.

ST. PAUL.—L. L. May & Co. have built three houses 75 x 20 each, one 75 x 16, another 75 x 11 and one 100 x 25, all heated by steam.

ERIE, PA.—The second meeting of the Erie County Horticultural Society was held Sept. 26. An excellent display of grapes was made.

NEW HAVEN, CONN.—An amateur in this city has two rose geraniums which have grown to a height of ten feet. They are two years old.

GREEN BAY, WIS.—Reinecke & Wendorff have built two new houses 75 x 14 and 75 x 20 respectively; also a small propagating house.

SYRACUSE, N. Y.—A clothing house in this city had recently on exhibition in their window a floral baby carriage as a window attraction.

ANDERSON, IND.—J. S. Stuart has just completed two greenhouses 100 x 18 each. He would like price lists and catalogues from which to select a stock.

WAUKESHA, WIS.—Twenty acres of land has been purchased by E. V. Beales, formerly of St. Paul, who will go into flower growing extensively here.

COLUMBUS, O.—Sept. 26 a special display of cut flowers was made at the Ohio Centennial Exposition in this city. Prizes aggregating \$200 were awarded.

POUGHKEEPSIE, N. Y.—Herbert S. Ransom has completed four new greenhouses at Highland, to be used for growing roses for the New York market.

SPRINGFIELD, ILL.—In the pond at Oak Ridge cemetery six varieties of water lilies and lotuses have been successfully grown and bloomed the past summer.

BERWYN, Pa.—E. G. Hornbrooke & Co., have sold out their florist business to John Neusall, who will continue it. The nursery business will be discontinued.

WESTERLY, R. I.—S. J. Reuter has just completed six new greenhouses, four being 15 x 72 and two 10 x 72 each, making him fifteen houses in all, heated by steam.

MILWAUKEE.—Mr. C. B. Whitnall has been elected president of the Florists' Club and F. P. Dilger, vice president. Mr. Frank Whitnall will go to California about January 1.

ROCHESTER, N. Y.—W. A. R. Morehouse, until recently general manager for Hiram Sibley & Co., has severed his connection with that firm and will soon open a new house.

HARRISBURG, PA.—Joseph Schmidt has rented his seven greenhouses to Logan McClintock, a young but well posted florist. Mr. Schmidt retains his store on North Third street.

MORRISON, ILL.—Robert Davis & Son market gardeners here, are building a greenhouse 50 x 20 and will branch out into floriculture. They will also handle seeds for local demand.

BANGOR, ME.—At the recent Eastern State fair the total number of entries in the horticultural departments were 599 against 408 last year. In flowers and plants there were fifty entries.

PROVIDENCE, R. I.—The floral exhibits at the state fair were numerous, but mostly made by amateurs, Robert Johnston and George Westcott being about the only florists who exhibited.

AUSTIN, TEXAS.—Wm. Radam the florist and nurseryman is gaining considerable notoriety by claiming to have discovered a sure cure for the yellow fever. He calls his remedy a "Microbe Killer."

BEAVER DAM, WIS.—Joseph Wagner received a thousand dollar check from the railroad company for the privilege of running through his new greenhouse, and he is now building two more new houses 60 x 18.

APPLETON, WIS.—Dennis Meidam has built four new houses, two 75 x 11 each, one 75 x 20 and another 15 x 12. Also a packing room 40 x 10 and an office 16 x 16. He has a stone basement 30 x 16 for dormant plants in winter.

QUINCY, ILL.—We had a sharp frost the night of October 1 that killed all tender plants which were unprotected. Summer trade has been very light. Plants for forcing are in fine condition and a lively winter trade is expected.

MONTREAL.—The floral department at the annual show of the Horticultural society was a splendid exposition of floriculture in this section. The exhibits of both plants and flowers exceeded in numbers and quality those of any former exhibition.

MEADVILLE, PA.—On August 29 one of the churches held a floral exhibition at which prizes were offered for flowers and plants grown by the Sunday school scholars of various ages. There were a large number of entries and much interest was developed.

WASHINGTON, D. C.—N. Studer is building five houses 20 x 300. He says he looks for better business this winter than ever before. All the other florists are repairing and getting things in shape for frost. Business has been very dull except in funeral work.

LANSING, MICH.—Prof. L. R. Taft, a graduate of Amherst Agricultural College and for some years a professor of horticulture in the Missouri Agricultural College, has been engaged to fill the place made vacant by the resignation of Prof. Bailey at the Michigan Agricultural College.

BLOOMINGTON, IND.—The Indiana State University has received very liberal appropriations from the state and its twenty acres of grounds are being handsomely laid out. Plans have been drawn by O. Benson, a Chicago landscape gardener, and work is now progressing.

BROOKLYN, N. Y.—A stranger called at the greenhouses of florist L. Rhoades Sept. 20, and ordered some flowers. When the florist returned from another house where he had gone to cut some flowers, he found that the stranger had committed suicide in his absence. No clue to the stranger's identity was found.

LARNED, KAN.—The gardeners of Pawnee county recently met and formed a mutual benefit association with a membership of seventeen, and elected officers as follows: President, Henry Booth; Vice-President, W. T. Jackson; Secretary, A. J. Burdick; Treasurer, Archie Cook. The object is to maintain uniform prices.

DANVERS, MASS.—Among the attractions on the grounds of the hospital this season was a Chinese pagoda seventeen feet high of growing plants. There was a dome supported by six pillars with archways high enough that a person might walk under without stooping. There was also a sun dial in plants.

SAN FRANCISCO.—At a meeting at the rooms of the State Board of Horticulture September 21, a State Board of Floriculture was organized and Messrs. A. D. Pryal, of Oakland, B. M. Lelong, of this city, W. A. T. Stratton, of Petaluma, and David J. King, of this city, were appointed a committee to draft a constitution and by-laws.

TOPEKA, KAN.—At the recent exhibition premiums for "best and most effectively arranged general display of plants in pots" were awarded as follows: Frank Sachs, of North Topeka, first, \$60; D. A. Rice, Topeka, second, \$40. Paul M. Pierson & Co. received firsts for "best and most tastefully arranged floral display" and "best arranged basket."

BROOKLYN, N. Y.—Martin Kennedy, a gardener in the employ of James Weir, Jr., the florist opposite the entrance to Greenwood Cemetery, has sued the trustees of the cemetery for \$20,000 damages. He claims that he contracted blood poisoning by drinking water from a hydrant in the cemetery not being warned that the water was from wells in the cemetery and consequently poisonous.

NEW BEDFORD, MASS.—W. S. Brown built a large rose house this summer. His plants are looking finely and give promise of a good crop of buds this winter. His chrysanthemum house contains about 1,500 plants of the best varieties in 4 inch pots up to large specimens in 12-inch pots. All his stock is in excellent condition and reflects credit on his foreman John Rooney.

LA CROSSE, WIS.—J. C. Easton, a local amateur, has built some very pretty conservatories, containing 7,800 feet of glass. Edw. Kirchner is the gardener in charge. Paul Zoellner succeeded P. E. Steves as superintendent at the Oak Grove greenhouses. The John A. Salzer Seed Co. is making some changes, moving the general office upstairs and using the first floor for a show-room only, and otherwise improving their facilities. They report trade as unusually good. At North La Crosse Bernhard Beyer has built two rose houses 100 x 20 each and a packing room 50 x 14, all constructed in best style.

ELMIRA, N. Y.—At the state fair September 17-22, floral hall contained probably the finest exhibition of plants, cut flowers and floral designs in the nearly fifty years history of the society. James Vick, of Rochester, excelled in cut blooms of dahlias and gladioli. Rawson of this city had the largest general exhibit, securing first premiums on general collection of plants, also for palms, geraniums, fuchsias, etc., in separate classes, first on roses, floral designs, etc. Mrs. H. D. Wells, of Elmira, had a creditable display, but not taking as many premiums. The amateurs of the state were out in full force.

CLEVELAND.—James F. Lie has extended his Euclid avenue store making it now 16 x 40. A bay window with stained glass is another feature, in addition to many other improvements. At his greenhouses he is building a cold house for bulbs. J. M. Gasser is adding 3,000 feet more glass, making him a total of 53,000 feet. Mr. W. J. Leitch resigned his position at the Newburgh asylum Oct. 1, to go into partnership with J. C. Gooding. The style of the firm will be Gooding & Leitch. The new firm has purchased eight adjoining lots and is building two new houses 100 x 21 and 100 x 8 respectively, all heated by steam.

MILWAUKEE.—At the recent exhibition first premiums for most artistically arranged floral design, most tastefully arranged basket, best pyramidal bouquet, best display roses, and best display ornamental foliage plants were awarded to F. Whitnall & Co.; for best collection cut flowers, best pair flat table bouquets, best five named varieties roses, best twenty greenhouse plants in bloom, best ten geraniums, and best display of flowers of all kinds grown by exhibitor, to G. W. Ringrose; for best ten named dahlias to Chas. Hirschinger; for best show pansies to Wm. Toole; for best show gladioli, best show lilies, best show greenhouse plants and best six fuchsias to Currie Bros.

Boston.

Snow flying in the air October 9, not an outdoor flower left, carnations not established in the beds yet, and chrysanthemums only showing bud. The telegraph boys' step makes the heart of the commission man glad, the grower comes to town with head erect and a new backbone, while the retailer pulls down his old vocabulary of "cuss words" and prepares himself for vengeance upon all "combinations" and cases of "large head" that crop out in his vicinity, and fills his show windows with plants, baskets and immortelle designs while he waits with as much patience as possible for the tide to turn.

W. J. S.

Philadelphia Chrysanthemum Show.

Preparations are being made for the grand chrysanthemum show which takes place in Horticultural Hall Nov. 13-16. Philadelphia has well earned the reputation of having the very best chrysanthemum shows in this country, and she will more than retain that reputation this year. Every lover of this favorite flower should not fail to come and see it. Call on Secretary Farson at his office and any information will be cheerfully given and courteous treatment may be depended upon. Send for the new schedule which may be had by addressing Mr. Farson,

Horticultural Hall, Broad St., Philadelphia, Pa.

The Florists' Club will have its annual chrysanthemum supper on Tuesday evening. It would be a pleasure to the club to have visitors report on their arrival in the city, so that an invitation may be extended to our brethren from other cities.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

- | | |
|---|---|
| Baltimore,
R. J. Haliday. | New Orleans,
H. A. Despondmer. |
| Boston, W. J. Stewart. | Philadelphia,
Edwin Lonsdale. |
| Buffalo, Daniel B. Long. | New York, W. S. Allen. |
| Cincinnati,
Harry Sunderbruch. | Aug. Rolker & Sons. |
| Cleveland, O.,
Mrs. E. G. Campbell. | C. H. Joosten. |
| Detroit,
J. Breitmeyer & Sons | Pittsburgh,
J. R. & A. Murdoch. |
| Hamilton, Ont.,
Webster Bros. | St. Louis, Michel Plant
& Seed Co. |
| Harrisburg, Pa.,
J. Horace McFarland. | San Francisco,
Thos. A. Cox & Co. |
| Louisville,
George Thompson &
Sons. | Toronto, Ont.,
J. A. Simmers. |
| | Washington, D. C.,
L. Schmid & Sons. |

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THE CUTS

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Write for prices on any which you have seen in previous issues and would like.

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PANSY PLANTS,

from first class seed, ready for immediate delivery, 75 cents per 100, \$5.00 per 1000.

JOHN J. CONNELLY, Bryn Mawr, Pa.
Mention American Florist.

F. A. RIECHERS & SOHNE A. G. Florists,
HAMBURG, GERMANY.

Largest stock of Azalea indica, Camellias, Lilies of the valley for the wholesale trade. Price list on application.

TO THE TRADE.

CLEMATIS CRISPA, ARUNDO DONAX VARIEGATA,
EULALIA ZEBRINA.

H. STEINMETZ, Raleigh, N. C.

SEED OF EVENING GLORY.

(White seeded var.), i. e. Moonflower. Pink Moonflower is a novelty not yet offered the trade. Eulalia, Jap. var. and Zebрина.

MRS. J. S. R. THOMSON, Spartanburg, S. C.



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THE
AMERICAN FLORIST

VOLUME II.

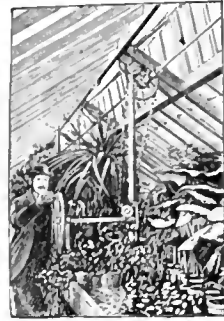
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VENTILATING APPARATUS.

WITHOUT A BREVET, EITHER IN COST, SPEED IN OPERATING OR SECURITY IN CASE OF STORMS.



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- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

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The first severe frost of the season occurred the night of the 2nd inst. Coleus were killed and other tender stuff sadly marred.

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Write for prices on Cyclamen, Begonias, Asparagus, Geraniums, Coleus, Passifloras, Violets, etc., etc.

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The Florists' Clubs.

It is not encouraging to learn that at least one or two of our florist clubs are in an unhealthy condition, for the beneficial influence of these organizations can scarce be doubted. Apart from their educational tendencies they have a social aspect which in no small degree enhances their value. The club meetings not only afford members an opportunity for discussing matters of vital importance in a business sense, but also for indulging in social converse for the cultivation of a closer intimacy with each other, thus helping us to bear more charitably with some brother's eccentricities or infirmities, and to a fuller appreciation of his good qualities. I have noted with much satisfaction the interest that is being awakened among florists and the various efforts that are being put forth with a view to elevating the florists' vocation. Little by little abuses hitherto existing in the trade and tending to bring it into public disrepute, are being crushed out; unscrupulous dealers are beginning to find their occupation gone and their places taken by men of principle and intelligence. But no permanent good can possibly be accomplished except by persistent and united effort on the part of those engaged in the business. "In union there is strength," and as a means to this end the organization and permanent maintenance of local clubs is specially desirable. Then again, no general association, such, for instance, as the S. A. F., can very well give attention to all business interests or abate business grievances in every section of the country. Trade interests are not, in all respects, universally alike, and there are grievances peculiar to certain localities. Therefore the utility of a local organization must be quite apparent, since it affords a medium for the concentration of business interests and for the more expeditious and effectual removal of trade grievances in a particular locality.

As a matter of course the writer has his individual ideas—wise or otherwise—concerning the management of florists' clubs. I will, however, content myself by saying that I consider it bad policy to continue the same men in office for more than one term. They may be very able and capable men, but for many reasons I regard the election of new men each year as most conducive to the welfare of the club. I am also very much in favor of making the florist club a beneficial organization. The Baltimore Club has adopted this plan, which I consider an excellent one. It tends at least to keep up the active membership, and the very nature of the system is calculated to keep the finances of the club in a healthy condition.

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BOUVARDIA BOCKII, the finest pink variety	Per 100
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ROSES, fine collection, 2 1/2-inch, fine	4.00
VERBENAS and COLEUS, 2-inch	2.00
Rooted Cuttings of Coleus and Verbenas	1.00

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Colored Carnations in variety	8.00
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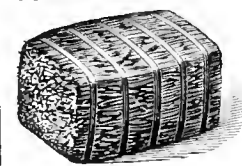
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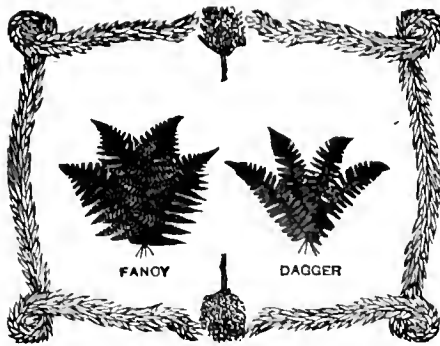
Abutilons, three kinds yellow, white and scarlet, 2-inch pots	per doz	100
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Hoya Carnosa Variegata and Cunninghamii 3-in	2.00	
Hibiscus, double and single 3-inch	.60	5.00
Heliotropes, White Lady and Jersey Belle 2-in	.40	3.00
Heliotropes, Mrs. David Wood, double 3-inch	1.00	
Impatiens Grandiflora Moonflower 2-in	.50	4.00
Ivies, English, Irish and Variegata 3-in	.60	5.00
Justicia Carneae 3-in	.60	
Lycopodiums assorted 2-in	.40	3.00
Lagerstroemia, Crape Myrtle, 3-in	1.00	
Oxalis Lutea pleno double yellow 3-in	.50	3.00
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Petuniums, double assorted 2-in	.50	4.00
Pittosporum Variegata 3-in	1.50	
Plumbago, Capensis and Larpente 3-in	1.00	
Roses, Teas, the below kinds 2-in	.40	3.00
" the same in 3-in	.75	6.00
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Roses, Hybrids, Teas, assorted 2-in	.60	5.00
Canoons, La France, Meteor, Wm. F. Bennett, etc.		
Roses, Hybrid Perpetual assorted 3-in	.60	5.00
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" Rubas Grandiflora, fringed roses 2-in	.75	6.00
" Dormant Hybrids, strong	2.00	12.50
" Dormant, Teas, Bourbons, Bengal	1.50	10.00
Smilax 3-in	.50	4.00

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FOR FORCING AND FALL PLANTING.

Hyacinths in colors	\$ 4.50
Tulips, double and single for forcing	2.50
Paper White Narcissus	2.25
Lilium Candidum	5.00
Lilium Harrisii XXX best, 7 1/2 to 9 1/2 in circum.	22.00
Froesia Refracta Alba	4.00
Lily of the Valley Pips	1.50
Calla Roots, strong bulbs	12.00
Thiobose Pearl	2.00
Crocus, all colors	.50
Roman Hyacinths, select white	4.00

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500,000 Cut Hardy Ferns

These ferns are from 10 to 20 inches in length, of a beautiful dark green and will keep for several weeks. They are used for Bouquet work, filling flower baskets, vases, &c., &c., and are also used extensively for decorating church altars for which they cannot be excelled.

\$1.50 per thousand Ferns.

500 bbls. first quality XXX Bouquet Green. **WARRANTED.** Sack or barrel of 30 lbs. \$2.00. 100 lbs. \$6.00 Terms cash, or Green will be sent C. O. D.

300 bbls. second quality Bouquet Green, \$1.75 per bbl., \$5 per cwt.

20,000 yards of Bouquet Green Wreathing or Roping, all wound on a cord with fine wire in a thorough manner. 3-in. diameter, flat or one-sided, 4 cts. per yard; 3-in. diam. round, 6 cts. per yard; 4-in. diam. round, 8 cts. per yard; 5-in. diam. round 10 cts. per yard. 1,000 barrels Sphagnum Moss, long, clean fibre, dry or green, \$1.00 per barrel or six barrels for \$5.00.



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Greylock Peak from the South end of Lake Otota.



10,000 CHRISTMAS TREES, from 3 ft. to 30 ft. high.

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	Each.		Each.
4 to 5 ft. high.....	.10 to .15	14 to 15 ft. high.....	\$1.25 to \$1.50
6 to 7 " ".....	.20 to .30	16 to 17 " ".....	1.75 to 2.00
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Also fine large plants of *Vinca Harrisonii* from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of **SINGLE PRIMROSES**, at \$8.00 per hundred.

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Fine, large plants in 6-inch pots, at \$10.00 per 100.

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MARIA LOUISE, at..... \$8.00 per 100

GOOD STRONG SMILAX, 3-in. pots, \$5.00 per 100

I also have a large stock of *Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus*, at \$30.00 per 1000. Strictly our selection; clean, strong plants in 2 and 2½-inch pots.

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Strong plants from field or from 5 and 6-inch pots at \$10 per hundred.

CARNATIONS. Snowdon and Garfield, extra strong plant from field \$5 per hundred.

JASMINUM GRANDIFLORUM in bud and bloom from 5 and 6-inch pots at \$15 per hundred.

Can also furnish cut flowers of Bouvardia and Carnations to the trade throughout the season in large quantities. Prices on application.

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FOR SALE.

Carnations from open ground, large clumps of **WHITE LAUREL, SUNRISE, SEAWAN, SCARLET GEM, CHESTER PRIDE, MISS JOLIFFE, SCARLET QUEEN, LADY EMMA.**

I. LARKIN, Toughkenamon, Chester Co., Pa.

CARNATIONS.—Hinze's White, Garfield, and others. Extra strong clumps, \$6.00 per 100; \$35.00 per 1000. **Violets** Swanley White and Maria Louise, free from disease, \$5.00 and \$6.00 per 100; \$50.00 per 1000. **Balsies**—Large double flowered, white, red and pink; extra fine plants, \$1.50 per 100; \$10.00 per 1000. **Bouvardias**—in fine variety, \$5.00 per 100.

PAUL BUTZ & SON, New Castle, Pa.

PALMS, FERNS, ETC.

All sizes from Seedlings up. Large stock of most useful varieties in best condition at lowest prices.

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HUGHES' SOLUBLE FIR TREE OIL.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants such as ferns, etc., it used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

Dog fanciers should not be without it! It makes a silky coat and produces healthy skin action; kills fleas, and is excellent for washing dogs.

Housewives should not be without it! Used with ordinary household soap it is an effectual DISINFECTANT, BLEACHER AND CLEANER OF FABRICS. It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

Put up in 1 gallon tins, \$3.25. Full directions & trade Put up in 1 quart tins, \$1.00 mark on each package.

E. GRIFFITH HUGHES, Operative Chemist, MANCHESTER, ENGLAND.

New York Depot with

AUGUST RÖLKER & SONS, 44 Dey Street, Sole Agents for America.

VIOLET PLANTS.

— FOR SALE BY —

SCHROEDER BROS.

POUGHKEEPSIE, N. Y.

\$8.00 per hundred. Cash must accompany all orders. Plants are first-class.

DECORATIONS.

PALMETTO PLANTS and LEAVES.

LONG NEEDLE PINES, WILD SMILAX, ETC.

For Christmas and Hall Decorations.

Send orders early to

A. C. OELSCHIG, SAVANNAH, GA.

1000 ROSES, 4-IN. POTS.

MERMETS, PERLES, BON SILVIE, FRIGNEUSE, THE BRIDE, NIPHETOS, SAFRANO, ETC.,

at \$10.00 per 100. All in good condition for winter blooming.

1000 Bouvardia A. Neuner, Pres. Garfield, \$9.00 per 100.

1500 Carnations, leading kinds, \$10.00 per 100.

1000 Violets, Maria Louise, Swanley White, \$6.00 per 100.

All the above are fine clumps from open ground.

EVENDEBROS., Williamsport, Pa.

NEW CARNATIONS.

New White Carnations Wm. Swayne and L. L. Lamborn.

Fine field-grown plants, \$35.00 per 1000.

New Dark Crimson Carnation, PRIDE OF KENNETT, \$25.00 per 100. Prices of other leading varieties on application.

Also 2,500 SMILAX, 3-inch pots, prices low

WM. SWAYNE, Kennett Square, Pa.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY, CEDAR RAPIDS, IA.

A Trade Secret.

Last May a Young New Yorker started out to Hunt novelties for his fall catalogue. He set the Ball rolling by taking a Gurney to a Hill in Indiana where he found on the topmost Craig a curious Pitcher plant which he concluded would be a real "acquisition," but the King of the natives would not permit it to be taken away.

In order to Currie favor with this potentate, one night when the Moon was Fuller than usual he instructed him in a Stew-art which greatly pleased him and at the same time commenced to Fisher round for the hand of his Dingee daughter. After allowing the young couple to Spooner round for a Little while the native Parson's services were secured, the Menand women of the tribe assembled and the twain made one. Knowing that the men of the tribe would not Henderson's in law of the King in any act, he once more attempted to secure the plant. Procuring a stout stick of Wood he proceeded to Whittle it to a sharp point and with this as his only weapon he sallied forth, packed the plant for a long journey and turned his toes to the east. His wife however detected him as he was substituting his room for his company and commenced to Maule him with her stuffed club over the head where the Harris scantiest. He finally overpowered her and heaped Coles of fire on her head by giving her a farewell kiss on the nose and fled where none would A. Lauer to repeat her club practice.

After a tiresome journey during which he had many Battles with hostile tribes, streets Arabs and other savages, he reached Philadelphia on a bleak Dreer day in October and exultingly showed his plant to a number of Gardeners who at once pronounced it neither Neuner valuable.

The young man still lives but his Grey head tells his mournful tale of misdirected effort.

HYDRANGEAS, CLEMATIS, ALTHEAS, ETC.

	Per 100	Per 1000
4,000 Hydrangea P. G. 12 to 15-inches....	\$ 7.00	\$60.00
8,000 " " " 3 to 5-inches....	3.50	30.00
2,000 Variegated Leaf Weigelia, 8 to 12-in	5.00	
3,000 Clematis Virginia, 1 year layers...	6.00	50.00
1,000 " Flanula, 2 years.....	6.00	
1,000 " Viticella, 2 years.....	6.00	
500 " Crispa, strong, 1 year....	10.00	
1,500 One year Climbing Roses, strong...	7.00	
1,000 Handsome Named Altheas, 3 to 4 feet.....	12.00	

D. LEE & SON,
MADISON, Lake Co., OHIO.

ORDERS TAKEN

For Rooted Cuttings of COLEUS, CARNATIONS, VINCA, GIANT GERANIUMS, Etc. \$2.00 per 100; \$15.00 per 1000.

METALLICA BEGONIA, 2-inch..... \$4.00 per 100
ROSES, H. P. and Teas, 2-inch..... 4.00
DRACENAS, INDIVISA..... \$1.50 to \$5.00 per doz.

W. W. GREEN SON & SAYLES,
WATERTOWN, N. Y.
Mention American Florist

SMILAX.
To the Trade at all Seasons.
F. E. FASSETT & BRO.
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PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

HARDY AND RARE Japanese Plants for the East.

15 FINEST VARIETIES OF MAPLES, 1-4 ft.
STYRAX JAPONICA, STYRAX OBOSSIA. (Read article in this year's *London Garden*.)
SYRINGA JAPONICA, HARDY MAGNOLIAS,
THE GRAND CONIFER SCIADOPITYS V.

"**UMBRELLA PINE,**"
in sizes 1-6 ft. (Has been shipped safely by frt. to Boston.)
RARE VARIETIES RETINOSPORAS.
50 VARIETIES TREE PÆONIAS. NEW HERBACEOUS PÆONIAS.
NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEMATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

FOR THE GREENHOUSE.
RHAPIS AND CYCAS PALMS, BAMBUA NANA, AR-AUCARIAS, TREE FERNS FROM AUSTRALIA.
32 VARIETIES OF JAPANESE LILY BULBS
LARGE ASSORTMENT OF SEEDS FROM JAPAN AND CALIFORNIA.

Send for our Catalogue. Now is the best time to order for Spring delivery East. We have many valuable novelties never before introduced. Send for estimates.

H. H. BERGER & CO.,

315 & 317 Washington St., SAN FRANCISCO, CAL.
P. O. Box 1401. (ESTABLISHED 1878.)
Mention American Florist.

ROSES.

In order to make room for young stock, we offer the following low inducements:
Mermel, Bon Silene, from 3/2-inch pots..... \$ 7.00
S. d'un Ami, Cook, " 3-inch pots..... 5.00
Safrano, and Adam, " 2 1/2-in. pots..... 4.00
Bride and La France, 3/2-inch, \$10.00, 3-inch, \$8.00; 2 1/2-inch, \$5.00, per 100.
Teas and Hybrids from open ground, \$6.00, \$8.00 and \$10.00 per 100.
Ampelopsis Veitchii and Quinquifolia, first size \$8.00, second size \$6.00 per 100.
Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots, \$10.00 per 100.

CARNATIONS, Strong Clumps.

Peerless, Edwardsii, Hinze's White, Portia, Crinson King, Philadelphia, Hinsdale, James Garfield, Mrs. Garfield, Alegatiere, Fred Johnson, Andalusia, Annie Webb, J. Gould and Century.
1st size, \$6.00 per 100; \$20.00 per 1000.
2nd size, \$5.00 per 100; \$15.00 per 1000.

VERBENAS.

Perfectly healthy out-door rooted cuttings, Mammoth set XX collection, \$1.25 per 100, \$10.00 per 1000.
General collection, variety unsurpassed, \$1.00 per 100, \$8.00 per 1000.

VIOLETS.—Swanley White, \$6.00 per 100; \$50.00 per 1000. Marie Louise, \$5.10 per 100; \$40.00 per 1000.
Our Carnations and Violets are grown on new soil. They are large and perfectly healthy.

L. C. WOOD & BRO., Fishkill, N. Y.
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ROYAL PALM NURSERIES

OFFER TO THE TRADE

Lafania Borbonica, 2 leaves, 10 to 12 inches, \$5 per 100 postpaid.
Oreodoxa regia, same size and price.
Latanias, 4 to 6 leaves, 12 to 18 inches, \$1.00 each.
" 4 to 7 leaves, 18 to 24 inches, 1.50 " "
" 5 to 8 leaves, 24 to 32 inches, 3.00 " "
Eranthemum pulchellum, blue-flowered, 18 to 24 inches, \$1.50 per dozen, \$10.00 per 100.
Caesalpinia pulcherrima, the Barbadoes flower fence, 12 to 18 inches, \$2.50 per doz., \$20.00 per 100.
Erisofrya Japonica, the Loquat, with glossy evergreen leaves, strong 1 yr plants, \$5.00 per 100.
Zamia integrifolia, resembles Cycas revoluta, at 15c. per lb. net.
Dry Bulbs Crinum and Pancratiums, at \$5.00 per 100. Seedling Palms by the 100,000. Write for other quotations and catalogue.

REASONER BROS., MANATEE, FLA.

Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,
BY THE HUNDRED OR THOUSAND,
GEO. WITTBOLD,
Cor. School and Halsted Sts.,
LAKE VIEW, CHICAGO.
Mention American Florist.

ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

WM. MATHEWS,
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ORCHIDS
Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., Govanstown, Md.

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NEW AND RARE PLANTS, ETC.

A very extensive Stock of Orchids:
EAST INDIAN, MEXICAN, CENTRAL and SOUTH AMERICAN, ETC. PITCHER PLANTS, a large Collection.

NEW AND RARE HOTHOUSE AND GREENHOUSE PLANTS, carefully grown, at lowest rates.

Finest Winter Blooming Roses, Clematis, etc.; DUTCH BULBS, large importations from leading growers in Holland. Fruit and Ornamental Trees. Catalogues on application.

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ORCHIDS A SPECIALTY.

The Stock at the Clapton Nursery is of such magnitude that without seeing it is not easy to form an adequate conception of its unprecedented extent.

Coleus, Roses, Fruit Trees, Ornamental Leaved and Flowering Plants, also

GENERAL NURSERY STOCK

Of fine quality and immense extent.
The Glass Structures cover an area of 257,300 feet.

HUGH LOW & CO.,
Clapton Nursery, LONDON, ENGLAND.
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HIGH GRADE PANSIES

A SPECIALTY.

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors:

Our Improved Giant Trimardean as the best for market.

And New French Fancies as Extra.

Trade Packages of either variety at \$1 each. Seed of our own growth.

We have proved these to be the highest quality of Pansies at the present day, and are the same as we exhibited in Boston in May last.

DENYS ZIRNGIEBEL,
Needham, Mass.

WATER LILIES,
All Colors.

Young plants suitable for late flowering NOW READY.

Send for prices.

BENJ. GREY, Malden, Mass.

FOR SALE.

A few thousand Magna Charta Roses, own roots, field grown, very large and strong.
Also 5,000 one year old Multidora Jap. (Dawson's stock) are left for fall delivery.
Ask for prices.

A. C. OELSCHIG, SAVANNAH, GA.
Mention American Florist

HARDY * ORNAMENTAL * SHRUBS

FOR FLORISTS TO SELL.

A SAMPLE LOT OF 50 KINDS

TO THE TRADE ONLY

FOR \$10.00.

In order that florists everywhere may grow to appreciate the value of a line of samples of this kind, and add a new department to their business, we have decided to make the following offer to the trade only.

We will furnish one each of the following list of fifty (50) distinct and valuable selected kinds of flowering shrubs and trees, packed and delivered in New York City for \$10.00. The plants will be of regular catalogue size, and of finest quality in every respect.

Japanese Maple—Dark purple. Low growth, somewhat erect form, foliage dark purple or claret tint, very deeply cut. A very attractive and decorative form; best variety for pot culture.

* **Daphne Mezereum**—Red flowers, small bush, blooms in April.

Purple Berberry—Violet-colored foliage and fruit. Rich looking and effective.

Berberis Thunbergii—Compact, glossy, light green foliage. The best hedge plant.

Clethra alnifolia—Growth low and dense, leaves abundant and light green; numerous small spikes of white and very fragrant flowers in July. A valuable shrub.

Red Flowering Dogwood—Flowers suffused with bright red color lasting long. A new variety of remarkable merit.

White Variegated Dogwood.

Cydonia Japonica (Japan quince) *simplex alba*—Pure white flowering variety.

Cydonia Japonica rubra grandiflora—Large red flowers.

Cydonia Japonica tricolor—A beautiful variegated-leaved variety.

* **Deutzia gracilis**—White, dense bushy low growing, end of May or first of June.

* **Deutzia crenata flore plena alba**—Flowers double white tinged with pink in racemes four or five inches long. One of the most desirable flowering shrubs in cultivation.

* **Exochorda grandiflora**—Vigorous growing, finely shaped shrub, with light colored foliage and wood, and a great profusion in May of the most lovely pure white flowers.

* **Forsythia Fortunei**—Yellow, flowing bushy habit, April and May.

Forsythia viridissima—Differs from *F. Fortunei* in a more straggling growth and deeper colored flowers and bark. It also blooms earlier.

Hydrangea paniculata grandiflora—Vigorous spreading form, immense pyramidal panicles of white flowers more than a foot long.

Hydrangea nivea—A vigorous growing, hardy variety, with leaves of a silvery white underneath.

Hydrangea quercifolia—American species. Vigorous shapely growth, large foliage like that of the oak, downy beneath, and richly tinted in autumn; white flowers in spikes, showing finely among the massive leaves.

Buists' variegated leaved Allheas.

Hypericum Kalmianum—Low spreading bush with small bright yellow flowers in August.

Ilex Virginica—Small bush, white flowers in June; very beautiful in autumn tint.

Ligustrum ovalifolium.

Lonicera fragrantissima—A vigorous shrub of upright habit, suited to almost any soil and exposure; leaves good size and rich green; flowers pinkish early before the leaves and very fragrant.

Philadelphus grandiflorus—Strong growing branches, showy large slightly fragrant flowers in June.

Golden **Philadelphus** holds its color well.

Prinos vilicillata—Vigorous upright bush; fine ornamental red berries in autumn.

* **Double Flowering White Almond**—Beautiful double white flowers in May.

* **Double Red Flowering Almond**—A beautiful small shrub, bearing in May, before the leaves appear, an abundance of small, double, rose-like flowers, closely set on the twigs.

Prunus Pissardii—A red-leaved plum of permanent color.

Rhodotypos kerrioides (Japan)—A very pretty shrub with numerous pure white flowers.

Sambucus nigra aurea—Solid, golden yellow leaves. One of the very best golden-leaved shrubs.

Spiræa Callosa Fortunei (Japan)—Rich, attractive foliage; rose-colored flowers in June.

Spiræa Thunbergii—Airy bushy habit, white flowers, May. Fine fall tints.

Spiræa opulifolia aurea—Large shrub, very yellow foliage, rich and massive.

Spiræa Bumalda—Pink, in terminal umbels, June and all summer. A small shrub often with partly variegated foliage.

President Mossart Lilac—Dark purple. Large trusses.

Chinese Purple Lilac.

Chinese White Lilac.

Persian Lilac—Small leaves, purple flowers.

* **French Red Lilac**—Abundant large sized panicles of reddish flowers.

Tamarix Africana—Pink flowers in June; should be cut back and formed immediately after it blooms to obtain flowers for another year.

Tamarix Indica—Blossoms in August; very strong growing, feathery and waving in aspect.

Viburnum plicatum—Medium shrub, pure white, June. Best of the snowballs.

Weigela or Diervilla rosea—Direct compact growth; fine rose-colored flowers in June.

Weigela Lavellee—Flowers dark reddish purple in June, and less abundant throughout the summer.

Weigela rosea nana var.—Dwarf spreading habit and possessing clearly defined variegated leaves. Stands the sun well, and is bright golden throughout the summer.

Pyrus Malus Halleana (Parkmanii)—Half tree, blooms when small, crimson and white, May.

Purple Fringe, or Snake Tree—This variety is a low tree with roundish head, and covered with reddish seed vessels like a purple mist.

Cut Leaved Sumac—A beautiful low tree or shrub with leaves of very large size, deeply cut and drooping gracefully from the branches. Autumnal color, a rich red.

Styrax Japonica (Japan)—Low growing shrub, or dwarf tree; white bell-shaped flowers, hanging from branches on long pedicels.

Those marked with an * are such as might be suitable for forcing.

PARSONS & SONS COMPANY,

(LIMITED)

Kissena Nurseries,

FLUSHING, N. Y.

— Catalogues on application. —

Boilers Again.

In the September 15 issue Mr. W. W. Coles advises not to use cast iron boilers for steam heating. Right you are Mr. Coles. I had two large cast iron boilers in use last winter which caused a loss of at least \$1,000. They were continually leaking and cracking, sometimes putting the fire out when the thermometer stood at 15° with the result of freezing some of my plants.

Get good wrought iron boilers—as I have done this season—and you who are putting in steam will not be troubled by Jack Frost if your pipes are laid right and the boiler is large enough. My houses are warmed with a pressure of only one pound.

Regarding this important matter of laying the pipes, if any one wishes to know my method I will gladly respond to a query. Would give my plan here but so many different ones have been already printed that another one would tend only to confuse. If possible it is best to visit some place where you can see the method you think of adopting, in successful operation. You can then judge better than from printed plans, though if this is impossible a written or printed plan is the best substitute.

Corfu, N. Y. E. M. GIDDINGS.

SMILAX WORMS.—Will some one give me a remedy for smilax worms? R. F.

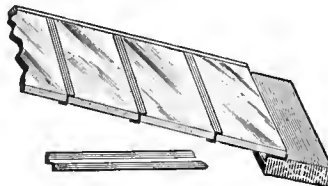


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FLORAL WIRE DESIGNS.**

JAS. GRIFFITH,
THE PIONEER MANUFACTURER IN THE WEST,
305 Main Street, CINCINNATI, OHIO.
SEND FOR WHOLESALE PRICE LIST.



**IMPROVED GLAZING.
J. M. Gasser's Patent Zinc Joints,**



For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil burners for steam boilers. Send for sample and price list.

J. M. GASSER,
101 Euclid Avenue, CLEVELAND, O.
Mention American Florist.

ESTABLISHED, 1866.

Floral Wire Designs,

Manufactured by

N. STEFFENS,

335 East 21st Street, NEW YORK.

SYRACUSE POTTERY CO.

Ships Flower Pots the longest distance, the most safely, quickly and cheaply. Our freight rates are very low; to Norfolk 24c, Nashville 32c, Memphis 37c, E. St. Louis 29c, Detroit 19c, and Cleveland 16c. Here is a postal:—

" 18 Spadina Ave., TORONTO, ONT., Oct. 3, 1888.
DEAR SIR:—The pots you sent came to hand in good order. I must say that they are the best and cheapest pots we ever got. Yours respectfully,
GEO. WADDS, gardener."

Here is a letter from a customer who sends with it an order for four more crates:

SANTA BARBARA, CAL., Sept. 9, 1888.
J. NEAL PERKINS, Syracuse, N. Y.
DEAR SIR:—The two crates came to hand September 2 in fair condition, about two per cent of breakage. [They were 25 days on way.]
Respectfully,
CHAS. F. EATON.

READY PACKED CRATES

Are our specialty. We also sell crates packed to order of mixed sizes from one pot upward. From our great stock we ship at once and at buyer's risk and frt. Samples free in any crate on request.

PRICES PER CRATE, CASH WITH ORDER:

3,150 Thumbs,	\$8.00;	320 5-inch	\$4.40
2,825 2 1/2-inch,	8.00;	160 6-inch	3.50
1,875 2 3/4-inch,	7.25;	108 7-inch	4.00
1,000 No. 3 Rose,	7.00;	60 8-inch,	4.00
1,000 No. 2 Rose,	6.40;	100 4-inch,	
1,500 No. 1 Rose,	6.50;	125 5-inch,	Crates....\$5.00
1,300 special 3-in.,	6.00;	80 6-inch,	
1,150 3-inch,	6.00;	30 7-inch,	
875 3 1/2-inch	5.50;	20 8-inch,	Crates....\$4.00
600 4-inch,	4.75;	16 9-inch,	
300 4 1/2-inch.	3.90;		

Send for price list and freight.

J. N. PERKINS, Manager, Syracuse, N. Y.

ONLY POTTERY MAKING A SPECIALTY OF

**FLOWER POTS
FOR FLORISTS.**

THE WHILLDIN POTTERY CO.,
713 & 715 WHARTON ST.,
PHILADELPHIA.

SASH BARS

VENTILATORS, RIDGES, GUTTERING AND LUMBER.

NO WIDE-AWAKE FLORIST need he told it will pay him to use Sash Bars, etc. made from

== CLEAR CYPRESS. ==

Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

LOCKLAND LUMBER CO.,

LOCKLAND, HAMILTON Co., OHIO.

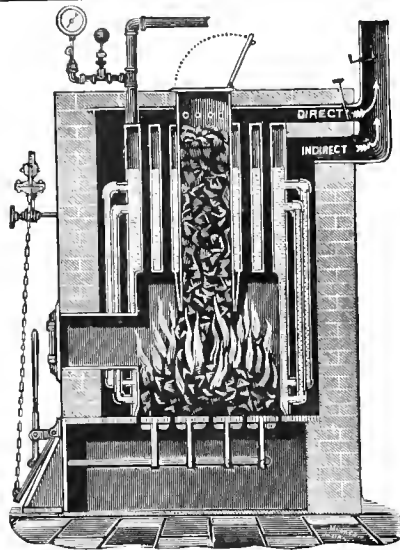
HAND TURNED EARTHEN WARE

Price List for 1888.

2 1/2-inch.... per 100,	\$ 50	8-inch.... per 100,	\$ 5.50
3 1/4-inch.... "	63	9-inch.... "	6.75
4-inch.... "	88	10-inch.... "	8.00
5-inch.... "	1.38	12-inch.... "	23.50
6-inch.... "	2.20	14-inch.... "	50.00
7-inch.... "	3.75	16-inch.... "	100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to **HILLFINGER BROS., Fort Edward, N. Y.**

VOLUME III OF THE
AMERICAN FLORIST,
BOUND IN HALF LEATHER, PRICE, \$2 25.



The Best Steam Boiler

For Greenhouse Heating.

STEADY FIRE NIGHT AND DAY.

EASILY CONTROLLED.
AUTOMATICALLY REGULATED.

SEND FOR CIRCULAR.

FERGUSON BOILER COMPANY,

No. 1, 3 and 5 Church St.,

ALBANY, N. Y.

Greenhouse Pipe and Fittings



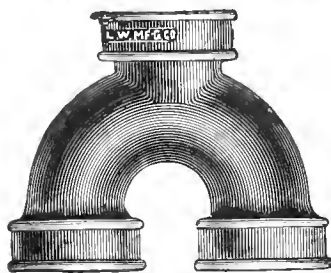
Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.



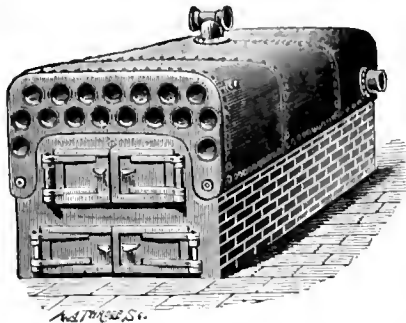
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ESTABLISHED 1854.

Devine's Boiler Works

THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.
Send for New List.

PETER DEVINE,
387 S. CANAL ST.,
CHICAGO.

Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

J. H. IVES, DANBURY, CONN.

HALES' MOLE TRAP

For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD N. J.**

Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada
Glazed on the

Helliwell Pat. Imperishable System

OR WITH PUTTY.

For further testimonials, illustrated catalogue or estimates address

JOSEPHUS PLENTY,
HOPTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

HOT BED SASH VENTILATORS. WRITE FOR PRICES.

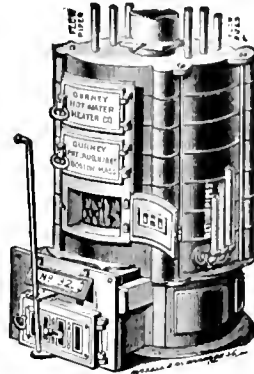
FULL SIZE OF PINE or CYPRESS. WE CARRY A FULL STOCK OF 12 1/2 and 16 foot lengths.

JOHN L. DIEZ & CO.,
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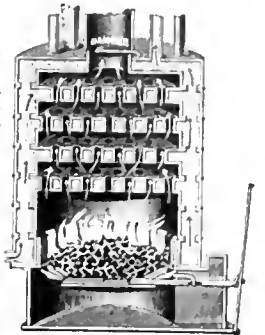
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THOMAS GRAY, Florist

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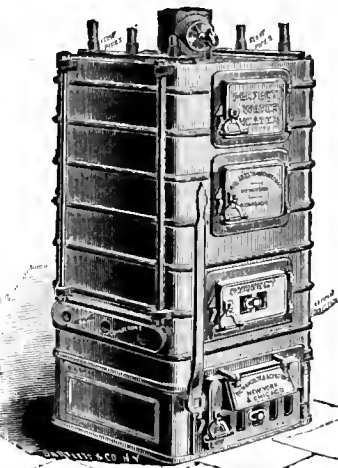
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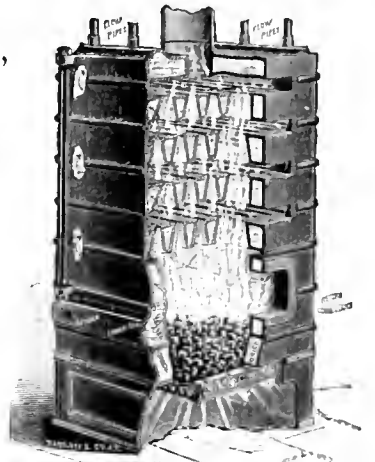
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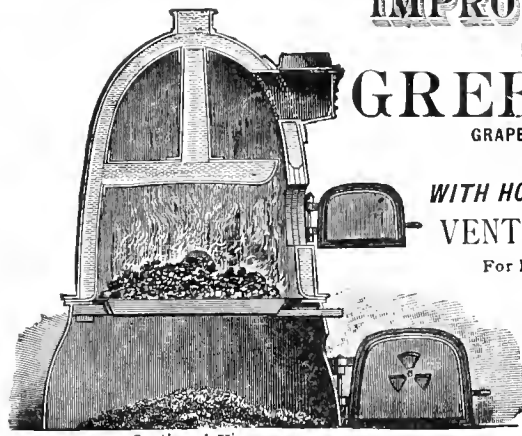
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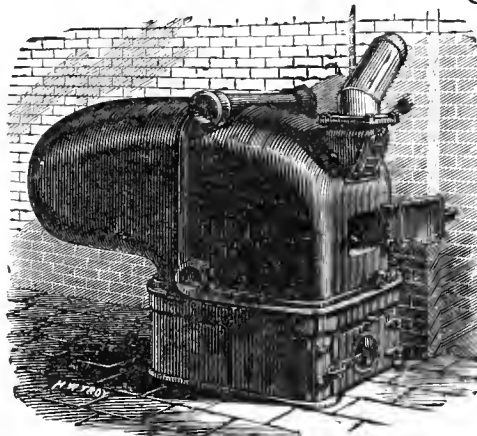
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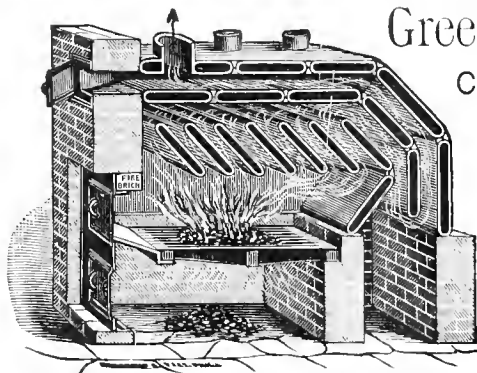
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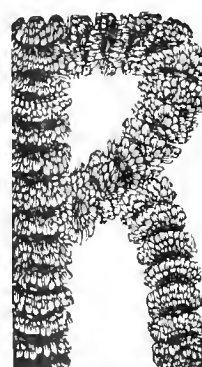
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THE AMERICAN FLORIST

NURSEYRYMEN'S DEPARTMENT.

Vol. IV

CHICAGO AND NEW YORK, OCTOBER 15, 1888.

Supplement to No. 77.

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treasurer. The next annual meeting at Chicago
the first week in June, 1889.

Long Island Notes.

BY WM. FALCONER.

PINUS PONDEROSA and P. Jeffreyi, both
imported trees in the Pacific forests dis-
pise our hospitality. They are hardy
enough and they linger along year after
year with us, but they always have an
unhappy look about them.

ABIES MAGNIFICA and A. grandis are
two other Pacific trees we can do without.
The first seems to be hardy enough but I
cannot get it to make any growth. The
second grows like a weed in summer but
gets cut in winter, so unless age adds
hardness it wont stay with us, still our
plants are several years planted here.

EUONYMUS EUROPEUS ERECTUS NANUS
is the name of a shrub I had a few
years ago, reported to grow two feet high.
Our plants are between four and five feet
high and as fastigate in form as an Irish
yew. Hardy with us, apparently, but I
would not recommend it as being hardy
in more exposed places; and one of the
very best things of its kind that I know
of. Perfectly columnar, of close but
thrifty form, well branched and leaved
from the ground up, and although decid-
uous, the leaves have a persistent tendency
and evergreen look about them that adds
to the value of the shrub.

ROSA RUGOSA FROM SEED.—It all de-
pends upon whether you sow the fresh
seed right now or wait till spring, whether
your seedlings come up next or a year
hence.

THE CUP-LEAVED MULBERRY is a home-
ly tree. The leaves are very curious it is
true, but it has a persistent tendency to
throw out vigorous shoots bearing plain
leaves.

THE DWARF SUMACH (Rhus copallina)
has bright shining leaves that are seldom
impaired by insects, and they do color
beautifully in fall. But once planted
what an inveterate weed it becomes, it
suckers around and comes up all about

the place and soon becomes a nuisance.

DAPHNE CNEORUM is one of the sweet-
est and prettiest of dwarf evergreen
shrubs. It bears a full crop of flowers in
spring and moderate crop again in late
summer and fall. But it doesn't thrive
well everywhere. I have tried it here in
all manner of places that I thought would
please it most, but to no purpose, it seems
unhappy. At Boston, however, I have
had it in superb condition. It is hardy
enough. Nurserymen propagate it by
lifting the old plants and tearing them
apart into many pieces, also by layering,
and some who have greenhouse conven-
iences propagate it from cuttings of the
young wood. No fear of its becoming
over plentiful. One New York firm tells
me they used to handle it but have had
to stop pushing it as they could not get
stock enough of it.

CERCIDIPHYLUM JAPONICUM is a small-
ish (with us anyway) slender tree recently
introduced from Japan. Some folks like
it, others don't. In growth it assumes
two forms—a handsome pyramidal and a
dense open fall-apart shape; the first is
obtained by early attention in thinning
and shortening the shoots so as to set the
form, the second is had by just letting
the plants grow any way they choose.
I particularly admire this tree. For sev-
eral years after its introduction it was a
very rare plant, "because," Mr. A. S.
Fuller tells me, "Trumpey didn't know
what stock to graft it on." But don't
bother about grafting it, the tips of the
half-ripe shoots strike root very easily.
As the tree is a shallow rooter it thrives
only in good moderately moist soil. Our
plants have not yet shown any disposition
to flower, although they are large spec-
imens with trunks several inches in di-
ameter.

TRANSPLANTING TREES AND SHRUBS.
—I prefer transplanting all manner of
easily handled hardy trees and shrubs,
no matter whether they are deciduous or
evergreen, in fall. But in the case of
extra choice sorts or somewhat tender
kinds I'd rather wait till spring and then
plant just as soon as the ground is mel-
low. In the case of large evergreens,
particularly close growing sorts like ret-
inosporas and thujas, it often is May
before I am able to move them on account
of frost in the ground about their roots,
and we must not move them before the
frost leaves the soil else the frozen lumps,
now half rotten, will break apart and
snap off the very rootlets we should strive
to save. Pines being more open-habited
do not hold the frost much more than
would a deciduous tree. Well, but isn't
late spring early enough to transplant
evergreens? No, it isn't. We cannot
plant them too early providing the
ground is in good condition. Evergreens
don't shrivel up and die as soon as they
are transplanted; about the middle of
July you will be able to note the living

from the dying. It is pretty harsh treat-
ment to plant evergreens just as the heat
and drought of summer are setting in,
and then expect them to right-away
recuperate their mutilated roots enough
to sustain their thirsty bodies, many of
them will die first.

"VANDALISM! Vandalism!" "Sacrile-
ge, sacrilege!" and the like are epithets
I often hear from the lips of visitors who
catch me in the act of chopping down or
rooting out some choice or noble tree.
But it must be done. The moment one
tree encroaches upon another, one of
them has got to be cut down else both of
them will be spoiled, for it is far better
to have one perfect specimen than two
imperfect ones. But why plant your trees
so close to begin with? For two reasons:
First to give the place a full and furnished
appearance we plant the permanent trees
where we wish them to remain, and be-
tween these, as nurses and for temporary
effect we plant many supernumeraries
which shall be cut down as soon as their
services can be dispensed with. Second,
new trees and shrubs occur every year
and we must have them, and as we keep
no reserve grounds for such material we
are obliged to set them out in our already
filled plantations. We are always bring-
ing in and always throwing out.

THIS BRINGS me to to landscape archi-
tecture. Oh, how many sermons do I
read, what lashings we practical folks do
get, how we are battered and buffeted and
ridiculed in print! But mark you, ob-
serve how mighty little information our
would-be teachers deign to give us. Talk,
gush, halderdash by the volume, but ac-
tual, pointed, practical information how
to obtain the very pictures they hold up
to our imagination is, I presume, too
sacred to be given unto us. But, I often
think, as Moses isn't here now it's mighty
hard work work to squeeze water out of
stone. At the same time we have archi-
tects who can and do construct perfect
landscape pictures, and who not only
know how to do it but also what materials
to use in doing it. Olmsted, Parsons, Vaux,
Miller and Bowditch are of this kind.

The Japanese Plums—The Satsuma.

Since I wrote of the Kelsey Japan plum,
Batankio (or Batankin, as some call it)
last month, I was so fortunate as to find
young trees of that most curious of fruits,
the Satsuma plum of Japan, or, as it is
now quite generally known, the Japan
Blood Plum, in fruit in the grounds of
the University of California at Berkeley.
The tree is a much stronger, smoother
grower than the Kelsey; leaves smoother
and more lanceolate, wide in the middle
and narrowing to each end; twigs stout,
long and smooth. The fruit is round
with a deep suture on one side; dark dull
red, with bloom, flesh dark, bright crim-

son or cherry red; skin very thin with no acerhity; flesh or pulp very fine grained, very juicy, abundant free blood red juice, when fully ripe melting and delicious. We may say first best in quality to eat from hand when fully ripe. The plum when first mature is quite firm and will prove a good long shipper. When over ripe becoming very soft, but still juicy, and not mushy. In size the plums examined were about the size of the native plum known as Miner, or about the size of the well known Green Gage, but it is said to grow much larger. Stem longer and more slender than that of the Kelsey which is very short and thick for a plum. The pit of the Satsuma is quite small for the size of the fruit, roundish, somewhat pitted and corrugated.

I am intensely interested in these plums. This Satsuma very closely resembles in tree, leaf and growth a plum tree sent east from California under the name Ogon, which proved quite hardy with me in Illinois in our severest winters, much more so than the Kelsey, and it may be that some of these fine fruits may do well in the great Northwest. Since I wrote of the Kelsey last month I had some of them stewed for sauce, and found them very nice served in that way.

Many young orchards in different parts of this state, of the Kelsey have fruited for the first time in quantity this year, and all report them very productive and profitable. The keeping qualities of these plums are truly remarkable. I have before me a very large specimen of the Kelsey gathered when fully mature one month ago yesterday. It is yet perfectly sound.

That the Kelsey is quite near to the peach in many of its peculiarities is plain to any one who will examine it critically. It has the stem and pit of the peach. The pit is corrugated, pitted and shaped like that of the peach, and the kernel has the same skin and flavor, and fully bears out the view that I had long ago formed from observation, namely: That we may expect, and that we now have, hybrids between nearly all the different species of the almond family, and that we may look for very valuable future results from such hybrids.

Hybridism brought about by skillful artificial means should be continually striven for, though we may have ten thousand failures for each success. Given our fully hardy native plums as a base—their lacking somewhat in self pollination, making them easy to experiment with in this line—should give the northwest in time some good, fine hardy fruits.

The high mountain regions of Northern California has some fine native plums that may prove of value in this work. But it is best for those who work for the great northwest to stick pretty close to the wild plums of the northern part of that region. Some of them are really fine valuable fruits in their wild state, and capable of endless improvement.

The plums proper, those of the European type, are not proving as profitable in California as the other members of the almond family. They nearly all do finely and bear enormous crops of magnificent fruit, but are too acid when canned or dried, except the prune section. Of these the sweet raisin-like French prune, the Petit Prune de Agen is grown in great quantities, and is still being more largely planted than any other fruit. The tree is a strong, healthy, handsome grower, wonderfully productive; the fruit very sweet and easily dried into the prune of commerce. The crop is very regular and certain. An item before me gives the yield

of an orchard in Tulare county, only four years old, at 300 to 500 pounds to the tree. At the lowest price prunes have sold at on the tree this season, a cent and a quarter a pound, and at the lowest figure of product as given, to-wit; 300 pounds, we would have a net return from this orchard of \$375 an acre, and this in Tulare county, which twelve years ago was considered a worthless arid desert.

But give the exceeding rich soils of these so-called deserts a little good water from the mountains and we have at once the fruit growers and fruit tree and vine paradise, where nearly all the fruit bearing trees and plants will grow and thrive wonderfully, and where great commercial fruits such as the raisin grape, prune, peach, nectarine, apricot, fig and pear can be perfectly dried in the open air cheaper and better than any where else in the world where they can be grown with success. And this is not all. In the hot, dry, even morning air of the great Joaquin valley, but very few of the insect enemies so injurious to fruits can propagate, and none—yes, we may say *none*—of the destructive moulds, blights and rusts so destructive in moist climates can there exist. Sun dried fruit there, is as perfect from these reasons, as the very best evaporated fruit east.

But to bring water to these rich valley lands is very expensive, requiring a vast outlay of capital. But when once rightly brought, and of good quality, it is there for all time, insuring perfect crops every year. One buying a farm in the great valleys now, pays a certain price for his land, his climate and his rain-fall, or rather water for all time. This price may seem great in the start, but is it? I think if one will look this matter up very carefully that he will find an investment in Joaquin valley irrigated lands at the prices they can now be had for, a grandly good investment. If the soil is good and the water is good, so far as the soil is concerned we need trouble ourselves but little, for it is really all good. The waters of some of the rivers used for irrigation carry in solution too much alkali, which in time kills the land, rendering it unfit for most crops. The past month I gave the San Joaquin valley a pretty thorough looking over, directly after reading Prof. Hilgard's essay on "alkali."

Over 500,000 acres have just been redeemed from the sway of the Jack rabbit in Merced county by the great Crocker and Heffman canal, costing a million and a half of dollars. This adds that amount of the very best of soils in one of the best fruit regions in the state, in a fine, healthy climate.

D. B. WIER.
San Francisco, Cal.

The Seven Year Locust.

If your correspondent C. B. W. had been in the vicinity of Marengo, Ill., in 1871 and again the past summer, I think he would have been satisfied that although the 17-year chaps may not be relied on "to the minute," they come as near to it as any of the broods of insects that make annual visits. In the matter of details, however, he has not been altogether rightly informed. They do not come "in early spring," but after warm weather is fairly established. Neither do they wait for the trees to send out shoots and then "climb" to lay eggs. All the climbing they do is when they first leave the ground a wingless grub and climb upon a stalk, fence or tree and shed the skin, coming forth a perfect insect, and then they fly, and after flying a

few days the work of egg-laying begins. During their flying lives what a howl they do keep up. It is very wearisome and it is quite a relief when the last one is dead. The males alone sing. Although to-day, September 17, I can show you plenty of trees that at some distance look like dead trees, still I think the injury is comparatively little, for only the outer twigs, six inches or a foot in length are killed.

The nurseryman, however, dreads their approach, for eggs are laid in the upper part of the bodies of young nursery trees where they are as thick as the little finger or less, and the form of the tree is badly damaged. I believe nurserymen in this vicinity kept boys among the young trees to frighten away the pests. I believe the eggs do not remain unhatched seventeen years as stated, but hatch within a year, remaining in the ground in the larval state till the seventeenth year when they bore their way out from a great depth in the ground.

C. C. MILLER.

Your Spring Trade List.

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APPLE MAGGOTS.—F. L. Harver, botanist and entomologist at the Experiment Station of the Maine State College, at Orano, Me., is desirous of obtaining information regarding the apple maggot which makes thread like channels through the fruit. Specimens are also solicited.

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Supplement

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Fruits and Vegetables.

What is the difference between a vegetable and a fruit as the words are commonly used? Have the readers of the FLORIST ever thought of this question, and if so, I wonder how many can give a satisfactory answer?

I have asked several people the question hoping to receive some definite information, and the only answer that I receive is, that a fruit is a product of a plant containing seed, such as the grape, berries, peach, pear, apple, etc., and that a vegetable is the product of a plant used for culinary purposes.

These answers I deem insufficient, because, how then would you classify the tomato? Would it be a fruit when served uncooked and a vegetable when cooked? The same questions apply to the grape, berries, peach, pear and apple, which are all cooked or preserved. What class would the banana and pine apple (or other apparently seedless productions) belong to? Class for me the pea, bean and like seed bearing product now generally spoken of as vegetables. How about the radish, could it properly be classed as a vegetable according to the definition given? I have never known of it being cooked.

A little information on this subject would greatly relieve and oblige me.
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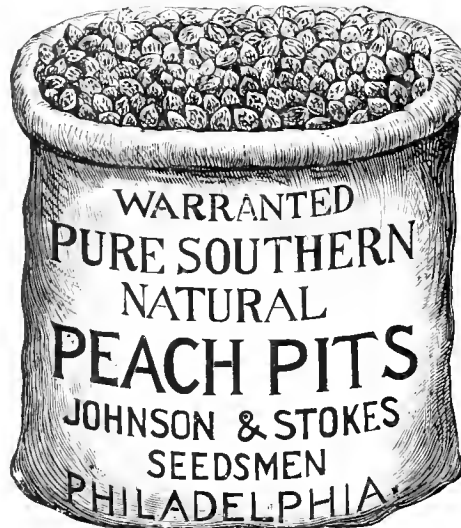
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THE AMERICAN FLORIST



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Vol. IV.

CHICAGO AND NEW YORK, NOVEMBER 1, 1888.

No. 78.

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SOCIETY OF AMERICAN FLORISTS

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1888.

The Executive Committee.

Following are the names of the members of the executive committee of the S. A. F. for the present term:

Peter Henderson, New York City; Chas. D. Ball, Holmesburg, Pa.; J. D. Reynolds, Riverside, Ill.; R. J. Halliday, Baltimore, Md.; A. P. Calder, Boston, Mass.; J. M. Keller, Bay Ridge, N. Y.; A. E. Whittle, Albany, N. Y.; Frank Huntsman, Cincinnati, O.; J. T. Temple, Davenport, Iowa.

Nomenclature.

We print elsewhere in this issue the admirable paper on Nomenclature read before the New York meeting of the S. A. F. by Mr. Robt. J. Halliday, of Baltimore. As suggested by the essayist, a committee of twelve was appointed and if these gentlemen faithfully perform their labors great good to the whole trade must result.

Following are the names and addresses of the gentlemen composing the committee:

Robert J. Halliday, Baltimore, Md.; Chas. D. Ball, Holmesburg, Phila.; G. H. Leahy, West Grove, Pa.; Edwin Lonsdale, Chestnut Hill, Phila.; J. N. May, Summit, N. J.; C. B. Whitnall, Milwaukee, Wis.; Wm. K. Smith, Washington, D. C.; Pohl George, Painesville, O.; Robt. Craig, Philadelphia; A. E. Whittle, Albany, N. Y.; M. A. Hunt, Terre Haute, Ind.; Beni. Grey, Malden, Mass.

We wish to say to these gentlemen now that there is no time like the present to begin. Don't put it off or leave it all for one member to do. The eyes of the floriculturists of America are upon you and they expect thorough and careful work from each member of the committee.

NEW CANNAS—We call attention to Mr. Temple's article on new cannas in this issue. No plant has been recently improved to a greater extent than the canna, and Mr. Temple's trials have included all the best new sorts.



Coming Chrysanthemum Shows.

Philadelphia, November 13-16.
Boston, Mass., November 14-16.
New York, November 13-15.
Orange, N. J., November 7-9.
Indianapolis, Ind., November 13-17.
Baltimore, November 14-15.

A FEW of our subscribers get huffy because the FLORIST is not sent to them after their subscriptions have expired, and when they do get around to mailing their renewal interject such remarks as "Guess I am good for a dollar," "Needn't be afraid you won't get your dollar," etc. The gentlemen who pass in these remarks for our inspection may be financially capable of buying the whole office, but the point is not as to whether the subscriber is good for the amount or not. If these gentlemen had come to the conclusion that they did not want the paper any longer and we had continued sending it, would they pay for it when a bill was presented at the end of the year? Most assuredly not! They would be foolish if they did. How are we to know whether they wish to renew or not unless they advise us of the fact? By securing cash in advance for subscriptions we are relieved from the heavy expense of keeping many thousand book accounts, and have so much more money to expend in giving you a good paper. Many of our readers write us that the FLORIST is worth many times the price charged; we believe that it is worth all that we ask for it and that those who appreciate it and want it should be willing to order it and accompany the order with a dollar. We want all the subscribers we can get—in the trade—but only on above basis, and we are pleased to say that our list shows an increase each issue. The grand majority of the trade find it no effort to order their

renewal upon expiration, why should an exceedingly slim minority find it so difficult and feel aggrieved when the paper is stopped on account of their own oversight or negligence?

The Philadelphia Exhibition.

The fall show of the Pennsylvania Hort. Society opened on Tuesday evening, October 2. It was a fair average show and there were some fine examples of good culture, but for some unexplainable reason the people do not patronize these exhibitions as they deserve. Whether it is that the advertising department is not properly attended to, or that the people are not sufficiently well educated to appreciate superior skill in the production of grand specimens of the endless varieties of plants, flowers and fruits I cannot say, but certain it is that the treasury does not show that amount of cash after these shows that it should.

The main features in these fall shows are the foliage plants: crotons, caladiums, marantas, ferns, lycopodiums, selaginellas and palms in great variety. The tuberous rooted begonias made a very attractive display and furnished nearly all the flowers that were in the hall, excepting, of course, the cut flowers, roses, etc.

The Kentia Forsteriana which was awarded first premium for the best specimen palm, occupied a prominent position in the main hall mounted on a pedestal. It was exhibited by William Joyce, gardener for Miss M. A. Baldwin, who also had the finest lot of well grown plants in the exhibition, taking them altogether. The greenhouses in which Mr. Joyce grows these plants are located on Chestnut street, near Eleventh, in the very heart of the built up part of the city. Mr. Joyce is over 60 years of age and has been an exhibitor almost continuously for nearly thirty years. He is, in fact, the oldest living exhibitor belonging to the society who is taking an active interest in its workings at the present time. Mr. Joyce declares this is his last year for exhibiting. His plea is that he is getting too old. To look at his plants and examine the premium list there is no evidence of his age, and especially when we consider the adverse circumstances under which his plants are grown. What would a fall show be without William Joyce? It is to be hoped that he will re-consider his determination and be prevailed upon to continue bringing his premium winning collections and specimens for many years to come. The kentia above referred to was a grand specimen, the largest of the kind in Philadelphia. It is somewhat difficult to realize, when looking upon this large and graceful palm, that only a few years ago it was received by Mr. Joyce in a

cigar box. The lycopodiums and selaginellas are always an especial feature in Miss Baldwin's exhibits, they were a very uniform lot. A plant of *Nepenthes Hookerii* with its "pitchers" gracefully depending from the tips of the leaves excited much curiosity. A bystander facetiously remarked that a good many of the pitchers would hold a quart.

Hugh Graham's Son was awarded second premium for 25 ornamental foliage plants, in florists class. Robert Wark, gardener to Clarence H. Clark, Esq., had a pair of very symmetrical plants of *Araucaria excelsa glauca* (Norfolk Island pine). These are very useful for cool conservatory decoration. The drawback to their being used more generally is their cost. Thomas Long, gardener to A. J. Drexel, Esq., had a rare collection of palms; one, *Livistona altissima*, was much admired both by the ladies and florists. If it could be had in quantity and cheap there would be a demand for it as a window plant. It might be described as a miniature compact though graceful form of *Latania borbonica* (*Livistona chinensis*).

So well pleased were the judges with William Joyce's collection of 15 decorative plants that they awarded a special premium of \$10 in addition to the first, \$20.

Hugh Graham's Son carried off first premium for 12 crotons, also for specimen plant (croton). There were three entries for 25 palms, which, in addition to palms forming a part in the collections in competition in the decorative and ornamental (?) classes were quite plentiful. One mammoth specimen of *Cycas circinalis* was too large and heavy to be taken into the hall, so it occupied a position in the vestibule. It came from the conservatory of C. H. Clark, Esq. It is said to be the largest plant of the kind in this country. Pennock Bros. had a very large and perfect specimen plant of *Latania borbonica*; this occupied a pedestal in a prominent position which added greatly to the general appearance of the building.

Caladiums were exhibited by William Joyce, H. A. Dreer and John M. Hughes, gardener to George W. Childs, Esq. Those from "Wootton" occupied most of the space on the left hand side of the hall. There were over thirty plants, they comprised the best of the old varieties as well as some of the newer ones.

C. D. Ball, H. A. Dreer and R. Wark each exhibited collections of 25 ferns and a very interesting feature they proved to be. In Mr. Ball's lot were good specimens of *gleichenia*, and *Adiantum decorum* looked as though it would make a useful one for cutting purposes. There were three fine plants of *Davallia Fijensis* in as many different collections, a pretty good evidence of its value as an exhibition plant. Mr. Ball was awarded first premium, H. A. Dreer second, and Robert Wark third. Marantans were as much admired as ever. Mr. Joyce took first for six plants, Hugh Graham's Son second. For specimen maranta the order of the awards was reversed. A specimen *Allamanda Schottii*, exhibited by Wm. Frederick, gardener to W. W. Frazier, Jenkintown, was in fine bloom, and gave the only dash of yellow to be seen in the show.

Aquatic plants occupied a position near the stage in a large square tank. There were the pretty blue *Nymphaea zanzibarensis*, the deep pink *N. devoniensis*, and Egyptian lotus *Nelumbium speciosum*; foliage, flowers and seed pods formed the background, also the variety with white

flowers striped with pink. H. A. Dreer, the exhibitor, was awarded a special premium, \$15. Robert Bancroft, who represents the Haddon Floral Houses, of New Jersey, had a little tank filled with *Pontederia crassipes* which attracted much attention.

There was only one exhibit of asters in pots and these were below the standard. The Philadelphia florists ought to do better than that. A good display of asters would have helped the begonias in furnishing color to make the hall more cheerful, relieving the predominating masses of green. Oscar R. Krienberg received first premium for a large and varied collection of pansy blossoms, which were nicely arranged with wild fern fronds. The same exhibitor also had some flowers of *Cosmos hybridus*. Allan Barr was awarded first premium for the only collection of wild flowers. Many of the visitors were of the opinion that first honors should have been withheld, because not one of the specimens were named. It looks as though the judges exceeded their duties by awarding a first premium where the exhibit was not according to conditions and regulations.

The cut roses, as usual, attracted their full share of attention. C. Ramsden's 12 "The Gem" were in good shape, so also were Coles & Whiteley's *Perle des Jardins*. Craig & Bro's American Beauties and Edwin Lonsdale's Mad. Cousins held their own as among the best roses grown. Considering the earliness of the season there were some very creditable "buds" among them. Pennock Bros. took all first premiums in the classes for florists. The other florists of this city deserve a vote of censure for not exhibiting in the above classes.

Dreer's cut gloxinias, verbenas, petunias, dahlias, etc. occupied a good deal of space and made a good display. Mrs. E. D. Demaris also had a collection of dahlias and a pair of hanging baskets for which was received first premium. O. R. Krienberg had quite a number of cut single dahlias, but they are not nearly so perfect and fine as when forced under glass in early spring. Heron & Nisbet's basket of *La France* was awarded a special premium of \$5 which was well deserved. It contained some good blooms and was attractively put together. Pennock Bros. were awarded a special of \$10 for a large and pretty table design. Hugh Graham's Son constructed a large mound of fruits: bananas, grapes, pears, etc.

Although cut flowers attract more attention at these fall shows than palms, caladiums, crotons, etc., yet after the first night they are generally a disgrace to the place. The foyer is generally set aside for the purpose of displaying cut flowers, fruits and vegetables, but it would be to the society's (or those who have these matters in charge) credit to close the doors after the first night. One of the officers expressed himself that in his opinion the exhibitors themselves should have sufficient pride in their own exhibit to renew the flowers from time to time as required, to keep them looking fresh until the close of the show. But when we turn to the schedule of premiums we find there the munificent sum of \$2 offered for the first premium for 12 *Perles*, Bennetts, etc. as the case may be, and \$1 offered as the second premium; no third premium is offered. The first premium might induce the lucky recipient to keep his exhibit fresh, but there is very little inducement for he who gets no premium at all to keep his flowers in good condition. If the society

was to offer premiums in the cut flower classes every day, that would have the desired effect, and until the society adopts some such liberal policy, there will be the same complaints among the society's patrons as now. It seems strange that this plan has not been adopted before. After the first day there is nothing left for the daily papers to say to keep up the necessary amount of interest for the people to have a desire to visit the show.

E. L.

Massachusetts Horticultural Society.

The sixtieth annual exhibition of the Mass. Hort. society was held at Boston, Sept. 18 to 21. As to plants and flowers it did not compare favorably with corresponding exhibitions in former years, and was in many respects a disappointment, although this was not entirely unexpected.

Several of the leading exhibitors of recent years were conspicuous by their absence, and had it not been for Mr. Manda who arrived opportunely on the second day with a fine collection of cypripediums, oncidiums, etc., the orchid family, which has now become such a potent attraction in floral exhibitions, would have been represented by but one individual, a solitary plant of *Vanda cærulea*. Mr. Manda's display was most creditable. Very large plants could hardly be expected when it is considered that these had to be brought over 250 miles, but many varieties quite rare were included and all the plants looked neat and healthy. There were forty varieties of cypripediums, the special gem being the rare *C. Sanderiana*.

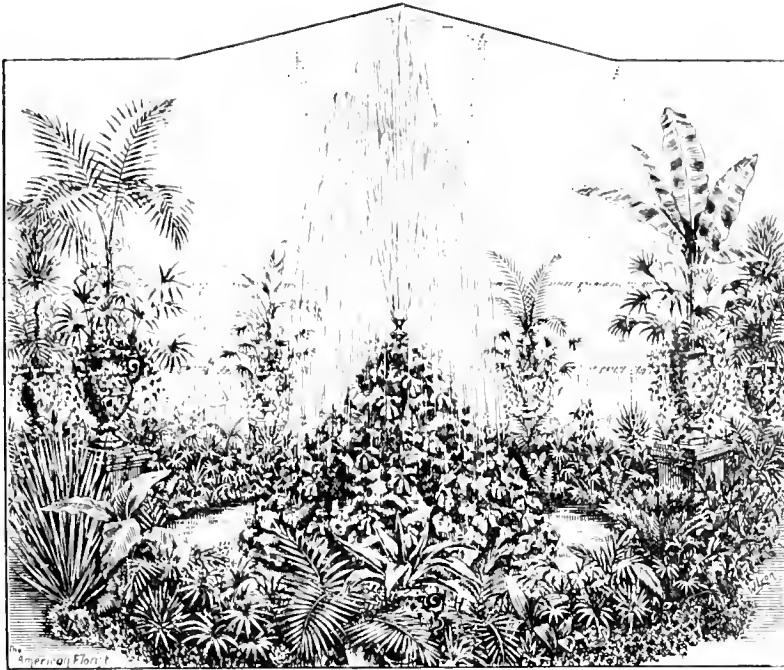
One of the best plants of the collection was *Lælia elegans prasiata*. There was also a fine specimen of *Catasetum Bunge-rothii*, and a good assortment of oncidiums and odontoglossums. The *Odontoglossum grande* of course received the usual share of attention as the "Baby Orchid."

One of the best grown plants ever seen here was the magnificent specimen of *Nepenthes bicalcarata* suspended in the center of the hall. It was grown by Geo. McWilliam; gardener to Mrs. J. Lasell, and well merited the silver medal which was awarded to it.

Perhaps the most graceful plant in the hall was a perfect specimen of *Aralia Chabrieri*, eight feet high, from Wm. Martin, gardener to H. P. Kidder. Mr. Martin also made a good display of *alocasias*, *crotons*, *marantans*, *anthuriums*, *dracænas* and *caladiums*. His *Anthurium Ferrierense* received first premium for "specimen flowering plant," and his *adiantum*s and other ferns were all well grown. Among the latter was an unusually fine plant of *Davallia Mooreana*. The first prize for specimen variegated plant was given to Thos. Clark for *Ficus elastica variegata*. The old question of what constitutes a variegated plant was disputed as vigorously as ever, and probably will continue to be. The society should define just what it considers as a variegation, otherwise it would be preferable to omit this class from the schedule entirely. Thos. Clark's *crotons* and *dracænas* were good, and being very large plants made a most effective and striking group. The whole collection was bought by Mr. Manda after the exhibition had closed.

The largest plants in the hall came from J. H. White of Brookline; among them were magnificent plants of *Cycas revoluta* and *Cycas circinalis*, both superbly furnished. Of equal merit was a splendid *Dasyliirion acrotichum* shown by James Comley.

From the Harvard Botanic Garden



FOUNTAIN AT THE AMERICAN INSTITUTE FAIR, NEW YORK.

came a large collection of economic and medicinal plants, which if there had been a prize offered for crookedness would have been well entitled to that honor, but which were nevertheless very interesting to those who stopped to read the cards attached to each, descriptive of their history and uses.

W. C. Strong, J. A. DeMar and F. L. Temple showed a large number of evergreens in pots, which served to make the vestibules and stairways attractive. Among Mr. Temple's plants were several large specimens of the "Umbrella Pine" (*Sciadopitys verticillata*). It would be impossible to exaggerate the delicate gracefulness of the new weeping lilacs exhibited by Mr. Temple. The arrangement of the foliage on the pendant branches is like that of no other plant and when seen outlined against a light background produces a most beautiful effect. A new golden hop tree (*Ptelea trifoliata aurea*) shown by J. A. DeMar was much admired and will probably prove a valuable addition to our hardy variegated trees.

The display of cut flowers was very meagre. Norton Bros. contributed a group of cut roses including some fine blooms of Mme. de Watteville. These were all the roses shown. L. W. Goodell staged some excellent asters, Phlox Drummondii and pansies, also had a large tank of aquatics. Some good dahlias were shown by E. Sheppard & Son and others.

Mr. Martin, Geo. McWilliam and J. H. White all competed sharply for the premiums in the tender grape section, and there were some fine clusters of Muscat, Alicante, Fabiana, Sweetwater, Hamburg and other favorite kinds.

The fruit and vegetable display was very complete. This might be expected, however, as the inducements in the way of premiums to these exhibitors are entirely out of proportion to those offered in the plant and cut flower departments.

For instance, we see in looking through the schedule for this year that the premiums for the year for onions exceed those for ericas; more is offered for Baldwin apples than for palms and cycads; more for tomatoes than for tender roses, yet the latter must be renewed every day while the show lasts; more for cabbages than for flowering stove plants; more for radishes than for pansies; more for peppers than for carnations, and the prizes for pears exceed the combined premiums for the year for orchids, ferns and lycopods and azaleas both hardy and tender. It is an easy matter for the large market gardeners, who abound here, to go through their acres of cabbages or tomatoes, or orchards of apple and pear trees and select a dozen or two fine specimens, the only extra labor involved being the delivery of the same to the exhibition hall; then as a rule they all dispose of their exhibits at high figures as soon as the show closes.

With plants it is a different matter. A large and continuous outlay in money, time and labor is required to produce plants for exhibition purposes, and even the transportation to and from the hall is no small matter. Money in itself may be no object to some plant exhibitors, but, nevertheless, as it is the plants and rare flowers which attract visitors to exhibitions where an admission fee is charged, the plant exhibitors naturally feel the discrimination, and seek a readjustment, even though the market stuff should suffer in consequence. For the man who produces a new and improved cabbage, a superior grape, or a better potato than we now have no encouragement is too great, but it certainly is difficult to see any gain to the world horticulturally or economically in the continuous offering of money prizes for varieties of vegetables which in many cases are as old as their exhibitor, which nobody cares to look at, and which were grown as well twenty years ago as they ever can be.

The Mass. society is not alone in its present experience. Other institutions of its kind have within the past few years had to face vital questions growing out of the grand awakening and robust growth of floricultural industry. That there is dissatisfaction here is plain. Visitors from a distance see it and remark it, and it were folly to shut our own eyes. This part of the country is rich in material, and does not lack the men who if once interested can produce exhibitions worthy of the name and fame of the Mass. Hort. society. They have given grand exhibitions in the past and can do still better in the time to come, but first there are inequalities which should be corrected, and a new policy which shall be abreast of, even in advance of, the times, should be inaugurated.

It is well to remember that the private gentlemen who will force their gardeners to exhibit against their will and inclination are few and far between. The co-operation of the humblest member is not to be despised, and where the rank and file feel a personal interest and pride there is success assured. It is the sincere hope of all true lovers of horticulture in its noblest department, that this society will master those problems which have brought such disaster to other similar organizations.

NOTES.

Mr. F. Sander of London and his American agent Mr. Forsterman, Mr. Low of London and Mr. Wm. Grey of Albany, were among the prominent visitors at the exhibition.

A curiosity in the shape of a mammoth bunch of the fruit of *Latania borbonica* was received on the last day of the show from Robt. Cristie of Newport.

The cucumbers grown under glass by Jas. Dillon of Forest Hills, were remarkably fine specimens.

Mrs. P. D. Richards who makes such interesting exhibits of wild flowers has discovered a treasure in the shape of a pink variety of *Lobelia cardinalis*.

W. J. STEWART.

Fountain at the American Institute Fair, N. Y.

The center pyramid of the fountain is composed of rocks and sarracenias, hundreds of these plants being fastened among the stones. There is a fine collection of palms and foliage plants around the circle of the fountain and the vases are most tastefully filled. Wm. C. Wilson arranged the fountain which is a fine feature of the fair. F. A. B.

New York Notes and Comments.

Mr. John Henderson, of Flushing, has sold his nurseries to a stock company; in future it will be the John Henderson Company. The genial and popular Chas. Anderson will continue to act as manager. Mr. Henderson is a shareholder in the new company, though giving up active part in its management. One of the large stockholders is a prominent dry goods man.

Mr. William Elliott has been quite ill lately, suffering from an unusually elaborate form of malaria. He is now recovering, but expects to subsist chiefly on quinine for some time to come.

That troublesome surplus still bothers the Florists' Club. It will not continue to be a cause of anxiety, though, if the suggested dinner is decided upon. But a good many feel that the club has not the

right to spend this money in such a way. As some very sensible members say, it would be the most business-like plan to divide it pro rata and return to the men who contributed to the entertainment fund, since the money was not given to the club itself, but contributed for a special purpose. Still another suggestion is that it should be expended in purchasing a square meal for those who couldn't get anything to eat on that memorable excursion. Another suggested use was that of providing permanent rooms for the club. Mr. May spoke of the excellent quarters of the Boston Florists' Club, where members may meet their friends or spend a quiet evening at any time. Mr. May spoke of the convenience of such a meeting place to the assistants in city flower stores. Mr. Thorpe also spoke of the many advantages to be derived from a permanent home for the club. Mr. Elliott and Mr. Cowan spoke eloquently of the necessity for prudence in disbursements; the fact that the treasury contained a comfortable surplus should add to the stability of the society.

It was felt that the florists of the city and vicinity should express their deep regret over the untimely death of Mr. Court; on behalf of the club Mr. Cowan prepared some simple and touching resolutions which are to be forwarded to Messrs. Veitch. Reference was made to Mr. Court's many estimable qualities as a man, as well as his accomplishments as a horticulturist, and there is no doubt that the sorrow expressed on this occasion will be echoed by all who knew him.

Mr. Messeburg, who has just returned from Europe, was asked to give his impressions, but declined. Mr. Keller, who has also been abroad, has promised some remarks on European horticulture at the next meeting. Mr. Spaulding says his impressions of Paris were rather moist; he spent forty days in that city, and it rained thirty of them.

Messrs. F. Sander & Co. held their great auction sale October 16. It was a success; most of the great orchid fanciers were there to give zest to the buying, and the average prices were good. The highest price realized for a single plant was \$230, which was obtained for a fine specimen of *Vanda Sanderiana*, said by many to be finer than the *Morgan* plant. It was purchased by Messrs. Pitcher & Manda. The same buyers secured a wonderful specimen of *Cypripedium Boxallii atratum*, said to be the finest plant of this variety in existence. It sold for \$160. The list of cypripeds at this sale was remarkable for rarity and excellence. A plant of *C. Godseffianum* sold for \$110. This is a novel hybrid, cross between *C. hirsutissimum* and *C. Boxallii*, described as very rich in coloring and marking. Another expensive luxury in the form of a cypriped was *Philbrick's* variety of *C. Chantini*, which was sold for \$150. Another mite of a cypriped, *C. Horneanum*, was sold for \$95. Others ranged from \$70 down. The sale is said to have amounted to something over \$8,000, and the general impression given is that orchid fanciership is not by any means on the wane. A mass of *Laelia albidula bella*, said to be the finest specimen in existence, was sold for \$52.50; considered an inadequate price. A specimen of *Laelia anceps alba* sold for \$125; it was a large mass with 280 bulbs.

A bunch of fine flowers, including a very handsome spike of *Vanda carulea*, was brought from Rochester by George Savage, to give the uninitiated some idea of what orchids could do. A good many

noted growers, amateur and professional were present at this sale, and the event may be regarded as a brilliant success.

EMILY LOUISE TAPLIN.



Roses in the Open Ground.

I have been asked by many people this fall as to the cause of so many varieties of roses, tea, Bourbon, China, and H. P's, failing to grow this year. In fact a great many varieties that a few years ago grew well and made fine plants are more unsatisfactory every year, and this season a great many have died with some growers, and in no place that I have seen this year are they at all satisfactory taken as a whole.

The cause for this seems wrapped in mystery. Some probably will say it is due to lack of constitution from continued forcing, but one of the worst cases I have seen this year was a lot of *Hermosa*, nice thrifty plants imported from France last fall, and planted out in the spring in the usual way; where such plants would formerly make strong, vigorous growth from two to four feet high, many of these are no larger than when planted, and this is not an isolated case with this variety. I have seen several that are not much better, and some on new soil where probably a rose has not been planted in twenty years, if ever, before. It is not the fault of soil either, because in the same locality and on same class of soil a few years ago almost any kind of roses grew very finely. To prove that it is not due to forcing I prepared last fall a piece of ground (about one and a half acres) by trenching it two feet deep and giving it a good dressing of manure. This spring I planted the whole with roses, some of every variety I had in stock, and considered worth growing. Among these were several hundred imported plants which had never been forced, and fully 75 per cent. of these are no better today than my own growing from forced plants. Out of all these varieties of tea, Bourbon and China's tried, only about fifteen sorts have made anything like satisfactory growth, and of the hybrid remountant class only about the same number of varieties have grown at all satisfactorily. In another piece of ground of nearly the same size, not trenched but well manured, and plowed deep, I planted several thousand young spring struck plants of all the best kinds. Of these 70 to 75 per cent. only have grown fairly well. This lot is on an old piece of sod ground that has never had a rose grown on it before.

As far as I can judge from my own experience and that of others, the worst ones to do well are *Perle des Jardins*, *American Beauty*, *Puritan*, *Princess Beatrice*, *Bennett*, *Souv. de Gabriel Drevet*, *Countess of Pembroke*, *Princess de Hohenzollern* and *Countess de Frigneuse*. With me the most satisfactory varieties are *Princess de Radziwell*, *Mme. Joseph Schwartz*, *Duchess de Brabant*, *Marie Guillot*, *Agrippina*, *Mme. Scipion Cochet*, *Pierre Guillot*, *Susanne Blanchet*, *Malmaison*, *Papa Gontier*, *Marie Van Houtte*, *Edmund de Biazaut*, *Souv. of*

Wootton, *Aunie Cook*, *Meteor*, *Coquette de Lyon* and *Bon Silene*. They are named in order of their respective value for freedom of growth and continuous blooming qualities. In some of the past dry seasons some claimed the dry weather was to blame, but that certainly cannot have been the cause this season, for with the exception of the month of June we have had a superabundance of rain the whole season.

It would be interesting to many growers in the east, particularly around New York and Philadelphia, if growers in other sections of the country would give the result of their experience in this line. I would add that the list of varieties given as doing very badly and those as doing fairly well are based on trials with fine vigorous young plants, planted from 3 inch pots, the first week in May. A few year-old plants of some of these varieties have done well.

JOHN N. MAY.

Summit, N. J., Oct. 18.

Rose Primrose Dame.

EDITOR AM. FLORIST:—Your correspondent "E," page 82, October 1 issue, must have misunderstood what I said about *Primrose Dame*.

The statement made by me at the New York meeting was in substance, that I considered it one of the best roses of the last two years, and that while I would not recommend it for commercial purposes, it was a very valuable rose for any one to grow who had a retail trade.

I do not remember that I stated why it would not stand the test "E" refers to, i. e., for commercial use, but it is because the stem is not strong enough for the bloom, when used as a long-stemmed cut flower. But for the small grower who makes up more or less work, I do not know of a more profitable rose.

M. A. HUNT.

French Roses.

The *London Garden* is after the French rosarians. Listen to what it says about the new rose *Madame Andre Duron* (*Bonnaire*, 1887).

Some half dozen plants of this new rose, which was sent out last November as a hybrid tea, are now blooming freely, and as far as can be judged from the form and color of the numerous flowers, the foliage, growth and general appearance of the plant, the variety differs in no respect from the old *Bourbon*, *Sir Joseph Paxton*.

Does not this bear out what Mr. Antoine Wintzer said at the convention last August in New York? The only difference is, Mr. Wintzer said this same rose was identical with the old *Bourbon*, *Appoline*. Can more light be thrown on this subject? It would interest many of us small florists who can only afford to buy a few novelties each year. We need protection.

Z.

Rose Mme. Gabriel Luizet.

This beautiful hybrid has become deservedly popular as a cut flower rose and is now largely forced for bloom, especially around Philadelphia. The large pink blooms are borne on stout stems with handsome foliage, making it most desirable to meet the present demand for these characteristics in a cut flower rose.

Our illustration shows a vase of these roses grown by Mr. Edwin Lonsdale, Chestnut Hill, Philadelphia, to whom we are indebted for the photograph from which the engraving is made. We would also call attention to the arrangement of the roses which we consider most excellent and worthy of study.



VASE OF MME. GABRIEL LUIZET ROSE.

PERMANENT BEDS AND RAISED BENCHES.—Will some one of our experienced rose growers tell me why the old system of growing tea roses in permanent beds was abandoned and the new one of growing them almost entirely on raised benches adopted. I think that Mermets, Brides, Bon Silenes and even Perles would give good results by the old system if the borders or beds were well drained.

J.

WHAT IS THE MATTER with our bench of roses? They drop their leaves before they should, particularly the Brides. They are pretty free from red spider, but have a little mildew on them, for which I have dusted them with sulphur and "grape dust." They were benched in July. I keep the temperature of the house now 55° at night, 65° during the day, admitting air on all favorable occasions, syringing them well on sunny

days and letting them alone on dull days. What is the best remedy for mildew?

FLORIST.

SEEDLING DAHLIA.—Edward Morat, Louisville, Ky., sends us specimen blooms of his seedling dahlia. The flowers are a light yellow in color, double, about three inches in diameter and symmetrical in form. Mr. Morat states that it is dwarf in habit and the most prolific

bloomer he has ever seen, the flowers coming invariably perfect in form. The color is a desirable one and if its free blooming qualities are not over-rated it should prove of value to the trade.



Notes on Sander's Sale
at New York.

BY WM. FALCONER.

THE CATALOGUE contained 1,060 lots, and although Elliott tried his best he couldn't sell them all in one day. Forty-two genera were represented. The hybrid cypripediums were the feature of the sale. But although a large number of plants were offered there was not a correspondingly large assortment of popular serviceable orchids. Among the orchids offered were 26 species and a few varieties of cattleyas; 13 species and a few varieties of odontoglossums; 53 kinds, including species, varieties, crosses and hybrids, of cypripediums; 19 species of dendrobiums; 12 of oncidiums; 5 of arides; 6 species and one variety of phalænopsis, and 4 species of vaudas.

WHAT A GLOW of satisfaction suffused the warm countenance of Sander as on a chair he sat and smoked and listened to the appealing, coaxing, bluffing voice of Elliott extracting dollars where sometimes quarters might suffice.

ANOTHER SANDWICH, please. Why, man, are you crazy? This is not Pharaoh's storehouse nor Hutch's corner. Don't you know that bread has ris?

ALTHOUGH Henry Siebrecht has thousands upon thousands of orchids at home and which he wishes to sell, he can't resist the temptation of patronizing other folks' sales, and if he wants a plant you'll have to pay the piper if you can buy it over his bid.

JOHN THORPE was buying orchids for some of his customers.

GEORGE SAVAGE came from Rochester and brought a box of orchid blossoms to tempt our souls and set our hearts a-yearning to produce as good. After viewing a splendid spike of *Vanda cerulea*, that in its glorious of all vaudas, no wonder Arnold should pay \$55 for a plant. And the bunch of golden oncidium blossoms gave a mighty impetus to the sale of *O. varicosum* and *Rogersii*.

FRIEND LOCKWOOD brought spicy posies of lovely carnations for the young ladies.

"REALLY I hardly know where to put them, we are crowded full now. But we are building more greenhouses as fast as the carpenters can get them put together," said Mr. Manda to me at the sale. And still he spent more money there than did anybody else.

CYPRIPEDIUM DRURYI.—A distinct yellowish flowering East Indian species. "The finest specimen in existence," to Mr. Smith of Lee for \$50.

CYPRIPEDIUM CHANTINI, (Philbrick's variety).—In the way of *C. insigne* Maulei but very much finer, and this variety is one of the finest. This specimen was a large vigorous plant in a 12-inch pot, and Pitcher & Manda paid \$150 for it.

CYPRIPEDIUM GRANDE.—A hybrid raised by Seden at Veitch's nurseries, London, from *C. Roezlei* (the seed-bearing parent) and *C. caudatum* (the pollen-bearing parent), both S. American species. It is an extremely vigorous grower. Arnold bought a fine plant for \$45. At the Morgan auction sale in New York three years ago Sander bought a plant of this orchid for \$170.

CYPRIPEDIUM ALBO PURPUREUM.—A very handsome rosy-colored orchid raised by Seden at Veitch's. Its parents were *C. Schlimi* (the seed-bearing) and *C. Domini* (the pollen-bearing). Pitcher & Manda bought a handsome plant in a 10-inch pot for \$70. At the Morgan sale Veitch bought a plant of the same kind, but not so good a specimen for \$120.

CYPRIPEDIUM GODEFROYE.—A little gem in the way of *C. nivium* and *C. concolor*. Introduced from Cochiu China in 1880 by M. Godefroy Lebeuf, whose collector found it in the region of Laos "growing on limestone rocks on the east side of a mountain, where until about 10 o'clock in the morning it is in the shade, but where after that time and until night it is thoroughly exposed to the intense heat of the unbroken rays of a tropical sun." It first flowered in cultivation in November 1883, and was exhibited for the first time at the orchid exhibition held at South Kensington, London, May 12-13, 1885. McFadden, of Cincinnati, bought a handsome specimen for \$35. Sander bought a plant of it at the Morgan sale three years ago for \$130.

CATTELEYA LABIATA is a popular orchid in any form, but some of its varieties are highly appreciated. Henry Siebrecht gave \$37 for a small plant with one new growth and a few old stems of the true autumn blooming variety of it, and carried it home in a paper bag under his arm. Manda gave \$45 for another plant of about the same size, but considered a finer variety. At the Morgan sale Kimball, of Rochester, paid \$160 for a pretty good plant of this species.

CATTELEYA BOWRINGIANA is a recently introduced species "a native of Guatemala, where it is found growing luxuriantly on the bare rocks, enjoying full sun the greater part of the year. It is one of the finest introductions of late years. Its blossoms are very beautiful, fifteen of them being often borne on a single spike and that during the winter months. The sepals and petals are mauve tinted rose, the lip being of a rich crimson and the throat yellow." Within a year or two large quantities of this orchid have been imported, and Sander offered many of them at his sale. But the prices did not run high. Graham of Philadelphia, bought a splendid specimen about two feet square for \$80, and several of us bought small but good plants from \$13 to \$2.50.

VANDA SANDERIANA.—A magnificent showy species and "a native of Mindanao, one of the southern Philippine Islands, where it is found growing on the branches of trees in slightly shaded localities and blooming in the month of October." According to Sander "it grows high up on old trees, perched upright between the branches, in situations which are not shady." It was first imported into Europe by Sander, then by Low. In the *English Garden*, February 9, 1884, is a figure and colored plate of the first plant that flowered in England. A full page illustration is given page 441 of the *Gardeners' Chronicle* 1883. A double plate (532) occurs in the *Illustra-*

tion Horticole, 1884. When first introduced to Europe the late Mrs. Morgan, of New York, bought what was considered to be the finest specimen of it in cultivation for \$2,000. At the auction sale of her orchids it was bought by Siebrecht & Wadley, of New York, for \$900, the highest price, I believe, ever paid at auction for an orchid in America. They immediately sold it to Mr. Osborn, a private gentleman at Mamaroneck for \$1,000. After Mr. Osborn's decease his plants were sold, and Siebrecht & Wadley again became the possessors of this now famous specimen, but at a price about one half of what they paid for it at the Morgan sale. At Sander's sale the other day a very fine specimen with four growths about 16 or 18 inches high and in a cabin-basket some 12 inches square, was bought by Pitcher & Manda for \$230. Another specimen, taller and in bloom, but having only one growth was sold to Mr. Eyerman, of Pittsburg, Pa., for \$70.

BIG PRICES.—I don't mind paying a big price for a vigorous, well-rooted plant which has a good chance of pulling through with rough treatment, but for a tiny morsel of the rarest gem and which would require much careful attention to bring it out at all, I certainly should hesitate to pay a big price. Even take common stock—cattleyas, odontoglossums or oncidiums, a strong, sound plant is worth a good price but puny little things are not worth buying at any price. But "well-rooted" as regards orchids requires qualifying: Some of our best orchidists would almost as soon have a thoroughly sound freshly imported orchid—a cattleya torn from the branch of a tree, for instance, as one that had been established in a greenhouse.

A CONTRAST.—"Audy" held up to our admiring eyes a little plant of *Cypripedium Godeffianum*, in a 4-inch pot and Arnold bought it for \$110; he again lifted to our gaze another hybrid gem, namely, *Cypripedium florneanum*, in a 3½-inch pot, and Manda claimed it for \$95. Then a couple of men declared they were unable to carry to the front a specimen of *Cattleya Mossie* which reposed bouquet-fashion in the mouth of a big barrel, and was the largest mass of a cattleya of any kind I ever saw; but Manda got it for \$45.

New French Cannas.

Passing along the streets and boulevards in the suburbs of most cities one tires of the stereotyped round scarlet geranium bed with its border of white, or the mound of red coleus dotted with yellow as seen on nearly every lawn. They are pretty, but the sameness is trying to the eye. Instead of planting something sweet-scented or with handsome foliage and pleasing but cooling to the eye, near the house, in most cases the glaring geraniums occupy that position, and the effect on a hot July day is as irritating to the eye as a red shawl to a turkey gobbler.

Among the many handsome plants suitable for the lawn none are more satisfactory or will create such a furor when seen as the new types of cannas raised by Crozy of France, and Fewkes and Heffron of this country. With beautiful foliage and lovely flowers about the size of a gladiolus and of almost every shade of red or yellow, a bed of them properly planted as to height and color, is an ornament to the finest lawn, as the beautiful leaves and flowers are produced as profusely as with geraniums, from June until October, if the old flower stalks are re-

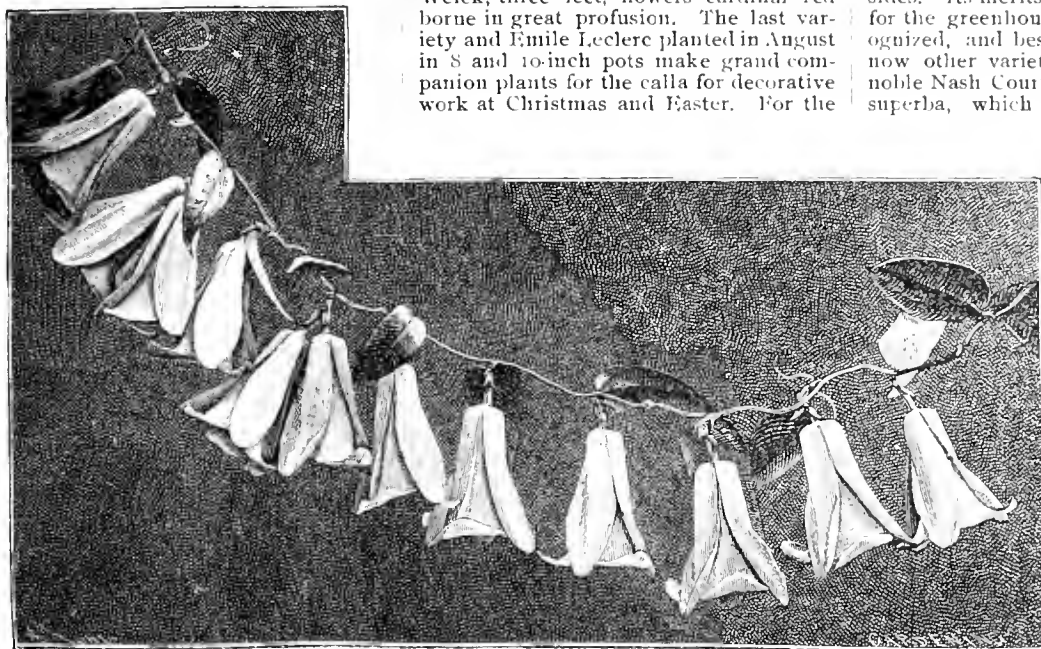
moved when unsightly. The habit of the plant gives a tropical effect planted either in circular beds or as a background for other plants.

Their culture is simple. Divide and start in pots about March 1, and plant out about May 15 to 20, in very rich soil with an abundance of water from July 1 to Sept. 1. During that period they cannot receive too much water, provided it

a peculiar orange red shading to salmon. For a circle around these use B. Cousan-cat, height five to six feet, foliage green, flowers orange scarlet. For a third row use Florifere, five feet high, flowers lemon yellow spotted with maroon. Fourth, plant Lapente, four and one half to five feet, peculiar dark stalks and green foliage, flowers a most brilliant crimson. Fifth, Emile Leclerc, three and one-half to four feet, flowers orange yellow spotted crimson, (extra fine). Sixth, Adolph Weick, three feet, flowers cardinal red borne in great profusion. The last variety and Emile Leclerc planted in August in 8 and 10-inch pots make grand companion plants for the calla for decorative work at Christmas and Easter. For the

The Lapageria.

It would be only waste of space to write much on the two most beautiful climbers that are flowering at the present season—*Lapageria rosea* and *alba*—as they are now seen in many greenhouses, and their culture, once considered difficult, is thoroughly mastered. Since the colored plate of *L. rosea* appeared in the *Garden* of October 26, 1878, the culture of the *lapageria* has extended on all sides. Its merits as a beautiful climber for the greenhouse have been fully recognized, and besides the type we have now other varieties of it, such as the noble Nash Court *lapageria*, or *L. rosea superba*, which bears a profusion of



WREATH OF LAPAGERIA ROSEA.

is not too cold. Take up in the fall, cut tops off about one foot from the roots and store in dry soil in a warm cellar. They will bloom all winter if taken up before frost and planted in the greenhouse or conservatory. Some of the flowers are as finely marked as orchids, and valuable for cut flower work, as they keep well if carefully handled.

Experience has taught that they make a stronger growth the following season if kept growing some during the winter, as cutting off all the foliage of the flowering varieties seems to enfeeble them somewhat. For instance, two *Ehemanni* cannas growing side by side, one taken up and foliage all cut off, grew five feet high, while the other one kept growing in greenhouse with part of the foliage removed, bloomed all winter and made a growth when planted out in same soil at a distance of four feet from the other, of over eight feet in height.

The best size for a circular bed to plant the new cannas in, is of ten to twelve feet in diameter, made perfectly level, a little below the surface of the surrounding soil, so that the water will not run off as it would do if raised. If the bed is larger than ten or twelve feet in diameter it will look squat, and if smaller it will look too high. A well grown canna is an addition to any kind of architecture, planted at side and close to base of front steps leading to porch or veranda.

For the center of bed or the back row, plant *Infant* which grows to a height of six feet, foliage purplish bronze, flowers

seventh row plant *Tonkin* or *General Boulanger*, very dwarf, flowers yellow splashed carmine.

Of other blooming cannas equally good are *Ehemanni*, eight feet and *Noutonni*, seven feet with banana-like foliage; the first with carmine lake, and the second with cardinal red flowers, both with flower-stalks rather spreading than upright; *Gladiaeflora*, six feet, flowers salmon; *Revol-Massot*, five feet, scarlet; *Flamboyant*, seven feet, flowers salmon, foliage purple; *Safrano*, apparently identical with *Gladiaeflora*; *Bebe*, dwarf, lemon-yellow, spotted red; *Henri Martin*, cardinal shading to pink; *Strelitziaefolia*, handsome foliage; *M. Ferrand*, purple foliage; *Paul Bert*, crimson red; *J. Metral*, red shading to majenta; *Brilliantissima*, extra fine purple foliage; *Cardinalis*; *Bethal*; *Brilliant*; *Multiflora*; *Leon de Saint-Jean* and *Roseaflora*.

These new cannas are also valuable to the florist as plants for room and other decorations; their handsome foliage and bright flowers make them very useful for such work. After being grown in the open ground they can be lifted and potted, and if well watered will not wilt a particle. After being used they can be replanted and will not show any appreciable injury.

Of the older kinds one of the best and one which should be in every collection is *Premeices de Neice*. Florists should have all of them.

Davenport, Ia.

J. T. TEMPLE.

heavy, deeply-colored flowers of remarkable substance. In a batch of seedlings of *L. rosea* we obtain an interesting variation in color. Some of the blooms are quite short and distinctly bell shaped, others of greater length and curiously mottled and spotted. It is not difficult to propagate either the red or the white flowered *lapageria*. In the case of the white variety the best way is to layer the shoots, as this kind does not come true from seed, as has been often mentioned in the *Garden*. Both should be grown together, although we often find that only one has a place at all, the red variety; but this is a mistake, as the clear waxy white flowers of the beautiful *L. alba* are in excellent contrast with those of the other kind. The best way to show off the beauty of the *lapageria* is as a climber. Sometimes we find it grown as a pot plant, and a miserable failure usually results from this treatment. It is essentially a climber, and delights in its native home to ramble over shrubs; therefore as natural a condition as possible should be chosen for it. A well-drained border is a necessity, and slugs must be kept away from the tender rising shoots. Long tubular lamp-glasses can be used most advantageously to shield the young growth from these small marauders. The accompanying illustration shows the extreme elegance and informality of *Lapageria rosea*.—*London Garden*.

Nomenclature.

BY ROBT. J. HALLIDAY.

[Read before the New York meeting of the S. A. F.]

In treating of the nomenclature of plants the subject admits of the following divisions: scientific nomenclature; floral nomenclature; popular nomenclature; market house or old woman's nomenclature. Closely allied to the topic are such frauds as substituting, renaming etc.

First. Scientific nomenclature, all botanical names given to plants, subject to the universal rule of priority. For example, ampelopsis, camellia, ipomœa, etc. With this classification we have no right to interfere, nor do we wish to do so in any way.

Second. Floral nomenclature. Here we are all interested. The naming of varieties is by the florist, their originator, and the rule of priority should be observed here also, (but is not always) as to the names of favorite flowers. Examples are Camellia Jenny Lind, Fuchsia Rose of Castile, Geranium Happy Thought, Rose The Bride.

Third. Popular nomenclature. Much trouble and confusion arises from not giving in catalogues and periodicals the scientific as well as the popular name. Let us ask, to illustrate, what is Boston ivy? Is it Ampelopsis Veitchii, Senecio scandens, or a variety of ivy?

Fourth. Market house nomenclature. I have also designated this as that of old women—in no wise reflecting upon that eminently respectable class, female and male of the community—but I am not sure that a more fitting appellation would not be humbug nomenclature, since in its use all other systems of nomenclature are ignored, and a name is substituted which not only puzzles the botanist and the amateur, but may "deceive the very elect." How many vines are sold as the "cinnamon vine?" What is the "wax-plant," "Painters brush," "Beefsteak plant?"

Premising thus, I will say of this subject of the names of plants none is of more importance to this association; no one other thing will do more to bind us together and make our association a success, than an effort to prove to the world that we are guided by honesty and integrity. There is nothing so important as fair dealing between ourselves, and the honest presentation, through our catalogues or the advertising columns we use, of what we have to dispose of to the public. Our loved profession calls for a careful and honorable statement of the goods we offer without unnecessary laudation, calculated to mislead, deceive or cheat.

To correct scientific nomenclature is not the object of this paper, however important it may be to have correct botanical names; but with the correcting of floral nomenclature and popular names this association has the most to do, and any attempt to introduce high sounding names, without authority, for those already established should be condemned by all honorable men of the trade. We want to understand each other in what we catalogue and sell.

How is this understanding to be reached? My views are that by a committee of twelve men much would be accomplished towards amending our present nomenclature, and it is to be hoped sincerely that such a one will be ordered here to-day. We need reform in the matter, and we need it badly, one and all of us. Our catalogues require pruning. Under the present status some would like to do the proper thing, but others will not allow it.

A committee such as suggested would have great influence in correcting abuses and a rule would be established as general and final, and settle the question as to whether scientific, floral or popular names should be used, or whether the three are not better than any one employed alone.

I am greatly in favor of popular names as well as scientific, but the popular must not be misleading ones. Or, are you going to allow us to continue to supersede popular names for floral nomenclature without giving scientific names as well, or allow them to be known in different parts of the country by as many aliases? This latter has been the source of great confusion, not only to us of the trade, but to the amateur and the flower-loving community.

RENAMING.

This practice is growing and should be condemned. Allow it to go on and extend, and in a short time many of us will be classed with those trades and professions which humbug the public. Plants are advertised, as most of us are aware, with high sounding names, not those given them by the originators; and some even go so far in the highway of impudence as to give pretended warning. "We are the only firm which has the true Eureka," etc., etc.

I will give an example. Supposing we have a plant—Fuchsia Souvenir de Prince Albert—from France, imported by many under this florist's name. Some one not satisfied with the name on pecuniary principles, changes it to "Babbling Brook," or some other sensational name, to have something different from his fellow florist in name, but not in fact. Is this honest? To this practice I could give a deserved name, but prefer to leave that to the association.

Against fraud, fictitious namings, deluding the trade and the public, a tribunal is needed whose authority would be recognized as effective and final. I will give examples of renaming. Coleus Dr. Gross of the west was taken east and called "Nellie Grant," so was Carnation Secretary Blaine and Mrs. Carnegie. Heliotrope Madam Blomage from Europe was renamed "Snow Wreath," sent back to England under this new name, returned to us again under the name of "White Lady." There are many similar cases to this.

Our association, now numbering over one thousand members, we need to be doing something practical to keep together, and to gain for its ranks those yet remaining outside. Those who attend its annual meetings are certainly benefited by the hints and suggestions received, and pleased by the opportunity for social intercourse, for making and renewing acquaintances and for cementing friendships, but what has been done for the stay-at-home? Many have not the time, others lack the means to attend these yearly gatherings, and it is our province and our duty to do something for their good, and something that will advantage them and the whole trade.

One way to do this, in my judgment, is to raise a committee of competent men—men without fear, favor or prejudice—who will exercise their own free will and independent judgment in all matters that may be laid before them. We want men to do right, not for appearance sake, but because it is not their nature to do otherwise. Such men can be found, they are right here with us to-day. The committee should be composed of twelve men, of whom nine must agree before a verdict is rendered.

Then the florist in moderate circumstances, the new beginner, the greenhouse worker, who has only gone into a modest business for himself, want authority for what is now advertised in our catalogues and heralded the country over in magazines and newspapers. One man as authority is no longer countenanced. The committee with functions such as are suggested to-day, was proposed at our first annual meeting in Cincinnati four years ago, but the idea was not utilized.

Every florist should have the right to name his own seedling (and this right ought to be sacredly preserved to him, and no one allowed to change or rename it) and to place it upon the market as he thinks best. His reputation may be such that it will go at once and upon his own word. As suggested before, one man's word goes but a short way generally in our line now a-days. Now the people want something more reliable. Establish here to-day the suggested committee of twelve men and you will at once accomplish much towards laying a foundation for the correction of nomenclature, of substituting, of re-naming and of humbuggery.

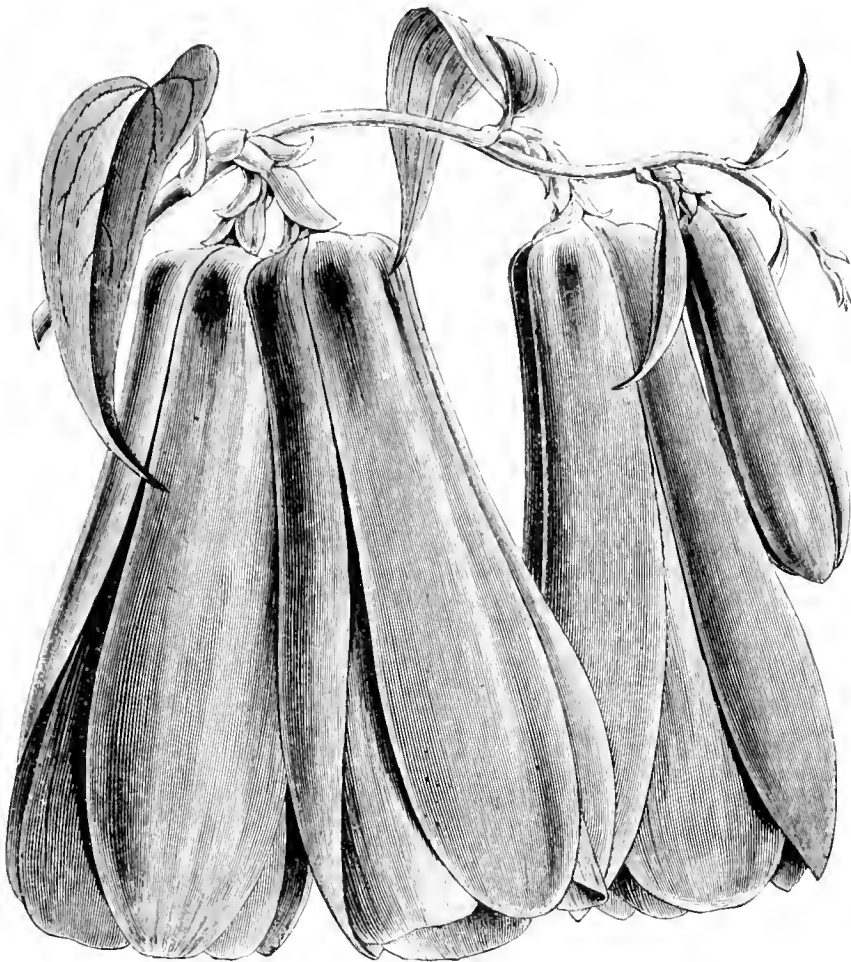
As a practical grower lacking knowledge, I would ask our committee when established to give the proper names and synonyms of the following plants, so they may be catalogued correctly, and we may understand each other in print. If synonyms, let one or the other and the authority there be given. How does Fuchsia Storm King of New York differ from Frau Emma Topfer of Germany? Is Storm King the English translation of Frau Emma Topfer? What is the proper name for Ipomœa Mexicanum? Is this a market house name? What is the proper name for Rose Ball of Snow? Is it an American seedling, or is it Boule de Neige of French origin? Is Geranium White Swan an American seedling, or is it La Cygne which was sent out two years ago? Would not your committee recommend in cataloguing and advertising to give the French as well as the English—one or the other in brackets?

It is not all lovers of flowers, any more than myself, who are French scholars, but the committee can stop this confusion. I would like to ask the committee for information regarding the three ipomœas. Is Ipomœa Childsii new, and in what respect does grandiflora differ from bona nox? What is the correct name of the great Siberian lily, so broadly heralded over the country a year or two ago? Some would like to catalogue it with proper name. How does the new Tea Rose The Gem differ from Marie van Houtte? What would a committee do with this?

SUBSTITUTING.

By this is meant sending one kind or variety of plant for another ordered of the same color, or nearly so. As for example, sending Rose Cornelia Cook for The Bride. The necessity or excuse for this will be obviated by the correction of our nomenclature. Give to plants known to be good and distinct the seal of the association's approval, and substitution will be seldom practiced.

There are some who class substituting with what is more aptly to be designated as fraud. This is where a hundred kinds are taken from one bundle or hatch and labeled to suit the order. This kind of substituting will always be practiced by street vendors or peddlers, but is never thought of for an instant, of course, by any florist of reputation.



LAPAGERIA ROSEA-NASH COURT VARIETY

APPROVED VARIETIES.

In yet another direction could this committee be of great value. Most of you must admit that our catalogues are becoming a jumble, and a reduction is needed in the number of plants named. The tendency has been to increase names without distinction. Advertise before the trade and the public generally—this seems to be the motto towards the adoption of which we are fast drifting, if we have not adopted it already in practice.

By some it is claimed that the more names and the longer lists the more demand. Henceforth I hope our practice will be fewer names and more distinct kinds. Take for instance the roses, Agrippina and Queen's Scarlet, so near alike that one of them will answer every purpose. Our committee, I am sure, would pass without notice Queen's Scarlet, and there would be one less to catalogue. Then we have Roi de Cramoisis and Eugene Beauharnais, I do not say that these are identical with Agrippina, but so similar that of the four sorts named probably your committee would approve of two of them. The other two would drop from the lists—though all who wish may continue to catalogue them.

Go through the teas, the hourbons and the hybrid perpetuals in the same way and the florist with moderate glass will be able to compete for popular favor:

the beginner will not be bewildered, and the amateur who has been humbugged will not suffer again, and our business will be conducted by a higher standard. Then those living in remote parts of the country, or far from floricultural centers would have something else to depend upon, than the flaming description so often seen in our catalogues.

Let it be remembered that it would be no part of the duty of the committee to condemn any plant, save upon sufficient evidence that there is fraud connected with its introduction or naming. This indorsement or authorization—say the initials S. A. F., or any other mark to be adopted, would be a guarantee that it had received the favorable verdict of twelve competent judges, confirmed afterwards by a majority vote of the members present at a general meeting of the association.

Then there are many excellent plants grown for the last ten or twelve years or longer, which by many are not yet sufficiently known to purchase without hesitation. The association's authorization appended to those would obviate all further discussions or doubts as to their values. For instance, take the miniature vine, Ampelopsis Veitchii, the good qualities of which are known to hundreds of florists, though there yet remain quite a number not familiar with them. Or

take such plants as the following which, if deemed worthy, your committee might designate and decorate with the sign of the association's approval: *Aspidistra lurida variegata*, *Pandanus Veitchii*, *Palm Latania borbonica*, *Palm Seaforthia elegans*, *Cyclamen persicum*, *Acacia pubescens*, *Farfugium grande*, etc. I would like to see your committee affix the seal of approval on such plants where it considers them worthy of such indorsement, then in my next catalogue I could so designate them, so that the inexperienced lover of plants might rely on the good qualities of such as are thus approved. I would also like the society's approval of such varieties of roses as *Perle des Jardins*, *The Bride*, *La France*, *Catherine Mermet*, *Niphetos*, *Suiset*, *Bon Silene*, *Safrano*, etc. I would also like to know the good qualities of the new *Heliotrope Mrs. David Wood*—Is it double? Also the new rose-colored violet *Mad Millet*.

The roses and other plants are named only as examples and not with any intention of forestalling any action of the committee. Many may ask what would be done with roses, etc. of recent introduction, for example, *Princess Beatrice*, *Meteor*, *Viscountess Folkestone*, *Ye Primrose Dame*, *Puritan*, *Luciole*, etc. These are all advertised and catalogued as first class in every respect, but can a committee of twelve men be relied upon to give such an indorsement? It is doubtful in the extreme. They have not been long enough disseminated for their true character to be known. And so throughout long lists of plants. Members should be invited to submit lists of plants grown and offered for sale by them, for the committee to pass upon; and as this was done in the course of time we would clear off the rubbish.

New plants and those of recent introduction should be fully tested before receiving the sanction of the association. Condemn no plant; if it is not worthy of approval it will fade from lack of notice. Much more could be said on this point. Appoint this committee and there will be many similar questions to be submitted. Its work will be varied, perhaps troublesome, but the result can be only useful, profitable and beneficent to the entire trade of the country, enhancing in the end our profits, the satisfaction with which business is done, and above all, establishing the character of our membership for business-like and fair dealing with all men, no longer sneered at as followers of a calling in which a low standard of honesty is maintained.

Lapageria Rosea.

There are many varieties or forms of *Lapageria* in cultivation, differing chiefly in size and the depth of coloration. Some of the paler forms may certainly be described as rose, and when this occurs the pale or white spots are brought out with great prominence; but, on the other hand, when the coloration becomes intensified, it becomes inclined to crimson or rosy crimson. The Nash Court variety, of which we give an illustration, is externally of an intense unspotted rosy crimson, with a rich shining lustre, while internally it is closely and conspicuously marked with white, on a slightly paler ground. We must also speak in eulogistic terms of the great size of the flowers of this variety, as they measure from 3 $\frac{1}{2}$ to 4 inches in length and appear magnificent as they hang in closely contiguous pairs. The weight is also something extraordinary, which speaks for

itself of the great substance of the floral segments popularly termed petals. The firmness and rigidity of the same correspond with their thickness or substance. A number of leaves and shoots bearing leaves which accompanied some flowers kindly sent us by Mr. Humphrey, gardener at Nash Court, were equally, if not more remarkable for their noble dimensions. Without the accompaniment of flowers we should certainly have said the leaves were those of *L. rosea alba* enormously enlarged, as the leaves of the latter variety are naturally broader than those of the type. The leaves of the Nash Court variety of *L. rosea* are heart-shaped, elongated instead of lanceolate, and measure from 4 to 7 inches in length by 3 to 4½ inches in width, and are of a firm and leathery texture, deep green and shining. We have also been favored with flowers from Messrs. John Laing & Sons, Forest Hill, who have acquired the stock and who will put this grand variety into commerce.—*Gardening World*.

Philadelphia.

Trade is still improving and the outlook is certainly very promising. The florists have made no marked changes in their stores, but a number, by using a little paint and paper have freshened them up considerably. The one exception to this is the store at Eighth and Sansom streets. We learn that James Ritchie started here over thirty years ago. The firm's name was changed to Ritchie & Cauley, then to Ritchie & Son, later to Ritchie Bros. On January 15, 1885, J. H. Campbell & Sons took the store, and this year have made great improvements for a small place. We regret that "Bennie" was not in when we called, as what he knows about the place would fill volumes, as he has been a fixture for years.

The offer of Mr. Peter Henderson of \$100 for the best herbarium should not be overlooked, and those that intend to arrange one should remember that there are a number of fall blooming plants that can be collected now. The young men, and especially those connected with growing establishments, should make an effort to get this prize. Start at once to collect, then get a good book on botany which will tell you how to arrange them.

There are eleven men employed at one of the nurseries in Philadelphia who have formed a little club. They propose to fit up a room over the potting shed and by making small weekly assessments obtain money to use for buying books, papers, games, etc. The object of the club will be purely social and no person can become a member unless employed on the place. We think the idea is a very good one and shall take pleasure in reporting their progress, and hearing from any other clubs that may start.

Can not some person devise some better means of covering decorative plants than wrapping up with paper for moving short distances in very cold weather? Could we not get some very cheap bagging, line it and have hooks on one edge?

Mr. John Thorpe deserves great credit for the graceful arrangement of wild flowers and grasses in the old shoe, as illustrated on page 105. Many a young "artist" in our business would be benefited if he would study well the loose, careless, graceful arrangement of flowers. Apropos to this design we have sold hundreds of rough cherry bark "logs." We found a decayed wild cherry tree in the woods, cut the branches into pieces

about twelve inches long, being careful to preserve the bark and then took out the rotten wood from the center. By filling the logs with moss and arranging choice flowers loosely in the ends and tying a handsome piece of ribbon around the center with the bow on top, we were enabled to get anywhere from \$5 to \$10 for them. We also put pieces of bark on easels, lashed a cluster of flowers to it, sometimes using a spider's web made out of wire, which pleased many people. The design on being sprinkled made the web look very natural and as though it was covered with dew. We have also taken straw coverings of wine bottles, filled the open end with the choicest flowers, tying a bow of ribbon on the smaller end and in many cases they were much appreciated. Several weeks ago when passing a store we were attracted by a broken willow basket that had been thrown away; it looked like a wine carrier large enough for two bottles. We took it to the store, bronzed it inside and out, filled it with the finest flowers, having orchids falling from the broken places, sent it to a horticultural exhibition and it was very much admired.

Roses are improving in quality. American Beauties are retailing for \$3 per doz; La France, Mermets, Brides and Bennets, \$1.50; Perles, Niphets, Papa Gontiers, Sunsets, \$1. There are fewer Bon Silenes grown this year than ever before and we fear that we shall soon be obliged to say good bye to this little favorite.

At the last meeting of the Florists' Club Mr. Edwin Lonsdale read a very good paper; for a subject he had "The Philadelphia Flower Market," (that is coming next year). A number of the largest growers are strongly in favor of it. Mr. Robert Craig spoke very much to the point when he said, "I will send every flower I grow to the market if three fourths of the growers in the city will do the same." Messrs. Edwin Lonsdale, Chas. F. Evans and Wm. Baker were appointed a committee to ascertain how many growers were in favor and would support a market. Mr. Robert Kift is very enthusiastic on the subject and feels as though it would be a benefit to the whole trade.

The gentlemen actively connected with the chrysanthemum show November 13-16, assure us that it will be better than last year, which is saying a great deal.

H. H. BATTLES.

Baltimore Odds and Ends.

The Maryland Hort. Society proposes to hold a chrysanthemum show November 14-15. This announcement comes a little late in the day; it was not generally expected that such an exhibition would be held this season so that few, if any, chrysanthemums have been grown for show purposes, nevertheless there is enough good material on hand to make a fine display. Our boys vow they're going to do the best they can on such short notice. An admirable hall has been secured, there is an unusually competent committee in charge, and Secretary Sands is "whooping it up" for all its worth, so that prospects are cheering for an excellent exhibition.

Bignonia venusta is, I think, one of the prettiest climbers we have and yet it doesn't seem to be very commonly grown by commercial florists for whom it ought to be profitable. If well cut back about August or September it will give an abundance of bloom at a season when flowers are in demand. It should have

a temperature of 60° to 70°, and although it will bear considerable neglect it will amply repay a little special care and attention. I saw an unusually fine specimen of this *bignonia* last season at Mr. Wm. Fowler's and by the way, florists visiting Baltimore should not fail to call at Mr. Fowler's place, a part of the once famous John Hopkins' gardens, and but a few minutes walk beyond the city limits. Mr. Fowler was for a number of years gardener to the late John Hopkins, and after his employer's death he secured from the trustees of the estate a lease of the greenhouses and adjacent grounds. Having made suitable alterations in the houses he has since devoted himself to commercial gardening. The business is confined chiefly to growing cut flowers and plants for the local trade, but the houses contain many good old things not often met with nowadays. The conservatory is the only building unaltered; it contains a number of fine specimen plants which, though of little use to the present incumbent, are cared for as the property of the estate. The grounds are rich in rare evergreens, while an urn here, or a piece of statuary there, still speak to the visitor of the beauty and grandeur for which this place was celebrated during the life time of Mr. Hopkins. On the occasion of my visit I was a good deal pressed for time, but I am looking forward to another visit in the near future, when I hope to devote an entire day to "doing" this grand old place where the past and present of American gardening are so singularly interwoven.

The regular meeting of the Baltimore Florist Club held on the 3rd inst. was a particularly interesting one. Mr. Kress read a good paper on roses. Mr. Walters had an excellent and practical essay on "What it costs to grow a geranium in a 4-inch pot." The essayist stated that they were grown for two widely different purposes. One man grew for bedding and desired simply a good stocky plant ready to bloom, another man grows for market purposes, and he must have a good bushy plant in bloom and built generally to attract the attention and shekels of passers by. A house 64 feet long with benches suited to hold thirteen 4-inch pots in each row, standing close together, will accommodate 4,700 plants, while of fine large market plants 2,500 would fill the same space. To grow the latter number, Mr. Walters said the necessary expense would be as follows: 2,500 3-inch pots, \$17 50; 2,500 4-inch pots, \$25; 4 tons coal, \$22; soil, \$3; ground rent, taxes, etc., \$39; wear and tear of greenhouses, \$30; horse and wagon, \$10; market stand and toll, \$5; labor, \$100; bringing the cost of a first class market plant in 4-inch pot to about 10 cents, while the cost of 4,700 bedding plants would be about 5½ cents each. As a matter of course above items would vary in different localities, but the figures given by Mr. Walters are a fair estimate of what it costs to grow geraniums in 4 inch pots about Baltimore. President Halliday read a very able paper replying to questions asked at previous meeting, as to what benefit the S. A. F. was to the trade in general. His arguments were sufficient to convince the most skeptical. This champion of the S. A. F. further replied to doubts expressed concerning the longevity of that organization. Of his views however readers of the FLORIST may judge for themselves.

I like the remarks on page 74 in reference to "early firing." Most of us I guess find it necessary to start a little fire once in a while before the regular

season sets in, but the writer found, and others have doubtless noted the same thing, that plants, especially roses, were rendered much more susceptible to injury by this system of occasional firing, and so years ago I adopted the plan of keeping up my fires once they were started, no matter how early in the season that might be. It costs a little more coal, but this extra cost is as nothing compared with the improved health and vigor of the plants.

Business is a little slow in Baltimore at present, but there is still something doing. Bulb trade has been very satisfactory and there has been a tolerable business done in connection with the fall opening of dry goods and millinery stores. Quite recently the leading dry goods firm of Hutzler Bros. moved into new quarters, probably one of the finest buildings of its kind in the country, and their greatest attraction on opening day was a perfect floral fac-simile of the front of their building. The piece, 6x9, was a magnificent bit of work, every detail being carefully followed. This floral edifice was erected by Pentland pursuant to orders received from New York parties.

The new conservatory at Druid Hill Park has been completed and partially stocked from the Patterson Park houses. This robbing of Peter to pay Paul has been a decided advantage to the Patterson Park, as the houses were getting too overcrowded. Baltimore florists would very willingly contribute towards stocking the new conservatory, but they feel decidedly sore towards the park commissioners for their action some time ago in prohibiting the exhibition of plants from the park conservatories. It is probable therefore that the honorable commissioners will have to buy stock or depend on donations from private growers for their new building. A. W. M.

October 6.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By practical gardener and florist; married. Private place. Best references. JOHN GREENHALGH, box 14, Woodbury, N. J.

SITUATION WANTED—By a young gardener; German; 9 years' experience; private place preferred. Address: J. H., care Am Florist, Chicago.

SITUATION WANTED—By an intelligent florist and gardener. Would like a place as manager or propagator or private place. Address: W. PAULING, Wrights Grove, Cook Co., Ill.

SITUATION WANTED—Single German, competent florist and gardener in all branches, would like to engage at once if particulars in answer are given. Address: Wm. K., care American Florist.

SITUATION WANTED—By young man aged 22; 4 years' experience in England, 1 year in Canada 2 years in orchids, good references. Address: GEORGE, ERLS OF RT, Davenport, Ont., Canada.

SITUATION WANTED—By a competent gardener and florist; understands all branches of gardening. Grape and rose culture a specialty. Capable of taking full charge of gentleman's place. Understands the care of blooded stock if required. Best of references. Address: J., care American Florist.

SITUATION WANTED—As foreman, propagator or second, in a large nursery. Age 24; 17 years' experience under glass in England and Canada, in all branches of the profession. Roses a specialty. Good references. Abstainer. Address: G. SMITHERS, Brockville Greenhouses, Brockville, Ontario.

WANTED Seedsman Experienced in care of stocks of garden seeds, for wholesale and retail. Address: SEEDS, care Am Florist, Chicago.

WANTED If Wm. Reed, florist, formerly of Spring Bank, Oconomowoc, Wis., communicates with I. W. Conrad, 96 W. 13th St., Chicago, he will hear of something to his advantage.

WANTED A partner to engage in the horticultural business in Guatemala, Central America. Climate healthy, soil very fertile. A splendid chance for an enterprising man with some capital. Address at once. MARTIN BENSON, Cutler, Dade Co., Florida.

WANTED Practical florist. Must understand the raising of greenhouse stock and forcing of vegetables. Single; give references and state wages expected including board. Address: FLOREST, box 753, Fort Dodge, Iowa.

WANTED A first-class, sober and industrious florist, thoroughly competent to grow roses and other cut flowers for commercial purposes and to take charge of same. No others need apply. S., care American Florist, Chicago.

WANTED A young man to assist in store; one who has had some experience preferred; must make himself generally useful. Please state wages wanted, experience and give references. Address: EVANS & BATTLES, 108 S. 12th street, Philadelphia.

WANTED A good florist and gardener. Vegetable raising for Market a specialty. An honest man, not afraid to work, will have a permanent position and only such need apply. State wages expected. Married man preferred. Address: R. G. NICHOLSON, Chestertown, Md.

WANTED A young man practically conversant with the seed business, especially the market garden and retail department. Must be thoroughly competent to take charge of same, and to write and speak German. Address, stating reference: A. Z., care American Florist, Chicago.

FOR SALE—1000 feet 4-inch cast iron pipe, two boilers and some manifolds and elbows all in good condition. Cheap. N. S. FIDEL, Annapolis P. O., D. C.

FOR SALE—One of the finest retail flower stores on the West Side; fixtures all new and well stocked with baskets and designs; a good trade established; will sell at a great sacrifice for good reasons. Address: J., care Am Florist, Chicago.

FOR SALE Finest florist's store in Chicago. Sales average \$22,000 a year. Big stock of seeds, bulbs, porcelain goods, and imported artificial flowers, etc. in addition. Good location. Owner engaging in other business is reason for selling. Address: T., care American Florist, Chicago.

FOR SALE—Five well stocked greenhouses and contents, city water, near entrance to one of the principal cemeteries of Cincinnati, O., with a lucrative fall trade. Average amount of fall trade sales to the cemetery alone is \$500. Reason for selling, bad health of owner. For full particulars, address: C. A. PETERS, Price Hill, Cincinnati, O.

FOR SALE—An old established greenhouse can be bought on account of illness of the owner, at a very reasonable price. 5000 feet under glass and fully stocked; situated in one of the smartest manufacturing towns in New England. Address: J. H. GRIFFITH, care Rural New Yorker, Box 338, New York City.

WANTED. To purchase canes of *Draucena Terminalis*, also seedlings of *D. Indivisa*, stumps of *Cycas revoluta*, seedling Palms and Ferns. Please state terms and prices, and confer with: GOODING & LEITCH, Crawford Road, north of Wade Park, Cleveland, O.

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This boiler is made of the best wrought material, 32 inches diameter by 10 feet in length, with four 8 inch cylinders through it. One of the finest hot water boilers extant, and recommended by best engineering talent as the most economical and durable heaters made. It has been in use one season, and the reason for having the same taken out is, we are putting steam system in all our houses. We paid \$15 for this. Can be had for \$100 cash, free on board cars. Absolute guarantee as to quality and condition given. HILL & CO., Richmond, Ind.

FOR SALE.

Five acres of land in a high state of cultivation 1 1/2 miles from center of city, two greenhouses 60 feet long; good building, plenty of water, three forcing pumps; fruits of all kinds; an bearing grapevines. Good market for flower and vegetable plants. This is a good chance for young beginner in the flower business. Address: E. WEBB, Real Estate, Agt., YOUNGSTOWN, OHIO.

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Tabernamontiana	Per 100
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Carnations Sunrise, P. De Graw, Purple	
Garfield, Queen of Whites, Century, Hinz's White, Open ground plants	8.00

2nd Trade list mailed on application.

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FINE ROSES.

We offer for sale to the trade this Fall a fine, healthy lot of out-door grown Roses; strong, 1 year old dormant plants on their own roots, including the following staple varieties and others:

Price, \$12.00 per 100; \$100.00 per 1000.
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N. B.—We carry a full line of Fruit and Ornamental Trees, Shrubbery, 2 year Roses, Clematis, etc.
ADDRESS: W. S. LITTLE, Commercial Nurseries, ROCHESTER, N. Y. Mention American Florist.

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Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address: WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS.

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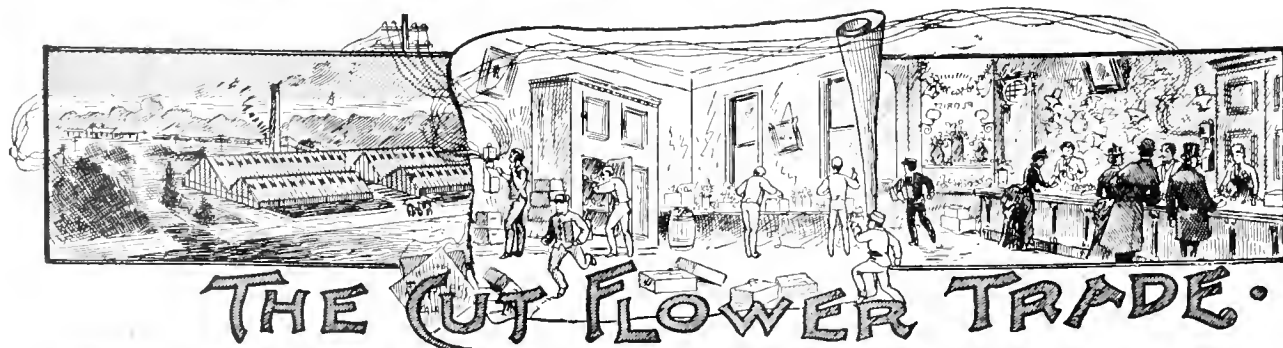
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on the P. W. & B. R. R., 19 miles below Philadelphia. Apply to: ARTHUR M. BURTON, Esq., 501 Walnut St., Philadelphia.



November Floral Fashions.

As if wearied of the "sere and yellow leaf" and the gorgeous effects made with colored foliage, decorations have toned down in tints until they are almost demure. Ferns are so favorite that they compose the main part of all embellishments. The soft lace-like fronds of *Adiantum cuneatum* are more effective than the gorgeously dyed autumn leaves, and when massed together they are very conspicuous. Table arrangements are made with either an entire covering of maiden hair ferns with floral effects in each corner, or else there is a center circle of these with a cluster of Russian violets near the edge, or a bunch of roses in the same position. The baskets of living plants introduced by McConnell are frequently used for dinner center pieces, but these are so choicely filled that those who possess them dislike to expose them to too much light, so they generally have a position on the drawing room table or to ornament the piano. The most fashionable dinner arrangement may be said to be the rose, lily or violet cluster among adiantums.

For luncheon arrangements the new French roses, such as Cusin, Watteville and Wetmore, have replaced Hinsdale and Grace Wilder carnations so long popular for these affairs. The pink and yellow roses adorn the luncheon board gloriously and show off well in the glass bowls and baskets that are so much liked by young girls. Favors of Bohemian glassware are now the vogue for young ladies' luncheons, which are being given at a furious rate by the coterie, who are this winter to make their debut in society. The girls who have been separated during the summer are now feasting each other with sweets and flowers to attest their joy at reunion. The most delightful line of favors are filled with blossoms to decorate the table and then be given away. Blue, crimson and yellow glass handled baskets contain clusters of Cusin and other roses of the same family. The de Wetmore rosebuds are very much admired; it is an excellent keeping rose, the same as Cusin and Watteville. Very natty poke bonnets of glass are also flower holders and have a crown trimming of ribbon. Pitchers of frosted glass hold roses, or look very faintly filled with any small flowers.

The corner ornamentations when dinner table are bedded with adiantums, are exceedingly artistic. Pansies are laid in purple and yellow patches so that they cut off one corner irregularly in a very æsthetic way. Diagonally opposite these will be a diamond of violets in the corner, all varieties of this flower being shaded into this design.

There is a new departure in the way of presenting floral designs to actresses nights when they make their first appear-

ance in new plays in parts they create. A bower of foliage is erected at one side of the proscenium, or in the center of the orchestra if there is room, and the floral gifts are all hung on this and not passed to those to whom they have been sent. The bower is of course an ornament and there is time for the audience to have a good look at the designs before they are removed.

Baskets with the handle rising from the center and the edge turned over like the rim of a hat are filled with Puritan roses and ferns for bridal gifts. The handle is almost as round as a hoop and is covered with white rose buds, usually Niphetos.

FANNIE A. BENSON.

New York.

New York.

Hanft Bros. made an elaborate decoration of a terrace garden for the Brewers' convention.

C. L. Doran for an entertainment given at Chickering Hall for the yellow fever sufferers, embellished the stage tastefully with plants, free of cost.

Henry Siebrecht, Jr., is now his father's cashier in the Fifth avenue store.

Florists are all grumbling at the low prices of flowers. Only those who depend upon transient trade keep any stock of flowers as yet.

Lemon verberna is now the popular bit of foliage "thrown in" as was geranium, to the order of cut flowers. It is very much valued.

Peter Henderson & Co. have just completed a new seed warehouse 50 x 100 feet, and three stories high.

Hanft Bros., of Fifth avenue, have widened and otherwise improved the entrance to their store and redecorated their interior. They have now a highly attractive establishment.

Plant stands of cedar, costing from \$15 to \$25, are very neat and ornamental. These are 2 feet 8 inches high and in length and are 14 inches wide.

It is about decided to hold the coming chrysanthemum show in a tent to be erected on the northwest corner of 14th and Union Square. It has been impossible to engage a suitable hall for this purpose.

Mr. T. H. Spaulding has chrysanthemum plants that are six feet in diameter. He has 5,000 chrysanthemum plants altogether on his place.

F. A. B.

Boston.

Galvin's exhibition of the "Century Plant" in Horticultural Hall has drawn crowds of people and made more money than a whole horticultural exhibition would. The officious showman in charge clears his throat and solemnly informs the gaping public that "this plant, ladies and gentleman, flowers just once

in a hundred years and is now exactly one hundred years and six months old." "How can you tell so exact?" inquires a doubtful bystander. "Oh, it is a matter of record," replies the showman with a look of injured innocence, and adds, "It is of very rapid growth. You observe how the bracts ramify on the stem as the decimation goes on." Over against the wall stands a smiling donkey made from pampas grass, and as the last remark falls upon his fuzzy ears they have to hold him up to prevent his falling down. In the lower hall is a model of Ancient Jerusalem, and at the entrance stand two shivering young men who strive to outdo each other in crying, "This way to the sentry plant," and "This way to Jerusalem," and you pay your money and take your choice. In Boston we don't have to depend upon politics for all our excitement.

Artist Storer, of this city, is at Short Hills, N. J., painting rare orchids for Messrs. Pitcher & Manda.

The Mass. Hort. Society held its annual election of officers Oct. 6 and the following were elected: President, Henry P. Walcott; Vice-Presidents, Charles H. B. Breck, Benjamin G. Smith, Frederick L. Ames, William H. Spooner; Recording Secretary, Robert Manning. W. J. S.

LILIUM AURATUM.—The demand for the blooms of this lily is on the increase. Hallock & Son report sales of 5,000 spikes this fall and state that with a little care and judgment blooms may be had every month in the year.

A FLORIST in a western state advertises in the local paper that he has a number of creditors who are now living with their second wives, but who have not yet paid for the floral designs which symbolized their intense grief at the loss of their first loves. He threatens to publish their names unless they step up and settle within sixty days.

CHRISTMAS GREENS.—The sales of these by the florist is constantly increasing. Mr. L. B. Brague, Hinsdale, Mass., gives his sales of last season to florists as 500 barrels of bouquet green, 25,000 yards of wreathing made from the green, and 10,000 Christmas trees, in addition to several hundred thousands of cut hardy ferns which have in some sections partially supplanted smilax for use in decorations and in floral work.

KANSAS CITY, MO.—Baker Bros. have opened a floral store at 15 East Seventh street. J. N. Kidd, formerly of Logansport, Ind., is a new florist at 711 Main street. E. F. Heite & Son have built a chrysanthemum house 45 x 20. W. W. Hamden & Co have succeeded Hamden, Mason & Case, the seedsmen at 417 Walnut street.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Each, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for November 15 issue must REACH US by noon, Nov. 9. Address

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

Fred W. Kelsey, New York, trees, shrubs and bulbs; C. H. Murphey, Urbana, O., plants; John S. Hay, Oneida, N. Y., bulbs, plants and trees; Herbert Post, Selma, Ala., seeds; W. D. Boynton, Shiocton Wis., nursery stock; Geo. W. Miller, Wright's Grove, Chicago, plants; John Saul, Washington, D. C., bulbs and plants; V. Lemoine, Nancy, France, plants; J. Newman & Sons, Boston, Mass., wheat sheaves and immortelle designs; English Specialty and Novelty Co., Newton-le-Willows, England, seeds.

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VARIETIES:

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ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

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27 Washington Street, CHICAGO.

PAUL KROHN,

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Shipping orders will receive prompt attention. Good supply of fine Adiantum ferns.

Wholesale Markets.

Cut Flowers.

	NEW YORK, Oct. 25.
Roses, Bon Silences	\$7.00
" Perles, Niphotos, SOUVS	3.00
" Gontiers	2.00
" Cousins, Bennetts	4.00
" Mermets, Brides	1.00 @ 5.00
" La France	5.00
" Dukes	5.00
" Am. Beauty	10.00 @ 20.00
" Puritans	8.00 @ 10.00
Carnations, long	2.00
Carnations, short	1.00
Snillax	2.00
Lily of the valley	8.00
Violets	1.00

	BOSTON, Oct. 25.
Roses, Teas	\$1.50
" Mermets, La France	6.00
" Brides, Perles	6.00
" Niphotos	5.00
" Beauty	12.00
" Gontier	5.00
Carnations, white	2.00
Carnations, colored	1.00
Chrysanthemums	2.00
Lily of the Valley	6.00
Violets	.75
Pansies	.50
Snillax	12.00
Adiantums	1.00

	PHILADELPHIA, Oct. 25.
Roses, Bons, Safranos	\$2.00
" Perles, Niphotos	5.00
" Mermets, Brides	5.00
" Bennetts	4.00
" La France, Cooks	5.00
" Am. Beauties	12.00
" Gontiers	5.00
Carnations, short	1.00
Bouvardia, heliotrope	1.00
Lily of the Valley	8.00
Snillax	20.00
Callas	10.00
Harrish lilies	10.00
Double violets	.51
Single violets	.25
Chrysanthemums	.75

	CHICAGO, Oct. 27.
Roses, Perles, Niphotos	\$3.00 @ 4.00
" Bons, Safranos	2.00
" Mermets	4.00 @ 5.00
" Bennetts, Dukes	4.00 @ 6.00
" Papa Gontier	5.00
" La France Brides	5.00 @ 6.00
" Am. Beauties	10.00 @ 15.00
Carnations, short	.75
Carnations, long	1.00 @ 1.25
Snillax	18.00 @ 20.00
Adiantums	1.00 @ 1.51
Callas	12.50 @ 15.00
Tuberoses	1.50
Heliotrope	1.00
Chrysanthemums	1.00 @ 3.00
Violets	.50 @ 1.00

WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

N. F. McCARTHY & CO., WHOLESALE FLORISTS

and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS

Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

CUT ROSES AT WHOLESALE.

The only establishment in the West growing Roses exclusively. 20,000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the customers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety.

Also all the leading varieties of young Rose plants for sale.

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Corner St. Louis Avenue, CHICAGO.

WELCH BROS., WHOLESALE FLORISTS.

165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram sent immediately when it is impossible to fill your order.

Thos. Young, Jr., & Co., Wholesale Florists,

INCORPORATED 1885,

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Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Benaett, Perle, Mermat,
And other Standard sorts

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230 WABASH AVENUE,

CHICAGO.

THE WISCONSIN FLOWER EXCHANGE, WHOLESALE CUT FLOWERS.

Consignments Solicited. Send for price list

133 Mason St., MILWAUKEE, WIS.

Mr. Thorpe Explains.

Here is how I became identified with that original design. After a *sumptuous* meal at the hotel on Iona Island, together with a few sportive friends I went to see the "Base Ball" game. On arriving at the ground my attention was called to a group of men intently looking at something almost microscopic in size laying on the sod, and to satisfy my curiosity I had to ask, what is the trouble? One fellow from the far west said somebody had thrown up his collation, which wasn't true. At this moment up stepped the noble Fred Gordon and said, "John, here's an original design I have made up and I want to present it to the umpire. It's my own creation, John, but nobody dare present it as theirs. That Willie Allen is waltzing up and down here on the foul line with his cane, like one of the finest on Broadway and we are afraid he will club us."

It did not take me long to grasp the situation and the design and as soon as there was an opportunity for the east to beat the west by a decision of the umpire, I gracefully stepped up with that truly original and valuable design and with my best manners presented it to that prince of umpires, Charley Anderson. Well, never shall I forget the time. Here's what he said (the umpire): "Take that thing away! Strike one! Will Allen, why don't you keep these folks away? Foul! No ball, striker out!" Not to be outdone and knowing that those members of the S. A. F. who could not attend the convention would like to have some reminiscence of it, a happy thought struck me that a photograph in all its truthfulness would be appreciated in spite of the umpire's "strike one," and that's how the photograph came about.

So far so good, but here comes the *Croton tiglium*, or the bitter part. Fred Gordon, the original designer of the "piece de resistance," wrote me, under date by the postmark August 25.—"Dear Sir: Kindly inform me what became of that piece, I O. N. A. Island, U O 2 know. Did Cinderella see that Slip-her? Please reply or pay me for my efforts." I did not reply to Mr. Gordon for fear of being saluted with "strike one," or "foul," or "striker out," and this is how the matter stands in relation to what I did with the best intentions. JOHN THORPE.

Judging by the Point System.

Having recently had opportunity to study this system in practical operation, we have no hesitation in pronouncing it a great advance on the old method. The system should by all means be universally adopted.

There are, however, some disadvantages which should not be overlooked. Rarely will you find three or five judges whose ideas of perfection—to points or 100 points as the case may be—are the same, and should one of three have a low standard and consequently vote comparatively high on everything, while the others having a higher standard vote low accordingly, the one who votes high wields an undue influence in the grand average, and where he may differ in judgment in regard to any entry, he may overrule both the other judges. This however will probably rarely occur and is not an argument against a system which has so many great advantages to offset it.

An inspection of the "returns" from the judges is very interesting. The remarkable unanimity in some votes and

the wide difference in others is a subject for much speculation, but a still more interesting fact is that while one of the judges may occasionally vote lower on one point than the others he is pretty certain to vote correspondingly higher on some other point thus keeping the average practically the same.

A very valuable feature of the system is that each exhibitor may know the exact degree of excellence he has, in the opinion of the judges, attained, and by how many points he has won or lost a premium.

Where there are three judges voting on three different points on each entry, the nine votes of the three judges may be added and the result divided by nine, giving the average quickly. There should of course be no discussion on the merits of an exhibit by the judges and each be in ignorance of the result until the returns are compiled and the averages computed.

Asparagus Plumosus.

How can we distinguish *Asparagus plumosus* from *Asparagus plumosus nanus*? Does the variety *nanus* have any tendency to climb? If so, does it climb less rapidly than the type, or wherein lies the distinction?

This question has been asked by me a number of times but without getting any satisfactory reply. Your large circulation among the very best talent in the business ought to bring the desired information. A TYRO.

OBITUARY.

WILLIAM C. GERMOND died at his home in Sparkill, Rockland county, N. Y., October 6, at the early age of 32 years. He was widely and favorably known to the trade as an enthusiastic cultivator of roses.

Mr. Germond was a person of peculiar endowments. From early life singularly correct, generous, courteous, cheerful and courageous; always earnest and zealous in business, respected and esteemed by all who knew him. His funeral was largely attended. The services were conducted by the pastor of the Reformed Church at Tappan, at which place he was buried. He leaves a young widow to mourn his loss.

W. B. CORNING.

News Notes.

LOUISVILLE, KY.—Edward Morat has just completed eight new greenhouses on his new place.

GRAND RAPIDS, MICH.—T. R. Renwick & Co. have built three large new houses. Trade has been excellent.

WINONA, MINN.—John Wunder has erected a new rose house 80 x 18 and added another story to his residence.

CLEVELAND.—Miss Rose B. Gasser, daughter of florist J. M. Gasser, was married to Mr. D. R. Kuisely Oct. 30.

NEW LONDON, CONN.—John Spallings has finished a new house for camellias and azaleas. Brick walls all around.

FORT DODGE, IOWA.—John U. Kellenberger has just completed three new houses, one 18 x 100 and two 18 x 60 each, heated by steam.

LOUISVILLE, KY.—Nanz & Neuner have just completed three new houses

16 x 100 each, to be used for roses, and heated by hot water.

ST. JOSEPH, MO.—Mr. Hans Nielson received first premium for floral display at the exposition and an excellent notice in the daily *Herald* in consequence.

SPRINGFIELD, MASS.—C. F. Fairfield has completed three new houses and has taken out his hot water pipes from all the houses and arranged to heat by steam.

ALLEGHENY CITY, PA.—E. Ludwig, formerly in the employ of Ludwig & Richter will start in business for himself at stand 217 Central Market, the 3d inst, as florist and seedsman.

WASHINGTON, D. C.—A floral street car with horses also of flowers was constructed by J. H. Small & Sons, for the recent banquet to street railway managers at Willard's hotel.

NORWICH, CONN.—G. Geduldig has finished two houses, one 50 x 20 and the other 40 x 12, fitted with the Hippard's lifting machinery. Geo. Young's greenhouses have been sold and carted off. H. Goldsworthy is very low with consumption.

STILLWATER, MINN.—Mrs. Geo. Low has built three new houses, 25 x 20, 85 x 18 and 45 x 11 respectively. Also a neat office 18 x 10, lighted by electricity. Chas. Nehring is now completing two rose houses 60 x 16 and an office 20 x 10 on Fort street.

ST. PAUL.—H. W. Bunde has built two rose houses 14 x 60 each, one carnation house 12 x 32, two other houses 13 x 22, and an office 16 x 20. Louis Edlefsen has added a new rose house 100 x 15. The German gardeners of the city had a grand ball October 24.

SPRINGFIELD, MASS.—At the Bay State Fair held here October 4 to 11, ten first premiums on plants and flowers were awarded to N. J. Herrick, of this city. Among other exhibitors in the floral department were L. W. Goodell, of Dwight, J. W. Adams and the Mass. Agricultural College.

MINNEAPOLIS, MINN.—Most florists are busy repairing their houses and bringing plants into winter quarters. Weather has been favorable. Cut flower business is rather slow yet, but all look for good trade for the winter. There have been several weddings and receptions, but nothing very elaborate in decorations. Chrysanthemums are just coming in now; roses are plenty; carnations and bouvardia are scarce yet.

OMAHA, NEB.—L. A. Casper has moved his store from Fifteenth street to the Paxton Hotel building. T. N. Parker has built four more houses, two 90 x 12 for carnations, one 100 x 16 for smilax and another 130 x 8 for orchids, ferns, palms, etc. The benches are supported by iron frames. He has 1,100 chrysanthemums in preparation for the exhibition to be held in the opera house November 15. An aquatic house 40 x 30 is filled with fine stock which is looking well. Hess & Swoboda have built two rose houses 80 x 16 heated by steam, and Claus Matties has erected two additional houses covering space of 162 x 44. Henry Ehrenpfort's new houses are two 60 x 14, two 50 x 16, with a new office 16 x 16, and boiler house 30 x 22. The whole place is heated by steam, a 30-horse power boiler doing the work.

DANSVILLE, PA.—Xavier P. Le Duc will start into the florists' business here.

BUFFALO.—W. J. Palmer has completely refitted his down town store, having it newly papered, grained in white oak and put in electric light, and new refrigerators, adding much to its attractiveness.

SAN FRANCISCO.—The California State Floral Society has been organized with officers as follows: Prof. E. J. Wickson, president; W. A. T. Stratton, vice president; Emery Smith, secretary; Mrs. W. H. Ware, treasurer; directors: A. T. Bancroft, John H. Sievers, D. J. King, Mrs. Ahern and Mrs. Farnham. A paper on "The Chrysanthemum" will be read at the next meeting by John H. Sievers, of this city. The State Board of Horticulture will hold its semi-annual convention at Chico, commencing Nov. 13 and continuing four days.

CHINESE NARCISSUS.—It is stated that all the bulbs sold under this name are not the true Chinese. The bulb of the true Chinese narcissus is larger and different from that of any other of the family.

10 cts. \$2.00

PRICE TO BE RAISED JAN. 1st.

The largest, handsomest, most valuable gardening magazine in all the world is *The American Garden of New York*. Its writers are practical, successful gardeners, fruit growers, florists, investigators and amateurs, whose experience covers all states and countries; thus it is adapted to the needs of all sections and conditions. It is thoroughly independent, not being connected with any nursery or seedsman's interest. It is firmly established, covering 42 years of age, dating back to the old *Horticulturist* of Downing, and the *Gardener's Monthly* of Meehan. It is practical, beautiful and finely illustrated. It is valuable to the florist, fruit grower, market gardener, country gentleman, amateur, to every man and woman who loves growing things.

You come the nearest my ideal of a Horticultural Monthly for popular circulation of any of the makers of such literature.—CHAS. W. GARFIELD, Sec'y Michigan Horticultural Society.

Indispensable to horticulturists, gardeners and florists (both practical and amateur).—CYRUS T. FOX, State Pomologist of Pennsylvania.

For introduction where unknown the magazine will be sent two months for 10 cents. Subscription price, \$1.00 a year; to be raised on Jan. 1st to \$2.00. Previous to that date subscriptions received at present low rate (\$1.00 a year), for one year or several years. Two months now for 10 cents, for introduction.

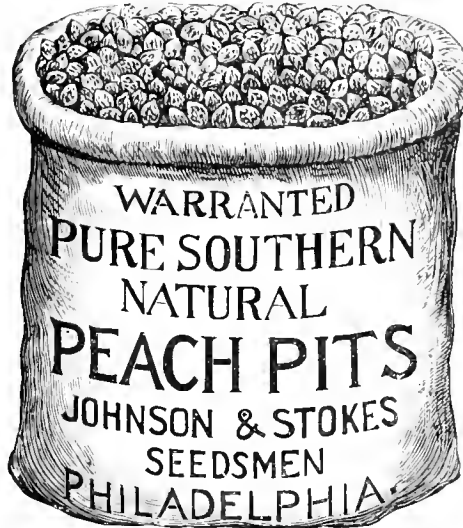
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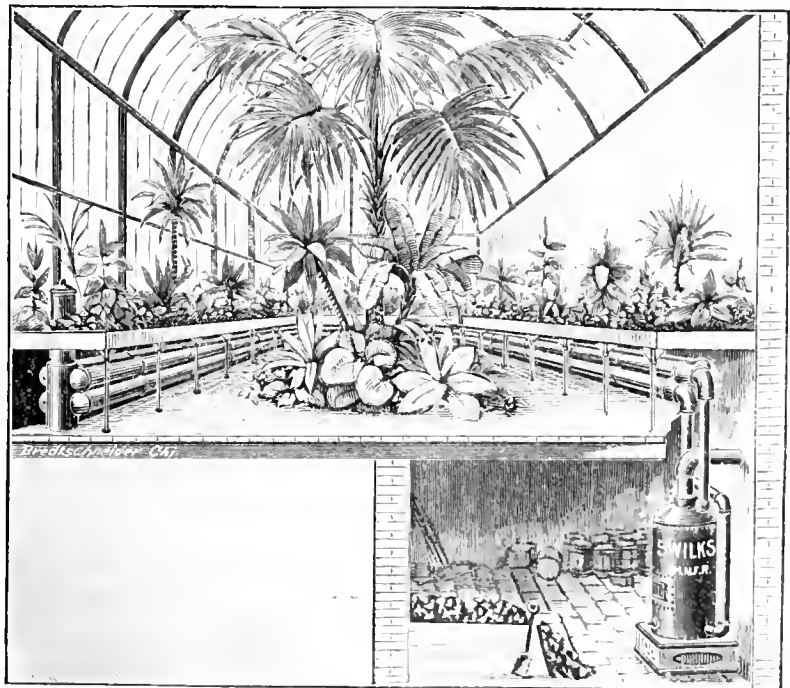
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OUR GREAT SPECIALTY.



CHOICE Southern Natural PEACH PITS, selected from original seedling Trees in Tennessee and North Carolina, which are entirely free from Yellows or disease at 50 Years Old. Owing to the almost total failure of the Peach crop in these sections, our supply this season is quite limited. Order early. Samples and prices on application.

JOHNSON & STOKES,
217 and 219 Market Street,
PHILADELPHIA, PA.



SAVE COAL BY USING
THE CELEBRATED WILKS' WATER HEATER,
FOR HEATING
Poultry Houses, Greenhouses, Stores, Dwellings, Bath-tubs, etc.
RUBBER PACKING FOR GREENHOUSE PIPE CONSTANTLY ON HAND.
SEND FOR CIRCULARS.
S. WILKS MFG. CO., Monroe and Clinton Sts., CHICAGO, ILL.

Indianapolis.

About 10,000 square feet of glass has been added to the greenhouse capacity by the florists of this city the past summer.

Quite an interest is being taken in the coming exhibition. The public schools will close Wednesday afternoon of exhibition week to give the children an opportunity to attend. The committee would like to have as many florists from other cities as possible attend the exhibition and the entertainment on the evening of Nov. 14. Write the secretary if you decide to come.

At the State fair last month the display of plants, designs and cut flowers was very creditable. Berterman Bros. received first premiums for new funeral design, original funeral design, basket, bouquets and cut flowers, cut roses, newest show design, cut gladiolus, palms, begonias, etc. Mrs. Hilker received first for best arranged display of plants and second for bouquets, baskets, etc. Chas. Reiman took first on caladiums, ferns and geraniums, and second on new funeral design, original funeral design, newest show design, etc. J. Larsen took first for hanging baskets and asters. A feature was three premiums offered by an undertaking firm for the newest funeral design; there were five entries, Berterman Bros. receiving first, Weishaar Bros. & Lentz second, Mrs. Hilker third.

Nothing can beat natural gas. It is fine, and if pressure indicates anything it is here to stay for some years to come.

The system of judging suggested by Mr. Battles is a good one and should be universally adopted. W. B.

NEW DWARF WHITE DAHLIAS, SAGO PALMS, ETC.

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Heliotrope, Mrs. David Wood.....	8 00	
Ipomoea grandiflora, Moonflower.....	4 00	
Roses, Teas, assorted, 2-inch.....	3 00	
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Smilax, 3 inch.....	4 00	

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USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.

CHICAGO.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

November 1—Tem. morning 40°, noon 58°, evening 48°. Wind SE. Continued potting rooted geranium cuttings. Potted sempervivus and echeverias from outside. Spread leaves in frame yard.

2—Tem. 47, 63, 52. W. Same as yesterday and laid down half standard roses in bed outside.

3—Tem. 42, 62, 60. W. Same as yesterday.

4—Tem. 39, 48, 36. NW. to N. Same as yesterday and laid down clematis.

5—Tem. 32, 49, 48. NW. to SW. Continued potting rooted geranium cuttings. Continued potting echeverias from outside. Bent down root-grafted roses in bed outside and prepared to cover with dry leaves for the winter.

6—Tem. 43, 66, 55. SW. Sunday.

7—Tem. 50, 68, 59. SW. Potted rooted cuttings of rose geraniums and geraniums Mme. Phitzer and Earl Roslyn; also of petunias. Potted little echeverias which had been kept pricked in boxes all summer. Cleaned white-wash from glass on front of conservatory.

8—Tem. 43, 45, 40. NE. Continued same as yesterday.

9—Tem. 44, 44, 42. E. to NW. Sifted sand and prepared it for propagating. Commenced propagating Alternanthera latifolia and amœna. Cleaned and potted old echeverias. Cleaned shed and frame yard.

10—Tem. 37, 42, 39. W. Continued putting in propagating bench cuttings of Alternanthera amœna.

11—Tem. 31, 43, 42. N. Same as yesterday and surrounded outdoor rose beds with boards to keep dry leaves in position.

12—Tem. 32, 47, 35. N. Continued propagating Alternanthera amœna. Potted a lot of geraniums which had been heeled in in frames. Cleaned echeveria offsets and repotted a lot of echeverias which had been kept in pots.

13—Tem. 38, 54, 50. S. Sunday.

14—Tem. 42, 44, 45. W. Put in bench cuttings of Alternanthera aurea. Finished potting old echeverias and commenced potting rooted offsets in thumb pots. Cleaned stock geraniums.

15—Tem. 41, 45, 38. NW. to N. Put in propagating bench cuttings of Alternanthera aurea nana. Continued potting echeveria offsets in thumb pots. Continued cleaning stock geraniums.

Best Carnations.

My specialty is growing cut flowers of carnations for wholesale trade. For white flowers I secure best results from Peerless, though Hinze's White has done well. I have two houses of Peerless which are looking fine. Of colored kinds Crimson King, Sec'y Windom, Duke of Orange and Marshave done well with me.

This year I am growing for the first time Grace Wilder, Anna Webb and Buttercup. They give promise of a good crop. I have also tried a few plants of Wm. Swayne, American Wonder, Uncle Sam and American Florist. The Swayne died this summer of disease, the American Florist is not very strong, the American Wonder about the same, but Uncle Sam is one of the healthiest of any I have.

Will other growers of the carnation please give their experience with the above named kinds and other new ones. It would save many of us trouble and expense.

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MIXED PANSIES
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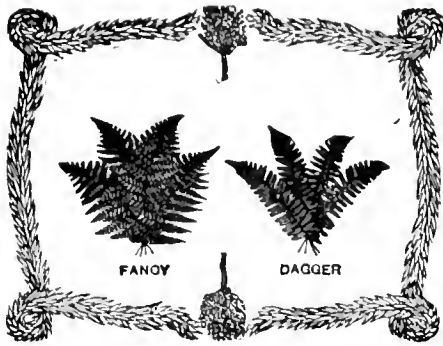
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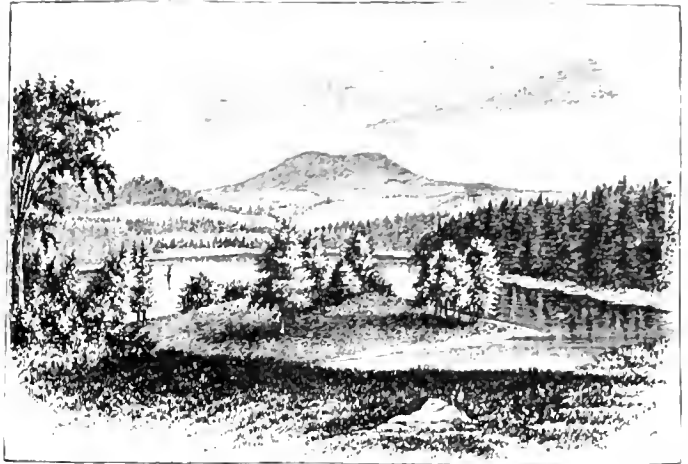
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W. D. BOYNTON, Shiocton, Wis.

Chicago.

L. Dreher & Co. are new florists at 205 North Clark street.

Geo. Burke is out of business at 74 State street. Geo. Klehm now conducts the business.

James Farrell has opened a floral store at 227 Wabash avenue, next door to the Eden Musee.

Mr. Frank Benthey, a Wabash avenue florist who has been gradually accumulating an interesting family, one at a time, has doubled the limit and won. Both are girls.

Chas. Reissig has removed from Wabash avenue to 31 Washington street. The new store has a much better show window and is otherwise an improvement on the old one.

A hail storm the night of October 18 smashed 1,200 lights of glass on E. Weinhoeber & Co's. greenhouses on the north side. Florists Burdsall and Krick also lost a few hundred lights each, but Weinhoeber & Co's. loss was the most serious one. The daily papers reported that the Lincoln Park greenhouses had \$300 worth of glass smashed but this smash was entirely in the reporter's mind, as they did not lose a single light. Florist Kennicott at Barrington had quite a loss in glass from the same storm.

At the last meeting of the Florists' Club the annual election of officers was held with result as follows: President, Jas. D. Reynolds; Vice-President, D. B. Fuller; Corresponding Secretary, G. L. Grant; Financial Secretary, P. J. Hauswirth; Treasurer, Flint Kennicott; Trustees—Thos. Hopkinson, F. F. Benthey, A. McAdams, Jos. Curran and M. F. Gallagher. It was decided to give a ball sometime in January next, the same to be on an elaborate scale, making the floral decorations the most prominent feature. The second anniversary of the club will be celebrated the evening of November 8, with a supper, an address by the President-elect, and a good time generally.

On October 25 John Lane had a chrysanthemum display on his grounds at 4801 Lake avenue. The plants were scattered over the lawn and proved quite an attraction. The day was pleasant and crowds of people "took in" this free exhibition. John Goode & Co., Geo. W. Miller and the Oakwoods greenhouses sent plants, and Mr. Lane displayed some of his own which were six feet tall and five feet across, loaded with bloom. A few eastern florists sent plants, including the Philadelphia prize set from Robert Craig, of Philadelphia; a set of seedlings from Hallock & Son, Queens, N. Y.; a set of small plants with flowers by mail from M. A. Hunt, Terre Haute, Ind.; and a set of new varieties from W. K. Harris, of Philadelphia. Mr. Lane intends to make a similar display every pleasant Thursday during the chrysanthemum season.

F. A. RIECHERS & SOHNE A. G. Florists,
HAMBURG, GERMANY.

Largest stock of Azalea indica, Camellias, Lilies of the valley for the wholesale trade. Price list on application.

SMILAX.

To the Trade at all Seasons.

F. E. FASSETT & BRO.

ASHTABULA, OHIO.

Mention American Florist.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

Contracts made now for Fall Delivery 1888

Japanese Lily Bulbs

California Lily Bulbs

Japanese Seeds.

Conifers, Palms

Trees, Shrubs,

and Bamboos.



H. H. BERGER & CO., 315 & 317 Washington Street,
SAN FRANCISCO, CALIFORNIA.
Send for Estimates. Established 1878.

PLANTS.

Carnations for Winter Blooming: good, strong plants from the open ground, of the following varieties:

ROBT. CRAIG, SNOWDON,
PRES. GARFIELD, SNOW WHITE,
HINZE'S WHITE. Price, \$10.00 per 100.

Also fine large plants of Vinca Harrisonii from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of SINGLE PRIMROSES, at \$8.00 per hundred.

BOUVARDIA, good strong one year old plants at \$12.00 per 100.

*** VIOLETS, ***

MARIA LOUISE, at \$8.00 per 100
I also have a large stock of Roses—Teas, Hybrid Teas, Noisettes, and Polyanths, at \$8.00 per 100. Strictly our selection; clean, strong plants in 2 and 2½-inch pots.

GEO. W. MILLER,

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ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World.

Introducer and Grower of all the leading Novelties.

Catalogue free on application.

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VIOLET PLANTS FOR SALE.

Good healthy plants in bud, and true to name. Double blue Marie Louise, and early single blue. Car. at \$2.50 per 100, \$2.00 per 100, 500 at 1000 rates. Also a large lot of double Swanley White which has to be disposed of on account of being in open ground and no way to protect them, at the low rate of \$2.00 per 100, \$18.00 per 1000.

All goods sent C. O. D. one-third cash must accompany order. Cash must also accompany orders from unknown parties.

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FOR SALE.

Carnations from open ground, large clumps of WHITE LAPURITE, SUNRISE, SEAWAN, SCARLET GEM, CHESTER PRIDE, MISS JOLIEFFE, SCARLET QUEEN, LADY EMMA.

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CARNATIONS. VERBENAS. ROSES.

I am receiving orders for rooted cuttings and young plants to be delivered in January, February March and later.

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Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,

BY THE HUNDRED OR THOUSAND.

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Many additions of Choice New varieties this season.

Send for New Catalogue.

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ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., Govanstown, Md.

ROSES.

Per 100
Hybrids from open ground, strong... \$8.00 and \$10.00
Teas .. 6.00 and 8.00
Mermet, Bon Silene, (from 3½-inch pots)..... \$ 7.00
Safredo, S. d'un Ami, " 3-inch pots..... 5.00
La France, for forcing/ " 2½-in. pots..... 4.00
Ampelopsis Veitchii and Quinquifolia, pot-grown, first size \$8.00, second size \$6.00 per 100.
Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots, \$10.00 per 100.

CARNATIONS, Strong Clumps.

Peerless, Edwardsii, Hinze's White, Portia, Crimson King, Philadelphia, Hinsdale, James Garfield, Mrs. Garfield, Aletiegria, Fred Johnson, Andalusia, Annie Webb, J. Gould and Century.
1st size, \$5.00 per 100; \$40.00 per 1000.
2nd size, \$5.00 per 100; \$45.00 per 1000.

VERBENAS.

Perfectly healthy out-door rooted cuttings, Mammoth set XX collection, \$1.25 per 100, \$10.00 per 1000. General collection, variety unsurpassed, \$1.00 per 100, \$8.00 per 1000.

VIOLETS.—Swanley White, \$6.00 per 100; \$50.00 per 1000. Marie Louise, \$5.00 per 100; \$40.00 per 1000.

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" CUSPIDATA (Star of Quedlinburgh.)

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Greatest sensational Novelty—Grashoff, 1888. Special offer, with colored plate. Wholesale prices gratis. General catalogue ready soon.

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HIGH GRADE PANSIES

A SPECIALTY.

After a thorough trial of the most noted strains of Pansies in cultivation, we confidently recommend the following to the trade as a long way ahead of all others, for size or colors:

Our Improved Giant Trimardeau as the best for market.

And New French Fancies as Extra.

Trade Packages of either variety at \$1 each. Seed of our own growth.

We have proved these to be the highest quality of Pansies at the present day, and are the same as we exhibited in Boston in May last.

DENYS ZIRNGIEBEL,

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WATER LILIES,

All Colors.

Young plants suitable for late flowering
NOW READY.

Send for prices.

BENJ. GREY, Malden, Mass.

FOR SALE.

A few thousand Magna Charta Roses, own roots, field grown, very large and strong. Also 5,000 one year old Multiflora Jap. (Dawson's stock) are left for fall delivery. Ask for prices.

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NEW CHRYSANTHEMUM

“MRS. ALPHEUS HARDY,”

— AT THE —

ORCHID AND CHRYSANTHEMUM SHOW, UNITED STATES NURSERIES, SHORT HILLS, N. J.

NOVEMBER 19 TO 24, INCLUSIVE.

Trains leave New York from Barclay or Christopher Street Ferry, 7:30, 8:30, 10:10, 11:10, A. M.; 1:30, 2:30, 4:00, 4:30 Express P. M. Returning, leave Short Hills, 9:50, 10:20, 11:00 A. M., and 12:15, 1:44, 3:00, 5:08, 6:54 P. M.

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I have the **NEW MAMMOTH**, and all the very best varieties grown for the Florist Trade now ready. (Only first-class varieties kept in stock.)

I shall be able to supply 25,000 good, strong **ROOTED CUTTINGS** weekly up to May 1, 1889.

CARNATIONS, ROSES AND PANSIES.

A fine healthy stock to select from. Send for my Wholesale Price List before placing your order elsewhere.

FRED SCHNEIDER,

WHOLESALE FLORIST.

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MUSHROOM SPAWN. Best Mill-truck. Of unsurpassed quality.



Can be thoroughly relied on to produce a fine crop of the best Mushrooms. Our stocks are the largest and freshest in the country. Quality guaranteed the BEST IN THE WORLD. Why spend your money on doubtful quality, when you can get the best at a price that will please you? We sell at rack-bottom prices for first quality spawn.

By mail, post-paid, 22 cts. per pound, Five pounds for \$1.00. By express, Ten pounds for \$1.20, Fifty pounds for \$5. One pound of spawn will plant a space 3 feet by 4. Special prices for LARGER quantities. 21 N. Thirteenth St., John Gardiner & Co., Philadelphia, Penna.

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Moore's Diamond and Cayuga, early black, No. 1 vines, 50c. each, \$5.00 per doz.
Niagara, Empire State, Ulster, Poughkeepsie, F. B. Hayes, Woodruff Red, 25c. each, \$2.50 per doz.
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Warranted true to name and of best quality. Sent postpaid on receipt of price.

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If you are troubled with it, read these documents, and send for sample.

A CAREFUL MAN'S REPORT.

MONROE, Orange Co., N. Y., Oct. 8th, 1888.

MR. HAMMOND:—The sample of “GRAPE DUST” sent to me some time ago I have tried on Roses for Mildew, and so far I am well pleased with its action. It is superior to anything that I have found. Indeed, I think it will prove a specific for the disease. I am now experimenting with it for “Black Spot.”

Yours truly,

FRANK CHARLTON, ROSE GROWER.

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MR. HAMMOND:—Please deliver to our team one barrel of “GRAPE DUST,” loose.

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To better introduce, we will send samples free if applicants will pay postage or expressage.

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TRENTON, N. J.

We offer a very large stock of Erie Blackberry Plants, Asparagus Roots, Apple Trees, Peach Trees, Shrubbery Plants and large Evergreen Trees, Willows, Raspberry Plants, Catalpa Trees, etc. Your correspondence solicited.

Wholesale Price List and Retail Catalogue free.
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HYDRANGEAS, CLEMATIS, ALTHEAS, ETC.

	Per 100	Per 1000
200 Hydrangea P. G. 2 to 2½ feet	\$10.00	
4,000 Hydrangea P. G. 12 to 15-inches	7.00	\$40.00
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2,000 Variegated Leaf Weigela, 8 to 12-in	5.00	
3,000 Clematis Virginia, 1 year layers	6.00	60.00
1,000 " Flamula, 2 years	6.10	
1,000 " Viticella, 2 years	6.00	
500 " Crispa, strong, 1 year	10.00	
1,500 One year Climbing Roses, strong	7.00	
1,000 Handsome Named Altheas, 3 to 4 feet	12.00	
1,000 Storm King Fuchsias, 2½-in. pots	3.50	25.00

D. LEE & SON,
MADISON, Lake Co., OHIO.

Louisville Exposition.

The displays of cut flowers were the most elaborate that have ever been seen in this city. C. J. Reimers had, on the first table, a palm tree, the entire trunk of which was encased in roses, and a large crescent of ferns and roses, a scythe of roses and a sheaf of wheat.

Samuel Thompson's "Old Kentucky Home" represented a large mule in white roses just entering the stable of smilax, while in the rear stood the plow in red roses. The fences were represented by fern leaves.

Nanz & Neuner had one of the most striking displays, the principal piece being a full-sized eagle in mortal combat with a huge serpent. They also had a fine display of cut flowers in baskets and various designs.

H. W. Faschman, the wire worker, had a portrait of President Cleveland in a massive floral frame.

F. Walker & Co. had a large and creditable display of various floral designs, including a sickle and wheat, a large scroll with the cross and crown, besides some handsome baskets.

Haupt & Epping had as a central figure a life size horse in flowers. Their other designs and baskets were very pretty. Jacob Schulz's display was very attractive and was the only one that contained any sweet violets.—*Louisville Daily Commercial.*

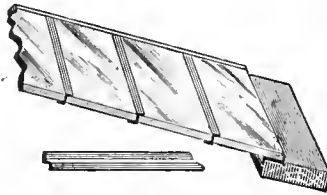


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FLORAL WIRE DESIGNS.

JAS. GRIFFITH,
THE PIONEER MANUFACTURER IN THE WEST,
305 Main Street, CINCINNATI, OHIO.
SEND FOR WHOLESALE PRICE LIST.



IMPROVED GLAZING.
J. M. Gasser's Patent Zinc Joints,



For putting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil burners for steam boilers. Send for sample and price list.

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101 Euclid Avenue, CLEVELAND, O.
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ESTABLISHED, 1866.

Floral Wire Designs,

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THE EVANS CHALLENGE
VENTILATING APPARATUS.

WITHOUT A RIVAL EITHER IN COST, SPEED IN OPERATING OR SECURITY IN CASE OF STORMS.



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QUAKER CITY MACHINE CO.,
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RICHMOND, IND.

WHEN WRITING FOR ESTIMATES, PLEASE GIVE FOLLOWING DIMENSIONS:

- 1st. Give the number of sashes to be lifted.
- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.

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ONLY POTTERY MAKING A SPECIALTY OF

FLOWER POTS

FOR FLORISTS.

THE WHILLDIN POTTERY CO.,

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SASH BARS

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NO WIDE-AWAKE FLORIST need he told it will pay him to use Sash Bars, etc. made from

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Bars all Shapes up to 20 feet long.

Send for circulars and estimates.

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2 1/2-inch....	per 100, \$ 50	8-inch.....	per 100, \$ 5.50
3 1/4-inch....	" 53	9-inch.....	" 6.75
4-inch.....	" 88	10-inch....	" 8.00
5-inch.....	" 1.38	12-inch....	" 23.50
6-inch.....	" 2.20	14-inch....	" 50.00
7-inch.....	" 3.75	16-inch....	" 100.00

No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to HILLFINGER BROS., Fort Edward, N. Y.

VOLUME III OF THE

AMERICAN FLORIST,

BOUND IN HALF LEATHER. PRICE, \$2.25.

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Wishing to reduce stock of small sizes of flower pots at once OFFER GRAND CUT DURING NOVEMBER.

10 PER CENT. DISCOUNT

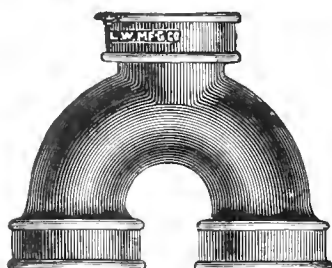
On 10 sizes of pots, 4-inch and under, for one month only. Splendid chance for Pacific Coast customers, and those in Canada who have to pay 35 per cent duty. Frt. to Boston, Detroit, Toronto and Hamilton only 76c. on a crate of 400 pounds. On receipt of cash we deliver at once free on board here. Our pots cannot be beaten, and we take this means to attract new customers, knowing they will, after trying us, always buy of us at our regular prices which are exceedingly low by the crate.

3,150 Thumbs, \$8.00;	1,300 special 3-in., 6.00;	160 6-inch 3.50;	190 4-inch, /
2,625 2 1/4-inch, 8.00;	1,150 3-inch, 5.50;	108 7-inch 4.00;	125 5-inch, .....\$5.00
1,875 2 3/4-inch, 7.25;	875 3 1/2-inch 5.50;	60 8-inch, 4.00;	80 6-inch /
1,900 No. 3 Rose, 7.00;	600 4-inch, 4.75;	30 7-inch, /	This last 35 crate we offer 10
1,900 No. 2 Rose, 6.40;	300 3 1/2-inch, 3.50;	20 8-inch, /	per cent discount on as well
1,500 No. 1 Rose, 6.50;	320 5-inch, \$1.40;	16 9-inch, /	as first ten crates.

We sell crates of mixed sizes, too, packed to order. See our ad. on page 124 of last issue. Those who buy large amounts are especially invited to write to us for any special terms desired. We will give samples and accommodate all. Write at once for full price list and freight rates.

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Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

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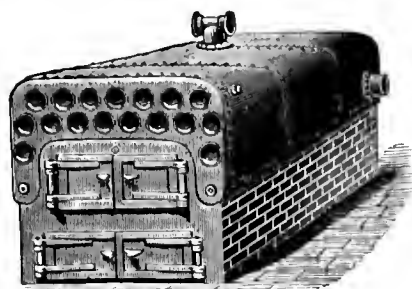
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THE FLAT TOP TYPE

Wrought Iron Hot Water Boilers.



Capacity from 350 to 10,000 feet of four-inch pipe.
Send for New List.

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Ives' Putty Machine.

Patented Jan. 8, 1887.

The best device ever invented for laying putty. With this you can make old leaky sash perfectly tight without removing the glass. It will do the work of five men in bedding glass.

Sent by Express on receipt of price, \$3.00.

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For destroying ground moles in lawns, parks, gardens and cemeteries. The only PERFECT mole trap in existence. Guaranteed to catch moles where all other traps fail. Sold by seedsmen, Agricultural Implement and Hardware dealers, or sent by express on receipt of \$2.00 by **H. W. HALES, RIDGEWOOD N. J.**

Conservatories

GREENHOUSES, ETC.

Erected in any part of the U. S. or Canada
Glazed on the

Helliwell Pat. Imperishable System
OR WITH PUTTY.

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HORTICULTURAL AND SKYLIGHT WORKS.

Offices, 144 Pearl Street, NEW YORK.

HOT BED SASH VENTILATORS. WRITE FOR PRICES.

CASH OF FULL SIZE OR PINE or CYPRESS. WE CARRY A FULL STOCK OF

JOHN L. DIEZ & CO.,
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12 1/2 and 16 foot lengths.

"15 YEARS' EXPERIENCE. THE GURNEY SAVES 33 1/3 PER CENT IN FUEL."

Letter from Thomas Gray, of Fitchburg, Mass., in reference to

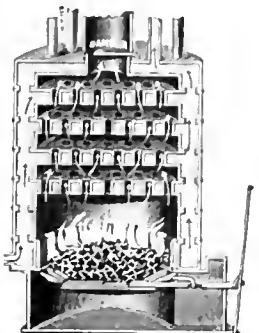
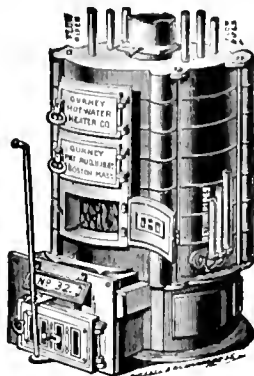
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Dear Sirs:—In answer to yours, asking my opinion of the Gurney Hot Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.

Yours truly,

THOMAS GRAY, Florist.

Illust. Catalogue & Testimonial Sheet Free.
GURNEY HOT WATER HEATER CO.,
237 Franklin Street, BOSTON, MASS.



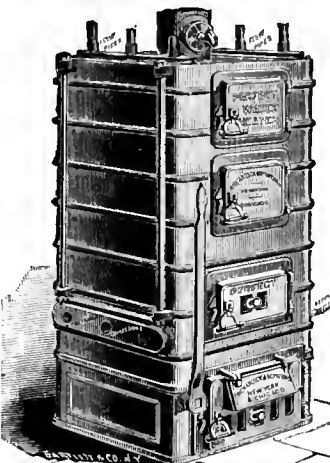
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Reduce your Coal Bills

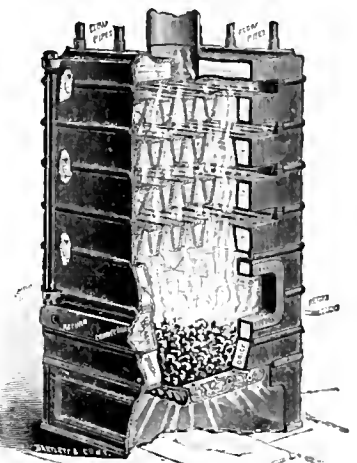
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"Perfect"
(Trade Mark)
Hot-
Water
Heater.



THE MOST POWERFUL HOT-WATER BOILER EVER CONSTRUCTED.

These Heaters contain more features for saving fuel and labor, and are better adapted for heating Conservatories, Greenhouses, Dwellings, Offices, Schools and Public Buildings than any other makes of Hot-Water Heaters. By reason of their enormous heating capacity and increased square feet of boiler surface, and positive circulation, they are the only rapid circulating Hot-Water Heaters made. At a test made the 19th of January, 1888, at the works of the A. A. Griffing Iron Co., Jersey City, N. J., (manufacturers of the "BUNDY Radiators")—where all the leading makes of Hot-Water Heaters have been tested—more power was developed, with less fuel, than any heater ever tested there. SEND FOR CIRCULARS.

RICHARDSON & BOYNTON,

MANUFACTURERS,
84 LAKE ST., CHICAGO, 232 & 234 WATER ST., NEW YORK.
Mention this paper

PIPE AND FITTINGS FURNISHED

—TO—
PLANS AND SPECIFICATIONS.
Contracts solicited for
HEATING GREENHOUSES.
Most improved plans.
ALL WORK GUARANTEED.
Prices furnished on application.

E. A. STIMSON & CO.,
No. 22 and 24 Sears Street,
DAYTON, OHIO.

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VOLUME II.

FAIR HILL TERRA COTTA WORKS

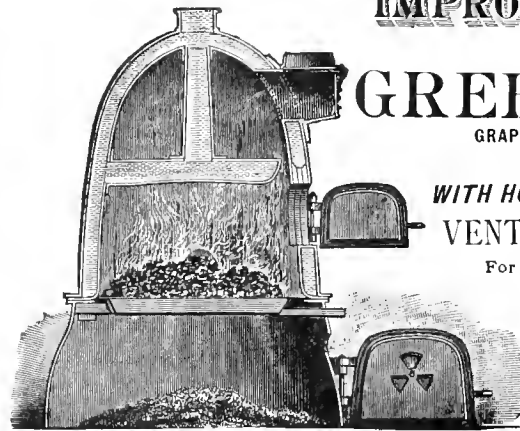
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No. 2341 N. Seventh St., PHILADELPHIA.
Illustrated Catalogue free upon application.

Handsomely bound in cloth with leather back and corners, and title lettered on back in gilt, may now be had from this office.

Price, \$2.25.
AMERICAN FLORIST CO.,
54 LA SALLE ST., CHICAGO

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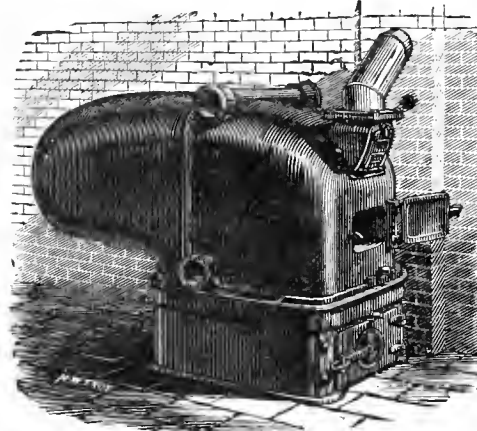
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FINE PEARS.—Mr. M. P. Dulty, Zanesville, O., sends us specimen fruits of Sheldon (russet variety), and Duchesse d'Angouleme pears of unusual size, one of the Sheldon's measuring 3 3/4 inches in diameter. Both kinds were very finely flavored.

JAPANESE ANEMONES.—It is now the 20th of October and I still have any amount of Honorine Jobert flowers. Where the rains and wind have not beaten and tarnished them out of doors they are quite good yet and many to open, but where grown in a cold frame now boarded up three feet high back and front and covered over at night with sheeting or sashes the anemone flowers are as fresh and white as snow and in as great profusion as they were in the middle of September. W. F.

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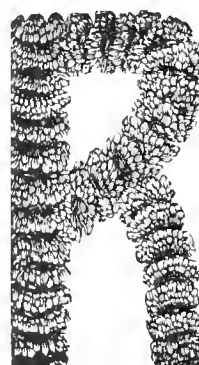
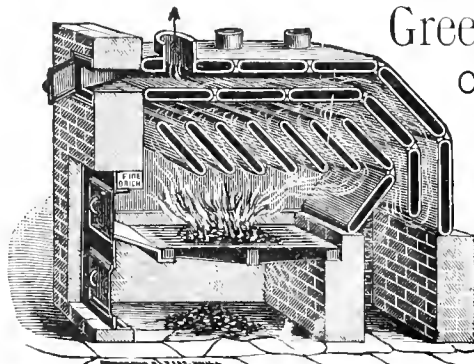
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Vol. IV.

CHICAGO AND NEW YORK, NOVEMBER 15, 1888.

No. 79.

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice president; Wm. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

THE PRINTED REPORT of the proceedings of the fourth annual convention of the Society of American Florists held at New York last August has been received from Secretary Stewart. Certainly every member of the society—and every member of the whole trade—will have reason to be proud of this record of work accomplished by the national society. It bears evidence of careful and painstaking work on the part of the secretary in its compilation, and its typography is excellent. The uniform high character and practical value of the essays presented at the New York meeting was certainly remarkable when compared with those presented at conventions of similar bodies, and these with the interesting discussions on them appear complete in this volume of 100 pages, and we believe that no florist who is worthy of the title can afford to be without it. If you are not already a member of the society send \$2 now to Secretary Wm. J. Stewart, 67 Bromfield street, Boston, Mass., and secure the report for this year. This will also entitle you to membership up to January 1 next, after which the membership dues will be \$3 per annum.

S. A. F.

The printed report of the New York meeting has been mailed to all members whose dues for 1888 have been paid, and should now be in the hands of all those entitled to receive them. A copy of the constitution and by-laws has also been mailed with each report. Any member not receiving his report should notify the secretary at once. Those whose dues are unpaid should attend to the same at once as the number of reports is limited.

THE OPENING DATE of the New York chrysanthemum show was changed at the last moment from Nov. 13 to Nov. 8, hence we are enabled to give in this issue a few preliminary notes on this show. A full report will appear in next issue.

The Orange Chrysanthemum Show.

Naturally it was a success—it always is. Good plants and good flowers—abundant enthusiasm and executive ability together make a very efficient combination for a successful show. There were some few weak points, but they were insignificant amid the general excellence. The weakest point, as at every show of this kind, was the display of designs. There seems no actual reason why a rigid design of chrysanthemums should exist, but people will make them. There were some baskets here which were built on the same model as a store-made birthday cake, round and smooth, with a pattern on top which looked as if it might be made in gum drops. The general effect was enough to bring tears. But there were some few compensating arrangements, in the shape of loose masses of flowers, which were really artistic.

General arrangement? That was much improved by the addition of large palms, backing the plants and thus preventing any bareness. The pyramids of chrysanthemums, such a feature at previous shows, were not really so good this year.

The star of the show was the much heralded "Mrs. Alpheus Hardy," unquestionably the most unique introduction of recent years. One might say the most unique introduction in the entire list of chrysanthemums without being far out. It is a large globular flower, long-petalled like the Japanese, yet in regularity of form resembling the Chinese type. In color, purest white, free from faintest tinge of color, and most remarkable feature of all, the backs of the petals are covered with long silky hair. The effect is indescribably strange and beautiful, it can be likened to a white ostrich tip, and nothing else. One can see at once what an acquisition this must be to the trade. Its keeping quality is as yet unknown, but the texture is thick and firm. It was a lovely sight to see these flowers resting on a bed of adiantum; perhaps the only chrysanthemum which does not become coarse by comparison with delicate ferns. Messrs. Pitcher and Manda were the exhibitors; they possess the entire stock. This flower received special honors. The committee reported on it thus: "New chrysanthemum Mrs. Alpheus Hardy your committee consider is the most remarkable acquisition in the way of new and beautiful plants that has been introduced in recent times."

The orchid display for which Mr. Sander offered a special prize—a magnificent bound volume of "Reichenbachia"—was taken by Pitcher and Manda. Their display included some of their remarkable cypripediums. C. Faircanum, a little gem, C. Leeanum and C. Arthurianum were among them. That new lalia, L. Eyermannii, was there, a pretty thing. A good plant of Oncidium incurvum with

three tall spikes of bloom, was noticeable; so was a big pan of Cypripedium insigne. The collection would have attracted attention anywhere.

A fine group of decorative foliage plants attracted attention near the door. A big tree fern in the centre; Anthurium Andreanum, with its showy flowers; Pan-cratiun oratum, sweet and snowy, and several fine crotons. One oddity with metallic leaves would attract attention anywhere, especially if announced by name. It was Camphylobetris Ghiesbrechtiana. Adiantum Parleyense, Asparagus plumosus nanus, and other dainty plants completed a most beautiful group. Pitcher and Manda were exhibitors, first prize. The same exhibitors received second for ferns—a handsome group, though their finest gleichenia was in the group of foliage plants. First prize for ferns was taken by Mr. Burke, of Short Hills; it included a plant of Adiantum capillus veneris of tremendous size; many authorities declared it the finest plant of the variety extant. It was certainly remarkable.

But this was a chrysanthemum show. There were the usual tremendous cut blooms; one of Mrs. Frank Thompson, exhibited by John Cullen, gardener to Mr. Wilbur, Bethlehem, Penn., was ten and a half inches in diameter. This exhibitor made a fine display of cut blooms.

First prize for 24 distinct varieties in pots was taken by Geo. McClure, formerly gardener to Mr. Spaulding, who was conspicuously absent to the regret of those who remember his former fine displays. Mr. McClure's display was exceedingly fine.

Second prize in the same class was taken by Michael Doyle, gardener to Mr. Ferry.

E. Williams, of Montclair, showed some native grapes—not for competition.

For 10 standards, Mr. Barr first, second Mr. McClure, gardener to Mr. Brown.

Single specimen, first, Geo. McClure; second, Michael Doyle; grafted standards, Mr. Barr first.

Pyramid, Dennis Brachen second, first withheld.

For 50 dwarfs, first, William Barr, superb; second, Geo. McClure.

Cut flowers, first, John Cullen, Bethlehem, Penn.; second, United States Nurseries, Short Hills; third, Geo. McClure. The remainder of the prizes were divided among several, United States Nurseries taking first from four classes.

For best seedling of any section, first, Thos. Jones; second, Geo. McClure.

Best 12 seedlings, Thos. Jones; second, Geo. McClure.

For roses, Mr. May made a regular sweep; five first and two second premiums, a fine exhibit. Mr. F. L. Moore, of Chatham, made a meritorious exhibit.

Mr. McGall took second with his asters, first was withheld.

Best collection of palms, Alexander McPherson, gardener to Mr. Burke, of Llewellyn Park—fine too.

Best cycas, Mr. Brown, Orange, Geo. McClure gardener.

Best new and rare plant, United States Nurseries; second, Mr. Burke.

Seedling carnations, first, John McGowan.

Too much can not be said in favor of the new chrysanthemums exhibited by Mr. William Barr. Mrs. Wm. Barr is a wonderful crimson, incurving petals lighter beneath. Peter B. Mead is perhaps the most remarkable golden yellow, with long tubular petals. Sunset is what its name implies, glorious yellow shading into orange and red. Mrs. Carnegie and Miss Alice Brown are more fine ones. Mr. Barr's exhibit was of remarkable beauty all through; there could be no question of its superiority. Mr. McClure also deserves special mention and Mr. Michael Doyle, all well known as prize takers.

Philadelphia was represented by Messrs. Harris, Lonsdale, Burton and Craig, who with Ernest and Rudolph Asmus, Mr. Henshaw and others, acted as judges. Mr. Fewkes, of Boston, was present. Mr. Pitcher gave a pleasant dinner to these visiting gentlemen, an attention much appreciated.

Mr. May had work enough for two, but he didn't seem to mind it, and there was enough sociability about the affair to furnish half a dozen ordinary societies. It was a grand success, and we only hope it may be repeated for many years to come.

EMILY LOUISE TAPLIN.

Brevities From the New York Show.

At time of writing this show is hardly under way, so it would be obviously unfair to attempt any criticism. It promises well, certainly.

It is held in a large marquee in a corner of Union Square. A flower show in a tent is truly British, and as such should appeal to the New Yorkers. We don't know yet who are the lucky prize takers. Mr. Spaulding makes up for his absence from Orange by a large and fine exhibit; Mr. Barr is here with his beautiful dwarfs and John Cullen, of Bethlehem, has a lot of immense cut blooms. Thos. Tricher, gardener to Judge Benedict, exhibits fine plants and flowers grown out of doors.

Mr. Hamilton came from the pleasant land of Pittsburg, where natural gas and coal trains perennial bloom, to show Mrs. Andrew Carnegie; her first appearance in this form. Description will be given later. Mr. Fewkes brought from Boston a lot of unique blooms, being the hatch among which "Mrs. Alpheus Hardy" made her appearance. They are most remarkable; one which may be described as the most noticeable is Lillian B. Bird, a large tubular-petaled flower, delightful shrimp pink in color. Neesima is a strange yellow, and all this batch present marked distinguishing characteristics. Most of the well known exhibitors were present; later report will give their names and honors.

Chrysanthemum designs were poor; the artist who learned bouquet making in a broom factory appears still to be devoting his attention to this flower.

J. G. Bebus had some fine baskets of roses; John Finu displayed his usual taste in plateau and basket of ferns, palms, etc.

Of course Mr. May had some fine roses; also John Henderson and J. H. Taylor. These gentlemen are always looked to for such flowers.

Some good decorative plants relieved the chrysanthemums, and the arrangement as far as can be judged in its imperfect stage, will be effective and artistic. The general opinion is that a well filled marquee is better than a dim and sparsely furnished hall, an opinion in which many will concur. Detailed report in next issue. EMILY LOUISE TAPLIN.

Chrysanthemum Show at Chicago.

Florist M. F. Gallagher's chrysanthemum show at the Eden Musee was an agreeable surprise to local florists. Mr. Gallagher is certainly entitled to much credit for his enterprise in getting up unaided such a very creditable display.

The hall was well filled with plants, and while there were none which might be called really fine exhibition plants, they were arranged in masses of color that created a pleasing effect and apparently excited the admiration of the average visitor more than would the handsomest specimens of cultural skill.

All the plants shown were purchased outright by Mr. Gallagher and the show was given strictly as a business venture. A remarkably liberal feature was that after buying the plants, prizes for best, second best and third best collections was offered. The growers of the plants should certainly be satisfied with this arrangement—he paid for their plants and then secure prizes in addition. The first prize was a large silver fruit and flower holder; second, a large silver cup; third, a smaller silver cup, awarded to Messrs. John Goode & Co., Chicago Floral Co. and John Laue respectively.

The show was continued for a full week, fresh plants being substituted for those which began to look bad. The displays of cut chrysanthemums and cut roses were changed daily, and some very handsome flowers were shown. A table containing handsome specimen blooms of Chrysanthemums Golden Band, M. Delaux, John Webster, Daimio, Mrs. T. Norris, Soliel Levant, White Venus, and other good kinds, some of them decided novelties, attracted much attention.

A very pretty feature was an old tree covered with blooming orchids. A table spread with a cloth of white chrysanthemums on which stood a vase of pink filled with yellow was the only thing in the way of designs, though numerous baskets filled with chrysanthemums and other flowers were scattered through the hall. Blooms of Lapageria rosea and alba and of Anthurium Scherzerianum occupied a place near the orchids and were admired by visitors as members of that family; one lady pointing to an anthurium remarked to a friend that it was "the largest red orchid she had ever seen."

Two large wicker shoes were filled with chrysanthemums and labeled "Chicago," while two of fully twice the size similarly filled were labeled "St. Louis." This caught the crowd, but a St. Louis lady who visited the show took the liberty of transposing the signs and they remained so for some time before discovered, so the joke worked both ways.

The roses were arranged in vases with a bit of Adiantum Farleyense in each. This added much to the general appearance of the table. The ownership of all plants and flowers by one individual permitted arrangements and changes that would probably have been impossible under the usual circumstances and the general effect was undoubtedly heightened in consequence.

In spite of the large outlay the show was a financial success which is certainly gratifying. A bulb show under similar conditions is promised for early spring.

WE UNDERSTAND that the chrysanthemum show at the Cincinnati exposition occurred as announced, but strange to say have been unable to obtain any facts, even in response to requests. Can it be possible that the Cincinnatians were unable to make it the howling success that was anticipated? Speak up Cincinnatians.

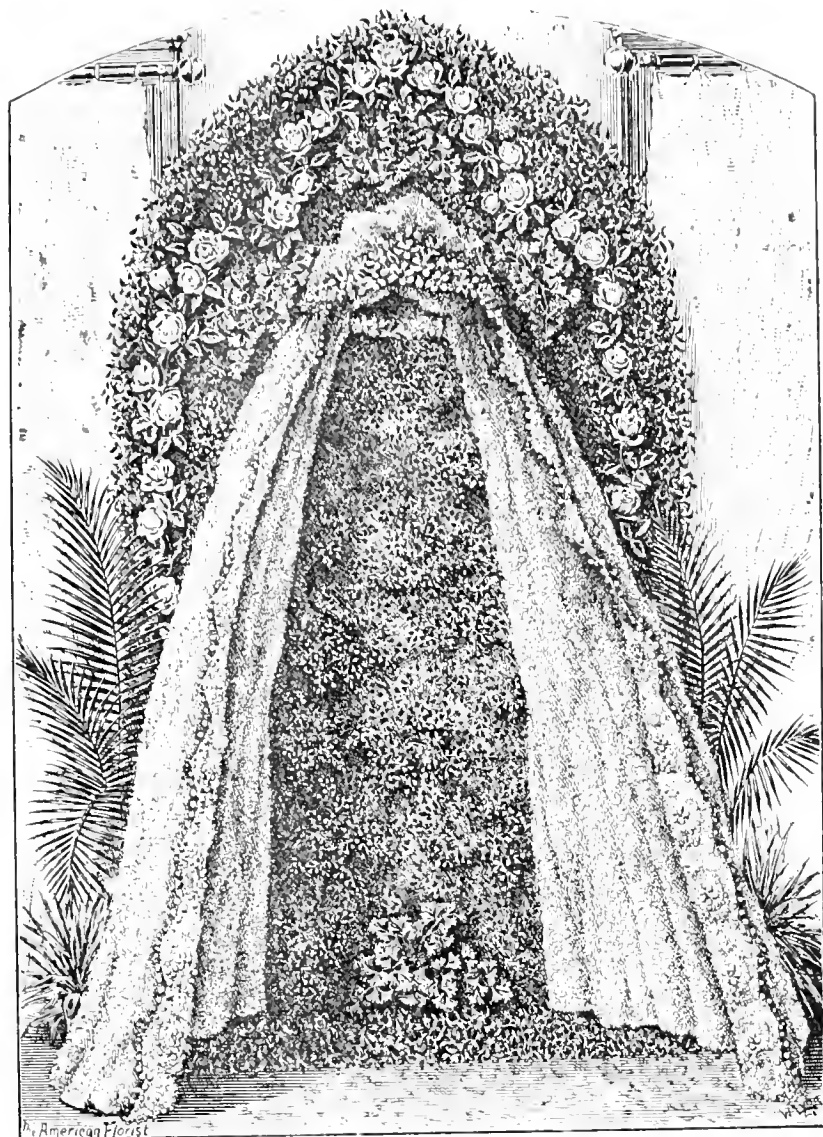
John Henderson.

The retirement of John Henderson from active business on the first of October of this year, is a noteworthy event in the history of American floriculture. Mr. Henderson comes of a family famous in horticulture; his father was E. G. Henderson, well known as the late head of the large nurseries at Pineapple Place, London, England.

The subject of this sketch came to America about forty years ago, being then in his thirty-first year. What occupied his busy brains and hands for the first fifteen years of his residence in this country is not known to the writer, who first knew of him as a partner of the late John Taylor in the florist business at Bay Side, Long Island, N. Y. At that time the firm grew a miscellaneous collection of plants, and were the first to send cut flowers to the New York market in any considerable quantities. Mr. H. superintended the growing of the plants and was then, as now, an adept in all that pertained to plant culture. He was the first man in America to organize and carry to practical success, a chrysanthemum show; the show was held at Bay Side, and while far behind many of the shows which are held all over the country in these latter days, it was a revelation to most of the visitors at that time.

He remained in partnership with Mr. Taylor for ten years and then removed to his present location at Flushing, L. I. At this place he turned his attention to the growing of the better varieties of zonal and other pelargoniums, fuchsias and a few other soft-wooded plants; these he grew in what was then considered immense numbers and the fine specimens he turned out have seldom been equaled, and never surpassed, even with all the added experience up to the present time; the good work in this department and the quantities he sent into New York raised the standard of the successful market plant in that vicinity many degrees; he really taught the New York florists of that day how to grow such plants to perfection. A few years later he abandoned the growing of these plants in pots on account of the distance from New York, which entailed considerable expense in delivering them, and turned the whole of his now immense area of glass into the cultivation of cut flowers; in this branch he has been pre-eminently successful.

He has done more to raise the standard of cut flowers than any man in this country; he has been a pioneer and leader in growing most of the flowers that have been popular in the past quarter of a century, and has been the introducer of more sterling good things; to him we are indebted for discovering the merits of that most useful of all roses, Perle des Jardins; he also, before any of his brethren in the trade were aware of its good qualities, was growing thousands of Papa Gontier; he raised and introduced the



NEW WEDDING VEIL CANOPY

Snowdon carnation; the hardy pink Mrs. Simpkins (Snow), and many other plants most useful in their day; his recent success in forcing magnificent blooms of Magna Charta and other hybrid roses, in immense numbers in the early days of winter, are too well known to need more than mention.

While dwelling on his remarkable success in his private business his discharge of public duties as a horticulturist and as a citizen must not be overlooked; he it was who resuscitated the New York Horticultural Society some years ago when it had lost nearly all its members and showed but few and feeble signs of life; and as a result of his force and energy (with the assistance of a few bright spirits notably Wm. Davidson, the secretary at that time), there was thrown open to the public the grand horticultural exhibition in Madison Square Garden, which has never been equaled in this country, and which was financially and in every way a grand success. It is sad that the New York Society has again fallen into a dormant state, but even now, with all the lamentable lack of interest, something

good from John Henderson is to be seen at every exhibition.

Mr. Henderson has also been one of the strongest supporters of the Society of American Florists and has been present at all its conventions; at the first meeting he told the younger brethren the secret of his success in life; it was constant, persistent work. "When I came to this country," he said, "my time was from 4 o'clock in the morning until dark at night." That constant work in gardening, if coupled with a temperate life, does not hurt the health, his present vigor of mind and body amply testifies. He also, in addition to his work as a horticulturist, has for many years found time to discharge the duties of village trustee in Flushing; is an active deacon and trustee in the Episcopal church; is president of the Niantic Club of Flushing; vice president of the Flushing savings bank, and has been one of the most active spirits in the building of the recently finished charity hospital at Flushing, to which he donated five acres of ground, admirably located, on which the new building now stands.

His love for flowers began with infancy and shows no sign of abatement, and while he has retired from active work to a richly deserved rest his interest in flowers, especially what he calls good flowers, will doubtless only end with his life.

The new firm will be known as the John Henderson Co., and the former manager, Charles Anderson, (now a partner in the new concern) will remain as superintendent. His many friends can wish him nothing better than a continuation of health and of the success he has already achieved as a grower of first class flowers. The new firm is, perhaps, the very largest concern in the country, and starts with the brightest of prospects and their establishment will doubtless continue to be one of the most interesting of places, always worth a visit from any one interested in the forcing of roses, which has become the great specialty in the Flushing greenhouses.

Philadelphia, Nov. 6. R. C.

New Wedding Veil Canopy.

A high panel with gothic top is formed of wire work covered with adiantums and roses. A tiara of orange blossoms extends from this like the top of a canopy, and from this falls a bridal veil which is worked out with orange flowers, lily of the valley and bouvardia in a lace pattern. Both slender silver wire and net are used for the foundation of the veil. Palms are placed each side the panel at the base. Klunder made this elegant design. F. A. B.

Naming Plants.

We all are very anxious to raise some new and worthy plant and reap the credit and the profit that should belong to us as the originators and disseminators. This is our legitimate right. As soon as we have raised a good thing and we know it to be good we wish to give it a name, and as we have been the raisers of it, it is only natural that we should name it after ourselves, for instance geranium James Brown, carnation John Smith or chrysanthemum Robert Jones.

Now if we of ourselves are capable of pushing our new namesake for all that it is worth and we wish almost exclusively to command the sale of our own raised plants, this is all well and good, and Brown can cry aloud for Brown till he is tired, and Jones yell out for Jones with all his might, and so on. But if you do not wish to confine the sale of these plants within yourselves and would wish to have your brother florists also take hold of your plants and help you boom and sell them, then let Brown name his geranium Bonfire, Smith his carnation Spitfire, and Jones his chrysanthemum Golden Ringlets. Then all of you can join in the booming and selling of the same plants without advertising one another. Brown won't if he can help it mention the names of either Smith or Jones in his catalogue because they are his rivals in business, for the same reason Smith won't mention the name of Brown or Jones, and you can't blame Jones if he too ignores his competitors Smith and Brown. Expatiating on the narrowness of this policy is all bosh, it's human nature and it's business too, and it is precisely what is practiced every day of our lives.

Remember that the names that are easily spoken, easily understood and easily remembered are the most profitable names because they appeal to the masses, and at all times strive after des

criptive names—names that will in one word convey some idea of what sort of plant it is. We seem to have a craze for naming our varieties with people's names for instance, Fuchsia Henry Clay or Gladiolus Mrs. Cleveland; well, this may be all right, but as these names convey not the least idea of what sort of fuchsia Henry Clay may be or gladiolus is Mrs. Cleveland, the florist who has an eye to business should renounce the idea of the Mr. Crowley and Miss Kitty names and give us something that will mean something.

WM. FALCONER.

[We heartily concur in the views above expressed.—ED.]



Madame Gabriel Luizet.

The H. R. rose Madame Gabriel Luizet, the subject of illustration on page 131 in last issue was sent out by Liabaud in 1877 or 1878.

The flowers in the "cut" hardly do justice to the variety, as to size. It may not be as large as Her Majesty, Paul Neyron or Baroness Rothschilds, but it will compare favorably with any other variety in general cultivation. In color it is a delicate silvery pink, pronounced by many to be the most beautiful shade of pink in cultivation. It may become lighter after having been cut a few days, but it never gets tinted with purple. It is deliciously fragrant.

It was not until 1882 that it began to attract the attention, in this country, to which it is entitled. Its popularity has been steadily increasing ever since. It would have been more generally cultivated long ago, had it not been so very difficult to raise from cuttings—both hard and green wood. The people in this country have a prejudice against budded or grafted roses, and a decided preference for "own root" plants, which has retarded its general dissemination to a great extent. It seems to have yielded more graciously to the propagators' art within the past year or two, for it is now met with in most of the prominent rose catalogues.

No rose, among the H. R.'s, is harder than the "Luizet." It gives universal satisfaction wherever planted out, but it is as a forcing rose that it commands attention and admiration. It will bloom from ten days to two weeks earlier than Baroness Rothschilds in the same house, under exactly the same conditions.

The flowers shown in the photograph from which the illustration was made were cut last February. It "breaks" free and every shoot produces a rose. As an exhibition sort it ranks as the best in England; actually heading the list according to the London *Journal of Horticulture* of Oct. 11, last. It will be a long time before Mme Gabriel Luizet is displaced, as a rose for general purposes.

Philadelphia. EDWIN LONSDALE.

Permanent Beds and Raised Benches.

Your correspondent J., on page 131, asks why the old system of growing tea roses in permanent beds was abandoned.

I do not know of any better way to answer his question than to give my own reason, which I think I am correct in saying is the same that governed so many others.

When I grew roses in permanent beds I found that the roots in spite of any amount of drainage would gradually travel downwards in search of moisture; this caused them, after the second year particularly, to often stand still for a long time during the winter when roses were most in demand, but in the spring gave immense crops of buds. After reasoning this matter over I tried the bench system as much less laborious and less expensive than the pot system. At first we made the benches eight to ten inches deep thinking it was necessary to retain the plants in steady vigor. This we found a considerable improvement so far as it went, and the balance at the end of the year was considerably in favor of the new system. But we had to use great care in watering during the winter and gradually we reduced the depth of soil and continued to find it an improvement all around till now my best benches of roses are growing in not more than two and a half inches of soil.

And any one who will give the two systems a fair and impartial trial will I think be convinced that there is more profit in growing them on raised benches than in solid beds, no matter how well they are drained.

I do not wish to say that roses will not do well planted out in permanent beds, but what I wish to say is that count every item of expense carefully and then balance the accounts at the end of the year and the benches will have considerable to their credit. At least such has been my experience, after many and repeated trials.

Summit, N. J.

J. N. MAY.

Marie Van Houtte.

[Synonyms "The Gem," *Comte de Grivel*, and other names.]

I would like to tell what I know about this rose that has been sent out under the name of "The Gem."

First I will say that it is an old variety, Marie Van Houtte, raised by Ducher and sent out in 1871. I will state why I am so positive about this rose being Marie Van Houtte. For several years I held the position of propagator in two of our large rose-growing establishments, where there were 500 varieties cultivated and 5,000 or more of Marie Van Houtte raised every year. In handling so many varieties any one that has a desire to know one rose from another can soon learn the characteristics of the many varieties and they will seem quite distinct. One characteristic of Marie Van Houtte is that on nearly all new growth can be found small dark colored thorns, very soft and numerous. This is peculiar to this rose; I don't know another variety so marked in this particular. A close observer can find in all roses some particular mark that they can easily be distinguished by. I think this one of the best ways to study the rose; the color of the flowers and the size often vary, but certain characteristics can always be found. When this variety was pointed out to me as something new I recognized it at once as Marie Van Houtte. We have no duplicates of nature and as this rose they call "The Gem" is identical with Marie Van Houtte there can be no mistake about it being one and the same thing.

I hope all florists will satisfy them-

selves about this and not put it in their catalogues of '80 as something new. There are a great many plants sent out under two or more names and I hope that the committee of the S. A. F. will at once get to work and pass on all new plants sent out. With their endorsement there would be less trouble in this direction and we would know what we are growing without paying a high price for something that we have already on the place.

I have 100 plants of Marie Van Houtte which I am growing for cut flowers, and from the way it is growing I believe it will be a good rose for forcing. It is a very good bloomer, the color and size is something to be admired. Although the color is not distinct it can be used with good effect in funeral work. There are certainly none better for out-door culture; it is quite as hardy as Safrano, in this section a very free grower, and not subject to the many diseases of the rose.

Chester, Pa.

D. T. CONNOR.

[While "The Gem" is acknowledged to be some old variety from which the label had been lost, the fact remains that several acknowledged rose experts who have examined the plants at Mr. Ramsden's place state that it is not Marie Van Houtte.—ED.]

Mme. Andre Duron.

The notes on the rose Madame Andre Duron are somewhat conflicting and I may say do injustice to a most magnificent hybrid tea variety. There is evidently a "mix" somewhere, for Mme. Andre Duron with us is exactly as described by the originator and introducer, M. Bonnaire. The description reads: "A beautiful, fresh, clear red, very large and often equal to Paul Neron in size." Now, a rose answering that description is very far from Appoline, and still farther from resembling Sir Joseph Paxton as noted in the clipping from the London *Garden*. There is evidently a case of some kind of substituting for we feel sure we have the genuine article. I send you blooms of the same for your inspection cut from young plants.

I might add that with us the rose gives every promise of being a most free and continuous blooming variety; as much so as La France or any of the hybrid tea varieties. Mr. Henry Bennett commends this rose quite highly in a letter received from him some time since, and believes it will rival our Am. Beauty for the same purpose we put A. B. to in this country. We flowered a dozen plants of this variety last winter and from the manner in which it behaved we took a great liking to it and believe the rose has unquestioned merit for American growers. Let the credulous dismiss their doubts, for it is entirely distinct from either Appoline or Sir J. Paxton and in no way resembles them.

Richmond, Ind.

E. G. HILL.

[The roses sent were certainly very distinct from Appoline and Sir J. Paxton.—ED.]

Is It a Theory?

In the issue for October 15 Mr. Craig attributes the healthy condition of his Perles to the fact that they were cuttings taken from imported stock. This is a fact that we will no doubt all eventually recognize; not that it is necessary to send to Europe for our stock, but that a constant interchanging between the growers of different localities will be a very great



PRIMROSE DAME.

aid in keeping up the health and vigor of standard varieties of roses, carnations, etc.

It was, and perhaps is yet, a custom among English gardeners to exchange cuttings of geraniums, etc. in order to keep their stock from degenerating. Darwin in one of his works, which I unfortunately have not at hand for reference, gives a number of experiments in proof of this method of keeping up and improving the vigor of plants.

I have seen cuttings taken from the same plants, one lot by the owner and another by a florist from a different locality, and those taken to the different locality were vigorous and healthy to a remarkable degree, while those grown by the owner were weak, and before the season was over two thirds were dead. As both growers used the same methods it certainly looks as though the change in locality was the cause. This matter is worth observation and consideration.

Lancaster, Pa. A. M. HERR.

French Roses.

On page 130 you quote from the London *Garden* that they consider the new

rose Madame Andre Duron identical with the old Bourbon variety Sir Joseph Paxton.

I think there must be some mistake in this somewhere, as I have this variety received from two different sources in Europe. Both are true to name I feel certain, but they are certainly not identical with Sir Joseph Paxton and while I do not consider they are identical with the old Appoline, yet they very much more resemble that variety than the first named. It appears to be a free blooming variety judging from the plants I have had growing here some months, and probably it will prove of value on further trial, but it certainly, in my estimation, does not come up to anything like what it was represented to be to me. One party wrote me from the other side that it would rival our American Beauty. Well, I do not know in what way it is to do it, for certainly in color, size or fragrance it is nowhere in the race with that standard favorite. But perhaps I am premature in my estimation (I hope I am), but we get so many grand things in name from the raisers, and after one or perhaps two years trial they very many of them go to decorate the rubbish heap.

Very many of our rose growers are getting tired of spending large sums of money on such worthless things, and the raisers of new roses and other novelties for the American market learn to retain only such as are of real merit the better it will be for them and their business. For while our people are ready and willing to pay a good price for a really good thing, yet they to-day are just as good judges of good roses as any of their European brothers and are much quicker to resent any unfair dealings. Let the raisers elevate the standard of quality before they can expect us to buy in the future.

Summit, N. J.

JOHN N. MAY.

Primrose Dame.

Mr. Hunt in qualifying his remarks made at the New York meeting on this rose in your last issue, exhibits a fear lest he may have said too much in its favor. Now I would go even farther than Mr. Hunt, and recommend this rose to every one who has use for a beautiful rose.

Grant that it does not equal in size Perle or Mermet, yet it presents charms, and beauty of coloring not to be found in any other forcing rose. I make this assertion and add that it will produce five buds where Niphotos or Perle will produce one, and where good culture, and its special wants are considered it can be grown nearly equal to Niphotos in size.

But as Mr. Hunt remarks, where good quality, and quantities of buds are required give Primrose Dame a trial, and when once you have strong plants, this beautiful rose will not need any help to win its way into your favor.

In growth it is weak when small, but with good culture, it can be grown into strong, healthy bushes. I send you a few blooms for inspection.

Richmond, Ind. E. G. HILL.

[The blooms sent were of about the size of a medium Perle, in color a pale yellow deepening to apricot in center. Certainly a charming rose, though stem weak and foliage rather small.—ED.]

The Blue Rose Again.

And "Nemophila blue" at that! Cox, Crews & Co., of Gloucester, Eng., in their pamphlet just received tell us that they not only have actually that *rara avis*, but a great many other before unheard of wonders hitherto unthought of in the horticultural world.

They have got an orange the skin of which is so transparent that the luscious pulp shows through it. They have got a cross between the black currant and the gooseberry, a bona fide *black gooseberry*. And a hybrid between the plum and the peach, and other things of like ilk.

Are we Yankees going to be beaten? Where are now our vendors of the "Blue Roses" that flourished a few years ago, the gentlemen that offered their wares each spring from New Orleans to New York? What has become of them and of their strawberry trees that bore strawberries like coconuts? Where are their blue apples as big as pumpkins, why do they not now tell us where such things can be got, through the advertising columns of the *FLORIST*, or other horticultural magazines just as Cox, Crews & Co. are doing through the London floral magazines? Does the *AMERICAN FLORIST* question the existence of these wonders of the vegetable kingdom that it has failed so far to advertise them? Does it mean to set its hardly fledged

existence against the opinion of the venerable *Garden and Chronicle*, who evidently do not question the wonderful story, as their publishing the claim endorses it?
PETER HENDERSON.

Jersey City Heights, N. J., Nov. 3, 1888.

[The AMERICAN FLORIST would certainly not admit to its columns an advertisement of such impossibilities as those described in the adv. mentioned. The blue rose confidence game is now so venerable that it bears moss of immense length, and that any one should attempt now to work such an ancient swindle through the horticultural press shows a remarkable confidence in the gullibility of the public. And that horticultural papers of high standing should admit advs. of such palpable swindles is indeed surprising.—ED.]

Substitution.

We give below a copy of a card posted up in the packing room of an establishment doing a catalogue trade, for the instruction of employes filling orders. This concern indignantly denies that substitution is ever practiced at their place, but admits that "errors will occur in spite of every precaution." After perusing this card it would seem that it would be largely an "error" for a customer to get even one variety ordered true to name.

	Safrano,
	Jean Pernet,
Perte des Jardins	Mme. Margottin,
	Isabella Sprunt,
	Marie Van Houtte.
Duchess Edinburg	Mme. de Vetry,
	Aline Sisley,
	Souv. de David.
The Bride	Cels. Tea,
	Bella,
	Mlle. Rachel.
Mabel Morrison	Coquette des Blanches,
	Olga Maria,
	Perfection des Blanches.

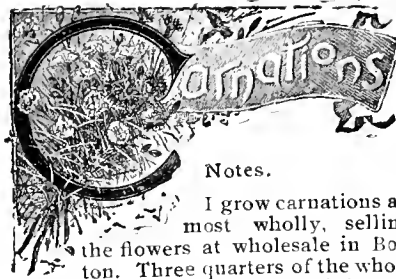
We are informed that the list is changed from time to time to suit the stock on hand. No wonder that they are always able to "fill complete" any order received.

Let us no longer dally with this matter. Decisive action is necessary. The substitutor is a criminal and should be punished as such. He is guilty of obtaining money on false pretenses.

If the trade or the national society would crush out this practice let them take legal action in every case where conclusive proof can be obtained. Fear of the consequences would then deter those who have lost all sense of honor. The FLORIST stands ready to publish to the trade the names of any who may be convicted.

Catalogues.

Are we not over-doing this catalogue business? We receive catalogues with long lists of plants, from concerns which would probably find it difficult to house one plant of each kind that they catalogue. Such concerns must certainly have greater temptation to practice substitution than larger ones, and it seems to be almost irresistible to some with acres of glass. Is it wise for these very small concerns to issue such a catalogue? We believe that it is not in the majority of cases. Don't try to do too much! Don't attempt to do both a local and catalogue trade. And above all don't send out a catalogue until you are able to spell at least a few of the plant names correctly.



Notes.

I grow carnations almost wholly, selling the flowers at wholesale in Boston. Three quarters of the whole are white; crimson next, then pink, yellow and variegated.

Locality seems to have much to do with the success of varieties. Twenty years ago DeGraw was my best white; now I have given it up on account of disease.

I have tried a large number of sorts from different sources and have grown a great many seedlings. Some of the latter are becoming widely known. Among them Anna Webb, Florence and Silver Lake are some of the best. I have this season a number of new ones of my own on trial, and some that I purchased. I have Anna Webb for crimson; Florence, soft scarlet; No. 82, (new) a fine early white; No. 84, dwarf white; No. 81, pure lemon yellow; No. 89, Naples yellow; No. 88, yellow shaded red; Silver Lake, late white.

Silver Spray made a good growth in the open, but the last of August the lower leaves began to turn yellow. Since putting in the house it is doing better. It is early, the flowers large, somewhat loose petaled, and some of them split. I look for fine flowers later on.

White Gem is not an early pink. A few straggling stems have bloomed. The flowers are very full, sweet, and in clusters. The main crop is yet in the future, probably not before February, and promises to be abundant. This also lost its lower leaves while in the open ground, but is now looking nicely.

Wm. Swayne made only a moderate growth, and the excessive rains in August caused the lower leaves to die with the others. It is now in flower, looks healthy but the plants are small. It is dwarf, flowers large, of good substance and very sweet scented.

L. L. Lamborn is also dwarf, flowers very white, larger, and plants are stronger than Wm. Swayne.

Daisy is another white purchased. It is only a moderate grower, but is healthy having scarcely lost a leaf. Flower good size and shape, dwarf, and medium early.

I had American Florist last winter and it died on the bench. The color is novel.

Grace Wilder seems to be the best pink carnation, healthy and early, but gives a good many imperfectly colored blooms.

Of Grace Fardon I have two plants, but it makes no show beside Grace Wilder so far.

Mrs. F. Mangold is a good pink, rather late, but gives nice long stemmed flowers. I do not succeed with Boule de Nieve, it being liable to disease.

Buttercup does not flourish on my light soil. The same with Hinze's White.

I find it a good way for me to grow a number of different kinds of the same color, to secure a constant bloom by the different sorts coming into flower successively.

S. F.
Framingham, Mass.

Best Carnations.

In reply to F. H. P., page 144, can say that Buttercup is fine with me. Swayne,

Lamborn, F. G. Hill and Mrs. Cleveland are fine growers, splendid bloomers and perfectly hardy. W. W. Coles is diseased with me. Anna Webb makes a good many bad flowers. Alegatiere is not constant in color and don't bloom rich, but sometimes the flowers are fine. Hinze's White and President Garfield are A. No. 1 with me, but the last named is coming a little late. Mrs. Garfield is good for a light pink after Jan. 1.

Hamilton, O.

THEO. BOCK.

Fireplace at American Institute Fair, New York.

"The Hanging of the Crane," a prize design at the American Industrial floral display was worked out with great care and precision. The mantel-piece was composed of ivy, and there is an ornamental cluster of purple asters on one side, and a sprig of nightshade berries on the other side. There is a cricket on the mossy hearth. Andirons are of golden rod and the flame is swamp alder berries. There are ferns and Virginia creeper on the shelf.

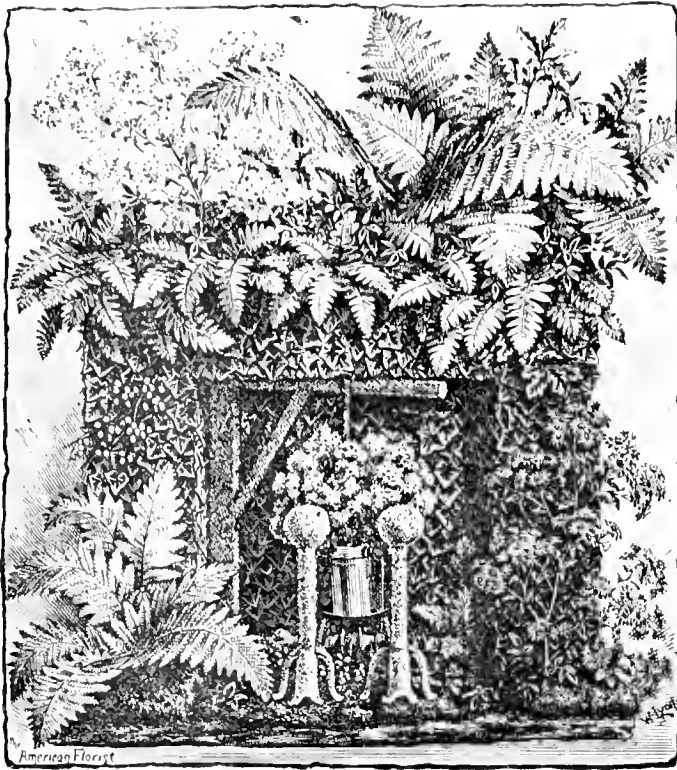
Long Island Plant Notes.

BY WM. FALCONER.

COLEUS GOLDEN BEDDER was the first to succumb to cold and wet.

THE WHITE DAY LILY is one of the commonest garden plants in country gardens; we find large clumps of it on every hand in old-fashioned village gardens and farmers' yards. But if a gardener or florist should ask for a clump just see how quickly the village lady believes her day lilies are worth something, and it isn't an ordinary but an extraordinary value she immediately sets upon them. At the same time we must admit that it is one of the scarcest plants in the trade to-day. I question if there is a firm on this continent who can supply 500 plants of it. I propagate it by division only. It has never ripened seeds with me. It loves rich moist soil and at all times a shady place to grow in. Although it can be grown fairly well in open sunny quarters, to have it in perfection we must give it shade.

VINCA ROSEA is one of the finest summer garden plants in existence. From the time it is three months old as long as it lives, be that one year or twenty years, it is continually in bloom. The typical form has rose-purple flowers; one variety has pure white and another white with red eye blossoms, and these last two are the prettiest. I use all three and in quantity, but I never keep over an old plant, nor raise a young stock from cuttings as European books advise us. I save the seed in September and raise my young stock from seed sown in winter or early spring in a warm greenhouse. The young plants love heat, and when plunged in a brisk hot bed in March or April become "o'er a' the ills o' life, victorious." By the middle or end of May they are fine stocky plants in bloom, taking plants for the market and in excellent condition for planting out. They hate shady places and dislike wet feet. They dearly love open sunny quarters, warm soil and rich if you like to make it so. Plant them in masses if you wish to enjoy them. Sometimes we have a lot of early summer flowering plants which, as soon as they have done blooming, should be cleared away. We can supply their places with coleuses, geraniums, French marigolds or zinnias, or with



FIREPLACE AT AMERICAN INSTITUTE FAIR, NEW YORK.

these vincas. I use a lot of this vinca for this purpose. It doesn't wilt, it isn't scraggy, it is in bloom when set out and it continues uninterrupted in blossom all summer.

THE ABYSSINIAN BANANA.—"Well, now I am glad that I have brought you something that you have not got," said Benj. C. Townsend, of Bay Ridge, to me one day last June as he gave into my hands a small plant of *Musa ensete* in a little pot. In the side of a large bed on an open sunny slope and dry sandy land I had a big hole made and filled with a couple of barrow loads of manure and there planted the banana. It grew immensely and by the end of September some of its leaves were seven feet long. Then I shortened back all of its leaves except the center ones which were not quite unfolded, dug up the plant and shortened back its roots enough to allow me to set the butt into a 12-inch pot which it fits snugly. In this way I will winter it in the greenhouse, then plant it out again next summer. No wonder the people extol the grandeur of this tropical giant in the flower garden. As it never produces any suckers it is always propagated from seeds.

THE PEPPER-TREE, OR CHILI PEPPER is familiar to everybody in the southern part of California. It belongs to the sumach family of plants and is a small or middle sized evergreen tree, a native of Mexico and South America, and now extensively cultivated as a garden shrub or tree in California, where its graceful habit, evergreen character, beautiful foliage and aromatic fragrance render it a great favorite. It ripens seeds abundantly and the seeds are cheap and they germinate readily and the seedlings grow

with the greatest freedom. These seedlings raised in February may be six inches high in May. Then plant them out as a border to a sub-tropical bed in a warm sunny place and you will have one of the loveliest bands of green your heart can desire, and in passing by it you can not resist the temptation to lower your hand and pluck a leaf and squeeze and smell it. And it will be such a border that you don't find in everybody else's garden. If you wish to you can lift, cut back a little and pot a few of them to winter over in the greenhouse, for they are not hardy, but what's the use of all this bother and lumbering up your house room besides, when you can buy the seeds so cheap and raise a stock of fresh plants so easily from seed every year. But they make capital pot plants if they are grown along in pots from the first. Planted out they grow from 12 to 18 inches high the first summer from seed and bushy in proportion. We raise them in this way and enjoy them exceedingly.

Adiantum Farleyense.

I notice a statement in W. W. Coles' note on ferns, in your last issue, that *Adiantum Fergessonii* is a better grower than *A. Farleyense*.

I am very sure that no adiantum is easier of cultivation than *Farleyense*, and I have yet to find the adiantum that can be grown into such a large specimen in one season. I started last April with a plant that the fronds had been nearly all cut from for decorative purposes the previous winter. This plant was in a 10-inch pot; it is now in an 18-inch, and measures over four feet through and is still growing freely. The plant sits on

the top of a twelve inch inverted pot and the fronds are almost touching the bench, completely hiding both pots all around.

I cannot understand why so many find this noble fern difficult to manage. I do not claim to have any special method of cultivation. I use for all my adiantums (with a few exceptions) nice fresh loam with an abundance of well rotted manure. I am also very careful to provide perfect drainage by using a liberal supply of fresh sphagnum over the crocks. I find it immaterial in what way they are watered. In summer I invariably water with the hose, and no need to be afraid of wetting the fronds (old cultivators advise to the contrary). When the roots have taken a good hold of the soil give an abundant supply of water, so that it will soak entirely through. In warm weather do this twice a day. There is no danger from over watering in warm weather, but once let a large specimen of this fern get dry and we may say good bye for the season. JOHN DALLAS.
Fairfield, Conn.

Asparagus Plumosus and Var. Nanus.

In answer to your correspondent, page 140, relative to these plants, I may say that they only differ from each other in their habit of growth. Though the dwarf variety certainly has a tendency to climb and under good cultivation will often attain a height of ten feet, its normal height is under two feet. In addition to this the stems are much more slender and tufted than in the type. All of our plants of nanus grown under ordinary stove plant treatment are under eighteen inches in height and may easily be mistaken for ferns. F. GOLDRING.
Kenwood, N. Y.

Asparagus Plumosus.

A Tyro wishes to know the distinction between *Asparagus plumosus* and *A. plumosus nanus*. The plumosus has a tendency to climb, but in the plumosus nanus there is no such tendency whatever. I have grown the true plumosus nanus for four years, and it climbs no more than an *Adiantum gracillimum* or *cuneatum*. THEO. BOCK.
Hamilton, O.

Hydrangeas.

Will you please allow me through the AM. FLORIST to ask the best treatment for tender hydrangeas? I had about twelve or fifteen two years ago, kept them in a house with mixed plants, growing all winter. They came out in the spring all right with large clusters of flowers and sold at a good profit. Last year I bought a hundred or more, gave them the same treatment and lost nearly half before spring, and none of them did well. P. H. P.

Foliage Beets.

In a former number of the FLORIST a correspondent mentioned the foliage beet as somewhat of a humbug. At that time when the plants were small I entirely agreed with him and destroyed all mine but six. They grew wonderfully and have been very ornamental all summer and fall and now at this writing (Oct. 29), they seem more desirable than ever, as the frosts which destroyed other foliage plants seems to have added to their beauty as they are more brilliant than ever. They have grown about two feet high, the foliage is bronze red, the

leaf stock bright scarlet with yellow center. Altogether I think they will prove a grand plant for the park or lawn.
St Joseph, Mich. T. A.



Seasonable Notes.

BY WM. FALCONER.

Examine your own collection, take careful notes and do some heroic weeding. Discard and spare not all poor, weedy flowers and plants of milky, delicate constitution.

Full double flowers are most desirable and in greater demand than are semi-doubles or singles.

Pure white, pure yellow and glowing crimson colors are more popular than are purple, red or mixed colors.

Flowers with stout, stiff necks are preferred for home or market use to weak-necked drooping blossoms.

The largest blossoms are the most admired, no matter how double and perfect in form and bright in color the small flowers may be.

From seeds saved from the choicest named varieties and hand-fertilized flowers we seldom get more than one plant in a hundred worth perpetuating, often not as many.

In light airy houses and with a little fire heat in cold, dull or damp weather we get our finest flowers.

Chrysanthemum flowers from plants growing in the open air are of a darker or deeper hue than are those grown under glass; what should be white indoors often comes purple tinged under open air treatment.

Eighty-five per cent of first year seedlings have good, vigorous constitutions, and ninety-eight per cent bloom the first year from seed.

Among hundreds of seedlings I have observed that what was very early last year is only early or second early this year or vice versa.

If any of the seedlings you saved and named last year are not as good this year as they were last, don't you think the proper thing to do with them is to cut off their flowers, then pitch their roots and bodies into the rot pile?

Visit the flower shows and take notes, but particularly avoid getting bewildered among the multitude. Be severely critical and insist upon general excellence, distinctness, size, fullness, brightness and purity, and if there is any doubt about any point give yourself and not the flower the benefit thereof. The already vast and fast increasing multitude of varieties compels this severity.

For general purposes lean favorably toward the varieties that produce a large number of good flowers upon a plant rather than towards those that produce only a few extra sized blossoms and these with extraordinary effort. And for this purpose you must give more attention to the plants in pots than to the cut flowers upon the exhibition table.

Extra early, also extra late good chrysanthemums are often more profitable than are those that bloom in the flush of the season. Keep an open eye in this direction.

Cypripediums.

The United States Nurseries, Short Hills, N. J., is believed to have the most complete and extensive collection of cypripediums known, and they are about to issue a catalogue containing a complete list.

The cypripedium is believed by many to be the coming flower for general stove and greenhouse collections and is already a favorite with leading orchid amateurs in both Europe and America. The enthusiasm for this charming genus, has been gradually increasing for years and the hybridists' skill and energy are being exerted to the utmost to increase and improve upon existing varieties, while numerous collectors are searching the unexplored tropics for new species. The existing varieties of the various species and hybrids are already so numerous and distinct, that one never tires of their beauty. A good collection possesses a daily interest, and furnishes blooms throughout the year. When small plants are procured they gradually grow into valuable specimens, so that they increase yearly in value, and become a good investment.

Their culture is simple. To be grown to perfection, they like abundance of moisture and plenty of drainage, being potted in peat fibre alone, without soil—given a temperature of 60 to 65, with ventilation and shading from direct rays of the sun.

No cut flowers blend more charmingly with roses than orchids. They are noble and beautiful in themselves, unique and graceful in form, rich and delicate in coloring, of great substance and durability. Their flowers last for weeks even after being cut.

Those who have never grown cypripediums should begin with a few of the leading species, and add to their collections as interest in them develops.

A series of articles on the cypripedium by W. A. Manda appeared in volumes 2 and 3 of the FLORIST.

Substitution.

A western florist writes that he ordered a quantity of young Bon Silene roses from a wholesale grower at a distance, and in due time received a box containing the number of plants ordered, but when some of them bloomed the flowers were small, nearly single, a dirty white in color and about as far from Bon Silene as could be imagined. He wrote the firm but could not obtain a satisfactory reply. A draft for the amount was presented through a local bank, payment of which he refused, and asks for advice as to his future action in the case.

We have answered a number of such queries by letter feeling that talk on such a matter would seem superfluous to most of our readers but as the number seems to increase we will endeavor now to relieve ourselves from any future letter writing on this subject.

If you order one variety of plants and the concern you order from sends you something else, return them at once. If you ordered beef from your butcher and he sent you pork you would send it back at once and insist on having what you ordered, wouldn't you? Well, the two cases are identical. There is no earthly chance for argument one way or the other. But if you should keep the pork and use it you would expect to pay for it wouldn't you? If you wanted the error corrected you would return the article you had received or let the matter go and pay for what was delivered.

With plants it is not always possible to tell at once whether the same are true to label or not, therefore you should accept them as correct until they prove otherwise. But when they have advanced to such a stage that they may be proved something different from what the label calls for the time to return the plants has arrived. First advise the shipper of all the facts in the case, and a wise precaution would be to call in some of the local florists to inspect the plants that they may be competent witnesses in case of necessity. In your letter to the shipper state that as the plants are not what you ordered you have no use for them and request that he advise you as to what disposition to make of them, also that unless other orders are received you will return the plants. If no reply received within a reasonable time pack up the plants as carefully as possible and ship. It don't make any difference what stage of growth or condition the plants may be in—even if they should be in such condition that they will be certainly killed by the operation, your duty is to at once return the goods, after you have used due diligence in notifying the party and have received no response.

Of course it is presumed that you have kept a copy of your order and of all correspondence with the shippers. If the case came to a suit it would be incumbent upon you to prove conclusively that the plants received were *not* what you ordered; that you used due diligence in notifying the shippers of the fact and waited a reasonable time for instructions before returning perishable goods; and that the plants returned were the identical ones you had received from them.

Some will say that they wouldn't go to this trouble for only \$10 or \$15. "I'll settle this bill, but they will never get another order from me," is a remark frequently made. We do not believe in this way of doing business. It is not business! If an error has been made by a reputable firm they will be glad of an opportunity of rectifying it, and if it has been made by some disreputable concern you are injuring the whole trade by paying tribute to a sharper. Insist on having what you order, and when you get what you order pay for it as per original agreement. Deal honorably with all men and exact the same treatment in return.

Long Credits.

We want to say a word about long credits. These are most expensive luxuries and it is remarkable how many indulge in such costly things. There are few wholesale houses that give a credit of 30 to 60 days on bills of goods that do not allow from 3 to 5 per cent off for cash in 10 days, and some Louses allow as high as 10 per cent. When you take a credit of 60 days from a house that allows 5 per cent for cash you are paying for the use of that money at the rate of 30 per cent per annum; on a credit of 30 days from a house that allows 3 per cent for cash you are paying interest at the rate of 36 per cent per annum; on a credit of 60 days from a house that allows 10 per cent for cash you are paying interest at the rate of 60 per cent per annum. If you are able to obtain credit at all you must certainly be worth some property and be able to secure a loan at the bank. If you are short of money when bills are due how much *cheaper* it would be for you to secure a loan from the bank at 6, 8 or even 10 per cent per annum, and pay your bills after having deducted the



DOUBLE LILIUM AURATUM.

discount for cash, saving from 20 to 50 per cent per annum in interest. Perhaps you hadn't thought of it in this light before.

But, you say: "I don't always pay these bills when the usual credit has expired. I let them run three or four months, sometimes longer, and so I wouldn't save so much interest by going to the bank." Ah! But is that honorable? If a bill is due November 1 according to the terms of sale and you permit it to run till March 1, you are withholding from some one money that belongs to them, not to you. You have practically dishonored a note when due. In addition to this how about your future credit with that house? Will they be as anxious for your orders as they would if you paid promptly? Will they make you *as close figures* as they would if they felt assured that payment would follow promptly when due? There can be but one answer to both these questions.

Be careful about giving long credits in your own business. Recklessness in regard to these matters has been the ruin of many a business man. The greatest fallacy of all is the policy described in the remark quite frequently made: "If I could get what is due me from that man I would never give him another dollar's credit, but if I stop selling him now I would lose all I have on the books against him." This is the height of folly. When this stage is reached chop it right off short and waste no time in getting in your claim while there is yet hope. Let some other fool carry men of that kind.

Don't let any account run over six months without a settlement. Get a note if you can't get cash.

The wholesale houses who give long credits to irresponsible parties do the whole trade a great injury. It is really surprising after each smash up of one of these brilliant but irresponsible parties to

find how many houses have been cajoled into giving credit for considerable sums, and that to men who have employed similar tactics several times before.

Credit is necessary to the proper transaction of business, but in these days of brisk competition its abuses have grown to wonderful proportions. Conservatism in financial matters has grown to be one of the most essential features of successful business management.

Catalogue Spelling.

Now that we have provided a committee to revise our present jumbled nomenclature, how about some means of securing more correct spelling of the names afterward?

While the compilers of a few catalogues seem to exercise care in this matter, the majority have a large proportion of the names horribly misspelled. Is it lack of knowledge or carelessness and poor proof-reading? Probably in some cases it is the first, in others the latter, and in still others a combination of both. We have seen common names which must have been as familiar as the alphabet so misspelled that as they appeared in the catalogue they resembled more the names of some Russian villages than common plant names.

Any one who has a business of sufficient size to warrant sending out a catalogue should have sufficient pride in it to see that the names are at least correctly spelled, even if the descriptions are rather lurid. In addition the retail buyers of plants use these catalogues as authority on the spelling of the names, give them correct names or none at all. A buyer judges a house very much by its catalogue. A poorly gotten up catalogue full of misspelled words and typographical blunders creates a poor im-

pression at once on a discriminating buyer. Send out a good catalogue if you send any, for a poor one will probably do you more harm than good.

Double Auratum Lily.

Our illustration is from a photograph of the flowers sent us by Mr. E. F. Siegenthaler, Wooster, O., and mentioned in our issue of October 15. In each flower there were two rows of segments looking much as though one perianth had been set inside of the other. A number of the segments were in a state of partial transformation from the stamens, anthers being in several cases to be seen on the tip or edge of the segments.

The beauty of the flower is certainly not enhanced by being "doubled," but should it be possible to perpetuate this freak, catalogue men would probably find it a great card, the single auratum being so well and favorably known and people so anxious for "double" flowers. Should this double auratum be catalogued with the description usually accorded such novelties, we have no doubt the buyers would expect a flower as double as a dahlia.

Our National Emblem.

I am very much pleased with Mr. Battles' article on the "Convention of National flowers," and it has opened up to me some new ideas about what care should be used in adopting our emblem. I regret exceedingly my inability to express my thoughts as beautifully.

Would it be right for us, the grandest nation on the face of the globe, to adopt a flower that is comparatively unknown in other countries than ours? one that all strangers would know only from pictures and not from actual acquaintance. I would say, no! Let it be something which every being in the world is more or less familiar with and one which they have supreme respect for and look upon it with awe for its wonderful strength.

Do not let it be the golden rod, *Nymphaea odorata*, *rudbeckia*, or any like flower. Can we as florists use any other than a botanical name? If not, then in place of golden rod (a merely local name) we must use the name *solidago*. Look in your dictionary and you find the *solidago* is closely allied to the aster family, and that it is comparatively speaking indigenous only to this country. Therefore, foreigners would not know the flower, as it is unknown with them; a sufficient cause to make this flower undesirable.

Shall we adopt the water lily as our emblem? My vote again should be cast in the negative; were we to adopt the *Nymphaea odorata* it would be supposed that we were copying after both Hindoostance and Egyptian, which have adopted as their emblems *Nymphaea rubra* and the *læta* respectively. Don't let us add another *Nymphaea* (*N. odorata*) to represent a third national emblem. Mr. Battles spoke of the water lily going to sleep; had any of us thought of this fact. We represent ourselves as a nation always alert and ready to grasp any new ideas and improvements. Is the water lily then symbolical of our energy and push?

Of all the flowers and plants that have thus far been presented for selection, I would vote for Mr. Battles' oak. It carries out the idea of our aim as citizens; it is a representative of the noblest,

strongest and grandest vegetable life, the three qualities that we all aim to reach as loyal citizens of this grand country. It starts just as our nation did, from a small beginning, the acorn as compared with a band of Puritans. Then the Oak tree, the "Monarch of the Forest," as compared with the national government of to-day, the monarch among nations.

Some of your readers may oppose the oak from the fact that it is not a flower. Let this have no weight with us, for on looking over a list of national emblems both ancient and modern, how often we find that leaves are used. Among them we can mention the laurel, palm, olive, shamrock and acanthus.

Don't let us put the first stain on that grand flag presented to the national society by adopting an unworthy flower or leaf as our emblem. Very few of us can look around our homes without being reminded of the grandeur, strength and durability of our favorite, the oak.

The question of durability raises another point in favor of the oak. Public men in Europe have said that it was an impossibility for a republic to exist for over a couple of centuries. We refute the idea and the oak would therefore be a fitting emblem in that it is, as a tree, most durable.

Lastly, in the language of flowers, the oak means hospitality; how suitable for a nation that opens its portals wide to the oppressed of all nations to adopt as its emblem such a suitable leaf and fruit.

Philadelphia. CHAS. F. EVANS.

Philadelphia.

Our chrysanthemum show takes place the 13th to 16th inst; we are promised great things. Cut flowers of chrysanthemums are selling now from 25 cents to \$2 per dozen; we understand that some New York florists are selling them for as much as \$6 a dozen; Philadelphia has not yet enthused enough to pay such prices, but we are living in hopes. Roses sell at about the same prices as I quoted in my last.

Fern pans for table decoration are more popular than ever; many families have two, one being taken away at the end of the week and the fresh one delivered. In this way the pans are always in good condition and make a cheap and beautiful table ornament.

There is quite a cry against the use of ribbons with flowers; in the main we believe the opposition well founded, but in some cases ribbons are effective. An instance of this came under our notice a few days ago. A prominent club gave a dinner and used 500 yards of ribbon of the club's colors. They had a large ball of laurel sixteen feet in circumference hanging from the ceiling in the center of the room and directly over the center of the table. From the base of the ball they had probably 150 ends of ribbons of the club's colors hanging; tacked on the ends of the table and on the centers of the two sides were ribbons arranged in fan shape. On all candelabra were sashes of ribbons and on the officers chairs were canopies made of laurel wreathing and ribbons. While we are not in favor of this profuse use of ribbons, we cannot help admitting that in such instances it is very effective.

Dried, pressed autumn leaves are effective in dinner decorations at this season. Such leaves do not wither. They are made into sprays which can be festooned over the chandelier and mirrors, then wreaths made of them to place around the mirrors upon which stand the cande-

labra, and upon the center one a fine cut-glass bowl filled with Puritan roses on extra long stems. This arrangement was much admired at one of our best club houses.

Bractena fragrans and *Arancaria excelsa* (Norfolk Island Pine) are very popular for house plants this season.

Two gentlemen were seen the other day with an oak leaf and acorn in their buttonhole. They evidently have heard of its being proposed as our national emblem and are in favor of it.

Grace Wilder carnations will not be as scarce this year as previously. Our growers have more of them planted and one firm has contracted for 2,000 cut flowers of this variety a week with a Bostonian.

A wreath or cluster of flowers has been used in place of crape to mark the houses that have been visited by death. Not a new idea but one that should be encouraged.

Among the growers Messrs. Harris and Colflesh have entered for the grand prize.

We are promised some chrysanthemum flowers 12 inches in diameter. Quite wonderful, don't you think so?

The places of Messrs. Craig, Lonsdale, Burton and Evans are all looking promising for a big winter's business. Their stock generally speaking looks fine and we hope it will exceed their anticipations.

Chas. F. Evans has put up a house especially for orchids and has added four others. Messrs. Craig & Bro. have built a house for azaleas which they have just imported.

Messrs. R. Atkinson & Son, Edgewater Park, N. J., have seven houses and several frames, all of which look well and are extremely neat. They are among the largest growers of chrysanthemums for their flowers, and grow roses and a general stock for spring.

Violets, both single and double, are more plentiful this year than ever before.

We are glad to say that a number of growers have stock of lemon verbena, rose geranium, heliotrope, *Adiantum cuneatum* and *Asparagus plumosus* for cutting purposes, and promise them in quantity during the season.

Several of Philadelphia's prominent growers went to the Orange chrysanthemum show to act as judges.

We are glad to see by Mrs. Benson's article that the New Yorkers are commencing to appreciate the Puritan rose, as we feel that it is a rose that has come to stay.

H. H. BATTLES.

Boston.

The Mass. Hort. Society has generously granted the use of its library room to the Gardeners' and Florists' Club for their meetings.

Geo. L. Parker of Dorchester, has made large additions to his rose houses. The steam heating arrangement in these is one of the most perfect systems in the country.

Chrysanthemums are very abundant. There is a noticeable improvement in the quality of those grown this year, as to variety and in size of flower. Many magnificent specimen blooms are to be seen in the store windows, and these bring prices equal to the best selected roses.

Much regret is expressed that so many of the chrysanthemum exhibitions have been set for the same days. The various societies in arranging for these shows would do well to consult one another and arrange as far as possible that their exhibitions should be consecutive, thus giv-

ing exhibitors an opportunity to show at various places and giving those interested an opportunity to visit the different cities.

Roses are very abundant at present. This is due partly to the influence of the chrysanthemums, but mainly to the bright warm weather that has prevailed. One large grower states that at no time during the past year have his American Beauties been so prolific and full of fine blooms as at present. Sunset has now become an established favorite here, even more so than the *Perle*. W. J. S.

OBITUARY.

HARRY B. MORSE, of the firm of T. Donovan & Co., florists at Natick, Mass., died at his father's home in South Framingham, Mass., October 28. He had been ill for nearly three weeks with typhoid fever, the symptoms from the first being of an alarming nature, but his death was a great surprise to his friends, who for a few days had considered that there was a prospect of his recovery. Mr. Morse was born in Fitchburg, February 13, 1863. At the age of 10 years his parents removed to Framingham. He came to Natick in 1879 and entered the employ of T. Donovan, and in 1880, at the age of 17 years, became an equal partner in the business. He was naturally of a quiet and retiring disposition, but when well acquainted was found to be of a social nature and made firm friends. In his business relations he was always honorable and won the esteem of all with whom he had dealings. At the time of his death he was a member of the Boston Florist Club and the Society of American Florists.

Baltimore Parks.

Probably the grandeur and sublimity of scenery in Druid Hill Park is rarely excelled, and indeed the entire park has been regarded by cosmopolitans as exceeding anything of its kind in natural beauty, as the aim here has been to assist nature in the embellishment of this pleasure ground, rather than to bring it into subjection by the landscape gardener.

At this season the autumnal tints and colorings are exquisite. The dells in this park are truly lovely. The brown leaves of centuries have fallen and carpeted these refreshing retreats which are very suggestive of repose. A fine archway has been formed by removing trees and pruning off branches of others, and from the Mansion House a glimpse through this will reward the observer with a picture, the perspective of which would gladden the eye of any artist, let him be the most exacting.

Two rows of magnificent lindens line either side of the mall and finally encircle the music pavilion, and on Whitsuntide we can almost imagine—and probably the Germans do—"Unter den Linden" of their "Vaterland." A fine lake contains 60 acres of water, the mean depth of which is 40 feet, the water being so pure as to present a steel-blue color. This lake is a part of Baltimore's water supply and is seen on entering the main entrance. A fine forest of oaks is reflected in its placid bosom.

The park abounds in finest forest trees, many of which have withstood the ravages of centuries. Some with twisted trunks and gnarled branches seem to have contended with nature in a grand struggle for supremacy. Several esplanades have been built overlooking a magnificent country and lovely vistas have been formed. The Woodberry

esplanade is the most prominent from which the observer can see the manufacturing town of Woodberry, with its industrial establishments. The chief cotton mills are here planted, also extensive iron foundries. The massive hills behind this busy place seem frowning down on the stir and bustle below and seem ready with little provocation to entirely annihilate the town.

A fine conservatory is being erected in Druid Hill at a cost of \$60,000, the main building of which, with dome 60 feet high, has been completed, and is stocked with a fine collection of plants. The two wings, each 150 feet long and 40 feet wide are yet to be built. The perfect arrangement of this building is unequalled in the heating, ventilation and drainage. In the environs of Baltimore are other parks quite interesting in themselves.

Patterson Park is situated in East Baltimore. From its main plateau one may see that part of the Patapsco river on which the British Man of War was anchored, on which (as prisoner) was Francis Scott Key, the composer of the "Star Spangled Banner," and floating free to the breezes of heaven on the parapets of Fort McHenry, can still be seen those bright stars and broad stripes which so inspired the immortal Key. This park contains a fine conservatory and is noted for its fine bedding.

Riverside Park with its beautiful water front and Federal Hill Park with its lofty elevation and historic associations are quite pretty and attractive.

Baltimore besides is dotted with many beautiful squares. The most prominent of which is Entaw Place, containing at least twelve large plats which are of incalculable benefit to residents of these localities as objects of horticultural interest, and as places of revivification.

WM. D. HAMILTON.

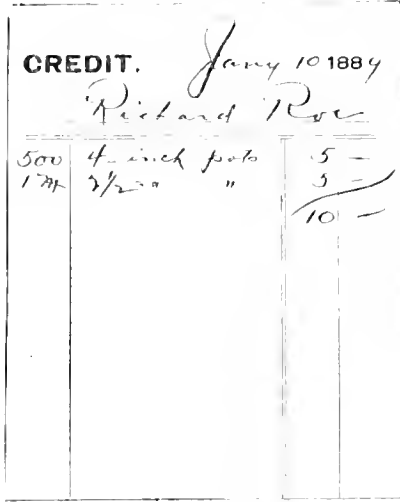
Business Methods.

Do you know what you are worth? Do you know how much you owe? If you can not answer the second question you certainly cannot answer the first one. If you cannot answer both you are not a business man, but merely a poor sort of an imitation. You are like a ship sailing along a dangerous coast in an impenetrable fog. You don't know where you are and have no means of finding out. Can you afford to go on in this way when it is such a simple and easy matter to keep such a record of your business that you can at any time know just how you stand?

Realizing that the great stumbling block in this matter with many florists is, in making the original entries, we have had had printed a quantity of debit and credit tickets—of which we give herewith sample reduced one-half in size—on which original entries can easily be made anywhere—in the greenhouses, out in the field, in the potting shed or anywhere, and with hands dirty or clean. The tickets are put up in blocks of 100; 50 of the debits and 50 of the credits, back to back in each block, the debits in black and the credits in red ink so that they may be readily distinguished. All that is necessary is a block of these tickets and a pencil to make any entry required. You can carry the tickets you have used in your pocket until you reach your office or desk when you can put them on a spindle or hook, where they will furnish data from which any book-keeper can readily work.

Do not use all your effort in keeping track of what is due you. Be just as

careful to make a record of any debts you may yourself contract and make proper credit entry at once. Insist on a bill with all goods delivered, check up the bill at once and if correct credit the amount at once. In using the tickets for this purpose date a credit ticket and write "By invoice dated . . . \$. . ." Trust nothing to memory. Should a man meet you on the road and pay you some money on account, fill out a credit ticket at once and you are assured against a failure to make proper credit on Lis account when you return home, an error which might give rise to an unpleasant



controversy, at the termination of which you would have to "eat crow" when he produced his receipt for the amount. By being careful to make credit entries at once on receipt of goods you are protected against disagreeable disputes as to items in statements when presented. Check up your statements with the credits you have made and if both are correct they should correspond. We know of many cases where bad blood has grown out of, and pleasant business relations been broken through neglect to attend to simple matters of this kind.

We will furnish the printed tickets above described at the following rates: 100, 20 cents; 200, 35 cents; 300, 50 cents; 500, 75 cents; 1000, \$1.40.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED: In greenhouse or floral store, by a young man who has had several years' experience. References exchanged. E. E. PARSONS, Leavenworth, Kansas.

SITUATION WANTED: By a florist and gardener; many years' experience; best of references; unmarried. Private place preferred. Address J. A. G. care W. J. Stewart, 85 Bromfield St., Boston.

SITUATION WANTED: By a florist of 15 years' experience in all branches. Also understands the retail seed business. Can furnish best of references as to character or ability. Age 26; single. State wages. Address O. B., care American Florist.

SITUATION WANTED: By a practical gardener and florist; English; as foreman or propagator, or help in greenhouses. Understands rose growing, growing palms, ferns, all kinds of bedding plants, cut flowers for retail or wholesale trade, floral designs, and decoration. Could manage a florist business, hold same position. 15 years' experience. Good reason for being disengaged. Good references. Address G. S., care American Florist, Chicago.

WANTED: Sober young gardener who has had charge of greenhouses; must understand cut flowers and plants thoroughly; must be able to manage place. A. F. CHS, 430 E. Division St., Chicago.

WANTED: Practical florist. Must understand the raising of greenhouse stock and forcing of vegetables. Single; give references and state wages expected including board. Address FLORIST, box 753, Fort Dodge, Iowa.

WANTED: A good florist and gardener. Vegetable raising for Market a specialty. An honest man, not afraid to work, will have a permanent position and only such need apply. State wages expected. Married men preferred. Address R. G. NICHOLSON, Chestertown, Md.

FOR SALE OR LEASE: SHURT will buy our block square, two growth uses, a 10 ft. heated basement, 5000 dwelling convenient to horse cars and R. R. depot; or will rent houses and garden to an enterprising florist at \$20 per month. Good location in a live town. H. L. LIPS, Hastings, Neb.

SITUATION WANTED.

A practical seed-man of many years' experience, being familiar with all details of the seed business, both in the house and on the road is desirous of locating with some reliable firm.

Address **SEEDSMAN,**
P. O. box 197 Rochester, N. Y.

HOT WATER BOILER FOR SALE.

This boiler is made of the best wrought material, 22 inches diameter by 10 feet in length, with four 8 inch cylinders through it. One of the finest hot water boilers extant, and recommended by best engineering talent as the most economical and durable heaters made. It has been in use one season and the reason for having the same taken out is, we are putting steam system in all our houses. We paid \$175 for this. Can be had for still less, free on board cars. Absolute guarantee as to quality and condition given. HILL & CO., Richmond, Ind.

GREENHOUSES TO RENT

AT CLAYTON, DEL.,
On the P. W. & B. R. R., 19 miles below Philadelphia. Apply to

ARTHUR M. BURTON, ESQ.,
504 Walnut St., Philadelphia.

NOVELTIES IN ROSES.

Also the leading forcing varieties, Teas, Hybrid Teas and Hybrid Perpetuals, and Novelties in Chrysanthemums.

Tabernaemontana	Per 100
Stephanotis Floribunda, per doz.	\$1.00 and \$3.00
Gardenia Rudiensis and Florida	8.00
Boxcarlins, from 2, 3 and 4 inch pots	\$3.50 and 5.00
Carnations Sunrise, P. De Graaf, President Garfield, Queen of Whites, Century, Hinz's White. Open ground plants	8.00

Trade list mailed on application.

JACOB SCHULZ,
LOUISVILLE, KY.

Mention American Florist

Largest Collection of Roses,

Including all the Latest Novelties. Lowest possible prices. Complete general catalogue and Special Wholesale Price List free on application (German or French edition).

KETTEN BROTHERS, Rose Growers,
LUXEMBURG, (Europe.)

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E. BENARD,
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ROSES ON THEIR OWN ROOTS
A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS

For particulars apply to
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P. O. Box 100 San Diego, Cal.

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JOHN CURWEN, Jr.,
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GREENHOUSE STOCK AND ROSES.
Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

IMPORTED M. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

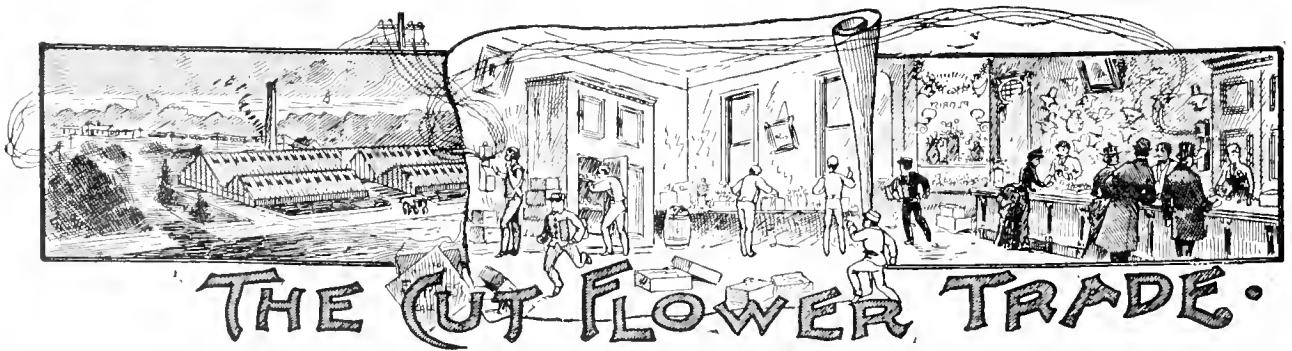
WILLIAM H. SPOONER,
JAMAICA PLAIN, Boston, MASS.

Mention American Florist.

CARNATIONS. VERBENAS. ROSES.

I am receiving orders for rooted cuttings and young plants to be delivered in January, February, March and later.

E. M. GIDDINGS, Corfu, N. Y.



Latest Floral Styles.

Fashions in flowers become more elegant as the season advances. The demand for novelties is active, especially among those who order heavily. Several of our leading florists are importing designs for all kinds of decoration. Costly fabrics will be used lavishly in choice arrangements. Satin is out of favor, but rich silks and gauzes stamped with silver and gilt will be the most desirable adornments for baskets and table designs, that are richly filled.

Wide sashes of silk, fringed and stamped with gilt in some appropriate motto are laid under center baskets of flowers for breakfast and luncheon ornate decorations. These look very beautifully; if the silk is stamped with silver the basket work is usually silver covered; if the stamping is in gilt the basket work is gilded. Silk tablecloths for expensive dinners are the same color as the American Beauty rose. This flower is prominent in the centerpiece among a bed of ferns and there are lighter shades of pink roses, such as La France, Mermets, Madame Cusin and the other new French roses.

The Bridal Tiara takes the lead as the piece de resistance in handsome wedding arrangements. It is a superb design, but is an expensive piece to make up. All the brides seem to be determined to be married under a wreath this fall. Very simple and pretty embellishments are made with the artist's wreath and the ordinary circle of flowers. Some of these are suspended with chains of foliage and are finished with very wide sashes. The Hebrew brides prefer the bell and this will always be in vogue.

Brides are carrying chrysanthemums. The bouquets are made up in the latest style, the center being loose and formed of tasselling flowers of the Japanese type. When the bride carries a bunch of chrysanthemums the bridesmaids' bouquets are made of roses, the loose center being formed of lily of the valley or jasmine. The latter flower makes an exquisite center to a bouquet. Bouquets for receptions and the theater are formed of richly colored chrysanthemums and are made quite large. A cluster of Parma violets is the fashionable street bunch. White violets with a center of orchids is the very choicest hand bunch for full dress occasions.

Men are wearing boutonnières of a large size; bouvardia is the fashionable flower for the coat. The bunches are made up half pink and half white. Half of the boutonniere is formed of double bouvardia and half of single.

Funeral work is more elaborate this season than ever known before. Wreaths for laying on caskets are made up with great care and beauty of finish, they are entirely without ribbon. Ivy wreaths

have long sprays of small leaved ivy running over the foundation. They are usually finished with large clusters of violets. The fashion of having a casket entirely surrounded by blooming flowers is very popular. The casket is set on a low bier and roses and high colored flowers form a bed that reaches to the top of it, which is entirely massed with bright flowers; the idea is, to be buried in flowers.

FANNIE A. BENSON.

New York.

London Notes.

The flower market at Covent Garden has been well supplied the last week with blooming plants and cut flowers, English grown flowers bringing good prices. Early chrysanthemums have been in good demand, and owing to the early frost have advanced somewhat in price. Bunches of violets are now in and find a ready sale.

As promised in our last we now give a list of the principal cut flowers for sale in the flower market and their wholesale prices in American money.

Chrysanthemums, white	25c to 31c per bunch
Chrysanthemums, specimen flowers	50c to 75c per doz. blooms.
Eucharis	\$1.25 to \$1.50 per doz. blooms
Stephanotis	\$1.50 to \$2.00 " "
Gardenias	50c to \$1.25 " "
Culteroses	75c to 1.25c " "
White roses	50c to \$1 " "
Yellow roses	50c to \$1 " "
Pink roses	\$1 to \$1.50 " "
Buff roses	37c to 75c " "
Paper White Narcissus	75c a dozen spikes.
Azaleas	31c to 37c a dozen sprays.
Lapageria	50c a dozen sprays.

The above prices are for first class goods as supplied to the best class of London florists. Imported flowers from France are much cheaper and are used by the street sellers principally. In speaking of street sellers we must make an exception of some half dozen men and women who sell flowers near the Stock Exchange. These sell button holes principally and sell fine flowers and get good prices, 12c being charged in many cases for a single carnation with a little green around it.

The annual exhibition of chrysanthemums (blooming plants) was opened at the Temple gardens October 19 and will continue during the month of November. There are some very good specimens on show, but will be in better condition in a week or two, as many of the plants are not in full bloom yet. This show always attracts a good deal of attention. While the show is not large, the plants are well arranged and well grown and many of the choicest specimens can be seen. The plants are arranged very closely on benches in a glass house specially arranged for the show, in one of the most charming parts of the Temple gardens, on the Thames Embankment. No charge for admission is made.

We noticed last week in passing through the West End Parks that the gardeners were busy taking up the plants from the flower beds, to make way for the fall planting of bulbs. The plants were pulled up by the roots and given away to the crowds of men, women and children, that were waiting for them along the walks near by. These would be taken home and transplanted into pots, or cuttings taken, and placed in the windows to grow and bloom all winter. The giving of these plants to the proper classes is a pretty custom, and no prettier sight can be seen in England than the cottage window with its clean white curtains and pots of blooming plants.

The weather the last week has been "quite English." Two days of fog and two clear; the fog was so bad that gas had to be used most all day.

October 19.

FLORAL DESIGNS, A HANDBOOK FOR CUT FLOWER WORKERS AND FLORISTS, is the title of a volume received from the publishers, Messrs. A. Blanc, Philadelphia, and J. Horace McFarland, Harrisburg, Pa. It contains fifty well executed wood engravings of various styles of floral designs elegantly printed on heavy paper with tinted back grounds, and should be of great value to florists, in enabling them to show customers what a design or basket will look like when filled. Many florists keep albums of photographs of filled designs, and this book is designed to be supplemental to such albums or where none are had to fill the vacancy. It will undoubtedly be heartily welcomed by all in the trade and especially by those who are so situated that it is difficult to secure good photographs of their own work. In addition to the plates thirty pages are devoted to practical hints on arrangement of floral work, which will be of interest to beginners.

A New Orchid.

Speaking of the Orange, N. J., chrysanthemum show the Newark daily *Call* says:

A novelty will be the exhibition of the Mrs. Alpheus C. Hardy orchid, an entirely new variety imported from Japan by James R. Pitcher. It is believed that he has the only specimens of this wonderful orchid in the world. He has carefully bred and propagated them until he now has in his conservatories at Short Hills, over 5,000 specimens. The flower is an exceedingly quaint and peculiar one, exactly resembling a white ostrich tip. Next May Mr. Pitcher intends putting these wonderful flowers on the market.

Everything of note is an orchid nowadays according to the average reporter. One recently referred to *Authurium Scherzerianum* as "a remarkably large red orchid which grows on trees in South America, the flowers shown being brought from that continent especially for this exhibition."

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate;
Inch, \$1.40; Column \$14.00.
Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for December 1 issue must REACH US by noon, Nov. 21. Address

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

D. B. Woodruff, Macon, Ga., plants and bulbs; Wm. Paul & Sons, Waltham Cross, England, roses; same, bulbs; same, fruit trees; same, ornamental trees and shrubs; same, seeds; same, new roses and plants; S. J. Thompson, Louisville, Ky., bulbs, seeds and cut flowers; M. Grashoff, Quedlinburg, Germany, flower seed novelties; Michael Rains & Co., London, England, bulbs; L. Cauchoix, Orleans, France, roses and hardy shrubs; Eugene Verdier, Paris, France, new roses; Hillebrand & Bredemeier, Pallanza, Italy, seeds; C. Raoux, New York, bulbs, plants and seeds; Wisconsin Flower Exchange, Milwaukee, Wis., florists' supplies. Jas. M. Thorburn & Co., New York, seeds.

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WHOLESALE AND COMMISSION DEALER IN
Fresh Cut Flowers & Florists' Supplies.
Flowers carefully packed and shipped to all points in Western and Middle States.
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Shipping Trade my Specialty.
Consignments Solicited.
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ROSE BUDS WHOLESALE
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VARIETIES:
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The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,
J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

NEW YORK, Nov. 9.

Roses, Bon Silenes	\$1.00 @	\$1.50
" Gontier	2.00	2.00
" Perle, Niphetos, Souvs	3.00	3.00
" Mermets	5.00	5.00
" Cousins, Bennetts	5.00 @	6.00
" La France	8.00	8.00
" Brides	6.00	6.00
" Am. Beauty	3.00	3.00
Mignonette	4.00	4.00
Smilax	2.00	2.00
Carnations, fancy, long	1.50	1.50
Lily of the valley	8.00	8.00
Violets	1.00	1.00

BOSTON, Nov. 9.

Roses, Bon Silene	\$1.50	\$1.50
" Perle, Sunset	1.00	1.00
" Brides, Mermets	4.00	4.00
" Niphetos	1.00	1.00
" Gontier	3.00	3.00
Lily of the Valley	1.00 @	6.00
Carnations, long	1.00 @	1.50
Carnations, short	.75 @	1.00
Violets	.75 @	.75
Tuberose	1.00	1.00
Bouvardia	1.00	1.00
Pansies	.50	.50
Adiantum	1.00	1.00
Smilax	12.50	12.50
Callas	12.50	12.50
Chrysanthemums, per bunch	.50	.50

Flowers very abundant.

PHILADELPHIA, Nov. 9.

Roses, Bon Silene	\$2.00	\$2.00
" Perle, Niphetos	2.00	2.00
" Bennetts	4.00	4.00
" Mermets	3.00	3.00
" La France, Brides	5.00	5.00
" Am. Beauties	10.00	10.00
" Gontier	3.00	3.00
Carnations, bouvardia	.75	.75
Lily of the Valley	8.00	8.00
Smilax	15.00	15.00
Single violets	.25	.25
Double violets	.50	.50

Market glutted with flowers.

CHICAGO, Nov. 12.

Roses, Perle, Niphetos	\$3.00 @	4.00
" Bons, Safran	2.00	2.00
" Mermets	4.00 @	6.00
" Bennetts, Dukes	4.00 @	6.00
" Papa Gontier	2.00 @	2.40
" La France, Brides	5.00 @	6.00
" Am. Beauties	10.00 @	18.00
" Cousins	3.00	3.00
Carnations, short	.80	.80
Carnations, long	1.00 @	1.50
Smilax	18.00 @	20.00
Adiantum	1.00 @	1.51
Callas	12.50 @	15.10
Tuberose	1.50	1.50
Heliotrope	1.00	1.00
Chrysanthemums	1.00 @	3.00
Violets	.75 @	1.00

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Cut Flowers and Florists' Supplies
— WHOLESALE —
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WHOLESALE FLORISTS
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Also entrance from Hamilton Place through Music Hall.

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The only establishment in the West growing Roses exclusively. 20,000 square feet of glass devoted to the growth of the Rose. We cut, pack and ship the same day; thus enabling the customers to get fresh Roses without being handled the second time. We ship Cut Roses all over the country with perfect safety.

Also all the leading varieties of young Rose plants for sale.

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165 Tremont Street BOSTON MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.
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INCORPORATED 1885,

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We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,

PROMPT SERVICE,

GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

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Telephone 977. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Winton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermel,
And other Standard sorts

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and Am. Beauties,
SPECIALTIES, NEW YORK.

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Wholesale dealers in
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THE WISCONSIN FLOWER EXCHANGE,
WHOLESALE CUT FLOWERS.
Consignments Solicited. Send for price list
133 Mason St., MILWAUKEE, WIS.

Philadelphia.

Ground has been broken for the erection of a large manufacturing plant, the property of S. L. Allen & Co., makers of agricultural implements, on a lot of ground recently purchased by them, bounded by Fifth street, Glenwood avenue, the North Pennsylvania Railroad and the connecting road of the Pennsylvania Railroad.

The plans will comprise four buildings, arranged in the form of a hollow square, with the railroad terminals and boiler and engine house, etc. arranged therein. The buildings will be constructed on the most approved ideas of modern mill construction, being designed with brick enclosed stairways and elevator shafts, with plank floors throughout and large elevated water tanks, all greatly increasing the security from fire.

The main buildings are designed with a view to enlargement by the addition of two more stories in the near future. To enable this to be done without disturbing the operations of the plant, what will constitute the third floor is already provided for, and a temporary roof will be laid over it. A site on the Fifth street front of the lot has been left for the addition of a foundry building to the plant at some future time.

The foundations for the plant are already under contract and will be completed during the present year, and the entire operation pushed to completion as soon as the weather opens in 1889, as the firm expect to occupy it by June 1 of that year.—*Philadelphia Ledger*.

CHICAGO.—Geo. S. Haskell, A. B. Cleveland and Albert McCullough were in the city October 31; also a day or two later William Meggat, C. W. Moore, Dan'l DeCou and Henry a Salzer.

CINCINNATI.—J. Chas. McCullough formerly of J. M. McCullough's Sons, has opened in the grass seed business at 21 and 23 West Canal streets.

New Notes.

HUDSON, N. Y.—R. W. Allen has succeeded Brockbank & Allen.

BUFFALO.—Wm. Legg has removed from Bryant street to 1015 Ellicott street.

ELMWOOD, CONN.—Swenson Bros. have succeeded Chas. K. Swenson, florist here.

LITTLE ROCK, ARK.—Smeeton, Coleman & Co. have opened a down-town floral store.

OAKLAND, CAL.—James Hutchison is completing two new houses 100 x 18 each at his branch nursery at Piedmont.

WASHINGTON, D. C.—N. Studer has opened an office and store at 717 Fifteenth street N. W. with telephone connections.

TOPEKA, KANS.—D. A. Rice has opened a floral store at 819 Kansas Ave. James Hayes has built a new carnation house 75 x 12.

ALLEGHENY CITY, PA.—The chrysanthemums are making a grand display in the city park conservatories, and crowds of people visit the park daily to view the display.

MEADVILLE, PA.—August Krueger has just finished six new houses—three 18 x 60 and three 11 x 60. Sash bars are all cypress, glass is 10 x 12 double thick and benches are of slate.

SPRINGFIELD, ILL.—Florist H. L. Phelps gave his third annual chrysanthemum show at his greenhouses the 7th to 10th insts., and made a very creditable display which attracted many visitors.

NASHVILLE, TENN.—A chrysanthemum show was held the week beginning November 5, the proceeds going to the Hospital of the Good Shepherd. A very creditable display of plants and flowers of autumn's queen was made.

SACRAMENTO, CAL.—The Bell Conservatories have been sold by their former owner, Mrs. E. B. Crocker, to M. J. Dillman, who has for the last four years been manager for her. The glass houses cover an area of 22,000 square feet.

RACINE, WIS.—Julius Martens, the 12th street florist, has sold his greenhouse business to F. Fountaine, the North Side florist, who will run it in connection with his old stand. Mr. Martens has taken a position with Currie Bros., Milwaukee.

NYACK, N. Y.—Mr. John Foley, late foreman for A. C. Tucker, is preparing to commence business for himself. W. R. Davison has built two eighty foot houses for carnations. J. Winterbottom has built and planted two houses, one hundred and fifty feet each, violets and carnations.

LOUISVILLE, KY.—Trade for October was immense. The demand for roses was remarkable, owing to the numerous weddings that occurred during the month. Florists have been working day and night. Plant decorations are in great demand for weddings. November has opened well and promises to be as lively as October.

COUNCIL BLUFFS, IA.—At the trades display held on the occasion of the opening of the Council Bluffs and Omaha Bridge, florist L. A. Casper had one of the most beautiful displays in line. His large delivery wagon drawn by four horses, was surmounted by three huge horns of plenty made of Cape flowers, and filled with dried flowers and grasses; two large horseshoes of dried flowers were placed in front. Inside the wagon each of the fourteen glass panels were draped with smilax looped with a cluster of roses, a large vase filled with choice roses, and ferns arranged loosely in the center. The outside was also festooned with roses and smilax, the whole having a most pleasing effect.

KANSAS CITY, MO.—Fire in the store of C. E. Hampton, florist on Ninth street, caused a loss of \$1,000 October 28; partially insured. Fred J. Faschman, wire worker, in same building, lost \$500. R. Jarrett has left for Maidstone, Kent, England, where he intends to grow roses. His son, Nelson Jarrett, succeeds him here and has built three houses 75 x 28, 75 x 18 and 75 x 10 respectively. Probst Bros.' new store in the Coates building is 50 x 24 with double flint glass windows and handsomely furnished. Newell & Gregorius have opened a floral store at 421 East 12th street. The florists of the city had a meeting the night of October 31, the object being to regulate prices in future and talk on subjects of interest.

MINNEAPOLIS.—At a meeting of local florists held Oct. 29, the Minneapolis Florists' Club was organized with officers as follows: W. A. Smith, president; Richard Wessling, vice-president; E. Nagel, secretary and treasurer. A committee was appointed to arrange a scale of prices for cut flowers, bouquets, baskets

and designs. Trade in cut flowers and plants has been good for past few weeks and is still improving. Chrysanthemums are now in their glory and people seem to take advantage of the abundance of these flowers, as there is an unusual number of receptions and weddings in the decorations at which the chrysanthemum plays an important part. Aug. S. Swanson was married to Selma J. Sudor Oct. 20.

THE HORTICULTURAL TIMES AND COVENT GARDEN GAZETTE.

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You come the nearest my ideal of a Horticultural Monthly for popular circulation of any of the makers of such literature.—CHAS. W. GARFIELD, *Sec'y Michigan Horticultural Society*.

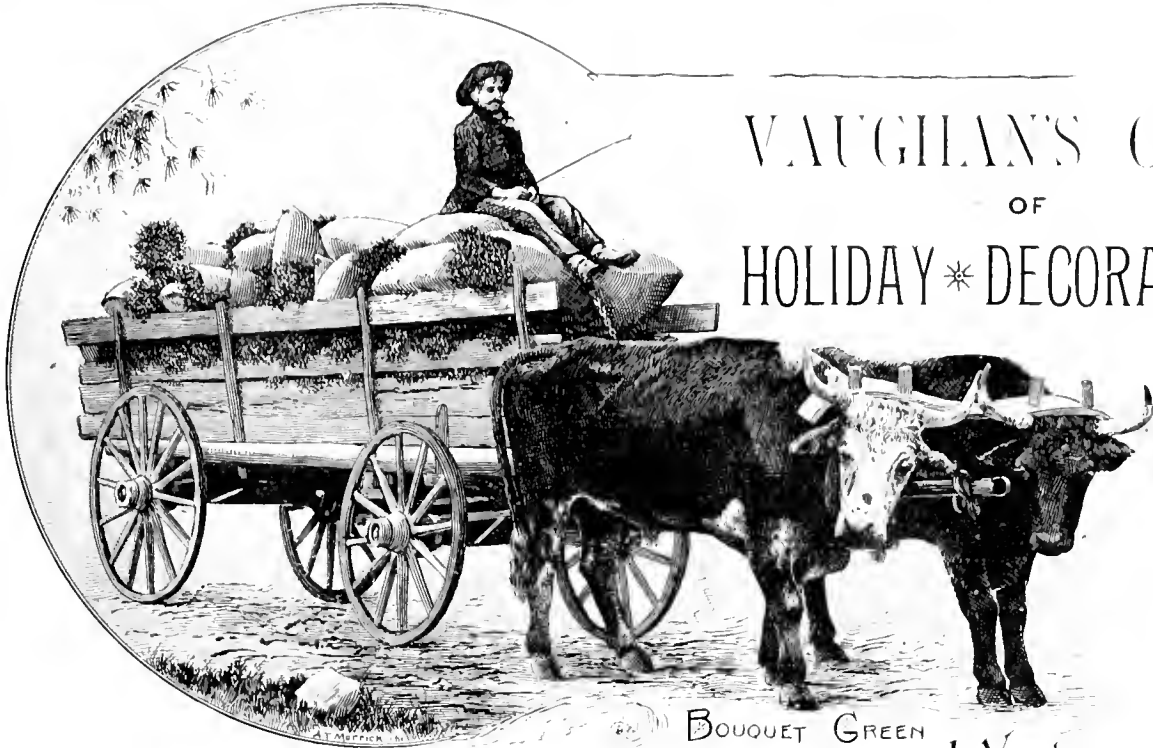
Indispensable to horticulturists, gardeners and florists (both practical and amateur).—CYRUS T. FOX, *State Pomologist of Pennsylvania*.

For introduction where unknown the magazine will be sent two months for 10 cents. Subscription price, \$1.00 a year; to be raised on Jan. 1st to \$2.00. Previous to that date subscriptions received at present low rate (\$1.00 a year), for one year or several years. Two months now for 10 cents, for introduction.

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Gathered for J.C. Vaughan

WE ARE HEADQUARTERS ON

HOLLY BRANCHES,

And can supply you with Fine Holly, fresh picked, and well berried; cases well packed and

PROMPTLY SHIPPED AT THE RIGHT TIME.

Order early and you will get it.

PRICE, per case of 16 cubic feet, \$6.00; five cases, \$5.75 each. Half case, \$3.00.

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We have arranged this season for good cases and specially careful packing to secure safe arrival of this perishable stock, and expect to supply best possible grade.

PRICE, per bbl. \$5 00; per original case [10 cubic ft.] \$12 00.

Mistletoe should always be shipped by express to reach buyer not before Dec 17, and be stored on arrival in a cool place.

We will not be responsible for delay after delivery to Express Company in good order.

LYCOPodium, Bouquet Green.

We are large shippers of Green, and will make closest market rates at any time. Write or telegraph us for latest prices before you buy. We can allow no shrinkage after delivery on cars. Low freight rates from Chicago to all points.

We quote following prices subject to market changes:

BARREL OR SACK, about 25 lbs.	\$ 2.00	
CRATE OR SACK, 50 lbs.	\$3.00; 100 lbs.	5.00
1000 POUNDS.	40 00	
2000 POUNDS, One Ton	76 00	
WREATHING, good quality, per 100 yards	3 50	
Extra Heavy, " " "	5 00	

FLORIDA GRAY MOSS, per lb. 15c.; per bbl. \$3 25

XMAS BELLS, of Scarlet Immortelles, each 1 00

HOLLY WREATHS, fine, each 25c.; dozen 2 25

FAIRY FLOWERS.

PURE WHITE, first size, \$1 50 per 100; \$12 50 per 1000
COLORED, first size, fine shades, 1.75 " 15 00 "

	Per doz.	Per 100
HARTFORD FERNS, fine sprays,	30	\$
MAIDENHAIR "	30	
COMMON "	15	1 00
AUTUMN LEAVES,	10	25
SEA MOSS, Natural, per bunch 100.	75	
" Green, " "	120	1 25

CAPE FLOWER WREATHS.

Pure white Capes, with artificial flowers and leaves, mounted in pasteboard boxes. Very salable. Assorted styles, per doz \$8 50, each 75c.

J. C. VAUGHAN,
Box 688. **CHICAGO.**



CUT FLOWERS FOR THE HOLIDAYS.

Chicago.

W. M. Hoyt & Co. have opened a floral store at 157 Wabash avenue.

At Mr. John Lane's last display on his grounds Mr. J. T. Anthony contributed a load of palms and decorative plants which materially assisted in the display. The eastern grown plants received by Mr. Lane made a most interesting feature of the display.

Messrs. Benthey and Kreitling, Wabash avenue florists, wagered a baby carriage on the presidential election. Mr. Kreitling has at present no use for the article, but has strong hopes. Mr. Benthey's carriage should be for twins and the question that agitates Mr. Kreitling's friends is whether he desires a carriage of the same style as that necessary to the comfort of Mr. Benthey's recent acquisitions.

The annual supper of the Florist Club on the 8th inst. was well attended in spite of the execrable weather. President Reynolds in his address reviewed the history of the club and pointed out abundant work for the future. Short speeches were made by other members and all were well received. Many who rarely speak at meetings were brought to the sticking point on this occasion, going to show that the best way to get the boys to talking is to seat them around a table. President Reynolds made the salad himself, and his reputation as a maker of toothsome edibles is now away up. The coming ball will be practically a flower show and ball combined, it having been decided to arrange the decorations complete by noon and charge an admission fee for viewing them during the afternoon. The hall will be on a much more elaborate scale than the one held on the north side and if it is proportionately as profitable as that one the treasury will be considerably swelled.

At the Exhibition.

FIRST EXHIBITOR—(Got 1st premium)—We were certainly fortunate in the selection of judges. They know good plants when they see them and don't you forget it!

SECOND EXHIBITOR—(Got left). Oh, rats! You make me tired! What do those men know about plants? Anyone that knew anything at all about plants would never have made the awards they did! They probably never saw any good plants till they came into this hall and then they didn't recognize them.

VENTILATING.

THE PERFECTION Ventilating Machine

I had on Exhibition at the NEW YORK FLORISTS' CONVENTION

was pronounced by able judges the LEAST COMPLICATED, SAFEST, STRONGEST, EASIEST,

and most rapid working machine ever offered to the public.

Send for Illustrated Circular before throwing your chance away.

E. HIPPARD,
Youngstown, Ohio.

Bulbs, Seeds, Immortelles, Porcelain Flowers, Florists' Supplies, Etc.

J. A. DE VEER,

(Formerly of DE VEER & BOOMKAMP.)

183 Water Street, NEW YORK.

—SOLE AGENT FOR—

THE GENERAL BULB CO., Vogelenzang, (Holland), Bulbs [Flowers.

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Ls. BREMOND FILS, Ollioules, (France), Bulbs, Immortelles.

A. H. HALLENSLEBEN, Konigsberg, (Germany), Vegetable Seeds.

Catalogues of Prime Hyacinths, Tulips, Roman Hyacinths, and all leading fall Bulbs, Florists' Supplies, Porcelain Flowers, and Vegetable Seeds will be mailed free to all applicants IN THE TRADE.

SPECIAL OFFERS:

	Per 1000	Per 100	Per doz
Roman Hyacinths, Standard Size	\$30 00	\$3 25	
" " Extra Selected	33 00	3 50	
Paper White Narcissus, large bulbs	11 50	1 50	.25
" " "improved" large bulbs	14 00	1 75	.30
Chinese Narcissus bulbs (true)	10 00	1 00	1.50
Lilium Candidum, (home-grown), extra selected	28 00	3 25	.50
Freesia refracta Alba, (home-grown), extra size	22 00	2 50	.40
" " " " second size	15 00	1 75	.25
Calla Ethiopica, home-grown, medium size		7 50	1 00
Gladiolus Colvillii alba, "The Bride"	30 00	2 50	.40
Lily of the Valley, true Berlin pips—in original cases of 2,500, \$24 00	11 00	1 50	
" " " " strong Dutch clumps	22 00	3 00	
Dielytra spectabilis, strong clumps home-grown	50 00	6 00	
Spiraea Japonica, strong clumps	40 00	5 00	
Tuberose, Pearl, extra selected	18 00	2 00	
" " " " second size, 3 to 4-in in circum	10 00	1 25	
Pandanus Urtilis seed (fresh)	10 00	1 25	

Cycas Revoluta stumps in all sizes at moderate prices.
TERMS: Net Cash, without engagement. Correspondence solicited.

A. BLANC, PHILADELPHIA,



LARGE STOCK OF ELECTROTYPES OF PLANTS AND FLOWERS FOR FLORISTS' CATALOGUES, ETC.

Catalogue of electros of plants, flowers, designs, etc., with '87 and '88 supplements, 35 cts., with vegetable, 50 cents, which deduct from first order. Electro of this Cut, \$1.50.

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Mention American Florist.

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TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address **MONON ROUTE**

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LILY OF THE VALLEY.

Best Hamburg Pips, per 100 \$1.50; per 1000 \$14.00. Special rates on 5,000 to 10,000 lots.

Large Clumps, imported, per 100 \$23 00.

Spiraea Japonica, Imp't, large clumps, per 100 \$6.00.

Dielytra Spectabilis, Imp'orted, large clumps, per 100 \$5.00.

Hyacinthus Candicans, Good Bulbs, per 100 \$1.50; per 1000 \$12.00. Ready Nov. 15 to 20.

We can still supply Roman Hyacinths, an assortment of Narcissus, including Paper White, grandiflora, Von Sion, incomparable, Alba Plena, etc.

TUBEROSE BULBS

EXTRA FINE THIS YEAR. READY NOW.

Special rates for large lots for immediate delivery.

NEW ENGLISH IRIS.

NEW FORCING GLADIOLUS. Now ready. See prices in Fall Trade List.

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" 5 " ".....	5.00	36.00
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At the following rates f.o.b. New York. Special prices on large lots

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Excelsior Pearls.....	\$2.00	\$15.00
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I OFFER A CHOICE LOT OF THE FOLLOWING BULBS:

	Per 100	Per 1000
Lilium Candidum.....	\$4.00	\$35.00
Roman Hyacinths, select.....	4.00	35.00
" First quality.....	3.50	34.00
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Von Sten Narcissus.....	2.50	21.00
Incomparable Narcissus.....	1.50	12.00
Single Duc Van Thol Scarlet Tulips.....	1.50	5.50
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* ROSES A SPECIALTY. *

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FOR SALE.

THE CUTS

USED IN ILLUSTRATING THIS PAPER.

Write for prices on any which you have seen in previous issues and would like.

AMERICAN FLORIST CO.

CHICAGO.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

Nov. 16—Tem. morning 44°, noon 54°, evening 46°. Wind SW. to NW. Continued propagating *Alternanthera aurea* nana. Potted rooted *echeveria* offsets in thumb pots.

17—Tem. 30, 42, 35. NW. Same as yesterday and pricked in boxes rooted *echeveria* offsets and covered *clematis* with leaves.

18—Tem. 31, 47, 45. SW. Same as yesterday and propagated *Begonias* *Saundersonii* and *Weltoniensis*. Also cleaned *cyclamens* and moved to warmer place.

19—Tem. 42, 27, 27. SW. to NW. Propagated *matricarias* and *Santolina tomentos*. Commenced repotting *primulas* into 4-inch pots. Covered out door beds of standard roses with leaves.

20—Tem. 18, 26, 18. NW. Sunday.

21—Tem. 25, 33, 34. S. to SW. Finished repotting *primulas*. Repotted *cinerarias*, some into 4 inch and some into 3-inch pots. Commenced repotting *coleus* into 3-inch pots.

22—Tem. 32, 41, 40. S. Continued repotting *coleus* into 3-inch pots. Took Roman *hyacinths* from frames into houses. Covered with leaves prepared pansy frame and standard rose beds and covered the whole with shutters.

23—Tem. 40, 41, 40. NE. Same as yesterday. *Chrysanthemums* about done blooming.

24—Tem. 37, 40, 40. NE. to N. Thanksgiving day.

25—Tem. 38, 42, 40. N. to SE. Continued repotting *coleus* into 3-inch pots. Potted rooted cuttings of *Alternanthera amena* and *A. latifolia*. Removed dried *gloxinia* bulbs from pots.

26—Tem. 42, 43, 42. S. to N. Finished repotting *coleus*. Potted rooted cuttings of *Alternanthera amena* and *A. aurea nana*. Removed dried *gloxinia* bulbs and roots of tuberous *begonias* from pots and packed them in moss in boxes.

27—Tem. 27, 19, 11. NW. Sunday.

28—Tem. 2, 13, 10. NW. to WSW. Covered tulip beds with manure. Potted rooted cuttings of *Alternanthera aurea*. Banked early frames in frame yard with manure.

29—Tem. 20, 27, 24. SW. to SE. Carted potting soil into houses. Sowed fern spores in pans. Potted rooted cuttings of *Alternanthera aurea nana*.

30—Tem. 34, 36, 34. ENE. to SE. Same as yesterday and cleaned and arranged *geraniums* in No. 7.

TO THE TRADE.

CLEMATIS CRISPA, ARUNDO DONAX VARIEGATA, EULALIA ZEBRINA.

H. STEINMETZ, Raleigh, N. C.

SEED OF EVENING GLORY.

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BOUVARDIA BOCKII, the finest pink variety	Per 100
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" Leiantba, 3-inch, fine	5.00
ROSES, fine collection, 2 1/2-inch, fine	4.00
VERBENAS and COLEUS, 2-inch	2.00
Rooted Cuttings of Coleus and Verbenas	1.00

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METALLICA BEGONIA, 2-inch, \$4.00 per 100
ROSES, H. P. and Teas, 2-inch, 4.00
DRACENAS, INDIVISA, \$1.50 to \$3.00 per doz.

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<i>John Smith</i>		
100	Verbenas	3 -
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CREDIT. <i>Jan 10 1889</i>		
<i>Richard Roe</i>		
500	4 inch pots	5 -
175	2 1/2 "	5 -
		10 -

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

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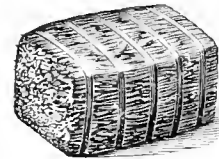
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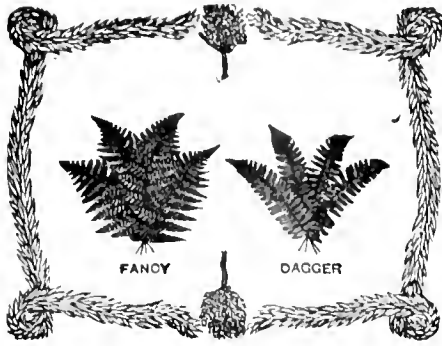
\$4.00 A BALE, THREE BALES FOR \$11.00.

Average 500 lbs. to the Bale.

Delivered Free on board.

We claim to have the Best, Cleanest and Strongest Stems in the market.

STRAITON & STORM, 204 East 27th St., NEW YORK.



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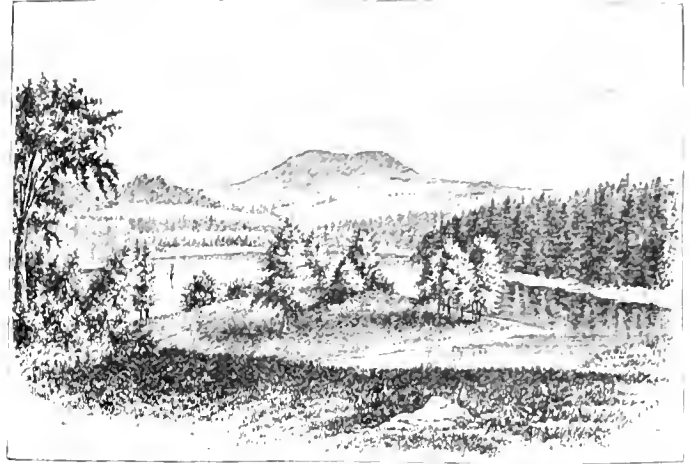
These ferns are from 10 to 20 inches in length, of a beautiful dark green and will keep for several weeks. They are used for Bouquet work, filling flower baskets, vases, &c., &c., and are also used extensively for decorating church altars for which they cannot be excelled.

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20,000 yards of Bouquet Green Wreathing or Roping, all wound on a cord with fine wire in a thorough manner. 3-in. diameter, flat or one-sided, 4 cts. per yard; 3-in. diam, round, 6 cts. per yard; 4-in. diam, round, 8 cts. per yard; 5-in. diam, round, 10 cts. per yard. 1,000 barrels Sphagnum Moss, long, clean fibre, dry or green, \$1.00 per barrel or six barrels for \$5.00.



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10,000 CHRISTMAS TREES, from 3 ft. to 30 ft. high.

Fresh from the beautiful Berkshire Hills of old Massachusetts, where the finest shaped trees in the world grow. WHOLESALE PRICE OF CHRISTMAS TREES put on cars at Hinsdale, Mass. If shipped from New York City add one-half to these prices:

4 to 5 ft. high.....	Each. \$.10 to \$.15	11 to 15 ft. high.....	Each \$1.25 to \$1.50
6 to 7 " .....	.20 to .30	16 to 17 "	1.75 to 2.00
8 to 9 "40 to .50	18 to 20 "	2.50 to 3.00
10 to 11 "60 to .75	25 to 30 "	4.00 to 6.00
12 to 13 "85 to 1.00		

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FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

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Die Erziehung der Pflanzen aus Samen.
EIN NEUES HANDBUCH IN DEUTSCHER SPRACHE FÜR GAERTNER UND FLORISTEN,
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XMAS TREES. BLUE SPRUCE.

The Blue Spruce is a well formed tree of beautiful dark blue green foliage, and is everywhere the prime favorite for this purpose. Small branches for decorating packed closely in barrel, for \$2 per barrel.

Special Prices on Car Lots.

Correspondence solicited. Terms: half cash with order, balance Jan. 1.

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Delivered on cars here, packed in light, strong crates at following prices

2 to 3 feet high.....	25 50 100
3 to 5 feet high.....	\$2.50 \$4.00 \$ 6.00
5 to 8 feet high.....	4.00 6.00 10.00
8 to 12 feet high.....	6.00 10.00 18.00
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BOUQUET GREEN,

1 1/2 cents per pound.

FESTOON GROUND PINE.

4 cents per pound

W. D. BOYNTON, Shiocton, Wis.

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It has been my practice to take inventory November 1 every year, as it is a time when stock on hand represents as near as possible a par value and is not likely to depreciate for many months. In the midsummer season it is utterly impossible to place an accurate value on stock as so much depends on the manner in which it is propagated, etc.

In making an inventory of houses I carry the first cost till they are rebuilt or discarded, as I find it impractical to estimate the actual decrease in value for each year. This summer I rebuilt two old houses using the steam pipe and fittings of the old for the new houses. The old houses cost \$1,450 and the new ones \$1,800, including the old pipe and fittings; this would really give me an increase of value of only \$350 on these new houses.

I would like to have the views of those who have had experience in this matter in regard to the manner in which houses and real estate are inventoried. Should the latter be carried at original cost or at a reasonable increase of value where property is improving, etc.?

HARRY CHAAPEL.

"Cut Rate" Competition.

The so-called aristocrats who are breaking down prices in the flower-market by selling flowers at "cut-rates" from the garlens which surround the mansions are not in a business they should be proud of. The capitalist who is so greedy of a few dollars that he will keep a poor gardener out of work to make them, ought at least to go openly into competition with the man whose ruin he seeks, and not pose as a gentleman of elegance while his gardener is around selling flowers, or get credit as a lover of nature when his flower beds are cultivated with a careful eye to gain. Of course business is business and gardeners could not object to legitimate competition. But when he has to compete with capitalists who care nothing for market rates and do not bother themselves about a few dollars more, which would represent a little fortune to the gardener, or a few dollars less, which would almost ruin him, he has reason to complain. We have heard of European aristocrats doing this kind of thing. But hardly thought the idea had been already adopted in America. — *San Francisco Daily Report.*

ROSES.

Hybrids from open ground, strong... \$8.00 and \$10.00
Teas 6.00 and 8.00
Mermel, Bon Silene, (from 3 1/2-inch pots)..... \$ 7.00
Safrano, S. d'un Ami, " 3-inch pots..... 5.00
La France, for forcing " 2 1/2-inch pots..... 4.00
Ampelopsis Veitchii and Quinquetfolia, pot-grown first size \$5.00, second size \$6.00 per 100.
Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots \$10.00 per 100.

VERBENAS.

Perfectly healthy out-door rooted cuttings, Mammoth set XX collection, \$1.25 per 100, \$10.00 per 1000.
General collection, variety unsurpassed, \$1.00 per 100, \$8.00 per 1000.

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To the Trade at all Seasons.

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PALMS, ORCHIDS and DECORATIVE PLANTS.

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COCOS WEDDELIANA,

THE BEST SMALL PALM.

FINE PLANTS, Per 100
9 inches high..... \$30.00
12 inches high..... 40.00
16 inches high..... 50.00
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Carnations for Winter Blooming; good, strong plants from the open ground, of the following varieties:

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DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of SINGLE PRIMROSES, at \$8.00 per hundred.

BOUARDIA, good strong one year old plants at \$12.00 per 100.

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MARIA LOUISE, at \$8.00 per 100

1-1/2 inch have a large stock of Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus, at \$30.00 per 1000. Strictly our selection; clean, strong plants in 2 and 2 1/2-inch pots.

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NO LESS THAN 500 AT THE 1000 RATE.

GERANIUMS. Plants from 2 1/2-inch pots. A choice selection of 30 best double and single varieties, \$3.00 per 100; \$25.00 per 1000.

Double White Alyssum, 2 1/2-inch pots... \$3.00 per 100
Gaulth. Pink and White..... 3.00 "
Bouardina, Double, STRONG, 4 1/2 INCH, 15.00 "
Leiantha, 3 1/2 inch..... 5.00 "

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All goods sent C. O. D. one-third cash must accompany order. Cash must also accompany orders from unknown parties.

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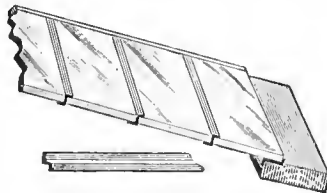


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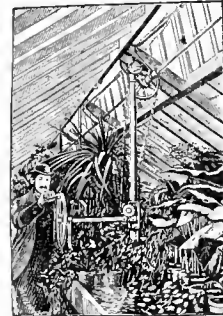
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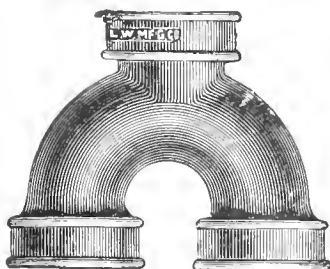
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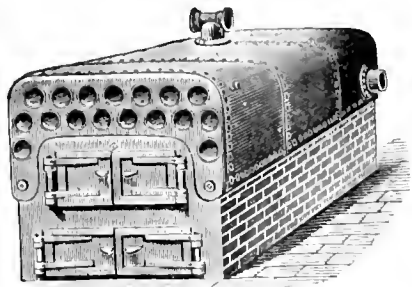
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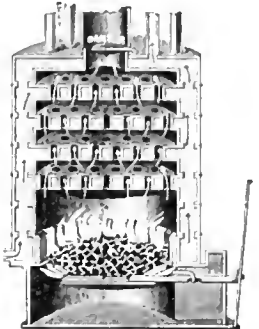
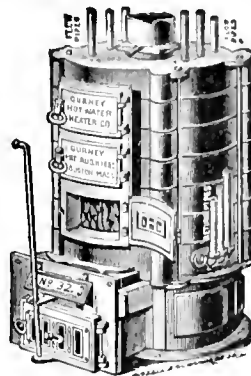
Yours truly,

THOMAS GRAY, Florist.

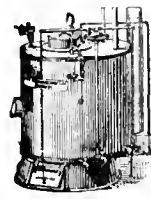
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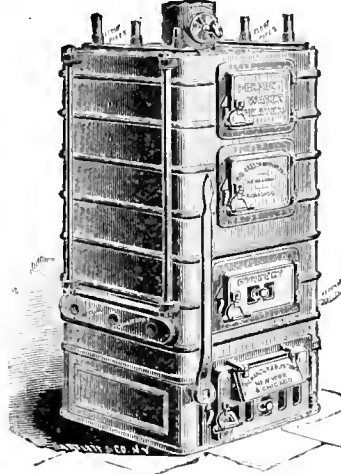
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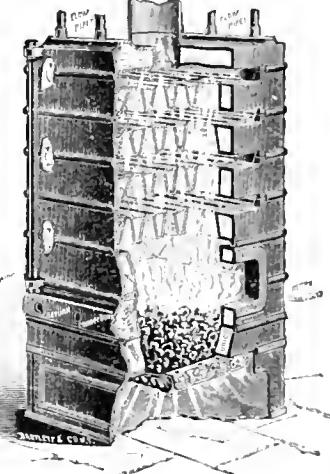
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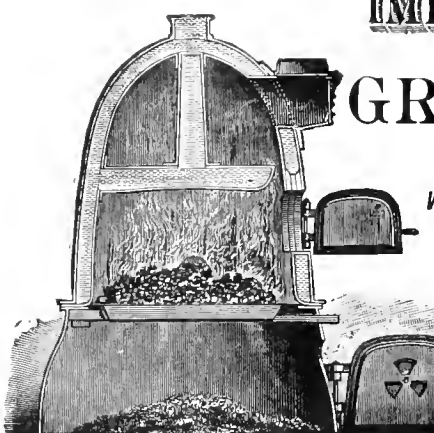
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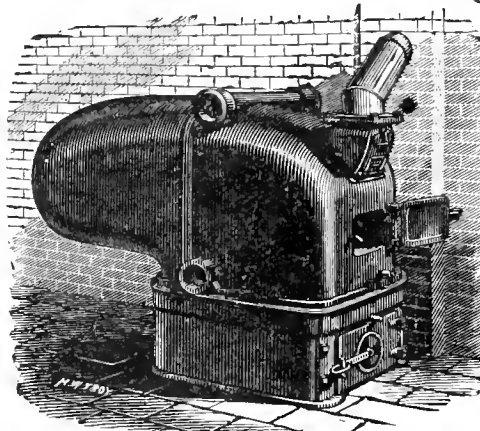
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PORTLAND, OREGON.—The Oregon State Horticultural Society held its quarterly meeting in this city Oct. 9.

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BULLETIN No. 2 from the Hatch Experiment Station of the Massachusetts Agricultural College, Amherst, Mass., is received. In the space devoted to horticulture appear reports on new and standard varieties of fruit which should be of interest to nurserymen. Henry H. Goodell is director of the station and Samuel T. Maynard, horticulturist.

INSECT LIFE.—The fourth number of this periodical bulletin from the division of entomology of the U. S. dept. of agriculture at Washington appears under date of October, 1888. These bulletins contain the results of the more recent investigations of the department and are undoubtedly of great value, more especially to the agriculturists and the agricultural press.



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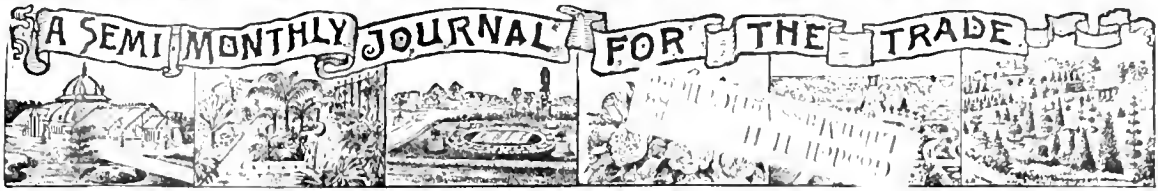
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Vol. IV.

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

Question Box for 1889.

The question box was a very interesting feature at the New York convention of the S. A. F., the answers elicited giving general satisfaction. The executive committee at its meeting in Buffalo next January wishes to arrange a list of questions which will equal or exceed in interest the list answered at the New York meeting and request that any member who wishes any information relating to the trade will forward the query now to W. J. Stewart, secretary, 67 Bromfield street, Boston, Mass., that the committee may refer the same to a competent member who will prepare an answer to be read at the next convention.

The members of the executive committee are required to travel long distances and to leave their business at a very busy season when meeting to arrange the programme and every member should do all in his power to facilitate and shorten their labors. You can assist materially by responding promptly to this call. If there is any subject you want brought up before the next annual convention let the executive committee know it now. You may rest assured that it will receive careful consideration.

The meeting of the committee last January at New York lasted two days and kept the members hard at work each day from 10 a. m. to 10 p. m., and with the increasing work before them the coming session will consume still more time unless business is facilitated by assistance such as is now asked,
J. N. MAY.

Summit, N. J., Nov. 19

THE CHRYSANTHEMUM CRAZE instead of being on the wane seems to have gained a fresh impetus. The shows in the larger cities all equal and some exceed those of former years while a large number are being held this year in places where the chrysanthemum has heretofore been but little known to the general public.

Chrysanthemum Shows.

Boston.

The annual chrysanthemum exhibition of the Massachusetts Horticultural Society opened in Horticultural Hall on Wednesday, Nov. 14, and continued for three days. Most of the plants were in position the night before, many of the exhibitors working far into the night arranging their displays. So, when at twelve o'clock on Wednesday the public were admitted to the hall they had the very rare experience of finding there an exhibition practically complete and ready for inspection at the opening hour.

Entering the lower hall the first object that met the eye was a grand plant of *Cypripedium insigne* with ninety blooms, which was exhibited by Wm. Martin. It attracted much attention on account of its fine habit, vigorous growth and abundant bloom. This, and a small group of camellia flowers from James Conley, was the only entry of any plant or flower not a chrysanthemum. No roses, no palms, no designs of any kind, and even the ever-present fruit and vegetable tables were quietly left at home and the chrysanthemums were given full swing for the time being.

The method of exhibiting the individual blooms here is much better than that followed in various other cities. Most of the specimen flowers being shown in vases, with stems and foliage present, instead of being spread out flat on a painted board. The introduction of a tall vase here and there, filled with showy blooms also served to break the monotony of the long rows of single blossoms, and added much to the general effect. The display of cut blooms this year was much more extensive, and in quality far ahead of any previous effort here. There were also a large number of seedlings raised by local fanciers and many of them were of a high order of merit.

The plants although not quite equal to some previous displays were, as a rule, well grown, dwarf and stocky in habit, with but few stakes, and very little unnecessary tying. Boston is to be congratulated that the pernicious and utterly repulsive system of tying the individual flowers on a chrysanthemum plant to a big wire frame has obtained so slight a foothold here.

One fault which is generally noticeable here however, is the neglect of disbud-ding. The result is, of course, very showy masses of bloom when seen from a distance, but the individual flowers are small and irregular, and our growers would do well to devote a little more attention to securing larger and more perfect blooms on their specimen plants.

The exhibitors this year were mainly the same who have been prominent in

previous shows. Edwin Fewkes & Son deserve special mention for their display of sixty plants on the stage, which were arranged with artistic effect and constituted one of the leading attractions of the show. The competition for prizes offered for general displays filling twenty-five and fifty bottles was considerable. The bottles however were much too close together and much of the effect in this section was lost through overcrowding.

Speaking of the plant exhibits in detail, the best group came from Jas. Comley who received the premium for "best twelve." One specimen of Golden Dragon in this lot was an unusually fine specimen. E. W. Wood took first prize for 20 plants, P. Malley second, and W. H. Elliott third. E. W. Wood also took first on specimen Japanese, specimen pompon and specimen anemone, while the first for specimen Chinese went to P. Malley. The competition in the various classes of Japanese was considerable, but on Chinese it was very limited. The proportion of pompous shown was quite large, a somewhat singular fact in view of the universal fancy for large flowering kinds. There were no "standards" worth mentioning. The premiums for six small plants each of Japanese and Chinese varieties, the plants being limited to not over four flowers each, brought out some wonderfully good specimens from Mr. Fewkes and Mr. Wood.

Mr. Fewkes' set of six Japanese which took first prize was simply grand. It contained the following varieties: Domination, G. F. Moseman, Mrs. Frank Thompson, Robt. Crawford, Jr., Neesima and Mrs. Langtry. It would be hard to improve on this collection. In this same section were remarkably good specimens of Lord Byron, Christmas Eve and Mrs. Forsythe from E. A. Wood. Among the most noticeable new plants were a seedling from Mrs. Wheeler of very dwarf habit by E. A. Wood, a seedling of deepest orange color grown by Pres. Walcott, and a plant of Wm. H. Lincoln by E. Fewkes & Son, this latter being one of the famous set imported from Japan last year, one of which was the Mrs. Alpheus Hardy.

A singular freak shown by Mrs. E. M. Gill was a plant of St. Patrick, a dark red variety of the incurved Chinese type, where one half of the plant had spotted and bore pale yellow flowers.

The principal exhibitors of cut blooms were E. A. Wood, Edwin Fewkes & Son, C. J. Power, Jos. H. White, Geo. Hollis, Pitcher & Manda, Mrs. J. W. Woodice and L. W. Goodell.

For superior culture and unequalled finish, four tall vases of Cullingfordii, Jardin des Plantes, and Mrs. C. H. Wheeler, grown by C. J. Power of South Framingham, excelled anything else in the hall, and it would be impossible to improve upon them.

Mr. Manda was on hand with cut blooms of the famous Mrs. Alpheus Hardy, and he had no reason to complain of any lack of admiration for it. Mr. Fewkes exhibited the other varieties imported at the same time with Mrs. Hardy and known as the Neesima collection. Their names and colors are as follows: Neesima, brilliant yellow; Lillian B. Bird, pink, very double and of peculiar form; Nippon, bright pink; Wm. H. Lincoln, bright pure yellow; Empress of Japan, white; Mrs. Fottler, pink; Kioto, incurved yellow, best of all; Medas, white with drooping thread-like petals, and Katayma, dark maroon, single. Certificates of merit were awarded to Lillian B. Bird and Kioto. E. A. Wood received a certificate of merit for a seedling from Mrs. Wheeler, richer in color than the parent and very double to the center.

Among a lot of twenty-four seedlings shown by Geo. Hollis were three of special merit, named Mandus, pale rose; Mrs. Harrison, white; and Peerless, pale lemon. A certificate of merit was awarded to the collection. President Walcott staged a large number of seedlings among which the best were F. No. 1, a large, full yellow, and several descendants from the Mrs. Wheeler, partaking in greater or less degree of the peculiarities of that variety. A certificate was awarded to the yellow seedling, and also to a superb white flower said to be a sport from Nil desperandum. The prize for best twelve Japanese blooms was awarded to Jas. Brydon. This exhibit comprized the following varieties: Mrs. Frank Thompson, John Thorpe, Canon Farrar, Mrs. C. H. Wheeler, Robt. Bottomley, Golden Dragon, John Collins, Madame C. Andiguier, Boule d'Or, Thos. Cartledge, G. F. Moseman, and Mrs. R. R. Mason.

Among the most noticeable of the showy Japanese collections the following white varieties may be mentioned: Edna Craig, Domination, Jessica, Moonlight and Christmas Eve. L. W. Goodell staged a collection fifty-two named varieties including many of the best sorts.

The attendance during the three days of the exhibition was very large, in spite of the stormy weather which prevailed during a part of the time. Quite a number of florists from a distance attended and this number would no doubt have been largely increased if it were not that the Philadelphia show was on at the same time.

WM. J. STEWART.

New York.

After all we have reason to be pretty well satisfied with our show. If the plants were not all they should be, the cut blooms were so far above the average that they made up for any deficiency, and the courage with which Mr. Thorpe and Mr. Spaulding worked in spite of discouragement and dismal weather, was certainly worthy of every success.

It was really a pretty show; the pleasing light under the canvas made everything appear to the best advantage, and even the poorer plants (and I'm sorry to say a good many of them ought not to have been exhibited) lost their deficiencies when viewed in the mass.

But the cut flowers were certainly the chief attractions. The two rival stars in this class were Mrs. Alpheus Hardy and Mrs. Andrew Carnegie. They can scarcely be called rivals either—they are so totally distinct. The first with its feathery white flowers has become too famous to need another description. The prevailing sentiment here, as at Orange,

was that it was the most unique introduction of recent years, and it received special honors. This flower was unable to compete for the special prize offered by Mrs. Carnegie, a silver cup, since that called for a flower never before exhibited. This prize went back to the land of natural gas, in company with Mr. Hamilton, being awarded for his flower, Mrs. Andrew Carnegie.

Another highly commended seedling was exhibited by John Jones, of Summit, it was called Mrs. Levi P. Morton. A very large Japanese, somewhat flat in form, disclosing the yellow center; color lively magenta pink with a silvery tinge beneath the petals. A showy flower altogether.

Geo. McClure, gardener to J. Crosby Brown, of Summit, exhibited a new seedling called Miss Emmy Brightburst. A regular flower of the Mrs. Wheeler type, but deeper in color and broader in petal; handsome and distinct.

The finest display of cut blooms was in the amateur section, exhibited by Thos. Tricker, gardener to Judge Benedict, of Farview, Staten Island. These were grown out of doors, with no other protection than canvas, and it was interesting to notice the variation of color under these circumstances. In most cases it was richer and deeper than the color of similar varieties grown under glass. Mr. Tricker's display in the Chinese section was really remarkable for the size and shapeliness of the blooms; this class does not always seem so well grown as the Japanese varieties. This exhibitor received most of the first prizes for cut blooms in the amateur class. Another exhibitor who might have made a good second, left indignant because the judging was delayed—the only discordant element of the show.

For bush and standard plants, Geo. McClure received first in the amateur class; for dwarf plants, Thos. Tricker. Among professionals John Thorpe and T. H. Spaulding took the lead. Mr. Spaulding's collection of cut blooms was large and fine, especially those in sprays, the most attractive manner of displaying them. The same exhibitor received first prizes in all classes for bush and standard plants. Mr. Thorpe received first prize for a handsome display of dwarf plants, and also for vases of cut blooms and specimen flowers. Mr. Spaulding displayed the best specimen plant.

John Finn carried off first prizes for palms and ferns, which added much to the beauty of the grouping, and also for two designs. The first, an original design suitable for a reception, was pyramidal in form, composed of adiantums, kentias and pandanus, crested by a small plant of Anthurium crystallinum; the result was exquisitely simple and graceful. The second design, a table plateau, was of adiantums and kentias, with a few Beauty roses here and there. J. G. Bebus exhibited some baskets of good roses; also bouquets. The floral arrangements in chrysanthemums were poor, but then they always are, at an exhibition, at least.

The roses and carnations exhibited were really fine. Mr. Jones' Cornelia Cook, Mr. May's Beauty and Mr. Taylor's Mme. de Watteville were all alike superb. The prize takers were Messrs. Bebus, May, Taylor, Jones and John Henderson, the latter having a large display.

In carnations the premiums were pretty evenly divided between John Thorpe and J. H. Taylor. Mr. Thorpe exhibited a new crimson Orient, which was very rich in color.

The United States Nurseries showed a

few orchids, among them Oncidium splendendum in bloom; W. C. Wilson displayed a few plants of the same class.

Mr. Fewkes, of Newton Highlands, Mass., exhibited nine distinct Japanese flowers, being the batch in which Mrs. Alpheus Hardy was discovered. The handsomest among them was Lillian B. Bird, exquisite shrimp pink with tubular petals; next comes Mrs. Fottler, a very full-petaled flower with a tint just like a La France rose. A first class flower for the florists' use, because it is just the color women want. Another good flower in the same lot was Kioto, a very rich yellow.

A. A. Wood, of West Newton, Mass., brought a good anemone, Mrs. T. F. Gane, which was much admired.

Henry Hales, of Ridgewood, N. J., exhibited a deliciously fragrant chrysanthemum called Nymphæa. Its white petals give it a look of a miniature water lily, a resemblance increased by its pronounced water lily fragrance. This originated with an amateur, Mr. E. M. Allen, of Ridgewood.

Dailedouze Bros., of Flatbush, exhibited a vase of specimen blooms arranged with careless grace; among them was a very excellent white Pelican.

Mr. J. H. Taylor showed what he could do with chrysanthemums—some tremendous flowers of Gloriosum and Comte de Germiny. Fine commercial varieties both.

The duration of the show was prolonged from three days to a week. It is worthy of note that both plants and flowers kept very much better and fresher in this tent than in an ordinary exhibition hall. Even the roses kept their freshness long after the usual time. In conclusion, if the show was not as large as we have a right to expect in New York, it had the merit of fine flowers and attractive arrangement.

Among the visitors Mr. and Mrs. W. J. Stewart, Mr. Fewkes and Mr. Wood represented Boston, while the Philadelphians who were at Orange visited the New York show also.

EMILY LOUISE TAPLIN.

View at the New York Show.

Our illustration shows a central group at the New York chrysanthemum show. The chrysanthemums comprising this group were in 6-inch pots, each plant bearing one immense specimen flower. Around the central pole of the tent were arranged evergreens and palms among which were blooming orchids.

In the left hand corner appears a bloom of chrysanthemum, Mrs. Andrew Carnegie, which was nine inches in diameter, and for which was awarded the vase or cup offered by Mrs. Carnegie for the best seedling never before exhibited. A picture of the vase appears at the right. It was awarded to Mr. Wm. Hamilton, of Allegheny City, Pa.

Philadelphia.

The sixth annual chrysanthemum exhibition was opened November 13, and continued open day and evening until Friday the 16th. It could have profitably been kept open a week longer. This fact should be borne in mind another year.

There were not as many plants at this show as in 1887. The lower hall, it will be remembered had to be called into requisition to accommodate the great number of plants in that year, at which time there were seven competitors for the grand prize of \$250, for 25 best plants.



CHR. ANTHEMUM MR. A. R. NEW CARNEGIE

P. S. & C. E. B. P. E. T. S. E. L. N. G.

VIEW AT THE NEW YORK SHOW

When the committee on the revision of schedule met to prepare a list of premiums to be competed for this year they deemed it advisable to offer, as the highest premium, \$100 for the best 12 plants, this, it was said, would open the doors wider for competition, because more growers of chrysanthemums could give the time and space to 12 plants than could accommodate and take care of 25 plants, and it did seem reasonable that such should be the case, but it proved otherwise for only four competitors took the mark this year. There was no appreciable falling off in the quality of the plants. Although one courageous individual made the assertion that 25 plants as good as those Craig & Bro. took first prize with last year could not be found in the building. The committee of arrangements had more space at its command to display the different collections to the best advantage, and room enough was left for the public to examine them critically.

In point of quality, taking into consideration the number of really valuable acquisitions, among the seedlings and recent importations it was by far the best chrysanthemum show ever held by the Pennsylvania Hort. Society, or, perhaps in this or any other country. It is questionable if in Europe so many fine varieties not yet in commerce were ever gotten together before, at one show.

The most sensational novelty was the beautiful Mrs. Alpheus Hardy. Words of mine are inadequate to convey an idea as to its beauty. The flowers are pure white, medium size, incurved Japanese, the center slightly indented, the disc entirely hidden. On the upper surface of the floret petals is what as first sight appears to be hoar frost or snow, which gives it a chaste, delicate and fluffy appearance. It was exhibited both as

growing plants and as a cut flower. It is evidently a healthy and free grower, and the dozen or so flowers shown were uniformly good. A silver medal was awarded Messrs. Pitcher and Manda, of the United States Nurseries, Short Hills, N. J., who own the stock.

Another noteworthy addition to the long list of chrysanthemums was Mrs. Andrew Carnegie, exhibited by John Thorpe. To say the least it was immense. It also has a distinct character. The floret petals are broad and have more of a tendency to stand out than do those that are usually known as Japanese varieties. It is crimson in color, the lower side of the floret petal is somewhat lighter in color than the upper surface, but not sufficiently so as to detract from its effectiveness.

William K. Harris came out strong with a seedling which he declares is the best one he has yet raised, and that is saying a great deal; for W. K. has raised some of the very best sorts in cultivation. He has named it Mrs. Wm. K. Harris. The first one he says that he has heretofore considered worthy of the name. In color it is yellow, a shade or so deeper than the old favorite Grandiflorum—when grown in a cool temperature. It is also larger, as shown by Mr. Harris, than any Grandiflorum ever seen in Philadelphia. In its general make-up it is similar to it, only that the bloom seems fuller and higher. In short there is more of it. It will be eagerly sought after both by exhibitors and those who grow first class chrysanthemum flowers for the cut flower market; Mr. H. Waterer is the fortunate owner of the stock, who bought it last year before it had developed its true character.

Fine cut blooms of new and distinct varieties were exhibited by Edwin Fewkes & Son, Newton Highlands, Mass., which

deserved and received marked attention both by connoisseurs and the public. Mrs. Pottler is a delicate blush tint, very large. Wm. H. Lincoln a fine yellow, deep in color and broad and somewhat flat in shape. Kioto is a yellow too; similar in shade to Grandiflorum, it also resembles it in size and contour, but the floret petals are broader at the base and tapering to a point. They have a tendency to whorl in a fantastic manner, hugging each other as it were, taking various directions yet preserving a uniformity which commends it to every chrysanthemum lover.

A seedling of last year, E. H. Fidler, was exhibited by the raiser, Thomas Monaghan, gardener to C. H. Trotter, Esq., Chestnut Hill. It is not too much to say that it was one of the most distinct and valuable in the show. It is a seedling from Mrs. Frank Thompson. Mr. Monaghan is positive about this, because one head of seed was all that he sowed that year. Out of the same lot of seed came some varieties which when in flower resembled Mrs. Charles Wheeler, but The Fidler stands alone as one of the most lovely, distinguished and valuable sorts that has yet been introduced. It is more like Mrs. Frank Thompson in form than any other variety, but in color it is a rich, bright yellow more or less streaked with red, giving it a slight bronzy appearance, yet it retains unusual brilliancy. The flower has more substance than its parent and like it, it will be a long time before it is displaced as a show flower or for choice cut blooms. It is not yet in commerce, Craig & Bro. have secured the stock and right of distribution. Lucky Craig's! Another notable variety which the same enterprising firm has bought is one that has been named Mrs. Levi P. Morton. It was awarded the first premium as the best seedling at Orange, N.

J. It was also exhibited at the New York chrysanthemum show, where Mr. A. D. Cowan, the popular seedsman, had the honor of giving it the distinguished name it now bears. In color it is a pleasing shade of pink, the floret petals are wide and long, which radiate with the utmost regularity from the disc. The base of each floret petal is white, which makes a broad and decided ring around the yellow center. The extremities of the floret petals have a slight but graceful inclination to incurve. Many expressions of regret were heard from those who had seen it once and had hoped and expected to see it again. But, as Mr. Thomas Jones, of Short Hills, the raiser, had no really good flowers to send—having only the original seedling plant to cut from—he thought it best to send none at all, if flowers creditable to the variety and himself could not be sent.

Mr. C. H. Trotter had a fine large seedling plant of the Mrs. Charles Wheeler type, only it was darker, having less yellow in its coloring. It was labelled President Harrison, I am told, at 9 o'clock on the morning after election. There is likely to be some confusion on account of that name. The most popular one of the hour possibly and at a time when seedling chrysanthemums are opening every day for a few weeks. This may be something for the committee on nomenclature to look into. In Messrs. Fewkes' collection there was another flower worthy of mention, the Medusa. It is creamy white in color, but its floret petals hung down shred-like; it has a very wilted appearance; this may prove valuable to raisers of seedlings; it is entirely distinct; nothing at all in cultivation heretofore is anything like it. Of course the strictly practical florist could see nothing in it.

Craig & Bro. had a meritorious exhibit, mostly new varieties that were not yet in commerce, or were exhibited for the first time, one of the most conspicuous was Sunnyside. On first opening it shows a pink tint. It becomes pure white when fully expanded; its quilled floret petals stand out straight, the outer row being a trifle longer than the rest, gradually shortening to the center; it is very full, large and has great substance. This is sure to take high rank both as an exhibition variety and for choice cut flowers. L. Canning reminds one, at first glance, of Mrs. George Bullock, being white and a fine flower. The habit of the plant is dwarf and free blooming. Its flowers keep better than the Mrs. Bullock, it has not the sad fault which that variety has of showing the effects of dampness so soon. Mr. John Westcott asserts that it is destined to take the lead as a white flower for market, both as a pot plant and cut flower. Mr. Westcott is conservative, his opinion is based upon observation, he having seen it growing at Craig & Bros.' greenhouses. Mrs. E. W. Clark (Chinese) is a companion plant to the preceding; in color it is rich light purple, a dwarf and sturdy grower. Dr. Stryker (Japanese) is a striking variety, dark pink in color, broad floret petals and has a slight tendency to incurve. Mrs. Isaac C. Price (a silver medal was awarded this variety) is a yellow Japanese, outer floret petals show a bronzy tint. It is a promising variety. Mrs. Irving Clark, a light pink Japanese, large and double. Mrs. M. J. Thomas is a pure white incurved Japanese with broad floret petals, very showy and distinct. It will be much sought after for exhibition purposes also for cut flowers. Mrs. J. N. May (Japanese) is a light soft shade of yellow, broad incurved floret petals. This

would add greatly to any collection as an exhibition variety. A novelty, which divided the honors with the new varieties was a grafted Puritan, on which were worked nineteen distinct kinds. This was grown and contributed by Wm. K. Harris, for which he received a special premium of \$10.

The highest prize was \$100 for the best 12 plants, which was awarded to J. William Colflesh. The collection consisted of Mrs. John Wanamaker, light silvery pink incurved Japanese; Mrs. Charles Wheeler, a finer plant of this well known and favorite sort was never seen in Horticultural Hall before. The same may be said about Mrs. Frank Thompson in the same collection, it was a magnificent specimen; there was more color in the flowers than is usual in this variety. A good plant of Cullingfordii added materially to the general good effect, so also did William Joyce, a comparatively new variety. It is a semi-double, an uncommonly pretty pink in color, very showy. Retta Colflesh is one of Mr. Colflesh's own seedlings, pure white, semi double, very attractive and it is evidently a good grower. Eugene Mizzard, a tassel-like Japanese purple flower. Gloriosum, the well known yellow; Puritan, the delicate blush; Surprise, a Chinese bronze and yellow, and two other seedlings, the names of which Mr. Colflesh has not yet made public.

Second premium, \$85, (only eight points behind the preceding) was awarded to John Kinnear, gardener to Mrs. Joel J. Bailey, Sunnyside, Darby, Delaware Co., Pa. This collection contained Christmas Eve, Mrs. A. Blanc, sent out by Craig & Bro. last year and was named after the wife of the celebrated horticultural engraver. A well grown plant of Mons. Freeman; some experts in chrysanthemum culture said it was the best plant of the kind they had ever seen grown, as it is a difficult sort to do well. M. Boyer, a delicate blush. The Bride, the first time exhibited, one of Waterer's last year's importations from Japan. It is pure white and it certainly is one of the best of the color. It is large, the outer row of petal florets have a tendency to act as guards, while a few droop gracefully, the inner ones incurve with equal grace. It makes a striking appearance in any group. Robert Crawford, Jr., is also a telling variety, it is valuable for exhibition purposes; it is semi-double and blush tinted. Mrs. Isaac C. Price (new) one of Craig's last year's novelties. It is chrome yellow in color, incurved Japanese, distinct and fine. Cullingfordii. Robert Bottomley, still one of the best whites. Puritan, John Collins and Gold, another valuable addition that Waterer sent out last year.

Third premium, \$65, to Gordon Smirl, gardener to Wm. M. Singerley, Esq., of the Record greenhouses, Gwyned, Pa. The most conspicuous plants in this collection were Shakespeare, Gold, Puritan, Robert Crawford, Jr., Temple of Solomon, Boule de Neige, Cullingfordii, Duchess, Lucrece, (new) a beautiful and distinct white, Marvel, white, blotched in the center with light purple, very good, and Wm. M. Singerley. The three last were imported by Waterer in 1886. This was the first time they had been exhibited.

Fourth premium, \$50, went to Wm. K. Harris; his collection contained Mrs. Charles Wheeler, Puritan, Mrs. Frank Thompson, Wm. M. Singerley, Mrs. J. C. Henzey (Harris), new incurved yellow, very pretty, Mrs. W. Bowen, (Harris new, Mrs. Charles Wheeler type, but

somewhat darker in color) Gold, Mrs. Langtry, Belle l'aul, Tokio, Snowball, (Harris) new, very appropriately named, being descriptive, but there is already one in commerce named Boule de Neige. Many people would be under the impression that the two varieties were synonymous.

For the best collection of six new varieties not before exhibited, Henry Surman, gardener to E. W. Clark, Esq., Germantown, for a grand lot of immense seedlings—No 5 was particularly fine—first premium \$30; W. K. Harris, 2nd \$25; William Jamison, gardener to R. S. Mason, Germantown, 3rd \$15. Best specimen plant, new variety not before exhibited, 1st \$10 to Henry Surman; 2nd \$8, P. Conlan, gardener to Percival Roberts, Jr., Pencoyd, Pa.; 3rd \$5, W. K. Harris.

In nurserymen and florists' class, 1st \$20, for six, one of a kind, J. W. Colflesh; 2nd \$15, W. K. Harris; 1st \$20, for 6, one of a kind, incurved, J. W. Colflesh; 1st \$20, for 6, one of a kind incurved Japanese, W. K. Harris; specimen plant, white, 1st \$5, W. K. Harris; 2nd \$3, J. W. Colflesh; specimen plant, yellow, 1st \$5, W. K. Harris; 2nd \$3, J. W. Colflesh; specimen plant any other color, 1st \$5, J. W. Colflesh; 2nd \$3, W. K. Harris; six single flowering, six sorts, 1st \$10, W. K. Harris; 2nd \$6, J. W. Colflesh; three specimen plants, 3 different colors, 1st \$15, W. K. Harris; 2nd \$10, J. W. Colflesh; specimen plant on which 19 distinct varieties were grafted, special premium of \$10 to W. K. Harris; seedling Mrs. Isaac C. Price, silver medal to Craig & Bro.; for display of seedlings and others not before exhibited, special, \$10, to same exhibitors; display of standards trained in various fantastic shapes, fans, vases, parasols, etc., special, \$10, to Edward Banyard.

In the amateurs' and gardeners' class Joseph Shaw, gardener at Ravenswood, Germantown, Pa., was awarded 1st premium, \$20, for 6 different varieties; 2nd \$15, P. Conlan; 3rd, John McCleary, gardener to William Weightman, Esq., Germantown, Pa.; collection of 4 different varieties, Gordon Smirl, 1st \$15; 2nd \$10, F. R. Sykes, gardener to Mrs. Harry Ingersoll, Olney, Pa.; 3rd, P. Conlan; Patrick Conlan also received 1st, \$25, for 6 standards, different varieties; 2nd \$20, Wm. Dewar, gardener to Mrs. Charles Wheeler, Bryn Mawr, Pa.; P. Conlan 1st, \$5, for specimen plant white; 2nd \$3, John Kinnear; 3rd, Joseph Shaw; specimen plant yellow, 1st \$5, John Kinnear; specimen plant, any other color, 1st \$5, John Kinnear; 2nd \$3, Thomas Monaghan, gardener to C. H. Trotter, Esq., Chestnut Hill, Pa.; 1st, \$5, for specimen standard, P. Conlan; 2nd \$3, Wm. Dewar; 3rd \$3, John McCleary; 1st for best seedling plant in bloom, Wm. Jamison; 2nd \$3, John McCleary; 3rd, Henry Surman.

Open to all class. The Red Leaf prize, a silver cup, presented by Mrs. Wm. P. Henzey, for the best four yellow varieties was secured by Wm. Dewar. The Sunnyside prize, a silver cup offered by Mrs. Joel J. Bailey for the best four Chinese varieties, was deservedly awarded to John Kinnear. The Pembroke prize, a silver cup, presented by Mrs. Charles Wheeler for the best 4 Japanese varieties was taken by P. Conlan. The Record prize, a silver cup, presented by William M. Singerley, Esq., for 6 naturally grown plants was awarded to Gehhard Huster, gardener for Mrs. Heyl, Darby, Pa. The Blanc prize, \$25, offered by Mr. A. Blanc for the best seedling plant in bloom never before shown, was taken by W. K. Harris

with his superb yellow seedling Mrs. W. K. Harris.

Cut blooms—The Wootton prize, a gold medal, presented by Mrs. Geo. W. Childs for the best 25 cut blooms in 25 varieties, was awarded to William Tricker, gardener to Judge Benedict, Staten Island. The Wilbur prize, a silver cup, presented by E. P. Wilbur, Esq., South Bethlehem, Pa., for the best 100 varieties; cut blooms, 3 of a kind, was awarded to E. P. Wilbur, South Bethlehem, Pa. The Shaffer prize, a silver cup, offered by Miss Elizabeth Shaffer for 25 varieties; cut blooms 3 of a kind was awarded to E. P. Wilbur. Thomas Monaghan, gardener to C. H. Trotter, Esq., was awarded a special of \$10 by the society for a collection of fine cut blooms, which was placed in competition for the last named prize.

In the nurserymen and florists' class for cut flowers Craig & Bro. were awarded second premium, \$10, for a collection of cut sprays in vases, one of a kind; W. K. Harris 1st, \$5, for 12 naturally grown sprays, Craig & Bro. 2nd, \$3, J. W. Colflesh 3rd, \$2; fifty blooms, one of a kind, 1st \$25, John Cullen, Bethlehem, Pa.; 2nd, Craig & Bro., \$20; 12 blooms, one of a kind, 1st \$10, W. K. Harris; 2nd \$6, Craig & Bro.; 3rd \$4, John Cullen.

In amateurs' class, 12 sprays naturally grown, 1st \$5, E. P. Wilbur; 2nd \$3, E. R. Sykes; 3rd \$2, John McCleary; 100 blooms, one of a kind, 1st \$75, E. P. Wilbur; 2nd \$60, William Tricker; 3rd \$50, John Kinneary, and a special, \$10, to John McCleary, fourth being withheld; 25 blooms, one of a kind, 1st \$20, E. P. Wilbur; 2nd \$15, William Tricker; 3rd \$15, John Kinneary; 4th \$5, Joseph Shaw.

Thanksgiving Design, 1st \$25, Hugh Graham's Son; 2nd \$15, Pennock Bros. Plateau of chrysanthemums, 1st \$10, Pennock Bros.; 2nd \$5, Craig & Bro.; 3rd \$3, John Mertz. Window box of chrysanthemums, 1st \$5, Miss Annie Bissett; 2nd, Craig & Bro. A special, \$5, Miss Bissett, for a basket of flowers, and a special, \$3, to Mrs. E. D. Demaris, for a vase of Cosmos hybridus. Special mention was granted to John G. Gardner for a fine lot of Erica Wilmoreana, growing in 5 and 6-inch pots, some of the sprays were 18 inches long. Any person who has any doubt about the practicability of growing heaths in this country should take a trip to Jobstown, N. J., where Mr. Gardner grows heaths—and everything else he has under his care—well.

In florists' class for cut roses there were only two exhibitors, Pennock Bros. and Wm. N. Crawford. Pennock Bros. took first for 12 each of Niphotos, Bennetts, Papa Gontier, Sunset, Mermets, La France. Mr. Crawford took first for Perle and American Beauty. In the Growers' class Craig & Bro., Coles & Whiteley, C. F. Evans and Clarence Ramsden were competing for supremacy. The result was as follows: Craig & Bro. were awarded first for Perles, The Bride, Bennetts, Sunsets, Mermets and American Beauty. Coles & Whiteley were first with Papa Gontier, La France and Mad. Cusin. C. F. Evans secured first with Meteor in the "any other variety" class, against C. Ramsden with "The Gem," who was awarded second premium. The last named exhibitor took first for Niphotos.

The judges on plants were Messrs. Charles Anderson, Flushing, Peter Henderson, Jersey City, John Bell, Hestonville, George Huster, Girard College, and Dr. Reed, Philadelphia. On flowers, W. W. Coles, Lansdowne, Pa., John G. Gardner, Jobstown, N. J., and B. F. Dorrance, Wilkesbarre, Pa. On bouquets,

designs, etc., John Burton, Chestnut Hill, Pa., Bryant Ferguson and W. S. Dilks, both of this city. One omission, which is to be regretted, was that the fine flowers and meritorious novelties exhibited by Messrs. Edwin Fewkes & Son, Newton Highlands, were not recognized in any way. There were at least three deserving of certificates of merit, they were Kioto, W. H. Lincoln and Lilian B. Bird.

John M. Hughes had at least 50 flowers of as many seedlings on exhibition, prominent among them were: Wootton, pure white, a distinct type—after the Chinese, and Mrs. S. M. Gross, a large and beautiful pink Japanese variety.

The decorations were on an elaborate scale, such as had never before been attempted here. It was a revelation to the members and patrons of the society. The Florists' Club of Philadelphia took the matter in charge and appointed Messrs. John Westcott and H. H. Battles to superintend the arrangements, and no two florists are better qualified to conceive and execute so practical and artistic decorations as these were. A liberal quantity of Chinese lanterns and Japanese parasols were judiciously interspersed among the evergreens and autumn boughs, which were grouped along the sides of the hall above the gallery with telling effect. Laurel wreathing was festooned around the balcony, suspended from the chandeliers and gracefully overhanging the Japanese garden on the stage. The coral colored fruit of the burning bush (*Eriogonum europaeum*) was thickly studded on the branches used in the decorations, which gave them a novel and pretty effect. Palmetto fronds formed the background of large bunches of chrysanthemums in which were arranged, with good effect, autumn leaves. The only hunting used was on the baluster and in front of the stage, and this was in subdued tones in coloring. Nile green and cheese cloth, each color alternating in knots and loops. This was Mr. Geiger's idea of the Floral Exchange, and it was favorably commented upon by those who make these matters a study.

Much of the success of the exhibition is due to the untiring efforts of Mr. David Bearn, chairman of the committee of arrangements, and his able assistant, Mr. John Nisbet, who had charge of classifying the cut flowers. The way in which both plants and flowers were arranged greatly facilitated the work of the judges, and was vastly appreciated by those who composed the committees on awards.

The judging on plants was done by points as recommended by Mr. H. H. Battles.

It is a matter for regret that one of the resident (quack) judges unaided and alone undertook to reverse the decision of the committee, as a whole, after he himself had signed the report. This is reprehensible and should be vigorously opposed on principle, especially when it is known that the original decision was rendered strictly in accordance with the schedule.

LONSDALE.

Indianapolis.

A really excellent show was made including many well grown plants and quite a number of novelties.

The best exhibit was decidedly that of Hill & Co., Richmond, Ind. Their twenty five plants, one of a kind, contained some very well grown plants, most of them new and meritorious kinds. Among them were noted Mrs. Wm. Howell, a pretty shade of red; Mrs. Richard Elliott; Venus; Mou. Boyer; Frank Wilcox, a very attractive flower; Delie;

Mrs. Isaac Price, a handsome yellow. Mrs. M. J. Thomas; Mt. Pleasant and Leopard, a novel flower, well named.

Fred Dorner's exhibit in same class ranked second. The plants were nearly as well grown, but it contained fewer novelties than that of Hill & Co. Among his plants Dr. S. H. Metzger, a single yellow of good form and well flowered is worthy of mention.

In the class for ten standards Hill & Co. were first with ten good plants. Among them were Mrs. Frank Thompson, Pietro Diaz, Marvel, Mrs. Richard Elliott, Mrs. A. Blanc, Jewell, W. W. Coles, Mme. Drexel and Frank Wilcox. A feature of Hill & Co.'s exhibits was that each plant had a plainly printed label which could be easily read twenty feet from the plants.

L. Canning, a large white variety impressed one with its value as a florists' flower. The flowers are large, very freely produced and the blooms seemed to come uniformly perfect.

In addition to Messrs. Dorner's and Hill's exhibits large displays of plants were made by Messrs. Weigand, Keller, Berterman Bros., Rieman and Mrs. Hilker. Messrs. Weigand and Berterman Bros. made displays of palms and decorative plants.

The United States Nurseries, Short Hills, N. J., sent a liberal quantity of excellent cut blooms including the great novelty of the season, Mrs. Alpheus Hardy. This is certainly a beautiful flower, a clear white in color, much incurved and the petals covered with white hairs as described. It is certainly the most novel chrysanthemum in existence and is withal remarkably handsome as well as novel, but its resemblance to a white ostrich tip is not as close as it might be, though possibly it resembles that as much as anything else. Other handsome blooms in their exhibit were Cloth of Gold, a large fine yellow; Hero of Stoke Newington; Admiration, handsome pink; Mrs. H. Cannell, a superb yellow; Robert Owen and Edwin Molyneux.

Hill & Co.'s exhibit of 24 varieties, one bloom of each contained many choice varieties, among them Mrs. E. W. Clarke, majenta, of large size; Sunnyside, large flesh colored flower; Mrs. Isaac Price, large incurved yellow, petals thready and twisted; Newport, pink, much incurved, fine flower; Minnie Palmer, white; Mrs. John May, yellow, and a number of others, duplicates of varieties which appeared in the plant exhibits. Elk's horn as exhibited in this collection was a bitter disappointment. It required very close examination to detect the "horn," and the flower was very inferior. Either Mr. Hill has had very poor success or Mr. Blanc drew very heavily on his imagination when he executed the engraving which we recently published as a portrait of this novelty. We hope that the trouble lay with Mr. Hill for the picture represented a handsome and novel flower. Mrs. Cleveland is another flower which is certainly flattered by the engraving which appeared in last spring's catalogues.

Mr. M. A. Hunt, Terre Haute, Ind., showed blooms of Lady Matthews, a globular, cream colored flower which appeared as though it might be valuable to the florist.

A few cut orchids including a spray of Vanda Sanderiana from Siebrecht & Wadley, New York, were an attractive feature. The vanda spray was presented to President-elect Harrison at the conclusion of the exhibition.

The designs consisted principally of

plows, lounges, hats, etc. A fan of white chrysanthemums on which roses and ferns were gracefully laid, was well done. It was the work of Chas. Rieman.

An exhibit of artificial plants and flowers—roses on plants bearing apple leaves, Rex begonias bearing trusses of geranium flowers, etc., excited some criticism and should not again be admitted.

President-elect Harrison and his wife visited the show and seemed much interested in the exhibition.

During the show a banquet was given which was much enjoyed. President Carmody had an extra supply of his own brand of humor which he dispensed liberally to the great amusement of those present. A number of visitors from other cities, among them Messrs. Michel and Koenig, of St. Louis, Murphy and Hardesty, of Cincinnati, Lane, Reynolds, Anthony and Grant, of Chicago. Mr. John Lane, the Chicago amateur, and Henry Michel, of St. Louis, acted as judges.

Secretary Berterman is a hustler which is an excellent thing, as he and his assistant, Mr. Hartje, seem to fall heir to most of the work.

Following are the awards:

Twenty-five plants one of a kind—1st Hill & Co.; 2nd Fred Dorner, 3rd H. W. Rieman, 4th J. D. Carmody.

Ten standards—1st Hill & Co.; 2nd Berterman Bros.; 3rd John J. Keller.

Ten yellows—1st Fred Dorner, 2nd H. W. Rieman; 3rd A. Wiegand.

Ten whites—1st Hill & Co.; 2nd H. Rieman; 3rd Fred Dorner.

Ten pinks—1st J. J. Keller, 2nd A. Wiegand, 3rd Berterman Bros.

Five seedlings—1st Wm. Hack.

Specimen yellow—1st Wm. Hack, 2nd Mrs. Henry Hilker.

Specimen white—1st Hill & Co., 2nd Mrs. Henry Hilker.

Specimen standard—1st Hill & Co., 2nd Mrs. Henry Hilker.

Specimen pink—1st Hill & Co., 2nd John J. Keller.

Specimen seedling—1st Hill & Co.

Collection in 4-inch pots, one bloom to a plant—1st Fred Dorner; 2nd Jens Larsen.

Collection cut sprays—1st Hill & Co., 2nd Jens Larsen, 3rd Berterman Bros.

Twenty-four varieties one bloom of each—1st Hill & Co.; 2nd Henry W. Rieman.

On cut roses Mr. Jacob Schulz, of Louisville, took all first premiums except that on Niels which was awarded to Mrs. Hilker.

Baltimore.

The chrysanthemum show of the Maryland Hort. Society held here on the 14 and 15 insts., was by long odds the best exhibition of the kind ever given by the society. The large concert hall in the Academy of Music was filled to its utmost capacity, there was a marked improvement over former years in the general arrangement, and altogether the exhibition was exceedingly satisfactory, especially in view of the limited time allowed for preparation. The decoration of the platform—for which a special premium was offered—was arranged by Pentland, and was the most conspicuous object in the hall. Crotons and palms were used for a background, faced with a perfect mass of chrysanthemums and finished off with a fringe of adiantums and other ferns.

John Donn, as usual, had the largest and most varied collection of chrysanthemums. Among so many excellent exhibits it is a delicate matter to discriminate but Mr. Donn's collection contained some unusually fine specimens, H. Waterer, Cullingfordi, Princess Teck, Jennie Y. Murkland, Souv. de Harlem, Mr. T. Norris and many others were never shown here in better form. Mrs. C. H. Wheeler, Mrs. F. Thompson, Mrs. Bullock and Robt. Bottomley, with flowers five to seven inches across were grand and a plant (in 7-inch pot) four feet in diameter was good enough for Boule de

Neige. The cultural skill displayed in this collection was certainly creditable, not only to Mr. Donn himself, but also to his efficient foreman, Mr. Ekas.

Another very fine collection was that of Gen. Geo. S. Brown. The plants were not of the lean and lanky style, they were well furnished from top to bottom, none of them very tall, but all of them extremely symmetrical.

Mr. Henry Bauer exhibited some immortelle work that was the best I have ever seen in Baltimore. The same exhibitor had a floral guitar on plaque of ivy leaves, very well executed.

Mr. E. A. Seidwitz deservedly carried off the honors for floral designs with a large mirror having a frame of miniature marigolds, at the upper left hand and lower right hand corners roses, chrysanthemums, etc. were exquisitely arranged; it was a very simple design, but in its conception Mr. S. showed that he knew how to secure special attention from the fair sex, for it is quite safe to say that every lady in the hall examined that mirror frequently.

There was a good showing of palms, ferns and other plants, but the chrysanthemums were the chief attraction during the two days of the exhibition. The judges were—on plants: Captain A. C. Pracht and Wm. Fraser; on designs, W. D. Brackenridge, John Donn and Chas. G. Campbell. They performed their duties to the satisfaction of all concerned, especially the victorious exhibitors.

We give below a list of the awards:

Twelve chrysanthemums, large flowered or Chinese—1st John Donn; second Chas. Campbell gardener to Gen. George S. Brown. Six chrysanthemums large flowered or Chinese—1st John Donn; second E. A. Seidwitz. Twelve chrysanthemums large flowered or Japanese—1st John Donn; second John Cook. Six chrysanthemums large flowered or Japanese—1st John Donn; second E. A. Seidwitz. Six chrysanthemums large flowered or pompons—1st John Donn; specimen plant large flowered or Chinese—1st John Donn; specimen plant large flowered or Japanese—1st John Donn. Specimen plant large flowered or pompon—1st John Donn. Display of fifty named plants in pots all classes—1st John Donn; second Hampton Easter. Display of twenty-five plants in pots all classes—1st John Donn; second Wm. Fowler. For best display in pots without regard to name or classes—1st James Pentland. Twelve cut blooms Chinese chrysanthemums—1st John Donn; second Wm. Fowler. Twelve cut blooms Japanese chrysanthemums—1st John Donn; second John Cook. Twelve cut blooms pompon chrysanthemums—1st Wm. Fowler. Display cut blooms distinct varieties chrysanthemums—1st John Donn. Group stove and greenhouse plants—1st Thomas Maddock, gardener to Messrs. Hoer. Group ornamental and variegated foliage plants—1st John Cook; second Thomas Maddock. Group ferns including tree ferns—1st John Cook; second Thomas Maddock. Display of cut flowers—Certificate of merit John Cook. Display of plants—Thomas Maddock. Design of cut flowers of merit—1st E. A. Seidwitz; second Miss Mary Patterson. Basket of cut flowers of merit—Henry Bauer certificate. Bouquet of cut flowers of merit—1st Miss Mary Patterson. Carnations—Henry Bauer certificate of merit. Begonias—Henry Eberhardt certificate of merit.

A. W. M.

Germantown, Philadelphia.

You will remember that I mentioned in the spring that it was proposed at that time to hold a chrysanthemum show in Germantown in November. As I said then, the committee that had it in charge based the premiums on awards amounting to \$250, with \$50 more for expenses, and that the whole amount was obtained by subscription, with no trouble whatsoever. Indeed the committee reported that \$600 could have been obtained almost as easily as what was got. The gentlemen and ladies who subscribed did so because of their desire to see good premiums given to encourage the growth of plants which would be a credit to the place. In this they were not disappointed.

While the plants as a rule were not so massive as they are often to be seen in the large cities, being confined—except in the case of single specimens—to 9-inch pots, they were evidences of good culture. One collection, that of William Beasley, attracted every one's attention on account of the luxuriant foliage on every plant. Three specimens from Michael Sammon, one each of Source d'Or, Duches and Puritan were over four feet in diameter, well grown and were pronounced by good judges to be superior specimens in every way. Puritan had from 450 to 500 flowers.

The judges were the well known Philadelphians, Thomas Cartledge, Walter W. Coles and J. William Colflesh.

The following is the list of first premiums:

AMATEUR LIST.

Collection of twelve plants—William S. Beasley.

Collection of six—1st, William S. Beasley.

Collection of three plants—1st, William S. Beasley.

Single Specimen Plants—For red, John McCleary; for white, Michael Sammon; for yellow, John McCleary.

Cut flowers—Joseph Shaw.

FLORISTS.

Collection of twelve plants—Thomas Meehan & Son.

Six plants, six varieties—Woltemate Bros.

Three plants—Thomas Meehan & Son.

Specimen plants, three colors—Woltemate Bros., for red, white and yellow.

Cut blooms—Woltemate Bros.

Collection of seedling chrysanthemums, six plants, open to all—Robert Carey.

Single specimen seedling, open to all—Alex. Lawson.

Design of cut flowers, other than chrysanthemums, open to all—John W. Young.

Design of cut chrysanthemum flowers—Woltemate Bros.

Cut roses—John W. Young.

JOS. MEEHAN.

New Bedford, Mass.

The chrysanthemum show of the Gardeners' and Florists' Club was a fine one, especially in the cut flower classes.

Mr. A. P. Calder, of Boston, acted as judge and made awards as follows.

PLANTS.

For 25 distinct varieties, double, in pots, one plant in each pot and each plant to have a single stem—George Brennan, gardener for L. A. Plummer 1st; William M. Howard 2d. For 12 plants as above—John Driscoll gardener for William J. Kitch, 1st; James Rickerson gardener for Edward D. Mandell, 2d. For 6 Chinese—Dennis Shea gardener for Horatio Hathaway, 1st. For 6 Japanese—William Keith gardener for Walter P. Winsor, Fairhaven, 1st. For 3 Chinese—Patrick Murphy gardener for S. Griffiths Morgan, 1st. For 3 Japanese—William Keith 1st; Patrick Murphy 2d. For 3 pompons—William Keith 1st. For 1 Chinese—William M. Howard 1st. For 1 Japanese—John Driscoll 1st; William Keith 2d. For 1 pompon—George Brennan 1st; John Driscoll 2d. For 1 specimen any variety—John Driscoll 1st. For 3 Chinese—George Brennan 2d. For 1 standard not less than 3 feet high—Dennis Shea 1st; Patrick Murphy 2d. For group arranged for effect—E. S. Haskell 1st; Dennis Shea 2d. John F. Tynan 3d. For 3 seedlings—John F. Tynan 1st; Patrick Murphy 2d. For largest named collection—E. S. Haskell 1st. William M. Howard 2d.

CUT FLOWERS.

For 24 Japanese varieties, 1 flower each—John Driscoll 1st. John W. Riley gardener for E. S. Potter, 2d. For 12 Japanese—Dennis Shea 1st. J. W. Riley 2d. For 6 Japanese—Wm. Keith 1st; E. S. Haskell 2d. For 3 Chinese—E. S. Haskell 1st; George C. Bliss 2d. For 3 Japanese—E. S. Haskell 1st; William Keith 2d. For 1 Chinese flower—E. S. Haskell 1st; Geo. C. Bliss 2d. For 1 Japanese flower—E. S. Haskell 1st. For Basket of Cut Flowers decorated with foliage—John F. Tynan 1st; Geo. C. Bliss 2d. For Vase of Flowers decorated with foliage—E. S. Haskell 1st. Patrick Murphy 2d.

Worcester, Mass.

The Worcester County Horticultural Society held its fifth annual chrysanthemum show at Horticultural Hall, November 15 and 16. The exhibition was very

good but on account of the rain the attendance was not large.

A collection of well grown plants shown by the State Lunatic Hospital, occupied the center of the hall. H. F. A. Lange had a good exhibit of finely flowered plants arranged on terraces in front of the stage. F. H. Wesson, Joseph Brierly and others grouped their specimens along the sides. Some of the best cut blooms shown were: Mrs. C. H. Wheeler, G. F. Moseman, Domination and Mrs. Frank Thompson.

The obnoxious green stake was not as prominent as last year, but a little less green stake and more green foliage would be an improvement. One objectionable feature was the poor light, which did not bring out the more delicate shades, but with the exception of this everything was well arranged, the tables covered with cloth and the floor kept clear of rubbish.

A. H. LANGE.

New Haven, Conn.

The chrysanthemum show was an advance on all previous efforts of the Chrysanthemum Club. It was certainly highly successful. Wm. J. Rowe exhibited a specimen of Volunteer which was eight feet high. Robert Veitch & Sons' exhibit which contained over fifty plants was a fine display, not entered for competition. Many prominent people were in attendance.

The awards were as follows: Six Japanese distinct named varieties—1st, Archibald Veitch; 2nd, John Gallagher, gardener to Mrs. Hillhouse. Six Chinese distinct named varieties—1st, Archibald Veitch. Four pompon distinct named varieties—1st, Archibald Veitch; 2nd, William Colter, gardener to Mrs. Sheffield. Specimen Japanese—1st, Archibald Veitch; 2nd, John Gallagher. Specimen Chinese—1st, Archibald Veitch; 2nd, John Gallagher. Trained standard any class—1st, W. J. Rowe, gardener to Joel Sperry; 2nd, Mrs. Dr. B. S. Lewis. In the fourth class a special award was made to William J. Rowe for a specially large plant.

Springfield, Mass.

The chrysanthemum show was an improvement upon previous ones in spite of the fact that many growers lost plants by the early frosts. The Mieliez Horticultural Company had perhaps the largest display.

Following is the list of awards:

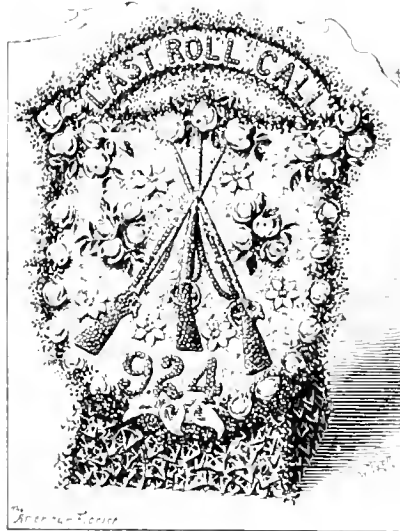
Display of 12 plants of distinct named varieties. Mieliez Horticultural Co. \$10; C. H. Denison \$5; R. H. Smith \$5; six distinct named varieties. Mieliez Horticultural Co. \$5; R. H. Smith \$4; C. H. Denison \$2.50; three distinct named varieties. Mieliez Horticultural Co. \$3; R. H. Smith \$2; C. H. Denison \$1; single plant. Mieliez Horticultural Co. \$3; R. H. Smith \$2; C. H. Denison \$1; standards. R. H. Smith \$5; C. Denison \$1; cut blooms. Mieliez Horticultural Co. \$10; E. H. Howland, Holyoke, \$5; 15 cut blooms, distinct named varieties. Mieliez Horticultural Co. \$5; C. H. Denison \$2; E. H. Howland \$2; 12 cut blooms distinct named varieties. Mieliez Horticultural Co. \$4; J. F. Taylor \$3; R. H. Smith \$2; single blooms. R. H. Smith \$1; Mieliez Horticultural Co. \$1; C. H. Denison \$1; cents carnations. Dexter Snow, Chicopee \$1; E. H. Howland \$1; N. J. Herrick \$1; single bloom Dexter Snow \$1.

Hartford, Conn.

The annual chrysanthemum show probably eclipsed any former exhibition of the kind held here. Many well grown plants and flowers were shown. The United States Nurseries at Short Hills, N. J., sent some handsome flowers, including two blooms of Mrs. Alpheus Hardy.

The Horticultural Society offered as prizes: For the best collection, first prize \$40, second \$15; for standards and Japanese \$10 and \$5 in each class; for pompons \$5 and \$2; for Atwood prizes \$25 and \$10.

The prizes were awarded as follows: Collection—George W. Atwood 1st; James Smith, gardener for Newton Case, 2nd. Trained standards—George W. Atwood 1st; Robert Patchet, gardener for Rev. Francis Goodwin, 2nd. Japanese named varieties—John O'Neil. Pompons—John O'Neil 1st; G. W. Atwood, 2nd. Atwood gift—Arthur Scrivener 1st; Arthur Jaqueth and boys of Watkinson Farm School 2nd; C. E. Beach 3rd.



THE LAST ROLL CALL

OSHKOSH, WIS.—The annual chrysanthemum show was much superior to any which has preceded it. In addition to the chrysanthemums there was a display of ferns and other plants from the conservatories of Senator Sawyer, and cut roses, carnations, etc. from John Nelson. Among the exhibitors besides Mr. James Lewis, Senator Sawyer's gardener, were John Nelson, George Reese, Mrs. Charles Kohlmann, Mrs. Haben, A. H. Bartlett and Isaac Miles of Oshkosh, and Frank Whitnall of Milwaukee. Among those present from other points were Messrs. Wm. Currie and C. B. Whitnall of Milwaukee, and J. C. Vaughan of Chicago.

SYRACUSE, N. Y.—The chrysanthemum show at Greyhound hall attracted a large attendance of society people. The prize for the largest and finest exhibit was awarded to Mrs. Theodore Dissell. The finest collection of ten cut blossoms was exhibited by Mrs. J. J. Belden. Mrs. Theodore Dissell exhibited the finest single plant. Peter Kay, the gardener for J. J. Belden, sent for inspection a miniature garden, which attracted much admiration. Edward Wheadon, a florist from Skaucateles, acted as judge. A handsome collection was exhibited by florist Albert Burt, not for competition.

SACRAMENTO, CAL.—The chrysanthemum fair held November 9 was a grand success. Four of the booths were elaborately decorated with chrysanthemums in colors to represent the seasons and the others were each covered with chrys-

anthemum blooms of some special shade. Many handsome designs in the same flowers were seen.

NEWARK, N. J.—A very creditable exhibition of chrysanthemums was made at the First Baptist Church November 13-15. The most attractive display of chrysanthemums was made by Bird Bros. A splendid array of flowers, ferns and plants came from the greenhouses of Mr. William Clark, and numerous other private conservatories contributed.

MACON, GA.—The annual chrysanthemum show opened in the Armory building Nov. 13. D. B. Woodruff exhibited quite a number of new varieties which were very handsome. The chief design was a mantel piece and hearth of chrysanthemums in various hues. It was elegantly made and was much admired.

HARRISBURG, PA.—A private exhibition of chrysanthemums was made by Mr. L. S. Bent at his residence in Steelton, Nov. 9. His collection is a very fine one comprising over 100 varieties. The exhibition was under the supervision of florist Samuel A. Parker.

OMAHA, NEB.—Florist T. N. Parker gave a chrysanthemum show at the exposition hall beginning Nov. 12. About a thousand plants were shown in 250 varieties. Orchids and decorative plants were an additional feature. The attendance was large.

CHARLESTON, S. C.—This city had a very creditable exhibition of chrysanthemums November 20-22.

"The Last Roll Call."

This design was made for the funeral of a police officer who was a member of the G. A. R. The design shows guns crossed on a policeman's shield. The latter is formed of white carnations, and edged with roses and adiantums. There are bunches of roses at the upper corners and callas at the lower ones. The more open spaces are dotted with Eucharis amazonica. The guns are worked out in immortelles. A band of white carnations edged with ferns and smilax contains the inscription "The Last Roll Call" worked in violets. The piece is on a stand of foliage. It was made by Fred. Gordon.

New York.

F. A. B.

The Autumn Show at the Eden Musee, New York.

An autumn show in which chrysanthemums take second place is a decided novelty; needless to say it is a success. We always expect such a result when Siebrecht & Wadley fill the Eden Musee; their two orchid shows were affairs of note, and their first autumn show, opening Nov. 29, falls into line with its predecessors.

At this season it is impossible to hold an orchid show; there are not sufficient varieties in flower, so this was described as an exhibition of decorative plants. The arrangement was different from previous shows and much more effective. As before, the alcoves along the mirror-lined walls were filled and banked with plants and flowers, but the main floor instead of being filled up with two or three long tables contained twelve circular stands or pedestals, each bearing one fine plant as a center piece, with a mass of plants and flowers about the base. The one exception to this rule was in the

center of the hall, an eccentric mass of gnarled and twisting branches hung with orchids. This arrangement showed everything to the best advantage while allowing space for the visitors.

The show was first opened for invited guests only, many prominent society people being present, as well as professionals, before it was opened to the public.

The first noticeable group on entering was a good plant of *Phenacophorum sechellarum*, the "Thief Palm," with its broad leaves and spiny stem; at the base a mass of *Cypripedium insigne*. Next was a superb specimen of *Seafortlha elegans*, its pedestal covered with artistically-grouped stove plants. A good plant of *Ananassa sativa* fol. var., richly colored, attracted more attention because it bore a little ripe pine apple. There was *Alocasia Sanderiana* with oddly cut leaves; small marantas and ferns. This was a very beautiful group. Another group, with a fine *Areca lutescens* in the center, had the base covered with *Adiantum Farleyense*; mingled among the ferns were vases of cut roses, fine Beauties, Mermet and Puritan. They are cutting really fine specimens of the last-named rose at Rose Hill; it really seems determined to redeem its character this winter.

A group with *Cycas revoluta* for centerpiece displayed some good chrysanthemums, stag's horn ferns were hung upon the cycas. A big *Caryota urens* had a base of *Adiantum Farleyense*; a few cut flowers were mingled with the ferns—*Odontoglossum crispum*, *Lapageria rosea*, a few oncidiums, cattleyas, etc. making a very pretty effect. Another big seaforthia with a base of stove plants, is a match to the first mentioned; this is probably the finest pair anywhere about New York, being equal in size and perfect in shape, only unfortunately they are getting too big for ordinary use. A plant or two of *Sphaerogyne latifolia* contrasted well with the other stove plants. Its rich coloring and bold habit makes this a very ornamental plant in any group. A fine *Asplitha* was surrounded by orchid plants; *cypripediums*, *spicerianum*, *Lawrenceanum* and *insigne*, cattleyas, *odontoglossums* and *kelias*.

The center pedestal was most unique. It looked like a mass of forked branches, striking out in every conceivable direction; it was full of odd nooks and crannies and had a broad low base covered with ferns, marantas, crotons and other foliage plants. The branches were covered with hanging orchids, here and there a *nepenthes*. Little baskets of *Sophranitis grandiflora* covered with its vivid scarlet flowers; fine *Phalaenopsis amabilis*; *Miltonia spectabilis*; *Calanthe vestita*; oncidiums, *odontoglossums* and *kelias*. The arrangement was charming, being so free from any suggestion of artificiality. Its irregularity made it the most noticeable arrangement in the room.

At either side the large central mirror was draped with a curtain of smilax, caught back at either side. Masses of chrysanthemum plants were in front of these curtains; on one side Mary Anderson in her white *Galatea* costume, stood in the midst of these brilliant flowers. A little group of heaths, *Erica hyemalis* and *australis*, filled one niche; pity these plants are not grown more extensively.

There were very good chrysanthemum flowers from Mr. Wm. Barr, Mr. Tricker, gardener to Judge Benedict, and the John Henderson Co. Mr. Barr sent some of his fine seedlings. "Mrs. O. D. Munn" is a large white flower with exactly the same thick soft texture and creamy tint as a Puritan rose. "Mrs. Jessie Barr"

may be described as "Mrs. Alpheus Hardy" without the hairs—a perfect beauty—this, however, is not an American seedling, being an importation from Japan. Sunset, Miss Alice Broomie and Mrs. Wm. Barr were other especially fine flowers.

Oncidium ornithorhynchum, *Vanda ceculea* and *suavis*, *Odontoglossum crispum* and other orchids filled one side recess, with a backing of ferns; another alcove contained a good plant of *Livistona horrida* surrounded by crotons, dracenas and ferns. These side groups were really charming. Some of the orchid blooms were from Wm. Mathews, of Utica; others from John Bush, of Tremont. The main exhibition, however, came from Rose Hill Nurseries. A much admired exhibit from John Bush was a very handsome plant of *Ouvirandra fenestralis*, the Madagascar lattice plant. It was beautifully grown, filling a glass globe, also tenanted by a few gold fish; this vessel displayed its form to the best advantage. This exhibit was given a place of honor by itself on a little stand in front of the platform.

The platform, which has been built out beyond the regular music stand, is very originally arranged. Along the edge it is fringed with variegated vinca; at one end a large specimen of *Cyathea dealbata* stands in front of it. At the back is a prim little hedge of arbor vite, while the platform itself is turned into a miniature Japanese garden. There are masses of carnations and stevia at either end and borders of marigolds with two tall standard chrysanthemums overlooking the whole. A center bed of Roman hyacinths bordered with pansies; an end bed of fine cyclamens and another of various primulas, among them the dainty *obconica*. Neat little gravel walks pass around the beds, and the whole has a look of formality in miniature.

Of course "Mrs. Alpheus Hardy" was winning admiration at this show; it is the first flower people ask for at every exhibition. *Nepenthes* were hung about wherever they added completeness, and there were some queer *sarracenias*. Big *latanias* outside gave promise of the beauty inside.

It was a fine show—there was no question of that—and doubly admirable at this season. A benefit to the trade too, and every visitor will hope to see it repeated.

EMILY LOUISE TAPLIN.

Cleveland.

Harry Jaynes has moved across the street on Euclid avenue, his window looks very attractive. Our Cleveland stores do look well these days.

The best selling early chrysanthemums as they come into our markets appear to be *Gloriosum* for yellow, *Elaine* for white and *Elise* for pink.

Robert Kegg has taken unto himself a better half. Robert says it's cheaper than having boarders.

One of our florists bewails the loss of an employe and \$200, which mysteriously disappeared at the same time.

Herman Hart has the chrysanthemum craze, but says no new French ones for him. Hart's place always looks so orderly it's a pleasure to go through it. Order and system characterize the whole establishment.

Ed. Paddock is reported to have made some extensive improvements lately out at his place in Newburg.

Mrs. E. G. Campbell had the prettiest and most tasteful turnout in the late Re-

publican Industrial Parade, so say the local papers. On the top of the wagon (which by the way is one of the handsomest wagons for the purpose in the country), was a floral motto, on which was inscribed "We sympathize," on the reverse side "Hurrah!" It attracted considerable attention.

At a recent funeral of a well known actor a new floral design was well brought out. It represented the proscenium of a theater with the curtain down. The richly decorated arch, the arc of footlights, the white stage and the maroon curtains were all reproduced in flowers of appropriate colors. The piece was at least five feet in height and four feet wide, and just in front of the curtain on the floor of the stage were the significant words, "The last act."

Another design I heard of the other day was for a railroad man; it represented a limited coupon ticket. The ticket which was five or six feet in length rested against a column, on which was placed a ticket stamp and behind stood the Angel of Death in the act of stamping in the date of limit. The first coupon bore the inscription, Pan Handle 69-82; the next N. Y. C. & St. L. 82-83; the next N. Y. West Shore & B. 83-87; the next N. Y. C. & H. R. 87-88. At the top were the words, "Limited to October 9th, '88."

Miss Rose Beatrice, only daughter of Florist J. M. Gasser, was married to J. R. Knisely at St. John's Church on the evening of October 30. The interior was very beautifully decorated for this occasion. Conspicuous among the floral features was the conventional bell, which was in this case some five feet in height and perhaps three feet in diameter. It was filled inside and out with white chrysanthemums, suspended on the lower edge like a fringe was a row of Mermet roses, while a large spray or cluster was arranged on the front in relief. Strings of smilax radiated to the point of suspension from the ceiling of the chancel. On either end of the altar were placed blue vases filled with large bunches of white chrysanthemums while a mass of Mermet occupied the center behind which rose a silver crucifix. One of the prettiest features was a wicker gate of smilax over the rail of which was carelessly placed a graceful spray of pink roses tied with pink ribbon. White roses and chrysanthemums crested the chancel rail on either side, while large tropical plants harmonized the different floral features of the decoration. Two arches of white chrysanthemums midway up either aisle divided off the portion reserved for invited guests. The bride carried a bouquet of white orchids, lily of the valley and Bride roses. The bridesmaids carried Perle and Mermet roses respectively. The reception which followed was held at the future home of the newly married pair. The house had been thoroughly renovated and almost rebuilt by Mr. Gasser and it and the beautiful furnishings were a present from the father and mother of the bride. The decorations at the house were in keeping with the interior. The mantels were banked with ferns, palms, etc. Large masses of loose roses in vases occupied different points of vantage. The reception stand was hung with straw colored silk upon which were fastened in a careless graceful fashion clusters and sprays of Gontier roses and *Asparagus tenuissimus*, while the mantel adjoining was banked with white chrysanthemums and pink *bouvardia*. The beautiful stairway of English oak was also heightened by its

smilax decoration. The supper table also contained floral features; a wreath of Mermet and Bride roses enclosing a cluster of ribbon of the same shade of each, surmounted, or was laid flat on the bride and groom's cake, while a large plateau of roses occupied the center of the table. The smaller tables were adorned with vases filled with other varieties of flowers. The wedding presents were numerous and elegant. C.

Floral Mat.

This is six feet long. Large bunches of *Lilium longiflorum*, lily of the valley compose the corners, while *La France*, Brides, Perles, Bennetts, Beauties and carnations are massed in between center panels of American Beauty roses. There are violets at each end of the panels. The lettering is done in violets, among white carnations. The mat is fringed with *Adiantum cuneatum*. Mrs. Irwin made this for the Depew reception.

New York. F. A. B.

Long Island Plant Notes.

BY WM. FALCONER.

CACTUS DEVOTION.—Rightly handled there is money in cactuses and satisfaction too. I don't mean that people hanker after building up collections of them as they do of orchids, but amateurs want them. They want *Phyllocactus latifrons*, *Cereus grandiflorus*, *Cereus flagelliformis*, epiphylliums, *Echinocactus multiplex*, and some mammillarias and "old man" cactuses as window plants. With the exception of the last two all are free and showy bloomers. And they make the best kind of house plants. They will bear an immense amount of ill treatment with apparent impunity provided you don't drown them. In mosaic and other artificial flower garden decorations cactuses of all sorts, large and small, are in demand. A marked case of cactus-fancy was told me by a responsible florist the other day: A butcher who knew nothing at all about plants happened to see a few nice cactuses on exhibition. Their "funny" forms arrested his attention, and he bought a few dollars' worth. He became so interested in them that he bought a good many more. These only whetted his appetite. His house fronted to the north, and now he wishes to sell his house that he may buy a house that faces south so as to give him an opportunity to build a south-facing greenhouse for cactuses. But a south-facing greenhouse is not at all necessary for the good cultivation of cactuses.

THE VARIEGATED-LEAVED COLISEUM IVY (*Linaria Cymbalaria*) is another pretty little plant not unlike the ground ivy in general appearance but the variegation is whiter and the foliage smoother. It may also be used in the same way. It is not common around New York. I think it was Peter Henderson who told me how carefully he imported it from Europe a few years ago—brought it over with him on returning from one of his visits there and nursed it in his stateroom. But he might not have bothered with it for we then had plenty of it in America. I remember seeing a lot of it, seven years ago, at the Cincinnati Floral Co's. greenhouses.

THE VARIEGATED-LEAVED GROUND IVY (*Nepeta glechoma*).—A good deal of this pretty little plant is now grown around New York, and it has even found its way to our auction rooms. Used for small baskets or brackets it is quite ap-

propriate, and it makes a comely sod, selaginella-fashion on the surface of the ground in pots around fuchsias, rubber plants, palms or other house plants. In moist half-shady places out of doors it is quite hardy, but less so than is the green-leaved form which has become naturalized among the grass by the roadside in the vicinity of old gardens. It is readily multiplied, and is being increased vigorously by some of our florists for the spring trade.

MR. W. J. DAVISON has been engaged to assist Mr. Peter Henderson in the compilation of a new edition of his Handbook of Plants. It is generally conceded that Billy Davison is one of the most intelligent horticulturists in America. He has an excellent knowledge of plants, hardy and tender, and is intimately familiar with the seed, florist, and practical plant-growing business in their several ramifications. And Billy loves flowers. When



FLORAL MAT.

I go to New York I most always bring him a bunch of flowers, anything new, rare or old-fashioned that I have got. To see his big heart open up in love for them, and share the joy they bring him, is pleasure that mutual tastes alone appreciate.

COSMOS BIPINNATUS.—What a pity it is that this splendid Mexican annual blooms so late in the fall as to be subject to be destroyed by frost before it comes well into blossom. We can get it into bloom at any time of year by growing it in pots and confining its roots, but when planted out, after vigorous growth begins flowering stops till well into September when it again begins in earnest and continues till destroyed by frost. We have it now Oct. 29 in extreme profusion, for, on account of our proximity to the salt water we have not had any frost. As cut flowers these cosmos blossoms are splendid, large, showy, beautiful, pure white, rose or purple, and they last a long time when cut. Some plants I raised from seed last June although not so wide spread as those raised in March are just as well furnished with flowers. Would it pay florists to grow it in pots for blooming from September till Christmas?

"WHAT DO YOU WANT?" "Manettia bicolor." "Why, haven't you got it?" "Yes, we have a few plants but not nearly enough to get up enough stock for our spring sales. It has been laying around our place for some years but we never did anything with it till last summer when I planted out a few on a bench in a greenhouse and trained them up on stakes and strings, and they grew and flowered beautifully. When customers came through the houses they admired it so much and asked for it that the boss right away saw money in it and is now going to push it." Said a florist's foreman who came to see me the other day. I took him out into the garden to a fence trellis on which I had the manettia growing, and stripped off half a bushel of

vines, packed them into a bundle for him and sent him home happy. Now here are two points to consider. First, The manettia grows better, keeps cleaner, appears handsomer and yields a vast deal more wood for cuttings when planted out of doors in summer than when grown in a greenhouse, no matter under what conditions. Second: The "boss" never appreciated this plant till his customers wanted it, and the customers never wanted the plant till it was presented to them in an attractive form. And it is just the same with a hundred other kinds of plants that we keep kicking around our greenhouses.

ORCHIDS, yes the people do want them. Among my correspondents are a large number of amateurs throughout the country who write to enquire about one thing or another. Many of these particularly wish to know about orchids. They have read about them, heard about them and seen pictures of them, but many of these people have never seen an orchid and are very curious not only to see one but to possess and try to grow one. And we all know there are lots of orchids that can be grown successfully as window plants. Now wouldn't it pay some florist who issues a handsomely illustrated catalogue to offer a \$5 collection of orchids and devote a page or half a page to illustrating and describing them? Three or four plants could be given for this price. And instead of raising this stock himself he could contract with Mathews, Brackenridge, Saul or other orchid grower to furnish the plants.

Cytisus Racemosus.

This old greenhouse shrub has experienced a revival within the last few years and if ever a thing merited to be brought out again and be pushed to the front, *Cytisus racemosus* is surely one of the most deserving, on account of its free flowering habit and the neat and graceful appearance of the whole plant. Whether grown as a standard or in bush form everybody must be pleased with it when in bloom, barely showing the fine, small, but dense foliage of a glaucous green color, so entirely is it covered then, with the golden yellow racemes of flowers.

As we may have them in bloom a month or six weeks before or the same time after Easter, or even later, we have here a valuable decorative plant, which bears the hardship of transportation well and can endure the dry air in dwelling houses as well as any plant I know of. The flowers hold on firm to the stems, are not easily bruised or spoiled and last a very long time. If you have a large plant of it you may expect to see it full of flowers for three months, providing you do not keep it in a very warm house; but there are not a great many large old plants in the country, although plenty of younger plants in pretty good shape are offered in many places, and as they are very free growers we shall have an abundance of good sized specimens of every shape in a short time. For Easter decoration it rivals the azalea, but is much less difficult to handle in transportation and also giving us a color, entirely missing in the latter.

We do not need to give them much heat, nor even the best site in a cold house; they are contented in most any place and don't require a great deal of attention. After flowering usually after Easter with me I set them in a shed and trim in the tops and give just enough water to keep life in them. Here they

remain until middle of May when they are repotted and set outdoors for the summer, the pots plunged to the rims and far enough apart to allow plenty of room for the new growth to expand. At the end of September or first of October the younger plants may require a second repotting before they go in the houses, but the older stock in larger pots will not need it. Nothing more is wanted and you may give them a warmer or a cooler place according to the time you want them to flower. Plants just kept free from frost in a pit or cold house will force like any of the hardy shrubs in about six to eight weeks without any difficulty.

Their propagation is an easy matter. Cuttings put in during winter or spring will root like willows, with or without bottom heat, and if potted off in rich sandy loam will make good salable little plants in one year. But the better way is to turn them out in the open ground for the first year, pinching in as they grow, and if dry weather sets in give them an occasional watering to help them along and by fall they will be nice bushy plants. Should you want some standards with straight stems and nice heads select the strongest of the lot and as they grow trim off all side branches until you have the required height, then let the remaining eyes at the top come out to form a head and treat these heads the same as you would a short bushy plant. Heads ten to twelve inches in diameter are no unfrequent occurrence for one year olds if the plants received good care. In lifting we should try to get up all the roots, even if the ball is unproportionately large; instead of cutting off any roots I prefer to wash them out in order to reduce the ball and be able to get the plants into a given sized pot. Cutting in the roots will cause many plants to shed their foliage and this would seriously interfere with the sale of them afterwards.

As I have had several inquiries lately relative to the management of this cactus I may as well give the answer in these columns as by letter. Although many readers may be perfectly familiar with the culture and treatment, others may not know much about it and these few hints will possibly help to advance a long neglected plant, also in other sections of the country. In the larger cities of the east it has had a good run for the last few years and will, by all appearances, stay permanently.

Rochester, N. Y. JOHN B. KELLER.

Rose Forcing in England.

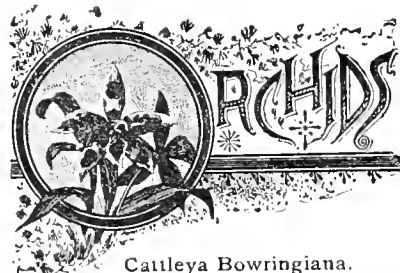
I arrived in England March 15 last and found that with one of the largest growers of cut roses in England, growing for the Covent Garden market trade, roses were a scarce article. About twenty houses were devoted to roses some over 250 feet in length and their cut then averaged seven or eight dozen buds a day. The cause of this small cut was simply lack of heat, the temperature rarely rising above 50° in the day time and at night it must have been considerably less. I remarked to the foreman that an American florist would be for putting legs on the pots so the plants could walk up and down to keep warm.

The result of this treatment is that during the winter when flowers bring good prices but few are produced while in spring when the sun heats up the houses enormous crops are cut and sold at ridiculously low prices. After this crop is cut they are nearly as scarce as in winter. I visited Covent Garden market July 15

and on that day I believe it would have been impossible to buy 200 Perle des Jardins buds, and I doubt if a thousand blooms could have been secured in all England. I believe there is a fine opening there for some of our American rose-growers as good prices are realized except in spring.

They graft nearly all their roses on the Manetti stock and use most any kind of soil, the deficiency being made up by guano or artificial fertilizers. A number of growers to whom I explained the American system seemed to understand its advantages but found it very difficult to acknowledge that their American cousins could teach them anything.

FRED MOORE.



Cattleya Bowringiana.

This is one of the tall growing varieties attaining a height of about a foot and a half. It is a very striking plant, and is a free bloomer. I think it will be found quite an acquisition to florists when better known. The pseudo-bulbs are erect, supporting two or three stiff smooth glaucous green leaves and are covered by three or four loose glaucous sheaths when young, they are much swollen (cormoid) at the base from which the roots are freely produced. The flower spikes issue from the tops of the pseudo-bulbs bearing from five to a dozen or more flowers measuring two and one half inches across, sepals and petals broad, deep rose color, lip somewhat cupped, bright crimson with a rich dark stain at the base extending along over the column, which is partially exposed and pure white, throat white, prettily penciled inside and rose outside. It is a late fall bloomer and lasts a long time in good condition.

The plant does best in a pot three parts filled with potsherds in a mixture of roughly chopped fibrous peat and sphagnum, care being taken to press the compost firmly in around the roots. A day temperature of 75° and 65° at night suits it best.

R. M. GREY.

Pittsburg, Pa.

CHRYSANTHEMUM NYMPHÆA.—H. W. Hales, Ridgewood, N. J. sends us flowers of his new sweet scented chrysanthemum Nymphæa. The blooms are shaped something like a water lily, rather small in size and fragrant. The fragrance however savors more strongly of the chrysanthemum than of the water lily, though more attractive than that the first named flower usually favors us with. Mr. Hales states that the plants are dwarf and very free flowering, the individual flowers being borne on long stems making them desirable for cut flowers.

CARNATIONS.—Mr. Theo. Beck, Hamilton, O., sends us specimen blooms of carnations of standard new sorts, showing evidence of good culture.

GARDEN AND FOREST and the AMERICAN FLORIST one year to one address for \$4.75.

Leaves of Advice From a Limb of the Law.

(For Young Florists.)

III.

Softly, softly, young man, you'll bust that rubber hose in a minute unless you work that force pump more gently. That's it, come to a rest and let me hear what the matter is. Old Scrubbs is a rascal, is he? Possibly, but give us the facts. You say you were in your nursery the other day filling an order for six dozen fruit trees when Old Scrubbs' son presented a bill for compost amounting to \$1.75, you paid it, he receipted it with a pencil, went off and spent the money for liquor and now the old man says it was no payment because the bill was not receipted in ink. Pretty mean business this; but take it coolly. The receipt is perfectly good. But let me say to you right here, that in general the law looks upon signatures and memoranda written in pencil with some suspicion. Therefore, unless absolutely impossible, make use of ink in all books and papers relating to your business. It doesn't look well to see a bill written in ink with the receipt in pencil. But I am glad you called my attention to the subject for if you have no objection, I'll talk to you about the execution of instruments, documents, contracts, etc.

If you sell a firm a bill of cut flowers you may think your work is done and that you have only to go to their place of business and collect the bill on the first of the month. A great mistake. You or some one for you must make out the bill properly and send it with the goods. Now suppose this firm is composed of Rough & Bluff. Through some carelessness the bill is made out to Mr. Rough personally. That very week the firm fails. Rough hasn't a cent in the world; Bluff is the moneyed man. Here you find yourself with a *personal* claim instead of a *firm* one; for make sure that Bluff will claim that the cut flowers were sold to his partner personally and not to the firm and the bill rendered will prove it.

Again, suppose it so happens that you are called upon to accept some document under seal from a firm, say a lease, a general release bill of sale or bond. Now it might occur to you that if one of the firm should sign the firm name to the instrument, it would be all that the law required. Not so. See to it that each partner signs his name and that the fact that they are partners constituting such and such a firm is set forth in the body of the instrument. Bear in mind that in all these matters an ounce of prevention is worth a hundred weight of cure!

If you have dealings with a married woman take care that she doesn't sign as a great many of them do: Mrs. Doe, instead of Susan B. Doe. It is matter of proof to show that she is the wife of John Doe. Now suppose you hold a power of attorney from some friend to sell or lease a greenhouse property. When it comes to signing, *first* write out the name of the giver of the power, *then* your own, preceded by the word "By" and followed by the words: "Attorney in fact."

If you should be called upon to execute any instrument as executor, administrator, guardian, etc., never fail to add the descriptive word to your name. This gives notice to the world that you are executing in a representative and not in a personal capacity.

There is a vicious custom among business men to hold themselves out to the world as having partners, when in reality

they have none, and to use the sign "Co" when there is no "Company," or to call themselves a corporation when there is no legal incorporation. My advice is in all these matters not to try to count for more than you really are. Nothing hurts a business man so much as to be obliged to go into court and confess that his partner is a myth. It prejudices a jury against a business man at once.

Right here let me call your attention to something before I forget it. Be particular in paying the wages of your helpers of all kinds and no matter how small the account, insist upon a receipt. If you make these payments every week keep a regular pay roll. Suppose they can't write? Then let them make a cross and have a witness to it. Nothing is more vexatious than to be sued by one of your hired men. They are often shiftless and improvident and when they recover from a Saturday night off they feel chagrined to find their purse depleted and at times insist that they were not paid in full.

In full! On account! These are important words in the execution of all commercial documents, such as bills, receipts, releases, etc., and so too are "Cr. by cash," and "Cr. by merchandise."

Get yourself once in the habit of executing these memoranda in a careful and business-like manner and you'll not easily be turned aside by such assurances as "Oh, never mind the receipt! Don't take the trouble to write that down; I'll not ask for it again! That's all right, I'll remember it. I'll send you a receipted bill," etc., etc.

Now another thing; if your wife runs the business, or is a partner in the business, let that fact appear on your circulars, bill-heads, etc. Don't masquerade behind your wife's name, get *personal* credit on the score of the business and then when an account is presented for payment say: "This bill should be made out to me, E. E. Doe; M. E. Doe is my wife." How much more honest it would be to have your wife sign: "Mary E. Doe." It pays to be honest in the long run, no matter how much you may realize from a single crooked transaction.

Strange as it may sound to you, very few business men know how to sign their names in a legal manner. Assuming a man's name to be Richard Brown Roe, the chances are he'll sign himself R. B. Roe, or R. Brown Roe. Either way would not be the strictly legal manner to sign that name. The law expects a man to spell out two of his names—the first of his given names and his family name; that is, the above named individual should sign his name Richard B. Roe.

I once knew a man whose name was Thomas a' Becket Burnus. He always insisted upon signing commercial documents and legal papers "Thomas a' B. Burnus." Of course those who knew of the existence of the name "a' Becket" knew what he was trying to do; but the large majority voted him a crank. And he was. Another thing which the world is entitled to get from a man is a clearly and legally written signature or firm name.

I've sat here half intoxicated with sweet smells while I have been talking and cannot withhold a word of praise for the splendid condition of your rose houses. Those Marechal Niels; those Bon Silenes; those Jacqueminots are superb. How clean the leaves; how healthy the plants; how large the yield. Everything is well ordered, neat, trim, exact. It proves your skill and your patience. Now, pray tell me if you can,

why there should be such attention to detail at this end of the line and confusion and disorder at the other?

Don't scowl. I'm not personal in my remark. I have no time to reform *one* individual. I'm speaking of young business men as a class.

In conclusion let me impress this fact upon your mind that when a man sets his name to a letter, contract, petition, statement, etc., the law presumes that he thereby gives his unqualified and unconditional consent and approval to everything set forth in the written or printed matter or in both. Now if there be a single word, line or paragraph which you wish to *except* from your approval, note the condition of your signing over your signature, and above all, never sign a paper of any kind until you have read it from end to end.

UNCLE BLACKSTONE.

Youngstown, Ohio.

The unusually mild weather makes everything in the greenhouses look strong and healthy. With the exception of our roses we have not had occasion to use much fire heat. Our Catherine Paul carnations are fine and producing an abundance of bloom, but none going to waste, as the demand for cut flowers for the last two months has been extra good.

Chrysanthemums are in their prime and the demand for plants and cut flowers ahead of any season so far. I had a large number of Lady Selborne, which coming in early were in great demand and brought good prices. No! No!! the interest and demand for the chrysanthemum does not abate any, nor is it likely to do so long as good flowers and good plants can be raised and put on the market. Plants of the early kinds with us left in the open ground have flowered well, an unusual thing for this locality. We have begun to cut our first Romans, being about two weeks earlier than usual, they are good and shall come in well for funeral work.

Our local retail bulb trade has this season increased considerably. Only a few years ago but a very few bulbs were needed to meet the demands. This party, that one and the next one, however, began to set out a tulip and hyacinth bed, their neighbors seeing them also wanted one, and so it has grown that soon a tulip bed will be considered as much a necessity as a geranium bed.

Considerable increase has taken place in the demand for flowering and ornamental shrubs, and it is going to keep on increasing. Why should it not? What is more attractive than a good collection of hardy shrubs for the decoration of our homes? Every florist should keep a supply of the best always on hand; it will certainly pay him, and instead of decreasing a demand for greenhouse plants shall increase it. M. MILTON.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—In florist store; 5 years' experience. Can come well recommended. Address: D. L. care American Florist, Chicago.

SITUATION WANTED—By a young man as florist; 6 years' experience; well recommended. Address: H. OLSON, 501 W. North Ave., Chicago, Ill.

SITUATION WANTED—By young Englishman with 12 years practical experience in all branches. S. BATHSON, 11 St. Monique St., Montreal, Canada.

SITUATION WANTED—By a first-class gardener, single, German, competent in all its branches, as foreman in a commercial or private place. Best of references. GARDENER, 16 Vine St., Philadelphia.

SITUATION WANTED—By young man with 3 years' experience with English florist. Aged 31, single, sober. W. K. H. A., box 95, Litchfield, Minn.

SITUATION WANTED—As foreman or assistant in commercial place by young man thoroughly familiar with general greenhouse work, understands propagating, etc. Good reference. S. G. BENJAMIN, Fishkill, N. Y.

WANTED—Nursery trade lists. Address: Brighton Nurseries, J. V. DE MAU, Proprietor, Brighton District, Boston, Mass.

WANTED—A practical gardener and florist, single, one who can take charge of and do careful work with vegetables, fruit and flowers. GEO. C. REIZ, State College, Centre Co., Pa.

WANTED—Practical florist. Must understand the raising of greenhouse stock and forcing of vegetables. Single; give references and state wages expected including board. Address: FLOREST, box 553, Fort Dodge, Iowa.

WANTED—A partner to engage in horticultural business in Guatemala, Cent. America. Climate healthy, soil very fertile. A splendid chance for an enterprising man with some capital. Address at once: MARTIN BENSON, Cutler, Dade Co., Florida.

WANTED—A practical florist who understands the plant business and growing of cut flowers generally. Must be competent to take charge of a large business; be first class, sober and industrious. Career man preferred. Address: A. A. care Am. Florist.

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Advertiser is desirous of locating with an established firm of seedsmen or florists for the introduction to the public of a class of plants destined to become as popular as the rose or chrysanthemum, has the finest stock in America, and is an expert in the production of same. An extraordinary opportunity to a thorough, genuine brain only, on very advantageous terms. L. B. care American Florist, Chicago.

FOR SALE OR EXCHANGE

For Palms, Dracenas or other decorative plants, 200 Marechal Niel Roses, 4000 plants in 3-in. pots, \$7 per 100, 500 do smaller 2 1/2 and 3-in. pots \$5 per 100.

W. J. BESSER, Plattsmouth, Neb.

WANTED.

A Partner, or an energetic Florist to rent for a term of years, the Floral Department of one of Atlanta's most attractive and remunerative resorts. A good chance for the right man. For particulars address: JULIUS HARTMAN, Little Switzerland, Atlanta, Ga.

NOVELTIES IN ROSES.

Also the leading forcing varieties, Teas, Hybrid Teas and Hybrid Perpetuals, and Novelties in Chrysanthemums.

Per 100	
Tabernemontana	..... \$6.00 to \$8.00
Staphanotis Floribunda, per doz.	\$2.00 and \$3.00
Gardenia Radicans and Florida	..... 8.00
Bouvardias, from 2 1/2 and 3-in. pots, \$3, \$4 and \$5	..... 8.00
Carnations, surprise, P. de Gray, President, Garfield, Queen of Whites, Century, Huz's White, Open ground plants 8.00
25 Trade list mailed on application.	

JACOB SCHULZ,

LOUISVILLE, KY.

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ROSES ON THEIR OWN ROOTS

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GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co., Pa.
Money Order Office: Bryn Mawr, Pa.

IMPORTED M. P. ROSES.

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates. Price lists to applicants. Address

WILLIAM H. SPOONER,

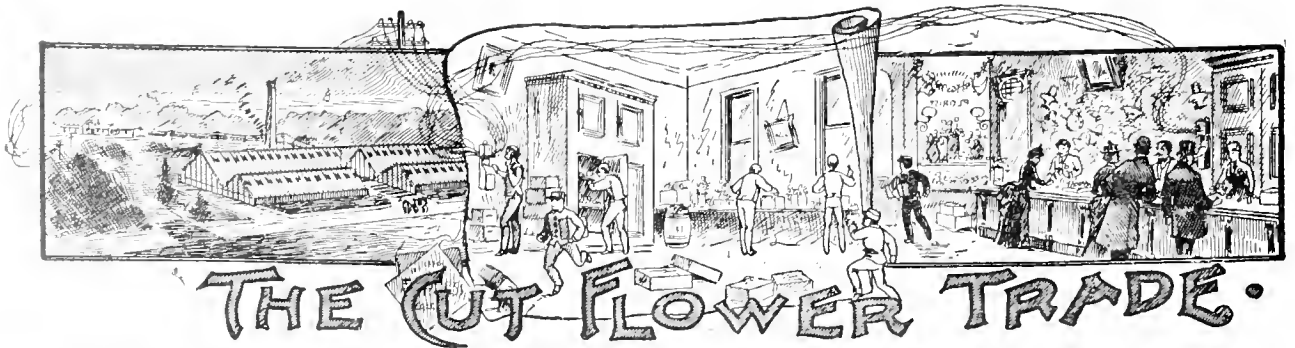
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Our Seeds never had Sea Sickness.

FRESH HOME-GROWN SEEDS OF
SELECTED *PRIMULA OBCONICA*.

We are the largest growers, and have the finest strain of *Primula obconica* in this country, and have harvested an unusually fine crop of seed, which we offer to the trade at \$1.00 per 1000. Special rates for large quantities.

FISHER BROS. & CO.,
NEW ENGLAND NURSERIES, MONTVALE, MASS.



December Floral Fashions.

A great deal of the attention of our florists is given to the rich ornamentation of modern mantel pieces and to corridors in house decoration. There is always one large effect in the latter, it sometimes being the hall fireplace, and again it is the settee where there is usually an oval mirror suspended above. Peter Bogart, who served a long apprenticeship with A. S. Burns, has distinguished himself by elegantly embellishing the Brokaw mansion, where a daughter of the house was married the past week. In the corridor, where there is a settee and mirror above, an exquisite bit of floral business was done in greenery. The settee was formed into a bank of palms, the choicest specimens being used. The mirror was framed in a garland of *Lygodium scandens* which, by the way, is grown very handsomely by Wm. C. Wilson, who makes a specialty of cultivating it. An elegant feature in the drawing-rooms was the designs of passion flowers in straw which were filled with Beauty roses, and the foliage, covered with asparagus, which were placed over the pier glasses. The mantels were festooned with pink chrysanthemums, roses and *Lygodium scandens*.

Fancy chrysanthemums of late varieties are much used for large effects. Mrs. Wheeler and Mr. Moseman, the stayers in old gold and crimson, are arranged with ivies in immense careless bunches over pictures, easels and on cabinets. Clusters of growing vines, such as *Tradescantia*, are quite the vogue placed on mantel shelves and left to trail down. Growing plants in drawing-rooms are considered necessary to their beauty. In the best houses here the parlors are light; the shades are lifted and there are growing plants, vines on the mantels, ferns here and there on tripods, and a few specimen palms on a pedestal wherever there is room for one.

Many of these plants are hired for the season and taken care of by the owners. Mr. Siebrecht has specimens all over the city in mansions where he looks after them, and if they begin to show signs of weakening they are at once replaced and the invalids carried out to the plant hospital at his Rose Hill greenhouses.

Wedding bouquets are of immense size, and also those of bridesmaids. The bouquet holder appears once more and this time with a clasp to fasten it to the glove, I suppose for the reason that it is too heavy to carry. Eleven hundred white violets were put in one bridal bunch this week. Miss Brady's wedding bouquet contained 600 sprays of lily of the valley, and her bridesmaids carried bouquets with 100 *Mermets* in each. Klunler makes a superb bridal bunch of white orchids, with a fringing center of

jasmine. It is about as lovely as anything can be, and his assistant, Wm. Irving Brown, can arrange the most aesthetic corsage bouquet or boutonniere of any floral artist in this city. He makes one of the former of lily of the valley, with the stems turned upward and protruding among white and purple violets, with a bit of lacy fern, *Adiantum gracillimum*, pushing out from every point.

Boutonnieres are a fashionable gift from ladies to gentlemen. They are made up with great care and finish and cost from \$2 to \$3. Roman hyacinths with a center of white violets is among the choicest boutonnieres for full dress; they are quite large. For street wear a single chrysanthemum is considered elegant. Violets are in great demand for corsage bunches to be worn in the street. They are pinned outside the wrap if the weather permits, and inside on the dress if there is danger of their being frost bitten. Women will always take care of their violets. They are the sweetest and choicest blossom a flower lover knows. Hanft Bros. have had a run on Neapolitan violets.

A great many brides are carrying richly bound prayer books instead of bouquets. A prayer book bound in white plush and gold was this week ornamented with Scotch heather. It was so elegantly embellished that the arrangement cost as much as a bouquet. The heather sprays covered one side and a rich sash crossed one side the cover. It was certainly very tasteful and beautiful.

New York. FANNIE A. BENSON.

News Notes.

BALTIMORE.—Mrs. R. J. Halliday died suddenly October 29.

COLUMBUS, O.—Florist Jno. R. Hellen-thal lost his wife Oct. 5.

ZANESVILLE, O.—E. L. Koethen, the florist, was married Nov. 13.

MANCHESTER, PA.—Augustus Doll has built a new rose house 80 x 20.

HASTINGS, NEB.—David H. Holmes has built a new house 100 x 12, heated by hot water. Also an office 12 x 12.

NEVADA, MO.—The thirty-first annual meeting of the Missouri State Hort. Society will be held here Dec. 5 to 7.

ALMA, MICH.—Charles Long, formerly of Rochester, this state, will start in the plant and vegetable business here. He is building three greenhouses, one 22 x 100 and two 12 x 100 each. He would like wholesale price lists from which to select stock.

LAWRENCE, KAN.—F. Barteldes & Co. have added to the rear of their store a warehouse with three floors 117 x 50 each,

containing machinery for cleaning grass seed, etc. They report that Kansas crops are much shorter than last year owing to the drought.

CINCINNATI.—W. Siedel has opened a floral store at 497 Vine street. The initiatory steps are being taken to form a florists' club. Secretaries of other clubs will confer a favor by forwarding copies of their by-laws to R. Witterstaetter, Sedamsville, Cincinnati, O.

DENVER, COLO.—Braun & Satterthwaite have purchased four acres of additional land and are building two houses 100 x 20 each, heated by steam. Thos. Chapman has built three new houses, 40 x 18, 40 x 22 and 60 x 29 respectively. J. L. Russell is building a new house 75 x 20 and has just completed an eight-room dwelling in connection.

ALBANY, N. Y.—The store and attached conservatory of H. G. Eyles & Co., 36 North Pearl street, was completely destroyed by fire on the morning of Nov. 24. Nothing was saved but the books. The conservatory contained a very fine stock of decorative palms, etc., recently bought in for winter work. The insurance is about one fourth of the damage. The firm opened store the same day at 11 North Pearl street, where they will remain until their old stand is rebuilt. The building was owned by Col. James Hendrick.

MILWAUKEE.—E. Elliot has given up business for the present on account of poor health and has leased his greenhouses to Herman Schwoetke, who will conduct the business in connection with Patterson Bros. as usual. Mr. James Currie will on May 1 resign his position as superintendent of Forest Home cemetery. He will again take an active part in the firm of Currie Bros. Mr. Wm. Martin, who has been Mr. Currie's assistant, will succeed him as superintendent at the cemetery. Frank Whitnall will leave for California in January to enjoy a milder climate, in the meantime growing callas and palms for the Milwaukee market.

SAN FRANCISCO, CAL.—At the regular monthly meeting of the State Floral Society November 9, an interesting paper on the chrysanthemum was read by Mr. John H. Sievers. The paper was followed by a general discussion on the culture and treatment of the plant. A large number of new members were admitted to the society and the membership roll now bears over fifty names representing fifteen counties of the state. The subjects for discussion at the next meeting will be spring flowering bulbs and rose growing. Exhibits of chrysanthemums, roses and dahlias were made by Miss Blanche Platt, Mrs. C. Ware, A. D. Pryor, John H. Sievers and Charles V. Parker.

THE AMERICAN FLORIST

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No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for December 15 issue must reach us by noon, Dec. 8. Address

THE AMERICAN FLORIST CO., Chicago.

THE PRINTED REPORT of the Proceedings of the second annual convention of the Association of American Cemetery Superintendents held at Brooklyn, N. Y., Sept. 5-6 last, has been received from Secretary A. H. Sargent, Akron, O. It is neatly printed, contains the many practical and interesting essays read at the last convention and should be of great value to any one connected with or interested in cemeteries. The essays upon "Landscape Gardening in Cemeteries" by R. D. Cleveland, "An Ideal Cemetery" by F. Furich, "Lawns" by Wm. Salway, "Greenhouses and Flowers" by Juo. G. Barker and "Evergreens in the North-west" are of interest to the general horticulturist as well.

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J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

NEW YORK, Nov. 24	
Roses, Bon Silene	\$2.00
" Perle, Niphetos, SOUVS.	4.00
" Gontiers	3.00 @ 4.00
" Mermets, Cousins	6.00
" La France	12.00
" Bennetts, Brides	5.00
" Am. Beauty	35.00
Carnations, long	2.00
Hyacinths	4.00
Mignonette	4.00
Narcissus	6.00
Lily of the valley	8.00
Violets	1.25
BOSTON, Nov. 24	
Roses, Toss	\$2.00
" Perle, Sunset	6.00 @ 8.00
" Brides, Mermets	8.00 @ 10.00
" La France	12.00
" Gontier, Niphetos	6.00
" Am Beauty	25.00
Carnations, short	1.00
Carnations, long	2.00
Carnations, fancy	2.00
Violets	.75
Lily of the Valley	6.00
Romans, Narcissus	4.00
Tulips	4.00
Bouvardia	1.00
Fansies	1.00
Smilax	12.00
Adiantum	1.50
Callus	15.00
PHILADELPHIA, Nov. 24	
Roses, Bon Silene, Niphetos	\$3.00
" Perle	4.00
" Mermets, Bennetts	5.00
" La France, Cooks	6.00
" Am Beauties	20.00
" Puritans	8.00
" Gontiers	3.00
" Brides	5.00
Carnations, bouvardia	1.00
Lily of the Valley	15.00
Hyacinths	6.00
Harrisii lilies	10.00
Callus	10.00
Smilax	20.00
Single violets	.25
Double violets	.50
CHICAGO, Nov. 26	
Roses, Bon Silene	\$2.00 @ 3.00
" Perle, Niphetos	5.00 @ 6.00
" Mermets, Brides	7.00 @ 9.00
" Bennetts, Brides	7.00 @ 9.00
" Am. Beauties	20.00 @ 25.00
" Gontiers	4.00 @ 5.00
" Cousins	4.00
Chrysanthemums	1.00 @ 3.00
Callus	15.00
Carnations, short	.50 @ 1.00
Carnations, long	1.00 @ 1.50
Carnation, Grace Wilder	3.00
Smilax	16.00 @ 18.00
Bouvardia	1.00 @ 1.25
Narcissus, Roman	6.00
Stevia	1.00
Heliotrope	1.00
Violets	1.00 @ 1.25
Adiantum ferns	1.00 @ 1.50
Camellias	10.00 @ 12.50

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WHOLESALE FLORISTS
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Also entrance from Hamilton Place through Music Hall.

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133 Mason Street, MILWAUKEE, WIS.

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CAREFUL ATTENTION,
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GOOD STOCK.

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Letters, box 688.

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165 Tremont Street BOSTON, MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.
Return Telegram is sent immediately when it is impossible to fill your order.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

The Wanamaker stores in Philadelphia and The Fair, Chicago, are in the seed business with retail packets at two cents each.

Of newspapers in the seed trade for 1889 we hear of but two, one in Chicago and one in Minneapolis. Small country journals running the advs. of Everett & Co. are not included.

Reports are current concerning a new organization of seedsmen. Does the present association need reform? And if so, can it not reform itself? We should think so.

H. W. Buckbee, of Rockford, is making great preparations for his 1889 seed trade. He will have a colored cover.

L. H. Read, of Cabot, Vt., is now at Rutland, Vt., and the new firm is Giddings & Read.

The following seedsmen passed through Chicago during the last week of November: S. V. Haines, Mr. Vanderbilt, of A. B. Cleveland Co., T. N. Griswold, Geo. S. Haskell, H. W. Buckbee, J. M. Kimberlin & Son, A. H. Goodwin, C. R. Root.

At Minneapolis, Shuman & Co. have gone out of business; J. E. Northrup, of N., B. & G. Co., has been elected Park Commissioner. At St. Paul, F. N. Long has sold out his seed and wire business and will start for Alaska in the spring.

Flowers in the Cemetery.

(Extracts from a paper read before the American Association of Cemetery Superintendents by John G. Barker, Forest Hills, Boston, Mass.)

Although you have given me a wide range, I will try and keep to the text given, and that you may understand why we place so much dependence upon flowers as an important feature at Forest Hills, allow me to give you a few facts as a basis. This season plants were set out on seven hundred and fifty-eight lots; a few of these lots have one flower bed only, the larger majority, however, have two, several three, and a few four beds on each lot, so that it is quite safe to say that at least fifteen hundred beds of plants were set out on the various lots this season. Some of you, perhaps, are saying, why, that cemetery must be one vast flower garden. By no means, there are now a few over 3,900 lots sold, and 758 only have plants set out upon them; there are very many vacant spaces and bare lots, I assure you. But how about the number alluded to? These are all paid for annually, or by a deposit of money, which provides that plants shall be perpetually set out. Of this number, 312 have this provision, and 456 are paid for annually.

As to their uses: The large plants just referred to are placed in summer, some of the best of them, under the portico of the receiving tomb, which is supported by arches. The taller ones in tubs are set directly under the archways; here they receive an abundance of light, but still protected from the rays of the sun. Here they do well and look well, and add very materially to the appearance of this particular place, being opposite the large fountain, the surroundings of which are always neat and attractive, and where every one drives or walks by; the larger portion, however, of these plants are arranged in groups in a partially shady place, where they get the morning sun only; those in large tubs and boxes are

out of the ground, while those in pots are plunged in the grass, not being removed from the pots. In this peculiarly well adapted place, arranged in this way, they have a natural appearance which should always be studied in order to give the most pleasing effect; this arrangement has proved very satisfactory and certainly is far preferable to scattering them singly all over the grounds, one here and another there, which amounts to nothing at all. In this location is a small lily tank and a good sized rockery, laid out in a diversified manner, with winding walks and bridges and a summer house. This is planted nearly exclusively with shrubs, hardy plants and ferns, and we hope to introduce many more of our rare hardy plants and ferns at this well adapted place for them. It is always kept neat and clean, and with the little fountains and trickling water, you will always find visitors on a hot day seeking the grateful shade of this attractive spot, not on account of any gaudy appearance by any means, but the natural simplicity of the place.

We have on our lots but few set beds; by this I mean masses or groups of color in foliage or flower; these are placed in the more public places. Of course there are some, as we have proprietors who have their preferences and give their orders as to how they wish their lots planted, but the prevailing way, and by far the most satisfactory, is the mixed system of planting, for the reason that there is always something in bloom, and if any one plant becomes shabby or dies out it can be removed and the others will rapidly fill up the space. In this way, when some of the earlier flowering plants give out they can be removed and not missed, and by keeping the dead blooms and leaves all picked off and the taller plants tied neatly to stakes, you always have tidy and attractive flower beds.

Permit me to call your attention to the planting of graves. A great many are planted every season, and very many prefer the mixed style of planting, for the same reason that I have already given in regard to the beds on the lots—there is always something in bloom. In my pamphlet, I make reference there, and reiterate in part what I then said. Very many like pauties in the spring, but you all know that they are of little use after the hot weather sets in, and in many cases after being removed, variegated alyssum is planted in the center of the grave and an edge of alternanthera around it, or Pilea repens in the center surrounded by Alternanthera paronychioides major; these two forms are especially adapted to small graves, and are neat and pretty, or you can use for a center row the Crystal Palace Gem pelargonium, or santolina, next to that alternanthera with an edge of Echeveria secunda glauca, or mexicana. There are a large number of graves planted with the common ground myrtle or periwinkle, and when well cared for it is very satisfactory, the deep green leaves contrasting finely with the delicate blue flowers. It is usually in flower about Decoration Day, a time when we want the graves to look well. The ivy is also used, and when planted in good soil and occasionally top dressed and kept clean always look well. This and the myrtle can be edged with the small hardy Euonymus radicans variegata, and with care will last many seasons without transplanting. Three other hardy plants I have read of as being appropriate for planting on graves, viz.: Campanula pusilla alba is highly recommended and

is said to produce a dense mass of pure white flowers, also Campanula carpathica alba and C. barbata alba, which is described as one of the sweet white flowers that abound in the rich, green meadows of Alpine France and Switzerland, and then there is the well known Iberis gibraltarica and sempervirens, the foliage of each is a handsome evergreen, the flowers of gibraltarica are of a purplish white and sempervirens of a pure white. I am asked to speak of the charges for planting. This I think would be difficult to do and make a rule for any other place, as circumstances are not alike; for lots of 300 feet the rule has been to charge the same for flowers as we receive for the care of the lot, which is \$5, making \$10 for care of lot and plants; this includes watering in dry weather. For larger and smaller lots the charge is in proportion to what is required. For planting graves, \$3 to \$5; for care of myrtle graves, \$2 each season, which includes covering with pine needles and leaves for the winter. All borders and graves are thoroughly prepared before planting by being trenched at least eighteen inches deep and a good supply of well decomposed stable manure thoroughly worked in. This is a great help in retaining moisture in dry weather.

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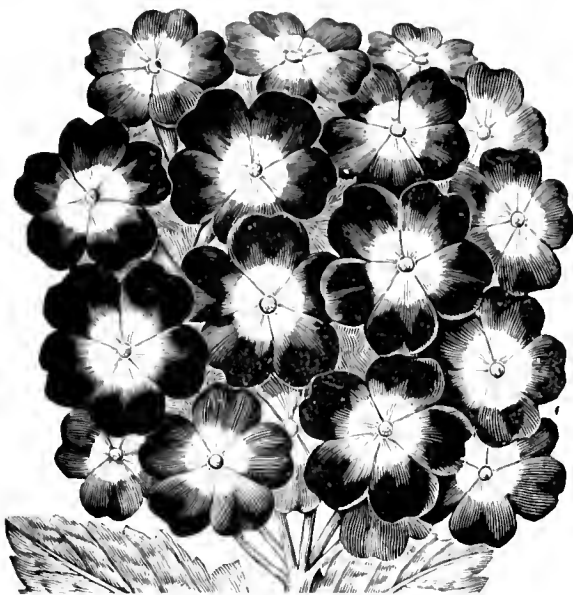
The "special numbers" of the AMERICAN GARDEN during the past year have been a Rose number, a Water Plant number, and two Chrysanthemum numbers. During the year to come there will be several special issues, very much finer than any yet issued. The December number, ready Dec. 1, will be undoubtedly the finest issue of any gardening magazine ever issued in this country and will be peculiarly rich in fine illustrations and valuable articles. The GARDEN is so greatly improved that its low price is a marvel to many, yet the advance during the year to come will be far greater in every way.

Subscriptions for 1889 are received now (up to Jan. 1) at \$1.00, including numbers of this year from November. After Jan. 1 the price will be \$2.00.

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We have good, healthy stock of the following plants to offer to the trade.

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Coleus in var., 2 1/2-inch pots	\$2 00
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LYCOPODIUM, OR BOUQUET GREEN. In bunches. Per sack of 25 lbs. \$2 00; per 100 lbs. \$5 00; 1000 lbs. \$40 00; Ton, \$75 00. There was an extremely short crop last year, and I advise all to place their orders early.

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Washington.

The trade in cut flowers has been unusually dull during the past month, the supply especially of choice roses far exceeding the demand. Florists in consequence have been animated to renewed efforts and several novelties in designs have appeared within the last few days. Notably so an artistic representation of the Executive Mansion by the Smalls, on the occasion of their chrysanthemum show which opened to-day. In their largest show window, some twenty feet across, the White House and its approaches are faithfully represented, the foreground of bright yellow, the walks of deep maroon chrysanthemums, and the roadway of natural cement. A well proportioned fountain is playing on the front lawn, then rises the familiar porte-coeliere with its column and covered driveway, and back of that the main front of the White House with every window and door jamb, every pediment and frieze accurately given, the whole in white chrysanthemums, etc. A most perfect piece of work in floral designing. Above all, suspended in graceful folds across a staff hung the national flag in flowers of red, white and blue.

Mr. Chas. F. Hale has attractive designs in both of his windows. In one a shaft eight feet high representing the Washington Monument, made up of chrysanthemums. The other window shows "Gates ajar" four feet high with the white columns and arch gracefully entwined with garlands of La France and doves perched on the portals.

W. S. Fisher lately showed a Masonic altar piece three feet high with emblems. The whole made up of immortelles and seemingly giving great satisfaction.

Other florists are also making fine fall displays. Schmid & Sons and also John Saul are doing a good trade in bulbs. Studer I learn is shortly to open a store-room and office in the city.

November 8.

A CALIFORNIA SUBSCRIBER writes: "Tell the Chicago florist who is visiting our state that if he will visit Sonoma county during the seasons for roses and corn he will find them of as good quality here as anywhere."

THE HORTICULTURAL MAGAZINE, Rochester, N. Y., has suspended publication, the last number being the September issue.

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THE PERFECTION Ventilating Machine

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Spiraea Japonica, strong clumps	40 00	5 00	
Tuberose, Pearl, extra selected	18 00	2 00	
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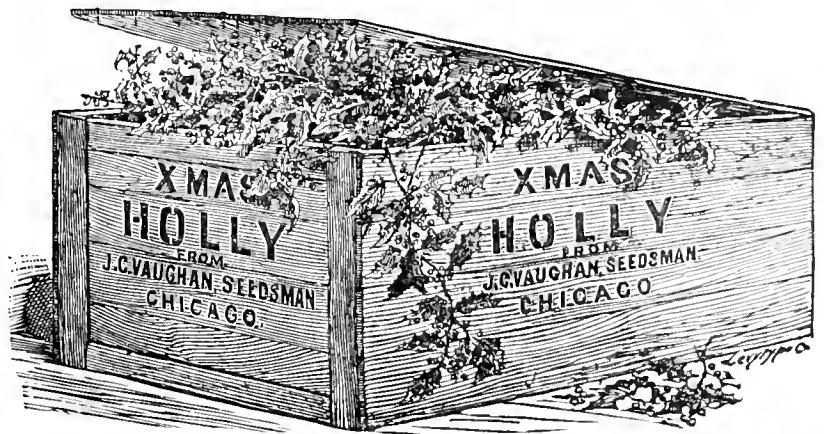
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EDWARDSII,	PORTIA,	GRACE TARDON,	SUNRISE,
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My stock is exceptionally fine and healthy; cuttings will be well rooted and guaranteed true to name. All orders will receive prompt and careful attention whether for 100 or 10,000.

Send for complete list and low prices on carnations and other cuttings. Satisfaction assured.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

December 1—Tem. morning 30°, noon 38°, evening 37°. Wind SE. Finished potting rooted cuttings of alternantheras. Potted rooted cuttings of matricarias and santolina. Cleaned old geraniums. Commenced propagating Mt. of Snow geraniums.

2—Tem. 37, 41, 40. S. to WSW. Continued propagating Mt. of Snow geraniums. Pricked in boxes rooted echeveria offsets. Repotted alyssums and manradians into 3-inch pots.

3—Tem. 41, 41, 44. SE. Same as yesterday.

4—Tem. 53, 49, 30. SW. to W. Sunday.

5—Tem. 29, 31, 32. W. to S. Propagated Thymus argentea. Pricked in boxes echeveria offsets. Tied carnations. Cleaned various plants.

6—Tem. 30, 42, 40. SW. to SE. Same as yesterday and commenced thinning foliage of little geraniums.

7—Tem. 37, 42, 35. SW. to N. Same as yesterday.

8—Tem. 38, 42, 36. NE. to E. Continued propagating Thymus argentea, thinning foliage of little geraniums and cleaning plants in houses.

9—Tem. 38, 41, 40. SE. Finished propagating Thymus argentea. Propagated begonias in variety and crotons. Thinned foliage of little geraniums.

10—Tem. 40, 41, 40. N. Potted rooted cuttings of begonias and some colens. Cleaned plants. Sowed a box of hollyhocks.

11—Tem. 36, 34, 32. NE. to NW. Sunday.

12—Tem. 26, 24, 27. W. to SW. Cleaned and pinched alternantheras in No. 3. Commenced cleaning cannas. Commenced propagating Achyranthes Lindenii. First lot of primulas now in bloom.

13—Tem. 39, 39, 40. S. Continued propagating Achyranthes Lindenii. Nipped superfluous foliage from little geraniums. Cleaned plants.

14—Tem. 32, 49, 35. SW. to WNW. Same as yesterday.

15—Tem. 39, 34, 30. NW. Same as yesterday.

Print your SPRING TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

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BOUVDARIA BOCKII, the finest pink variety	Per 100
yet sent out, 3-in. pots	\$15.00
" " 2-inch pots	8.00
" " Vreelandi and A. Neuner, 2-in.	6.00
" " Leiantha, 3-inch, fine	5.00
ROSES, fine collection, 2½-inch, fine	4.00
VERBENAS and COLEUS, 2-inch	2.00
Rooted Cuttings of Coleus and Verbenas	1.00

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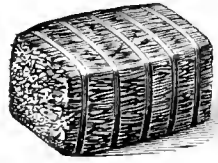
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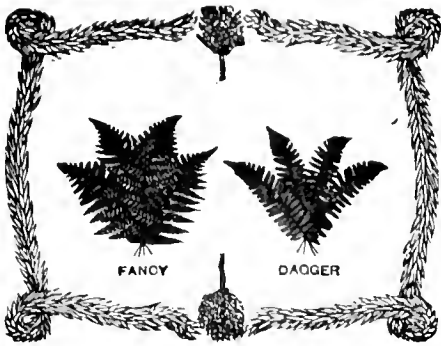


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For the benefit of our advertisers we submit the following statement of the issues of the AMERICAN FLORIST for the past year:

December 1, 1887	4,750 copies
15, 1887	8,000 "
January 1, 1888	5,000 "
15, " "	5,000 "
February 1, " "	5,000 "
15, " "	5,000 "
March 1, " "	5,000 "
15, " "	5,000 "
April 1, " "	5,000 "
15, " "	7,000 "
May 1, " "	5,000 "
15, " "	5,000 "
June 1, " "	5,000 "
15, " "	5,000 "
July 1, " "	5,000 "
15, " "	5,000 "
August 1, " "	6,100 "
15, " "	6,000 "
September 1, " "	6,000 "
15, " "	5,250 "
October 1, " "	5,500 "
15, " "	5,500 "
November 1, " "	5,200 "
15, " "	5,200 "

Total 129,500 copies
Average per issue 5,395

The above figures are taken from our bills for press-work and represent the actual number of copies issued.

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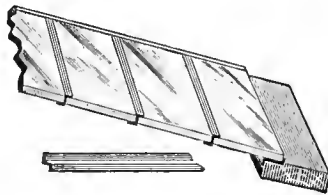
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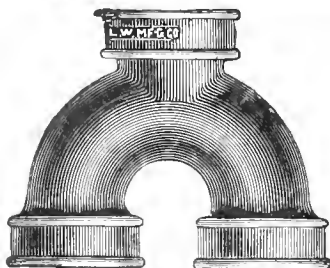
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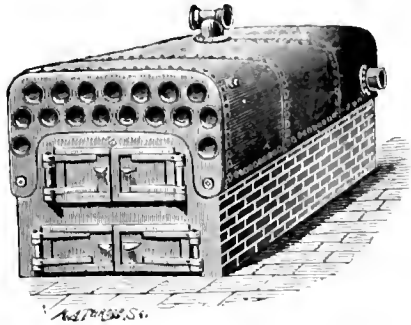
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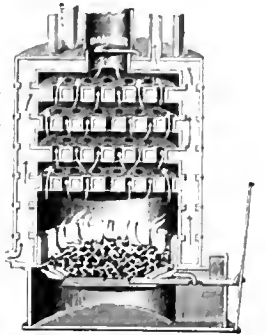
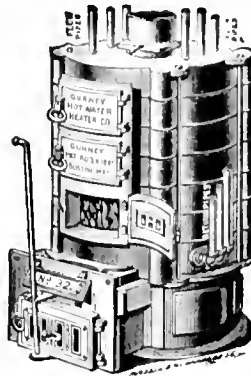
Yours truly,

THOMAS GRAY, Florist.

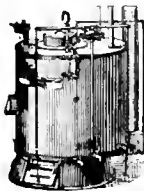
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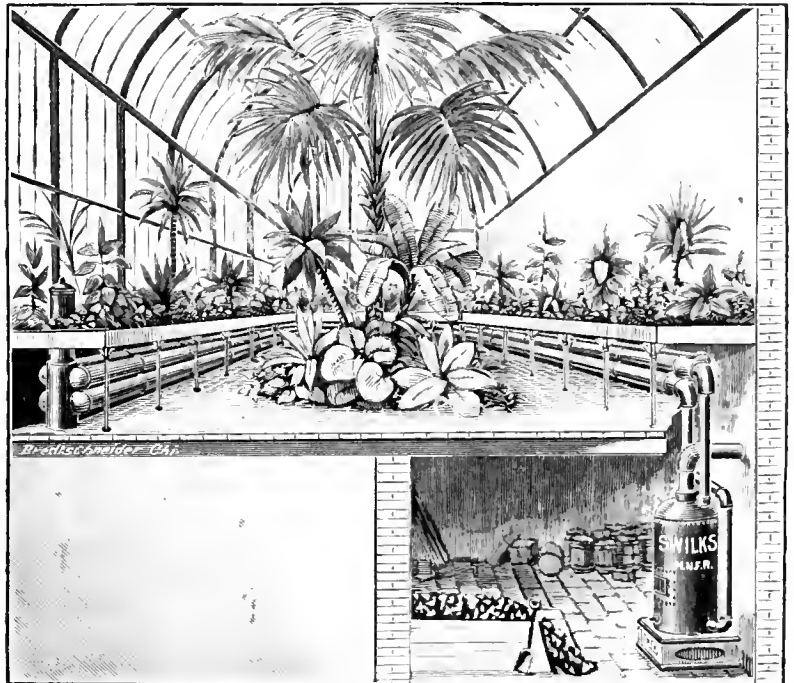


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COLUMBUS, O.—The State Hort. Society met for the last time this season on Oct. 4.


IRVINGTON, N. J.—E. Jacobi has built four new houses—three 16x60 each and one 11x60. Also a putting and work shed 13x63. He has put in apparatus to heat by steam.

EASTON, PA.—The exhibition of the Lehigh Valley Hort. Association which opened November 5, was a very handsome display. E. P. Wilbur, of South Bethlehem, shipped a car load of plants and flowers for the occasion, in care of his gardener, John Cullen.

COUNCIL BLUFFS, IOWA.—On the occasion of the opening of the Omaha bridge features of the procession were the displays of the local florists and seedsmen. L. A. Casper, W. H. Foster, J. R. McPherson, E. C. Erling, Hess & Swoboda and the Emerson Seed Co. each made excellent displays.

WORCESTER, MASS.—The Worcester County Horticultural Society held its annual meeting Nov. 7 and elected the following officers: Henry L. Parker, president; Stephen Salisbury, H. F. A. Lange and George E. Francis, vice-presidents; Edward Winslow Lincoln, secretary; Chas. F. Brooks, librarian and treasurer.

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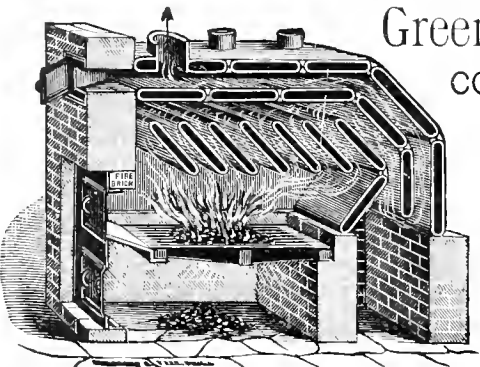
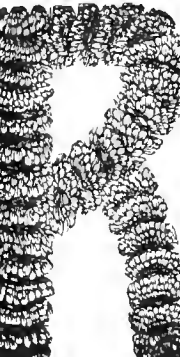
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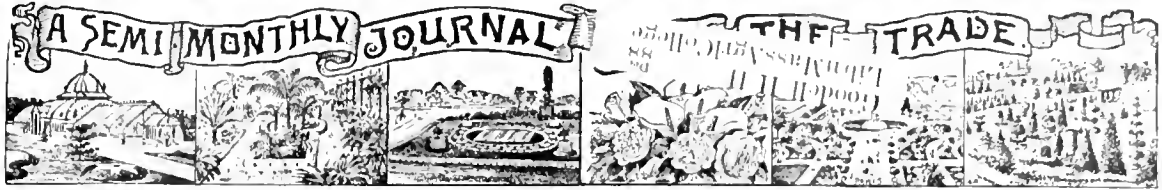
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Vol. IV.

CHICAGO AND NEW YORK, DECEMBER 15, 1888.

with Supplement. No. 81.

THE AMERICAN FLORIST

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Entered as Second-class Mail matter.
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EASTERN OFFICE,
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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

OUR HOLIDAY SUPPLEMENT which every subscriber receives with this issue will we think be appreciated as an extremely useful present. A large number of subscribers have written us that they found the illustrations in the FLORIST of great value to show customers what certain decorations and styles of work were like when complete, and always with benefit to their trade. Knowing that the engravings would be much more convenient for reference and to show customers if together rather than scattered through the volume, we have arranged them as seen and present a copy to each subscriber herewith. We have printed several thousand extra copies of this supplement, omitting a portion of the matter on the title page, so that those of our subscribers who wished to purchase a quantity for presentation to their customers would have abundant space in which to print or stamp their business card. We believe that no better advertisement could be devised for a florist than copies of this supplement, for they would certainly be much appreciated and undoubtedly be preserved by the recipient. We will make low rates on quantities for this purpose. See prices quoted in our adv. on page 209.

REV. S. REYNOLDS HOLE, the author of that charming work, "A Book about Roses," has just celebrated his seventieth birthday at his home in England.

THE CHRYSANTHEMUM SHOWS in England have been as numerous as ever this season and there is apparently no abatement in the popularity of this plant there.

CHRYSANTHEMUM CENTENARY.—The National Chrysanthemum Society of England proposes to commemorate the introduction of the chrysanthemum by a centenary celebration. The form of the celebration has not yet been decided upon.

Notes From Around New York.

A visit made to any of the numerous florists' establishments around New York will always be found profitable, and it is to record some of the impressions received during a trip of this kind that this paper is written.

One of the marvels of the day is the number of greenhouses that may be noticed in every direction within twenty miles of the metropolis. There seems to be no limit to the number of florists, from those who have thousands of dollars invested to those who possess only two or three greenhouses; and as all appear to make a living, many, in fact, doing somewhat more than this, we may be sure that though production increases consumption does so likewise.

The majority of growers are apparently about equal in ability as regards the cultivation of the plants that are usually grown for market purposes. But there is considerable inequality in the business ability of florists. The man who makes the most money is the man who uses the best judgment as to the market at his disposal. For instance, at one place was seen a large number of pot roses that were bought at auction for two cents each. These plants were of the various market kinds sufficiently large to occupy 4 and 5-inch pots. Plants if bought per order would easily average twenty cents each. The man that grew these roses was wrong in his judgment as to the market for them and suffered accordingly. Probably there is not a florist living who does not make mistakes and who will continue to do. But to the man of sound judgment mistakes are a help to increased success.

When we have grown our plants only half our work is accomplished. Next in order is the disposal of them. The most difficult part of our undertaking. To sell these plants or flowers at a profit, and to sell them just at the right time so that successive crops may be grown on the benches and every inch of room made available for all it is worth, is the business part of our daily operations, and one that taxes every man's ability to the utmost. For any man to grow an immense amount of stock without being sure as to his power to dispose of it to advantage, would almost certainly result in much of it being sacrificed. Not every one is so situated as to be able to grow only that stock which he is sure pays the best. Few markets in the country can equal that of New York. Those who have their business located in smaller cities must necessarily occupy their houses with a varied assortment. It is, however, the man that can confine his operations to two or three specialties who succeeds the best in reaping the best return from his labors and investment. He can concentrate his attention and

plan his work much better when only a few objects demand his care than he could if they were more numerous. This fact is becoming more and more generally recognized and needs no argument. Men who once thought that to make their business a success it was necessary to have a little of everything, now discriminate and select. This method will be still more practiced, and perhaps it will not be too much to say that ultimately the various good growers will each be noted for some one or two articles that have become his specialties.

It is a fact worthy of notice that no grower has every class of his plants of equal degree of excellence. In one establishment the Beauties and Mermets may perhaps be as fine as can possibly be grown. In a neighbor's these varieties may not be as good, but possibly the Perles and Niphetos will be of superior merit. Teaching us that causes, very often looked upon as of slight importance, determine the character of our stock for the season. Nothing in the cultivation of plants should be looked upon as of minor moment. Mildew becoming established, the continuance of a cold atmosphere and a wet soil thereby checking growth, a few weeks delay in planting, improper feeding, excessive pruning, all help to deteriorate our roses. Constant attention is required, and how can this always be given in commercial places where a great number of plants is grown? Better plants will be grown and more money made by carefully deciding beforehand what we are likely to sell and then confining our operations to these few things and concentrating our energy and attention upon them in such a manner that we shall be noted for their superiority.

Among the many good growers of roses around New York not one is of higher repute than Mr. Ernest Asmus. His place when seen at the beginning of November was remarkable for the neatness and system everywhere displayed. Though many of his houses are old and, therefore, not so conveniently built for the production of cut flowers, yet the roses in these old houses look equally well with those that are in houses of later erection. But few roses appear to be grown the second year; all varieties of teas being of this year's planting. Perles were looking exceedingly well, with strong and luxuriant growth, not a sign of any malformed flowers. Niphetos, also, were in fine shape. Few rightly appreciate the capabilities of this rose. Grown as it should be, small and even medium sized flowers should be the exception. The finest Niphetos that the writer has ever seen were grown in solid beds, and the plants were three years old. As a rule, because Niphetos flowers freely and the shoots are of moderate length, the rose is relegated to the side benches,

where it is naturally confined for want of room and seldom shows its true character. But no rose repays generous treatment better than this one. Plant it in the center of the house in soil not too deep; allow it to remain several years; feed it freely but judiciously, and the grower will be astonished at the strong stems and large flowers that the bed will produce. *Niphetos* requires very little, if any, pruning. The dead and exhausted wood should be cut away once or twice each year, and if when the flowers are gathered the shoots are cut to the old wood, no other pruning will be found necessary. Should any one follow this plan with this rose let him not fall into the mistake of supposing that it should be rested through the summer. This would be injudicious treatment for any tea rose, and it is especially so with *Niphetos*. Get vigorous and clean growth through the summer and abundance of flowers will follow through the winter.

One of the most striking features seen are two beds of American Beauty. These roses are grown in shallow benches in the center of the house, and have produced a great quantity of vigorous canes which are tied down close to the soil. But these canes can hardly be seen on account of the large number of smaller shoots thrown up all over the bed and which evidently were all going to flower. After seeing these beds no one need detract from the merits of this glorious rose. If one man can make such a complete success of it, then those of us who have heretofore met with failure in its cultivation have an incentive to renewed exertions. What one man can do is within the power of another. Whether Mr. Asmus expects to have the rose in as fine a condition all through the winter is not known to the writer. Certainly if he does he is to be envied, not only for his skill but also for the pecuniary returns that he will receive. Several houses of hybrids also promise well.

In a large house in which lilacs, later in the season are grown, was a magnificent bench of yellow chrysanthemums. It would not be possible by a written description to convey an adequate idea of this magnificent bed. Obviously, the plants must have been growing there all summer, they being about six or seven feet high and covered with as large flowers as can be seen anywhere. Many other chrysanthemums are grown and all show evidence of superior cultivation. Mr. Asmus confines his operations to roses, chrysanthemums, lilacs and bulbs.

At the establishment of Kretschmar Bros., Flatbush, L. I., may be seen the finest *Perles* and *Bon Silenes* that have come under my observation. One peculiarity in their cultivation is the extraordinarily heavy mulch that is used. Apparently from three to four inches in depth. It is commonly supposed that heavy mulching for winter work is contrary to sound principles; but here is direct evidence in favor of the practice. The roses are entirely free from mildew and spider and cannot be surpassed for luxuriance of growth and quantity of bloom. Though the mulching system works to such advantage with these gentlemen, yet it cannot be advised as the best for every one. With many men, manure used so freely would only result in ruin to the roses. These gentlemen, to judge by their stock, certainly know how and when to use it. Houses in which there is the maximum of sunlight may perhaps be better adapted for this system than those not so favored.

A fact related by one of the firm is worthy of remark. He stated that at one time everybody in Flatbush grew cyclamens. But now nearly all have given up their cultivation owing to disease that makes its appearance after the plants have been grown two or three years. *Bouvardias* can be seen here in all their old time glory. Large plants and covered with flowers. A novel plan was also observed. The growing of the white *Dahlia Camelliaeflora* under glass for the purpose of cutting the flowers during the late summer and fall months. The plants were past their prime, but had evidently been covered with fine flowers.

Mr. Messeburg of the same neighborhood, takes rank with the best florists for a well arranged and skillfully conducted place. The houses are noticeable for their great neatness. Cemented walks, brick pits, clean houses and clean plants combine to make a perfect picture of cleanliness. The credit is his of having the tidiest commercial place of this section. Why should not this end be more striven for than it is? There needn't be much more expense attached to a right system than to a wrong one. And it is the right system that brings such pleasant results. What a contrast between this place and others with muddy walks, weedy benches and insect eaten plants.

Much has been said about the greater profit to be derived from roses grown in shallow benches in preference to solid beds. Mr. Messeburg can show a house of *Perles* that have been in solid bed for six years. Such wood and such flowers; no plants grown in shallow benches could ever equal them. As they are now beginning to get rather thin this is probably their last season. Yet it must be remembered that rose plants retained for so many years must have every attention, both summer and winter, in order to produce satisfactory returns. With all these growers *La France* was not up to standard. Proving that the best growers do not have all their plants in equal ratio of excellence. Carnations with Mr. M. were in perfection. Fine plants and full of buds. The older varieties of white carnations are still grown. One house of *Snowdon* is particularly well done. *Hinze's White* are in good shape and so are the colored varieties grown. *Smilax* though extensively and easily grown is but seldom seen in the best condition. Here it presents a fine appearance. Thick strings of a deep green color; free from the ravages of thrip and without any young growth mixed with that which is now ready for cutting.

The growing of plants for the sale of cut flowers is the distinguishing feature of these places; always, though in limited variety. At Mr. Keller's, Bay Ridge, L. I., palms and ferns together with cut flowers are grown in large quantities for the market. Dealers soon find out what species of plants are best for their trade and growers must choose their stock accordingly. At one time *Seafortia elegans* was quite in demand, but some of the arecas and *keutias* have quite superseded it. How the prices of small plants of many of these palms have been reduced. Good medium sized specimens are always sought after, and are sure to bring remunerative prices. *Pandanus Veitchii* can always be sold, but it was surprising to hear that *Dracaena terminalis* has somewhat lost its hold on popular favor. Mr. Keller's stock is healthy and well selected for the purpose for which it is grown—for sale to the trade. A great number of ferns in the market

varieties are on the benches and all are looking well. A very fine bed of *Niphetos* of this summer's planting—stocky plants producing large shapely flowers. *Bennetts* also are good, especially a bed planted this year. A house of *Cypripedium insigne* looks very well, for the plants are healthy and covered with flowers. But few orchid flowers sell as well as this old favorite, or pay as well. If stocks of *barbatum* and *Spiceriaum* were as easily procured, it is doubtful if *insigne* could hold its own. There are also several houses of carnations; plants healthy and well budded.

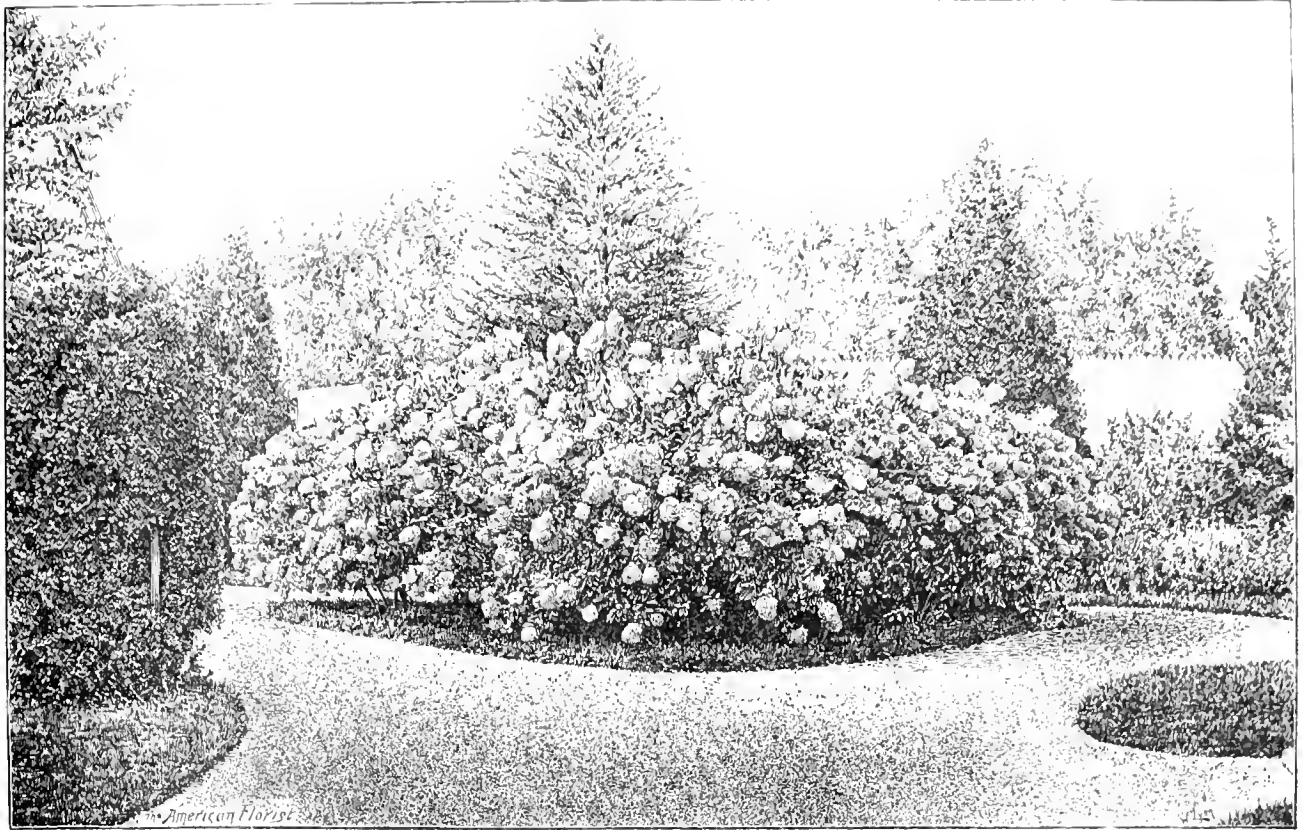
Mr. Keller has but lately returned from Europe and there is no food for our vanity in hearing him speak in glowing terms of the English and Continental growers. Some way or another we have assumed, on this side of the ocean, that in the growing of roses and other cut flowers we are away ahead. But Mr. Keller has a different impression. If he would write an account of his experience to the *FLORIST* its readers could not fail of being very much interested.

Mr. Dean, also of Bay Ridge, has a number of houses and he makes a specialty of stock for Easter sales. It would be difficult to find a larger and better assortment of hydrangeas, azaleas and *cytissus* all to be used for this purpose. To the unprofessional visitor these plants would look anything but prepossessing now, but no display of plants can possibly be more attractive than these will be two weeks before Easter. A very large collection of *Lilium Harrisii* is also grown. Mr. Dean states, that in his opinion, there is likely to be some trouble with the bulbs that, in the future, will be imported from the Bermudas. With his last fall importation a number can now be noticed that are not *Harrisii*; they are somewhat alike in foliage, but the false is dwarfish at present compared with the true and blooms much later, thus making it of no value for Easter work. Before planting all the bulbs are similar in appearance. If Bermuda growers do not exercise care and their stock gets mixed in this way a serious loss may ensue to American florists, and it is well that all should be on their guard against being imposed upon in this way. Mr. Dean has also a large stock of carnations.

Among the growers visited no new carnation of value was seen. We had three new white varieties sent out last spring with boastful advertisements describing them as better than any in cultivation. The writer bought 100 plants of one of these peerless(?) varieties and which was raised in the New England States. It was represented by a friend as first class; but so far it has proved utterly valueless; poor in habit; weak in growth; shy in blooming. Another gentleman stated that he had a scarlet carnation much better than *Portia*. One hundred of these were obtained from him and the price paid for them just double the price of *Portia*. Planted on the bench for winter blooming, they have proved themselves identical with *Portia* in every respect. In fact, it is *Portia* sent out under the name of "Glowing Coal." No doubt the gentleman from whom it was purchased was also victimized. There is no scarlet carnation yet sent out that is better than *Portia*—no white better than *Hinze's White*, *Peerless* and *Snowdon*. *Anna Webb* deserves to be more generally known. It will eventually supersede both *Seawan* and *Crimson King*.

ALFRED E. WHITTLE.

Albany, N. Y.



BED OF HARDY HYDRANGEAS

Bed of Hardy Hydrangeas.

Our illustration shows a bed of hardy hydrangeas (*Hydrangea paniculata grandiflora*) as seen the past season on the grounds of Mr. John White, Waverly Place, Elizabeth, N. J.

The bed was twenty-five feet in diameter and contained thirty plants, the center plants reaching to a height of eight feet. The plants will be seven years old next spring. They were in bloom August 1 and made a handsome show for two months. When at their best there were two or three thousand panicles of bloom, the largest measuring fourteen inches in length and ten inches in diameter at the base.

Visitors came from miles around to see this bed and all pronounced it the finest bed of the kind they had ever seen.

New York Notes and Comments.

In addition to the Horticultural Society's show there was quite a creditable display of chrysanthemums at the American Institute Fair, Mr. Thorpe in particular making a fine show. "Mrs. Alphens Hardy" was there and received its usual honors; it is hard to name any other plant of recent introduction which has received so much notice. Partly, no doubt, because it appeals to so large a class; many novelties are attractive only to scientific or professional plant lovers. Judging from the extent to which it is already purchased by the trade, it is expected to hold high rank among cut flowers. Nearest it in beauty one would be inclined to put "Mrs. Wm. Barr,"

another white which is full of promise for the florist.

Chrysanthemums brought pretty good prices on the whole—cut flowers are referred to—especially as they became scarcer. J. H. Taylor says his two houses of Comte de Germiny and Gloriosum paid very handsomely, of course they were fine flowers, and these are decidedly popular varieties. Big, showy flowers are the most salable. Small doubt that Mrs. Andrew Carnegie will take a prominent place for cutting, also Mrs. Fottler and Kioto. Mrs. Fottler is an uncommon tint for a chrysanthemum, and it just happens to be one of the colors women greatly admire.

In addition to the regular shows in and around the city a great many guests visited the United States Nurseries at Short Hills in the latter part of November, when the entire place was thrown open for exhibition. It was quite a new departure to have the exhibition take place at the greenhouses and additionally interesting on that account. It was a display especially interesting to orchid fanciers, particularly those devoted to cypripedes. Over fifty species and varieties of this class were in bloom at the time of the exhibition, among them many rare and unique. *C. Arthurianum* was one of the rarities noticed, showing distinctly the character of its parent, *C. Faircanum*. *C. lencorhodum* was another rare form, and also *C. Hyeannum*, with characteristic green-striped dorsal sepal. *Harrisianum*, *Spicerianum* and *insigne* are to be seen in great variety; these seem likely to be the general utility sorts for cutting, as they are easily grown,

and durable and prolific. We hear a good deal about cypripediums in cut flower work, and there can be no doubt of their usefulness, though they could never be used alone. Their stiff habit makes them ungraceful without other flowers; mingled with others they are charming.

Another interesting group at these nurseries is a collection of new anthuriums from Switzerland, chiefly of the Rothschildianum section. Many novelties are promised among them, said to be unique. A good many were specially attracted by the opportunity of seeing the stock of the wonderful new chrysanthemum. It was certainly at a disadvantage this year, having been forced on into bloom, but a sight of the plants gives no doubt of its robust habit. A tremendous lot of *Primula obconica* is here in bloom; very dainty it is, too, though not yet fully established in public favor.

There is a very strong determination in many quarters to bring out a lot of these simple spring-like flowers about Easter. It is a question whether they take greatly earlier in the season, but at Easter every florist is asked to provide something suggestive of spring. Bulbs have been done to death; they are needed, of course, but they are no longer novelties. It seems very likely that some of the pretty spring-like herbaceous plants will sell well if forced for the right season. Hellebores have not been a success here so far. It seems as if something might be done with a lot of the showy anemones; a number of them are specially associated with Easter. All the bulbs or spring flowers are liked when grown in flats; in that case they can be

sold as they grow, to be cut when desired.

The orchid houses which Mr. Fostermaun is building at Summit for F. Sander's American branch all have concrete walls. This is considered a great advantage; it collects moisture to a greater degree than brick, is warmer and soon becomes covered with moss, all working together to produce the atmosphere orchids love.

Ethel Brownlow is a rose our English friends praise very highly, but Mr. May has rooted it out with deep disgust. It is addicted to mildew and every other disorder a well conducted rose should avoid. It is a well grounded fact that a rose which does well in England very often does the reverse here. But then their usual test is out of doors; ours under glass.

Comtesse de Frigneuse does not seem to become very popular, while Sunset is certainly increased in favor. Perhaps the Comtesse has not yet received the exact treatment it demands. Madame de Watteville which, for a time, seemed to meet with little favor, is now coming forward. The flowers exhibited at the recent New York show were larger and better colored than any previously seen; it seemed a formidable rival to Mme. Cusin. There should be a tremendous crop of Beauties this winter; so many growers have enlarged their supply, declaring that it paid better than any other rose.

As for chemical fertilizers under glass, Mr. Taylor, who has been carefully experimenting with them, says that in most cases one is quite safe to leave them alone and stick to good barn yard manure if procurable. They can only be used with extreme caution and in a dilute state, as they are very apt to destroy the delicate feeding roots of such plants as roses and carnations. What are called high grade fertilizers could hardly be used at all with safety, and they all need such careful manipulation that it really seems the wisest plan to leave them alone. We can't treat roses like prize potatoes.

One of the annual revelations of the autumn shows is the number of amateurs who grow chrysanthemums under canvas, and in many cases beat the professionals at it. This was the case at a small show held at the little suburban hamlet of Englewood, N. J. All amateurs, but a good many plants would make professionals tremble for their laurels. One of the most successful exhibitors was the sexton of a neighboring church, whose only glass is a few small frames.

It is likely that next year will see a good many chrysanthemum shows in the small places about New York. The success of this show at Englewood has emboldened its directors to project a local horticultural society, an enterprise which deserves every encouragement.

EMILY LOUISE TAPLIN.

Long Island Plant Notes.

BY WM. FALCONER.

ANEMONE JAPONICA—Don't forget that this isn't any too hardy, but under a good mulching with a shutter over it to keep it dry, you may expect to find it right next spring.

FROM A CHOICE strain of seed of garden varieties of pentstemons we get most as good sorts as we already have under names.

LILY BEDS—I had these forked over three inches deep last week, and all

bulbs, large or small, that were turned up were picked up and saved and planted over again. A lily bulb should not be nearer the surface of the ground than at least four inches, this is to avoid the heat and drought of summer, the freezing and thawing of winter and being heaved out of the ground by frost. After forking I mulched the ground with rotted manure and added a coating of dry leaves over longiflorum, Krameri and other somewhat tender or uncertain kinds.

CYTISUS RACEMOSUS.—I am glad Mr. Keller called attention to it, page 183. I grow a lot of it and think a great deal of it. One year old plants make beautiful little specimens in 5 or 6-inch pots and they always look so clean and thrifty. When in bloom they are so full and so bright and yellow that they arrest attention and admiration at once. A slight frost won't hurt the plants.

ETHEL is the best conditioned late white chrysanthemum that I have got.

IF YOU HAVE some choice retinosporas, arbor vitas, yews, junipers or other dense growing evergreens, don't let the snow destroy them by weighting down the branches and spreading them apart. Just take a piece of marlin or stout string and run it in among the branches to tie them together and prevent their being spread apart by the snow.

SERICOGRAPHIS (Jacobinia) **GIESBREGHTIANA** is a name big and ugly enough to kill any flower no matter how handsome it may be, but this pretty little plant is really worth growing. Raised from cuttings in spring, planted out over summer, lifted and potted in September and protected from frost it blooms beautifully in November and December. In 4, 5 or 6-inch pots it forms nice stocky plants that are now laden with graceful panicles of narrow tubular scarlet blossoms.

LIBONIA PENRHOSIENSIS is another very pretty little plant now perfect bunches of bright crimson and yellow blossoms. As a showy plant for either greenhouse or window decoration it is very becoming, but for cut flowers not of much avail as the blossoms soon wilt after being cut. I treat it exactly as I do the sericographis. It is a cross between the above sericographis and *Libonia floribunda*. Although hybrids between species are frequent enough, crosses between genera are not common.

LIBONIA FLORIBUNDA, a Brazilian little plant and near relative of the last two is treated in exactly the same manner. But it does not bloom till *L. Penrhosiensis* is about over. It is the least showy of the three, but it blooms as copiously and is a bigger and bushier plant than either of them.

CACTUSES A-BOOMING.—"What do you think of the boom in cactuses now? I have sold \$10,000 worth this year! and I am only 'small fry,' you know." This is what a prominent specialist writes me under date of Nov. 27. It has set other florists a-working too. One firm is propagating and collecting cactuses with all its might, and another firm knowing the facts would rush into the prickly business too if they could only get some one to grow the plants for them. Careful, brethren, careful! Castuses are most uncivil chaps, not one workman in twenty knows them or loves them, and while they will bear a vast amount of ill usage with apparent impunity, there is a limit even to that, and as a florist should be continually propagating and increasing his stock, he can only do this from vig-

orous thrifty plants, and not from ill-conditioned scrubs. You can't strike a cutting in a few days as you can a coleus, nor can you multiply a variety *ad infinitum* in a year as you can a chrysanthemum.

PRIMULA OBCONICA.—We usually raise it from seed, but sometimes seed is scarce. Some three months ago I divided a lot of old plants into as many pieces as I could get with good crowns, and inserted each piece into a 2 inch pot filled with sharp sand and chopped live sphagnum and kept them near the glass in a close, shaded pit and watered them well. Every bit has now made a nice well rooted plant.

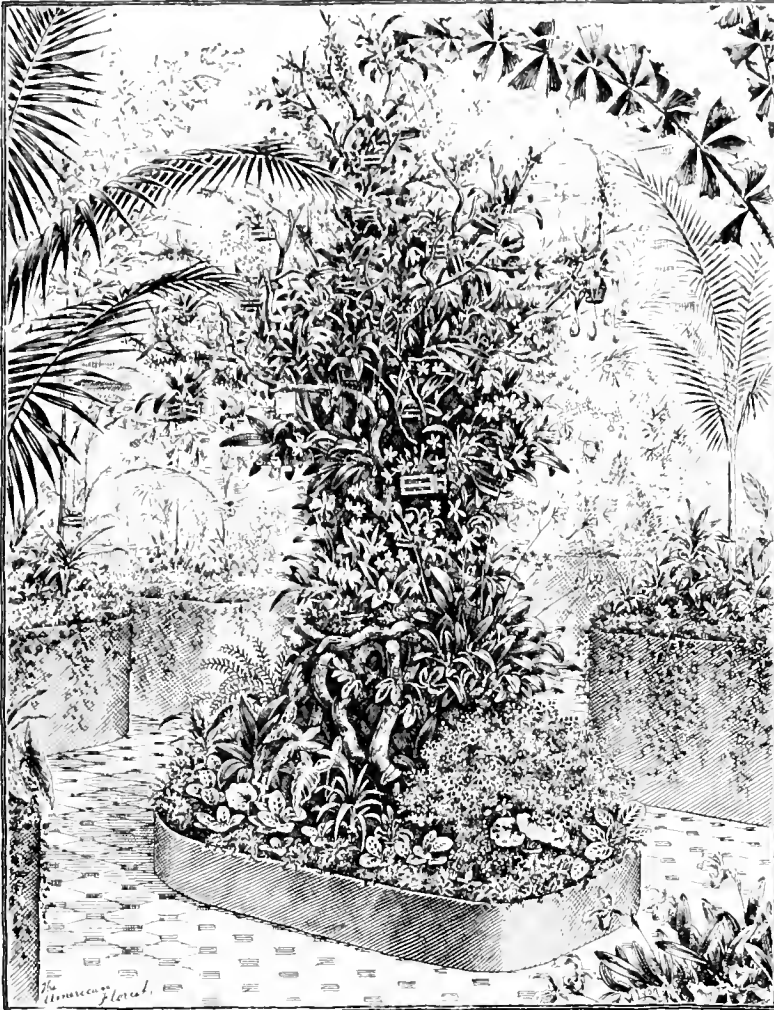
CHRISTMAS ROSES at Christmas are all right by way of variety and oddity, and no doubt a limited number of them will sell well by way of being a novelty and "English, you know." I have a lot of them (*Helleborus niger maximus*) in bloom now in a cold frame and they are quite attractive. In a place where they are sheltered at all times, slightly shaded in summer and in fairly moist soil. I planted them a couple of years ago. They have grown into good strong crowns with leaves nearly two feet long, and now from every crown bunches of large white buds and flowers have arisen. So that I can get the full use of the flowers in winter I have placed a frame with sash over the plants and shall protect them a little from severe frost. There are several species and varieties and between them their blooming period extends from now till May, but all are not pretty or showy. Woolson has a fine collection well established under the trees beside his residence.

BERBERIS THUNBERGH is the prettiest ornamental berried shrub that we have got at Christmas. It is better than the winterberry of our swamps because of its far more brilliant scarlet berries and the certainty with which all native plants bear fruit. Now, if florists will get a lot of these berries now and sow them in boxes they will come up in spring and make nice little plants a few inches high by next fall, then if planted out in a year's time they will be capital stock for sending out.

IT IS SELDOM that a propagator takes to raising plants from seeds with the same enthusiasm that he does from cuttings, but now is a good time to go into the seed raising business. We are more likely to be less pressed for time and room just now than we will be in a few weeks later on, and can better take care of delicate seedlings like gloxinias and begonias. And there is a host of things we can now raise from seeds for our spring sales. Take, for instance, snapdragons, foxgloves, hollyhocks, annual asclepias, perennial coreopsis, pentstemons, larkspurs, anemones, irises and a host more. And among bedding plants especially, there is *Vinca rosea*.

I WAS AT Jobstown, N. J., the other day to see Mr. Gardner. He had a lot of large plants of gardenias. But he says, "what's the use of growing them, the dealers won't take the flowers. They can sell a few, but nothing like as many as I could raise." Why is this? In the London market the gardenia is one of the choicest and most sought for of winter flowers.

IN A ROSE HOUSE he called my attention to a plant of Perle that had also produced a branch bearing a true Sunset, and another branch bearing a large, full double, flat like a Malmaison, bright



ORCHID ARRANGEMENT AT THE RECENT EXHIBITION OF MESSRS. SEBRECHT & WADLEY, NEW YORK.

yellow rose. I hope he can secure a stock of this last freak.

EUCHARIS MITE.—He showed me some eucharis plants that were affected by the root mite. These plants were perfectly clean a few years ago and he couldn't understand how the mite came there. "Do you grow Roman hyacinths?" I asked. "Yes, thousands of them," he replied. "Well," I remarked, "most likely the mite was introduced by them." It is a fact that Roman hyacinths when imported are often infested with what we know as eucharis mite, which soon finds its way to most every other bulbous plant upon the place, notably amaryllises, crinums and eucharis, but it preys more upon eucharis than upon anything else.

HEATHS.—Mr. Gardner has a good word for Cape heaths and grows them very well. *Erica Wilmoreana* is his favorite. It is an easily cultivated, free growing, sure blooming species. He has a large number of plants in 5 inch pots and which are two years old and eighteen to twenty-four inches high and correspondingly bushy. They are growing in cool, light airy greenhouses. The soil used for them is a dark colored peat found in the neighborhood and a sprinkling of sharp white sand; and so that the young roots inside the pots may not get dried

up or injuriously affected by changes of temperature and drying conditions, the pots are plunged in sphagnum moss inside larger pots. During the summer months he plunges them out of doors in an airy place not sheltered from the winds on any side. Here we can water them as liberally as we please with impunity, whereas were they in sheltered places where the wind would not reach them on every side they would soon become unhealthy.

MR. HUGHES' CALADIUMS were the chief attraction at the exhibition connected with the last meeting of the Florists' Convention in New York. I was at Bryn Mawr the other day and found these beautiful specimen caladiums at rest under a greenhouse bench. The varieties consisted of Boieldieu, Calypso, Candidum, Chantini, Clio, Mad. Alfred Bleu, Mad. Marjolain Scheffer, Mons. A. Hardy, Meyerbeer, Pearl of Brazil, Prince Albert Edward and Triomphe de l'Exposition. The little *Argyrites* is one of the prettiest and most useful of all caladiums, and a good deal grown for table and bracket plants, and in small pots for mixing with ferns and other plants in furnishing.

LACHENALIAS as basket plants. Mr. Hughes had wire baskets lined with moss

and filled inside with earth and studded all over with lachenalias, suspended from the roof in a greenhouse. Used in this way these little Cape of Good Hope bulbs grow admirable and bloom well, and their multitudinous duplicity every year always affords abundance and to spare. They are kept dry and rested during the summer months, started into growth in fall and had in perfection of bloom from midwinter till midspring.

HARDY PERENNIALS.—There is an increasing demand for these and a proportionate increase of supply. Landscape gardeners use them in quantity to plant about the front of shrubbery beds and belts, to furnish rockwork for effect in their natural landscapes and for the margins of ornamental ponds and streamlets. Hallock tells me he is going to import full sets of all good things as feverfews, paeonias; Woolson tells me he has stock enough to plant twenty-five acres, and has bought another farm adjoining his present nursery and is building more greenhouses; Manla writes me he has seven acres under hardy plants; Josiah Hooper told me his firm is going into them heavier than they used to; and at Mr. Meehan's I found that hardy perennials were quite a feature of the nurseries.

Grafting Azaleas.

In a former communication I gave you my views on growing azaleas from cuttings, but as many varieties are of slow growth on their own roots and of too branching a habit to form good plants of convenient height, grafting is resorted to and thereby we are enabled to give the weaker growers more vigor and in fact a better constitution in general. For a stock we may select any strong, robust grower, usually the old *Phonicea* and *indica alba* are preferred, because they root easy and make a growth in a very short time.

The stock should be at least six inches high, in a thrifty condition and may be worked at any time in the year, either by side or top grafting. The side grafting should be done with a scion of half-ripened wood and the incision made into the stock at a place where the wood has not turned dark yet. Older scions and grafts into older wood will take a much longer time to unite and therefore should not be practiced. No wax is used, but the plants are placed in a close frame, shaded from the direct rays of the sun and in a few weeks will be united so that air may be admitted, and finally the glass taken off entirely. After that the stocks may be cut off above the graft.

The better way in my opinion, but to a beginner far more difficult, is the soft top grafting, which also may be performed anytime in the year, or whenever soft tips for scions are available. We do it here any time between January and June. Cut out the top of the stock, where it is still very soft, cleft it down about half an inch and insert a scion as young and tender as we can handle conveniently; the younger the better, for in this soft state it will unite with the callus forming on the cleft of the stock in a few days. The beginner may find it rather difficult at first to shave off both sides of so soft and small a scion, also the cleft into the top of the stock may not be a very easy task to perform for a new hand, but a little practice will bring everything straight and after a dozen or two have been worked, anyone will get used to it. The tying also may bother him, but practice will overcome this in the same way. I prefer to tie with bassmatting, for it will

generally decay soon after the graft has fairly taken and this saves the trouble of untying, which would be required if we used any other material for the purpose. As fast as we graft the stocks they are placed in a close sash frame on a bench in the propagating house and shaded a little. We lay them in a slanting position, rather close together, half burying the pots in the sand, but they may be set up erect if there is head-room enough for the plants without touching the glass.

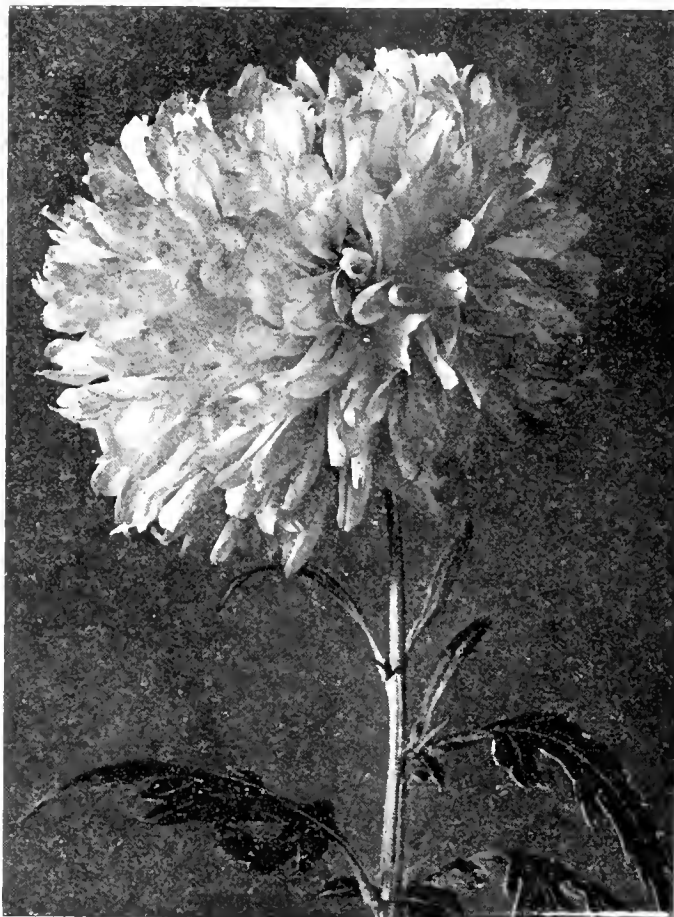
Anyone not familiar with the working of azaleas in soft tips may think that many grafts would wilt and die, but the close, moist atmosphere in the frame will prevent them from wilting and as the young and tender parts operated on will callus in a few days, the moisture rising from the sandbed under the little plants will keep them fresh, and in ten or twelve days a little air may be admitted and on examination we will find that the grafts have practically united. If the atmosphere in the frame was not constantly kept moist and close, the frame not being tight, then we may have poor success, but taking every precaution to avoid their getting dry, we are sure of 99 out of 100, even if we did not make a very good fit of bark to bark in some of the grafts. Azaleas are now almost universally so grafted in the large establishments of Belgium, but the Belgians were not the first to practice soft-wood grafting in azaleas, I believe.

The originator of Herzog Adolph and Herzogin Adelhaide von Nassau (our Duke and Duchess of Nassau of today), Bernhard Andre, A. Borsig, Deutsche Perle, etc., etc. Jos Mardner, who is still among the living, high in the eighties, in Germany, although for fifteen years or more retired from business, lays claim to that point. Guided by the observation in sidegrafting, that by using softer wood and working higher up into the softer part of the stock the grafts would take much less time in uniting, with a much smaller percentage of loss, therefore he worked higher up until he came to the tips and the softest wood. He kept his secret only a few years, for by selling young plants of his renowned seedlings any observing plantsman would soon find out that they were grafted in a different way. He also was a very shrewd business man and most of us could learn from him in that respect. He raised large numbers of azalea seedlings annually and when he had decided on half a dozen varieties, he would grow a large stock of them and then send circulars to all the leading establishments in Europe, stating his price for the set, shipment to begin not before he had secured 200 subscribers. As his seedlings had the highest reputation, the leading firms would order a number of sets and catalogue them in their next issue, before they could get even the plants generally, and invariably they had a large number of orders before they were able to get up a stock, consequently they had to buy more of him to satisfy their customers. In this manner the old gentleman made more out of his seedlings than he would in the ordinary way, by sending the plants as the orders come in, but he was always honorable, and to his credit we must say, that he never sent out a poor variety; even now, after so many years' improvement, if we look back at any of his varieties, we must admit that the poorest of them are still among the best.

Rochester, N. Y. J. B. KELLER.

Chrysanthemum Snowball.

Our illustration shows a single bloom of this excellent variety, cut from a plant



CHRY ANTHEMUM SNOWBALL

grown by Superintendent Kanst at the South Park greenhouses, Chicago. It certainly presents great attractions to the commercial grower as the plants are very robust, remarkably free from mildew and other disfigurements and the flowers are not only very freely produced, but are very desirable when cut. They are double to the very center and in shape almost a perfect ball about three inches in diameter. We believe that this variety will take place with the florist as a valuable white.

We understand that it was imported from Japan as No. 27 by Mr. M. A. Hunt, Terre Haute, Ind., and by him named Snowball. The name is certainly a very appropriate one, but as we note that Mr. W. K. Harris has given one of his seedlings the same name it would be wise for these gentlemen to correspond and decide which plant was first given the name, and rechristen the other one. Even then the name may by some be considered synonymous with Boule de Nieve as noted by Mr. Lonsdale in last issue. Truly that committee on nomenclature has abundance of work before it.

Chrysanthemum Elksborn.

In response to our comment on this variety in last issue Mr. Blanc sends us a specimen bloom which is certainly handsome and fully realizes the expectations raised by the engraving executed by him and which we published in Sept.

15 issue. The flower is of exactly the size of the illustration and the peculiarity which gave it its name is strongly marked, almost as much so as in the engraving.

Is It a Theory.

Mr. Herr, on page 154, speaks of exchanging cuttings as a necessary proceeding to keep stocks of roses, carnations, geraniums, etc. healthy. While it will do no harm to select good healthy cuttings of any of the above from your neighbors, or even renew old sorts by fresh importations from careful growers in Europe, we do not consider it at all important. First get the best stock you can find and from a reliable source, grown in a proper temperature and proper soil, neither pushed by a high temperature or stimulating manure. Select only the best for propagation and only from the strongest and healthiest plants. Persist in doing this and a weakling will be the exception and that too without going outside of one's own stock.

We have found by persisting in this line we have kept old sorts up to their original standard of health and vigor, but in many cases—as roses—when they were first introduced, being compelled to take small and sometimes weak plants or none, by continuing to only propagate from the best wood and not driving the plants by excessive heat and fertilizers, most sorts are quite sure to improve in



CHRYSANTHEMUM MRS ALPHEUS HARDY

vigor. Very true the Perle will outgrow the Niphetos, but the latter with a little more time will invariably make strong healthy plants, and in the long run will well repay for the extra time required to bring it along in a moderate heat and soil not over stimulated. I. C. Wood.

Fishkill, N. Y.

Rex Begonias as House Plants.

Mr. Fred Kanst has some splendid specimens of Rex begonias in the conservatories at South Park, Chicago. Many of them are three feet through and in handsome proportion. He has them placed on piers of bricks in the basin of a fountain, the top brick rising about half an inch above the surface of the water.

They thrive splendidly in this position and Mr. Kanst says they can be grown nearly as well in the dwelling by placing the pot on a brick in a pan of water, keeping the water about half an inch below the upper surface of the brick. In this way the plant absorbs the water as

it requires it and moisture is supplied to the under surface of the leaves, which is necessary to the best development of the plant. Florists would do well to advise buyers of Rex begonias to try Mr. Kanst's method.

Chrysanthemum Mrs. Alpheus Hardy.

The illustration shows a flower of this remarkable novelty which has attracted so much attention wherever shown. It has been so many times described in these columns that any further description is unnecessary. We may add that we are indebted to Messrs. Pitcher & Manda, Short Hills, N. J.—the owners of the stock—for the use of the cut.

London Notes.

During the past week the public attention has been drawn to the chrysanthemums. On Wednesday and Thursday November 7 and 8, the National Chrysanthemum Society held its grand show

at the Royal Aquarium, Westminster. The show was well attended and a very good display of blooms and plants were made by many of the best growers. We do not think the blooms were as large and fully expanded as in former years, but suppose this must be attributed to the wet cold summer we have had.

On November 9 and to the annual chrysanthemum show was held at the Crystal Palace. The leading growers also took part in this, but many of the blooms looked as though they had done duty at the Aquarium show. The first prize for 18 Japanese varieties, distinct colors, was won by Mr. W. Packman, of Fooks Cray, Kent. This was a grand show, the blooms being very large and well grown. Mr. Packman also received three certificates as follows: One for a new white chrysanthemum called "Avalauche," which was a splendid bloom, some 10 inches in diameter, pure white and very thick; also a certificate for a bloom called "Marsa," a deep rose color with silver reverse, which looked to us like a sport from Mons. Freeman; the

third certificate was for a creamy white bloom with corkscrew petals called "Florence Percy." Mr. T. Skinner, gardener at Sutton Park, also won a first prize for 12 distinct varieties of Japanese chrysanthemums. One of the best in his exhibit was that of a bloom of Edwin Molyneux; in fact he had the finest flower of this variety in the show. Mr. J. Doughty obtained a certificate for his new chrysanthemum "Violet Tomlin." This is a sport of the chrysanthemum "Princess of Wales."

The growing plants in bloom shown in groups were very fine. That of Messrs. Davis & Jones, of Camberwell was superb. These plants were arranged in banks of 100 feet square. Messrs. Davis & Jones won the gold medal at the Aquarium on the 7th and 8th. This is the highest prize ever offered by the National Chrysanthemum Society.

Mrs. Smouth, of Hastings, had a dinner table decorated with dried sea weed which was very pretty. This article is coming into use here for yacht decoration. These seaweeds, Sertularias and Corallines, are prepared in such a way that they retain all the characteristics of the zoophytes, from which they are made; they have the beauty of natural flowers and are practically everlasting. As we stated they are used a good deal for yacht decoration and also for drawing rooms, table and electric light decoration. In the latter they can be placed over the shade or directly on the lamp and produce a very pretty and novel effect.

The West End florists report that business is looking up; many of the occupants of the large houses have returned from the continent or the country, and cut flowers and plants for decoration are again in demand. Orchids will again be largely used this winter for table decorations and basket work. This is the worst season of the year for orchids here, but the supply of late autumn flowering orchids has been very good. T.

November 10.

Cyrtanthus McKenii.

Cyrtanthi may be described as miniature amaryllis; they have lovely drooping crimson, white and yellow flowers and are very well adapted for greenhouse cultivation. We have several species in Natal: breviflorus, yellow; angustifolius, crimson; obliquis, orange, green, etc. C. McKenii I consider the most useful and only wants to be known for growers to use it largely, blooming as it does through midwinter. The stem is about a foot long and bears six to eight snow white tubular flowers about two and a half inches long and one-half inch across tip, hanging in clusters, with a delicate jonquil like perfume. Unlike the above named cyrtanthi C. McKenii increases rapidly by offsets, like a tuberose. The blooms last for a week after cutting and are freely produced when white flowers are most needed. With rather a moist soil and temperature 60° to 70° Fah. I find it does well in winter. In summer the bulbs should not be allowed to dry off too much, as naturally they do not quite lose their long narrow leaves. Ordinary light rich loam will be found the best soil for its successful culture. It has been largely propagated and bulbs can now be had at a very moderate figure.

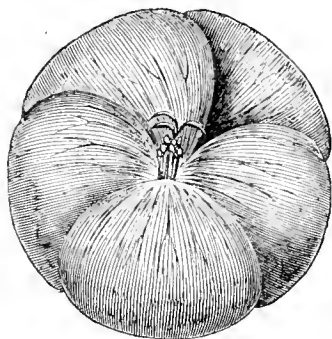
Freesia refracta alba is now—August, our spring—just coming into bloom. Few flowers I know have a more delicious perfume. The color, as is well known, is snow white with sometimes a pale

lemon yellow throat. Several nurserymen hold large stocks and the price within the last year has come down 50 per cent. R. W. ADLAM.

Maritzburg, Natal, S. Africa.

New Zonal Pelargoniums.

The illustration serves to give an idea of the march of improvement that continues to be made in this old-fashioned, and, at the same time, most popular class of plants. Those who have seen the under-mentioned varieties, or some of them, at recent exhibitions, will have no doubt as to the correctness of the representations, both with regard to the size, regularity, and general disposition of the petals; but, at the same time, they give no idea of the substance, nor the delicate, yet charming and brilliant hues of all shades possessed by the flowers themselves, which have been wonderfully improved in recent



PELARGONIUM PL. SHOWING SIZE A FEW YEARS AGO.

years, thanks in a great measure to the encouragement given to raisers by such firms as Messrs. H. Cannell & Sons.

On the upper left-hand corner of the illustration, the first figure represents Lady Frances Russell, having soft rose-colored flowers, with a white eye, and dwarf, short-jointed stems. The second to the right is Lady Roseberry, with petals of the richest salmon, and white at the base. Countess of Derby follows with suffused salmon flowers, deepening to a fiery tint in the center, and white at the margin. The fourth figure represents Brilliant, one of the richest and finest scarlet flowers existing in this class of plants. Lily, which follows, produces the largest flowers of any white variety, but is generally faintly tinted with pink at the base of the petals. Succeeding this is H. Cannell, Jr., which produces large flowers of perfect form in huge trusses; the color may be described as a deep crimson, heavily suffused with purple, and white at the very base only. No. 7 on the lower left-hand side represents the variety, Rev. H. Harries, with large, soft rosy red flowers, produced in bold trusses of great size. To the right of this is a pink variety, shaded with purple, and named Mrs. David Saunders. It flowers freely and is dwarf in habit, carrying the flower-stems well above the foliage. The small figure above is that of one of the zonal pelargoniums so popular a few years ago, and which, by comparison, serves to show the advance that has been made with the modern varieties, such as those above mentioned. Even this type is a vast improvement upon the original wild species.—*Gardening World*.

A National Flower.

While it is certainly gratifying to note the patriotism evoked by the few notes on this question, the flood of communications we have recently received on the subject necessitates doubling the size of the paper or declining to give further space to them. As we can't afford to do the former we are compelled to accept the alternative. Hereafter please mail your ideas on this matter to the committee of the S. A. F., who are to report a flower for the consideration of the society at the Buffalo meeting.

Leaves of Advice From a Limb of the Law.

(For Young Florists.)

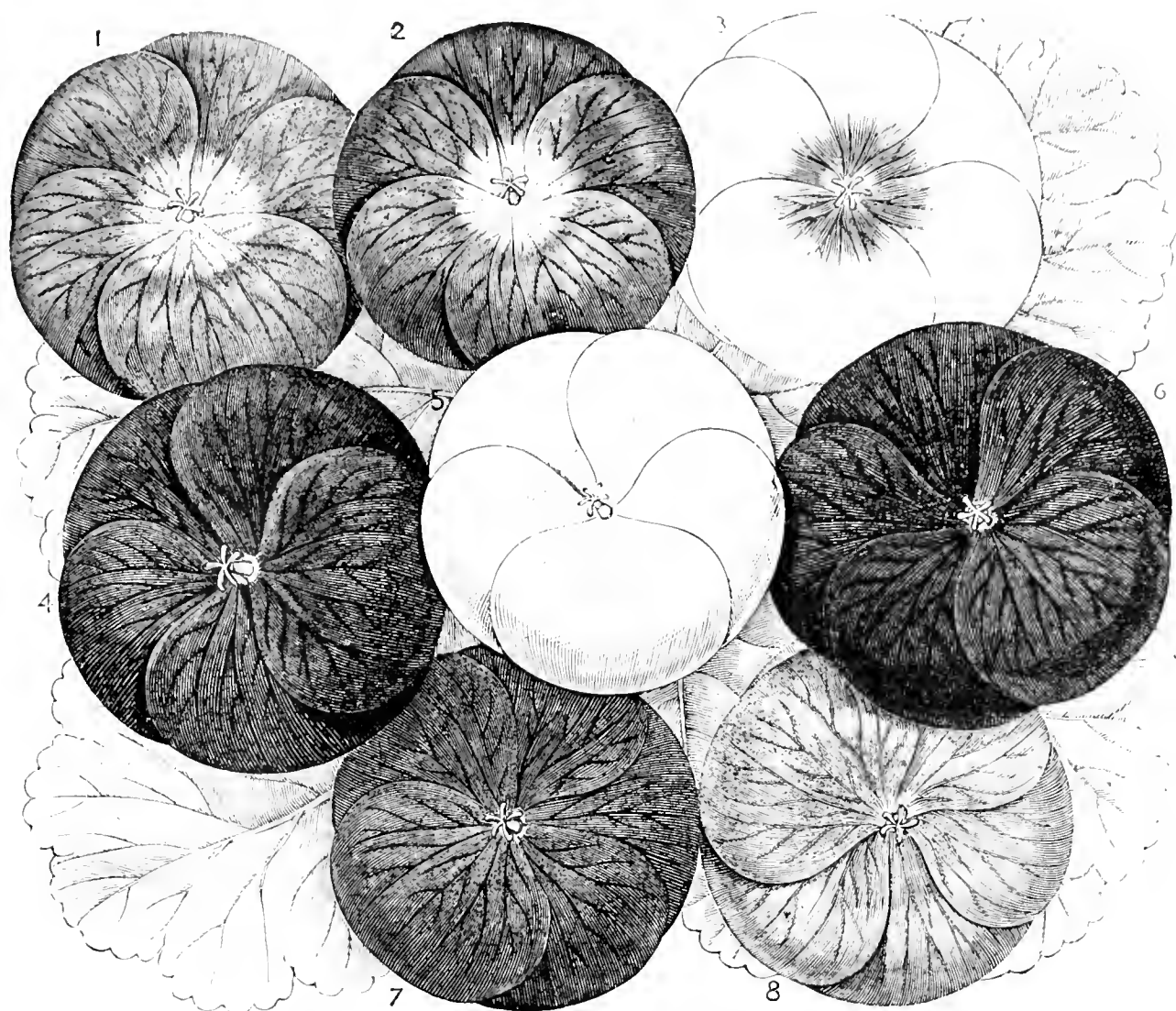
IV.

You look worried this morning, what's the matter? By the way, what a superb display of chrysanthemums. My favorite flower. What's that your muttering? Would have been finer if you had not been cheated? Calm yourself and let me hear how it all happened. You say, some one told you that Spriggins, your business rival, had secured a thousand plants of beautiful varieties, not only in white and yellow, but in several rare shades of pink and also in deep red, a very rare color. You at once offered to take one half the invoice off his hands, offering a low price but a cash one. He accepts and sends you all the white and yellow ones. You've not been cheated. Really there was no sale at all. There was only a bargain for a sale, a very different thing. What you should have done was to return the 500 plants at once and say that you would call and specify which colors you wanted. Had he refused to accede to this that would have been the end of it.

Bear in mind that there can be no sale unless first of all, the property to be sold shall have been so accurately described as to render it certain that purchaser and seller are thinking of the same property. In this case they were not. You must always distinguish between a sale and an agreement for a sale. To constitute a sale there must be: First, ownership; next, a meeting of both minds as to the identity of the property; then unconditional offer and unconditional acceptance. That instant the sale is complete, no matter where the goods may be, no matter how they may increase in value or how worthless they may become.

You will perceive that the reason why the law insists upon offer and acceptance is that otherwise a wide door to fraud would be opened. In fact a business man would need be pretty wide awake or he would find himself a buyer against his own will. I mean enterprising dealers would take the risk of your returning an invoice of goods and then try to hold you on the plea that you did not repudiate and hence approved the sale, as they would call it. A man can't be made a buyer in spite of himself.

Let me say a word here as to contracts for future sales upon the happening of some event. You may say to Spriggins: If I get \$100 for the contents of my cold frames on the first of the month I'll buy five dozen fuchsias, six dozen azaleas and one dozen camellias for such and such a price per dozen. Spriggins accepts. The general idea among business men is, that should you on the first day of the month tender the exact sum due for the merchandise specified it would be a sale and would give you such absolute rights in the property that you could seize it by



NEW ZONAL PELARGONIUMS

legal process. Nothing of the kind. You confound two things. It would be simply a breach of a contract for a sale and not of a sale itself. You might, if you wished, make a tender of the sum agreed upon and then sue for damages.

Another thing you must bear in mind. You must not mix up exchanges or "barter" and sales proper. A sale becomes absolute the instant the offer is made and accepted, but that instant too there must either be cash payment or specific agreement as to credit. Not so with an exchange of property. An offer to exchange is not binding until contract signed or until the delivery of the property. The two articles must change places and the new owners must come into actual possession of them.

No, you are wrong. Spriggins committed no fraud upon you. Quite right, any sale brought about by fraud may be and should be at once rescinded. A slight delay would do no harm, but my advice is, in such case, don't let a leaflet grow on the plants until you have returned them with a plain statement of the grounds for so doing. Had Spriggins shipped you five hundred plants of his

own growing there would have been a fraud. That's a good point. I'll answer it.

You say: Suppose you are induced by fraudulent representations to make a sale of merchandise. You do so and give the buyer the usual thirty days credit. Now before the credit has half elapsed you learn of the fraud practiced upon you. Would it be right, you ask, to bring suit at once for the amount of the invoice? No, it would be fatal. You would simply confirm the sale and rob yourself of the right to seize the goods if possible, and arrest the buyer for fraud.

You ask: How is it when merchandise is sold by sample? The general rule is that you warrant the merchandise to conform to sample. But mind you, no more! You don't, as a rule, warrant that the sample is anything more than it seems to be. The buyer buys with his eyes open. The only question is: Does the article conform to sample. I would say to you: Be careful how you give warranties. Your business is a peculiar one. Varieties in colors, tints, shades, shapes of leaves and sizes of blossoms are so endless that the same pair of eyes may readily see differently every time they

look! Hence it behooves you to be careful how you give warranties as to these delicate variations.

You may have heard of the old Latin maxim which is always the rule when a purchaser buys with his eyes open. I refer to *caveat emptor*. "Let the buyer be on his guard." But even this rule doesn't apply to sales accomplished through fraud.

If you affirm that a rare species of chrysanthemum is your own importation and not to be found at any other dealer's you will be bound by your declaration; but you can't be held for a "mere opinion." That is no warranty.

Oh, don't mention it. I knew you would feel better after a quiet talk. The blood has left your brain and gone back to its right channel. Thank you. I'll take a glass with pleasure. I'm very fond of home made wine.

UNCLE BLACKSTONE.

THE AMERICAN GARDEN will raise its subscription price to \$2 a year on January 1. Our club rate of \$1.85 for the FLORIST and AM. GARDEN together for a year holds good till Jan. 1, however.

Rose Mme. Andre Duron.

Respecting the rose which has had some notice in your columns pro and con, I beg herewith to quote from the London *Garden* again (Nov. 10), which is from the pen of Canon Girdlestone, who, by the bye, has scored our American Beauty so unmercifully from time to time.

Mme. Andre Duron (Bonnaire). This rose has much the character of the old Bourbon Sir Joseph Paxton in foliage, habit and type of inflorescence; the flowers are said to sometimes attain to the size of those of Paul Neron, but it is to be feared that its common color will be against it.

With me it does not promise very well. The half dozen plants which I have on trial are anything but satisfactory. It may be that the treatment it is receiving does not suit it. Though when anything succeeds well with other florists and does not do so with me I usually blame the soil. In the same house where the variety in question is a failure, Perles, Sunsets, The Bride, Mme. Cusin, Niphetos and La France are doing well, in comparison. Fully realizing that we should not be too hasty in our condemnation, yet I must record the fact that up to date I have not cut one marketable bud from the six plants on trial. It is not desirable in either form, size or color. Philadelphia. EDWIN LONSDALE.

Seedling From Paul Neron.

We have received from Mr. Isaac A. Pool, Escanaba, Mich., a photograph of a new rose which he states is a seedling from Paul Neron, but superior to that variety in vigor of growth, size and color of flower. He also states that the flowers are much more persistent and the plants freer in blooming than its parent. It is a chance cross and its male parent is unknown.

NEW ROSE FRANCES CLEVELAND.—This is reported to be a sport from Souvenir d'un Ami, originating with W. H. Ryan, Chatham, N. J. It is described as a beautiful pink in color, plant a strong grower and very prolific.

Holiday Prices.

Baltimore florists are, generally speaking, highly pleased with the prospects for "right smart" of trade during the coming season, although one florist "feels confident" that it won't be as good a season as last, and another assured me that the bottom had most completely fallen out of business and the outlook was exceedingly poor. Be that as it may, it is certain that we are all—above gentlemen included—making ample preparations for a brisk season.

Apropos of all this I would like to say a word regarding the retail prices that frequently prevail during the holidays, particularly in the cities. I am satisfied that many of us do material injury to our trade by too high prices. A love for plants and flowers is common to all sorts and conditions of men, yet at certain times it is well nigh impossible for people of even moderate means to do more than covet their neighbor's flowers, inasmuch as flowers, for the time being at least, are expensive luxuries in which only those possessing plethoric pocket-books can hope to indulge. We ourselves are perfectly cognizant of this latter fact and the knowledge inclines some of us to be rather independent in our bearing towards humbler patrons whose quarters and half dollars would be thankfully received at other times. I have no reference whatever to the cranks who want twenty-five cents worth of

flowers at Christmas, to consist of "a few lilies of the valley, three or four American Beauty roses and some smilax." On the contrary, I have no words to waste on such people, I like to sit down on them, and I enjoy seeing them sat upon, but there are hundreds and hundreds among the masses in every city who would be delighted to brighten their homes on Christmas morning—if at no other time in the whole year—with a few of even the commonest flowers, were it possible to obtain them at a reasonable cost.

I am not to be understood as suggesting that we ought to sell flowers at the same prices in December as in July; we all anticipate increase of business and better prices during the holidays, and in fact at any time when supplies are sorely taxed to meet an unusual demand. A legitimate advance in prices is nothing more than business, but what I do mean to say is this: that some of us are altogether too avaricious. We are not content with moderate profits, and in our anxiety to reap all possible gain from a business freshet we pile on prices to such an extent that we virtually confine our patrons to a certain class, excluding many others whose mites, in the aggregate, would considerably increase our profits. All is fish that comes to the net, and whether a customer be rich or poor, whatever the extent of his order, we should do our utmost to give him satisfaction. I believe in every florist deriving a fair, just profit from the sale of his goods, and I am satisfied that if in many things we should sell at closer figures, thus placing plants and flowers within the reach of a greater number we would be able to report a more satisfactory holiday trade. A. W. M. Baltimore.

[Since values were first recognized they have been based upon supply and demand. If the article to be valued was plentiful and easily obtained the valuation placed upon it was small, while if the supply was limited and many desired the same the value was placed proportionately high. This has come to be known as the law of supply and demand and has been the base of all values since man first recognized their necessity. Another factor in determining prices is the cost of production. Common sense teaches all that the selling price must exceed the cost of production. The prices of flowers at any season of the year must be governed by this same law of supply and demand in conjunction with cost of production. If the supply is large and demand slow prices must consequently be low, while if the supply be short and the demand brisk prices must be higher. At the holidays the supply is short and the demand generally the best of any time of the year, it also costs more to produce flowers at that time, they are consequently worth more and an article should bring what it is worth. If prices were not advanced to a profitable figure at the holidays the supply would not be as large as it now is, as there would not then be a sufficient incentive to surmount the numerous difficulties and develop the necessary skill to produce the flowers at that time. As to avariciousness there can be no sentimentality in business matters. Sometimes business men give away thousands of dollars worth of goods—not from pure love of humanity by considerable, but because they expect to receive it back with heavy interest through business channels. This is merely a question of policy. Will it be to the best interests of

the florist to sell his goods at less than cost during one season that he may reap an increased benefit during the balance of the year? We are inclined to think that any interference with the accepted order of things will be futile and that the highest price at which all the supply can be sold is the correct one for the florist to charge. But if the stock can not be sold out clean at the prices asked a failure to at once make a reduction would certainly be poor policy. Flowers are not the only luxury which is within the reach of the rich only at certain seasons. Strawberries at \$1 a box in February will not be found on the poor man's table, but this does not limit the consumption of the same berries in June at 10 cents a box.—ED.]

News Notes.

LAKE FOREST ILL.—Hild Bros. are building another rose house.

NEWPORT, R. I.—Florist Brandt made an exhibition of chrysanthemums which brought much praise from the local press.

INDIANAPOLIS, IND.—The twenty-eighth annual meeting of the Indiana Hort. Society was held at the State House December 4, 5 and 6.

MILWAUKEE—It is rumored that Mr. Peters, foreman at Forest Home cemetery, is about to build and conduct some greenhouses for himself.

UTICA, N. Y.—Chas. F. Seitzer sustained a considerable damage to his stock through sewer gas coming through the ground into his greenhouses.

DENVER, COLO.—C. R. Gallup & Co. have built two new houses 100 x 12 each. Mr. and Mrs. Gallup have returned from a five months European trip.

BELLEVILLE, ILL.—E. W. Guy has added two new houses, 100 x 16 and 100 x 11 respectively. A. G. Fehr Las also added two, one 60 x 18 and the other 60 x 12.

VICKSBURG, MISS.—Mrs. E. D. Wright has remodeled a rose house 80 x 20. Noah Vandenburg claims to have cleared \$1,200 from his three-quarter acre garden patch this year.

DALTON, MASS.—F. B. B. Sears who has heretofore grown vegetables only has just completed a new greenhouse and is preparing to grow plants and flowers. He will use steam for heating.

WASHINGTON, D. C.—A portion of the land on which the Botanical Gardens are located is involved in a law suit. A suit in ejectment has been brought against Supt. Smith as agent of the United States by an heir of a former owner.

SALINA, KANS.—The wife of Mr. John C. Nolan, head of the Salina Floral Co., died on the 4th inst. of heart disease. Mr. Nolan was formerly an eastern man and has many friends in both the east and west who will be grieved to hear of his affliction.

SCRANTON, PA.—Florists G. R. Clark & Co. gave a very successful chrysanthemum show in the Armory building commencing Nov. 7. About 1,500 plants were exhibited. Visitors stated that it compared favorably with the shows in the larger cities.

CHATHAM, N. Y.—A severe snowstorm with high wind the latter part of last month has made this a very trying fall for the cut flower grower. So much dark

weather has made it very difficult to get any flowers out. English violets are doing the best of anything.

SANDUSKY, O.—Florist Wm. Dilger gave a chrysanthemum show at Fisher's hall beginning November 22, which was very well attended and was a successful exhibition. On the opening night Mr. Dilger read a paper on the chrysanthemum to an audience of nearly 400.

MILWAUKEE.—It is reported that G. W. Ringrose will retire from the florist business next spring. It is doubtful if ever before has there been so many orders for Thanksgiving day refused as this year. The supply was a trifle short and the demand much larger. Roses were in special demand.

SAN FRANCISCO.—State Inspector of Fruit Pests G. W. Klee has prohibited the receipt of cut flowers from San Mateo county on the ground that many shipments are infested with the cottony cushion scale which is thereby transmitted to and established in districts hitherto free from its ravages.

DETROIT, MICH.—Arrangements are being made for a flower show in the spring to be given by the local florists under the auspices of the daily Journal and local charitable organizations; the latter to receive any surplus after expenses are paid, the Journal guaranteeing that there shall be no deficiency.

LITTLE ROCK, ARK.—Joseph Vestal has built six new houses this season, one 125x20, one 168x22, three 125x12, and one 78x12. Also a packing and plant cellar 60x18, and an elevated iron water tank holding 84,000 gallons. Tipton & Hurst have added two houses, one 100x18 and the other 100x6. M. W. Heron's new houses are two 56x22 and one 25x12.

PORTLAND, OREGON.—A bill prepared by the State Horticultural Association to create a State Board of Horticulture to consist of six members will be introduced in the next legislature. The board is to look after the fruit interests of the state with power to enforce certain restrictions, appoint an "inspector of fruit pests, etc." The passage of the bill would undoubtedly be of great benefit to horticulturists generally throughout the state. The Oregonian of Nov. 15 gives the bill in full.

NEW ORLEANS.—Twenty members of the New Orleans Hort. Society attended the funeral of Edward F. Nelson, late superintendent of Audubon Park and one of the active members of the society. Among the floral designs sent by the members of the society was a floral banner, the emblem of the society, which was very handsomely made. Mr. Nelson was formerly superintendent in the horticultural department at the World's Exposition. His age was 37 years. Chas. Schultz has been appointed superintendent of Metairie Cemetery, considered to be the largest cemetery in the south. Chas. Eble has removed from 4 Camp street to 165 Canal street where he has a handsomely fitted store.

COLUMBUS, O.—The annual meeting of the Columbus Horticultural Society was held on the afternoon of the 1st inst. Valuable reports were received from the standing committees and officers. The society has not a large membership, but at the meetings there are many interesting papers and discussions. The chief fault of the society is its lack of the social feature, so essential to the best development of a first class horticultural

society. The following officers were elected for the ensuing year: President, O. W. Aldrich; Vice-President, Prof. Wm. R. Lazenby; Secretary, W. S. Devol; Treasurer, Geo. W. Sinks. Executive committee, W. J. Green, Mrs. N. E. Lovejoy, Clarence M. Weed. Chairman of standing committees—on botany, A. D. Selby; entomology, Clarence M. Weed; meteorology, Moses Craig; library, J. J. Janney; fruits, W. J. Green; plants and flowers, Mrs. N. E. Lovejoy; vegetables, R. J. Tussing. The next meeting will occur Dec. 29—subject of paper "Genesis of the Vegetable Garden," by J. J. Janney.

Philadelphia.

The snpper given by the Florists' Club during the recent chrysanthemum show was a most enjoyable affair, and was participated in by many visiting florists who were present at the exhibition, as well as a large number of members of the club. Among the guests were Messrs. John N. May, Summit, N. J., President S. A. F.; John H. Taylor, Bay Side, N. Y.; Chas Anderson, Flushing, N. Y.; W. S. Allen, A. D. Cowan, D. A. Munro, of Garden and Forest, and Wm Elliott, New York city; F. R. Pierson, Tarrytown, N. Y.; Alex Murdoch, Pittsburg, Pa.; John Thorpe, Pearl River, N. Y.; Dan'l B. Long and Wm. Scott, Buffalo, N. Y.; and several others whose names I can not now recall. Vice President W. J. Palmer, of Buffalo, did not make his appearance until the following day. L.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—Rest of references as to ability and character. Single. State wages. Box 145 Fishkill on Hudson, N. Y.

SITUATION WANTED—By young English gardener, 7 years' good practice. Excellent references. TEGG, 37 Hyde Park Ave., Hyde Park, Mass.

SITUATION WANTED—Any person who is in want of a seedsman or florist, can find one who knows his business, by addressing (stating wages given) ENERGY, care American Florist, Chicago.

SITUATION WANTED—By a good gardener; has had many years' experience, and a good knowledge of the business. Sober and industrious. GEO. F. KREBS, 1213 Feiler St., Louisville, Ky.

SITUATION WANTED—By a first-class gardener (private or commercial); 19 years' experience in all branches of gardening (Orchids and roses especially). German, married, no children. Address: HANS VON OERTZEN, Mont Clair, N. J.

SITUATION WANTED—A seedsman with 12 years experience in agricultural, vegetable and flower seeds, bulbs, implements, etc. Thoroughly understands testing seeds under glass and in open ground. SEEDSMAN, care J. A. Bruce & Co Hamilton, Canada

WANTED—Nursery trade lists. Address Brighton Nurseries, J. A. DE MAR, Proprietor, Brighton District, Boston, Mass.

WANTED—A sober, steady, reliable greenhouse man; single, one who understands the business in all its branches such as raising roses and general greenhouse stock; a steady job to the right man. References required. Wm. A. Beck, North Cambridge, Mass.

WANTED—A foreman of wide experience in well known rose-growing establishment. East to take full charge of large commercial place, two hours from New York. Must be able to grow roses and other cut flowers equal to best sent to New York market. Salary \$1,000 and first-class accommodations, or if satisfactory arrangement made, will work on shares. Position permanent. Address: ROSE GROWER, P. O. 333, New York

FOR SALE—\$100 will buy half interest in florist's establishment in Washington, D. C. Single man. For particulars address: LOUIS SCHMID & SONS, Washington, D. C.

FOR SALE.

Florist business in a large and growing city in New York State. Paying and increasing business. Valuable real estate—10,000 square feet of glass, thoroughly heated; large stock Palms, Roses, etc., etc. Satisfactory reasons for selling. A fine opportunity for a young man. Advertiser will take interest as silent partner with responsible party. Terms and particulars upon application to: ROSES, care American Florist, Chicago

NOVELTIES IN ROSES.

Also the leading foreign varieties. Teas, Hybrid Teas and Hybrid Perpetuals, and Novelities in Chrysanthemums.

Table listing various rose varieties and their prices, including Tuberosa-montana, Stephanotis Floribunda, Gardenia Indiens and Florida, Bouvardias, Carmelons Sunrise, P. De Graw, Queen of Whites, Century, Hinz's White, etc.

JACOB SCHULZ, LOUISVILLE, KY.

Mention American Florist.

E. BENARD, ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS A SPECIALTY. NURSERY STOCK OF ALL DESCRIPTIONS. For particulars apply to E. BENARD, Jr., P. O. Box 140 San Diego, Cal.

JOHN CURWEN, Jr., GENERAL GREENHOUSE STOCK AND ROSES. Villa Nova P. O., Delaware Co. Pa. Money Order Office: Bryn Mawr, Pa.

IMPORTED M. P. ROSES.

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates. Price Lists to applicants. Address

WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS.

ROSES, SMILAX, VIOLETS, AND CARNATIONS,

IN QUANTITY. READY NOW.

JOS. RENARD,

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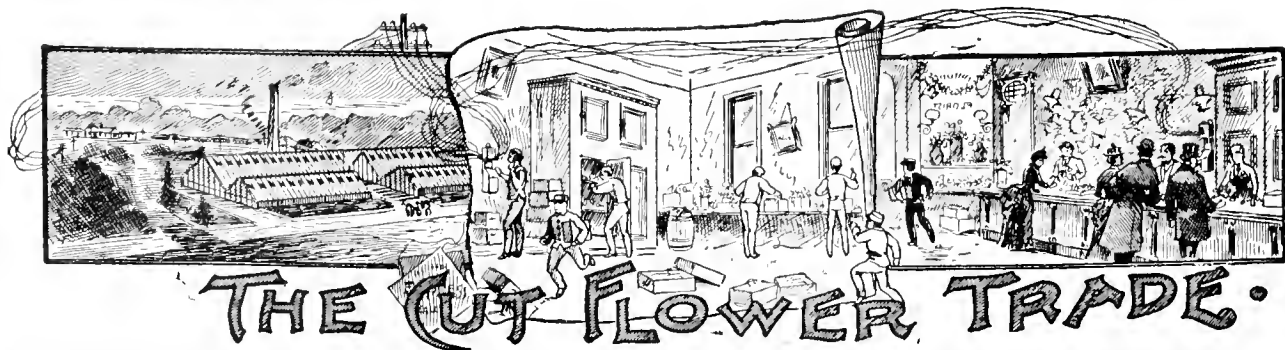
RETAIL FLORISTS

Secure a quantity of the handsome supplements which we mail with this issue and present them to buyers of flowers. No better advertisement of your business could be devised than the numerous handsome illustrations it contains. We have printed several thousand extra copies with blank spaces on the title page where you may print or stamp your business card, and will supply them at the following rates, cash with order:

Table showing rates for retail florist supplements: 25 Copies for \$3.00, 50 for 5.00, 100 for 9.00, 200 for 16.00, 300 for 20.00, 400 for 23.00, 500 for 25.00.

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.



Winter Floral Styles.

Fashion dictates that for the trimming of evening gowns for all occasions, excepting weddings, foliage shall be used. The reason is probably that green, with its numerous shadings into olive, and almost into yellow, is the most stylish color for costumes of all sorts. White, in light and rich fabrics, is the vogue for full dress entertainments, if worn by young people, and even the dowagers dress in white satin brocades and velvets. Low necked and short sleeve, or sleeveless robes are trimmed with vines or grasses in the following manner: They are attached to a green ribbon, which is fastened to the left shoulder and are trimmed off narrower as they cross the bodice; the sash extends around the skirt, the grasses widening at the side where they are at their greatest depth. The sash is then gracefully draped across the back and up to the left side where it is finished with a cluster of grass. Knots of grass fall from each shoulder down the arm. This is a lovely and easily applied trimming. A few frosted grasses are sometimes introduced among the fresh ones. Bridal gowns made in the Directoire style have the corselet entirely massed with double white bouvardia with a cluster of orange blossoms at the breast. The corselet is trimmed with flowers when it appears at receptions; it is a most elegant garniture and not at all perplexing to adjust. Floral garniture on gowns would grow in popularity much faster were it not discouraged more or less by florists who have not the taste or deft fingers to apply it. This is the style of ornamentation, however, that brings in a round profit. There is a demand for it and many determined to have it employ women out of the profession who make a good living in this city by trimming gowns with natural flowers, and becomingly and gracefully arranging blossoms in the hair and on the dress of those going to entertainments.

Fashionable dinners are now in full blast and table novelties in floral designs are every day appearing. A great deal of glass for flower holders is favorite. Glass baskets for favors, glass gondolas for holding roses, and glass swans for filling with lilies are much used. Center banks of living palms, ferns and mosses are made very large, in fact, so large as to entirely cover the table to the line of the covers. The foliage must, of course, be selected to have the arrangement choice. Sometimes just a line of foliage is placed at the top of the cover; smilax or asparagus is used. In this line a corsage bunch is laid. A colored candle in a glass candlestick finishes each end of the line. The flowers in the center piece are the color of those in the corsage and the candles are also of the same tint. For dinners in a large hall a circular

table within a circle made by a large table is the most elegant style of the season. The smaller circle, where the representative guests are to be seated is elaborately embellished with pink and red roses; the outer table has a wide band in its center filling to the covers, of asparagus, mignonette and cypripediums.

Green bouquets made up with the loose centers are carried when the gowns worn are trimmed with vines or grasses. Cypripediums and ferns form the outer band and mignonette and asparagus the center fringing.

New York. FANNIE A. BENSON.

New York.

C. L. Allen has started for Europe. Siebrecht & Wadley's show at the Eden Musee was financially damaged by the chrysanthemum exhibition which preceded it. Too many shows within a fortnight.

John Thorpe evidently won the hearts of Andrew Carnegie and wife at the chrysanthemum exhibition, the same as he always captures the good graces of those who appreciate his work. Mrs. Carnegie invited him to luncheon at the close of the show.

Mr. Henning, who was so long with Klunder, is now with Lee, of Union Square.

Mrs. Irwin has opened a very pretty floral shop on Waverly Place near Sixth avenue.

Silver and gold filigree bouquet holders are again coming in fashion.

Rose and bulb sales at auction during the fall and so far this month have been unprecedentedly large.

Isaac Young, Esq., is seriously sick. Henry Siebrecht will make a trip to Trinidad immediately after the holidays.

Samuel Henshaw, of Staten Island, who was for twenty years gardener to Mrs. John Green, has lost his position.

Alex McConnell decorated the casket of a prominent member of the stock board who died this week, very elegantly. There was a band of roses ten inches wide surrounding it, and from that hung a deep fringe of foliage. Over \$100 was paid for this choice arrangement.

Boston.

Trade in Boston has been lively during the past two weeks, but as is generally the case at such times good flowers have been difficult to obtain in any quantity. If the wholesale dealers could have supplied the demand for roses, carnations and violets, they would have good reason to be very happy.

The weather has been as unpropitious as possible for the production of first quality flowers. Should it continue so till Christmas the prospects are for a very limited supply. There are still a few

chrysanthemums left, but not in sufficient quantity to influence prices of, or demand for other kinds of cut flowers.

All signs point to a largely increased demand this season for best varieties of flowering plants, such as cyclamens, primulas, etc. There is also a noticeable revival of the demand for palms and other decorative plants, and this class of goods commands better prices than it has for some years.

Bernard Minton, a well known rose grower of Dorchester, died of consumption on Saturday Dec. 1, 1888. He has been in failing health for some time and his friends had given up all hope of his recovery. His brother, Peter Minton, was carried off by the same disease a few years ago.

The firm of Minton Bros. was well and favorably known, and in the days when Boston was the principal source of supply for the eastern rose market, the Bon Silenes and Yellow Teas grown at their place had a great reputation and commanded at all times the very highest prices.

"Barney" Minton had many sincere friends, for he was a generous, whole-souled man, and when a brother florist was in distress Barney could always be counted on as a willing and liberal contributor to any measure of relief or charity. His funeral was attended by many representatives of the florist trade.

W. J. S.

Chicago.

M. Klok has opened a floral store at 465 North Clark street.

It is reported that a certain fashionable florist not far from the south side of Washington street filled a ratification order with an alleged design of the national flag. The field of the same which was made in the upper right-hand corner was of white with blue stars dotted in it. The emblem was returned and changed later—but no one knows why the stars were blue that day.

Flowers have been remarkably scarce for the last few weeks. It has been years since such a scarcity existed at this season, and the quality of that to be obtained is not of the best. Prices consequently rule high and every body is grumbling.

Catalogues Received.

Reasoner Bros., Manatee, Fla., plants and nursery stock; F. C. Heineman, Erfurt, Germany, flower seed novelties; Rouston Servan, St. Remy-de-Provence, France, seeds; Carbone & Monti, San Francisco, Cal., plants, seeds and bulbs; R. G. Nicholson, Chestertown, Md., fruit trees, vines, etc.; F. Dubreuil, Monplaisir, Lyon, France, roses; Fred Roemer, Quedlinburgh, Germany, flower seeds.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.
 Advertisements, 10 Cents a Line, Agate;
 Inch, \$1.40; Column \$14.00.
 Cash with Order.
No Special Position Guaranteed.
 Discounts, 3 months, 5 per cent; 6 months, 10 per
 cent; 12 months, 20 per cent.
No reduction made for large space.

The Advertising Department of the AMERICAN
 FLORIST is for Florists, seedsmen, and dealers in
 wares pertaining to those lines ONLY. Please to
 remember it.
Orders for less than one-half inch space not accepted.
 Advertisements for January 1 issue must
 REACH US by noon, Dec. 24. Address
THE AMERICAN FLORIST CO., Chicago.

FROM THE United States Nurseries,
 Short Hills, N. J., we have received their
 catalogue of cypripediums, and it is cer-
 tainly a credit to the establishment. On
 the outside cover page appear exceedingly
 well executed engravings of five kinds
 of cypripediums and the list of varieties is
 not only very complete but the habitat
 of the species or names of its parents
 appear opposite each name, which makes
 it very convenient for reference to any
 one interested in these plants. Typo-
 graphically this catalogue is a model and
 it is a pleasure to give credit for such
 excellent work.

**WHOLESALE CUT FLOWERS,
 HOLLY, GREEN AND MISTLETOE.** Write for prices.
THE WISCONSIN FLOWER EXCHANGE,
 133 Mason Street, MILWAUKEE, WIS.

CHAS. E. PENNOCK,
WHOLESALE * FLORIST,
 38 So. 16th Street, Philadelphia, Pa.

GEO. MULLEN,
 17 CHAPMAN PLACE, (near Parker House),
BOSTON, MASS.
WHOLESALE AND COMMISSION DEALER IN
Fresh Cut Flowers & Florists' Supplies.
 Flowers carefully packed and shipped to all points
 in Western and Middle States.
 Orders by Telegraph, Mail, Telephone or Express
 promptly attended to.

A. S. KIMBALL,
WHOLESALE CUT FLOWERS,
 Shipping Trade my Specialty.
 Consignments Solicited.
 170 LAKE STREET, CHICAGO.

ROSE BUDS WHOLESALE
THE OAKLEY ROSE HOUSES
VARIETIES:
 Beauty, Bennett, La France, Mermet,
 Bride, Niphotos, Perle, Sunset,
 Papa Gontier, Bon Silene.
CHAS. L. MITCHELL, MGR.,
 P. O. Box 188, CINCINNATI, OHIO.
 Telegraph Address [via W. U. Tel. Co.] Cincinnati, O.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.
ALL CUT FLOWERS IN SEASON.
 Write for price list. Consignments solicited.
WIRE-WORK made to order, and in stock.
 27 Washington Street, CHICAGO

CUT FLOWERS
 The choicest Cut Flowers at lowest market rates
 shipped C. O. D. Telephone connection. Use A. F.
 Code when ordering by telegraph. For prices, etc.,
 Address,
J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

NEW YORK, Dec. 30	
Roses, Bon Silenes	2.50
" Perles, Niphotos, Gontiers	4.00
" Sunset	4.00
" Mermet, Brides	8.00
" Cousins Bennetts	8.00 @ 10.00
" La France	12.00 @ 15.00
" Am. Beauty	50.00 @ 40.00
" Puritan	15.00
" Magna Charta	5.00
Mignonette	4.00
Smilax	20.00
Carnations, long	2.00
" Hyacinth, Narcissus	4.00
Lily of the valley	5.00
Violets	1.25 @ 2.00
BOSTON, Dec. 10	
Roses, Bon Silene	4.00 @ 4.00
" Perle, Sunset	8.00 @ 10.00
" Gontier, Niphotos	6.00 @ 8.00
" Brides, Mermet	12.00
" Am Beauty	60.00
Carnations, short	1.00
Carnations, long	2.00
Carnations, Wilder	3.00
Lily of the Valley	6.00
Romans, Tulips	4.00
Narcissus	4.00
Violets, Pansies	1.75 @ 2.00
Stevia, Bouvardia	1.00 @ 1.50
Adiantum	1.00 @ 1.50
Smilax	12.50
Callas	15.00
PHILADELPHIA, Dec. 30.	
Roses, Bon Silene	4.00
" Gontiers	5.00 @ 6.00
" Perles	4.00 @ 5.00
" Niphotos	4.00 @ 6.00
" Mermet, La France	7.00 @ 8.00
" Brides	7.00 @ 8.00
" Am Beauties	15.00 @ 25.00
" Puritans	10.00
" Bennetts	6.00
Carnations	1.00
Bouvardia	1.50
Lily of the Valley	8.00
Smilax	20.00
Romans, narcissus	6.00 @ 8.00
Callas	10.00
Double violets	1.00
Single violets	1.25 @ 1.50
CHICAGO, Dec. 12	
Roses, Perles, Niphotos	8.00 @ 10.00
" Bon Silene	4.00 @ 8.00
" Mermet, Brides	12.00 @ 15.00
" La France	12.00 @ 18.00
" Am. Beauties	55.00 @ 50.00
" Gontiers	8.00
Carnations, short white	1.00 @ 1.25
Carnations, long white	1.50 @ 2.00
Carnation, short fancy	1.50 @ 2.00
Carnations, long fancy	2.50 @ 4.00
Smilax	18.00 @ 20.00
Callas	18.00 @ 20.00
Camellias	10.00 @ 12.50
Bouvardia	1.50 @ 2.00
Narcissus, Romans	5.00 @ 6.00
Lily of the valley	5.00
Violets	1.50 @ 2.00
Polinsetias	20.00 @ 25.00
Stevia	1.00
Tulips	5.00 @ 6.00
Adiantum ferns	1.25 @ 1.50

WM. J. STEWART,
Cut Flowers and Florists' Supplies
Roses, Orchids, Fine Heaths,
Lily of the Valley, Adiantums in var.

CHRISTMAS HOLLY,
WHOLESALE.
 67 Bromfield Street. BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS
and Jobbers in Florists' Supplies,
 1 MUSIC HALL PLACE, BOSTON, MASS
 Also entrance from Hamilton Place through
 Music Hall.
 We keep a large supply of Fancies and Carna-
 tions always on hand. Return telegram sent
 immediately when unable to fill orders.
 Auction Sales of Plants Spring and Fall.

W. F. SHERIDAN,
Wholesale & Commission Dealer in
CUT FLOWERS,
 No. 50 W. 30TH ST., NEW YORK.
 Orders to be shipped will receive prompt attention

Thos. Young, Jr., & Co.,
Wholesale Florists,
 INCORPORATED 1885,
 20 W. 24th St., NEW YORK

CUT FLOWERS.
 We are on deck DAY and NIGHT to give
 your orders
CAREFUL ATTENTION,
PROMPT SERVICE,
GOOD STOCK.

And our record shows that we "get there" a little
 oftener than some others.

VAUGHAN'S FLOWER DEP'T,
 Telegrams, 88 State, CHICAGO.
 Letters, box 688.

W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS,
 36 EAST 23rd STREET, NEW YORK.
 ESTABLISHED 1877.
 Price List sent upon application.

LaRoche & Stahl,
Florists & Commission Merchants
 —OF—
CUT FLOWERS.
 1237 Chestnut Street, PHILADELPHIA.
 Consignments Solicited. Special attention paid to
 shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,
 Telephone 377. WASHINGTON, D. C.
 Roses planted for Winter 1888-9
 Souvenir de Wootton, The Gem, Puritan,
 American Beauty, Annie Cook, Mad. Cusin,
 Papa Gontier, The Bride, La France,
 Bennett, Perle, Mermet.
 And other Standard sorts

EDWARD C. HORAN,
WHOLESALE FLORIST,
 36 WEST 29TH STREET,
 The Bride, Mermet,
 and Am. Beauties,
SPECIALTIES, NEW YORK.

HAMMOND & HUNTER,
 Wholesale dealers in
 Cut Flowers and Florists' Supplies
 61 West 30th Street, NEW YORK.

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WHOLESALE FLORISTS,
 116 & 118 DEARBORN STREET,
CHICAGO.
 Store Open Night and Day.

M. OLSEN,
WHOLESALE * FLORIST,
 230 WABASH AVENUE,
CHICAGO.

WELCH BROS.,
WHOLESALE FLORISTS.
 165 Tremont Street BOSTON MASS.
 We make a specialty of shipping choice Roses and
 other Flowers, carefully packed, to all points in
 Western and Middle States.
 Return Telegram is sent immediately when it
 is impossible to fill your order.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

E. J. BOWEN reports a good seed trade at his Portland, Oregon, branch.

NEW ORLEANS.—Joaquin Rapp, seedsman at 10 and 12 Phillip street, died last week, aged 72 years.

JEROME B. RICE & Co., of Cambridge, N. Y., have purchased the business of the Shaker Seed Co., at Mt. Lebanon, N. Y., who retire.

W. W. BARNARD & Co. succeed to the garden seed and implement business of Hiram Sibley & Co. at 6 and 8 North Clark street, Chicago.

MRS. BELLE REID, widow of Jas Reid, was married Dec. 2 to Col. Robert M. Floyd, of Highland Park, Ill., but now a resident of Philadelphia.

A. D. COWAN & Co., New York, have been appointed agents for distributing the Lionard tomato, raised by John G. Gardner, Jobstown, N. J., and certificated by the S. A. F. at the New York meeting.

MOREHOUSE & ANNIS is the title of a new seed firm at Rochester, N. Y., composed of Mr. W. A. R. Morehouse, formerly manager for Hiram Sibley & Co., and Mr. T. E. Annis, a seed grower at Livonia Station, N. Y.

A Florists' Club for Buffalo.

A meeting of prominent florists of this vicinity was held on evening of Nov. 23, at Long's store, and preliminaries arranged for forming "The Buffalo Florists' Club," the following officers being elected to serve until March 1 next: President, W. J. Palmer; Vice-President, J. H. Rebstock; Secretary, Dan'l B. Long; Treasurer, R. F. Lawrence.

A second meeting was held at same place on evening of Nov. 30, the sections of a constitution and by-laws approved, and a membership to the number of twenty-two enrolled on the secretary's books. A third meeting to be held Dec. 7 will no doubt advance arrangements toward securing a permanent meeting place. Active interest is manifested by those taking part, and assurances of a successful club are not wanting.

S. A. F. Standard Pots.

At the last convention of the Society of American Florists a pot of certain shape and sizes was adopted by the society as a standard. This action was followed by a request to all potters in the country to manufacture this particular style and sizes so that where a collection of pots from various manufacturers, accumulated in one florist's establishment the pots would set together uniformly on the bench, and nest together perfectly, thus avoiding considerable breakage which almost invariably occurs where a collection of slightly varying sizes are nested together.

The Whilldin Pottery Co., of Philadelphia, are first to the front with pots manufactured according to the models agreed upon by the society. A circular received from them contains engravings showing the exact shape and sizes of the standard pot and should in consequence be of interest to all.

The sizes adopted are 2-inch, 2½-inch, 2½-inch, 3-inch, 3½-inch, 4-inch and

from that on in even inches, all *inside* measurements. The pot has a rather wide rim at the top to give strength, is provided with a projection which keeps the bottom a small fraction of an inch from the bench, and the drainage hole is a trifle larger than usual.

When all potters shall have conformed to this standard a considerable saving will be made to the trade in breakage, and when you order a 3-inch pot you will receive one which measures 3 inches inside, not 2¾ inches, 3½ inches or some other size which will not nest with any other manufacturers' so called 3 inch pots.

We trust that other potters will not be slow in falling into line. We shall be pleased to announce the fact when they do so.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1887.

December 16—Tem. 27, 31, 30. WNW. to SW. Finished putting in cuttings of Achyranthes Lindenii (about 6,000). Propagated Achyranthes metallica.

17—Tem. 27, 31, 39. SW. to NW. Continued propagating Achyranthes metallica (total of 3,000). Propagated another lot of Begonia Saundersonii. Cleaned plants.

18—Tem. 29, 38, 37. NW. to SW. Sunday.

19—Tem. 37, 43, 41. S. to SW. Commenced potting rooted cuttings of Thymus argentea, four cuttings in a 2½-inch pot. Cleaned and washed plants in conservatory. Cleaned cannas.

20—Tem. 36, 41, 40. SE. to ENE. Continued potting cuttings of thymus. Sowed in boxes seed of pansies, Cineraria maritima, Verbena hybrida, bellis, vincas and cyclamen.

21—Tem. 10, 9, 7. W. to WSW. Commenced potting rooted cuttings of Mt. of Snow geranium. Cleaned cannas and other plants.

22—Tem. 9, 15, 12. W. to SW. Continued potting rooted cuttings of Mt. of Snow geranium. Laid an additional covering of manure on tulip beds. Cleaned caladiums.

23—Tem. 22, 28, 26. S. to W. Potted rooted cuttings of begonias and Panicum variegatum. Repotted pilogynes into 3 inch pots.

24—Tem. 7, 19, 20. W. Repotted Lophospermum scandens into 3-inch pots.

25—Tem. 20, 28, 24. SW. Sunday.

26—Tem. 28, 28, 24. SW. Celebrated Christmas day.

27—Tem. 30, 33, 35. S. to SE. Propagated second lot of Mt. of Snow geraniums. Commenced potting rooted cuttings of Achyranthes Lindenii—two in a 2½-inch pot.

28—Tem. 1, 3, 3 below zero. NW. Same as yesterday and cleaned plants in general.

29—Tem. below zero 4, 12, 5. NW. Finished propagating Mt. of Snow geraniums and commenced taking cuttings of fuchsias, abutilons and salvias. Continued potting rooted cuttings of Achyranthes Lindenii.

30—Tem. 2, 22, 21. S. to SE. Propagated another lot of Alternanthera aurea nana. Continued potting rooted cuttings of Achyranthes Lindenii and metallica.

31—Tem. 30, 38, 41. SE. to S. Same as yesterday.

PORTLAND, ME.—An enterprising firm here has been buying immense quantities of wild rose leaves, which they use in confectionery.

TO MAKE A HIT,

THE AMERICAN GARDEN

IS NOT an agricultural journal in the sense of reaching the mass of farmers, or dealing with ordinary farm questions.

THE AMERICAN GARDEN

IS an agricultural magazine in the sense that HORTICULTURE IS THE REFINEMENT OF AGRICULTURE, and that the larger portion of the people representing progress, enterprise, wealth and refinement in both city and country in all parts of the land are interested in the topics of which it treats.

IT REACHES THE CREAM OF BUYERS.

Country Gentlemen,

Villa Residents,

Gardeners,

Fruit Growers,

Florists,

Market Gardeners,

Nurserymen,

Landscape Gardeners,

Amateur Gardeners,

Progressive Farmers,

Conservatory Owners,

Orchid Specialists,

Rose Growers,

Orange Growers,

Vineyardists,

Greenhouse-men,

Lady Amateurs,

Progressive Men and Women

in all states and many lands.

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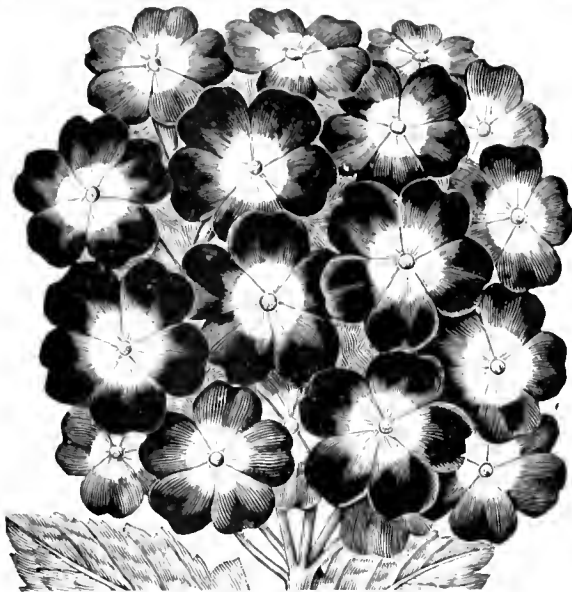
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COMMONPLACE.



MAMMOTH VERBENA.



GROW VERBENA PLANTS FROM SEED.

A number of leading florists prefer decidedly to grow Verbenas from seed. Seeding plants produce healthier growth and are more easily handled than from cuttings. Our New Crop of

MAMMOTH VERBENA SEED

is now ready, grown from stock seed we saved from named plants produced in 1886 WHICH WE GUARANTEE TRUE. The flowers are of mammoth size and of brilliant colors of all shades, from brilliant scarlet to pure white, showing large contrasting colored eyes.

Choice Mixed Seed . . . trade 1/2 kt. 50c; 1/4 cz. \$1.25; 1/2 cz. \$2; 1 cz. \$4
 Smilax Seed, new crop trade 1/2 kt. 50c; 1 oz. \$1.50
 Centaurea Gymnocarpa 1000 seeds 60c.
 Centaurea Candidissima 1000 seeds 75c.
 Mignonette Machel, the best for pots trade pkt. 30c; 1 oz. \$1

SEASONABLE FLOWER SEED LIST of New Crops now ready and mailed to all applicants in the trade.

HENRY A. DREER, SEEDSMAN AND FLORIST, PHILADELPHIA.

FOR THE SPRING CATALOGUES.

The makers or agents of the following goods desire them inserted in all the forthcoming Seed Catalogues and will be glad to supply free of charge (any size) and descriptive matter. Write them for terms, etc.

- GEM CULTIVATOR AND MODEL SEED DRILL.
- THE AVERY TRANSPLANTER.
- THE A. H. MATTHEWS' DRILLS.
- MOON FLOWER SEED (white), per lb. \$7.50.

J. C. VAUGHAN,

146 & 148 W. Washington St., CHICAGO.

- SLUG SHOT, FOR BUGS.
- GRAPE DUST, FOR MILDEW AND ROT.

B. HAMMOND,

Fishkill-on-Hudson, N. Y.

FOR SALE OR EXCHANGE

For Palms, Dracaenas or other decorative plants, 300 Marechal Niel Roses, strong plants in 3-in. pots, \$7 per 100. 500 do smaller 2 1/2 and 3-in. pots \$5 per 100.

W. J. HESSER, Plattsmouth, Neb.

CALLA LILIES.

Fine well-rooted young stock from 2 1/2-inch pots, just the thing for Spring mailing trade. Free by mail, 20 for \$1.00; \$1.75 per 100. By express, \$1.00 per 100; \$5.00 per 1000.

DIFFENBACHIA BAUSEL, fine plants from 4-inch pots, 10 inches high; by express \$2.40 per dozen; by mail, 4 for \$1.00; \$5.00 per dozen.

FRESH SEED, own sowing—Anipolopsis Veitchii, 30c. per oz., two ozs. for 50c; \$3.00 per lb. by mail. i.e. stamps for small amounts; over \$1.00, money order on Dover, Del., or registered letter to my address. All plants by mail in boxes.

See "ad." of New Bedding Colors in next issue.

R. W. HARGADINE, Felton, Del.

Our Seeds never had Sea Sickness.

FRESH HOME-GROWN SEEDS OF SELECTED PRIMULA OBCONICA.

We are the largest growers, and have the finest strain of Primula Obconica in this country, and have harvested an unusually fine crop of seed, which we offer to the trade at \$1.50 per 1000. Special rates for large quantities.

FISHER BROS. & CO.,
 NEW ENGLAND NURSERIES, MONTVALE, MASS

MUSHROOM SPAWN. Best Mill-track, Of unsurpassed quality



Can be thoroughly relied on to produce a fine crop of the best Mushrooms. Our stocks are the largest and freshest in the country. Quality guaranteed the BEST IN THE WORLD. Why spend your money on doubtful quality, when you can get the best at a price that will please you? We sell at rock-bottom prices for first quality spawn.

By mail, post-paid, 22 cts. per pound, Five pounds for \$1.00. By express, Ten pounds for \$1.20, Fifty pounds for \$5. One pound of spawn will plant a space 3 feet by 4. Special prices for LARGER quantities.
John Gardiner & Co., 21 N. Thirteenth St., Philadelphia, Penna.



HOLIDAY GOODS AND NOVELTIES.

LYCOPodium, OR BOUQUET GREEN. In bunches. Per sack of 25 lbs. \$2.00; per 100 lbs. \$5.00; 1001 lbs. \$10.00; Ton, \$75.00. There was an extremely short crop last year, and I advise all to place their orders early.

EVERGREEN WREATHING FOR FESTOONS.—Of Bouquet Evergreen, well wound with wire for decorating Stores, Dwellings, Churches, Halls, Etc. Price, \$5.00 per 100 yards; \$40.00 per 1000 yards.

EASTERN HOLLY. Finely covered with Red Berries. In demand for Christmas Decorations. Order early. Per case of 16 cubic feet, \$6.00; three cases and over, \$5.00; per half case, \$3.25; per bbl. \$2.00. Keep Holly in a cool place until needed, and not exposed to severe cold.

HOLLY WREATHS. 12 inches in diameter. Per dozen, \$2.25; per 100, \$15.00. I have a large stock ready for shipment.

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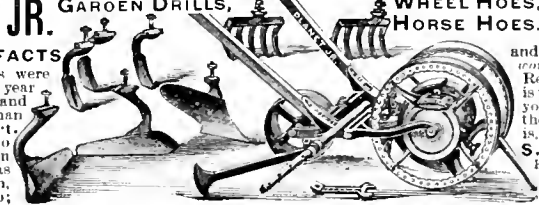
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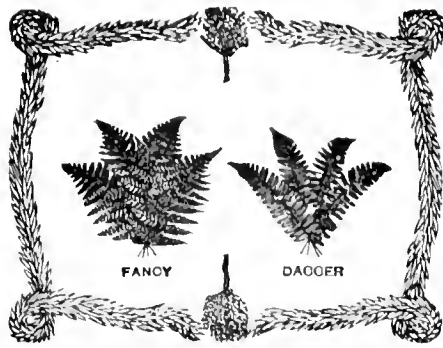
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We hear considerable complaint of careless packing by shippers. "Plants were evidently in fine shape when shipped, but were terribly crushed when we received them," is a common complaint. Wholesalers would do well to devote some thought to this question and supervise more closely the work of their packers. However excellent plants may be when shipped, if they are ruined in transit previous quality counts for little. We have several times heard the remark made "Blank's plants are usually good, but every shipment I get from him is nearly ruined through poor packing, so I buy from Dash whose plants are not quite so good, but they come through in better shape." This goes to show that careful packing is fully as essential as skillful growing, to build up a permanent business. A word to the wise, etc.

Law Suit About Lilac Bushes.

The following which is of interest to the trade we clip from the Jersey City Journal:

TRENTON, N. J., Dec. 3.

Advisory Master Garretson filed an opinion to-day in the case of Hollinger vs. Asmus, in which he advises a dismissal of complainant's bill. The defendant is a florist and rented some land from one Ernest. Hollinger afterward came in possession of the property under a tax title. At the time of the original renting the premises were in sods and weeds, and he, the defendant, told Ernest that he intended to plant pinks. For two seasons pinks were planted, but afterward the land was used for growing lilac bushes. His purpose was to secure the flowers in advance of the season at which they bloom in the open air. In this way the flowers became valuable in the market, while otherwise they have but little value. To accomplish this early blooming the bushes are planted in the open ground and allowed to grow until they are at an age when they will bloom. In the fall prior to the winter or spring in which they are to be forced, they are dug around, lifted from the ground and removed to the hothouse, and are in bloom shortly after the removal. The lilacs on the premises were all planted for this purpose, and the question in the case is whether the bushes come within the same rules as trade fixtures and removable by the tenant, or whether they belong to the reality. The Advisory Master holds that the tenant may remove the lilac bushes and advises a decree to that effect.

BAY VIEW NURSERIES OFFER NEW CROP PALM SEEDS

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- THRINAX ARGENTEA, the silver leaved palm \$3.50
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PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

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PLANTS.

Carnations for Winter Blooming; good, strong plants from the open ground, of the following varieties:

ROBT. CRAIG, SNOWDON, PREN. GARFIELD, SNOW WHITE, HINZE'S WHITE. Price, \$10.00 per 100. Also one large plant of Vinca Harrisonii from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred. A splendid strain of SINGLE PRIMROSES, at \$8.00 per hundred.

BOUARDIA, good strong one year old plants at \$12.00 per 100.

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MARIA LOUISE, at \$8.00 per 100. I also have a large stock of Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus, at \$30.00 per 1000. Strictly our selection; clean, strong plants in 2 and 2 1/2-inch pots.

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Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

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FINEST STRAIN of Single Pink and White; strong, well established plants from 2-inch pots, \$3.00 per 100; \$28.00 per 1000. Stronger plants of above from 2 1/2-inch pots, \$4.00 per 100; \$38.00 per 1000.

NO LESS THAN 500 AT THE 1000 RATE.

GERANIUMS. Plants from 2 1/2-inch pots. A choice selection of 30 best double and single varieties, \$3.00 per 100; \$25.00 per 1000. Double White Alyssum, 2 1/2-inch pots... \$3.00 per 100. Oxalis, Pink and White... 3.00. Bouvardia Leiantha, 3-inch... 5.00. Begonia Rubra Alba, 2-inch pots... 3.00.

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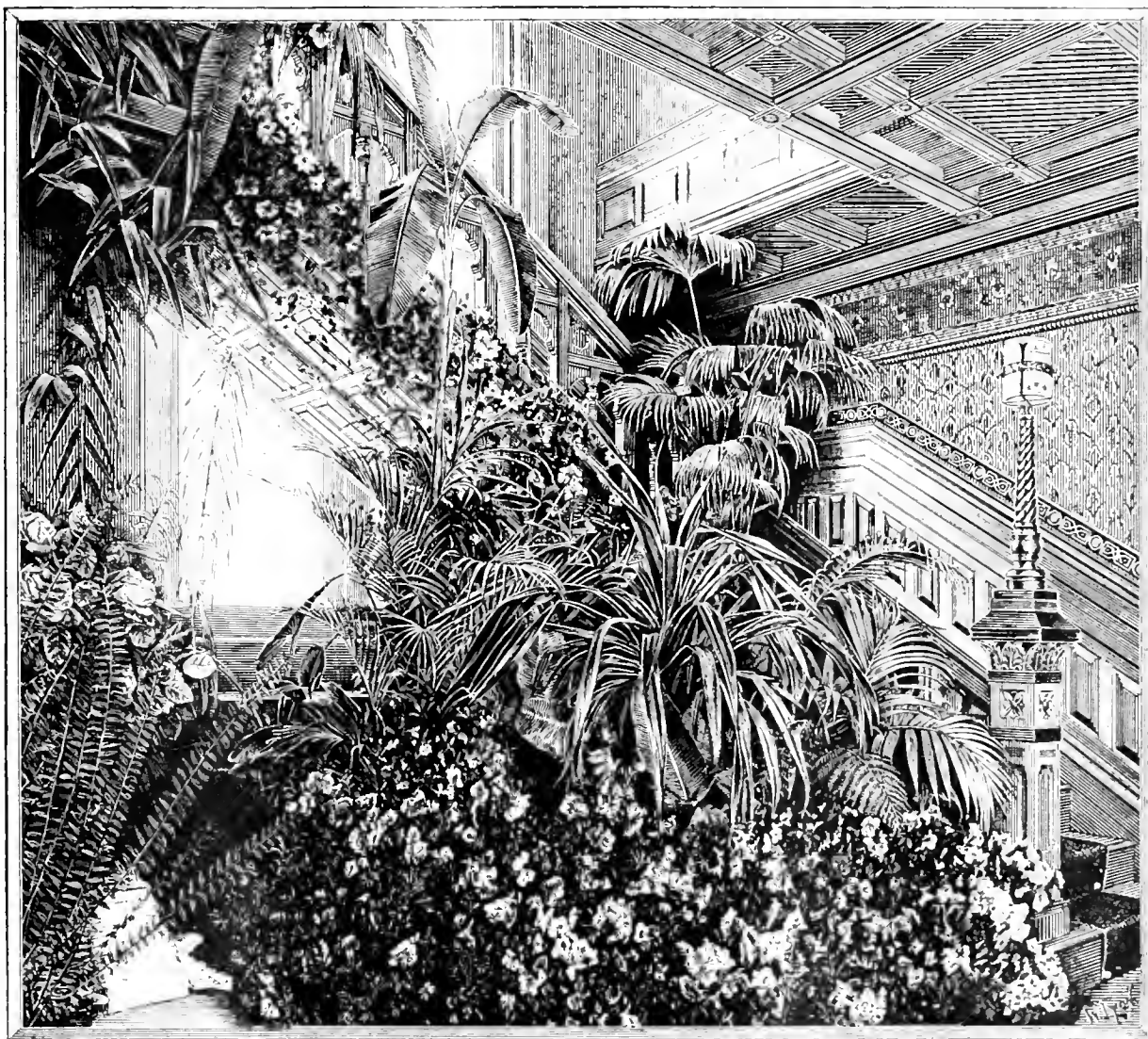
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Vol. IV.

CHICAGO AND NEW YORK, DECEMBER 15, 1888.

Supplement to No. 81.

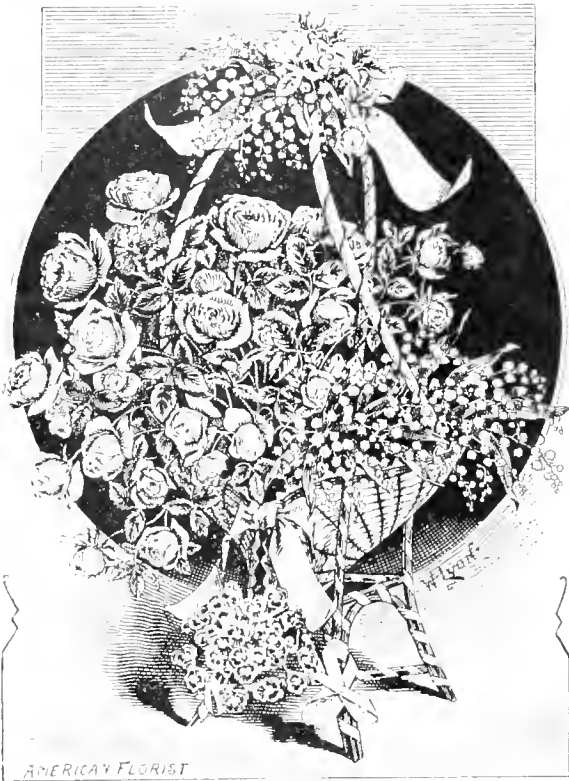


PLANT DECORATION.

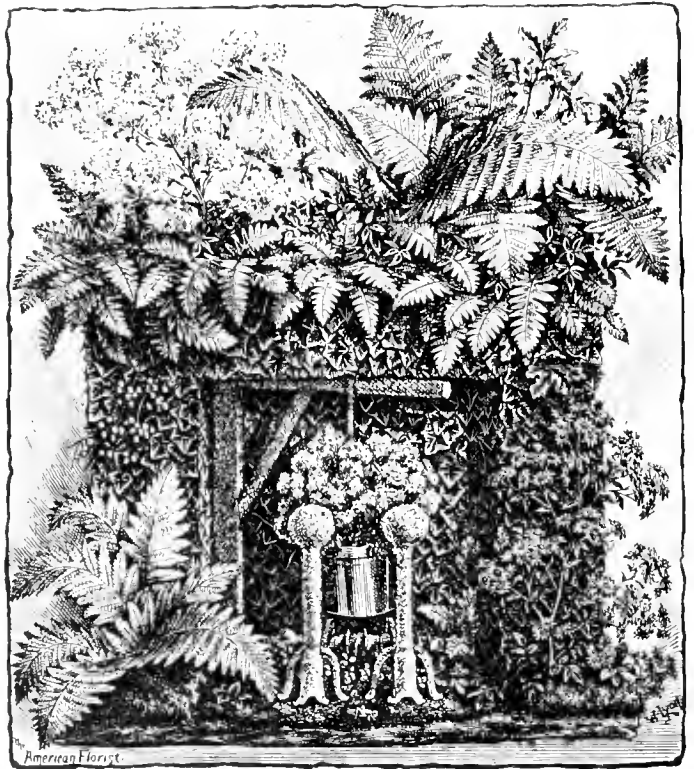
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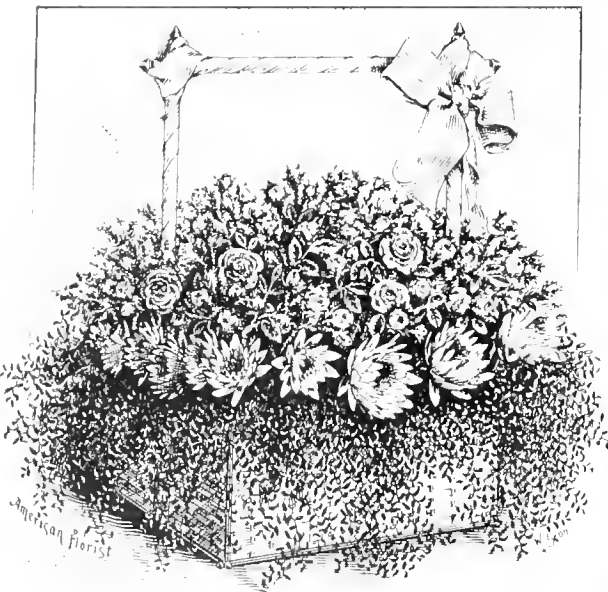
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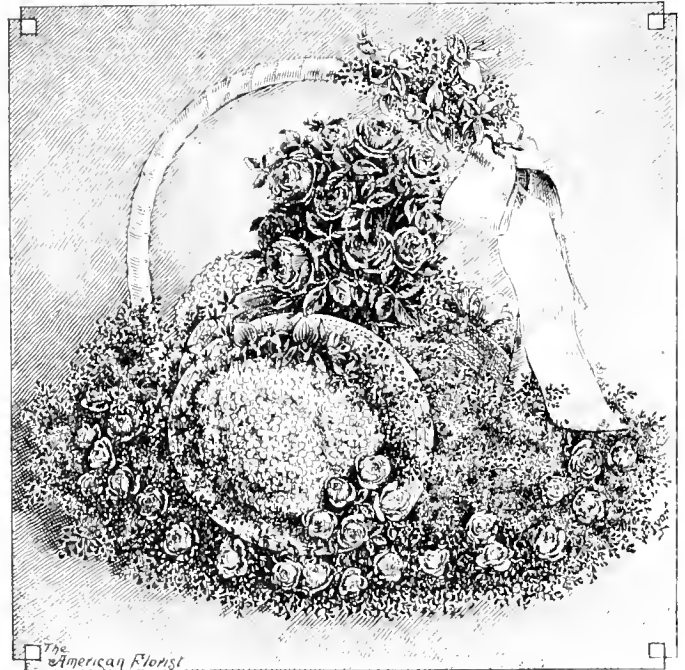
SOUVENIR BASKET.



FIREPLACE.



WEDDING BASKET.



COMBINATION BASKET.

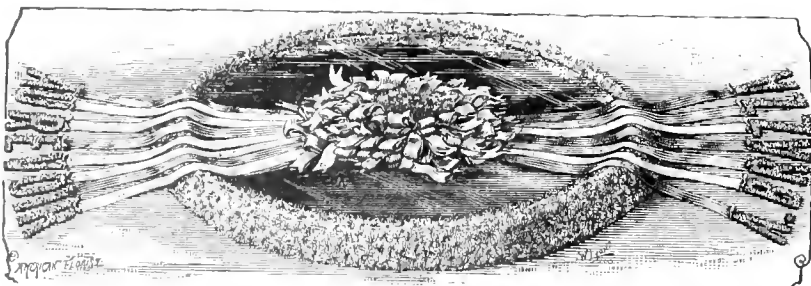


TABLE DECORATION.



FLORAL MAT.

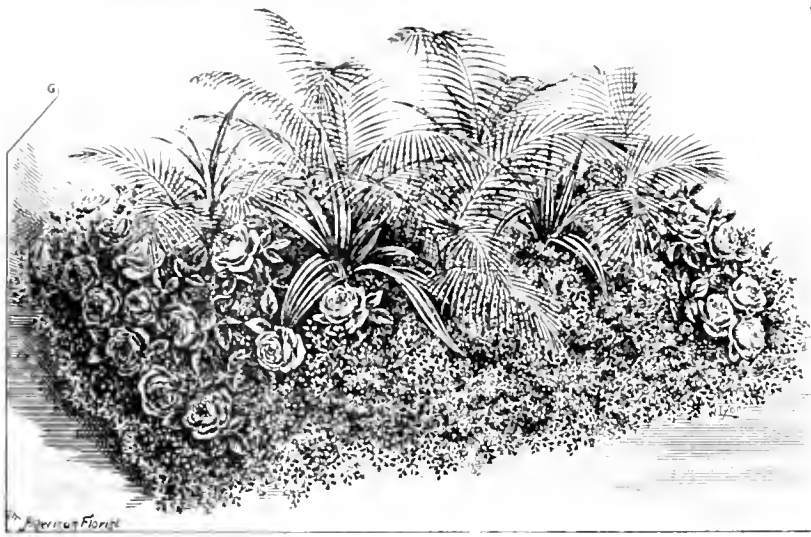
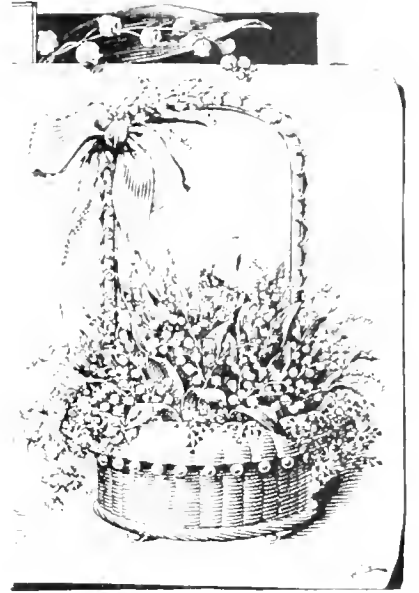
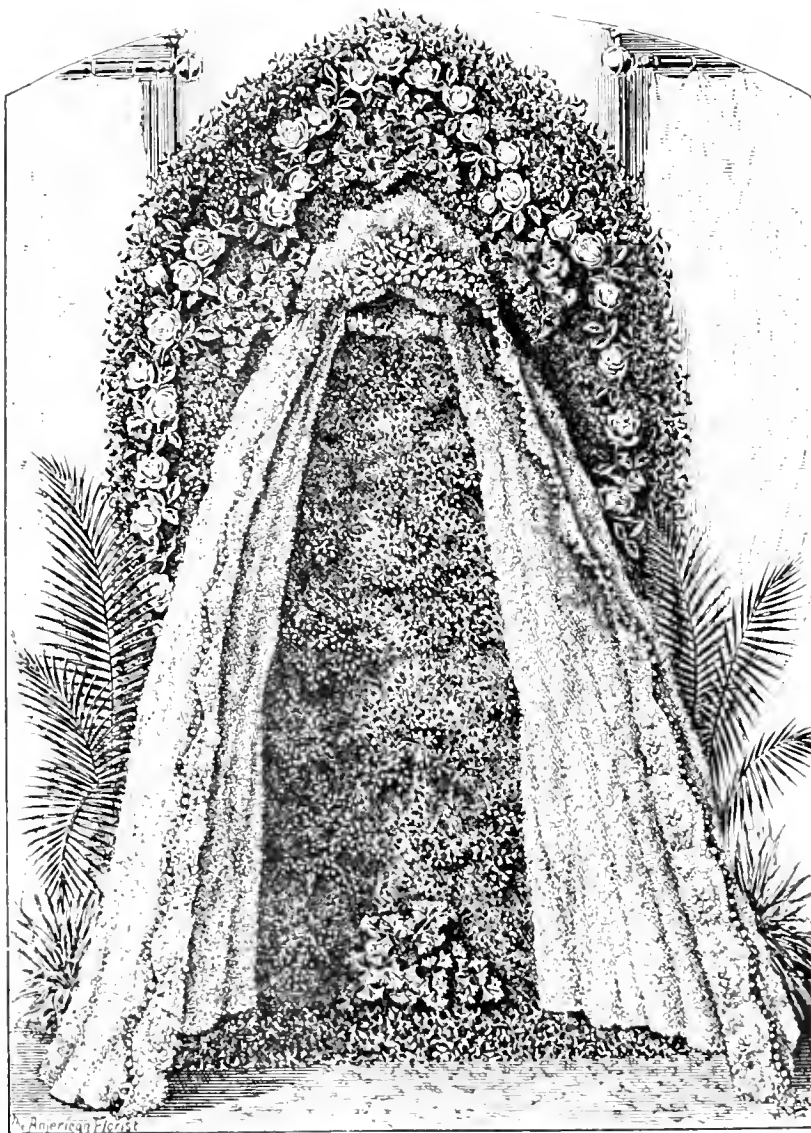


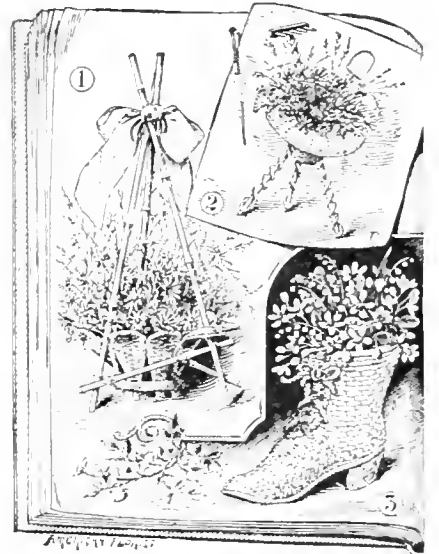
TABLE CENTER PIECE.



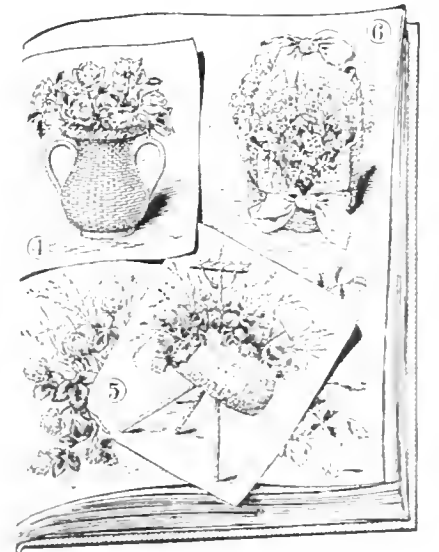
BASKET.



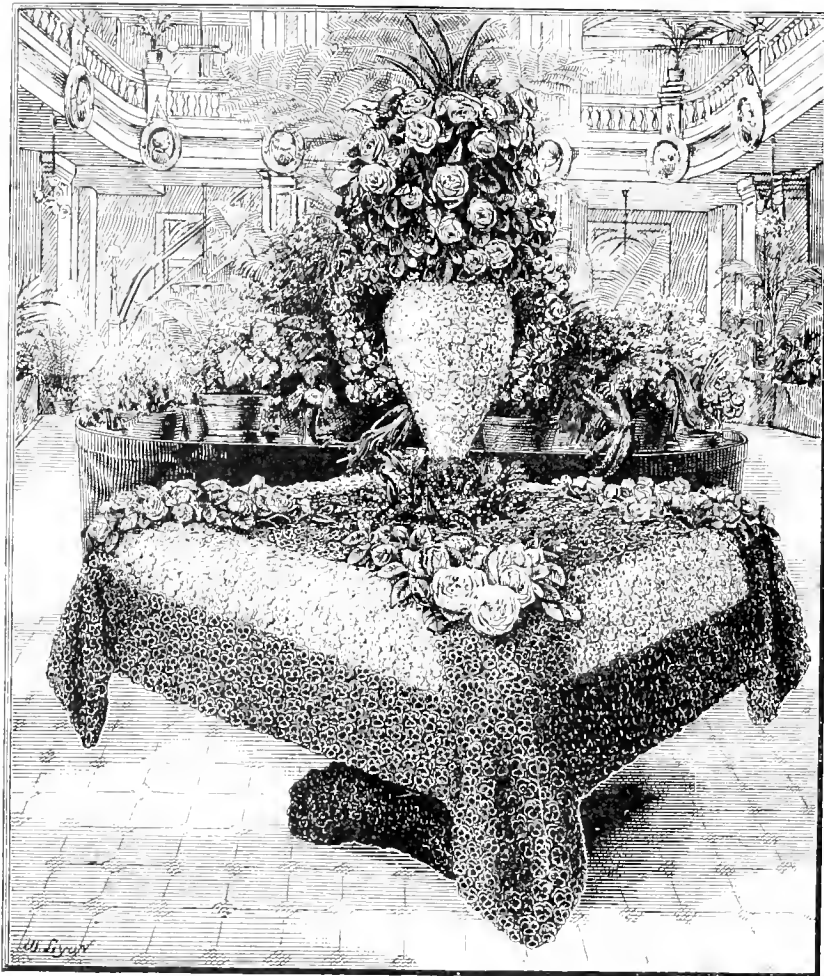
WEDDING VEIL CANOPY.



FAVORS.



FAVORS.



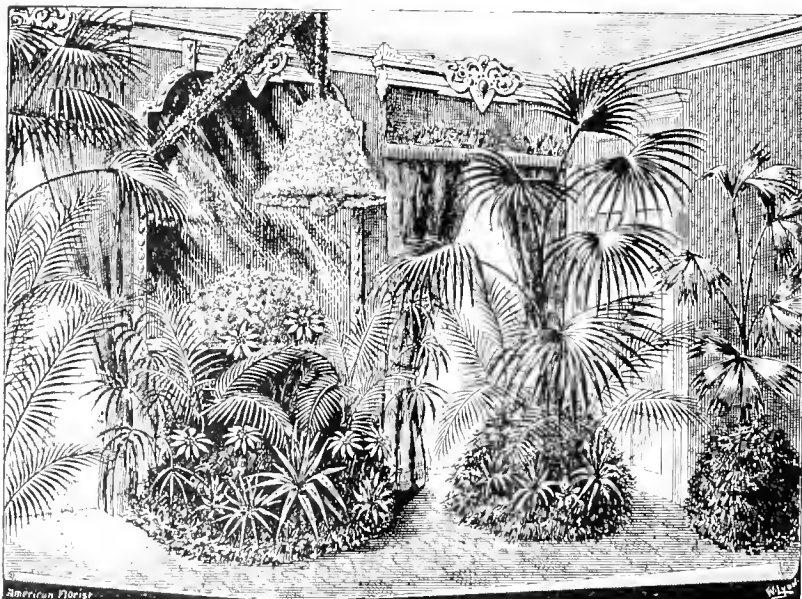
FLORAL TABLE.



BOUQUET.



BASKET OF WATER LILIES.



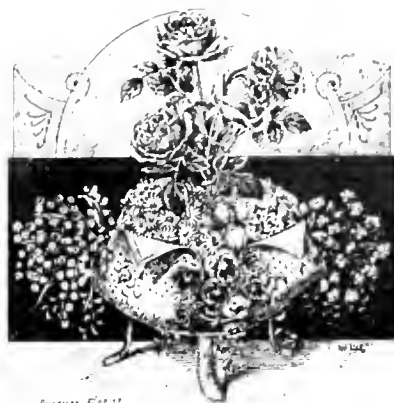
WEDDING DECORATION.



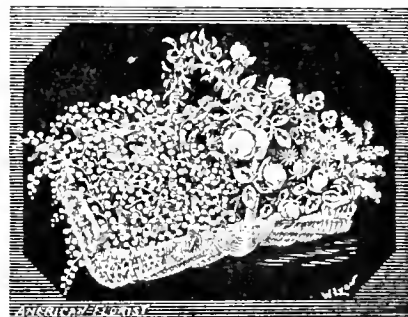
FLORAL HORSE-SHOE.



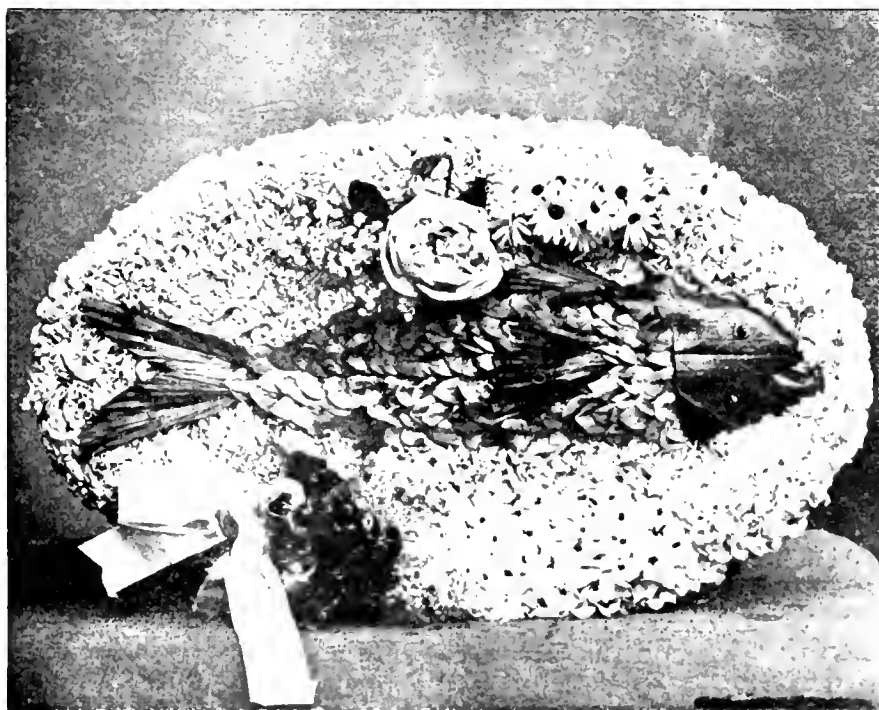
FLORAL FAN.



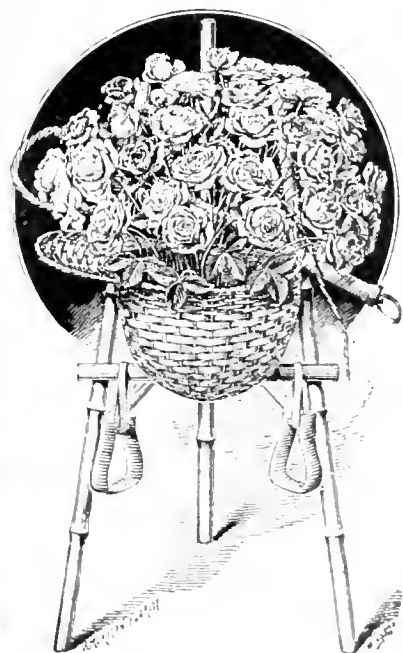
BASKET



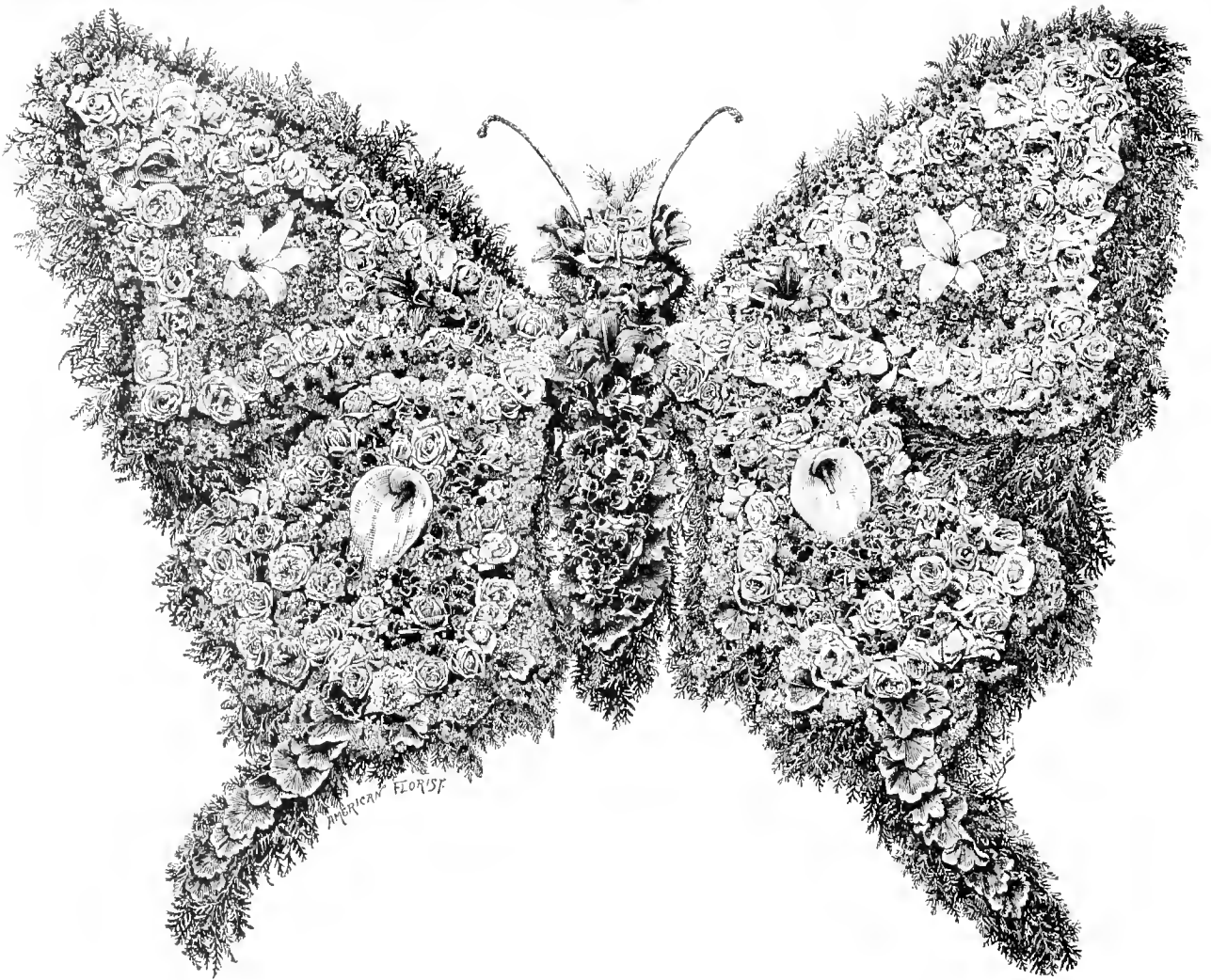
BASKET.



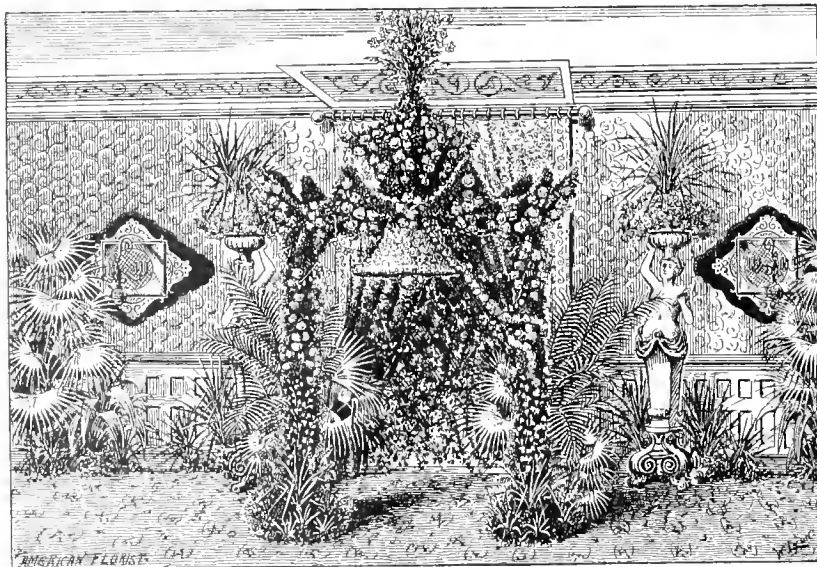
DINNER TABLE DESIGN.



ROCKY BASKET



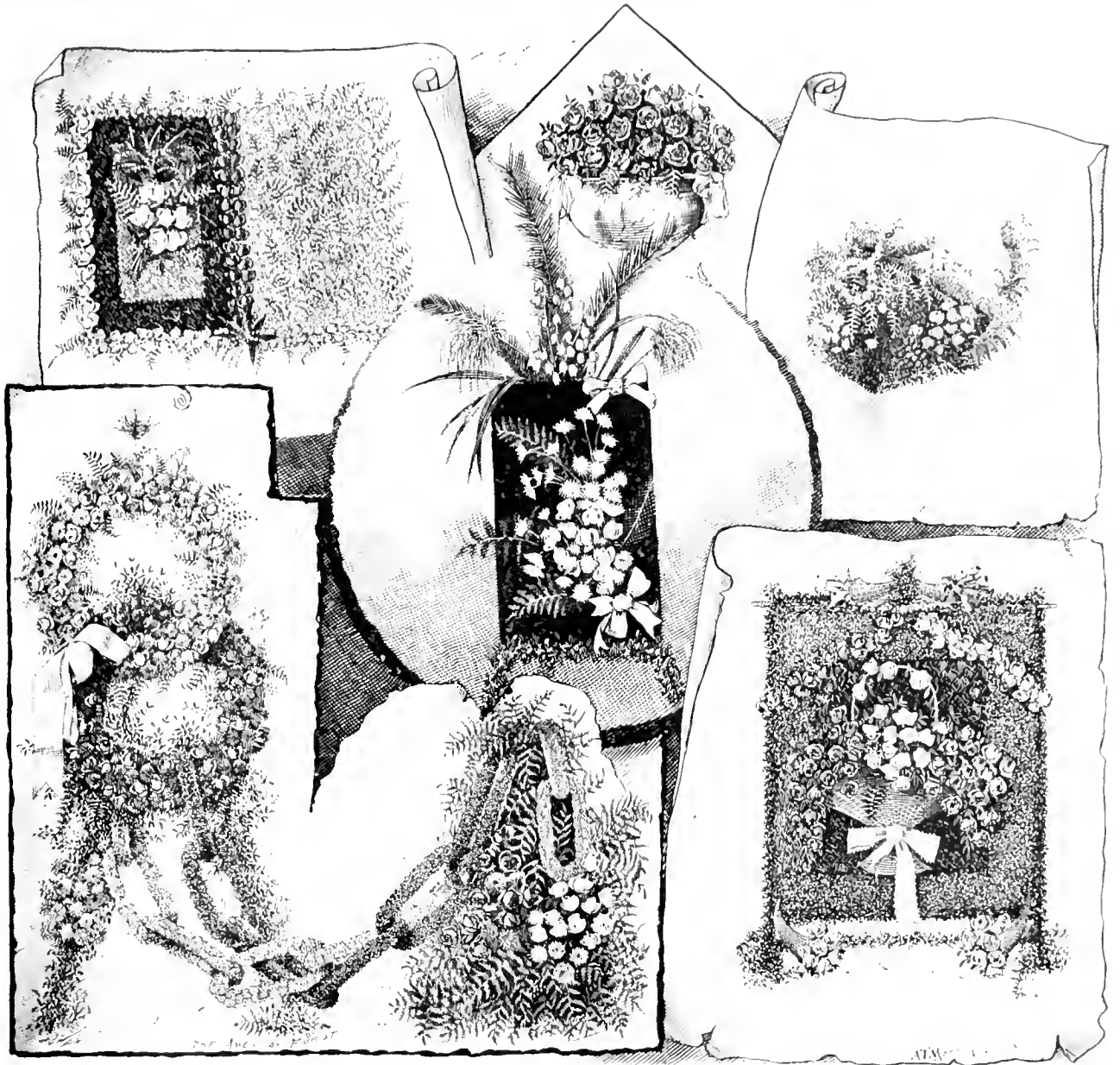
FLORAL BUTTERFLY.



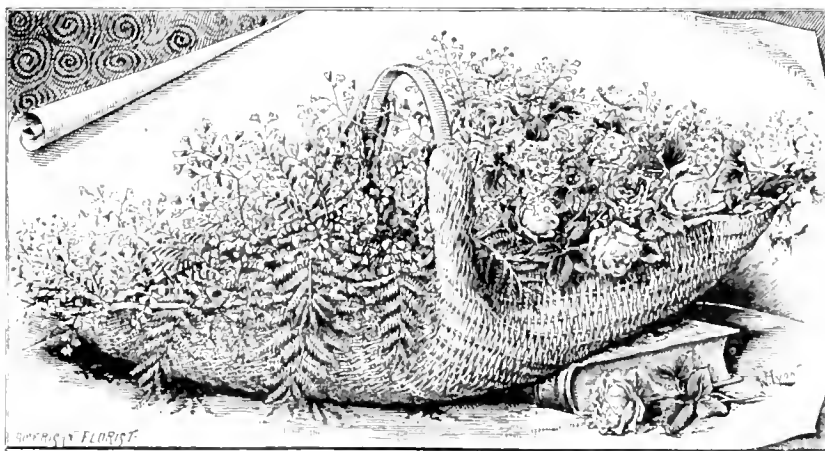
WEDDING DECORATION.



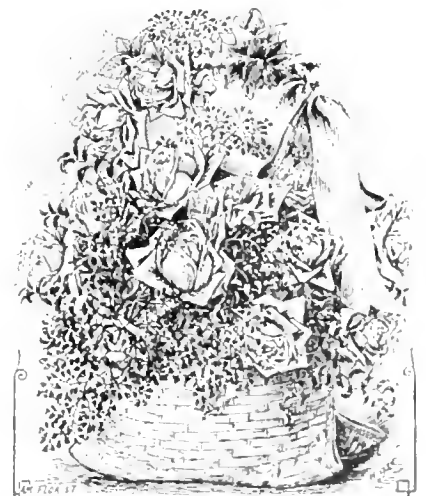
MIRROR DECORATION.



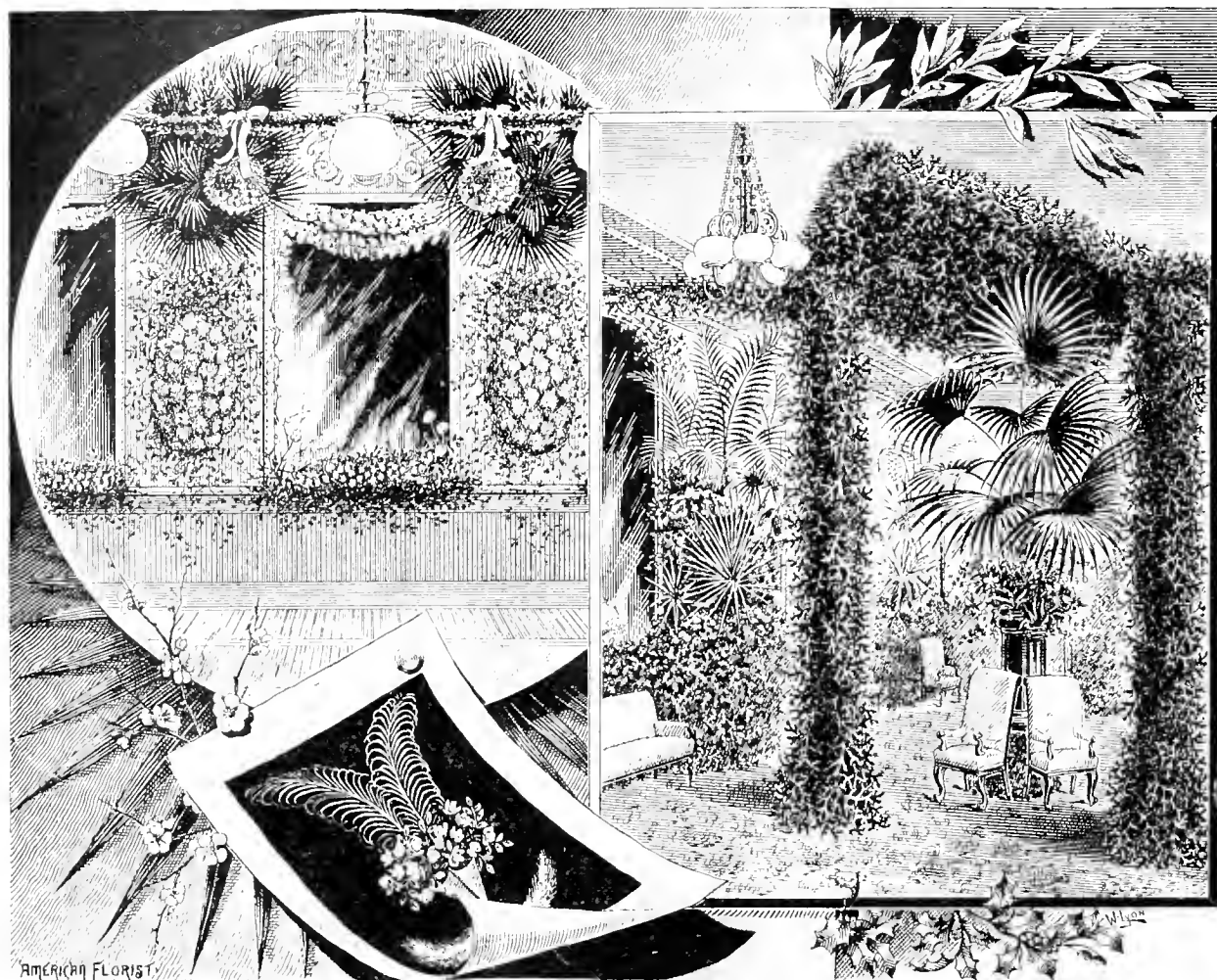
VARIOUS FLORAL DESIGNS



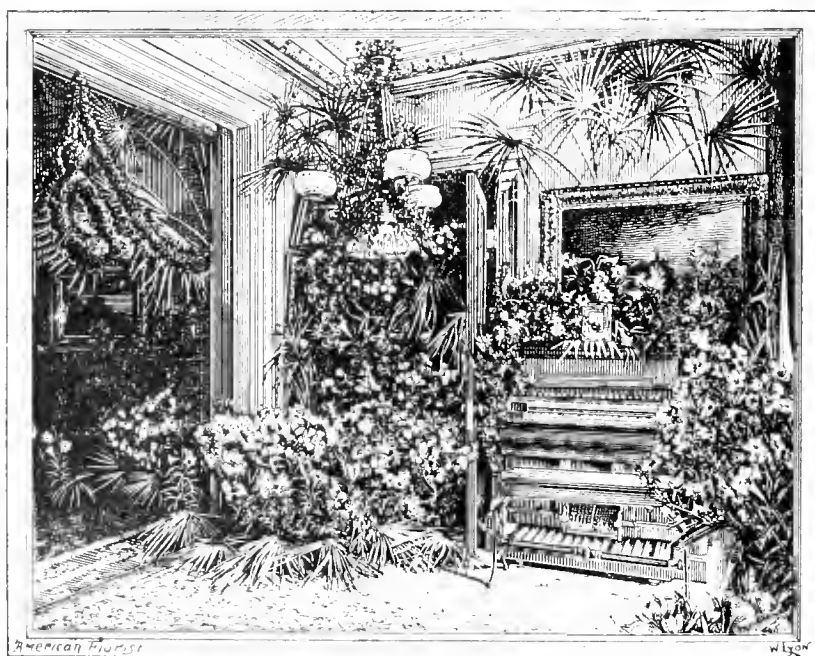
FRENCH FERN BASKET.



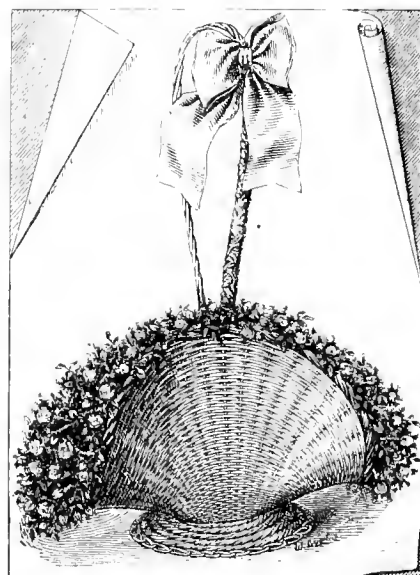
BASKET



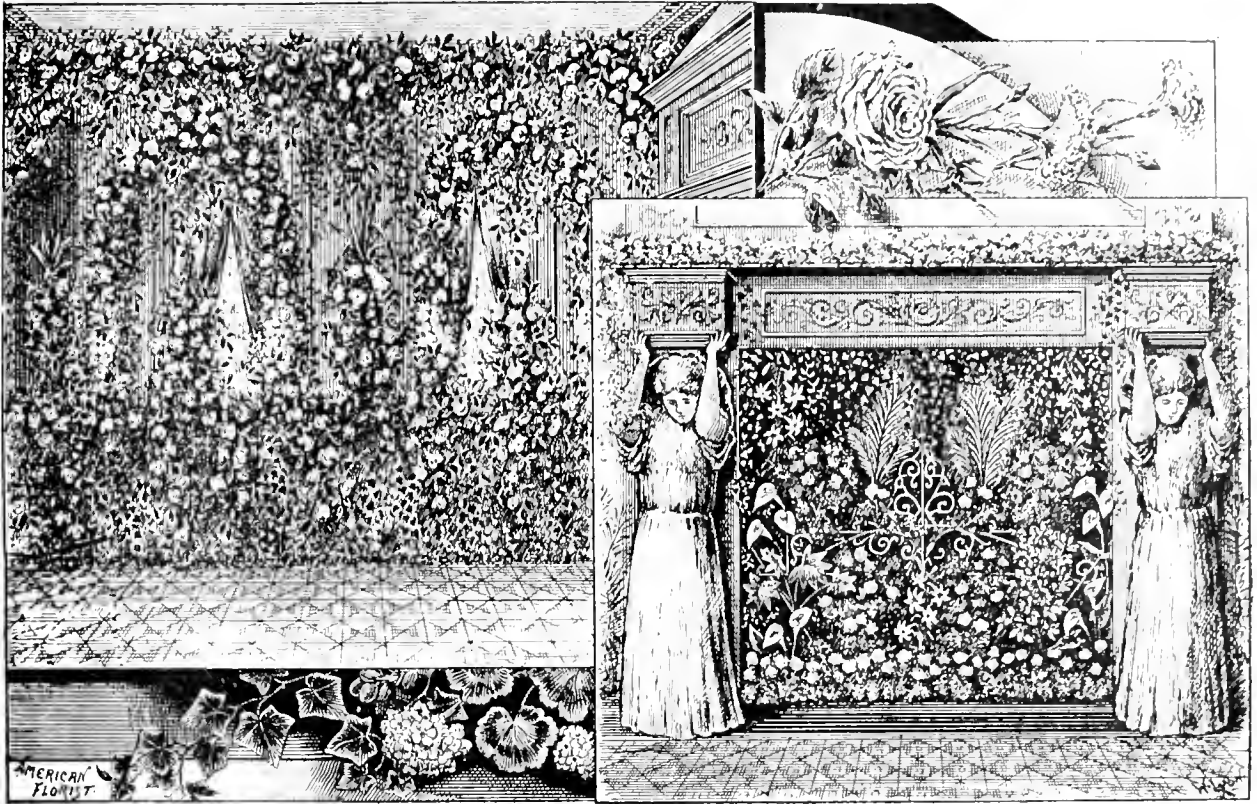
BALL DECORATION.



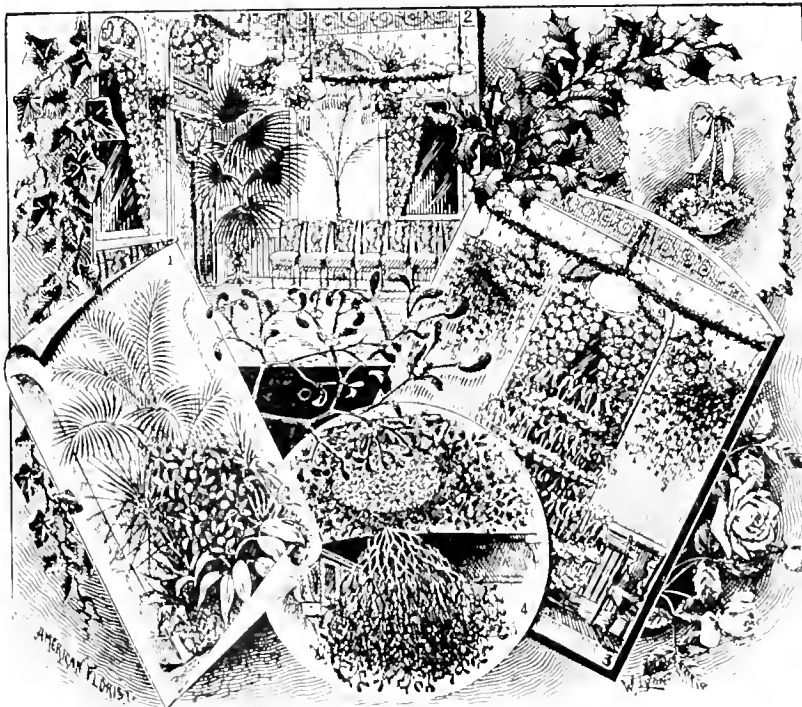
WEDDING, DECORATION.



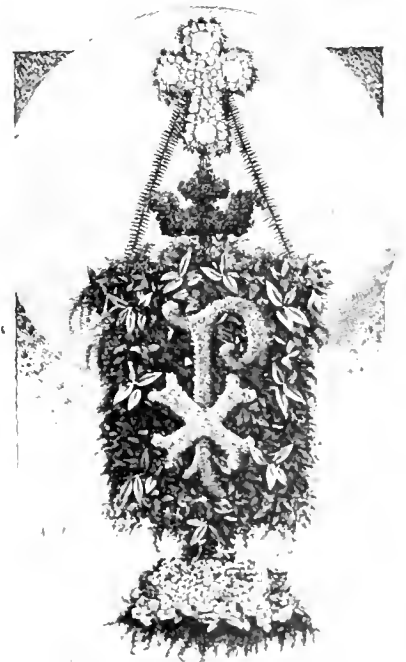
MARIE ANTOINETTE BASKET.



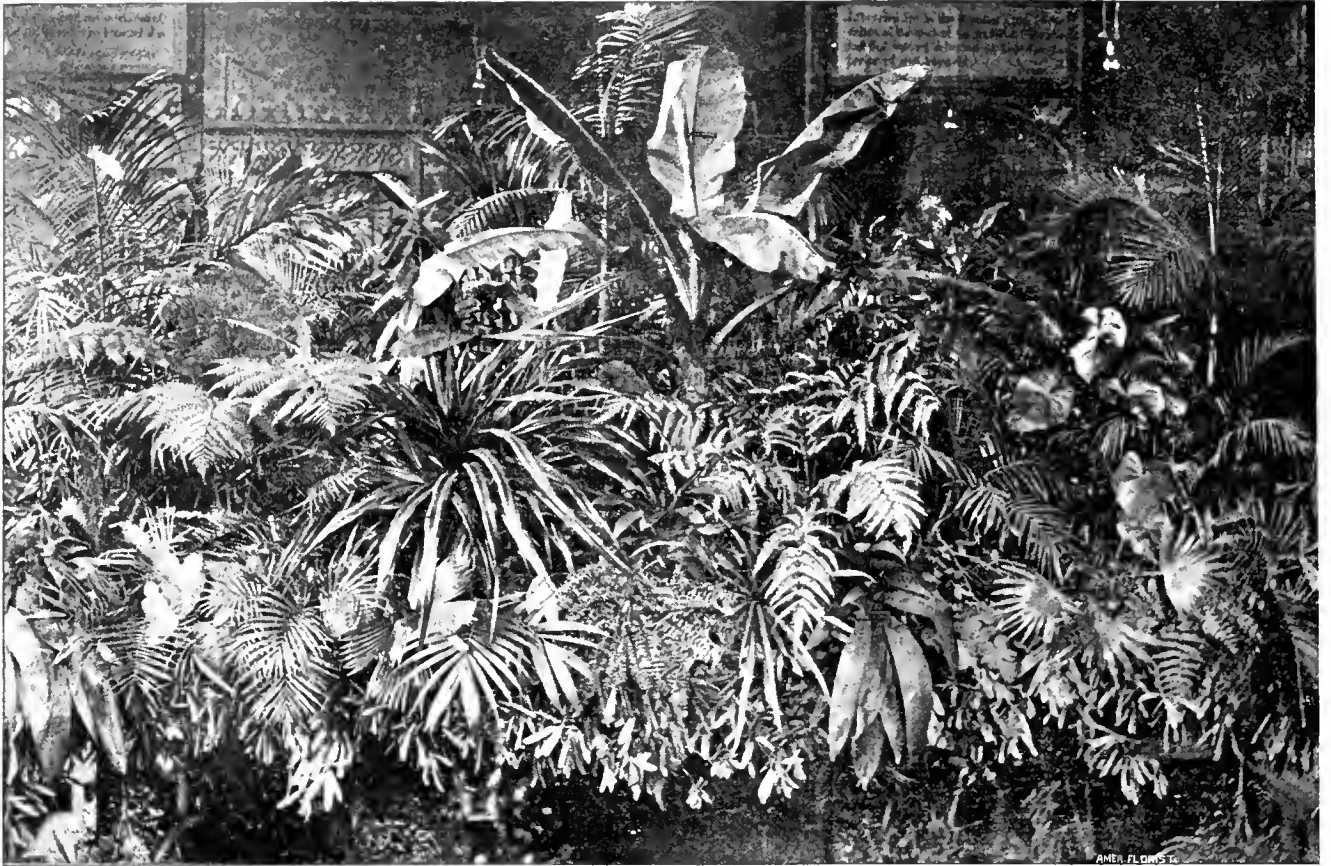
FLORAL DECORATIONS FOR BALL.



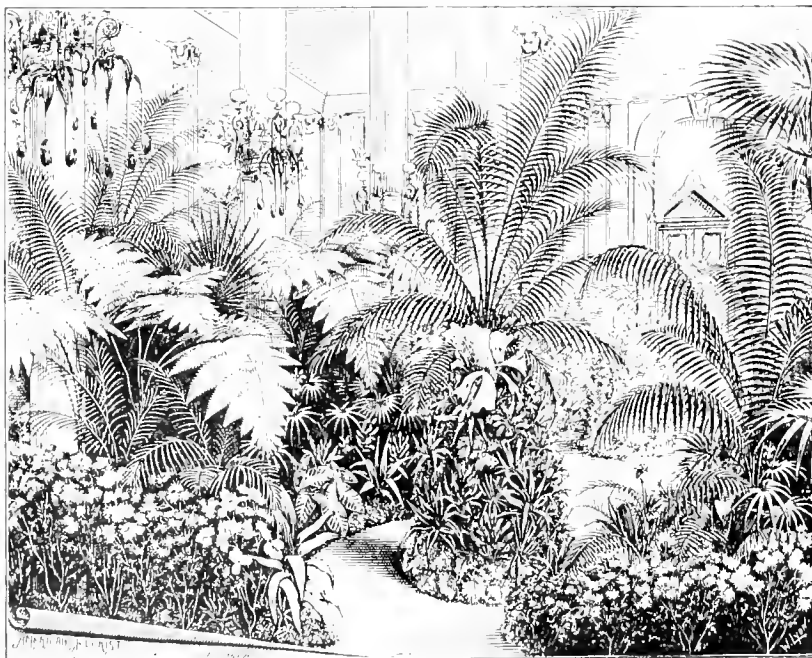
BALL DECORATIONS



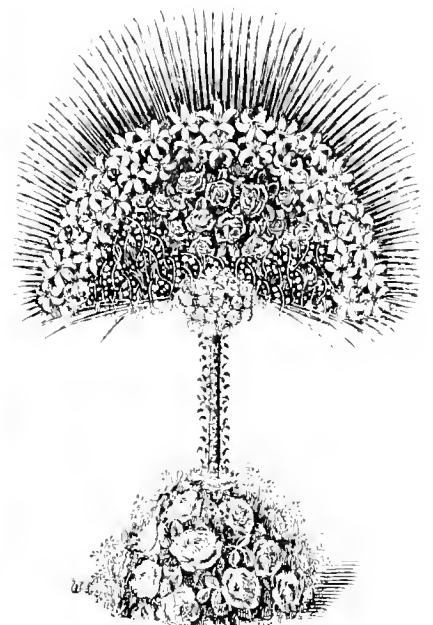
FLORAL BANNER



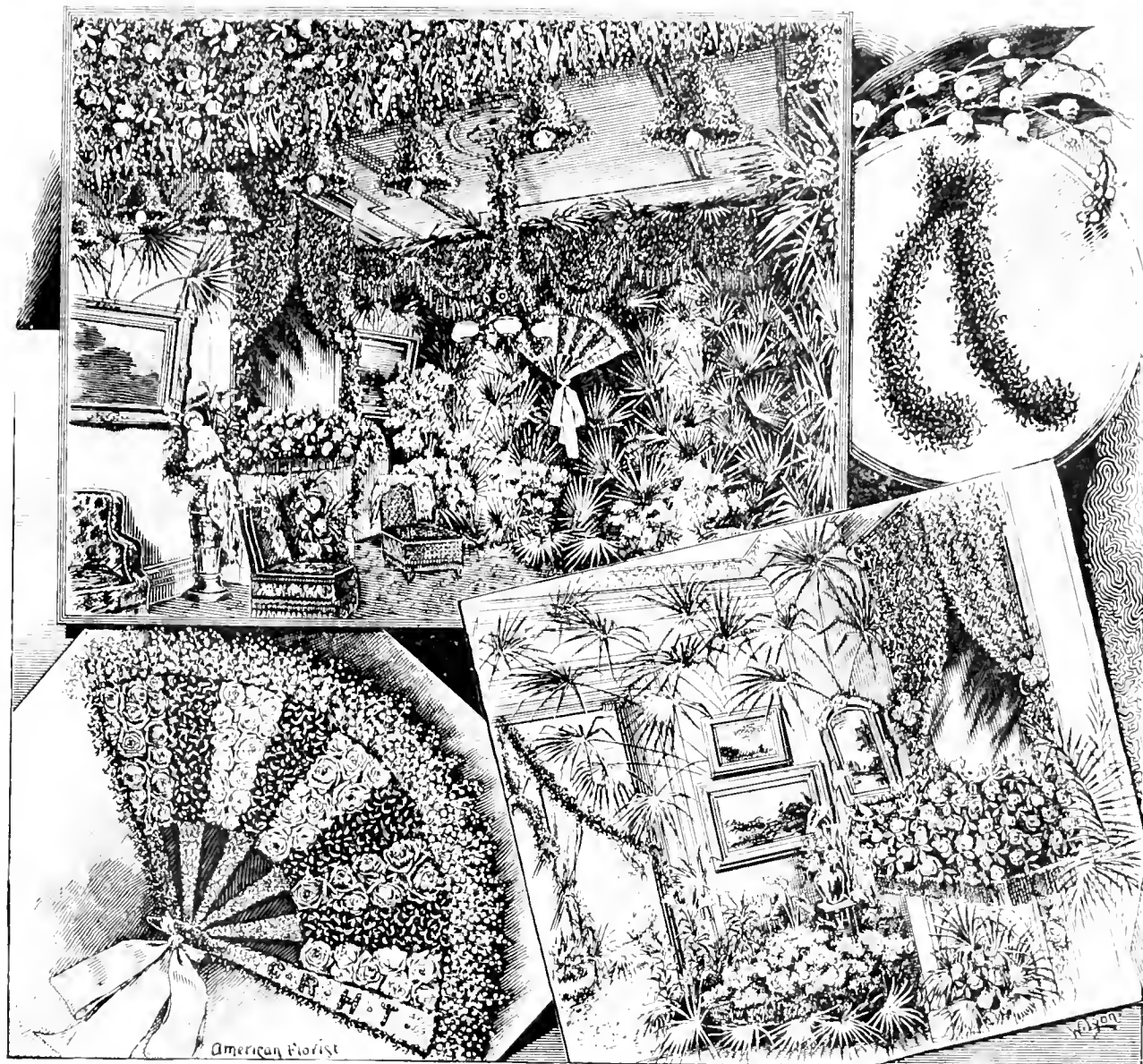
PLANT DECORATION.



PLANT DECORATION.



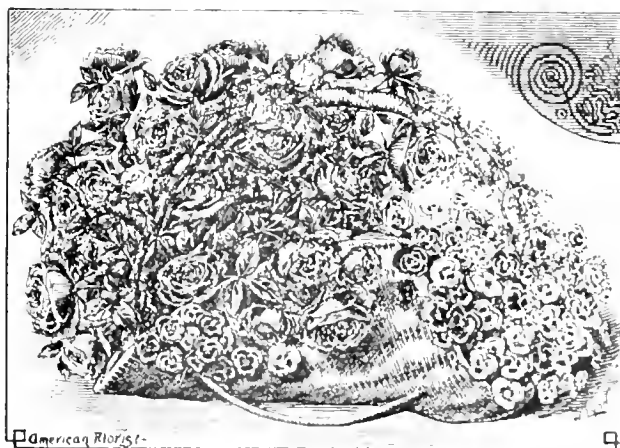
FESTOONED LEAF.



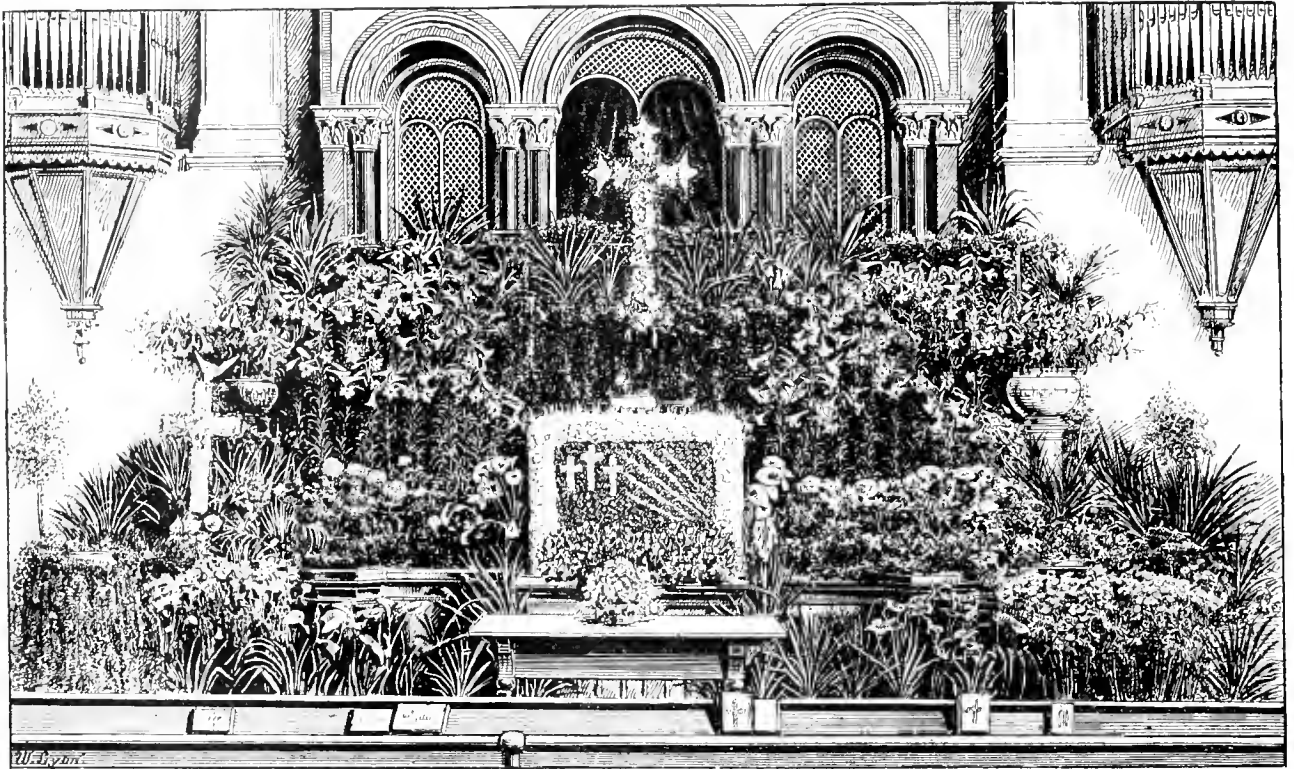
WEDDING DECORATION.



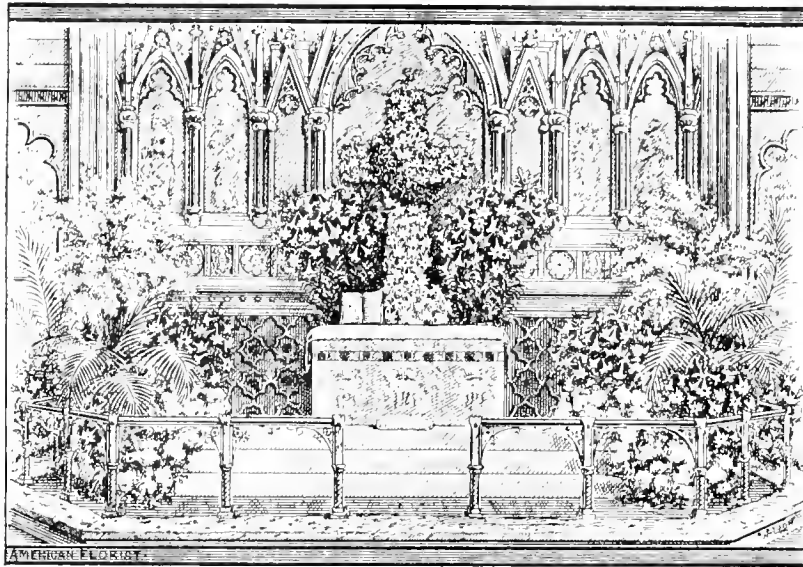
POUCH BASKET.



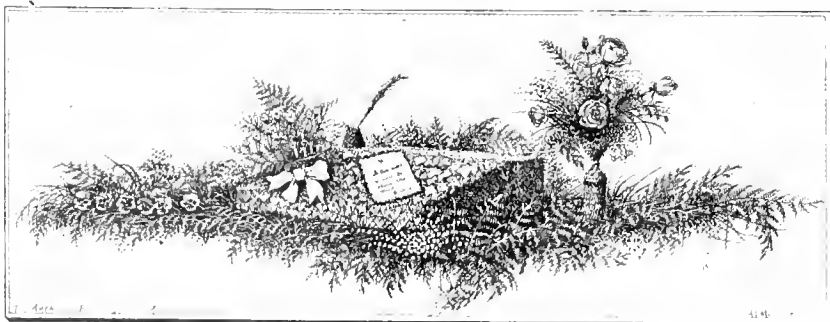
BASKET.



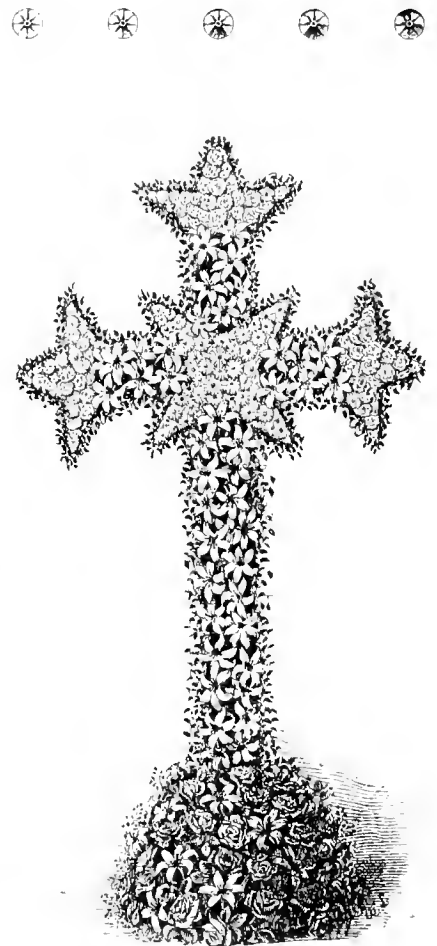
EASTER ALTAR DECORATION.



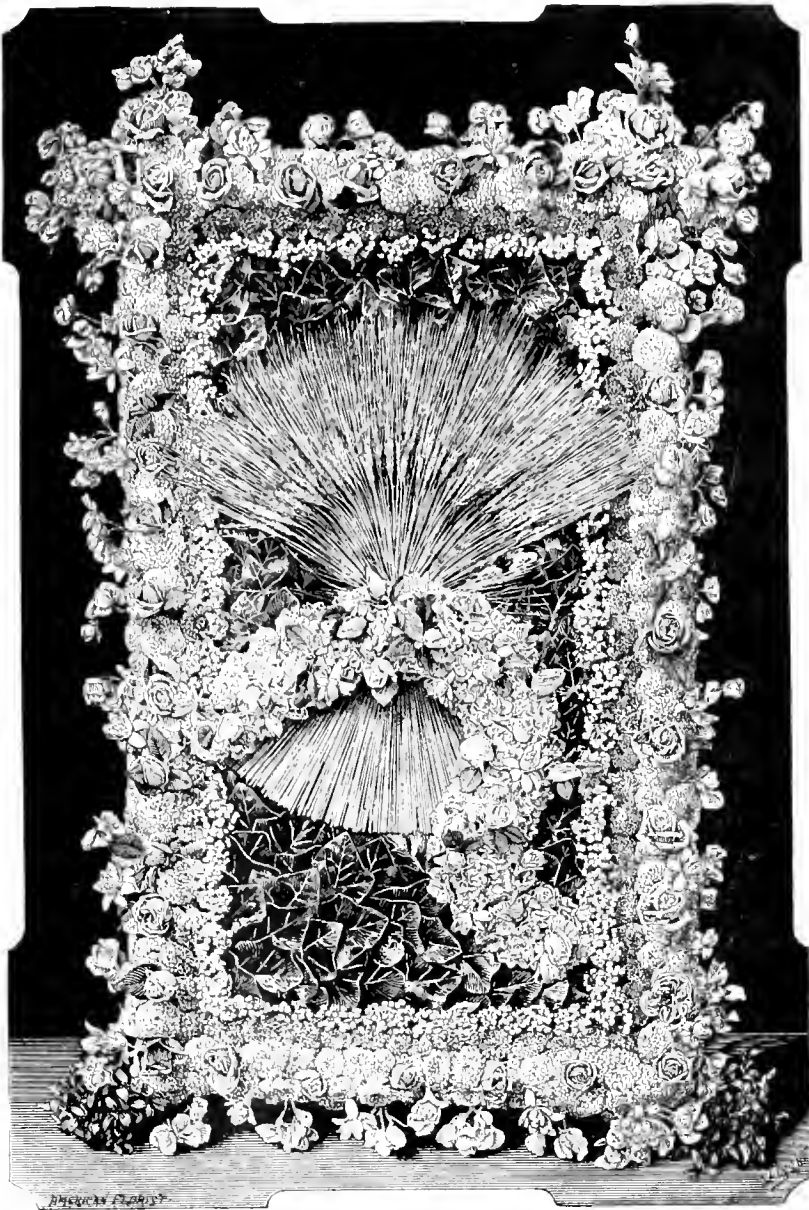
EASTER ALTAR DECORATION.



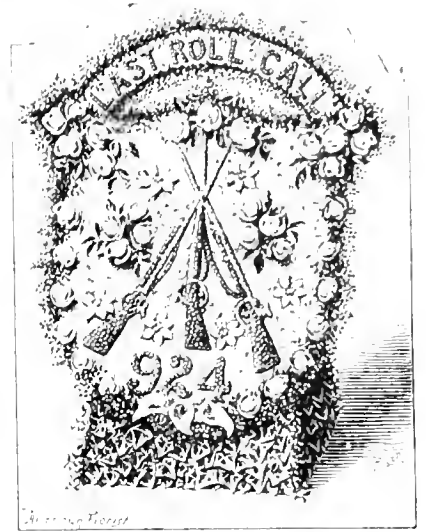
DESIGN FOR THE FUNERAL OF A JOURNALIST.



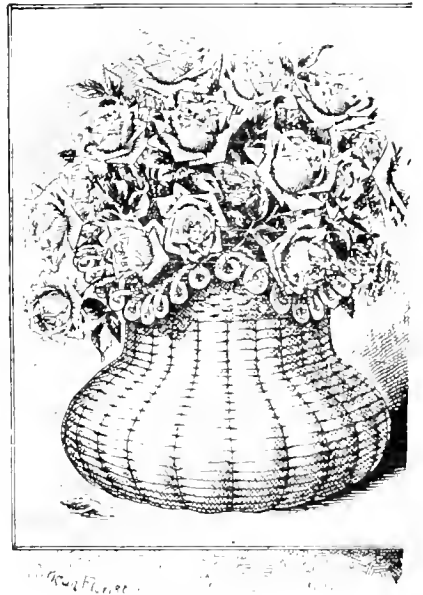
TRINITY CROSS.



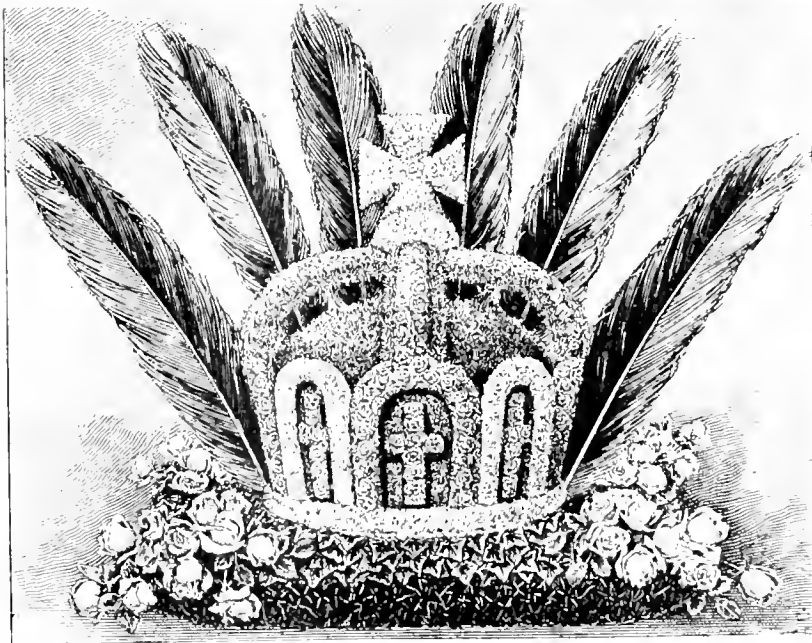
FUNERAL DESIGN.



THE LAST ROLL CALL.



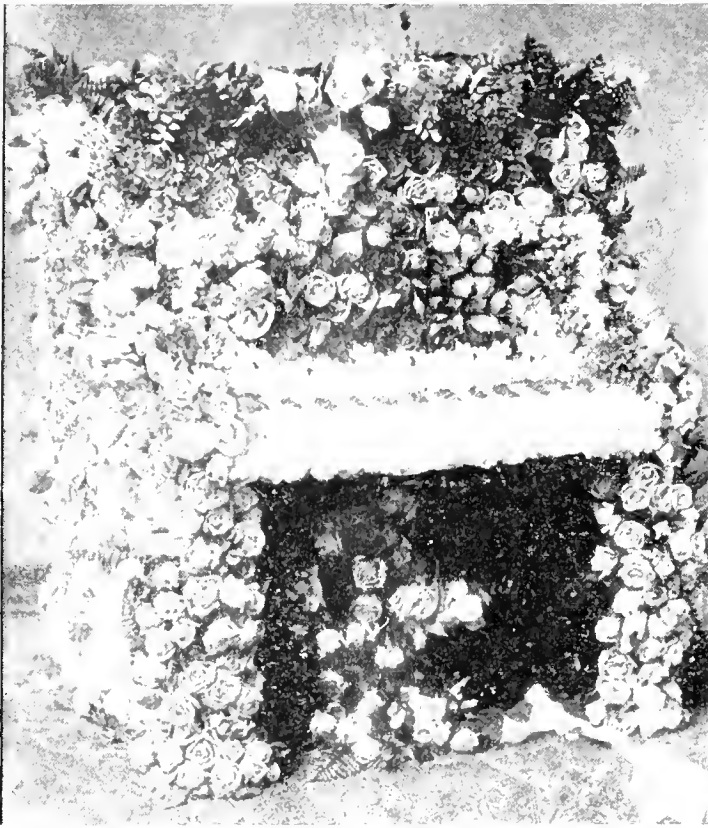
BASKET.



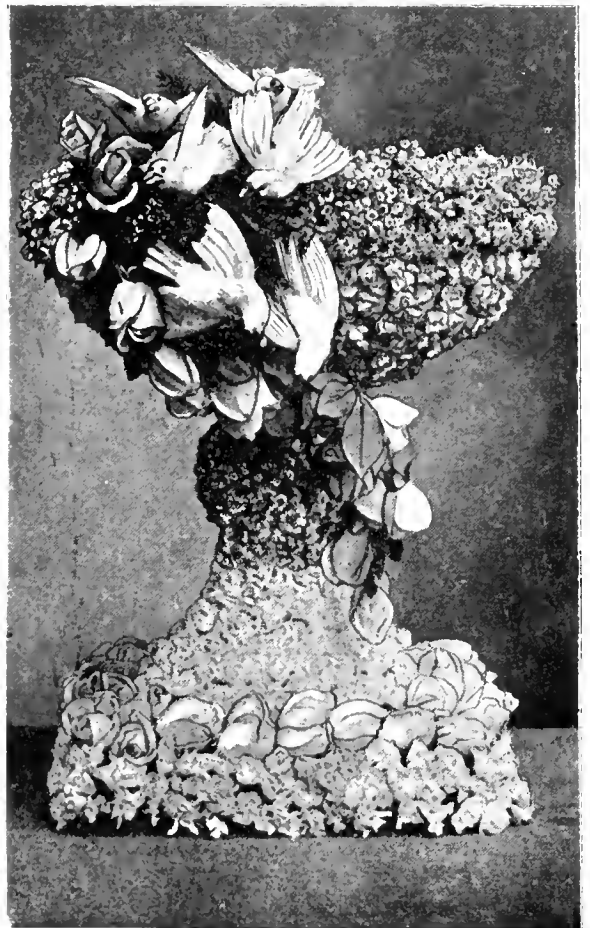
MEMORIAL DESIGN.



VASE OF ORCHIDS



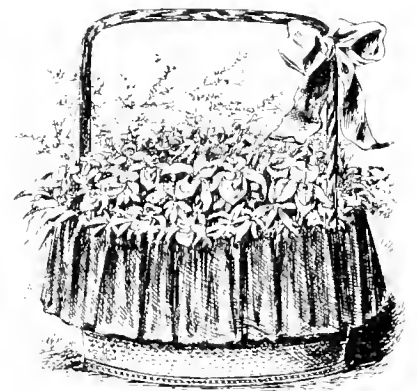
FLORAL PIANO



FLORAL BAPTISMAL FONT



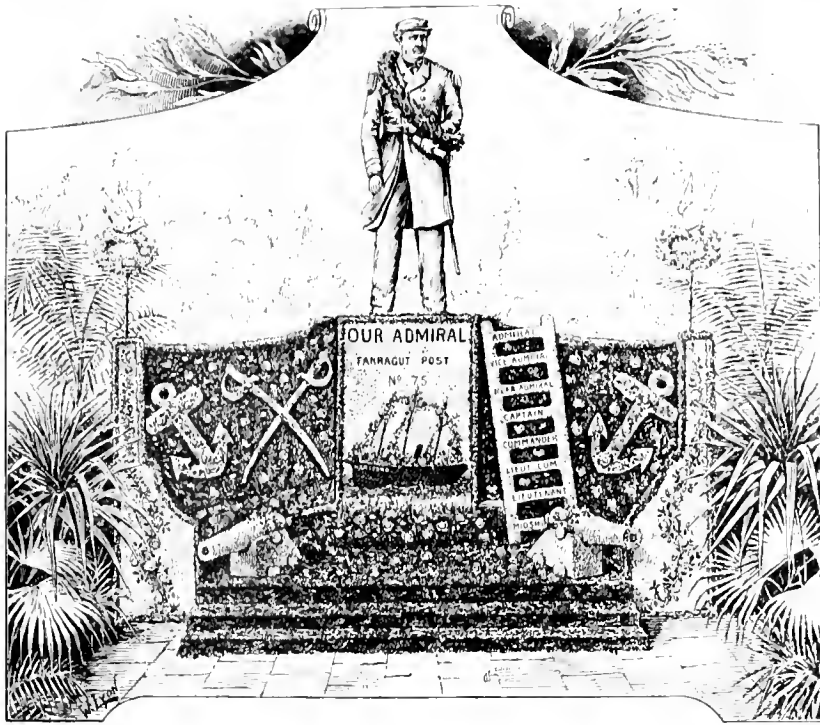
NEW FUNERAL DESIGN.



FISH BASKET



TABLE CENTER PIECE.



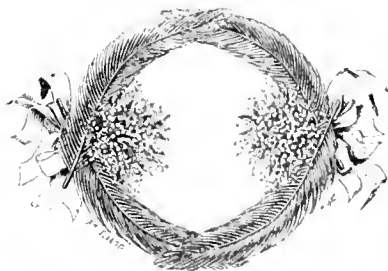
FARRAGUT MONUMENT, NEW YORK, DECORATION DAY.



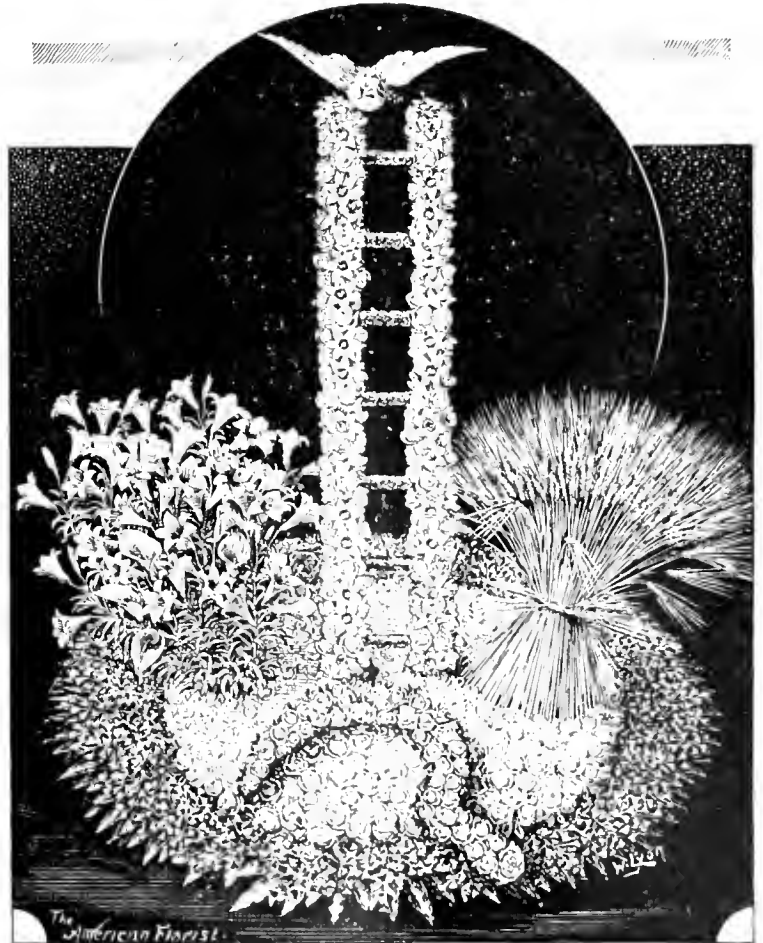
DECORATION OF LAFAYETTE MONUMENT.



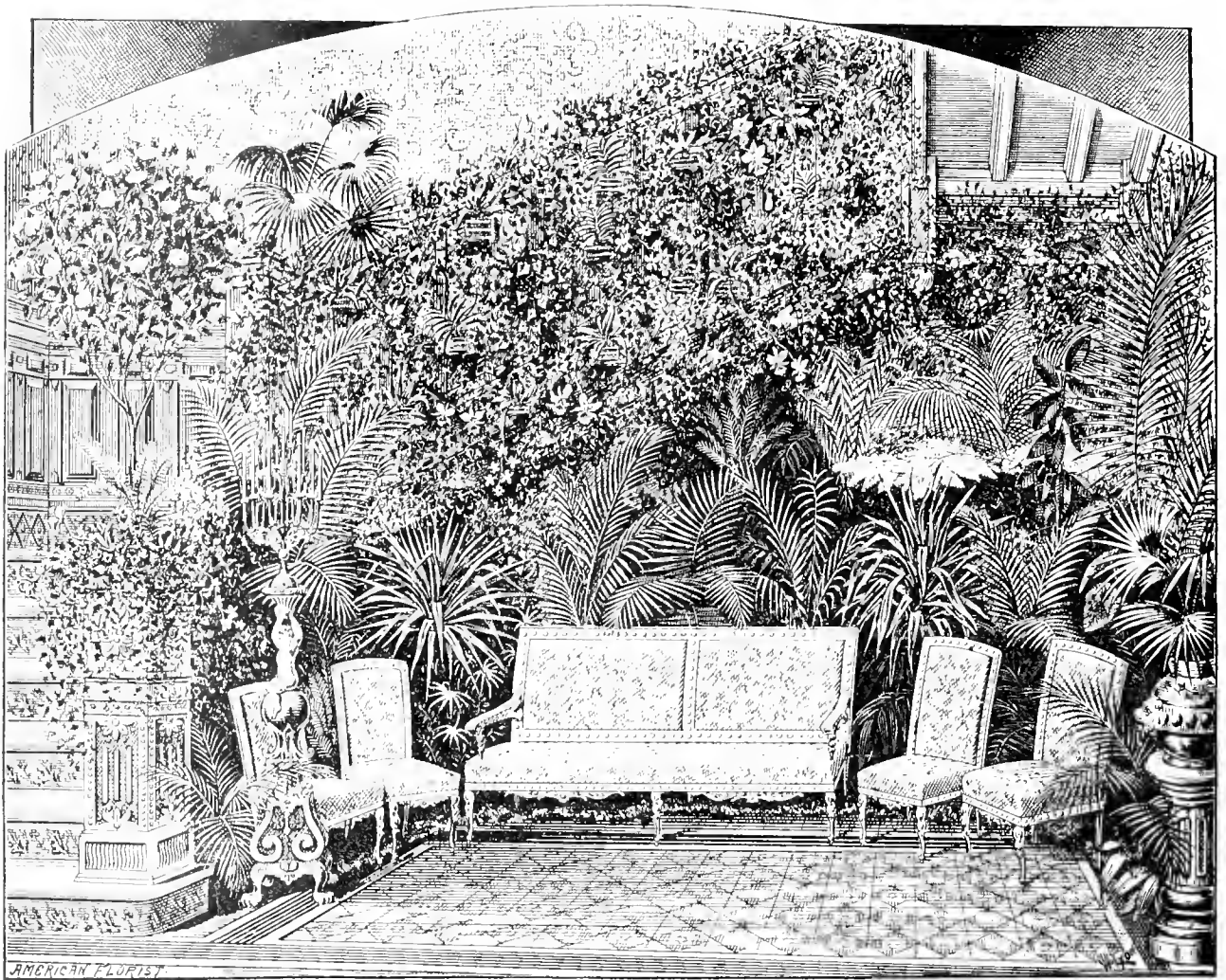
DESIGN PLACED ON THE GRAVE OF MAJ. GEN. G. K. WARREN AT NEWPORT, DECORATION DAY.



CASKET WREATH.



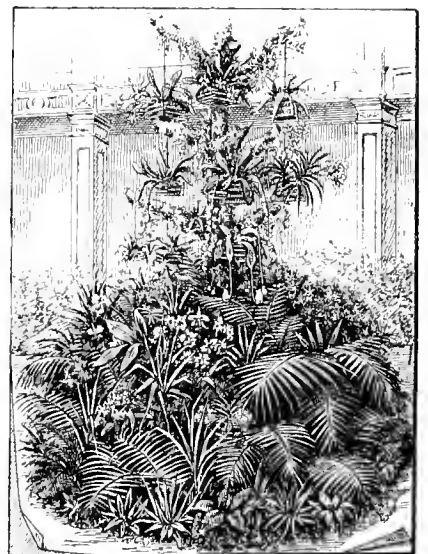
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PLANT DECORATION



GROUP OF PLANTS.

—* THE *—

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IMPORTERS AND DEALERS IN

ORCHIDS, EXOTIC AND HARDY PLANTS.

The stock of Orchids includes the choice collections of James R. Pitcher, W. A. Manda, Benj. Grey, Charles H. Snow, Wm. Bennett, W. W. White and J. Cartwright.

The collection of stove, greenhouse and hardy plants includes varieties and sizes to suit all purchasers. All plants warranted true to name.

The Cypripedium Catalogue contains 350 kinds, is ready and will be mailed free to all applicants.

The collection of Chrysanthemums is complete, including the entire stock of the "Mrs. Alphens Hardy," one of the most remarkable novelties in this class of plants ever introduced.

Orders for Spring delivery of this stock will be received now at \$1.00 per plant.

Cut flowers of Orchids, Chrysanthemums, finest strain of Cyclamens and Primula obconica at any time.

— CHRYSANTHEMUM —

MRS. ANDREW CARNEGIE.

The best Chrysanthemum yet produced from seed
either in America or Europe.

Winner of the Silver Cup and First-Class Certificate at the New York Horticultural Society's Exhibition, and Silver Medal at Pennsylvania Horticultural Society, Philadelphia, November, 1888.

APPENDED IS THE DESCRIPTION OF THE COMMITTEE BY WHOM THE CUP WAS AWARDED:

"The Committee desire to make special mention of its enormous size, rich crimson color and fine form; it is a remarkably free, strong grower, and good bloomer. A grand and noteworthy acquisition."

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JOHN BURTON, } COMMITTEE.
EDWIN LONSDALE, }

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I wrote you last season giving a description of my house and mode of arranging pipes for overhead heating. The results were so gratifying in the healthfulness of my plants, the large number of flowers and size, to the plants, the vigor of growth—especially Crimson King and DeGraw, as well as those of more robust growth, as to fully endorse all that "L. W." stated in article on "Diseases of Plants," on page 350, March 15 number, as to the natural and beneficial influence of overhead heating on the healthfulness of plants.

I find that I do not need so copious waterings nor so often as when I run with under heat. The bottom of soil is moist and cool even when the top is quite dry. I am not troubled at all with red spider, and it is very rare that I have any green fly. I only fumigated five times during last winter and did not use tobacco stems under the benches or in the walks. I filled the same house with carnations Sept. 1 this year, and under the benches are a variety of plants, yet I am not using stems nor fumigating.

I am now just finishing another house for decorative and bedding plants which I shall heat in the same way. Nothing could induce me to use underheat again. If Mr. May would try overhead heating for roses he would, I think, be very much pleased with results. When ventilating the cool air passes the hot pipes and is warmed to a genial temperature by the time it reaches the foliage, giving no "chill" to induce mildew.

Westfield, N. Y.

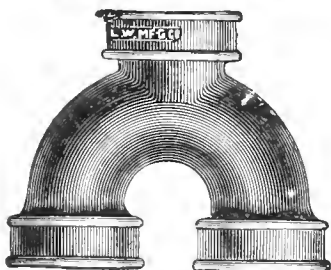
S.

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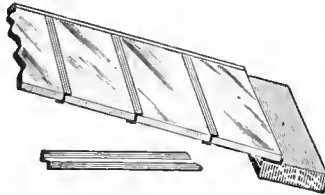
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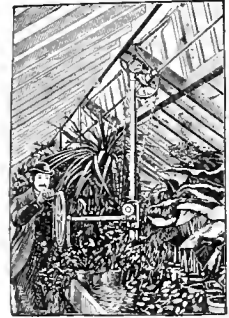
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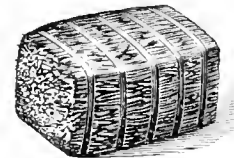


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4-inch.... "	88	10-inch.... "	8.00
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6-inch.... "	2.20	14-inch.... "	50.00
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No charges for package or cartage. Send \$1.00 for sample barrel before purchasing elsewhere. All florists will find it to their advantage to do so, as we make the best and strongest ware in the market. Terms cash. Address all communications to HILLFINGER BROS., Fort Edward, N. Y.

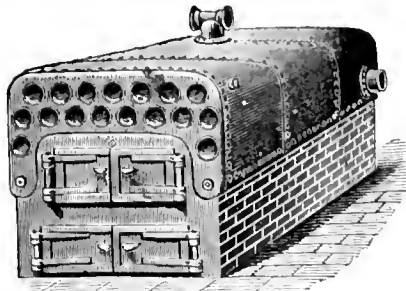
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Dear Sirs—In answer to yours, asking my opinion of the Gurney Hot Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water, and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot.

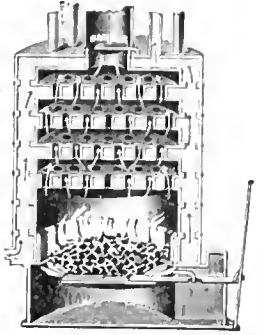
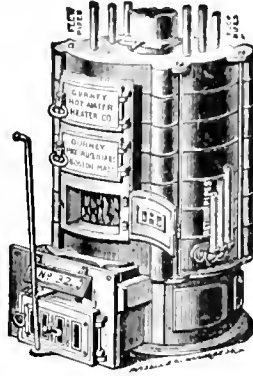
Yours truly,

THOMAS GRAY, Florist.

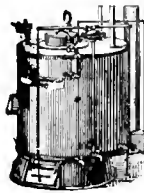
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ESPECIALLY ADAPTED FOR WARMING GREENHOUSES.

Gives a most uniform heat night and day. Can be run with less attention, and a **SAVING** of fully 20 to 25 Per Cent. in Fuel over any other method. Burns **HARD** or **SOFT COAL**. Endorsed by leading florists. Send for full Illustrated Catalogue, showing how to pipe and heat a house by steam. Address **HERNIMAN MANUFACTURING CO., GENEVA, N. Y.**

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We wish to induce all to try our flower pots now before the sale of 1889 opens. Prices of our **READY PACKED CRATES** in 1889 will be for spot cash—

3,150 Thumbs,	\$9.00;	1,800 special 3-in.,	6.00;	600 4-inch,	\$1.75;	100 6-inch	\$1.50
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But to attract new trade we now offer **UNTIL DEC. 31st**

* 5 per cent. Discount on all Sizes. *

This deducted from above crate prices leaves the net price per 1000—**SEE HOW LOW!**—7 inch, \$35.10; 6 inch, \$20.90; 5-inch, \$13.18; 4-inch, \$7.51; special 3-inch, \$4.38; 2 1/4-inch, \$3.69; 2 1/2-inch, \$2.90; thumbs, \$2.42 per 1000, but only for a few days. Send your order by Dec 31st and we will fill it at 5 off, but we allow no discount in 1889. Samples free in first crate. Our freight rates are very low. Try a crate.

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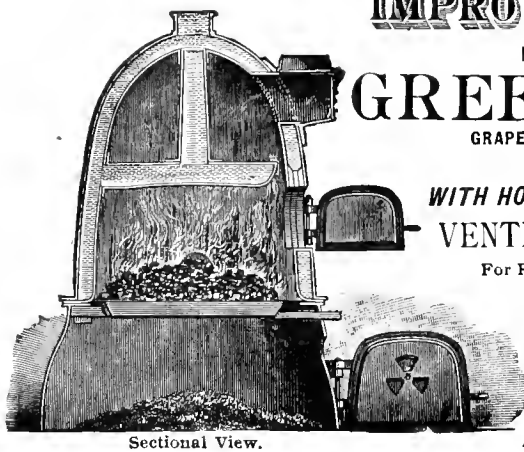
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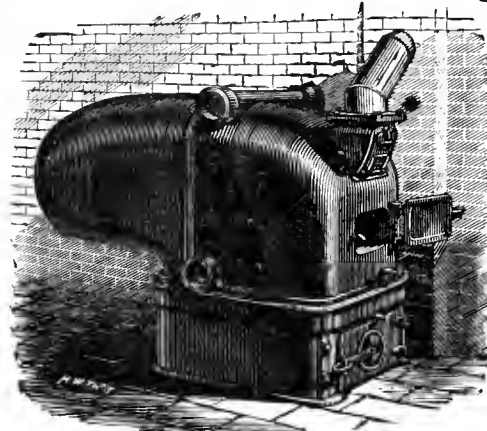
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FOR HEATING
GREENHOUSES
GRAPERIES, POULTRY-HOUSES, ETC.
ALSO FOR HEATING
WITH HOT WATER UNDER PRESSURE.
VENTILATING APPARATUS

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GALVANIZED SCREW EYES
And Wire for Trellis Work.

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Greenhouse Heating AND Ventilating



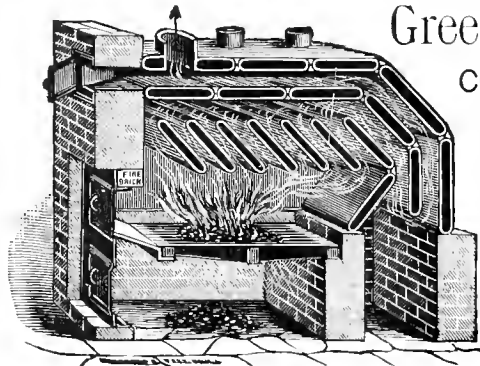
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ALSO
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all Material for Heating by
Hot Water.
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MYERS & CO.
1173 So. 9th St.,
PHILADELPHIA.

Cost of Greenhouse Construction.

Can any of your correspondents give the cost of building two greenhouses one hundred feet long by twenty feet wide, side walls three feet high, wooden posts boarded and clap-boarded? And which would be the most economical way to heat the same by steam or hot water? Said houses to be used for forcing roses and general flowering plants for wholesale. Temperature to run not less than fifty-five degrees in zero weather.

Gloucester, Mass. ENQUIRER.

St. Louis.

At the last meeting of the local Florists' Association officers for the ensuing year were elected as follows: Chas. Cannon, president; S. Kehrman, secretary; Alex. Waldbart, treasurer.

J. M. Hudson, formerly with the Jordan Floral Co., has opened a wholesale cut flower store at 1225 Market street.

Chas. Cannon and C. Young & Sons have had fine displays of chrysanthemums. John Young is recovering from injuries received by a fall from a wagon caused by the breaking of a wheel while driving.

Wm. Schray has built two rose houses 20x85 each; Luther Armstrong two 100x17 each; J. W. North one 120x25.

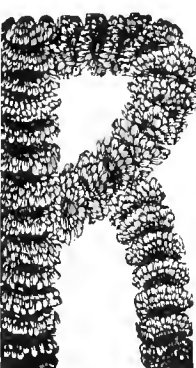
SEED OF EVENING GLORY.

(White seeded var.), i.e. Moonflower. Pink Moonflower is a novelty not yet offered the trade. Eulalia, Jap. var. and Zebra.

MRS. J. S. R. THOMSON, Spartanburg, S. C.



GREENHOUSE HEATING
AND VENTILATING.
Superior Hot Water Boilers.
JOHN A. SCOLLAY,
74 & 76 Myrtle Ave., Brooklyn, N. Y.
Send for Catalogue.



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Send for Sample.
2-in. purple, ... per 100, \$3.00
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W. C. KRICK,
1287 Broadway, Brooklyn, New York.
M. M. Bayersdorfer & Co., Phila., Agts. for Penna.
J. C. Vaughan, Chicago, Agt. west of Penna.



ALL SIZES OF SINGLE AND DOUBLE THICK
GLASS FOR GREENHOUSES.
ALL GLAZIERS' SUPPLIES.
Write for Latest Prices.
Mention American Florist.

THE AMERICAN FLORIST



America is "the Prow of the Lessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, JANUARY 1, 1889.

with Supplement. No. 82.

THE AMERICAN FLORIST

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Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.
EASTERN OFFICE,
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; Wm. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

THE EXECUTIVE COMMITTEE of the Society of American Florists meets at Buffalo, N. Y., on Tuesday the 15th inst. to arrange a programme for the convention of 1889.

THE AMERICAN FLORIST has always been and always will be strictly a *trade* paper. Its subscribers include only florists, nurserymen, seedsmen, gardeners and the employes of those in these lines. It is the *only* strictly trade paper for florists published, in this or any other country. It was started as a *trade* paper and has been maintained as such only. The wholesale prices which appear in our columns are seen only by those *in the trade*. When any one soliciting an adv. from you for some other publication makes any statement regarding the FLORIST contrary to above you may set it down as false.

Pots of Uniform Sizes and Shapes.

At the morning session of the second day of the convention of the S. A. F. held in New York city in August last, the committee appointed (by the executive committee at their meeting in January preceding) to "consider the propriety of recommending the florists of America to adopt uniform sizes and shapes of pots," made a report strongly recommending that the society should adopt a uniform standard of sizes and patterns, and submitted samples of what it conceived to be the best adopted for the uses of florists. Considerable discussion followed, developing the fact that the members were almost unanimously in favor of adopting the idea advanced by the committee; the matter was, however, referred back to the committee for consideration and a further report at a subsequent session.

At the afternoon session of the same day a paper was circulated by the committee among the members for signa-

tures, which was headed as follows: "The undersigned, members of the S. A. F., hereby give notice that in future they propose to buy only standard sizes of pots as adopted by the society;" this was signed by over three hundred firms, or nearly all to whom it was presented. After adjournment of the convention the committee (in accordance with instructions received at the meeting) caused to be made another set of pots somewhat wider at the bottom and with other improvements; these latter samples were submitted during the months of September, October and November to a large number of the leading florists of New York, Philadelphia and other sections and received unanimous approval.

The committee has done all in its power to secure a pot as nearly perfect as possible and has sent to most of the potters in America a copy of an engraving giving the exact sizes and shapes as approved, (those who have been inadvertently omitted will be supplied on application to the chairman, R. Craig, 49th and Market streets, Philadelphia, Pennsylvania).

It is to be hoped that the makers of flower pots throughout the country will cheerfully and quickly respond to the wishes of their patrons and furnish them with what they so much desire.

ROBT. CRAIG, chairman of committee.

[See supplement to this issue with cut showing the exact shape and sizes of the standard pot as adopted by the society. Post it up for reference.]

The Heating of Greenhouses.

The leading question among florists, especially those commercially engaged, is how their greenhouses may be most satisfactorily heated. Economy of fuel is demanded with a persistence born of a conviction that they are not now getting such results as are due to them. They naturally ask: Why is it that with all the advancements made in the science of heating and ventilation, greenhouse heating has to a great extent stood still for twenty-five years?

There are some difficulties encountered in greenhouse heating which have undoubtedly deterred engineers from giving to greenhouse work the same careful study which has been applied to other departments of their calling. We are compelled to acknowledge that the average or typical greenhouse in this country is heated with very little regard to economy of fuel. So long as the florist's greenhouse stock has grown well he has heretofore paid his coal bills ungrudgingly.

What are the requisites to a perfectly heated greenhouse?

First: A system of transmission and radiation which will maintain a uniform

temperature of radiating surface; this radiating surface must be so located that the hot air currents are positive and in the right place, rising up behind the benches under the glass and breaking up the cold counter current which always follows down under the glass, unless forcibly broken up and pushed away by the hot current off the pipes. We have seen many houses in which the direct reverse of this was true, the cold current dropping directly on the plants. The cold or counter current of air should all of it so far as the side benches are concerned, pass close to the floor under the benches till it comes into proximity of the pipes, where it is expanded and forced up behind the bench and under the glass. There must be a sufficient amount of radiating surface to maintain the required temperature and such surface must be so distributed that the house temperature will be practically uniform in all parts of it.

Second: A furnace and generator of simple design and durable material; no complex parts are allowable. A sectional device made up of innumerable joints sure to leak and cause annoyance cannot be tolerated by the greenhouse proprietor. Every part of it must be of easy access to clean and brush out and to make repairs. The furnace must show economy in the combustion of fuel; must be easy to fire. The whole apparatus must be of ample power; under complete control of fireman, and easy to manage. Having all this and a well built house a superior heat is bound to follow.

The two distinctive systems most largely used, the steam and the hot water systems only, will be noticed in this article. Each system is thoroughly practical and capable of showing a very high degree of economy. It is not our purpose to enter into a critical comparison of all the merits of these two systems or to prove by argument and practical data the superiority of one over the other, but to direct attention to a few of the most salient features of the two systems.

It is now quite well understood and acknowledged by engineers, and greenhouse men as well, that steam is a very convenient medium for the transmission of heat long distances. That it does it with little loss from friction in the pipes and when properly piped no diminution or appreciable diminution of pressure, and with no diminution of pressure there can be no diminution of heat in any pipe no matter how remote from the boiler; a fact we cannot absolutely attain in any hot water system. These two points, the low factor of loss from friction and the uniform temperature of all radiating surfaces are strong and incontrovertible facts in favor of the steam system, and can not be claimed by any other system we are acquainted with. The perfect

ease with which every steam pipe is controlled, makes the system very popular with those who have steam plants designed and constructed in accordance with the best practice.

Without going further into the merits of steam we will take up the hot water system and so far as this article is concerned will assume that hot water properly applied to greenhouse heating is in all cases a very superior heat, very economical in its actual results, and that in many situations it is superior to steam, more economical of fuel and attendance than any steam plant is capable of. But we must allow and assume at the start that hot water heat is not quite so uniform as the steam heat, which is invariable or varies only with the pressure. The hot water after being expelled from the boiler is continually and gradually imparting its heat to the surrounding air till it is again returned to the boiler, several degrees colder than when it left it. This feature of loss and lack of uniform temperature of hot water pipes and the friction which must be overcome in forcing this water through long pipes are inherent to the hot water system, and is in an absolute sense beyond the control of the engineer. However, an intelligent use of the means at his command should, and we think does, enable him in a great measure to overcome these difficulties and bring the hot water system to a plane of excellence, even in this particular, nearly equal to steam. It is our experience that in extreme cold weather in our northern climate, there is no system of heat known to the engineering profession, which can show better results than a good steam system of the most approved type, unless we allow the hot water system a much greater radiating surface than is allowed the steam system.

We have little left us now to bolster up our favorite system of hot water from an economical point of view except a lower temperature of radiating surface, and consequently a lower chimney temperature. If we assume a pressure of 15 lbs. in our steam boiler we have a steam temperature of about 250 degrees Fahr. That temperature is constant. To maintain it we must have a high furnace temperature, and when the gases of combustion have passed out from the boiler, having produced all the possible useful effect, there must be in the chimney a temperature many degrees higher than the steam temperature, which we have assumed to be 250 degrees. The chimney temperature will be governed largely by the useful effect or economy accomplished in the boiler. The nearer the chimney temperature approaches the steam temperature the greater and more noticeable will be the economy of fuel in the furnace. Now it must be observed that in the steam system this chimney temperature is nearly constant, no matter how great the fluctuation in temperature of the out door air. We can't raise steam without 212 degrees of heat and without steam we can transmit no heat into the houses. Tersely expressed the steam boiler chimney is always hot, never less than 220 degrees and often 300 degrees and over. Here then is the problem which confronts the steam engineer. Now, during a mild night with a steam plant at his command, and this stream of hot gas rushing up the chimney into space out of his reach, to make this plant do the work with a fair showing of economy. Well, the problem is before him but he has not yet solved it.

The hot water apparatus under the

same conditions yields to his wishes beautifully. A slow fire imparts a gentle heat to the water, circulation at once commences, the necessary radiation heat is soon obtained and an examination will show that the temperature in the chimney is not high enough to burn the hand. Under the former conditions, or zero weather there can be little difference of economy in the two systems, for if we allow the hot water system the same amount of radiating surface as the steam system, the radiation temperature must be the same in each system. In raising the radiation temperature our chimney temperature is raised with it, and our hot water economy goes up the chimney along with it. It follows then that hot water apparatus should have a more liberal allowance of radiating surface than steam requires, otherwise we do not derive all the benefit which belongs to it. With an out door temperature of 30° to 40°, a very moderate temperature in the hot water pipes will maintain the required house temperature, and we can produce this low temperature granted a boiler of the best construction, without creating a high temperature in the chimney. It is this saving of heat which makes the constructing engineer, who is striving to meet the demands of his customers for a fuel saving apparatus, look so kindly upon hot water as a medium to receive and carry the heat generated in the furnace to his radiating pipes. The problem of reducing this high smoke stack temperature is solved with hot water as a conveying medium provided the boiler is of a good type and is capable of utilizing a due portion of the heat from the furnace.

Careful investigation and experiment has led the writer somewhat against his will or former ideas to the opinion that for all small plants, and many large ones, hot water will produce, or is capable of producing, results tending toward true economy, that with our present knowledge of steam can not be attained by any system of steam heat.

Assuming this to be true the next inquiry is how we can best perfect and carry out a good hot water system for greenhouses. It is not within the scope of this article to enter into a detailed description of the many different hot water systems in use. The underlying principle which governs them all is essentially the same in each. The heating profession, and the florists as well, are gradually gravitating toward a higher pressure system than the old low tank system involved. Instead of the old cumbersome 4 inch cast iron radiating pipes, wrought iron pipes with screw threads are most in favor. Some engineers have found 1½-inch pipes very successful, 1-inch pipes have also been used. The writer's best success has been achieved by the use of 2½ and 2-inch pipes.

The closed system of hot water heating can be made to do effective work, but it is more or less complicated in some of its features, and deserves in the estimation of many authorities little attention from those interested in the promotion of greenhouse heating. An open system under a pressure of ten to twenty pounds without any expansion tanks in the greenhouses, has many desirable features. We have obtained the best results with that system.

We have this year heated the new houses of Mr. Julius Scharff, of Floral Park, Long Island, with that system, with extremely promising results. We hope later on, when the weather is colder,

to make some experimental tests with this apparatus, and if they prove to be of value and interest the result will be furnished to the readers of the FLORIST.

Mr. Scharff's houses are built in rotation with a large roomy shed across the ends of the houses. The boiler pit is located in the shed. The mains rise directly over the boiler and run along the ends of the houses and over the greenhouse doors; from these mains the "feeders" drop down to the radiating pipes under the benches. The return main is in the shed and runs along the ends of the houses under the floor. All the mains and auxiliaries, shut off valves etc. are in the shed. The radiating pipes are 2½ and 2 inch. The outward flow pipe is 2½-inch; at further end of the house turns and branches into two 2-inch pipes on the return. Two of the houses are not separated by inside partitions. In these a 2½-inch feeder branches into two 2-inch pipes which are hung under the gutter between the two benches; the return is duplicate of the outward flow and suspended directly under them.

This arrangement gives a very uniform distribution of heat under both benches and leaves the entire space under them free for any useful purpose. It will be noted by most that this method of hanging pipes is not desirable for more than two houses, for if more than that number were left open without partition the outside wind pressure would certainly press the air inside of houses to leeward, and make the houses of uneven temperature. There could however be no objection to erecting the partition between the two lines of pipe which would effectually stop the evil. Hanging the pipes in this position produces a very natural and desirable circulation of air throughout the houses. The pipes from their position under the gutter compels the hot air current to rise behind the benches and push away the cold current which naturally falls from the glass in close proximity to the plants.

In this plant the water tank which supplies the greenhouses is in the shed. This tank was utilized for the water supply to boiler and is also made to serve as an expansion tank for the whole system. The height of tank is sufficient to create a pressure in the pipes of about fifteen pounds, which allows a hot water temperature of nearly 250 degrees, a heat equal to the usual temperature employed in steam apparatus. The circulation is very strong and rapid and the water returns to the boiler very hot.

In describing this apparatus we have already occupied so much valuable space that the subject of boilers must be left for another article. E. S. TITUS.

Hempstead, Long Island.

Begonia Octopetala Lemoinea.

ED. AM. FLORIST.—I beg to send you a photograph of a new kind of autumn flowering tuberous begonia. This novelty is the result of a crossing between *Begonia octopetala* L'Heritier and some of the finest tuberous rooted begonias. As you may judge from the photograph the result is a magnificent one, and the new race *octopetala Lemoinea* is one of the handsomest that I have ever raised.

The root is somewhat irregular, lengthened, black; the herbaceous stem very short, in such manner that the leaves seem radical, these are broad, undulated, of a glossy green with round hairy stalks. The plant bears six to eight erect flower stalks big and hairy, a foot high loaded with large flowers. The individual blooms attain the size of three inches,



BEGONIA OCTOPETALA LEMOINEA

are composed of six to eight large oval petals, which give them somewhat of the shape of *Anemone japonica* or *Anemone fulgens*. A nearly complete range of colors from the pure white to the scarlet with various shades of pink and carmine, is to be found in this new class which produces a beautiful show of blooms at the time when the brightness of the tuberous begonias is over.

The photograph was taken November 10, 1888, in my nursery from a variety of *Begonia octopetala Lemoinea* with pink flowers and is one sixth natural size.

Nancy, France. V. LEMOINE.

Notes on Building Good Greenhouses.

Florists I think will unanimously agree with me when I say that one of the most important branches of our business is the building of first class greenhouses, thus laying a good foundation from which the natural expectation will be good results.

Those contemplating the erection of such houses will find it to their advantage to visit those recently built by Mr. Chas. S. Price at Lansdowne, Pa., as they are certainly the most complete houses erected in this vicinity and this opinion is the universal one expressed by great numbers of florists who have inspected them.

One of the first things one must look at is the location. In this respect Mr. Price is particularly fortunate as the ground on which he has built has a southern exposure with a gentle slope in that direction the greenhouses facing the same way thus reaping all the benefits of the sun's rays, which are so necessary, especially so to one in his business, that of raising cut roses for the Philadelphia market.

There are six houses and they are all the same size, 100 x 20; the posts are of cedar, very heavy and placed but four feet apart; the walls are of triple thickness, first being rough boards then coming a lining of heavy building paper, which is finally covered by the outside German siding; thus one will see that there are no cracks or crevices through which the cold air can creep in and this means quite a saving in steam, in which system of heating Mr. Price firmly believes. First quality French glass will be found in these houses, large panes 16 x 24, there are eight panes, 24-inch, between the front wall and the ridge, the sash bars 1 1/2 x 3-inch are supported about half way by iron pipe some 1 1/4-inch, the ridge being strengthened by a like pipe every ten feet.

The ventilating apparatus is the neatest

and strongest I have ever seen being arranged in the following manner: About one foot from the bottom of the ridge there is a cross 1 1/2 x 1-inch, the inch way being reamed out so as to allow the 1-inch pipe that is used for the shafting to work more easily. It will be noticed that the shafting is directly under the ridge, this may at first thought appear to make it very difficult for the arms on the ventilators to work properly, but it does not have that effect as the ventilators work very easily, in fact more so than any others which have ever come to my attention. Two of the "Evans' Challenge Machines" are placed in each house, they are giving entire satisfaction and Mr. Price endorses them most highly.

Another evidence of the popularity which the locomotive boiler enjoys in our business is here given as Mr. Price has placed two of them in his cellar which has been excavated some ten feet below the surface of the ground and walled up in a most substantial manner by a hard stone which abounds in the locality. The boilers are each of 25-horse power and he has them so arranged that either one or both may be used as required. A good idea and one which I believe is original with Mr. Price, is that in casing the smoke stacks, which is by a galvanized covering, a space of four inches has been allowed so as to let all the dust, etc. have a free and unobstructed passage from the cellar to the open air, and this is something which readily commends itself as a great convenience. The shed or work room is placed very advantageously, there being three houses on either side of same connecting with each and every greenhouse and is 16 x 90 feet.

The water supply is also worthy of mention. Mr. Price, not believing in the efficacy at all times, especially the summer season, of the wind mill, has a steam pump of the Worthington make, which throws a continuous 2-inch stream up to his tank some twenty feet above the ground, said tank having a capacity of 4,500 gallons. In connection with the shed I would state that the roof has a slight slope so as to run off the water, and along the edge the tin which forms the covering is kept up three inches on either side so as to prevent any icicles from forming and dropping on the glass. The space between each house is twelve feet, and consequently none of them are shaded by each other and thereby all the light possible is attained.

The benches are all made of iron and have slate bottoms, the side benches are placed eight inches from the walls so as to make allowance for any drip to fall behind the bench and so not injure in any way the plants on the benches. A strong hook driven in each of the cedar posts serves to keep the benches perfectly firm and steady. The center benches are three feet wide with a passageway between them of twelve inches so as to permit of syringing, etc., and in not having this space eighteen inches instead of twelve inches, Mr. Price thinks he has made a mistake which other florists would do well to avoid, as twelve inches is not room enough for a boy and still less for a man to work in comfortably. These center benches are fastened to the 1 1/4-inch pipe which supports the roof by hooks made of 1/2-inch iron bent around the angle of the benches.

To account for the rolling of the steam pipes caused by either expansion or contraction as the case may be, the pipes are supported by an inch iron pipe connected to the T iron legs by a set screw,

having on it a lug which fits loosely on the inch pipe.

If Mr. Price's roses are to be taken as a criterion the supposition that slate benches have a tendency to produce club root is to use a slang phrase "away off," as his roses are doing as well if not better than they would have done on wood. Many people who use slate do not consider that the soil dries out on slate more rapidly than on wood and therefore the plants are not kept sufficiently wet, which fact no doubt gives rise to the above mentioned presumption. The La France and Bride roses which he has been sending to the market have been almost universally pronounced the finest in Philadelphia.

Mr. Price is one of the most successful growers of the rose Pierre Guillot around Philadelphia and it has proven itself to be his most profitable production. Strange to say there are three other florists right at Lansdowne who have tried to grow this rose but have failed to make anything out of it.

These houses of Mr. Price are planted as follows: No. 1, Bennett and Pierre Guillot; No. 2, Papa Gontiers and Niphetos; No. 3, The Bride; No. 4, Mermet; No. 5, La France; No. 6, Mrs. John Laing and Magna Charta. The crop in this latter house is expected to be on in the latter part of January. Should any florist wish to have any particular thing given more definitely Mr. Price will be pleased to give him all the information he may desire. WALTER W. COLES.

Lansdowne, Pa.



For Florists.

BY WM. MATHEWS.

The season is at hand when lovers of the beautiful in nature will be asking for something lovely in flowers and many florists will have their energies taxed to get together the desideratum in that line. Fine roses will on some days be a short supply and in consequence very costly; lily of the valley, lilac, freesia, carnations, violets and a host of other good all around flowers will not be just the thing wanted to supply the demands of some customers. The florist who keeps abreast of the times will suggest to such a bouquet of orchids. "Why yes," answers the customer, "but are they not exceedingly costly?" "They are somewhat expensive, so are choice roses just now, and really I think that taking into consideration their lasting qualities, their beauty and loveliness, they are about as cheap as any other flower." A truth that I know many of our florists do not like to admit, and those are the ones that are continually harping against the advent of the orchid flower. They do not take kindly to new ideas, they are angry and jealous of those florists who (fortunately for them) received the orchid with open arms and are in consequence making a clear walk over in the race of choice decorations and rare designs.

The cultivation of orchids has been dubbed by many an English "fad," a

"spasmodic craze," etc. To all such I would venture the question: How is it that for the last forty years their cultivation has been steadily on the increase in England, France, Belgium, the German Empire, Austria and Russia? To-day it would astonish the most skeptical anti-orchidist to see the immense collections in those countries, and the so-called craze is still marching along with the progress and refinement of the age. They (the orchids) have become deeply rooted in the hearts of those who live not to feast alone their stomachs but their finer sensibilities as well.

The American people are the greatest supporters and admirers of everything high in art and nature, their purses are always open to a thing of merit, they want the best and are liberally and openly free to pay for it. The florist, depend upon it, who caters to these tastes will surely profit by it. I don't care how many Charlies and doubting Thomases there are that are ready at every turn to cast a stigma upon orchids and their culture. I am sure that the orchid will take such an upward start as to better the condition of its more humble neighbors and that the stimulation will be so great that ere long we shall have chrysanthemums as large as a soup plate, carnations the size of a policeman's badge on "parade days," and roses as big as the antagonism of some shortsighted florists to the orchid.

Compare the bouquet style of '68 to the style of a bouquet for same purpose to-day; compare the quantity and variety of winter floral productions of that date to the present, what a difference! Customs and styles have changed to an alarmingly large degree. The florist who cultivates and brings to public view flowers of the highest standard of quality will rank above those that are content to move along in the groove that they seem to have been molded in without a single aim to better the taste in floriculture or their condition. The florist who uses his best endeavor to raise the standard of perfection will surely take first rank, a very pleasant thing to take, even if there are not so many dollars in it. He will also have the satisfaction of being cognizant that he has elevated his profession and taken infinite pleasure himself and at the same time received the encomiums of his patrons.

This winter I am sure will alter many florists' views and opinions of the value of orchid flowers. Those that don't use them will lose many good orders that they would have had if they kept a few orchid flowers in stock. We will suppose a grand reception about to take place in one of our large cities. Three fourths of the invited guests are on terms of intimate friendship, each one knows the style and taste of the other. Mrs. B. knows well that Mrs. C. will order the choicest basket of orchids that her florist can put up, Mrs. B. will determine that she can not quite go a basket of orchids, but will go to her florist and order a much more expensive basket of other kinds of flowers than she otherwise would have done if she had not been impressed with the idea that Mrs. B. would order the orchid basket. So in this way the orchid will tend to increase and elevate quality, price and quantity of other flowers instead of rivaling and absorbing the place that other flowers had occupied previous to the advent of the orchid in this country.

I have myself four houses devoted to orchids, and I declare that I am continually adding stock of other flowers such as roses, carnations, violets, etc., and every now and again I have to buy

in all the different sorts and I am getting better prices or I would say putting up much more expensive baskets and other work in the standard kinds of flowers, simply from the fact that at almost every party I have to make from one to five baskets containing more or less orchids. In other baskets containing roses, carnations, etc. I am getting nearly double the prices I formerly obtained, simply from the fact that they have to be made of better quality to compete with those which contain the orchids. My neighbor florists are also doing more and better business every year. There are twelve in this city of 45,000, and every one of them have added this year from one to five houses. There are about eighty-five greenhouses from 75 to 150 feet long in Utica; of course many go off on the five railroads that center here. I think this a pretty good showing for a small city.

I am at present using four houses for orchids and have the roof of the carnation and other houses pretty well occupied, the glass being large, 15 x 18, will of course admit of quite a few orchids overhead without the least damage as far as I can see to the carnations and other stuff, such as poinsettias, bouvardia, etc. The flowers cut from the roofs of those houses are I consider a great gain over a roof without them.

My florist friends do not feel unfriendly to the orchid. If you use them rightly you will find them warm and supporting friends, not given to quarreling with their neighbors but to help them along in their journey through life.

Utica, N. Y.

Black Rust and Black Spot are Contagious Diseases.

The black rust on verbenas, heliotropes, etc., as is now well known, is caused by a minute mite, that can only be distinguished by a powerful microscope and is one of the most difficult pests to contend with in the culture of plants, all remedies seeming to fail.

Last year about this date we picked out one thousand plants of verbenas affected by the black rust, divided them into ten lots of one hundred each, and for thirty days attempted the destruction of the insect with sulphur, tobacco, fir tree oil, Gishurst's compound, pyrethrum, quassia bark, Paris green, Cole's insect destroyer, lime and hot water, using each remedy for each lot. These were systematically and carefully applied without apparently producing the slightest benefit, for the hundred lot to which nothing was applied was no worse at the end of the experiment than those to which the different "remedies" had been applied.

This season we selected with the greatest care only such verberna cuttings as were in perfect health, and by relentlessly throwing out every plant that became affected we have thus far our stock in better shape than it has been in years, which has made us come to the conclusion that as far as is known to us, there is no remedy against black rust, that the disease is contagious beyond question, and that the only way to keep a stock clear is to throw out every plant having the least taint of the disease, so that it may not affect its neighbor.

We have about come to the same conclusion about the black spot on roses, that it yields to no known remedy and that the best thing to do is to pick the affected leaves off as far as is dared to be done. The season has been unusually wet and cloudy in this section and black spot has troubled us more than usual.



Double White Pansy.

That it too is contagious there is no question. The Hybrid Teas such as the American Beauty are, of course, the first to be affected, but we find in a house in which American Beauties are grown with Perles, Sunsets, Papa Gontiers and Mermetts, wherever the American Beauties butt up against any of these varieties for three or four feet they, too, are less or more affected, while away from the Beauties there is not a sign of it; all varieties in the house are in unusually fine vigorous growth and health except the spot on the American Beauties.

PETER HENDERSON.

Jersey City, N. J., Dec. 17.

Talks About Annuals.

Let us discuss the cultivation of the pansy as an annual. The first question that presents itself to our mind is: What strain of seed shall we plant? And this question brings up another: What are the properties of a perfect flower?

Substance of petal is the most important point. However perfect may be the form, however beautiful the color or large the flower, if it is weak and flimsy its beauty is destroyed. The petals must be thick and velvety, a condition which will enable the flowers to keep well after being gathered. The second point is form. The petals must be so disposed as to form almost a perfect circle, yet I think the two upper petals should be a little longer than the others, so as to just break the circle. The margin must be smooth and the petals perfectly flat; not turning up at the edges, which defect

spoils many flowers otherwise perfect. The next requirement which demands our attention relates to color. Whatever the color, it should be clear and pure; with the eye large and distinct. Lastly comes size: Of course it is desirable to have good sized flowers, but size is the least important point of a good pansy.

I believe judges usually adopt the following scale of points: Form, four points; substance, three; color, two, and size, one. If I were to attempt to improve upon this scale, I should say, give to substance four points, or even five; and let us have some good, heavy, velvety pansies.

Referring to my diary I find March 10 has been the average date for planting pansy seed, and May 20 for setting the plants in the open ground. The young plants are treated in the same way as the asters, and are transplanted into beds as soon as the ground becomes dry and warm. The beds are prepared for the reception of these plants as previously described, except that thoroughly rotted cow dung is the only manure used; horse manure should be avoided. Set the plants two feet apart each way, and water thoroughly in dry weather. Almost as soon as the plants have become established in their new position they will begin to bloom; and unless they are closely watched, and all the buds are picked off as they form, the plants will exhaust themselves in producing a few very inferior flowers, and grow very spindlingly.

From the day that the plants are transplanted into the open ground the beds should be examined every morning;

every visible bud should be pinched off and every long shoot shortened; the object in view being to obtain large, stocky plants full of vitality. If this matter is attended to regularly it will only take a few minutes each day, but if neglected even for a day, and the day be a warm one, some of the plants will be sure to flower, which will weaken them and partly undo our previous work. If the plants are thus kept from flowering until cool weather, and then allowed to bloom, the flowers will be of good substance and large size. I do not wish this to be taken as implying that I ever consider the size of the flowers in any different light from that mentioned in my scale of points, but this keeping back process will make large and at the same time heavy and velvety flowers.

After the first of September the flowers of almost all other annuals begin to grow poor, and the first frost practically ends their flowering. But the pansy seems rather to improve than otherwise by any frost that we usually have in September; and it is from the first of that month until the middle of October that a bed of pansies grown as described is in its prime; a time when flowers of all kinds are, I believe, rather scarce. Last fall, after every other flower in my garden had been spoiled by frost, my pansy bed remained for a month in full bloom, covered with an abundance of the most beautiful flowers.

The *Tropæolum*:—Of this extensive genus, including with hardy annuals also greenhouse and herbaceous perennials, three of the annual species chiefly attract our attention; these are:

Tropæolum majus (fall nasturtium).—A well known running species, much used for covering trellises and rustic work.

Tropæolum minus (dwarf nasturtium).—A dwarf species, growing from one foot to fifteen inches in height, and one of the most useful flowers we have; for its compact growth and rich colored blossoms render it an excellent bedding plant.

Tropæolum Lobbianum.—A running species, which may be grown on a trellis, or as a dwarf if the ends of the vines are closely pinched off; otherwise it will cover unnecessary space. The flowers are smaller and more cup-shaped than those of the two preceding species; and are of very brilliant colors.

The *Tropæolum* is easily grown. All that seems necessary is to plant the seed in good soil, see that the plants have plenty of room in which to grow, and keep the soil thoroughly stirred. Sometimes the seed does not germinate very freely and even after it is up the cut-worms destroy many of the young plants; so it is well to sow the seed thickly and thin out when the plants have attained some little size.

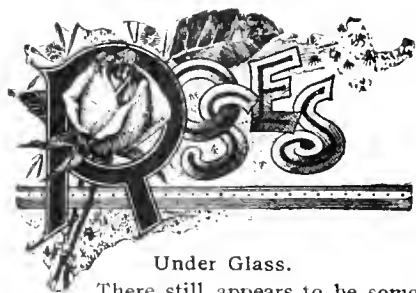
Boston, Mass.

M. B. FAXON.

A Double White Pansy.

This addition to our list of useful flowers for florists' use was exhibited at the rooms of the Massachusetts Hort. Society July 21, and was awarded a first class certificate of merit. A large number of the flowers were tastefully arranged with foliage in a basket, forming a novelty in the line of decoration which attracted a great deal of attention.

The flowers are beautiful clear white, of medium size and good substance. They have long stems and are freely produced. It was exhibited by R. & J. Farquhar & Co., Boston. The illustration is from a photograph sent us by the introducers.



Under Glass.

There still appears to be some trouble from diseases afflicting roses under glass, judging from what some of the growers write me. Some have been feeding very liberally, in fact much too liberally, others thought to try a few degrees more heat to kill the mildew, and probably, though unknowingly, have almost cooked the plants; still others gave liberal waterings, because a growing plant ought to need watering at least once a week, the weather of the present season not being taken into consideration apparently; others again started out by giving their plants enough water to make them all intoxicated and then went to the other extreme by holding them without it till the soil at the roots become just dry, thus choking the plants to death with drought. As far as I can glean from their communications these are a few of the causes of the trouble.

Now to lay down any set rule to follow in any one of these cases would certainly be absurd, as there are so many circumstances to be considered in connection with each and every case quoted above and many others of a similar nature, that I can only give according to my judgment the general principles of plant life and in doing so I trust some items of the same may be found interesting to all who do me the honor to ask my advice on the subject. Many things I shall say will probably be considered repetitions by many of your readers; I can only plead the excuse of necessity in this instance.

Plant life in its wonderfully varied forms is governed by three principal elements: light, heat and moisture. Every climate from the torrid zone to the Arctic regions has a totally distinct class of plant life, suitable to the varied changes of light, heat and moisture contained therein. The rose, according to the best authorities, flourishes best in a climate resembling as nearly as possible our June and September months in the northern states; that being so if we wish to obtain the best results when growing these plants to flower them out of their proper season, we should certainly strive to follow nature's laws as nearly as possible. On going over a record of temperatures for June and September for several years I found the average minimum night temperature was between 54° and 56° and the maximum 76° to 78°. The proportion of light as every one knows during those two months is generally high and of moisture somewhat varied, but I have in my experience always found that the rose, particularly the tea varieties, thrives best in a nicely moistened soil not over wet at any time, nor ever becoming anything like dust dry during the growing season. Nature in all her wonderful storehouse never provides any large doses of fertilizers for the benefit of roses or any other plant, but what it does furnish is done in very minute parcels and under circumstances somewhat different from the usual mode practiced by those who are growing plants under artificial cultivation. And

when we apply fertilizers in any form to plants under glass we can certainly obtain much better results therefrom by giving it in a weak form at intervals as the plants require it than by giving strong doses at once. Again it can be observed by any one who wishes to see it that when the temperatures night and day in the months above named rises much above the figures given, the roses become smaller and if it should continue for any length of time the plants almost invariably stop growing and blooming, and the same law governs them under glass, only in a much more pronounced way, as the plants there cannot get the same atmospheric influence to bear on them *i. e.*, the thorough circulation of air in conjunction with more or less dew at night; on the other hand should a very cool spell occur during these periods, as it sometimes does in conjunction with rain storms, the blooms will not open well and often the plants suffer considerably in health from its effects, first by the sudden check to their growth which stops root action which in its turn produces black spot and other kindred diseases, all of which are caused by the sudden changes from one extreme to another. This certainly ought to teach us that the rose, pliable as it is to our wants, will certainly rebel at any unreasonable treatment we persist in subjecting it to.

In conclusion I would add that after very careful study of this subject, through all my experience in growing roses I have found them always to succeed best where I followed nature's teaching as nearly as possible, consistent with the different conditions of plants in the open air and those under glass, and avoiding as much as possible extremes in either heat, moisture or stimulants, particularly during the fall and winter months, and by giving all the air possible on all favorable opportunities. I do not wish to infer that even under the best possible management a plant or plants will not sometimes become unhealthy, but the chances are certainly much more against them when not properly cared for.

JOHN N. MAY.

Summit, N. J., Dec. 13.

New Roses in England.

Of the roses first generally distributed in this country in the spring of 1887, the majority have of course now been seen very fairly in character, with the result of maintaining the impression made last season that they include some very valuable additions, and constitute 1886-7 a rose year decidedly above the average.

TEAS.

CHATEAU DES BERGERIES (Ledechaux)—A pale yellow tea with a long bud and well-formed flowers; the petals not quite as substantial as might be, but when well grown a pretty addition to the light yellows.

CLAUDINE PERREAU (Lambert) is a seedling from *Souvenir d'un Ami* with very full globular flowers, somewhat similar in color, but very distinct in form; the plant is very vigorous and bushy and the flower stems very stiff, so that the blooms are carried perfectly erect and well displayed instead of being semi-pendulous like those of the parent.

DR. GRILL (Bonnaire).—This is a very pretty tea which was seen to great advantage in Messrs. Curtis and Sanford's nurseries at Torquay. The plant is vigorous and very free blooming; the flowers

well formed and opening easily, of good size and of a most pleasing coppery yellow color, deeply shaded at the base.

DUCHESS DE BRAGANCE (Dubreuil).—Another pale yellow which at one time appeared promising, but which seems rather near *Monsieur Furtado* both in habit and flower.

ELIZABETH DE GRAMMONT (C. Levet).—A bushy plant with open-cupped, short-petalled flowers of a somewhat ordinary shade of pale rose; it is not likely to prove at all valuable.

ETHEL BROWNLOW (Dickson).—The great substance of the petals of this charming novelty has enabled the flowers to withstand the rain and consequently to be one of the most conspicuous teas in the garden during the wet season of 1888. The plant is vigorous, exceedingly free blooming and perpetual, of a pleasing rosy shade with yellowish base and perfectly distinct, and the variety is one that all growers may safely plant.

LUCIOLE (Guillot) produces a bud of wonderful length and of still more wonderful color, but, beautiful as it is, there seems no reason to alter the opinion expressed last year, that it will be only a bud rose. To attempt to describe the color is hopeless, for it is a kind of epitome of all the shades existing among tea scented roses, but there seems to be no two opinions about the beauty of the half expanded blooms, which will be in great demand wherever cut flowers are appreciated.

MME ETIENNE (Bernaix).—Fairly vigorous and very free, a pretty fresh rose-colored tea of good size and form, and, though wanting a finer season to prove it thoroughly, distinct and promising.

MME. SCIPION COCHET (Bernaix).—A variety which makes a good branching plant with beautiful glossy, though not large, foliage, very free flowering and thoroughly autumnal; the flowers are of fair size and of a pleasing rosy yellow color with a deeper yellow base, but the margins of the petals are generally wavy or even crimp, which makes the bloom appear to lack quality.

PRINCESS BEATRICE (Bennett).—A very beautiful and refined flower of rich coppery yellow color, invaluable for exhibition and for cutting generally, as it lasts long in water, of good size and perfect form; the plant grows well and is very free, and the variety cannot fail to take a prominent position in collections of teas.

ROSES OTHER THAN TEAS.

COMTE DE PARIS (Leveque).—A fine crimson hybrid perpetual of great promise, vigorous, a free autumnal and with large well-formed flowers.

DR. ANTONIN JOLY (Besson).—A very large flower of distinct salmon-rose color, vigorous and free, and likely in a fine season to be good.

EARL OF DUFFERIN (Dickson).—Unquestionably the best rose of the year, and a rose that is certain to be universally cultivated. The vigor and freedom of the plant, the rich crimson color of the flowers shaded with maroon, their fragrance and the constancy of their fine form combine to render this variety one of the most valuable dark roses that has yet been raised.

GRAND MOGUL (Wm. Paul).—The cold, sunless season does not appear to have suited this dark crimson rose at all well, and it has not been seen in character; it is, however, vigorous and perpetual.



A PARIS FLOWER BASKET

GRANDIFLORA (Bernaix).—The large-flowered single multiflora makes a gigantic climber, and when covered with its great white flowers is most beautiful. First class certificate Royal Horticultural Society.

JOSEPHINE BURLAND (Bernaix).—A hybrid polyantha very distinct from the miniature Mignonette type, having perfectly formed almost white flowers of considerable size, but solitary; dwarf habit and most free.

LADY HELEN STEWART (Dickson).—This beautiful crimson rose appears to have been well suited by the cool season and has been constantly very finely exhibited. In the garden it has been incessantly in flower both during summer and autumn, and from its erect habit and immense freedom has been most effective. The blooms are of good size, with large smooth petals, always expanding well, and the variety is altogether most reliable.

MME. BOIS (C. I. Levet).—A most attractive addition of the Victor Verdier race, but quite distinct in color; the flowers are very large, well formed, and of great depth, and of a most telling shade of fresh rose color. The plant is vigorous and free and the flowers most constant.

MME. DESIR (Pernet pere).—A large, very full, distinct salmon-rose flower, which in a hot season will probably prove valuable.

MME. DE WIERRE (Leveque).—It is impracticable to continue trailing about

this rose's interminable original appellation, and it will therefore be best at once to employ the above shortened form. The variety is a promising dark rose of good size and form, very fragrant, free blooming, perpetual and a vigorous grower.

MME. HENRI PEREIRE (Vilin).—One of the very dark roses and an exceedingly fine flower; the plant free and very vigorous. It has frequently been very finely exhibited during the past season, and is certainly not a variety to be lost sight of.

MME. JOSEPH DESBOIS (Guillot).—A very beautiful rose of first-rate quality. The habit is sturdy and erect, as in Captain Christy, from which, however, it is totally distinct; the flowers are large, perfectly formed, almost pure white, with a rich flush of salmon rose in the center, and are most freely produced, the variety constituting an invaluable addition to the light hybrid perennials.

MME. TREYVE-MARIE (Liabaud) may be described as a cherry-colored Marie Baumann, not quite so good in quality, but of similar form and more erect, and of so taking a shade as to be well worth growing.

MAT. BARON (Veuve Schwartz) has been a good deal exhibited this year, but is of a deplorably gloomy color.

MRS. JOHN LAING (Bennett) has proved the most constant rose of its color. Every bloom comes perfect and the plant is most vigorous and free. The only

possible objection that can be urged against it is that its color is rather an ordinary shade of rose, but in the autumn when abundant flowers are produced, even this objection does not hold good, for late in the year the color becomes more clear and pure.

SILVER QUEEN (Wm. Paul). A good light rose very much in the way of Queen of Queens, but more pleasing in color.

THE PURITAN (Bennett) has caused little surprise by being out of doors this year a complete failure. The flowers are of such immense substance that it seemed impossible that they could ever expand without very great heat, and the absence of sunshine this year settled the question. As a rose for forcing at a high temperature it will probably be valuable.

Of the 1886 roses the most prominent by far has been the exquisitely beautiful Viscountess Folkstone (Bennett), which seemed to defy the unpropitious season, and developed bloom after bloom in the greatest perfection. Charles Dickens, Clara Cochet, Florence Paul and Her Majesty were well exhibited from time to time, and in the autumn Miss House, which may be described as a greatly improved Bessie Johnson, has been very pretty in its delicate blush color. Mme. Musset and Raoul Guillard are two similar and fairly good reds of Marie Baumann race; Rosieriste Chauvry and Souvenir de Victor Hugo, two very free deep reds of Victor Verdier family; Max Singer, the hybrid multiflora, has proved a most useful red climber; and Princesse Amedee de Broglie makes a striking pillar rose, its immense growth being clothed with large flowers of a distinct shade of telling rosy carmine. Mention should also be made of Mme. Villy, that all growers may avoid it, for it is without doubt one of the most worthless roses that has been sent out for years; worse, if possible, than the similar Joseph Metral distributed by the same raiser two years earlier. Among the teas The Bride has been far in advance of all contemporaries and is already a very general favorite; Ye Primrose Dame, Reine Nathalie de Serbie, Comtesse de Frigneuse and Claudius Levet have been fairly good, while the pretty colored bud varieties Marquise de Vivenis and Souvenir de Victor Hugo have been very charming in their way. Edmond de Biauzat makes a handsome plant with glossy and abundant foliage, and the flowers are of a very fresh rose color, but they are not large and are too irregular.

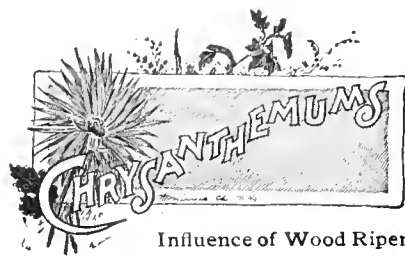
Thus it will be seen that among the novelties of each year there are some that can already be confidently recommended, and it is only to be hoped that there will be found as many varieties above the average of interest among the Continental hybrids distributed here last spring as among those sent out the year before.—*T. W. G., in London Garden.*

A Paris Flower Basket.

Nothing is more striking to the commercial observer in foreign countries than the wide difference in the classes of plants and flowers sold, from the cheapest to the dearest, while at the same time equally large business is done in the finest stores in one country with plants never so used in another.

The handsome flower basket here shown which was photographed for us in Paris, is an instance of this kind. Four polyantha roses in bloom in 4-inch pots covered with moss filled the basket, which was fifteen inches across at the

bottom and twenty-eight inches high. Very dwarf dahlias and other plants are used in same manner. The basket re-tailed at 30 francs (\$7.50).



Influence of Wood Ripening on Buds and Blooms.

Paper read by Mr. E. Molyneux at the Chrysanthemum Conference, Sheffield, England.

The ripening of the wood of chrysanthemums is a very important matter in the production of high-class blooms; indeed, without perfectly ripened wood it is impossible to have blooms of the finest quality. What I mean by perfectly ripened wood is wood that is ripened sufficiently by natural means as the result of correct treatment throughout. Sun is essential for the maturation of the wood in all stages of the plant's growth; but in some seasons and districts there may be too much of it and in others not enough, and we must make the best of both circumstances. Wood-ripening does not consist in merely hardening the wood, but storing it with nutriment for the blooms. Forcing the ripening, so to say, by drought or in other ways, contracts the sap-vessels unduly, and impedes the free flow of nourishment for the blooms at a critical time. Those persons who practice such methods in cultivation act erroneously and fail to produce the best blooms.

Seasons vary so much, that the locality in which growers reside is a very important factor in the production of good or bad blooms. Circumstances very often occur which cultivators have no control. They cannot, for instance, excel during a cold, wet summer in a low, damp district. The higher and drier the locality the harder the wood, and the greater the disposition of the plants to set buds prematurely. This is a difficulty some have to contend with, myself among the number. Where buds are persistently formed long before the time we wish to see them, much valuable time is lost in the growth of the plants in their various stages during the time the buds are forming. Moreover, high and dry localities result in narrow petals and rather small, but solid blooms; while reverse conditions promote broader petals and larger blooms. Where the locality is high, the air, although much rain may be registered, is drier than in the lowlands, and it is this dry air that hastens bud-formation which gives so much trouble to some growers. The proper time to "take" buds of some varieties is upset altogether under such conditions. They form either too early or too late for producing the finest blooms.

The question of dew is important. During a hot and dry summer, as in 1887, the absence of dews in high lying districts is much felt. Dew invigorates, and its scarcity or absence has been the cause of many small blooms. We can regulate and control moisture in the soil, but have practically no power over it in the atmosphere. We may do our best and may do some good, but after all the most we can do is but little in providing compensation for what we may consider the shortcomings of nature.

When the growth of plants is soft and gross, the latter particularly, and the wood pale green instead of brown in color, a want of ripeness is evident. Such plants produce blooms large in diameter, but they are usually lacking in depth and solidity of the petals. This is more noticeable in the incurved section than in the Japanese family. Blooms which are composed of extra broad florets are seldom if ever as solid as medium-sized blooms having narrower petals; neither can the former be considered of such high quality as those deeper in build, and consequently more firm and more likely to stand fresh a longer time. Blooms having unusually broad florets often show decided roughness and irregularity, and the grower is not able to present such blooms in the same highly finished condition as when the petals are narrower and the flowers more solid.

The present season is considered to have been a bad one for the growth of large high class blooms, especially those of the incurved section. This is borne out by the examples which have been staged at various exhibitions. It cannot be said they have been of the highest quality, or as they have been shown in some past seasons. Some stands have been extra heavy in the size of the blooms, owing to the immense breadth of the florets, but many of the blooms lacked depth in proportion with diameter consequently they were not so solid as they would have been had the blooms been deeper in proportion to their breadth. After a summer like the past we expect to see large blooms which lack solidity and closeness of the petals—a condition which is mainly owing to the unripened state of the wood. I am not in favor of extra large blooms of the incurved section, which are only large in one way—diameter—as they lack depth and solidity. My idea of an incurved bloom is one not great in diameter alone, but deep and firm in build, consequently of a better shape. Such blooms are never seen with extra broad petals, but they carry what is known as a good "shoulder." Such blooms as I have described are the result of perfectly ripened wood and are seldom met with after a season like the past. Where prizes are offered for the premier incurved bloom in a show, this honor generally falls to a specimen of the character indicated, and not to a flower which has merely two points in its favor—extra width of bloom and broadness of florets. Blooms which are generally chosen for this honor are usually remarkable for solidity and high finish, which qualities cannot be obtained from blooms which have extra broad and thin florets. The ripened character of the wood is the all-important factor in the production of blooms of the highest possible standard of excellence, and the complete maturation we seek is obtained, as far as seasons allow, by careful treatment from the beginning.

The method of culture I advise as the most likely to obtain the desired end is that of growing the plants in a regular steady manner, not by fits and starts, such as applying water regularly for a time, then neglecting the plants for a few days. Regular attention to potting is important, as if the plants are allowed to become root-bound many roots must be broken in the process, causing a check to the steady progressive growth that is so desirable in plants for producing the finest blooms. Crowding the plants in their younger stages of growth is most hurtful, and antagonistic to the development of vigorous wood and foliage.

Sufficient space should always be allowed the plants. When in their summer quarters they should be arranged in an open position where the sun can shine directly on them, but the position should be protected from north, east and south-westerly winds, which are often so destructive early in the season when the plants are first placed out of doors. Many plants have been so injured by a loss of their lower leaves during May that they have never recovered the desired strength. South-westerly winds, which are prevalent during the end of August and the early part of September, often do much damage to the buds and leaves where the plants are much exposed. The flower buds and their peduncles are at that time so tender that they are apt to be whipped about and so cause a check to the development of the blooms.

Some growers set too much store on plants with extra thick stems and gross green leaves. These are perhaps pleasant to look upon during the summer by the uninitiated, but when the test of good culture comes to be looked for, blooms possessing the desirable characteristics are generally missing. Very vigorous plants, as a rule, produce blooms devoid of solidity and other essentials.

It is possible to have the plants in some seasons ripened too much in dry localities. The summer of 1887 was a most trying one to contend with in high and dry districts, where not a drop of rain fell for eleven weeks, and scarcely any dew during a greater part of that time. The remedy in this case is that of shading the pots from the sun during the hottest parts of the day, by boards set on edge in front of them, fern, cocoa-nut fibre, or mats. Such means keep the roots in a cooler state than they otherwise would be with the sun shining directly on the pots most of the day. In the absence of shade to the pots the roots on the sunny side are almost sure to be killed, and we all know what that means. Plants in low-lying districts invariably produce the broadest florets and the largest, but not the most lasting blooms. The advantage of those which are more solid in character is often exemplified when the two kinds have stood two days at a show and borne the heat of crowded rooms. Those which are firm remain so longer than those which are more or less loose. The latter quickly show an "eye," which proves their weakness and non-sustaining form.

Flower-buds are generally produced upon plants at a more regular time in the various stages of growth when the plants are steadily, hence properly, ripened than when they are not, except in very high and dry localities, where they ripen their growth too early, causing premature bud-formation, which must be counteracted as much as possible, though it cannot always be prevented. Growers in the extreme southern counties often experience too early bud-formation, caused by a too early ripening of the wood, which their northern brethren are strangers too. This generally occurs with the whole of the Queen family, the plants forming flower-buds at times between the end of March and the end of April. This causes a serious interruption in their future growth, and prevents the formation of buds at the time most desirable for the district in which the grower resides.

AMERICAN POMOLOGICAL SOCIETY.—The twenty-second biennial session of this society will be held at Ocala, Fla., February 20, 21, 22, 1889.



ROCK WORK, WITH WATER-FALL AND SMALL LAKE IN THE CONSERVATORY AT FOREST HILL CEMETERY, UTICA, N. Y.

An American Chrysanthemum Society.

The chrysanthemum continues to grow in popularity, and with the rapid increase in the number of varieties, large numbers originating here, in addition to those imported, some organized action must be taken to avoid a hopeless muddle in their nomenclature, and means taken to eliminate the duplicates and poor varieties which are too frequently found in lengthy lists. In England this is in the hands of a society entitled the "National Chrysanthemum Society," and America is now in need of a similar organization. The American Society should work in harmony with other similar societies, but should be a separate organization, composed entirely of Americans who understand the requirements of the American grower.

Conservatory Decoration.

This is a matter to which insufficient attention is paid by the commercial florist. Every florist who does a general trade has a "show house" which is too frequently anything but a credit to him. There is room for great improvement in this direction. He cannot expect to have all his houses as carefully arranged for effect as a private or park conservatory, but he should use more effort to make his show house an exposition of his skill in both the growing and arranging of

plants. Our illustration of a rock work in the conservatory at Forest Hill Cemetery, Utica, N. Y., is presented to stimulate ideas on this matter. Can you not arrange some nook in your show house to be equally attractive?

New York Notes and Comments.

The Florists' Club will give a dinner on or about January 10, on which occasion they expect to welcome brethren from Philadelphia and Boston. A general good time is anticipated, and it will doubtless do something towards reducing that troublesome surplus. In future the meetings of the club are to be held in the evening instead of the afternoon, as heretofore. This gives opportunity for attendance to those confined to business during the day. But it is an inconvenient change to many out of town members, who, after an evening session, will be compelled to go home on the owl train. One member said he would prefer an evening session, because in that case he could get a night off once a month to attend the club, but this is a point of view which will present itself to few married men. At the next meeting Mr. Samuel Henshaw will give a paper entitled "A Plea for the Old-Fashioned Herbaceous Border," which, it is hoped, will be followed by a discussion. So far there has not been so much discussion as

one would wish; the members seem a little bashful about getting up and speaking their minds. It is a pity, too; so many of them are able to give much valuable information, and exchange of ideas should be a marked feature at such meetings. Let every man come prepared to have his little say on any topic that comes up, and we are not likely to hear that the society is losing its grip.

Quite a little excitement was caused recently by the rumor that a great magnate of the seed trade had opened a milliner's establishment. Two large windows in his Cortlandt street store were filled with fine artificial flowers, but there were no visible bonnets, and closer examination showed that the silk and muslin blossoms were arranged in baskets, or on plaques and easels. They were arranged with strands of Florida moss, and most women would call them just lovely. This seems to be opening hitherto unknown channels to the flower trade. Since the florists deal so largely in ribbons, and the seedsmen in artificial flowers the only thing left for the growers to do is to raise heavy crops of Paris bonnets.

All through December the growers have been complaining of poor crops, the result of bad weather. This has been the case especially with roses; they suffer both in quantity and quality. Very good American Beauties were in.

Mr. Nash, of Lake View, N. J.; has been sending in very fine ones. The Nyack growers still seem to be keeping up their reputation, but New Jersey roses are never far behind.

Joseph Towell, of Paterson, has a house full of *Alegatiere* carnations, forming a fine sight. This seems a very prolific variety, and it throws up such clean stems. A very satisfactory grower; it seems likely to take a prominent rank among scarlet carnations. There is very little to choose between Orient and Clifton among crimson; both are very satisfactory in growth. Clifton is the deeper color and seems a trifle larger.

Silver Spray, a white carnation of comparatively recent introduction, was seen to great advantage as grown by H. E. Chitty, of Paterson. Mr. Chitty, who is rather a specialist in carnations, intends to depend on this sort for his main supply of white ones next season. It is vastly superior to Hinz's White in floriferousness, and the color is remarkably clear and pure; habit good. Also her very good sort shown by the same grower is Frederick Johnson, clear deep rose pink, flower round and shapely. Floriferousness is a good thing. Some large and handsome pansies at the same nurseries were from Herr's strain; they showed a lot of very good dark ones, as well as mottled forms.

Dark colored chrysanthemums are not nearly so much in demand as the lighter ones, say some of the florists. White, yellow and pink are most called for, and the pink people demand (and have failed to get in this flower) is that of a La France rose. Evidently Mr. Fewkes is about to fill a long felt want with Mrs. Fottler.

Towell of Fifth avenue and 47th street, recently arranged a fine decoration for a reception at the house of Col. Brice, of campaign fame. The work consisted chiefly of flowers and was very elaborate.

Mr. George Such, of South Amboy, who at one time had the finest collection of stove and decorative plants in the trade, has now retired entirely from commercial horticulture, though growing a few orchids for pleasure. A good many fine plants formerly in his nurseries have found their way abroad, especially some fine nepenthes, of which the collection was unique and valuable. Some of these plants are now at Rose Hill Nurseries; others, including some seedlings of great merit, were purchased by English firms, who named and introduced them. It seems a pity that such a fine collection should have been dispersed. Mr. Siebreeht, who has a weakness for the nepenthes, says that his admiration for them had its origin in a visit to Mr. Such's collection.

English holly is very plentiful and very fine; small trees, three or four feet high, are imported by leading florists and make a very good show.

EMILY LOUISE TAPLIN.

Long Island Plant Notes.

BY WM. FALCONER.

GLONINIAS.—Pot up a few tubers for flowers in March and April. They like warm quarters and near the light, but always shaded from sunshine.

CALCEOLARIAS.—Don't let greenfly get a foothold on these plants so long as you can get lots of fresh tobacco stems for \$10 a ton. I take a lot of fresh stems, chop them up moderately small, say three or four inches long, with a hatchet, and lay

these in between the pots on the benches. The vapor from some fresh stems laid on the hot water pipes and sprinkled with water now and again is very destructive to greenfly and thrips. Calceolarias will stand a good deal of smoke without hurt, but cinerarias are most as tender as heliotropes. Rose geraniums and show peleroniums are also peculiarly subject to greenfly.

POLYPODIUM AUREUM as a window plant. When it comes to grafting rhododendrons and propagating the rarest and choicest of trees, friend Trumpey of Cassino, ranks first among men, but when it comes to growing ferns as window plants we must give precedence to Mrs. Trumpey. In her parlor near the window and in a large, deep pan is growing a very fine old specimen of this handsome fern, with arching fronds ten to fourteen inches wide and two and a half to four feet long. She has had it for years, and during all this time as a window plant in winter and a piazza plant in summer.

MY LAPAGERIAS are now throwing up fresh shoots from the root. I had some ferns and moss growing around the roots but as soon as I expected lapageria sprouts I plucked away everything else so that slugs should have no quarter there, and in order to still further frustrate the voracious little fellows I placed a collar of cotton wool on the ground around the neck of the shoots. Slugs won't cross cotton wool.

SLUGS ARE very fond of an orchid flower spike, and they usually graze it off near the base. But as it won't pay to take pains to grow a nice lot of odontoglossums or phalænopsis and feed the flower spikes to the slugs we had better put small rings of cotton wool around the base of these spikes.

"THE TONE of this correspondence, and the intimations which it contains, should make those persons who know something about their own gardens congratulate themselves that they are not entirely in the hands of their gardeners." This from an editorial note in *Garden and Forest*, Dec. 19, and referring to a case in which a gardener in England had probably been squeezing Sander the orchid man for commission. Brother Stiles, it is unfair to punish the innocent with the guilty. We repudiate the stigma. Please remember you will catch more flies with honey than with vinegar.

Dracænas.

After hearing or reading the very able essay delivered by Mr. Chas. Ball, at the last convention in N. Y., many of our florists will want to go into dracæna growing and a few hints may not come amiss.

Nearly all varieties of dracænas are propagated by cuttings, a few from seeds. To get up a stock in the shortest possible time, old stems or canes should be laid on a bench or bed with brisk bottom heat on the sand, and for covering I have always found sphagnum moss to be the best material; the canes are not so liable to decay, and the little cuttings, sprouting from the eyes, grow up faster than in sand covering, and are also less liable to damping off. Another advantage of the sphagnum is, that it seems to keep the life in the canes for a longer time compared with those bedded in sand and we are enabled to get cuttings as long as there are any dormant eyes on the canes.

As soon as large enough the young

sprouts are cut off close to the stem and treated as any other cutting. Many of them will have formed little roots into the moss and all those may be potted at once. It is not a very unusual occurrence that about one-half of the cuttings, or even a larger percentage will decay in the sand-bed before rooting, if the propagating bench is not just right, and I know a number of florists who had rather buy young plants of dracænas than to be bothered with their propagation. But it is a very simple matter to root every cutting, however tender it may be, by inserting them into water instead of sand. There is nothing new about the idea, but I have not seen it anywhere in print, and I know there are not many florists aware of the fact that you never lose a dracæna cutting inserted in water, be it a large fleshy top of *D. draco* or the very smallest of the terminalis tribe. Whether small bottles are used or large pans, covered with wire screens with half inch or inch meshes, the same result will be obtained. Leave them in the water until roots are well developed and an inch or over long, then pot them, being careful not to break any of the brittle roots and set in a warm place, where they will grow right ahead and do far better than plants rooted at the same time in sand. The propagation may go on anytime in the year with the same success, but in spring and summer months, roots will form in a shorter time than in midwinter, unless you have a very warm house to place your cuttings in.

After the plants have had their first repotting, more light and air should be admitted, especially for colored varieties, which should be grown in full light in order to get the variegation and color out distinctly. Rich sandy loam with a little peat or leaf mould and perfect drainage is essential to the welfare of these plants and I would rather grow them in an outdoor frame during the summer months, than in a close house, unless I wanted some tall plants of the green varieties, which could be hardened off later in the season.

JOHN B. KELLER.

Growing Tulip Bulbs.

Mr. Geo. Klehm, Arlington Heights, Ill., a grower of cut flowers for the Chicago market is growing his own tulip bulbs with success, and he thinks he is making a considerable saving over importing them.

GARDENIAS AND ROSES.—Would be pleased to have some of your readers give through the *FLORIST* the requirements necessary for the successful flowering of the gardenia, and the treatment given imported hybrid roses just received, the wood being somewhat shriveled. By so doing you will oblige me and perhaps many other readers of your valuable journal.

R. F. M.

FUCHSIAS.—I have a fine lot of fuchsias in 4 and 5-inch pots that for the past two months have brightened my houses and proved very useful for decorative work. They were struck late last spring, potted into 2½ inch pots and subsequently planted outdoors in a well manured border. We kept the buds picked off until September, when the plants were lifted, potted as above and started to growing for all they were worth. I didn't have over one hundred and fifty this season, next year I hope to have 500 grown in the same way for fall use.

A. W. M.

Baltimore.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED By a gardener fully competent in propagating and all greenhouse work. Address: C. cure American Florist, Chicago.

SITUATION WANTED By a first-class florist as foreman and propagator in commercial place. Address: E. E. PARSONS, care Cottage Hotel, Kansas City, Mo.

SITUATION WANTED Any person who is in want of a seedsman or florist, can find one who knows his business, by addressing (stating wages given) ENEIGA, care American Florist, Chicago.

SITUATION WANTED As gardener and florist, as first or second man in private place preferred; aged 23; experienced; disengaged Feb. 20. Address: H. E. P., American Florist, Chicago.

SITUATION WANTED As gardener; thoroughly experienced in forcing all kinds of vegetables; capable of taking charge of the best gardens, temperate and willing. Box 3, care American Florist.

SITUATION WANTED By a first-class gardener (private or commercial); 10 years' experience in all branches of gardening. Orchids and roses especially. German, married, no children. Address: HANS VON OERTZEN, Mont Clair, N.J.

SITUATION WANTED Commercial establishment or private place in want of competent and acting manager practically posted on all matters pertaining to the business. Address for all particulars: A. R., American Florist, Chicago.

SITUATION WANTED As gardener, private or commercial place; 12 years' experience; German; single; capable of taking charge of first-class greenhouses. Best of references. Address: CARL WAGONEK, 44 Chestnut St., Harrisburg, Pa.

SITUATION WANTED By a practical florist gardener; German; single; 7 years in United States. Good propagator; good taste for floral work. Seed trade experience in New York houses. State terms and wages. ERNEST, City Pump House, Cheyenne, Wyoming Ter.

SITUATION WANTED By a gardener and florist with 22 years' experience in the United States growing plants and cut flowers. Fine growing treatment and propagation of roses a specialty for 8 yrs. in several states. Commercial place preferred. Single; age 42 years. Good references. Address: A. GERGEN, florist, care American Employment Co., 79 Beville Street, New Orleans, La.

WANTED—Salesmen. By the oldest, largest and best-known Nurseries in the West. Permanent positions; good pay. outfit free. STARK NURSERIES, Louisiana, Mo.

WANTED—A young man who has had good practical experience in the cut flower business. Must have first class references. Address: W. C. Beckert, 47 Federal St., Allegheny City, Pa.

WANTED—To correspond with a young man of good character, that can furnish at least \$1,000, and that knows how to successfully manage the flower and plant business, and is not afraid of work. No others need write. Address: OSCAR WRIGHT, Moundsville, W. Va.

WANTED—Practical florist who understands the propagation and growing of bedding plants and roses; who has also had some experience in carpet bedding, and fully capable of taking charge of three greenhouses. Single man preferred. References required and given. To such an one a permanent situation will be given. Address, stating compensation required. S. S. COBB, Supt. Mountain Home Cemetery, Kalamazoo, Mich.

FOR SALE—Floral store. Trade 4 yrs. established, or will accept partner with little capital. Call or address: F. W. LOCKYER, 320 31st St., Chicago.

FOR SALE—Two beautiful places in the fruit belt of Northern Texas. One place of 11 acres, with 2000 bearing grape vines, fine house of 6 rooms, wine-house, poultry house, orchard. Price, \$3,500, \$1,500 cash, balance in four annual payments, 6 per cent. The other of 8 acres, 2 squares from court house, house of 6 rooms, up and down stairs, fine peach, apple and plum orchard, with rich black loamy soil; good for florist or nursery business. Never failing water. Price, \$4,000. For more particulars, address P. O. Box 23, Denton, Texas.

FOR SALE. Florist business in a large and growing city in New York State. Paying and increasing business. valuable real estate. 10,000 square feet of glass, thoroughly heated; large stock Palms, Roses, etc., etc. Satisfactory reasons for selling. A fine opportunity for a young man. Advertiser will take interest as silent partner with responsible party. Terms and particulars upon application to ROSES, care American Florist, Chicago.

WANTED. About 4,000 feet of SECOND HAND 4-inch Greenhouse Pipe. Send net cash price to SCHILLER & MAILANDER, Cook Co., NILES CENTRE, ILL. Mention American Florist.

E. BENARD, ORLEANS, FRANCE. ROSES ON THEIR OWN ROOTS A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS For particulars apply to E. BENARD, JR., P. O. Box 100, San Diego, Cal.

JOHN CURWEN, JR., GENERAL GREENHOUSE STOCK AND ROSES. Villa Nova P. O., Delaware Co. Pa. Money Order Office: Bryn Mawr, Pa.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates. Price Lists to applicants. Address: WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS.

EVERY FLORIST SHOULD HAVE OUR TRADE DIRECTORY Price only One Dollar.

AMERICAN FLORIST CO., 54 La Salle St., Chicago.

NOVELTIES IN ROSES.

Also the leading forcing varieties. Teas, Hybrid Teas and Hybrid Perpetuals, and Novelties in Chrysanthemums.

Tabernaemontana \$6.00 to \$8.00
Stephanotis Florida, per doz. \$2.00 and \$3.00
Gardenia Radicans and Florida 8.00
Bouvardias, from 2.5 and 4 inch pots, \$2.50 and 3.00
Carnations—Sunrise, P. De Graw, President Garfield, Queen of Whites, Century, Hintze's White. Open ground plants 8.00
Trade list mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

MUSHROOM SPAWN. Best Mill-truck, of unsurpassed quality.



Can be thoroughly relied on to produce a fine crop of the best Mushrooms. Our stocks are the largest and freshest in the country. Quality guaranteed the BEST IN THE WORLD. Why spend your money on doubtful quality, when you can get the best at a price that will please you? We sell at rock-bottom prices for first quality spawn.

By mail, post-paid, 22 cts. per pound, Five pounds for \$1.00. By express, Ten pounds for \$1.20, Fifty pounds for \$5. One pound of spawn will plant a space 3 feet by 4. Special prices for LARGE quantities. 21 N. Thirtieth St., John Gardiner & Co., Philadelphia, Penna.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

THE DINGEE & CONARD CO., ROSE GROWERS, WEST GROVE, PA.

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below samples reduced one-half in size.

DEBIT. <i>Jan 10 1889</i>		
	<i>John Smith</i>	
100	Verbenas	3 -
50	Geranium	4 -
		7 -

CREDIT. <i>Jan 10 1889</i>		
	<i>Richard Roe</i>	
500	4-inch pots	5 -
175	2 1/2 "	5 -
		10 -

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field—and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.10.

AMERICAN FLORIST CO., 54 La Salle Street, CHICAGO.



Boston.

It is many years since flowers have been so scarce for the holidays as they have been this year.

At the present writing it is too early to give a full report of the state of the market, but from present indications the holiday demand will be much in excess of the supply. This is due principally to the unprecedented season of dark sunless weather. The most surprising thing about it is the quality of the roses, carnations, etc., which have been brought in in such unfavorable weather, for much of the stock that is being received is very fine. Smilax is plenty with but little demand. Adiantum ferns are very scarce and will continue so for some time. Lily of the Valley is somewhat inferior, but on the other hand Roman hyacinths and tulips are unusually good.

In roses the drift of popular favor seems to be toward those varieties of recent introduction, such as the Beauty, Gontier and Bride. There are but few Jacqs in this market as yet, no hybrids and but very few Bennetts. Violets are in short supply and seem to be more popular than ever.

The sale of holly increases here every year. That received this season is of better quality than usual. Mistletoe is to be seen in but few stores, most of the florists having become completely disgusted at the useless condition in which it almost always arrives. Improper packing is the cause of all the trouble.

The Gardeners' and Florists' Club will hold its annual supper in latter part of January.

N. F. McCarthy has been elected to the Boston City Council.

M. H. Norton received a unique and comforting Christmas gift.

E. Sheppard, of Lowell, entertained a number of prominent florists at his home recently.

Fred Mathieson did likewise. The potting shed was supplied with all the appointments of a first class hotel.

David Allan wants to know whether Clematis Davidiana is a new species. S.

Holiday Prices.

I read with interest A. W. M.'s article on this subject and your reply in the December 15 FLORIST. I agree with A. W. M. that flowers should be for sale at such prices that people of moderate means can afford to buy them, and with you that flowers should be sold for all they will bring, as profits are small enough already and holiday seasons too short not to make the best of them.

What the trade needs is a supply of flowers that can be sold at low prices, but at good paying profits to the grower and dealer. Why cannot such flowers as calendulas, bouvardia, etc. be grown in large quantities and offered at prices that

will insure sales to the millions? My experience is that people (I am speaking now of the general public) do not so much want roses as they do flowers of any sort that are bright, pretty and low in price. A glance at our flower markets will show that roses, carnations, violets and a few other sorts practically make up all holiday flowers offered; and these flowers are within the reach of comparatively few persons.

As the florist says we want this rose trade and have a right to it at the best profit we can obtain for our goods; but do we not want also the trade of those thousands who will buy fifty cents to one dollar's worth of flowers even if they only get what costs twenty-five cents provided their money will buy a bunch; when they could not afford to purchase three roses for two dollars, even if these same three roses cost the dealer fifty cents each.

What is needed are flowers for all at prices within the reach of all; but all flowers must show a good profit.

Boston, Mass.

M. B. FAXON.

Baltimore Odds and Ends.

One of the most notable events of recent occurrence here, was the banquet at Renner's hotel, Dec. 6, in honor of Gen. Adam E. King. The decorations were very pretty, about two hundred plants, palms, ferns, etc., were tastefully arranged and formed a perfect forest of foliage. The unoccupied side of a long table was arranged with smilax and roses. A mound three and a half feet in diameter and about four feet in height, stood in front of the presiding officer, the national colors in satin ribbon being fastened at regular intervals around the design and drawn to a point above it; the design was composed chiefly of roses and Roman hyacinths. On the same table there were handsome baskets of Papa Gontiers and Brides. The center of another table was adorned with a balloon of roses between three and four feet in height. There were numerous other baskets of roses, and a couple of tables were decked with chrysanthemums. The chandeliers were handsomely festooned with smilax, and upon the napkin ring of each guest there rested an exquisite Gontier bud. As to the menu—"not knowing we can't say."

We were the large and attentive audience the other evening at an impromptu discussion on the airing of greenhouses in winter and it recalled a statement made by President Halliday at a meeting of the florist club, to the effect, that he regarded any man as a lazy man who didn't air his houses more or less every day. The subject is one on which florists hold very different opinions, and some of our best growers regard it as absolute folly to air a house, no matter how hot it gets, if there is a cold wind blowing out doors. Nevertheless we believe that the admis-

sion of a little fresh air every day results in healthier stock. When I took charge here last March, I found the roses badly used up with mildew; every ventilator was securely nailed up, the former superintendent having depended for fresh air on what might penetrate between the glass. My first work was to get the ventilators in working order, and they have been used every day up to date. I soon got rid of the mildew and haven't had a touch of it since. My experience in this case only served to strengthen my previous convictions, that the admission of fresh air to rose houses every day—if only for five minutes—is one of the best preventives in the world for mildew.

Amongst a collection of statice seen recently I particularly noted S. Halfordii and S. profusa. They are both good varieties for fall and winter flowering, the former is the strongest grower, but profusa is the most abundant bloomer, and the best for winter use. The average commercial grower might do worse than handle a few plants of it. Like others of its class it likes a rich, light soil, with plenty of water during the growing season; the temperature of an ordinary greenhouse will be sufficient, but to get them at their best all the varieties should be grown in a temperature of 60° to 70°.

A. W. M.

Postage on Flowers.

The question was asked of Mr. Peter Henderson at the convention in New York if the reduction in postage included all flowers. He replied, "Yes, there is no doubt about it, because the law says 'plants and cuttings,' and you can not make any difference between the flowers and the cuttings." The postmaster here demands the old rate of sixteen cents per pound. How is it in other places?

C. F. G.

MR. ALFRED ANDERSON, Portland, Oregon, sends us a bloom of Souvenir de la Malmaison rose which he states was cut December 1 from a plant budded September 15 last. Mr. Anderson worked twenty-one different varieties of roses on to a wild rose last September. The Malmaison was the first to bloom; the other growths show buds of all sizes, the American Beauty standing second in point of advancement toward blooming. This certainly shows a quick growth from the bud.

OWING TO the illness of our correspondent Mrs. F. A. Beuson, her usual letter on floral fashions does not appear in this issue.

THE NEW YORK GRAPHIC for December 19 devotes a full page to views in the greenhouses of the United States Nurseries at Short Hills, N. J.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for January 15 issue must REACH US by noon, Jan. 9. Address

THE AMERICAN FLORIST CO., Chicago.

Carnations.

Mr. Whittle in an article in your last number claims his new carnations purchased last year were not equal to representation. May not soil, location, or something of that sort have something to do with his failure? We grow Huize's White and E. G. Hill to perfection, but can do nothing with Alegattiere and Scarlet Gem. Why is it? Can Mr. Whittle explain? JOHN G. ESLER. Saddle River, N. J.

LARGE TUBEROSE BULBS.—Mr. J. C. Vaughan, the Chicago seedsman, sends us two Pearl tuberosa bulbs of immense size. With the attached sets one weighed 11 ounces and the other 12 1/2 ounces.

GEO. MULLEN,

17 CHAPMAN PLACE, (near Parker House), BOSTON, MASS. WHOLESALE AND COMMISSION DEALER IN Fresh Cut Flowers & Florists' Supplies. Flowers carefully packed and shipped to all points in Western and Middle States. Orders by Telegraph, Mail, Telephone or Express promptly attended to.

A. S. KIMBALL,

WHOLESALE CUT FLOWERS, Shipping Trade my Specialty. Consignments Solicited. 170 LAKE STREET, CHICAGO.

ROSE BUDS WHOLESALE. THE OAKLEY ROSE HOUSES

VARIETIES:

Beauty, Bennett, La France, Mermel, Bride, Niphotos, Perle, Sunset, Papa Gontier, Bon Silene.

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WHOLESALE FLORISTS, TO THE TRADE ONLY. ALL CUT FLOWERS IN SEASON. Write for price list. Consignments solicited. WIRE-WORK made to order, and in stock. 27 Washington Street, CHICAGO.

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J. L. DILLON, BLOOMSBURG, PA.

WHOLESALE CUT FLOWERS & FLORISTS SUPPLIES

What have you to sell? What can we sell you? Let us know by return mail. THE WISCONSIN FLOWER EXCHANGE, 133 Mason Street, MILWAUKEE, WIS.

Wholesale Markets.

Cut Flowers.

Table with columns for city (New York, Boston) and date (Dec. 26), listing various flower types and prices.

Table for Boston, Dec. 26, listing various flower types and prices.

Table for Philadelphia, Dec. 26, listing various flower types and prices.

Table for Chicago, Dec. 28, listing various flower types and prices.

WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE 67 BROMFIELD ST., BOSTON, MASS.

N. F. McCARTHY & CO., WHOLESALE FLORISTS

and Jobbers in Florists' Supplies, 1 MUSIC HALL PLACE, BOSTON, MASS. Also entrance from Hamilton Place through Music Hall. We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

W. F. SHERIDAN, Wholesale & Commission Dealer in CUT FLOWERS, No. 50 W. 30TH ST., NEW YORK. Orders to be shipped will receive prompt attention.

CHAS. E. PENNOCK, WHOLESALE & FLORIST, 38 So. 16th Street, Philadelphia, Pa.

Thos. Young, Jr., & Co., Wholesale Florists,

INCORPORATED 1885, 20 W. 24th St., NEW YORK

CUT FLOWERS.

We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,

PROMPT SERVICE,

GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEP'T,

Telegrams, 88 State, CHICAGO. Letters, box 688.

W. S. ALLEN,

WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

LaRoche & Stahl,

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1237 Chestnut Street, PHILADELPHIA Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co., WHOLESALE ROSE GROWERS,

Telephone 957. WASHINGTON, D. C. Roses planted for Winter 1888-9. Souvenir de Woolton, The Gem, Puritan, American Beauty, Annie Cook, Mad. Cusin, Papa Gontier, The Bride, La France, Bennett, Perle, Mermel. And other Standard sorts

EDWARD C. HORAN, WHOLESALE FLORIST,

36 WEST 29TH STREET,

The Bride, Mermel, and Am. Beauties, SPECIALTIES. NEW YORK.

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FISK & RANDALL, WHOLESALE FLORISTS,

116 & 118 DEARBORN STREET, CHICAGO.

Store Open Night and Day.

M. OLSEN,

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WELCH BROS., WHOLESALE FLORISTS.

165 Tremont Street BOSTON MASS. We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States. Return Telegram is sent immediately when it is impossible to fill your order.

News Notes.

WINONA, MINN.—Smith & Darling, florists, have dissolved partnership.

MEMPHIS, TENN.—John Pearson has added two new rose houses 80x20.

DENVER, COL.—Braun & Satterthwaite, florists, have dissolved partnership.

STOUGHTON, MASS.—J. H. French has added a new house 110 feet in length for roses.

SIoux FALLS, DAKOTA.—J. J. Schumacher built three new houses the past summer.

SAN JOSE, CAL.—F. E. Keffel, nurseryman and florist, has sold out and left for Europe.

EVANSVILLE, IND.—Florist J. D. Carmody proposes to hold a chrysanthemum show here next year.

PLEASANT HILL, MO.—G. M. Kellogg has built a new house 100x19 and arranged to heat by steam.

MILWAUKEE.—Mrs. L. M. Grover has taken a window at 601 Grand avenue and will conduct a retail business.

WASHINGTON, D. C.—Louis Krazer has purchased the stock, greenhouses and lease at 162 H street N. E., formerly owned by Wm. Furnage.

NEVADA, MO.—The annual meeting of the State Horticultural Society held here December 5, 6 and 7, was a very interesting one. Fully 500 were in attendance.

FRANKLIN GROVE, ILL.—The Horticultural Society of Northern Illinois will hold its twenty-second annual meeting here January 9 and 10. A very interesting programme has been prepared.

NEW BRITAIN, CONN.—George Scott, for thirty-four years the leading florist and nurseryman here, died December 11, aged 64 years. He was a native of Scotland. Mr. Scott was well known to eastern florists.

SPRINGFIELD, ILL.—At the wedding of Senator Cullom's daughter the decorations were entirely of chrysanthemums. Florist H. L. Phelps supplied a very large number of both plants and flowers for the occasion.

ATLANTA, GA.—At West View Cemetery is a magnificent bed of chrysanthemums. It is in the form of a triangle 150 feet from corner to corner and contains about a thousand plants. When in bloom the bed is a gorgeous sight.

PROVIDENCE, R. I.—At a meeting of the Horticultural Society held Nov. 28 a moderate sized audience listened to a paper by Mr. J. H. Bourn entitled "A review of the horticultural products of the year including the novelties in chrysanthemums, carnations, hybrid and tea roses." A small display of chrysanthemums and roses was made.

NEWARK, N. J.—At the chrysanthemum show held here Charles Bird was the only exhibitor of chrysanthemum plants. Mr. Bird exhibited 85 standards including 43 varieties. His collection contained 800 plants representing 160 varieties. Pitcher & Manda exhibited about two dozen varieties of handsome cut blooms. The exhibition was a decided success, about \$1,000 was realized. Negotiations for another show next year are already in progress.

COUNCIL BLUFFS, IOWA.—The thirteenth annual meeting of the Western Iowa Horticultural Society was held here Dec. 11 and 12. Florist L. A. Casper of this city, read an able paper on landscape gardening. Officers for the ensuing year were elected as follows: President, S. W. Wilson, Atlantic; Vice President, W. K. Follett, Malvern; Secretary and Treasurer, Geo. Van Houten, Lenox; Ass't Secretary, L. O. Williams, Council Bluffs.

Trade Correspondence.

We are not particularly given to the use of bad words, but when we address a communication to an individual or firm, requesting information on some matter and fail to get any reply, we certainly find it difficult to suppress a spirit of profanity.

During the year we have written to scores of florists on a variety of subjects, some of those to whom we wrote were advertisers in the FLORIST and our letters had reference merely to their advs., yet, although we invariably enclosed return postage, we failed in very many cases to receive any reply. Now, we are not parsimonious, it isn't the loss of the two cent stamp that worries us, but the failure to receive a prompt acknowledgement of our letters. We are perfectly content to receive a reply per postal card or any other convenient medium, so we get it. We think florists as a rule are inclined to be a little careless in this matter; no thorough business man ever neglects to answer his correspondence promptly, and when return postage is enclosed, failure to reply is specially discourteous.

Right here we wish to deliver a kind valedictory. Volumes might be written on trade abuses, and there is no subject we like better to tackle. Our bias in this direction has, on several occasions resulted in bringing upon us the contumely of men to whom we hadn't the least idea of referring. We have the welfare of the trade as much at heart as any florist in the country; our sole desire is to elevate and improve it, and we believe that a liberal airing of loose methods or doubtful practices, tends to their abolition. We do not consider that a man's prominence in the trade should exempt him from criticism if any of his business methods are questionable.

We have said our say on this point and shall endeavor hereafter to accept all unjust reproach in the spirit recommended by James Whitcomb Riley when he says:

"Never talk back to a feller that's abusin' you—
Jest let him carry on, and rip and cuss and swear;
And when he finds his lyn' and his dammin's jest amusin' you,
You've got him clean kerflummuxed and you want to hold him there."

Baltimore, Dec. 12, '88. A. W. M.

Exaggerated Illustrations.

Mr. John Lane, Chicago, sends us a few words on this subject. He deprecates the tendency to "improve" upon the subjects when engraving for catalogue purposes. As a remedy he recommends the use of photo-process plates, which are made direct from the photograph and must be just like it (the style of engravings so frequently used in the FLORIST), believing that plates of this kind will give confidence in the truthfulness of the illustration. He commends the action of Mr. J. C. Vaughan, Chicago, for the use of such plates in his catalogue and expresses the hope that others will see fit to follow his example in this

respect. He concludes with the declaration that all exaggerated descriptions and untruthful illustrations should at least be abandoned by all members of the Society of American Florists.

WHITE FLOWERED BLEEDING HEART.—Can some reader inform me where this can be obtained in America? They are common in Europe, but have so far been unable to obtain any here. J. B.

FOR THE SPRING CATALOGUES.

The makers or agents of the following goods desire them inserted in all the forthcoming Seed Catalogues and will be glad to supply free electrotyped (any size) and descriptive matter. Write them for terms, etc.

GEM CULTIVATOR AND MODEL SEED DRILL.
THE AVERY TRANSPLANTER
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For 1889

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to last year's customers

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54 La Salle Street, CHICAGO.

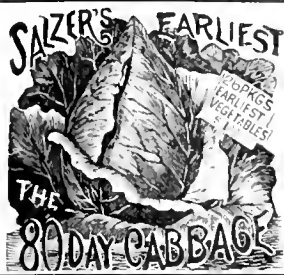
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FARM ANNUAL FOR 1889

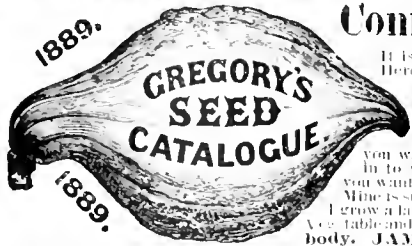
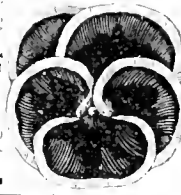
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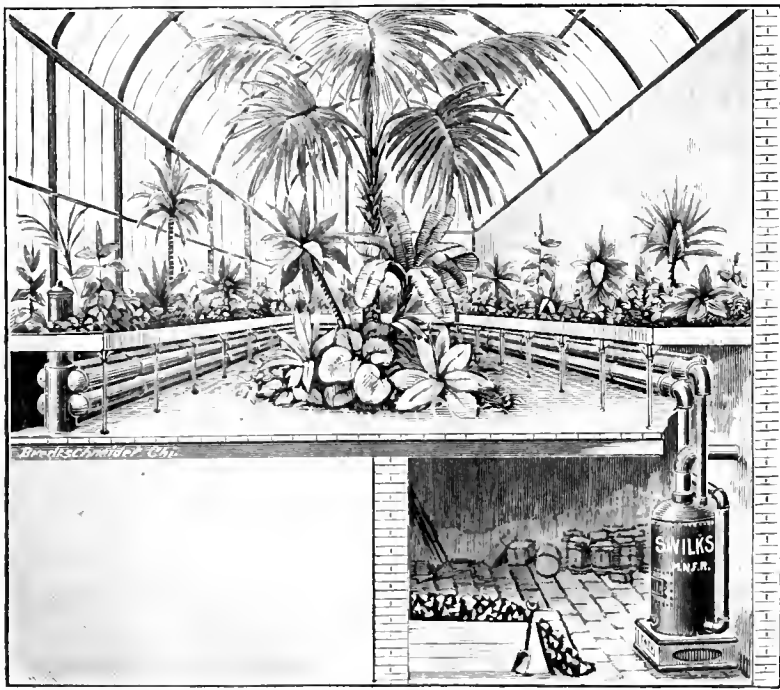
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Come, Fellow Farmers!
 It is the good things and the new things you want. Here is a Catalogue full of them! Do you want tested seed, raised from stock selected with extreme care, grown from the best strains, and from the originators? I am to have mine just such. Do you want new varieties that are really good, and not merely novelties? I am to have mine such. Do you want seed that the dealer himself has faith enough in to warrant? I warrant mine, as see Catalogue. Do you want an exceptionally large collection to select from? Mine is such. Do you want them directly from the grower? I grow a large portion of mine—few seed-men grow any! My Vegetable and Flower Seed Catalogue for 1889 FREE to everybody. **JAMES J. H. GREGORY, Marblehead, Mass.**



SAVE COAL BY USING THE CELEBRATED WILKS' WATER HEATER, FOR HEATING Poultry Houses, Greenhouses, Stores, Dwellings, Bath-tubs, etc.
 RUBBER PACKING FOR GREENHOUSE PIPE CONSTANTLY ON HAND.
 SEND FOR CIRCULARS.
S. WILKS MFG. CO., Monroe and Clinton Sts., CHICAGO, ILL.

DON'T SPREAD YOUR MONEY ALL AROUND THIN. PUT IT ON THICK, AS YOU DO MANURE, IN JUST THE RIGHT PLACE. TAKE A PAGE IN THE AMERICAN GARDEN FOR THE SEASON AND YOU WILL GATHER IN THE SHEKELS SURE. WRITE TO E. H. LIBBY ABOUT IT, 751 BROADWAY, NEW YORK.

Overhead Heating.

Seeing an article on overhead heating in the last number of the FLORIST I will give my experience in that direction. Our place is heated by steam with pipes below, except in two houses, each 20 x 60 feet, which have all the pipes overhead. In piping the house we used 1 1/2-inch pipes along the ridge of each house to the farther end, then branched and returned under glass on both sides, pipes about ten inches below glass on the sides; used 1-inch pipe for returns. In this way all pipes except the one large one in each house are returns, which all connect and enter the bottom of boiler as one pipe.

We can keep the temperature of these houses regulated better than the others. When the temperature above the benches and about the plants is 55° it is always from 3° to 5° lower under the benches. In these houses we have roses, carnations and general greenhouse stock, and find the plants are about as healthy in these two houses as found anywhere. We also find that it requires but three fourths the amount of fuel, because a smaller number of pipes will do the work. On the coldest night we have had this season, from 8° to 10° above with a strong wind, as we had never tried to see what we really could do we turned on all pipes and with four pounds of steam got the houses up to 85° in less than one hour.

In the two houses we have two pipes each 1 1/2 inches in diameter and eight pipes each one inch in diameter, making ten pipes for a glass surface of 10 x 60. I have heated with all systems of hot water and steam, but find this the most economical and satisfactory that I have yet seen.

INO. C. NOLAN.

Salina, Kans.

INQUIRER.—To obtain pure whale oil soap apply to any florists' supply house. Tell them you want the pure article and that you are willing to pay what it is worth. We know of no brand which may be relied upon as being absolutely pure. You are near the coast, why not go "whaling" yourself.

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Florists' and Market Gardeners' Seeds.

CATALOGUE READY IN JANUARY.

Still on hand, a supply of **BOUQUET GREEN** at \$1.00 per 100 lbs. **WREATHING**, fresh made, \$1.00 per 100 yards, or \$5.00 per 1000 yards. **DYED BOUQUET GREEN**, fine for all flower work, 35 cts. per lb.; \$30.00 per 100 lbs.

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5000 ELECTROTYPES FOR ILLUSTRATING FLOWERS, SEEDSMEN, AND NURSERYMEN'S CATALOGUES CHEAP.

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Our descriptive illustrated Catalogue for 1889, of 100 pages, containing description and illustrations of a complete assortment of the most popular plants for the Conservatory and Garden, also Bulbs, Roots, Vines, Shrubs, Flower and Vegetable Seeds, Ornamental Fruit and Shade Trees, is mailed FREE to all Applicants. Established, 1850. Satisfaction guaranteed. 25 Greenhouses.
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A. H. HALLENSLEBEN, Konigsberg, (Germany), Vegetable Seeds.
Catalogues of Spring Bulbs, Seeds, Florists' Supplies, Porcelain Flowers, Rustic Work, etc., FREE to all applicants IN THE TRADE.

SPECIAL OFFERS:

	Per 1000	Per 100	Per doz
Roman Hyaciuths, Standard Size	\$28 00	\$3 25	
Extra Selected	31 00	3 50	
Paper White Narcissus, large bulbs	11 00	1 25	.25
Grandiflorum, large bulbs	13 00	1 50	.30

Our Improvement on the Old Variety: Earlier, more vigorous, and larger flowering.

CHINESE NARCISSUS OR "SACRED LILY," (TRUE.)

White with yellow cup, fragrant, free flowering, forces well in water or light sandy soil, in a few weeks, can be started any time during the winter. VERY DESIRABLE. Baskets of thirty bulbs, \$3.50. Per 100, \$30.00; per 100, \$10.00; per doz. \$1.50.

LILY OF THE VALLEY, true BERLIN pips, best for forcing. Per 1000 Per 100 Per doz.

10 original cases of 2,500 bulbs, \$24.00 11 00 1 25

Extra strong Dutch clumps 15 00 2 75

SPIREA JAPONICA, strong Dutch clumps 40 00 5 00 .75

TUBEROSES, PEARL, Extra Selected 15 00 2 00 .30

Second Size, 3 to 4 inches in circumference 12 00 1 50 .20

For prices on Immortelles, Cape Flowers, Milkweeds, Pampas Plumes, etc., see my ad in issue of DEC. 15th TERMS: NET CASH, subject to market fluctuations



NEW DWARF DOUBLE TROPAEOLUM "DARKNESS."

There is nothing among the STRICTLY NEW plants so well adapted to a retail trade as this. The quality and color of the flower will cause it to

SELL AT SIGHT.

Buy half a dozen NOW, and they will give you an abundant stock for spring sales. It is of low bushy habit, bearing an abundance of very double, dark velvety flowers.

PRICE. 25 cts. each; Six for \$1.25.

MYRON A. HUNT,
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OUR SEEDS NEVER HAD SEA-SICKNESS.

Fresh Home-Grown Seeds of **SELECTED PRIMULA OBCONICA.**

We are the largest growers, and have the finest strain of Primula obconica in this country, and have harvested an unusually fine crop of seed, which we offer to the trade at \$1.50 per 1000. Special rates for large quantities.

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NEW ENGLAND NURSERIES, MONTVALE, MASS.

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The best "ALL THE YEAR ROUND" greenhouse plant in cultivation. Specially adapted for florists. New crop seed 1888, own selection. Trade price list on application to

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Trade offer of Irish grown Daffodils in June.

THE HELP FOR CUT FLOWER WORKERS AND FLORISTS, FLORAL DESIGNS,

PUBLISHED BY **A. BLANC AND J. HORACE McFARLAND,**

Has been kindly received, although not a few weeks it hits a weak spot, and helps those who sell floral work in many ways. 162 royal octavo pages, including 50 plates of designs, printed in soft tints and rich tones, and a complete treatise on floral work. Send for it, or send for a prospectus if you want to know more about it first. The extracts below show how it has impressed subscribers:

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Supply the Trade with
SEEDS, BULBS,
And all kinds of
FLORISTS' SUPPLIES.

Price List Free on application with business card.

	Per 100
Ampelopsis Quinquifolia, 1 year.....	\$ 8 00
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Calla lina, 3-inch pots.....	6 00
Deutzia gracilis, 3 yr, strong	15 00
Dracena Indivisa, 2½-inch.	8 00
Echeveria Secunda glauca, 3-inch.....	5 00
Gardenia Florida, 12 inches high.....	10 00
Gardenia Radicans, 2½-in..	10 00
" " variegata, 2½-inch pots.....	10 00
Geraniums, all leading varieties.....	4 00
Hydrangea Hortensis, 3, 4 and 5-in.	\$8, \$12 and 25 00
Ipomoea Noctiphylon.....	4 00
" " Palmata, strong garden roots.....	15 00
Laurus Nobilis, 3-inch pots.....	15 00
Lygodium Scandens, 3-inch.....	5 00
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Lycopodium or Christmas Greens, Holly and Mistletoe. Price on application.	
Roman Hyacinths, Narcissus, Tulips, etc.	

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12th Catalogue now ready.

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BULBS AND PLANTS
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MOON FLOWER..... per 100, \$3.50
GERANIUMS, 2½-inch pots, strong..... 5 00
SMILAX, 2½-inch pots, strong..... 4 00
See October 15 issue, page 120.

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CUTTINGS OF MULTIFLORA JAPONICA,
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at \$10.00 per thousand, by
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Also nice thrifty CARNATION PLANTS, 2-in.
Buttercup, best yellow..... \$3.00 per 100
Hinze's White, best white..... 2 00
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TUBEROSE BULBS

At the following rates f.o.b. New York. Special prices on large lots:

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Excelsior Pearls.....	\$2.00	\$15.00
Dwarf Pearls, fine stock.....	1.75	14.00

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Ampelopsis Veitchii, \$8.00 per 100.

FINEST PRIMULA AND PANSY SEED.

Apple Geranium Seed, \$3.50 per thousand, Fresh.

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— WHOLESALE DEALER IN —

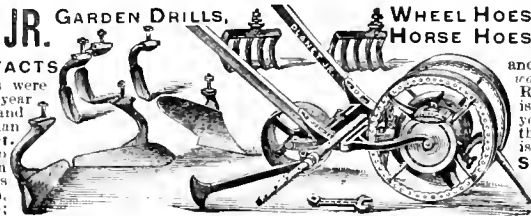
Seeds For the Florist Market, Garden-er and Farmer. **Requisites** Such as Baskets, Im-mortaltes, Grasses, Mosses, Boquet Pa-pers, Pampas Plumes, etc **Bulbs** For the Green-house or Gar-den.

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That these Tools were more popular last year than ever before, and are this year than last. Another Fact. Not one in ten who ought to own them knows it. Such as do not own them, ask those who do;



and examine them at work, they bear it well. Read our catalogue; it is free and reliable. If you have no use for these Tools, our advice is, do not buy them. **S. L. ALLEN & CO** Patentees & Manufc. 129 Catharine St. PHILADELPHIA.

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Die Erziehung der Pflanzen aus Samen.
EIN NEUES HANDBUCH IN DEUTSCHER SPRACHE
FÜR GAERTNER UND FLORISTEN.
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Preis bet Post, \$3.25.
Zu verkaufen bei J. C. VAUGHAN, CHICAGO.



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Mildew on the Rose

Try **GRAPE DUST.**

Sold by the Seedsmen.

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at the following prices for CASH:

	Per 100
HYACINTHS, White.....	\$2.50
" Red.....	2 00
" Blue.....	2 00
" Pink.....	2 25
" Yellow.....	2 50
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CROCUSES, Named.....	.25
HYACINTHUS CANDICANS.....	2 00
25,000 open ground H. P. Roses, 2 ft. cheap.	
Plants, Bulbs, Etc., by the thousand.	

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Moonflower, true, white seed; Amaryllis John-son, Hallii, Sarniensis; Regina, Rosa, Treaten; Atamasco; Candida, Cooperi; Cinnamon vine bulbs. Seed Ampelopsis Veitchi and Royal, Tuberoze and Climbing Hydrangea; Eulalia, \$4 per 100. To trade only. Mrs. J. S. R. THOMSON, Sparlanburg, S. C.

FAIR HILL TERRA COTTA WORKS

JACOB C. CASSEL,
No. 2341 N. Seventh St., PHILADELPHIA.

Illustrated Catalogue free upon application.

Daily Record of Work Done at the Lincoln Park Greenhouses, Chicago, 1888.

Jan. 1—Tem. morning 14°, noon 14°, evening 12°. Wind WSW. to W. Sunday.

2—Tem. 6, 12, 18. W. to SE. Celebrated New Year's day.

3—Tem. 2, 18, 20. WNW. to SE. Finished potting rooted cuttings of *Achyranthes metallica*. Potted rooted cuttings of *peperomias*, *ruellias* and *Begonia nigricans*. Propagated an additional lot of *Begonia semperflorens rosea*. Cleaned young coleus plants.

4—Tem. 36, 41, 35. SE to N. Propagated additional lots of *Achyranthes metallica*, *nierembergias* and *Cupilea platycentra*. Took one-half of *hyacinths* from frames to houses. Repotted old *fuchsias*.

5—Tem. 34, 35, 34. E. to SE. Propagated another lot of Earl Roslyn *geraniums* and *Achyranthes aurea*.

6—Tem. 38, 41, 35.—W. to N. Propagated white leaved *viocas*, *lobelias* and some *begonias*. Potted rooted cuttings of *Begonia Saundersonii*. Arranged *primulas*.

7—Tem. 34, 31, 30. W. Repotted *calceolarias* into 4-inch pots. Cleaned coleus.

8—Tem. 22, 30, 20. NW. Sunday.

9—Tem. 12, 29, 24. NW. Commenced potting rooted cuttings of second lot of Mt. of Snow *geraniums*. Spread manure on lawns. Shifted plants in No. 6.

10—Tem. 10, 15, 8. SW. to W. Finished potting rooted cuttings of second lot of Mt. of Snow *geraniums*. Repotted Mme. Phitzer *geraniums* into 3-inch pots. Commenced pricking seedling pansies in boxes. Propagated last lot of Mt. of Snow *geraniums*.

11—Tem. 8, 2, 2. WNW. to WSW. Same as yesterday and cleaned plants in houses.

12—Tem. 10, 22, 26. SE. Potted rooted cuttings of *fuchsias*, *salvias* and *Alternanthera aurea nana*. Continued pricking seedling pansies in boxes.

13—Tem. 4, 0, 6 below. WSW. to W. NW. Potted rooted cuttings of *Alternanthera aurea nana*. Topped little *geraniums*.

14—Tem. 2 below, 16, 11. SW. to NW. Propagated second lot of *Sautolina incana*. Potted rooted cuttings of *Begonia semperflorens rosea* and *Cuphea platycentra*. Continued pricking seedling pansies in boxes.

15—Tem. 14 below, 3 below, 10 below. NW. Sunday.

BOUVARDIA PRESIDENT CLEVELAND is receiving much favorable comment at the hands of English growers. They express great surprise that such a good thing should come from America with so little "blowing of trumpets, etc." How modest we are!

Rooted Carnation Cuttings.

Orders NOW taken for rooted CARNATION CUTTINGS of 20 of the leading varieties, to be ready for delivery in EARLY SPRING. Prices on application.

TUNIS DE PEW, NYACK, NEW YORK.

OUR NEW TRADE DIRECTORY Contains over 6,000 Names of (Live) Florists, nurserymen and seedsmen, in the United States and Canada. PRICE ONLY ONE DOLLAR. AMERICAN FLORIST CO., Chicago.

New Carnations.

L. L. LAMBORN, WM. SWAYNE, pure white, PRIDE OF KENNETT, dark crimson.

Orders booked now for Spring delivery of these popular new varieties. Send for price list. ROOTED CUTTINGS of other leading sorts of Carnations.

I make a speciality of growing Carnations. Stock is true to name, and free from disease.

P. O. Box 226. WM. SWAYNE, KENNETT SQUARE, PA

CARNATION CUTTINGS.

YOUR TRADE SOLICITED.

HINZE'S WHITE, E. G. HILL, LA PURITE, BLACK PRINCE, MRS. CARNEGIE, ROBT. CRAIG, CHESTER PRIDE, CRIMSON KING, EDWARDSII, PORTIA, GRACE FARDON, SUNRISE, AND OTHER GOOD VARIETIES.

My stock is exceptionally fine and healthy; cuttings will be well rooted and guaranteed true to name. Send for complete list and low prices. Satisfaction assured.

Special bargain on Hinze's White in quantity.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

100,000 VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

FINE POT PLANTS, \$2.50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000.

NO RUST OR MILDEW.

Fast light, and satisfaction guaranteed. Send for Circular.

CARNATIONS.

Having increased our facilities for propagating, we hope to be able to fill all orders for plants or rooted cuttings. Our list comprises only the best Winter Blooming varieties.

J. L. DILLON, BLOOMSBURG, PA.

NOW IS THE TIME TO ORDER ROOTED CUTTINGS

of *Verschaffeltii* and all the leading varieties of COLEUS. Price, 90 cts. per 100; \$7.50 per 1000.

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100,000

ROOTED CUTTINGS OF CARNATIONS of all the leading kinds, ready after January 1st. Having built last summer a house 100 feet long for that purpose, I am ready at any time to supply the trade with any quantity wanted. Send for trade price list.

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Chrysanthemums.

Choice and new varieties at low prices. Trade List now ready.

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VERBENAS.

Perfectly clean, per 100, rooted cuttings 50c.; transplanted \$1.00; from pots \$2.00; named \$3.00. Satisfaction guaranteed. Address

W. B. WOODRUFF, Westfield, N. J.

CARNATIONS.

ROOTED CUTTINGS OF

Edwardsii, Scarlet Gem, Phila. Red, Crimson King, Fascination, De Graw, La Purite, etc., \$1.25 per 100. Portia, Duke of Orange, Chester Pride, Peter Henderson, Mrs. McKinsey, etc., \$1.50 per 100. The Century, Robt. Craig or Garfield, Grace Fardon, Grace Wilder, Sunrise, etc., \$2.00 per 100. Buttercup, Field of Gold, Dawn, Fancy Andalusia, Mrs. Cleveland, etc., \$3.00 per 100.

PLANTS in 2-inch rose pots at double the above rates. Pups when we have them at one-half these rates. Wm. Swayne, L. L. Lamborn (will sell plants only), \$10.00 per 100. Pride of Kennett, fine crimson (plants only), \$8.00 per 100.

NOTICE.—We offer the following discounts on pips, rooted cuttings or plants: 500, 5 per cent off; 1000, 10 off; 2000, 15 off; 3000, 20 off; 4000, 25 off; 5000 or over, 30 off. TERMS always CASH. Send for circular. W. R. SHELMORE, Avondale, Pa.

ORDERS TAKEN

For Rooted Cuttings of CHRYSANTHEMUMS—Elaine, Fantasia, Mary Morgan, Mad. De Maje, Guernsey Nugget, Mad. C. Audiguer, Jessica, Tragedie, Gen d'Or, Source d'Or, Fair Maid of Guernsey, late white, King of Crimson, Moonlight; Metallica Begonias. \$2.00 per 100.

W. W. GREEN SON & SAYLES, WATERBURY, N. Y.

GET YOUR VERBENAS FROM HEALTHY STOCK.

I have the NEW MAMMOTH, and all the very best varieties grown for the Florist Trade now ready. (Only first-class varieties kept in stock.)

I shall be able to supply 25,000 good, strong ROOTED CUTTINGS weekly up to May 1, 1889.

CARNATIONS, ROSES AND PANSIES.

A fine healthy stock to select from. Send for my Wholesale Price List before placing your order elsewhere.

FRED SCHNEIDER,

WHOLESALE FLORIST, WYOMING CO., ATTICA, N. Y. Mention American Florist.

Bouvardias, Roses, Etc.

BOUVARDIA BOCKII, the finest pink variety	Per 100
yet sent out, 3-in. pots	\$15.00
" " 2-inch pots	8.00
" " Vreelandi and A. Neuner, 2-in.	6.00
" " Leiantha, 3-inch, fine	5.00
ROSES, fine collection, 2 1/2-inch, fine	4.00
VERBENAS and COLEUS, 2-inch	2.00
Rooted Cuttings of Coleus and Verbenas	1.00

FALL LIST NOW READY, AND WILL BE MAILED FREE TO ALL APPLICANTS.

Address GEO. THOMPSON & SONS, LOUISVILLE, KY.

ROOTED CUTTINGS

COLEUS OF 1888—Robert Craig, J. C. Vaughan, M. A. Hunt, Pres. Cleveland, W. H. Williams, Peter Henderson, R. J. Halliday, John Saul, John Thorpe, Wm. F. Dreer, Wm. C. Wilson, J. N. May, \$3.00 per 100; 2-inch pot plants \$10.00 per 100.

COLEUS—Mikado, Tokio, Kressi, Harry Harold, Louisa Beck, J. Goode, Mrs. Hunt and Rag Carpet, \$1.50 per 100; 2-inch pot plants \$4.00 per 100.

COLEUS, 25 OLDER SORTS—\$1.00 per 100, \$8.00 per 1000; 2-inch pot plants \$3.00 per 100, \$25.00 per 1000.

Price list of Surplus Stock mailed free.

I. N. KRAMER & SON, MARION, IOWA.

GROW VERBENA PLANTS FROM SEED.

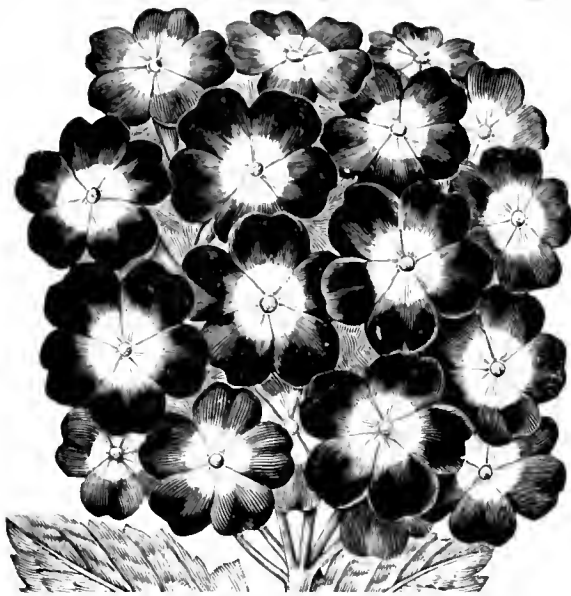
A number of leading florists prefer decidedly to grow Verbenas from seed. Seedling plants produce healthier growth and are more easily handled than from cuttings. Our New Crop of

MAMMOTH VERBENA SEED

is now ready, grown from stock seed we saved from named plants procured in 1886 WHICH WE GUARANTEE TRUE. The flowers are of mammoth size and of brilliant colors of all shades, from brilliant scarlet to pure white, showing large contrasting colored eyes.

- Choice Mixed Seed trade pkt. 50c.; 1/4 oz. \$1.25; 1/2 oz. \$2; 1 oz. \$4
- Smilax Seed, new crop. trade pkt. 50c.; 1 oz. \$1.50
- Centaurea Gymnocarpa. 1000 seeds 60c.
- Centaurea Candidissima 1000 seeds 75c.
- Mignonette Machet, the best for pots trade pkt. 30c.; 1 oz. \$1

SEASONABLE FLOWER SEED LIST of New Crops now ready and mailed to all applicants in the trade.



MAMMOTH VERBENA.



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STOCK FOR FLORISTS.

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| | Per 100 |
| Alyssum, double. | \$2.50 |
| Ageratum, four sorts. | 3.00 |
| Alternantheras, two sorts. | 3.00 |
| Begonia rubra, strong, 2 1/2-inch. | 6.00 |
| " flowering sorts, 2 1/2-inch. | 5.00 |
| Fuchsias, double and single. | 4.00 |
| Geraniums, double and single, 2 1/2-inch. | 3.00 |
| Hellotrope, four varieties, 2 1/2-inch. | 3.00 |
| Lantanas, six varieties, 2 1/2-inch. | 4.00 |
| Smilax, strong, 2 1/2-inch. | 3.00 |
| Salvias, six sorts, 2 1/2-inch. | 3.00 |
- Fine, healthy stock. Standard sorts. Good packing. Address

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ROSA RUGOSA.

ZOCHER & CO.,
HAARLEM, HOLLAND,

can offer the plants of the above at following low rates, per 100:
1 year, \$2.00; 2 years, \$5.00; 3 and 4 years, very strong, \$12.00.

LILY OF THE VALLEY.

Fine crowns, \$5.00 per 1000.

TUBEROUS BEGONIAS.

Large erect flowers, very fine. per 100, \$ 6.00
Extra selected, very large—superb. 12.00
— CASH WITH ORDER —

PLANT GROWERS. You can gain no better pay than write at once for list of 35 sorts Verbenas, all best attractive colors, the cream of many hundred seedlings of '88 from true Mammoth and other best sorts. They are remarkably vigorous, forming plants rapidly. Rooted cuttings of each separate, and best named Mammoth ready any time. Seed of this superb strain produces an unusual percentage of bright salable colors, offering a most profitable means of getting up a good stock for spring. Prices and full cultural directions sent.

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500,000 CUT HARDY FERNS.



FANCY. DAGGER.

These ferns are from 10 to 20 inches in length, of a beautiful dark green, and will keep for several weeks. They are used for Bouquet work, filling flower baskets, vases, &c., &c., and are also used extensively for decorating church altars for which they cannot be excelled.

\$1.50 per thousand Ferns.

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Long, clean fibre, dry, \$1 per bbl., or six bbls. for \$5.

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CARNATIONS! ROSES!

Rooted Cuttings of Carnations ready by Jan. 20 and after. The best sorts. Prices low.

ROSES.

Young plants of
MERMET, X X X
BRIDE,
X AND PERLES from 2 1/2-inch pots.
Ready in February and after. Write for prices.
E. M. GIDDINGS, Corfu, N. Y.
P. S.—Healthy stock, and well rooted.

DOUBLE WHITE PRIMULAS.

Fine plants from 3-inch pots. Per 100 \$ 9.00
" 4-inch pots. 12.50
BOUARDIAN, strong roots for propagating, in five varieties. 4.00
GERANIUMS, strong plants from 2 1/2-inch pots 3.00
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Actors, Pansies, Sweet Peas, Nasturtiums, and Danvers Onion. ESSAYS—Annuals and Their Cultivation, 10 cents—Garden Vegetables, 10 cents. Both, and Catalogue, 10 cents, if you mention this paper.
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SEND ORDERS NOW FOR
WHEAT SHEAVES,
Immortelle and Cape Flower Designs
And all Florists' Supplies,
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FLORISTS AND NURSEKYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants: such as ferns, etc., if used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

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SURPLUS STOCK.

WE HAVE GOOD HEALTHY STOCK OF THE FOLLOWING PLANTS TO OFFER:

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| Ageratum, White Cup, 3-inch. | \$1.00 per 100 |
| Alyssum, double, 2-inch. | 2.50 " |
| Begonia Metallica, 2-inch. | 3.50 " |
| Rose Geraniums, 2 1/2-inch. | 2.50 " |
| Geraniums in var., 2 1/2-inch. | 2.50 " |
| Cypripes Platycentra, 2-inch. | 4.00 " |
| Cinerarias, 2 1/2-inch. | 2.00 " |
| Hellotrope Mad. Blondey, 2-inch. | 3.00 " |
| Calla Lilies, 4-inch. | 8.00 " |
- Correspondence solicited.

J. W. DUDLEY & SON, Parkersburg, W. Va.

Baltimore.

Our recent chrysanthemum show was a success and the success was entirely the result of excellent management. We don't for a moment mean to disparage the excellent display made by our florists, but we feel like giving "to Cæsar the things that are Cæsar's," and the committee entrusted with the administration of affairs on the above occasion can compliment themselves on the fact that their efforts resulted in one of the most satisfactory meetings held by the Maryland Hort. Society for a long time.

Speaking about exhibitions I am reminded that the plant and fruit show held lately in Wilmington was not quite satisfactory to all concerned. Of the judges selected for that occasion three were from this city; of those three, one was prevented from attending by sickness, the other two got to Wilmington, but two or three hours later one of them was recalled to Baltimore to attend his daughter's death bed; the third remained but during his stay he was not very favorably impressed with Wilmington hospitality. He was not offered the most commonplace civilities and had not only to defray his traveling expenses, but in addition had to furnish his own dinner, supper, etc. It is but fair to assume that this lack of courtesy was not intentional, and if the Wilmington brethren desire to get competent judges for future exhibitions they will guard against a repetition of such discourtesy hereafter. I have the honor of being personally acquainted with the gentleman referred to and I know that it was not a matter of dollars and cents with him; it was not the expense incurred that annoyed him, but the lack of hospitality with which he was treated. A. W. M.

November 29.

NEW BEDDING COLEUS "SUNBEAM."

Bright dazzling pink & scarlet, edged yellow; medium height, stout jointed, and close branching. Selected from a large collection of seedlings of 1888. A clump of 25 plants the past season grown with all the old bedding varieties and most of the new, arrested the attention of all who saw it; and the universal verdict was the "brightest and most effective bedder of all." Somewhat dull in winter but all summer brighter than "Queen Victoria," and not stiff and coarse like that variety. Every florist should try it. One plant 25c., 3 for 50c., 8 for \$1, free by mail.

R. W. HARGADINE, Felton, Delaware.

VERBENAS.

OUR VERBENAS ARE PERFECTLY HEALTHY.

Table listing stock plants and rooted cuttings for Verbenas with prices per 100 and per 1000.

ROSES.

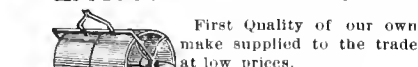
Table listing various rose varieties like Hybrids, Tea, Mermets, Cook, Adam, Souy, etc., with prices per 100 and per 1000.

COLEUS, from pots Best collection, per 100 \$4.00; per 1000 \$35.00.

Trade List of florist stock on application.

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LAWN ROLLERS.



First Quality of our own make supplied to the trade at low prices.

FRANK WHITNALL & CO., Milwaukee, Wis.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

PLANTS.

Carnations for Winter Blooming; good, strong plants from the open ground, of the following varieties:

ROBT. CRAIG, SNOWDON, PRES. GARFIELD, SNOW WHITE, HINZE'S WHITE. Price, \$10.00 per 100.

Also fine large plants of Vinca Harrisonii from outdoors, at \$10.00 per 100.

DOUBLE WHITE PRIMROSES, 3-inch, at \$12.00 per hundred.

A splendid strain of SINGLE PRIMROSES, at \$8.00 per hundred.

BOUARDIA, good strong one year old plants at \$12.00 per 100.

VIOLETS, MARIA LOUISE, at \$8.00 per 100. Also have a large stock of Roses—Teas, Hybrid Teas, Noisettes, and Polyanthus, at \$30.00 per 1000.

GEO. W. MILLER,

WRIGHT'S GROVE CHICAGO.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

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Table listing various plants like Primulas, Geraniums, Oxalis, etc., with prices per 100.

I will have for sale beginning JANUARY 10th, AN IMMENSE STOCK of Tea Roses, Carnations and Fuchsias.

ANY FLORIST needing Begonias, Coleus, Pansies, Abutilons, Pelargoniums, Alyssums, Hibiscus, FEVERTEW, LANTANAS, etc., etc., should send his list to me to be priced.

Address N. S. GRIFFITH, JACKSON CO. INDEPENDENCE, MO.

(Independence is well located for shipping, being 8 miles east of Kansas City.)

VIOLET PLANTS FOR SALE.

Good healthy plants in bud, and true to name. Double blue Marie Louise, and early single blue, Czar, at \$2.50 per 100, \$22.00 per 1000, 300 at 1000 rates.

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A SPECIALTY.

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Many additions of Choice New varieties this season.

Send for New Catalogue.

WM. MATHEWS, UTICA, N. Y.

5000 EUCHARIS BULBS, 1st size.....\$25.00 per 100 2000 " 2nd size..... 15.00 "

ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

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HARDY AND RARE JAPANESE PLANTS

FOR THE EAST.

15 FINEST VARIETIES OF MAPLES, 1-4 ft. STYRAX JAPONICA, STYRAX OBOSSIA. (Read article in this year's London Garden.) SYRINGA JAPONICA, HARDY MAGNOLIAS, THE GRAND CONIFER SCIADOPITYS V.

"UMBRELLA PINE," in sizes 1-6 ft. (Has been shipped safely by fit. to Boston.)

RARE VARIETIES RETINOSPORA, 50 VARIETIES TREE PÆONIAS, NEW HERBACEOUS PÆONIAS.

NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEMATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

FOR THE GREENHOUSE.

RHAPIS AND CYCAS PALMS, BAMBUSA NANA, AR-UCARIAS, TREE FERNS FROM AUSTRALIA.

32 VARIETIES OF JAPANESE LILY BULBS. LARGE ASSORTMENT OF SEEDS FROM JAPAN AND CALIFORNIA.

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Mammoth and other Fine Varieties.

Verbenas a Specialty.

Perfectly clean and free from all disease. Can have as many Standard Colors as you desire in your order. Goods packed light. Will guarantee safe arrival of goods.

STOCK PLANTS EXTRA FINE WILL AVERAGE FIVE CUTTINGS EACH.

Table listing stock plants and rooted cuttings with prices per 100 and per 1000.

Send Ten Cents for Samples.

ORDER EARLY. WM. DESMOND, KEWANEE, Henry Co., Ill.

WATER LILIES, All Colors.

Young plants suitable for late flowering NOW READY.

Send for prices.

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ORCHIDS, EXOTIC AND HARDY PLANTS.

ORCHIDS.

The largest stock of established plants in the country. We can make selections of free flowering and easy growing kinds, to suit either cool, intermediate or warm house.

SPECIAL OFFER TO BEGINNERS. 6 PLANTS, ONE OF EACH VARIETY, FROM \$ 5 00 to \$12.00 PER SET. 12 " " " " " " 10 00 to 25 00 " 25 " " " " " " 25 00 to 50 00 "

CYPRIPEDIUMS.

Catalogue containing 357 varieties free on application.

SPECIAL OFFER TO BEGINNERS. 6 PLANTS, ONE OF EACH VARIETY, FROM \$ 5 00 to \$10 00 PER SET. 12 " " " " " " 12 00 to 30 00 " 25 " " " " " " 40 00 to 90 00 "

CHRYSANTHEMUM "Mrs. Alpheus Hardy" will be delivered in April. Orders are booked now at One Dollar (\$1 00) per plant. Also, over 200 of other finest kinds.

FOLIAGE, FLOWERING AND HARDY HERBACEOUS PLANTS IN LARGE STOCK.

WE ARE PLEASED TO RECEIVE VISITORS AT ALL TIMES. TRAINS LEAVE FROM FOOT OF CHRISTOPHER OR BARCLAY STREETS. ONLY 17 MILES FROM NEW YORK VIA DELAWARE, LACKAWANNA & WESTERN RAILROAD.

1,076.

The Rural New-Yorker's seedling potato No. 2, will be sent to all yearly subscribers without charge. It yielded in the late celebrated "Potato Contest" at the rate of 1,076 bushels to the acre, the report being sworn to by six well-known judges. This seedling is thought to be the nearest approach to a perfect potato yet produced. The price of the Rural New Yorker is \$2.00 a year. It will be sent on a trial trip of 10 weeks for 25 cents in order to show progressive farmers, who do not now read it, that it is the best farm weekly in the world. "It has done more to promote the interests of agriculture in its experiment grounds than all the experiment stations put together" So say the editors of the New York Times, Tribune, World, Farm Journal, Inter Ocean, etc.; so say all who read it and know. It is pure, sparkling and original. Its illustrations are from nature. It commands the best writers in the world. Subscribe at once. Address the Rural New Yorker, 34 Park Row, New York.

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THE BEST POPULAR GARDENING PAPER IN ENGLAND.

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MUMS.

STOCK PLANTS.

I have a fine healthy lot of a few of the BEST CHRYSANTHEMUMS for COMMERCIAL * PURPOSES.

Write me for a list, and I will tell you the price and the names.

Up to this date, Dec. 19th, orders for

MRS. ANDREW CARNEGIE

have been received as follows--SEE AD. in last ISSUE. Only a few more can be booked at same prices:

- T. H. SPAULDING . . . 400 plants. In lots of Six.200 plants. ROBT. CRAIG300 " In Pairs460 " ERNEST ASMUS.100 " In Singles372 " E. G. HILL.100 "

JOHN THORPE,

ROCKLAND CO., PEARL RIVER, N. Y.

THE SYRACUSE NURSERIES, OLD AND RELIABLE,

Are still offering the most complete assortment of young, smooth, thrifty Stock in America. BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Headed) PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN APRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality. Special Inducements to Buyers in large quantities. Trade List out August 1st. SMITHS, POWELL & LAMB, Syracuse, N. Y.

Catalogues Again.

It seems to me that among the many good articles that have recently appeared in the FLORIST, the one entitled "Catalogue Spelling," in the issue of November 15, deserves more than a passing notice.

It is not necessary that a catalogue be large or full of costly plates; let each one have a catalogue suited to the needs of his business, but make a point of having all names of plants, vegetables and fruits spelled correctly, especially botanical names if they are used. One cause of so many mistakes in spelling arises from our copying names and descriptions from our neighbors' catalogues without stopping to see whether they be right or wrong; in turn our books are copied and so the mistakes continue.

As our yearly catalogue is with most of us our only opportunity of showing our customers what knowledge we possess of horticulture, how absolutely necessary it is to make the best possible impression. If full of glaring errors our book goes into the waste basket and our chance of a buyer is lost. If on the other hand our catalogue is compiled with care as regards spelling of names, descriptions, etc., it will at least stand as good a chance as any received, other requirements being equal. A thoughtful buyer will in almost every case give his preference to the man who shows himself to possess the best knowledge of his business, and how can we ever reach this knowledge without being at least well enough acquainted with our goods to spell their names correctly.

M. B. FAXON.

Boston, Mass.

SEEDSMEN

In placing this season's advertising don't forget that the AMERICAN FLORIST reaches over 5,000 BUYERS each issue.



Greenhouse Pipe and Fittings



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Pipe can be easily put together by any one, very little instruction being needed.

GET THE BEST!

Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

Mention American Florist.

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FOR THE TRADE. FLORAL WIRE DESIGNS.

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THE PIONEER MANUFACTURER IN THE WEST.

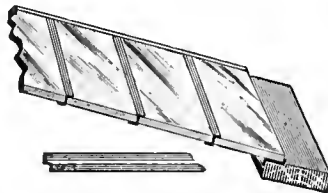
305 Main Street, CINCINNATI, OHIO.

SEND FOR WHOLESALE PRICE LIST.



IMPROVED GLAZING.

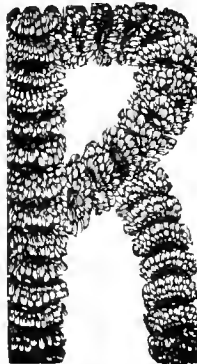
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For butting glass without laps; makes it air and water tight; saves fuel and glass. No breakage from frost. Also the best improved fuel oil Burners for steam boilers. Send for sample and price list.

J. M. GASSER,

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These letters are made of the best Immortelles, wired on wood or metal frames with holes to insert tooth-picks.

Send for Sample. 2-in. purple... per 100 \$3.00 Postage 15 cts. per 100.

Also dealer in Florists Supplies. Send for Catalogue.

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M. M. Bayersdorfer & Co., Phila., Agts. for Penna.

J. C. Vaughan, Chicago, Agt. west of Penna.

TOBACCO STEMS.

\$4.00 A BALE, THREE BALES FOR \$11.00.

Average 500 lbs. to the Bale. Delivered Free on board.

We claim to have the Best, Cleanest and Strongest Stems in the market.

STRAITON & STORM,

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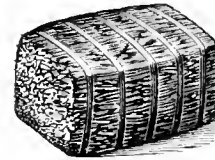


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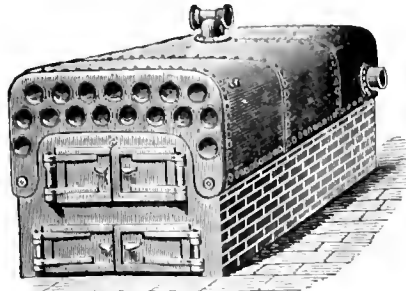
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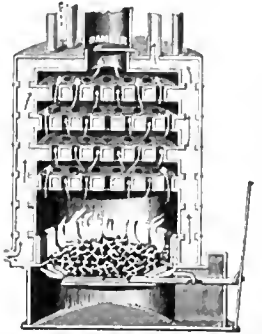
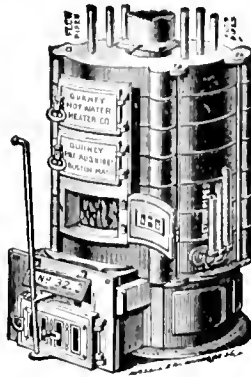
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Letter from Thomas Gray, of Fitchburg, Mass.,
In reference to

GURNEY HOT-WATER HEATER.



FITCHBURG, MASS., April 13, 1888.
Dear Sirs: In answer to yours, asking my opinion of the Gurney Hot-Water Heater which you sold me, would say that I have had fifteen years' experience in heating hot houses by water and must say the Gurney Heater purchased of you has proved itself a wonder, both in power and economy, using one-third less fuel to get same results than any heater I have ever used. The brick-lined pot I consider a special feature, as it renders combustion equal throughout the entire pot. Yours truly,
THOMAS GRAY, Florist.

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The sizes of our pots are stated by the inside diameter as ordered by the Society of American Florists; and our sizes, 2 1/2 in., 3 in., 3 1/2 in., 4 in., 4 1/2 in., 5 in., and 6 in., are the STANDARD POTS as ordered by the Committee. They are of the best quality, and when once used, the prices will sell them.

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1,575	2 1/2-inch,	6.75	875	3 1/2-inch,	5.50	320	5-inch,	4.40	60	8-inch,	4.00

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SUMMIT, N. J., October 13th, 1888.

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Building.

There seems to be considerable diversity of opinion as to the proper pitch for the roofs of greenhouses; also as to the most advantageous distance to place the side bench from the glass where it meets the outside wall. I think many would be glad to hear from practical men upon these points and I am sure that I would.

Walkerton, Ont. WM. RUSSELL.

Double Glass.

This saved me during the severe hail storm early in November. I only had ten lights broken in my two houses, each 100 feet long, while an adjoining house of single glass was quite badly damaged. The hail stones were large as walnuts, the largest ever known here.

Peoria, Ill. JAS. C. MURRAY.

BOILERS.—How many horse power capacity is required in a boiler to heat 1,500 feet 1 1/2-inch pipe with a slow fire? Think I am burning too much fuel.

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CHRYSANTHEMUM LILIAN B. BIRD.—Garden and Forest for December 19 contains an excellent photo-process plate of this handsome novelty.



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Superior Hot Water Boilers.

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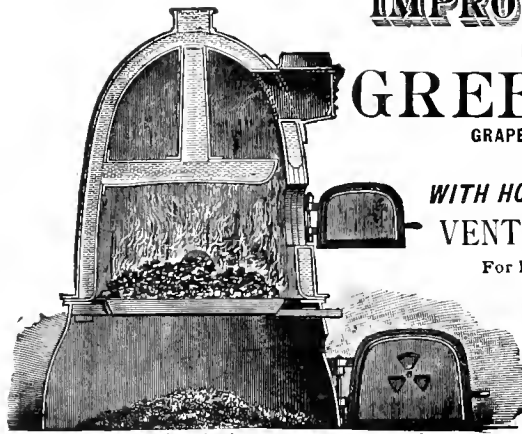
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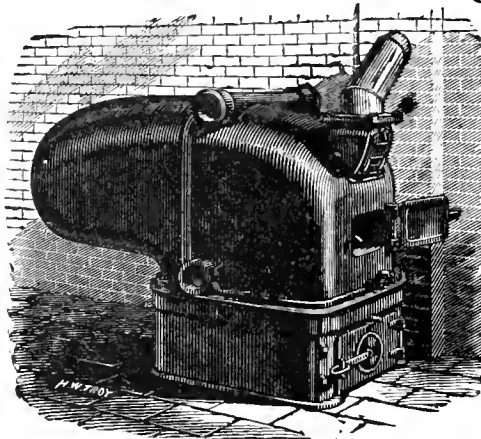
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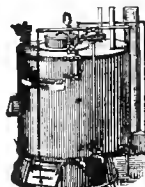
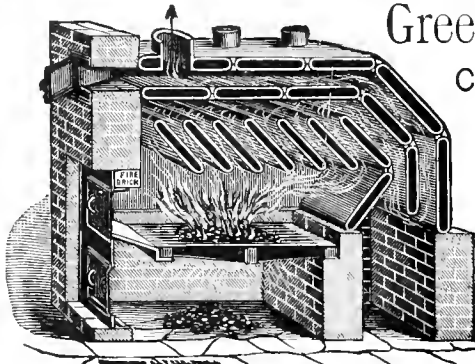
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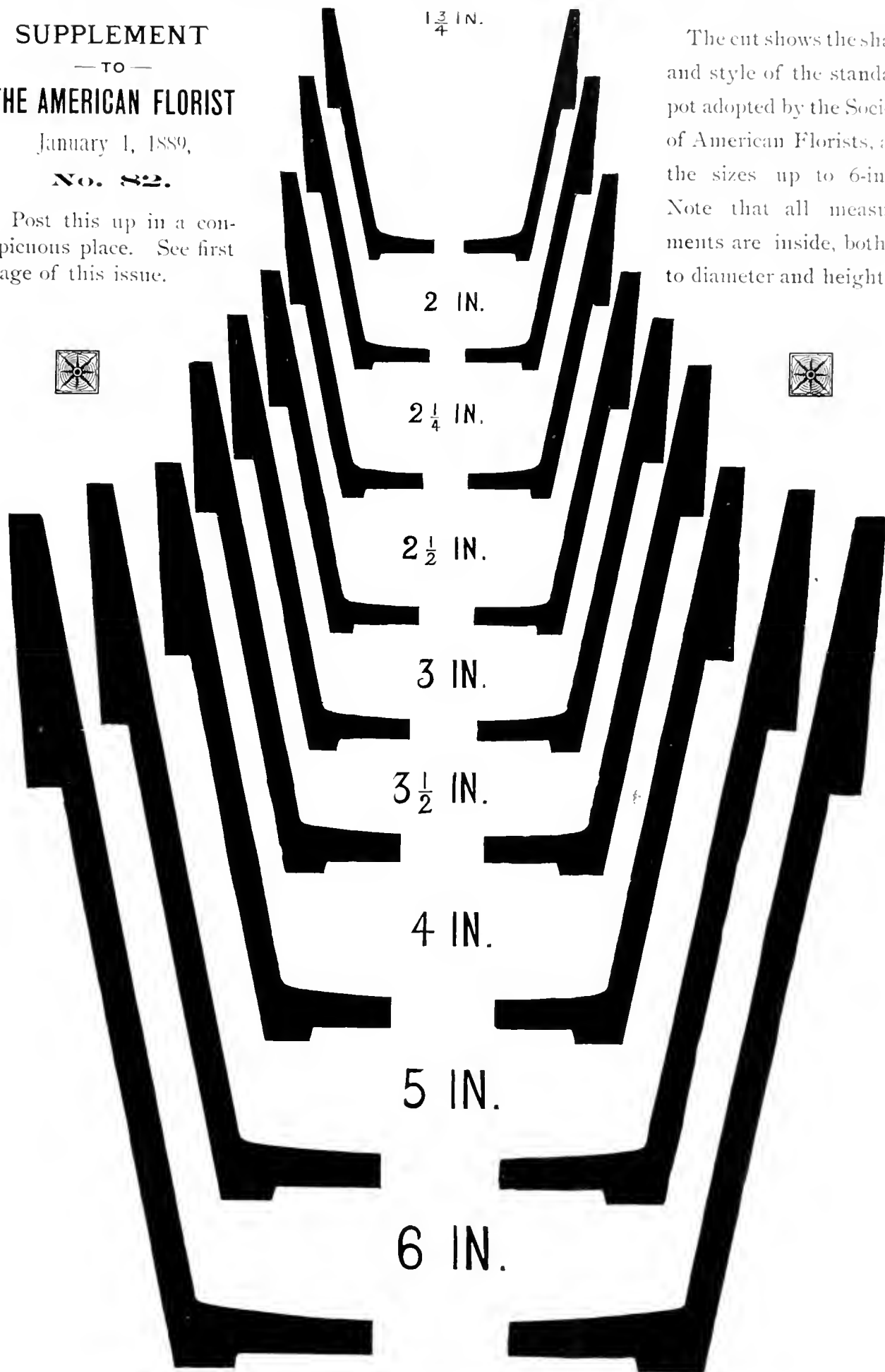
THE AMERICAN FLORIST

January 1, 1889,

No. 32.

Post this up in a conspicuous place. See first page of this issue.

The cut shows the shape and style of the standard pot adopted by the Society of American Florists, and the sizes up to 6-inch. Note that all measurements are inside, both as to diameter and height.





THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, JANUARY 15, 1889.

No. 83.

THE AMERICAN FLORIST

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Entered as Second-class Mail matter.

Published on the 1st and 15th of each month by
THE AMERICAN FLORIST COMPANY.

GENERAL OFFICES, 54 La Salle Street, Chicago.
EASTERN OFFICE,
Room 15, Vanderbilt Building, New York.

All communications should be addressed to the
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

THE EXECUTIVE COMMITTEE of the Society of American Florists will be in annual session at Buffalo when this number reaches our readers.

OUR HOLIDAY TRADE report in this issue is, we think, very complete and it should be of great value to the trade. In most instances the reports do not represent the observations of one individual only, as in the majority of cases we have had from one to four reports from different persons in the same city, and the reports presented combine the views and average the various estimates sent us by these different ones. While these reports varied as regards minor items, in nearly every case they were practically unanimous as to the main points involved, such as total volume of trade, quality of flowers and prices. The value of such a report based on such data and carefully compiled can not but be considerable to all interested.

Print your SPRING TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

THE HOLIDAY TRADE.

LITTLE ROCK, ARK.—Holiday trade was good. Roses in great demand. Weather mild and cloudy.

HOLYOKE, MASS.—Larger than last year, quality of flowers better, prices about the same, supply sufficient, more demand for loose flowers.

PROVIDENCE, R. I.—Not so large as last year, quality of flowers not so good, prices about the same, supply short. The demand was for loose flowers.

LAWRENCE, KAN.—Larger than last year, quality of flowers better, prices about the same, with supply insufficient for the demand. Largest call was for loose flowers, with an increased demand for roses.

ST. LOUIS.—Trade larger than last year, quality of flowers better and more of them, supply just about equal to demand. An increased demand was noted for Jacqs and Beauties. Seven-eighths of the call was for loose flowers.

PORTLAND, ME.—Trade about double that of last year, quality of flowers much better, prices realized about one-third higher, supply short. More roses were used than ever before. Call was nearly all for loose flowers this year.

WILMINGTON, DEL.—Larger than last year, quality of flowers generally very poor, prices about the same as last year. Supply about equal to demand. Principal call was for loose flowers. Think that the churches used more flowers than formerly.

ALBANY, N. Y.—There was somewhat of an increase over last year, quality of flowers about equal, prices realized were a little lower, supply not sufficient for the demand. There was an increased demand for Am. Beauty roses. There was less demand for baskets.

NEWARK, N. J.—Trade was a marked increase over last year, quality of flowers much better, especially carnations, prices about the same, supply fully equal to demand. Pinks were in strong demand compared with previous years. Sold more loose flowers than ever before.

GRAND RAPIDS, MICH.—Larger than last year, quality of flowers better and prices about the same. Supply was none too large, demand being largely for roses. Call for loose flowers and baskets was in about same proportion as last year, with a little better demand for good baskets.

CINCINNATI.—Smaller by 20 per cent, quality of flowers better, prices about the same. There was a surplus of all flowers except roses. The demand for roses and

violets showed an increase over last year of about 25 per cent. More call for loose flowers and less for baskets by 50 per cent.

KANSAS CITY, MO.—One fourth larger than last year, flowers of much better quality, prices about the same. Roses sold at \$1.50 to \$2 a dozen, some few sold for \$3 a dozen. Had plenty of flowers; can't sell flowers at fancy prices. No call for baskets, trade all in loose flowers.

OMAHA, NEB.—Larger than last year, and quality of flowers better. For good stock prices were better than last year. More choice flowers could have been sold, the bulk of the demand being for roses. There was less demand for made-up work, the largest call being for loose flowers.

DAVENPORT, IOWA.—Larger than last year, quality of flowers better and better prices realized. Supply not sufficient for the demand, the call being more for loose flowers and less for made-up work. Evidence of a vitiated taste was noted in a call for metal and porcelain flowers and immortelles.

CLEVELAND, O.—Larger than last year, quality better, prices about the same, and supply sufficient for demand. There was an increased call for plants, and carnations being cheaper than roses were more liberally called for. Call for baskets and loose flowers was in about the same proportion as last year.

ST. JOSEPH, MO.—Much larger than last year, and owing to the bright clear weather through December flowers were of better quality. Prices were about the same as last year, supply about one-third short. Rather more demand for baskets. Demand from outlying points was nearly equal to city trade.

SALEM, MASS.—A slight increase over last year, quality of flowers about the same, prices a trifle higher, sufficient supply of stock with the exception of violets. An increased demand for choice roses was noted. The call was almost entirely for loose flowers. Holly and green sold better than ever before.

HARRISBURG, PA.—Trade about equal to last year, quality of flowers better, prices realized about the same. Supply was not quite sufficient for the demand. Carnations, bouvardia and Roman hyacinths sold better than in previous years. Demand for baskets and loose flowers in about same proportions as last year.

NASHVILLE, TENN.—Never before was there such a demand as at Christmas, but unfortunately we can't afford to handle buds, especially Mermets at \$25 to \$35 a hundred, with express charges and the loss of a few buds in each lot in shipping. Were it not for the fact that I am cutting a few buds of my own I would have to close up.

PITTSBURG.—Larger by 25 per cent, quality of flowers about same as previous years except first lots received which had been held by growers and were rather stale, prices a little higher than previous years on some varieties. Supply about equal to demand. The demand for loose flowers exceeded everything; but few baskets were made up.

TOLEDO, O.—Much larger than last year, quality of flowers very much better, prices realized about the same, and supply of flowers good. There was an increased demand for fine buds, violets and lily of the valley. Larger call for loose flowers and less for baskets. There was a demand for a better quality of flowers at an advance in price.

TORONTO, ONT.—Trade about equal to last year, quality of flowers much better, owing probably to the open weather, prices about the same as previous years, supply equal to the demand. There was an increased call for roses. Less call for baskets and more for loose flowers. Palms were more used for decorations where flowers would be too expensive.

LOWELL, MASS.—Trade smaller than last year, quality of flowers poorer, prices about the same, supply short. There was more call for long stem pinks and chrysanthemums. Loose flowers were most in demand. We could have sold more roses but could not afford to buy at the wholesale prices asked, as buyers would not pay a sufficient advance at retail.

DANVILLE, ILL.—The holiday trade in this city was good. The demand for holly far exceeded any previous year, owing to the holly being far superior in quality this year. It found ready sale. White roses were scarce. The local florists were enabled to supply the demand, which was greater than last year. The demand for Christmas trees was never better.

NEW BEDFORD, MASS.—Trade about double that of last year, quality of stock not as good, roses being smaller and of poor color. Prices realized were about one-fourth higher. Not more than half enough flowers to supply the demand. There was an increased call for violets. Larger demand for loose flowers. More fault found with the high prices than formerly.

MILWAUKEE, WIS.—Trade larger than last year, quality of flowers better, prices about one-third higher. With the exception of Romans and valley supply was insufficient for Christmas; for New Year's supply and demand were about even. Call for baskets and loose flowers was in about same proportions as last year. There was noted a growing taste for ferns and other choice foliage plants.

MINNEAPOLIS.—Trade larger than last year, quality of flowers fully equal to previous years, prices higher. Supply sufficient; if prices could have been lower the demand would have exceeded the supply. There was an increased demand for the cheaper flowers. Most of the call was for loose flowers. Christmas trade was good but New Year's trade was nothing to speak of.

COLUMBUS, O.—Larger than last year, quality of flowers better, prices not as high, supply insufficient. There was a greater demand for roses, violets and carnations, but hyacinths, valley, narcissus and tulips were not as popular as last year. Demand was almost entirely

for loose flowers. Call for holly increases every year. Christmas trees were used more than formerly and supply was short.

SPRINGFIELD, MASS.—Larger than last year, quality of flowers about the same, prices better, supply sufficient to meet demand at prices asked. An increased demand was noted for roses (Mermets and Brides in particular), violets, carnations and valley. The bulk of the call was for boxes of loose flowers. There was less sale of the commoner greens and more demand for holly and the better greens.

PHILADELPHIA.—Larger than last year, quality about same as usual, with roses possibly a little poorer, prices realized were about the same as last year. We had a sufficient supply because we procured a large stock from other cities. There seemed to be a greater demand for baskets than usual. We believe the extremely high wholesale prices at the holidays are a great detriment to our business.

ST. PAUL.—Trade less than last year, quality of flowers about the same, prices probably in most instances lower. Supply was sufficient, especially at New Year's when some of us had quite a stock left on our hands. Much less demand for baskets, more for loose flowers. It was noted that instead of leaving orders for flowers a few days in advance customers this year waited till the last day before placing them.

WORCESTER, MASS.—Larger than last year, quality of flowers not as good owing to dull weather, prices realized were higher. Supply was sufficient with the exception of fancy roses and violets. There was an increased demand for fancy roses, an increase in the call for loose flowers and a notable decrease in that for baskets and bouquets. Tulips in pans and Roman hyacinths and freesias in pots sold very readily.

SYRACUSE, N. Y.—About 25 per cent, smaller than last year, quality of flowers about equal, prices of roses about the same but on other flowers considerable less. More than enough flowers to supply the demand, had some to spare. There was an increased demand for carnations and the cheaper flowers and less call for choice roses, etc. The call was almost wholly for loose flowers; the demand for baskets is yearly on the decrease.

TERRE HAUTE, IND.—Trade smaller than last year and quality of flowers not so good on account of so much dark weather. Prices about the same as last year. For Christmas the supply was insufficient, but for New Year's there was an excess, there being but little demand. Call for baskets and loose flowers was in about the same proportion as last year with perhaps a slight falling off in the call for baskets. New Year's trade is diminishing from year to year.

NEW HAVEN, CONN.—About the same as last year. Roses shipped in from the large cities were poor, tulips and lily of the valley poor and poinsettias very poor. Prices realized were generally higher especially for roses and violets. Considering the very high wholesale prices the supply was sufficient. There was more demand for cheap showy flowers and less for large fancy roses. The call was almost entirely for loose long stemmed flowers. The unusual demand for cheaper flowers was especially noticeable.

LOUISVILLE, KY.—Larger than last year, roses not quite up in quality, other

flowers about as usual, prices rather better, roses selling at from \$2 to \$5 a dozen. Supply rather short, flowers have been very scarce the past month. Increased demand for violets and red roses. Call for baskets was about 25 per cent, less but for loose flowers 35 per cent, better. Demand for holly and wreathing was much greater than last year. Many buyers of flowers are becoming very particular and want only the very best.

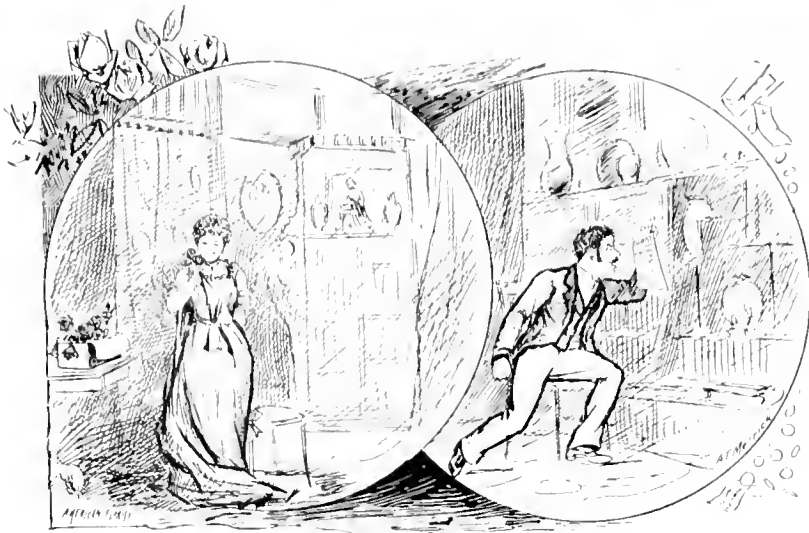
WASHINGTON, D. C.—Larger at Christmas with a little falling off at New Year's, quality of flowers extra good, prices about the same as usual, supply equal to demand with the exception of violets which were scarce. Among roses an increased demand was noted for Beauties, Gontiers and La France. Valley sold well. There was a decided falling off in the call for baskets with an increase in that for loose flowers in boxes. Good palms and blooming plants sold well.

DETROIT, MICH.—Holiday trade larger than last year. Quality of flowers was good except some of the roses which were not quite as good as last year. Retail prices about the same as last year; carnations brought a little better price. Supply was sufficient except at Christmas when roses were in short supply. Two-thirds of the demand was for loose flowers and bunches. Good demand for wreathing and an extra large call for holly. Retail prices of flowers were one-third less than printed wholesale prices.

RICHMOND, VA.—Trade double that of last year, quality of flowers better, owing to the unusually favorable fall and early winter we have had here, prices realized about the same. Had to rely on our home stock as northern flowers were too high in price to make a profit on. Supply about half enough for the demand. There was an increased demand for potted plants, roses and violets. Immortelle designs sold slow compared with last year. Four-fifths of the call was for loose flowers; less call for baskets every year. New Year's trade was slightly better.

DES MOINES, IOWA.—Larger for Christmas and smaller for New Year's. Home grown stock good; that shipped in was inferior—especially roses. Prices of roses were lower than last year and carnations, hyacinths and smilax were not advanced from usual rates. More good roses and carnations could have been sold; of Roman hyacinths there was plenty. The increased demand was for roses, carnations and hyacinths. But few baskets were wanted, the call being almost entirely for boxes of loose flowers. As none of the "upper ten" received calls on New Year's day, more of the demand was from the "middle class." Good demand for holly. Perles and Niphets brought \$2.50, LaFrance and Mermet \$3, Romans \$1, and carnations 50 cents a dozen; smilax 40 cents a string.

UTICA, N. Y.—Trade larger than last year. As to quality of flowers, roses, orchids and violets better, while carnations were not quite as good. Choice flowers brought better prices than last year, second quality about the same as before, culls were not wanted. Supply was sufficient for the demand—or nearly so. There was noticed a decrease in the call for Romans, valley and freesias and an increase in that for good roses, violets, orchids, carnations, stevia, etc. Much less basket work, the increase being in boxes of loose flowers, ferns, etc. I noticed that customers delayed placing



SHE RECEIVES THE POSE.

HE RECEIVES THE BILL.

SUNSHINE AND SHADOW AT CHRISTMAS.

their orders till almost the last day. Although trade may be classed as "good" there is not the usual excitement and bustle generally incidental to this season of the year. The unseasonable weather is probably one cause.

BUFFALO.—Trade about the same as last year, quality of flowers about the same, prices realized averaged about the same, too high at Christmas to do business at legitimate profits and be satisfactory to customers. Supply was sufficient or nearly so for the demand. An increased demand was noted for better quality of carnations, violets and bouvardia; roses held their place. Calls for loose flowers more numerous in proportion than last year. There was an increased call for holly wreaths, loose holly and mistletoe. The disadvantage of wholesale prices being placed unduly high at the start lies in the fact that they frighten off trade. Both the present and last year prices had to take a tumble at the last moment after trade had been already scared off by the high prices and it was too late to make known to buyers that prices had been reduced. Surely this seriously injures trade.

ROCHESTER, N. Y.—Smaller than last year, quality of stock very good, but prices realized lower. Supply was more than sufficient for the demand. There was a decrease in the call for roses owing to the high prices. It is said that growers have to get a big price during the holidays to make up for low rates that prevail during most of the year. It would certainly be better to average the prices more, so that such a great increase at the holidays would not be necessary. It is hard to make customers understand why roses that are sold at \$1 a dozen one week should be worth \$3 a dozen the next week, and the complaints and dissatisfaction that the dealer has to meet in consequence is simply fearful, to say nothing of the loss that is generally sustained through buying roses at from \$10 to \$30 a hundred for ordinary varieties and frequently being obliged to sell them at cost or less. We have always done it but while the cry of hard times lasts we don't want any more Christmas roses.

YOUNGSTOWN, OHIO.—The Christmas trade in cut flowers and church decorations was excellent. It used to be, only a few years ago, that the Episcopal church was the only one to observe Christmas with the decorations of holly, mistletoe and flowers now seen in nearly all denominations; even the Calvinistic churches are following in the same path, and before long every church shall have its Christmas decorations proportioned in extent according to the tastes and purses of its members. The New Year trade was not very large, receptions being out of style curtails the demand for flowers and other decorations. While we have not had much cold weather it has not been very favorable for the production of cut flowers; too many cloudy days during November and December. As a consequence Perles produced a good many "bull heads," and carnations did not attain the size they do with clear sunny days. To all observant florists the effect of a duration of cloudy weather on carnations of all kinds is apparent in the size of the flowers, especially if a high temperature is maintained.

Boston.

Christmas trade was very brisk, the demand for good flowers being considerably in excess of the supply, particularly for lily of the valley, violets, fancy carnations and roses of the choicer kinds. Yet in spite of this scarcity it was a difficult matter to dispose of what is known as "common stuff."

It was formerly the case that when first class goods could not be obtained customers took whatever they could get. Not so now, however, the best or tone seems to have become the rule, and so the mildewed, pale colored or aged rose found none so poor as to do it reverence. Stevia looked in vain for a purchaser, and that once useful and salable relic of by-gone days the short-stemmed carnation, although it smiled its sweetest and most seductive smile never left the ice chest until it took its final departure in disgrace for the rubbish box. Smilax, too, was the worst kind of a drug, everybody trying to sell it, but nobody willing to

buy at any price. With Christmas, however, went also the cold weather and a season of sunny springlike days followed resulting in heavy crops of all varieties, and thus for New Year's day the Christmas situation was reversed and stock was plenty and buyers few. For the first week in January prices have been unprecedentedly low on many varieties.

W. J. S.

Baltimore.

The holiday trade in this city was highly satisfactory and decidedly in excess of last season. While an enormous quantity of loose flowers were sold it is probable that the bulk of flowers disposed of at Christmas were worked up into baskets for which there was a brisk demand, bouquets and other designs, however, were rarely called for. There was no marked improvement in house or church decorating; there was an unusual demand for holly and mistletoe, but judging from trade in the past, few of our florists had laid in a large stock of the latter, consequently the supply was hardly equal to the demand.

New Years doesn't generally count for much in this section, but it is conceded that this season was an exception. The New Year's trade was good, confined almost exclusively, however, to loose flowers. Instead of calling on their lady friends as heretofore, it was a fad with our society young men to enclose their cards in boxes of choice flowers, and we most heartily commend this "new departure" as a source of infinite relief to the ladies and profit to the trade. The plant trade was excellent throughout, indeed one of our oldest florists told me that the plant trade this season was the best he had ever known in Baltimore, and I doubt if Baltimoreans ever found better stock to select from.

Prices generally were good. American Beauties sold at \$15 per dozen, La France \$5 and \$6, Mermets and Perles \$1, \$5 and \$6, Lily of the Valley \$2 and \$3, Romans and narcissus \$1.50 and \$2, tulips \$1.50, carnations 75 cents to \$1, violets \$3 per hundred.

We took special pains this season to get at "the hang of things," and it is very gratifying to be able to record such a healthy condition of trade. The marked improvement over former years tends not only to show an increase of public taste, but serves to demonstrate the fact that our florists are getting abreast of the times and are beginning to realize that a little cultural carefulness brings its reward.

January 2.

A. W. M.

Chicago.

Leading down town florists report an increase of from 25 to 50 per cent in their holiday trade over that of last year. The quality of flowers on the market was about equal to last year, though in some cases quality was a trifle below the standard. There is some complaint against growers who brought in large quantities of "salted" stock, some of which had been "salted" so long that it was practically worthless.

Prices were higher than last year, and the supply was practically sufficient at the prices it was necessary for the dealer to obtain in order to come out on the right side. Some florists noted an increased demand for Beauties, Gontiers and Brides among roses, and others noted an increased call for fancy carnations and other cheaper flowers owing to the

high prices placed on roses. One dealer reports that prices on roses and violets were so high that he could not sell them.

At Christmas the call was almost entirely for boxes of loose flowers, the call for baskets being even less than last year, but for New Year's two florists report quite a considerable call for made up work, more than for several years past. Other dealers report New Year's trade as about equal to last year, while some say that the day before New Year's was very dull, one describing it as a veritable "Blue Monday."

A feature noted by one dealer was that nearly all buyers of loose flowers ordered them to be all of same color, and very few mixtures of varieties were called for. Another florist reports that his Christmas trade was about the same as last year, but that it was less in cut flowers, this decrease being made up by an extra demand for plants.

Retail prices per dozen were as follows: Bon Silenes \$2 to \$3; Perles and Niphetos \$3 to \$4; Mermets \$4 to \$8; La France \$5 to \$7; Bennets \$5 to \$6; Gontiers \$4; Am. Beauties \$12 to \$24; Jacqs \$12 to \$24; long stem white carnations 75 cents; long stem colored carnations \$1 to \$1.50; Roman hyacinths \$1 to \$1.50; narcissus \$1.25 to \$1.50; tulips \$2; violets \$1 for bunch of 25 blooms, \$1.50 for bunch of 35, and \$2 for bunch of 50.

Holly and green sold well and total sales far exceeded those of previous years.

The banner sale of roses was a box of five dozen at \$80 for the box. It contained two dozen Am. Beauties at \$20 a dozen, two dozen Brides at \$8 a dozen, and one dozen Jacqs at \$24 a dozen. The florist who made the sale said himself that it was certainly robbery to charge such prices, but the buyer wanted them extra choice regardless of expense, and as it was he only made a fair profit after buying the roses at the prices demanded by the grower.

Several of the young men who collect the bills for the florists by whom they are employed threaten to resign. They state that they had rather meet Sullivan than present a bill to those customers who simply dropped in and ordered "three or five dozen of choice roses sent up to the house for Christmas" without inquiring the price. One collector remarked that if ugly looks could kill he would have died a hundred deaths since Christmas.

Philadelphia.

It is very gratifying to all concerned to be able to report an increase in the Christmas trade here when it is understood that we have made a similar report for some years past. The quality of the flowers was fully equal to that of former years. The prices realized by the grower were a trifle lower than last year, though there was no appreciable difference in first class stuff. The retail prices were about the same as for the past few years.

Owing to the delightful weather which prevailed during and immediately preceding Christmas, flowers were quite plentiful, especially carnations. La France among roses was the most scarce; nor were Beauties of first class quality any too abundant. There was no run on any particular flower or class of flowers. The salesman with the necessary amount of tact could generally persuade his particular customer to take whatever he recommended.

In some quarters there was a noticeable increase in the demand for baskets or

other designs without any effort of the dealer, whereas in others it was about the same as for the past year or two.

The great increase of prices as boomed by the grower and commission men was condemned unqualifiedly by the dealer. And the practice of holding flowers for these higher prices was equally as vigorously condemned. The dealer is so busy at this time that it is impossible for him or his assistant to watch closely the class of flowers left on these great occasions, and it is not until the flowers are brought into use that the poor quality is noticed. At that time it is difficult to place the blame where it belongs. And another evil which this plan of holding flowers for a week or ten days develops, is that the dealer finds it very difficult to obtain as many flowers as he could use to advantage for his regular trade during the few days before Christmas.

To the above complaints the grower thus retaliates: All through the fall and early winter prices are so low that sufficient cash is not realized in many instances from sales made as to meet current expenses. These matters are regulated by supply and demand; the dealer will buy just as low as he possibly can when trade is dull and flowers are plentiful, and the grower will charge as much as he possibly can when the demand is heavy and the supply is comparatively light. Then says the retailer as a parting shot, these high prices at the holidays injures trade for the future when the best and choicest flowers are in most demand.

There is a great deal could be said pro. and con. on both sides of that question, but at the present writing there seems to be no practical way of solving the question, or out of the difficulty. One dealer says somewhat sharply: "It will solve itself in time."

Rose crops are the most difficult to control. The cheaper classes of flowers can be had in greater abundance, but these bring much extra work to the grower and retailer, especially the latter, at the time when, with the limited skilled assistance, that each dealer can command at this season, it is a question whether it would pay to encourage it at present.

The trade at New Year's which had been gradually but surely declining for several years, has this year surprised most of the florists by a change for the better. Let us hope that it may continue. Smilax is very plentiful, and so also are adiantum fronds. The latter are almost daily increasing in popularity. Excuse this hurriedly prepared report. And wishing the FLORIST and all its readers a prosperous New Year, I am yours truly,
E. L.

New York.

Christmas was fairly good for the florists this year; New Year's day very poor—in fact, the commission men say that at this holiday there was no increase over an ordinary day. It is entirely going out of date as a fete day; consequently there is no special demand for flowers. Quite a number of growers lost through the foolish practice of holding back for the holidays; as one big commission man said, they would realize better prices by sending in stuff fresh day by day than by rushing in a quantity of held back flowers the day before a holiday. These back number roses are pretty sure to find their way into the ash barrel. A small percentage of held-back flowers in a lot lowers the grade of the entire number, and

consequently lowers the price even if it does not render them unsalable.

Very few Jacqueminots were in, and, for the most part, these were poor in quality. Surprisingly few Jacqs. are now grown, in comparison with former years, and they are rarely of high quality. Many declare that this rose does not really pay, when forced for the holiday trade; certainly they don't bring the price they once did. It seems as if the Bennett has rather superseded it in public favor.

Taken on the whole, the flowers sent in for the holidays were of a very high order of excellence; this is now imperatively demanded by the city trade. It is not sufficient for a rose to be a fine variety; it must be a fine specimen of the variety.

Prices did not vary greatly from those of last year. At Christmas, roses were as follows per hundred: Bon Silene \$5 to \$10; Papa Gontier \$12 to \$15; Ierle des Jardins the same; Niphetos \$8 to \$22; Mermets \$20 to \$30; Cusin \$20 to \$25; Duke of Connaught \$10; La France \$20 to \$30; Bennett \$15 to \$25; Am. Beauty \$50 to \$150; Jacqueminot \$35; hybrids \$50 to \$75.

It will be noted that the general average is about the same as last year. Papa Gontier almost doubles Bon Silene, and yet the commission men complain of it; they say it does not stay fresh-looking as long as the Bon, being more liable to turn blue.

At New Year's, roses were decidedly lower. Both Bons and Gontiers ranged from \$6 to \$8 per hundred; Perle des Jardins the same; Niphetos \$6 to \$10; Souv. d'un Ami \$6 to \$8. Mermets were divided into half a dozen grades, selling all the way from \$8 to \$25 per hundred; Cusin \$12 to \$15 and \$25; Bride \$15 to \$25; Beauty, all the way from \$15 to \$75; Jacqs. \$35 to \$50; Magna Charta \$50 to \$75.

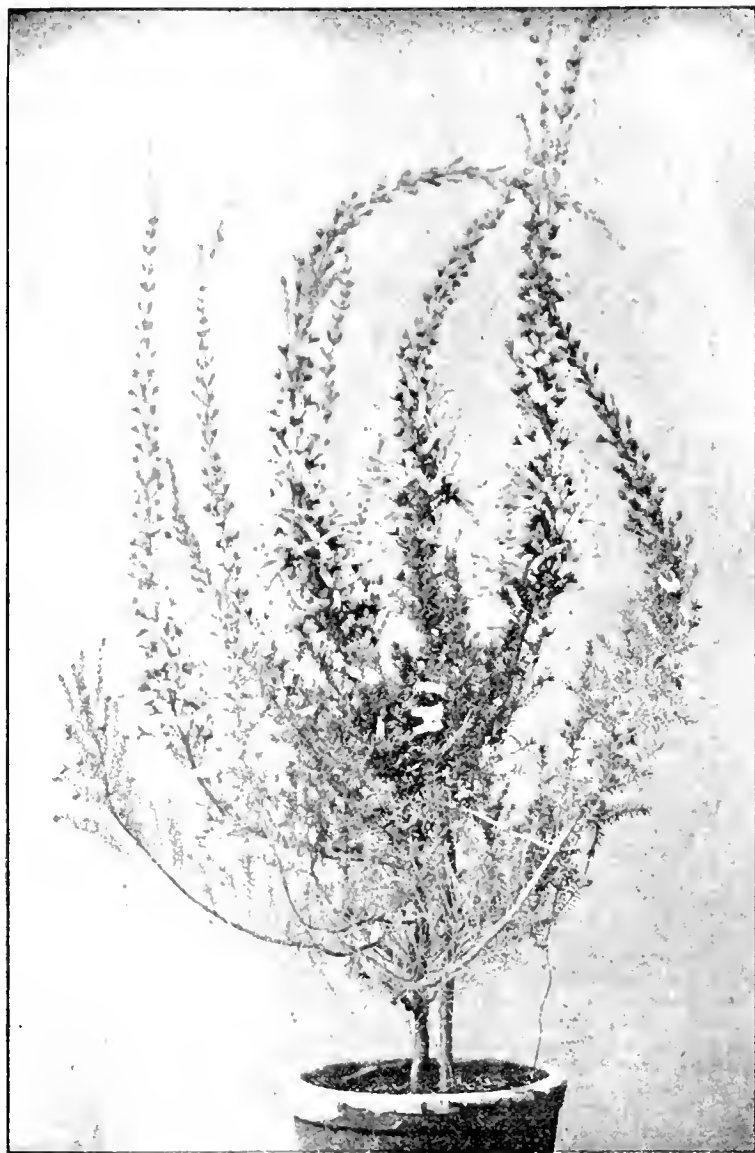
There were a good many poor Beauties; very good Magnas and Anna Alexieff. Fine Ulrich Brunner, and, about New Year's, beautiful Gabriel Luizet.

A great many carnations were held back; consequently they did not bring large prices. At Christmas, long stemmed \$3 to \$4 per hundred; short \$2. At New Year's, long stemmed \$1 to \$3; short unsalable. Bulbs were about the same at both holidays. Hyacinths, \$4 per hundred; tulips \$4; narcissus \$5; lily of the valley \$6 to \$8; lilies \$1.50 a bunch; violets \$1.50, \$2 and \$2.50; smilax 20 cents; mignonette 50 cents to \$1.50 per hundred.

Quite a lot of cypripediums and cattleyas were sent in by various growers; they seem about the most salable orchids. They are usually sold by the box, so much for the lot but the commission men do not seem very anxious to handle them. De Forest sends in a lot; J. H. Taylor grows fine cypripediums; Welch of Riverdale, sends in assorted cool house orchids, and many others send in odontoglo's and cattleyas.

Japan Quince (Cydonia Japonica), both red and white, was forced beautifully by Bird of Arlington Heights, (Newark), and by Siebrecht & Wadley. It is quite as easily grown as lilac.

A tremendous quantity of green was sold by the florists, only they draw the line at Christmas trees, which are now sold almost entirely by down town marketmen and street vendors. There was a lot of very good holly in, among it that from J. C. Vaughan of Chicago; the small trees imported by a few florists were noticeable as a rule for good foliage and plump berries. Among these trees



P. WILMOREANA

were charming varieties with variegated leaves and golden berries.

Mistletoe was, on the whole, a failure, through being improperly packed. The berries were usually all gone, forming a slimy mass in the bottom of the crate, and the leaves dropped also. "Colorado needle pines" sold well, and was a popular green.

It is the general opinion that the New Year's prices would have been better had the weather turned cold, but two weeks of unseasonable warmth hurt the trade very materially. A great many growers were off crop, but there was no scarcity of flowers through the large increase in glass. There was a large demand for loose flowers.

EMILY LOUISE TAPLIN.

Christmas Flowers at Covent Garden Market, London, England.

There can be no question as to the popularity of white flowers—not only at Christmas, but at almost any time of the

year. They seem, however, to preponderate in winter, owing, no doubt, to the fact that they pay better for production. Colored flowers are, however, tolerably plentiful, but it is evident, from the treatment they receive, that they are only considered of second rate value.

Prominent among white kinds are camellias, eucharis, gardenias, Richardia africana or Trumpet lily and chrysanthemums, both incurved and Japanese, the latter being abundant during the early and latter part of the season, when incurved sorts are anything but plentiful. Over and above these, however, are a large number of subjects which appear in quantity at times, but are more or less intermittent, each according to its particular season. Paper White narcissus, Roman hyacinths, double white Chinese primulas, and bouvardias may, however, be had in considerable quantity at present, and the supply will continue for many weeks. The same might be said of white azaleas and lily of the valley. Strangely enough, Christmas

roses are not so plentiful as one would be led to expect, especially after a long spell of unusually mild weather for November and December. Roses are nearly always plentiful, but the greater bulk of them at present consist of blush-colored, pink, pale rose, or salmony yellow tea-scented kinds. White varieties are not particularly numerous. *Lilium longifolium*, or its variety, *L. l. Harrisii*, is even already to the front and may be had nearly at any season.

For ordinary bouquet work a great variety of the commoner differently colored flowers are used, such as chrysanthemums (Japanese and Pompon), yellow roses, Christmas roses, scarlet pelargoniums, blue, yellow and purple pansies, recalling the recent mild weather, *Polyanthus narcissus* and similar subjects. The burst fruits of *Iris foetidissima*, exposing the globular scarlet seeds, are very ornamental and the plant might be more frequently grown in shrubberies and woodlands for this purpose than is at present the case. Unlike the common yellow iris, it prefers a dry and chalky soil, although the latter condition is not absolutely essential. The flowers used for button-hole bouquets are roses of various colors in the bud stage, carnations, gardenias, eucharis, *Lilium speciosum album*, double blue violets and primroses of the common yellow wild type.

Orchids are not particularly plentiful, but there is a tolerably good sprinkling of *Odontoglossum crispum*, *Oncidium crispum*, *O. Papilio* used for button-holes, for which it seems wonderfully well adapted; *Cypripedium insigne*, *Calanthe Veitchii* superba, *Dendrobium nobile* and *Zygopetalum Mackayi*. Among these the *cypripediums* are, perhaps, the most plentiful, while the *calanthes* are also pretty numerous and also tolerably well colored.

Pot plants are by no means so plentiful as we have seen them, but conifers, aucubas and *Erica hyemalis*, together with *Cyperus alternifolius* and ferns may easily be had. Duc van Thol tulips in various colors are also commencing to put in an appearance.—*Gardening World* December 23.

Erica Wilmoreana.

We present herewith an illustration of a blooming plant of this heath which has so frequently been favorably mentioned as a valuable variety for pot plants and for the production of cut blooms. The graceful spikes of bloom are very beautiful and meet with ready sale, and it is to be regretted that such an acceptable addition to our list of cut flowers as heaths would be is not made by growers of cut flowers.

The reason is found in the fact that few growers have success in flowering heaths in this country. Growers state that all the heaths are plants that dislike either a very high or very low temperature and with the sudden changes of temperature encountered in this climate it is impossible to give them the equable temperature necessary to their well being.

But as an offset to this several growers have been successful and they are loud in their praises of heaths for cut flowers. Mr. John G. Gardner, gardener for Pierre J. Orillard, Jobstown, N. J., grows *Erica Wilmoreana* well, and while he is not a commercial grower, from his experience he believes that this heath can be made to produce flowers in quantity and at a profit to the grower. In our issue for April 15, 1887, we printed a description

of Mr. Gardner's method of treating heaths.

We believe that if two or three men can successfully grow heaths in this climate others can do the same. There is always more profit in growing something that the majority are unsuccessful with, and we believe that it would be worth the while of *thorough going, careful* growers, near large cities, to give Erica Wilmoreana a systematic trial.

Mushrooms in Greenhouses.

It is now midwinter and our cut flower business is at its height, and we exercise ourselves to make as much money out of our greenhouses as we possibly can. This is right. Our greenhouses are pretty well crowded and we do not clearly see our way to introduce anything else. No place is empty. Under the benches we have lots of room, but beyond being a store place for canna, dahlia and other roots at rest we do not occupy the space. True we could grow rhubarb, asparagus and seakale there but this would necessitate growing these plants out of doors in summer and using a good deal of land that we could not well spare; besides, they are a bulky crop, and not always profitable.

But underneath our greenhouse benches is just the place for mushrooms. They are not a bulky crop, and a good sale for them at a good price is assured for all we can raise, for the supply has never been nearly equal to the demand.

In growing mushrooms for profit we have got to produce them as cheaply as possible. Don't make them the primary but rather the subsidiary crop. If the crop turns out good it is nearly all profit; if it is a complete failure, nothing is lost except the labor and the spawn, and it must be a bad failure that won't pay for them. The greenhouse room and heat we need not include in the cost, for, if the space was not used for mushrooms probably we would not use it at all. The loam and manure we need anyway and it is just as good for potting purposes—better for young stock—after having been used in the mushroom beds as it was before.

In order to grow mushrooms successfully we must handle them intelligently and carefully; it is no use to make the beds under our benches and then destroy them with water. Well, considering that they are under the benches and that we are continually watering the plants overhead and splashing water about the greenhouse with the hose, how are we to avoid wetting our mushroom beds? Easy enough. Right out there stacked up in the shed we have any amount of hotbed sashes, and as we don't want them for anything else during the winter months and as we cannot have anything better for protecting our mushroom beds we may just as well use them for this purpose.

What about the frame on which to rest the sashes? We don't want a close frame in a warm house, but if we should, two rough hemlock boards along the back and one board in front will give us frame enough. We don't need rafters. It is only a temporary affair anyway and the simpler we make it the better for ourselves and the mushrooms too. Mr. Gardner of Jobstown has range after range of mushroom frames inside his peach houses and vegetable houses and in bearing now.

But what about suitable manure? Don't let that be a bugaboo. You want horse manure and pretty fresh if you can get it. But it doesn't matter whether the horses

had been bedded with hay, straw, corn-stalks, or sawdust; and mule manure is just as good as horse manure.

It is too late now to think of making up some beds for this season's work, because mushrooms really are a winter crop, and it takes at the least two months' time from when you get the manure till you gather the first mushroom; indeed it oftener is three months.

The proper time to begin is August, September or October, with successional beds in November and December; this will give us an unbroken supply from the end of October till the end of April.

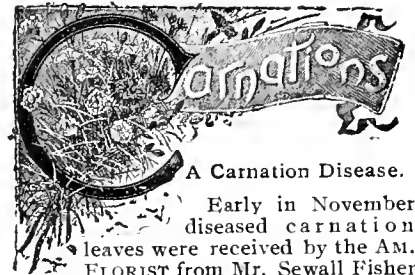
But you can think over these matters now. Go into your greenhouses and see how much empty space you now have under the benches and which might be devoted to mushroom growing as well as not. I presume you want to make some money? Well, if you do, why throw away this golden opportunity? Mushrooms are worth a dollar a pound wholesale and the supply has never been anything like equal to the demand. It is a mighty poor bed that won't give you four or five pounds of mushrooms a day. Now don't you think \$5 a day for mushrooms during the winter months would come in nice and handy? Then why don't you get it?

Don't go into the business with a rush; get into the hang of it first by trying it on a small scale. The long Island market gardeners are going into mushroom growing at an immense rate. In their business, times have changed from what they used to be some years ago before they had to buck against southern competition, and in order to save themselves they are compelled to take a fresh line in their business. They see a bonanza in mushrooms. This is nothing new. Some of them have been growing mushrooms on a large scale for over a dozen years, but, oh, how carefully they do guard this mushroom business from one another and the outside world. Let me give you an instance: About a month ago I called upon the largest mushroom grower (A) on Long Island. He showed me all around his place except where he grew his mushrooms. I made some remarks about mushrooms but he answered me most evasively—he wouldn't even talk upon the subject. Half a mile distant is his next neighbor (B) who also has a very large truck farm and immense ranges of vegetable growing greenhouses. He had been born and brought up in this place and lived neighbor to A all his life-time and they were on good terms and he has never yet seen inside of A's mushroom-growing houses or cellars. But no matter, although he never has seen a mushroom grown he is now erecting large buildings expressly for mushrooms and is going into the business. There isn't as much money in salad in winter as there used to be he said, and if his neighbors can make such a pile of money out of mushrooms he cannot see why he shouldn't do so too; anyway he is going to try, and is willing to pay for experience. Some two or three miles further on is another mushroom grower. Last year he raised and sold 1,700 pounds of mushrooms; the year before that he raised 2,200 pounds, but he hasn't a greenhouse at all, he grows his in cellars altogether. When we called on him, I told him we came purposely to see his mushrooms and as I was a large grower myself he needn't bother with any mumness or secrecy. After having satisfied himself on this score we found him a mighty nice man, and he explained his ways and showed us everything.

Now all this secrecy means just this: There is a little bonanza in mushrooms. Those who have "caught on" are scared half out of their wits for fear some other fellow catches on too. And if they didn't make money, and big money too out of it, they'd pitch it overboard quick.

I myself never had finer mushrooms nor such an abundance of them as I have this year. And I can assure you there is no secret at all in growing mushrooms; you just want to know the general routine of cultivation and attend to the same intelligently and earnestly; but if you don't do this, then let mushroom growing alone. WM. FALCONER.

Glen Cove, N. Y.



A Carnation Disease.

Early in November diseased carnation leaves were received by the AM. FLORIST from Mr. Sewall Fisher of Framingham, Mass.

Many were discolored and often wilted and had lost all their power to be serviceable to the plant as foliage. Others were discolored only in one large round spot, the rest of the leaf remaining green. The spots, often extending across the middle of the leaf, were light brown, studded on both surfaces with numerous black specks and surrounded by a differently colored and slightly raised border. The portion of the leaf occupied by the spot was evidently dead.

Under date of Nov. 16, Mr. Fisher writes in reply to a letter from me: "The disease on carnation leaves seemed to develop itself during the very damp weather in October and the dead leaves are a sorry sight to me. Since I have commenced steady firing it has abated somewhat. I can find a good many like the freshest, but the greater part are dead, as you will see. I am very glad to know that it is a fungus and not a 'disease of the tissues,' as one expressed it."

A microscopic examination showed not only that a fungus was the source of the trouble but that in the discolored orbicular spots there was little but fungus. In a thin section cut through one of the spots nothing could be distinguished of the original leaf tissue but the epidermis and the spirally marked fibers which constitute the veins of the leaf. All the pulp of the leaf was destroyed, or its remnant was obscured by the abundance of fungal tissue. Fig. 1 shows one of the fresher leaves with a spot in the middle. Fig. 2 is a diagram made from a section through the spot. The fungal tissue was so intricately interwoven that it could be represented only with great difficulty. The two lines *a* and *b* mark the leaf surfaces and *c* the vein in the midst of the leaf tissue. The spheroidal bodies are the reproductive organs of the fungus. The space around them was occupied by the filamentous mycelium. The number of reproductive organs in this particular section was somewhat above the average. In a line a little more than twice as long as the thickness of the leaf there are five. They are the black specks which are seen on the spots with the naked eye. They are asexual

in their nature and are simply conceptacles which contain the spores. Some have not yet opened, others are discharging some of their spores. Fig. 3 shows more highly magnified an isolated conceptacle discharging its spores. A cut through one of these shows it to be lined with short spore-bearing threads, (Fig. 4) each of which bears a spore at its tip. In this case the mouth of the conceptacle is

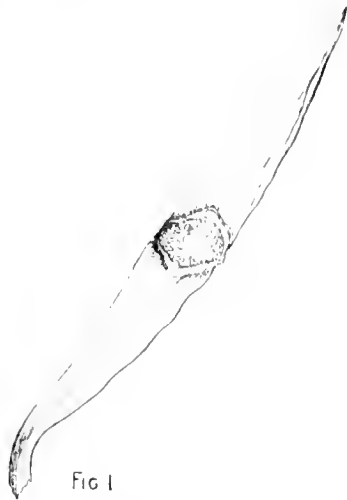


Fig. 1—A diseased carnation leaf, natural size.

wide open and all the spores have become detached. The spores still more highly magnified are shown in Fig. 5. They are colorless bodies, usually curved, with thin walls and often containing nuclear globules. Some appeared to be septate, but this could rarely be made out. The length of the spores is from twelve to eighteen ten-thousandths of an inch and the width less than two ten-thousandths.

A comparison with scientific descriptions and accurately named specimens showed the fungus to be *Septoria Dianthi*, Desm. It has been found in Italy, France, Portugal and Siberia, but has been reported only once heretofore in America, at Buffalo, N. Y. (Day's Cat. p. 137).

A black mold was also found on some of the withered leaves, where it had evidently established itself after the *septoria* had killed the leaf.

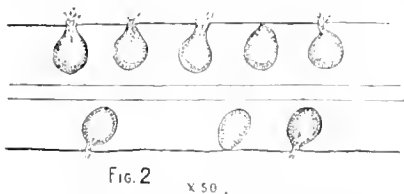


Fig. 2—A diagrammatic drawing of a cross section of the leaf, showing the conceptacles of *Septoria Dianthi*, Desm; magnified 50 diam.

There is no cure for a leaf already diseased, for the fungus is beyond the reach of anything that will not also destroy the leaves. But experiments to check its spread are worthy of trial. The mode of growth is similar to that of the black rot of grapes and remedies suitable to that, as described by Profs. F. L. Scribner and P. Viala, (Dept. Agri. Bot. Div. Bull. No. 7, 1888, p. 25), should be adaptable to this. To remove the diseased leaves and destroy them will

probably be a great help. Drops of water on the leaves are favorable to the germination of the spores; and one should look for beneficial results from watering the pots directly without sprinkling the leaves and from keeping the plants in a comparatively dry atmosphere. Mr. Fisher's experience favors this view.

It is stated that the spores of the black rot will not germinate in even a weak solution of copper sulphate. The latter is valuable as a preventive, but hardly as a cure, so that it should be applied as soon as there is the first sign of the disease or any reason to suspect an outbreak. The addition of lime to the solution is also suggested and the proportions recommended are six pounds each of copper sulphate and lime to twenty-two gallons of water. A. B. SEYMOUR.

Cambridge, Mass.

Notes on Carnations.

The explanation that Mr. Esler desires is a difficult one and rather beyond my power to give satisfactorily.

It is a known fact that varieties have varying degrees of excellence in different localities, and that the plant our neighbor brings to perfection will, under our care and with precisely the same treatment, frequently be a complete failure. Why this should be is a question for science to answer; and scientific attainments, alas! are not, as yet, found on the roll of a florist's qualifications.



Fig. 3—An isolated conceptacle from which spores are escaping; magnified 127 diam.

That the right environment is essential to the welfare of a plant we shall all agree; not only the atmosphere, but the soil also must be of fitting condition to ensure excellence. If we were students of biology and could ascertain with more precision the parentage of varieties that come under our care and also the various conditions of their growth, we could determine with more certainty the causes of disease and the chances for improvement.

What a field for study and observation does our profession offer. New questions are continually arising for our solution. The experience of years, combined with a sincere love for plants, does not prevent continual perplexity as we see plants which we have successfully grown in the past, succumb to diseases for which we have no known remedy. Just as Mr. May says no written testimony can be taken as an infallible guide, but every grower must observe and decide for himself.

Undoubtedly the character of our carnations for winter blooming purposes is influenced largely by the soil in which they are grown. The fact has been demonstrated to my complete satisfaction too many times for me to doubt it for a moment. Varieties planted in light soil and of superior merit generally have proven complete failures when grown

upon the soil at my disposal—a stiff clayey loam; and *vice versa*. With Snowden successful results have never been attained here, the same with Andalusia; yet on the sandy soil of Long Island, I have often seen these varieties in superb condition. Buttercup has always grown and flowered well here until this year, but on every light soil this variety has not been observed in good form.



Fig 4
x 127

Fig 4—Diagrammatic drawing of cross section of conceptacle showing the filaments which line it and to whose tips the spores are attached till maturity; magnified 127 diam.

For some unaccountable reason, not yet decisively apparent, both Peerless and Buttercup are this winter diseased to a very great extent with us. The late summer and early fall was a very wet season in this section and as the soil is so retentive of moisture disease may be attributed principally to this cause. When the carnations were planted in the greenhouse in the fall of 1887 the soil that was used on the benches was some that had been prepared a few weeks previously, by thoroughly burning freshly gathered sod. This was an experiment and the idea was that by using soil prepared in this manner, the adhesive nature of this loam would be rendered more porous, and water could be used freely through the winter. The result was quite satisfactory and the resolution was formed to continue the practice, for roses as well as carnations. But like many other resolutions which we are



Fig 5
x 225.

Fig 5—Spores, some of them containing nucleus-like globules, magnified 225 diam.

continually making, this one also, was—owing to pressure of work—never carried out this year. Whether, if soil of this nature had been used disease would have been prevented, it is beyond me to say, but there is much regret because of the omission. Any one with a stiff soil, incorporating with it some that has been thoroughly burned, will be surprised at the results, supposing that the practice is a new one with them.

The white carnation, of which mention was made in a previous issue, has not shown with me one single good point. It is shy of blooming, dwarf in growth,

and what flowers do appear are flimsy in texture and the calyx also bursts. It hardly seems possible that soil or locality could influence this variety in any marked degree towards superiority. Not one cutting will be propagated from it for any further trial. The variety "Glowing Coal" was condemned, not because of its inferiority, but for the reason that it was recommended as being of higher grade than Portia, when it is really Portia, but sent out under another name.

Within the last few days I was pleased to receive by mail blooms of two new white varieties of carnations, "Wm. Swayne" and "L. L. Lamborn." These specimen flowers were of good size and substance and appeared to be all that is desirable for a white carnation. Not having yet grown these two kinds nothing further can be said now as to their merits, but it appears just to mention this incident, for any new white carnation superior to those we now have would be a welcome boon to the trade. Each one of us is always ready to buy a good thing; what we deprecate with energy is the sending out new varieties with glowing descriptions that are well known by the raisers to be no better, and perhaps inferior to those already in the hands of growers. ALFRED E. WHITTLE.

Albany, N. Y.

Notes on Carnations.

I am glad to see that carnation culture is receiving more attention from your correspondents, for the growing of carnations must directly or indirectly affect nearly every florist in the land.

I have been both interested in and profited by what has been written on this subject and give below a little of our experience with the different varieties, giving some of the conditions under which they were grown. Our soil is light and porous, rather sandy, having no clay, but rich in vegetable matter, being part of a reclaimed swamp. Situated as we are on the eastern shore of Lake Michigan, both the intense heat of summer and the extreme cold of winter are greatly modified by the water. This we think is quite favorable to carnation culture.

We quite agree with Mr. Esler in the last issue of the FLORIST, page 235, in thinking that soil, climate, etc. may greatly affect certain varieties and noticed that his experience coincided with ours in many respects. We have this year for the growing of cut flowers in winter and for furnishing stock for young plants something over 10,500 plants, about one third of which are Snowdons, one third Hinze's White, and the remainder consists of about fifty of the new and standard varieties.

Snowdon is the most prolific early variety we have, pure white and dwarf in habit, though the flowers are short-stemmed and rather small. Hinze's White with us, as in most localities, is regarded as the best white for all purposes, though its place of honor is likely to be contested by some of the new varieties, among which are Silver Spray, medium height with large pure white blossoms on remarkably long and strong stems, L. L. Lamborn, a dwarf variety, very productive and particularly large blossoms, Wm. Swayne, robust habit, creamy white, large and double, and Daisy, very early and productive, flowers not quite so large but very double and borne on long stems. With us these all show so many good qualities as to make them worthy of a thorough trial, and they are

so different that one variety will not take the place of any of the others. They are all very fragrant, but each has its own peculiar fragrance.

Orient and Anna Webb are very similar in color, size and form of blossom, but a large per cent. do not open out perfectly, and those that do are not good keepers. Emperor of Morocco is the deepest crimson, blossoms very large and double and will last a long time either before or after picking, splendid habit and very productive. American Florist is very similar to Sunrise in color though much superior in habit and productiveness and is very fragrant. Florence is a light scarlet free and large, very promising. Paxton, white penciled with scarlet is very good with us, quite similar to Chester Pride, but healthier and more productive. Starlight, our own production, takes the lead in this vicinity; its clear pale yellow making it a favorite with the ladies while it is not so deep a color as to make it objectionable in cut flower work. Here it is early and unsurpassed in productiveness. E. G. Hill is a splendid carnation and if one has it and President Garfield he will need no other bright scarlet. Silver Lake is a fine variety, but not very double. Jeannette is a very promising white, good habit and very productive.

Alegatiere makes good growth and forms very many fine buds, but I have yet to see the first perfect blossom this season. We are sorry to say our experience is totally different from that of Mr. Towell given on page 232 of the FLORIST though it has had an equal chance with the rest. Scarlet Gem also forms quantities of buds, but scarcely one tenth of them produce perfect blossoms and our experience with White Gem is essentially the same.

I will not take space to refer to any other varieties, though we have many possessing valuable characteristics. As we have been benefitted by what others have written we hope this may prove profitable to some of your readers.

Grand Haven, Mich. J. G. H.

Sample Carnation Blooms.

Mr. Geo. Hancock, Grand Haven, Mich., sends us blooms of Florence, a little lighter in shade than E. G. Hill and an excellent flower; Emperor of Morocco, a fine dark crimson; E. G. Hill, the well known scarlet, but in the flowers sent there were traces of white markings on some of the petals, which we have not before noted on this variety; Anna Webb, the now well known crimson; Starlight, a good light yellow which we understand originated with Mr. Hancock; Paxton, white penciled with scarlet, pretty flower, but of doubtful value as a cut flower; Amy Phipps, in the way of Buttercup, but hardly superior to that variety; Daisy, a good white, but not equal to other good whites now in the market; one labeled "our new seedling," white shaded with scarlet, a pretty combination, but flower rather small and not very full; Silver Spray, Wm. Swayne and L. L. Lamborn, the new whites, all good; Swayne has the most substance, Lamborn is the clearest white, Silver Spray has a good degree of both of these valuable characteristics and the specimens sent were on fine long stems.

We are inclined to believe that the comparative value of these three white carnations will be largely decided by locality. If you need a new white carnation try all three in small numbers, and eventually put in a full stock of the

one that does best with you and best answers the requirements of your market.

Hinze's White.

There seems to be a divided opinion among us as to the merits and demerits of this carnation; caused no doubt by the difference in soils and the methods of handling it.

To have it in perfection, they should be planted in a rose house, (that is two-thirds slope to the south and one-third to the north) provided with plenty of ventilation. In a house of this kind you will get pure white flowers and plenty of them from Dec. 1 to July 1. There will of course be some blooms before Dec. 1, but not in quantity. It is a rank feeder and can be manured heavier than most varieties and will repay you with blooms averaging three inches in diameter. Most of mine are planted in solid beds, these are about two weeks later the season through than those on benches, otherwise I can see no difference.

I would like to say how many blooms I cut from a bed 100 feet by 9 feet last season, but I gave the figures to several brother florists at the convention and received a look from them that made me mentally vow never to repeat them again.

As to the new whites, Silver Spray, Swayne, and Lamborn, they are all giving good results with me.

Lancaster, Pa. ALBERT M. HERR.

SEEDLING CARNATION.—Mr. John W. Kropf, Collinsville, Ill., sends us a specimen bloom of a seedling carnation raised by him. It is of medium size, light scarlet oddly splashed with crimson. Quite a pretty flower and might prove valuable during the present call for fancy carnations as cut flowers. Mr. K. states that the blooms are nearly all borne on long stems. It is differently marked from any other carnation we have seen.

CARNATION SPORT.—A dark rich crimson carnation which is certainly a very handsome flower, is quite largely grown around Chicago under the name of Sport. Its origin seems to be more or less in doubt, but that it is a grand good thing there can be no doubt, and it should be more widely disseminated. It is far superior to Crimson King as grown there.



The cut of chrysanthemum Snowball in a recent issue scarcely does justice to the flower, at least it is not overdrawn. This variety is identical with Mr. Peter Henderson's Mrs. S. Humphreys as sent out by him last spring, both having been grown and bloomed by Mr. John Lane, of this city (work for the committee on nomenclature). At all events it is certainly the most profitable for commercial florists of any variety of its color and season (middle to late) known to me. It is a long time after showing color in coming to perfection, quite three weeks or more I should say, during which and for two weeks after it is fit for cutting. Other whites, Moonlight for example,

come to perfection quickly and are soon past use.

A florist of this city grew one plant of Snowball in an 8-inch pot from which he cut 230 blooms; these he sold at three cents each, netting him \$6.90.

The variety M. J. Thomas to be sent out this spring by Mr. Robert Craig is of the same parentage only the blooms are much larger than Snowball. P.

Chicago.

A National Chrysanthemum Society.

If ten years ago it had been said that by 1890 we should have a national chrysanthemum society, many would have said that those who even hinted at such a thing would be a good deal safer in some insane asylum where their utterings would not disturb the minds of their brethren with such absurd predictions.

The position the chrysanthemum occupies in America is such as no other flower (not even the rose) ever had in the short space of ten years. How the position was obtained is told in a few words. The chrysanthemum is a flower with so many variations in shape, such great diversity in color and so differing in size; it comes at a season when all flowers are more appreciated than at any other season of the year; it is a flower requiring no expensive apparatus or structure to bring it to perfection; the man who loves the chrysanthemum be he President or crossing sweeper, has but little difficulty in getting good flowers; it is inexpensive and can be obtained with little cost and trouble, as I said when there were not one-hundredth part as many grown as there are to day:

"The chrysanthemum is a flower that does not rely upon the vagaries of fashion for its popularity. It is a flower that appeals to the heart rather than the pocket. It is a flower that is grateful for all kindness bestowed upon it and returns for such five hundred fold."

That the time has come for a national chrysanthemum society there is no doubt and for the best interests of the flower and the public it must be brought about. It will be a great task and will lay heavily on the shoulders of a few, but like the S. A. F. it will be accomplished and now is the time to strike.

Let us look at what there is to do for such a society:

First, there is the supervision and discrimination to be given to seedlings before they are distributed; this I mention first for the reason that there are so many foisted upon the market now that are worthless, and because of its great importance.

Second, the consideration and selection to be given to collections for all purposes.

Third, the best method for producing the best specimens of all kinds and for all purposes.

Fourth, the supervision as far as possible over those distributing chrysanthemums so as to insure their being true to name.

Fifth, the formation and establishing of societies in all cities, towns and villages where one does not already exist.

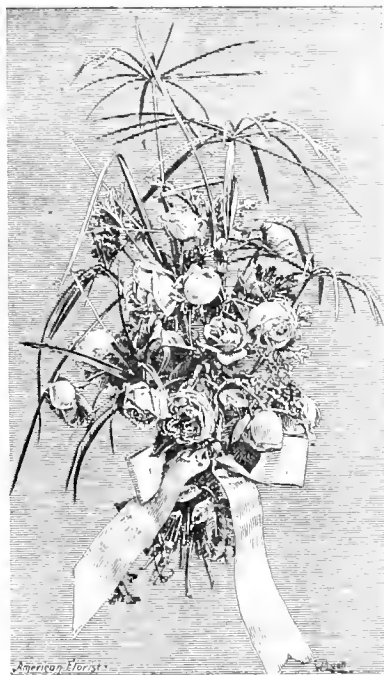
JOHN THORPE.

Chrysanthemums Blooming in January.

Here is a plant of Mrs. M. J. Thomas, coming into bloom eight weeks later than its regular time, a fine decorative plant for Christmas and New Years time, standing sixteen inches high in a 4-inch pot, full of large green leaves with three

branches, each carrying a beautiful large white crown flower.

As this seems to be out of the usual order it may be interesting for me to make known the method by which such may be manufactured. Inventive like, I have been experimenting having in view to improve in knowledge. This plant is from a lot of cuttings of tips from the top of an old plant taken August 1, rooted quickly and grown on rapidly to September 6, when it was transferred into a 4-inch pot and thereafter given ordinary cool growing treatment. September 25 it was cut back about four buds to induce branching and make later flowering; three branches were trained to crown blooming, and all the other buds removed, and now December 24, while the flowers appear so fine they need about five days more to come into ripe bloom, and will probably con-



LOOSE BUNCH OF ROSES AND FOLIAGE.

tinue in good condition four weeks during January.

In growing such, a few simple rules should be observed: The cutting made from flowering wood just before the bloom germ forms a bud, the cutting rooted quickly and grown rapidly for a time to keep the bloom germ from blasting, then as soon as the plant is well established and growing freely it may be potted into a blooming pot and thereafter treated ordinarily, and if trained to single stem crown bloom it will come into flower about November 20, but if cut back four buds about October 1 and branched it will come into bloom about Christmas time. In selecting sorts most suitable for this treatment I would advise such as are large flowering November blooming sorts, strong growers with stiff stems, large leaved not liable to drop and not subject to mildew. Those white in color will be most useful at Christmas time. For best results the habit of the plant and its time of blooming should be known before making the cutting.

JOHN LANE

1801 Lake Ave., Chicago, Dec 21, '88.

Loose Bunch of Roses.

A number of our readers located in the smaller towns have complained that while they were much interested in the illustrations of floral work which have appeared in the *FLORIST*, most of them were of too elaborate a character to be of much use to them, as they never had call for such expensive work. They further requested that we devote a small amount of space to something more elementary, feeling that then they might be benefited.

In response to this request we present herewith an illustration of a loose bunch of roses and foliage. There are but a dozen roses in this bunch, but it is arranged to show the full beauty and grace of each flower. The leaves of *Cyperus alternifolius* which are here used with effect are not commonly used, but they certainly add effect and we see no reason why their use should not be more frequent in floral work.

In the arrangement of a loose bunch it is well to avoid a combination of colors. Avoid stiffness and formality. Have it graceful above all things and see that each rose has a chance to display all of its beauty. Don't crowd them together, this hides their beauty and spoils the effect entirely.

We recollect a florist of the old school whose floral arrangements were wonders of ingenious skill in entirely destroying the grace and individuality of the flowers that composed them, and in passing his store one day we were dumbfounded to see a number of vases of roses, which were most exquisitely arranged, displayed in the window. We pondered on this considerably, wondering if he had arranged them himself or if they were the work of some new assistant, but the mystery was solved one morning when we called. He was "arranging" the vases of roses for the window and this was the way he did it: He took the roses out of the box one by one and hanging the roses downward placed the ends of the stems all even at the top, and after he had a bunch of sufficient size he would right them up and place in the vase. As the stems were of varying length, when placed in the vase the roses fell away into natural and graceful positions. He remarked apologetically that he had been so busy lately that he had not had the time to arrange the vases as carefully as he would like, and we mentally concluded that it would be a grand good thing if he was always as busy.

The present great demand for loose flowers in preference to any made-up work shows the drift of popular taste and the florist who adapts his arrangements to the popular taste and demand is making quick strides towards a successful business.

Presentation to Ex-President Hill.

Recently there arrived at our office a box containing 15 volumes of the *Cyclopedia International*. On examining the fly leaf in Vol. 1 I found it was a present with the New Year's greeting of many friends of the Society of American Florists. I had no thought of such a thing, and coming so unexpectedly it was indeed a great surprise.

The thought uppermost in my mind is that I have done nothing to merit the magnificent and useful present, which has been sent me. I trust my appreciation is commensurate in a measure at least—with the kind thought which resulted in my receiving so valuable a gift.

I apprehend and believe that our national society has a splendid future before it, and if we, as individual members of our profession, measure up to our opportunities and give of our thought, time and energies, we shall witness a marked and intelligent improvement in the profession to which we belong. If I have at any time contributed to such improvement I now feel that whatever of time or effort I have put forth is more than repaid by the generous testimonial which has been sent me.

What we want and need is a better appreciation by the public and press of the usefulness and dignity of our calling; and if we, by united effort, can accomplish this we can all feel that the advancement and position we so much desire for our calling is not so distant as it once appeared.

I value the gift on account of its practical usefulness, and let me assure one and all that I shall ever remember with pleasure the motive which prompted and the act which made me the recipient of so prized a work. With the very best wishes to one and all, I am yours fraternally,

E. G. HULL.

Richmond, Ind.

Boston.

MASS. HORTICULTURAL SOCIETY.

The annual meeting of the Mass. Horticultural Society was held on Saturday January 5. President Walcott presented his annual address. His review of the past year showed the society to be in a prosperous condition financially.

The schedule of prizes for the exhibitions of the coming year is now ready, \$3,000 is the amount appropriated for premiums for plants and flowers, \$2,700 for fruits and vegetables, and \$300 for gardens, greenhouses, etc. The spring exhibition will take place on March 27, 28 and 29; the rose and strawberry show June 25, 26; the annual exhibition on September 17, 18, 19, 20, and the exhibition of chrysanthemums November 12, 13 and 14. A special show of rhododendrons and azaleas is appointed for Saturday June 8. Prize exhibitions will also be held every Saturday from July 6 to September 7 inclusive. The usual course of Saturday essays has been arranged for the winter. The first of the series will be delivered on Saturday January 12, by Mr. J. H. Bourne, of Providence, R. I. Subject: "The evolution and variation of fruit plants, their tendency to degenerate when cultivated."

On Sunday December 30, Horticultural Hall narrowly escaped destruction by fire. The careless removal of a chandelier by a workman connected with a fair in the lower hall, was followed by an explosion of gas and the stage was soon a mass of flames. Prompt work on the part of the fire department saved the building, but not until several very valuable portraits of ex-presidents of the Horticultural Society had been completely ruined. The large painting of "Christ before Pilate," which was on exhibition in the upper hall was also entirely destroyed. The total loss was about \$7,000. It was most fortunate that the fire did not reach the valuable library of the society, the finest of its kind in America, the destruction of which would have been a national calamity.

WEDDING DECORATION.

One of the most prominent society events of the season was the Barrett-Anderson wedding, which occurred on January 3. Norton Bros. had charge of

the floral decorations. The magnificent cathedral where the ceremony took place was richly decorated with a superb display of foliage plants, camellias and azaleas. The reception was held at the house of Lawrence Barrett, the father of the bride, and here too a large display of plants was made. In the bower at one end of the parlor where the bride stood none but the choicest specimen plants were used. The flowers used were also of the richest character. The pagoda arrangement overhead was composed of orchids, freesias, red and white lapagerias and Adiantum Farleyense, with elaborate festoons on either side of Marechal Niel roses and Asparagus plumosa. A large vase of Anthurium Andeanum blooms and one of superb Cornelia Cook roses were conspicuous objects in the foreground. The mantel was loaded with American Beauty roses and Adiantum Farleyense, and between the folding doors was suspended a cornucopia filled with Marechal Niel roses. Norton Bros were given full liberty as to the extent and manner of the decorations and the result was a great credit to them in every way. Every flower used was choice and perfect in itself and although there was no limit set as to the cost, yet nothing was in the least overdone. "Our Mary" was seen to take Mr. Norton's hand and thank him personally for the artistic success he had achieved, and this was surely glory enough for one day.

TABLEAUX VIVANTS ON TREMONT ST.

Gardener in ulster gets off wagon with bundle of roses under his arm which he carries into store. A few moments after he is seen coming out of the store in a hurry and just as he reaches the wagon the two hundred roses come through the open door and whiz by his head as though thrown from a catapult. Gardener returns to store with great celerity and hostilities are at once declared—"catch-as-catch-can." A truce is finally arranged, but threats of future vengeance are still in the air.

GARDENERS' AND FLORISTS' CLUB.

The subject for debate at the January meeting of the G. and F. Club was "Learning to be a gardener." Many members participated in the discussion and some most interesting and amusing reminiscences were related. The annual supper of the club will take place on January 29.

NOTES.

Arthur J. Goode, a young man well and favorably known in the florist business here, died on Friday Dec. 28, after a lingering illness resulting from a stroke of paralysis received some time ago.

Mr. Chas. Storer has just completed a number of beautiful orchid plates for F. L. Ames and J. R. Pitcher, and has received a number of orders for similar work from Europe. As a cypripedium painter especially Mr. Storer has not an equal in this country.

Benj. Grey has just started a house of water lilies for early bloom. The house is over 100 feet long. Mr. Grey has three 100 foot houses of Grace Wilder carnations. He has discovered among his plants this year three sports from the Wilder, one salmon, one purple and one white in color. W. J. S.

Painted Roses.

ED. AM. FLORIST:—Being on Mr. Halliday's committee, I feel it my duty to inquire into the manner in which some

of your neighbors are manufacturing pink roses. Two ladies here say they have had pink roses from Chicago that were beautiful, not quite like any in Milwaukee, but next morning they discovered that their beautiful party dresses were badly damaged with paint. I know where they come from. Is it not the business of our committee to expose any fraud of this kind? I would like to get the sense of the trade on this subject and know of no better way than to ask the question through your paper.

Milwaukee. C. B. WHITNALL.

New York Notes and Comments.

A very handsome and original decoration was arranged by Siebrecht & Wadley for a New Year's dinner and reception. It was a large affair, some 125 guests being received at dinner, and as the ordinary reception rooms were all devoted to dancing this meal was served in the basement laundry. The ceiling and walls were entirely hidden, being covered with greenery, laurel, needle pine and palmetto, brightened by well-berried holly. Recesses in the walls were filled with palms, small holly trees, Jerusalem cherries and other similar plants, until the large room looked like a garden bower. Picturesque lanterns hung from the roof and a few bright fans were against the wall where more color was needed. The dinner was served on small round tables. Over each table a large Japanese umbrella swung open, depending by its handle from the roof. These umbrellas were covered with loose flowers. Just as the clock struck twelve, ushering in the New Year, all the umbrellas were simultaneously closed by an ingenious mechanical contrivance operated from an adjoining room, thus throwing a shower of blossoms over the guests seated beneath. The reception rooms above were decorated with palms and other large plants; large bunches of roses hung over the mirrors.

A visit to Julius Roehrs' place at Ruthersford, N. J., gives the opportunity of seeing a lot of remarkably fine hybrid roses, which he has been cutting since about Thanksgiving. Anna Alexieff he grows largely in boxes, as being handier in every way than pots. The boxes are from two to three feet wide and four to five feet in length. Alexieff is a very useful rose; as one florist said recently, it would completely eclipse Beauty if it had perfume.

Mr. Roehrs' house of Luizet, coming in about New Year's, was a grand sight, clean foliage and a mass of straight, strong buds. Magnas were in splendid order, too. No other roses than hybrids are grown on this place. Carnations are doing well on some of the side benches of the hybrid houses. Noticeable, by the way, that Anna Webb, in spite of good color and texture, shrivels up much sooner than some of the other crimson carnations, such a Orient or Clifton.

Mr. Roehrs has been known for some years as one of our largest forcers of bulbs, but he says that tulips are played out now and that there is not a large profit in Romans when you pay three cents apiece for the bulbs and have to sell the flowers for \$1 a hundred.

In addition to the hybrids this place displays a lot of commercial palms, pandanus, dracaenas and aspidistras. The variegated aspidistra is very handsome and it has the merit of being a plant one can't kill. Good specimens are not very plentiful; they have been neglected for some years.

Dracena fragrans is another handsome thing that has received a little neglect.

Mr. Roehrs has a German strain of cyclamens possessing remarkable beauty of foliage as well as flowers. In many cases the leaves look like a miniature *Begonia Rex* with their silvery markings and no two plants are alike in this respect. To be salable, these plants have to be symmetrical in growth and covered with a profusion of flowers. In many cases the white-flowered ones seem preferred.

A general topic of conversation recently in horticultural circles was an article in the *New York World* the day after Christmas, describing the great "Flower Trust," in which several of our friends among the commission dealers are described as hard-hearted monopolists. This article was what its contemporaries would pleasantly term a "World fake," but it certainly did harm to the business. As one prominent up-town florist said, it gave intending buyers the impression that flowers were unusually dear, when in reality the advance was very slight. The rank absurdity of a "Flower Trust" is evident to any one who knows the business. The *World's* screed was evidently inspired by somebody's personal spite.

Cusis is one of the most satisfactory roses one can use, says Mr. Scott, because they keep so well without losing color or shape. Make up a basket of Cusis one day and it is just as good, or better, the next. Not a common virtue with roses of such fragile beauty.

Cypripedium insigne is the only cypripedium generally salable for cut blooms, says Mr. Thos. Young. The darker sorts, such as *barbatum* and *Lawrenceaum*, which one would expect to take well, hardly sell at all. Another necessity for these flowers is a good long stem.

A good idea for keeping count of roses produced by each bed was noted at Mr. Nash's. It consisted of a tally sheet divided by perpendicular lines into four sections. The sections were headed thus: Upper side, lower side, north center, south center. Above this was the number of the house. It is easy enough to enter each cutting on the sheet and thus always keep track of the crop.

EMILY LOUISE TAPLIN.

NEW YORK.—J. Arnot Penman, the American agent for the Dictionary of Gardening has removed his office from 12 Dey street to 44 East Ninth street.

TALLAHASSEE, FLA.—Jno. G. Heintz, the florist of Terre Haute, Ind., has bought two acres of land here for gardening. He has a hundred hotbed sash and intends to raise early vegetables and tropical plants.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED. By a practical rose grower, also by an assistant. Good references. Address: D. A. C. Allegheny P. O. Pa.

SITUATION WANTED. By a gardener fully competent in propagating and all greenhouse work. Address: C., care American Florist, Chicago.

SITUATION WANTED. By a florist of 12 years' experience, single; age 27. Best of references. State wages. Address: R. A., care American Florist, Chicago.

SITUATION WANTED. By a florist and retail seed-man; single. No. 1 references. State wages. Address: W. C. H., care American Florist, Chicago.

SITUATION WANTED. An intelligent florist and gardener wants a place immediately, as foreman or manager. Apply to B. I. GOLDBROGEN, 2701 Cottage Grove Ave., Chicago.

SITUATION WANTED. Commercial or private by a single man, 28 years old; 7 years with Henry A. Dreer, Riverton, to whom he refers. Address: FRANK EBNER, Riverton, N. J.

SITUATION WANTED. By a young man (single), well posted in greenhouse work and willing to work under instruction. Good references. Address: J. C., care J. W. Ahern, Mt. Vernon, Ohio.

SITUATION WANTED. By a young man 21 years old, in the cut flower department; 1 year's experience; can give good references. Address: F. BROCKSAHL, 2610 Olive St., St. Louis, Mo.

SITUATION WANTED. By a first-class gardener; single, German; competent in all its branches as foreman in a commercial or private place. Best of references. Address: GARDENER, 1120 Wistar St., Phila.

SITUATION WANTED. By practical rose grower and plantman; 10 years' experience in commercial line; age 30, single. Best of references. State terms and wages. Address: E. M., care American Florist, Chicago.

SITUATION WANTED. Commercial establishment or private place in want of competent and acting manager practically posted on all matters pertaining to the business. Address for all particulars: A. B., American Florist, Chicago.

SITUATION WANTED. As gardener, private or commercial place. Aged 26; 12 years' experience; German; single; capable of taking charge of first-class greenhouses. Best of references. Address: CARL WALGNER, 40 Chestnut St., Harrisburg, Pa.

SITUATION WANTED. A first-class florist, well acquainted with all branches of the business, especially roses and carnations; also been in business for himself, and can furnish first-class recommendations. Address: ANTON PUTERICK, florist, Westerly, R. I.

SITUATION WANTED. As superintendent of park or grounds of large public institution. Fully experienced both under glass and outside. Had full charge where now employed five years. Have made landscaping a life study. Address: RAY, care American Florist, Chicago.

SITUATION WANTED. By a young man in floral store or office, thoroughly understands all kinds of design work; also double or single entry book-keeping; has had 5 years' experience in first-class store. Best of references. Address, stating salary paid: WORKER, care American Florist, Chicago.

SITUATION WANTED. By a gardener and florist with 22 years' experience in the United States, growing plants and cut flowers. The growing, treatment and propagation of roses a specialty for 8 years in several states. Commercial place preferred. Single; age 42 years. Good references. Address: A. GEORGE, florist, care American Employment Co., 70 Bienville Street, New Orleans, La.

WANTED. Salesmen. By the oldest, largest and best-known Nurseries in the West. Permanent positions; good pay. Omit free. Address: STARK NURSERIES, Louisiana, Mo.

WANTED. A capable, energetic man, single, by middle of Feb'y, or 1st of March, to run greenhouses on shares. No capital required. Address: A. M. C., box 27, Oxford, Chester Co., Penna.

WANTED. A good landscape gardener; one who thoroughly understands rose growing and bedding plants. None but a reliable and thoroughly competent man need apply. Address: ERNEST BOLTE, Allentown, Lehigh Co., Pa.

WANTED. A partner in a plant and floral business East. Store in center. A man of good character that can furnish at least \$200 capital. City of 38,000 inhabitants. Fine chance for the right man. Address: E., care Am. Florist, Chicago.

WANTED. To correspond with a young man of good character, that can furnish at least \$1,000, and that knows how to successfully manage the flower and plant business, and is not afraid of work. No others need write. Address: OSCAR WRIGHT, Moundsville, W. Va.

FOR SALE OR RENT. Florist business of the late H. F. Crowell; established 15 years. First-class opening for an energetic man. For particulars, address: EDITH M. CROWELL, 1512 Pacific Ave., Atlantic City, N. J.

FOR SALE. Two greenhouses and salesroom in good down town location in Chicago. Good line of decorating plants, bulbs, roses and other good stock. Will be sold cheap for cash. Good reasons for selling. Address: Box 6, care Am. Florist.

FOR SALE. In a large western city, good settled country. For the right man with some capital to connect nursery business with it. Located on Main street—street car line. 7 greenhouses heated with steam; good stock of plants, 200 hotbed sash, garden tools, wagon, horses, all in good order; plenty water, 4 years more lease on 30 acres of ground; cheap rent; large house; stable. Ground for sale any time. Done good business for 5 years in flowers and early vegetables. Cause poor health. Address: A. F. S., care American Florist, Chicago.

WANTED.

About 4,000 feet of SECOND HAND 4-inch Greenhouse Pipe. Send net cash price to

SCHILLER & MAILANDER.

Cook Co., NILES CENTRE, ILL.

E. BENARD,

ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS
A SPECIALTY.

NURSERY STOCK OF ALL DESCRIPTIONS
For particulars apply to

E. BENARD, Jr.,
P. O. Box 1400 San Diego, Cal.

JOHN CURWEN, Jr.,
GENERAL
GREENHOUSE STOCK AND ROSES.
Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

IMPORTED M. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2½-inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

Mention American Florist.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per Hundred.

ELLWANGER & BARRY,

MOUNT HOPE NURSERIES.

ROCHESTER, N. Y.



Holiday Prices.

A clipping from the New York *World* of December 26 with the caption: "A trust even in flowers. How the small dealers are squeezed about the Holidays" has been brought to our attention.

We give the substance of it below:

"I want a nice bouquet for a lady, my usual price, about \$2," said a young man to the attendant in a leading florist's establishment on Union Square last night.

"Two dollars will not get you much of a bouquet to-night, sir."

"How much do you charge to-night for such a bouquet as I usually get for \$2?"

"I shall have to charge you \$5 for it."

"Why, that's extortion. I won't submit to it. You have no right to take advantage of your customers in that way."

"I know it seems like an outrage," replied the dealer; "but I assure you that I will not make as much profit on the sale at \$5 as I usually do at \$2. You must remember that at holiday times there is an extra demand for flowers, and prices always go up."

"Well, I can't pay \$5 for a bouquet," and the young man went away in a huff. Worse than that, his best girl was probably disappointed. Worse still, a good many best girls were obliged to go without bouquets last night."

When the young man had gone out, the dealer turned to the *World* reporter, who had been an auditor, saying: "There it is, another customer lost, and more flowers left on hand unsold."

"Why did you charge him so high a price?" queried the reporter.

"I had to do so to get my money back. Flowers are very costly at this season."

"Is there a scarcity in the market?"

"Not at all. Flowers are very abundant today. Every dealer is probably overstocked."

"Then why the high prices?"

"Because of the combination between the commission men and the growers. They always combine at holiday times and put up the prices. It is just the same every Christmas, and at Easter, and any other time when there is a special demand."

"How much do they advance the prices at such times?"

"They treble and quadruple the prices. Now such a bouquet as that young man wanted for \$2 I can usually furnish at that price and make a profit of from 50 to 75 cents. To-night I would not save myself in selling it to him for \$5. An ordinary bouquet cannot be sold to-night for less than \$12 to \$15. Why, see here, here are roses that I generally sell for 10 cents which cost me to-day \$2 a dozen. Finer roses cost \$3, and more. These carnations, which generally cost 50 cents a dozen, cost to-day from 75 cents to a dollar. Single blossoms that we ordinarily retail for 25 cents cost us 50 cents to-day."

"Who makes these advances? What is the combination?"

"It is composed of the larger commission dealers or middlemen and the leading growers. These middlemen are wealthy and have ample facilities for keeping large stocks. Before the holiday season they scour the country, from Boston to Florida, and engage all the supplies of the growers. They offer them prices above the prevailing rates on condition of having their entire output. They begin to receive these supplies two and three weeks before the retail demand sets in. They are packed in snow and kept in dark, cool, damp places so that their beauty does not fade. And so, when the retail trade sets in and dealers must have stock, these men are enabled to charge their own prices—prices which have been previously agreed upon among themselves. It makes no difference what they charge, the dealers must purchase or go without. They form as close a combination and as absolute a monopoly as the Standard Oil Company."

"Who are in this combination?"

"It includes all the commission men of any account in the city. My trade has been unusually light to-day, not for lack of would-be customers, but because people will not pay the prices I am

compelled to charge. As a consequence, you see I have a large stock left on hand, and am a heavy loser by the day's business."

William H. Brower, the well known dealer at the intersection of Broadway, Fifth avenue and Twenty-third street, was highly indignant. "Our trade has been very light to-day," he said. "People will not submit to the outrageous prices we are compelled to charge. As a consequence I am overstocked and must lose money."

"Whose fault is it?" asked the reporter.

"It is the fault of the combination. There is no reason why they should advance prices on us the way they do at holiday times, only they have the power to do so, and exercise it. But it is some satisfaction to know that they have burned their own fingers this year. Trade has been so light because of the high prices charged that they as well as the dealers are left with large stocks on hand."

"But can't they work their stocks off by reducing prices?"

"They can, but they won't. They will not sell me at any reduction from fixed prices, but they will sell to the street vendor and the man on the corner such of their goods as begin to deteriorate at any price they can get."

"Who compose this combination?"

"Oh, all the commission men are in it. I do not care to mention names. It takes them all in."

"Why do the dealers submit to their extortion?"

"Because they are compelled to. But I don't believe they will do it much longer. I think the principal dealers will form a counter combination and agree to close upon holidays in future rather than encourage these men by working off their goods for them."

"Why do you not supply yourselves directly from the growers?"

"We can't do it, for several reasons. The large growers are in with the commission men in the first place, and share in the profit. Then, again, we have to keep a variety which can only be gathered from many sources, and no dealer can go all over the country to pick up his stock. Then, again, no dealer can take the entire production of a grower as the commission men do, so the growers do not care to sell to us."

The reporter visited a number of dealers from Fourteenth up to Twenty-third street and from Madison to Sixth avenue and found the same story everywhere.

The gentleman who sends us the clipping (evidently a grower) comments upon it as follows: "The poor florist forgets the profit he makes in the fall months when the grower gets but \$3 or \$4 a hundred and the poor florist receives \$2 50 a dozen for roses."

There seems to be some room for discussion on the points involved in the question of holiday prices. The statement that there is a "trust" or "combination" in the true sense of these words is of course nonsense. The high prices which prevail at the holidays are due to the unusually heavy demand at that season, which demand is anticipated by both grower and wholesale dealer as well as the retailer.

If prices have been pushed to a higher figure than would sell all the stock in the market, and stock has been lost in consequence, there has been an error on the part of the sellers in estimating the supply and demand. As the prices this season have been but little if any higher than last season it is to be presumed that the supply was larger and that lower prices were necessary to sell it all. If the supply was no larger than last season and the prices the same then it may be

assumed that the high prices of last year deterred many consumers from indulging in the luxury of flowers this season, thereby lessening the demand. If this last be true then the limit has been passed and an injury done, and the result will be lower prices next season, probably a little lower than necessary to sell all the stock, as if any have had stock left on hand this season they will be wary next time and keep down to a figure that will be sure to sell them out clean.

All that is necessary to assist these matters to regulate themselves is full information as to the supply, demand, prices, etc. at all principal points over the whole country at the holiday season, that the effect of the existing order of things on the consumers of flowers may be fully understood, and this the *FLORIST* supplies in this issue in the annual report of the holiday trade. We commend the facts presented in this report to the consideration of the trade.

The Reduced Postage on Plants and Cuttings.

I notice that one of your correspondents in your issue of January 1, complains that the postmaster at his place (he does not say where) insists in exacting the old rate of 16 cents per pound for "flowers," saying that they are not "cuttings." Your correspondent should appeal against the decision of this zealous hair-splitting Solomon to the Postoffice Department at Washington, and I have but little doubt but it will at once set him right, for of course there can be no such discrimination.

Few flowers are ever cut nowadays but have the stems long enough to be made into cuttings if desired. The reason why we were able to get a special law made so as to reduce the rates on plants and cuttings was that they were perishable goods, and consequently could not be placed on the shelves of a country store keeper like books, dry goods or hardware; in other words, the store keepers on the frontiers keep nonperishable goods in stock, so that there is no necessity for such to be sent by mail to consumers, but our perishable goods cannot be so kept and hence the good reason for being able to put them into the hands of those who want them by the mails at reasonable rates.

Jan. 4, 1889. PETER HENDERSON.

Tulips at the Paris Exposition.

E. H. Krelage & Son, Haarlem, Holland, last November planted six beds, each containing 225 square feet, with tulips on the grounds of the Paris Exposition. They are expected to bloom at the opening of the exposition or shortly afterwards. Over 700 varieties of tulips are planted in these beds.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.25.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.40; Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent; 6 months, 10 per cent; 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for February 1 issue must REACH US by noon, Jan. 25. Address

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

Park Nursery Co., Pasadena, Cal., nursery stock; August Rolker & Sons, New York, trade list select flower seeds; J. M. Thorburn & Co., New York, retail seed catalogue; same, trade seed list; Oscar H. Will, Bismarck, Dakota, seeds; Cole and Bro., Pella, Iowa, seeds; Fred Roemer, Quedlinburg, Germany, seeds; F. C. Heineman, Erfurt, Germany, seeds; Ed. Pynaert-Van Geert, Ghent, Belgium, cypripediums; H. A. Dreer, Philadelphia, trade list seeds; N. F. McCarthy & Co., Boston, florists' supplies; F. Barteldes & Co., Lawrence, Kan. retail seed catalogue.

Primula Obconica.

I would like to ask through the AM. FLORIST, what is the best temperature, location and soil for the successful growing of the Primula obconica? Is the plant sensitive to tobacco smoke, and how large do plants have to be before blooming profusely?

I have not been perfectly satisfied with the growing of them as yet. I will be grateful for any information upon the subject. C. W. LEWIS.

Lynn, Mass.

Building.

I wish to erect two houses for roses and carnations. Have a high elevation, wish to break power of northwest wind, can do so by building boiler house at north side and running greenhouses north and south. Would I have as good results as are to be had from houses running east and west? A. B. ELLSWORTH.

Allentown, Pa.

A. S. KIMBALL, WHOLESALE CUT FLOWERS,

Shipping Trade my Specialty.

Consignments Solicited.

170 LAKE STREET, CHICAGO.

ROSE BUDS WHOLESALE THE OAKLEY ROSE HOUSES

VARIETIES:

Beauty, Bennett, La France, Mermel, Bride, Niphetos, Perle, Sunset, Papa Gontier, Bon Silene.

CHAS. L. MITCHELL, MGR.,

P. O. Box 188, CINCINNATI, OHIO.

Telegraph Address [via W. U. Tel. Co.] Cincinnati, O.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

WHOLESALE CUT FLOWERS & FLORISTS SUPPLIES

What have you to sell? What can we sell you? Let us know by return mail.

THE WISCONSIN FLOWER EXCHANGE, 133 Mason Street, MILWAUKEE, WIS.

Wholesale Markets.

Cut Flowers.

Table with columns for flower types (Roses, Violets, etc.) and prices for Boston, Jan. 10.

Table with columns for flower types (Roses, Carnations, etc.) and prices for Philadelphia, Jan. 10.

Table with columns for flower types (Roses, Carnations, etc.) and prices for Chicago, Jan. 11.

WM. J. STEWART, Cut Flowers & Florists' Supplies

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO., WHOLESALE FLORISTS

and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS

Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

Auction Sales of Plants Spring and Fall.

W. F. SHERIDAN, Wholesale & Commission Dealer in CUT FLOWERS,

NO. 50 W. 30TH ST., NEW YORK.

Orders to be shipped will receive prompt attention.

CHAS. E. PENNOCK, WHOLESALE * FLORIST,

38 So. 16th Street, Philadelphia, Pa.

KENNICOTT BROS., WHOLESALE FLORISTS,

TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.

Thos. Young, Jr., & Co., Wholesale Florists,

INCORPORATED 1885,

20 W. 24th St., NEW YORK

CUT FLOWERS.

We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,

PROMPT SERVICE,

GOOD STOCK.

And our record shows that we "got there" a little oftener than some others.

VAUGHAN'S FLOWER DEP'T,

Telegrams, 88 State, CHICAGO. Letters, box 688.

W. S. ALLEN,

WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

LaRoche & Stahl, Florists & Commission Merchants

OF

CUT FLOWERS.

1237 Chestnut Street, PHILADELPHIA

Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co., WHOLESALE ROSE GROWERS,

Telephone 977. WASHINGTON, D. C.

Roses planted for Winter 1888-9

Souvenir de Wootton, The Gem, Puritan, American Beauty, Annie Cook, Mad. Cusin, Papa Gontier, The Bride, La France, Bennett, Perle, Mermel.

And other Standard sorts.

EDWARD C. HORAN, WHOLESALE FLORIST,

36 WEST 29TH STREET,

The Bride, Mermel, and Am. Beauties, SPECIALTIES. NEW YORK.

HAMMOND & HUNTER, Wholesale dealers in Cut Flowers and Florists' Supplies

61 West 30th Street, NEW YORK.

FISK & RANDALL, WHOLESALE FLORISTS,

116 & 118 DEARBORN STREET,

CHICAGO.

Store Open Night and Day.

GEO. MULLEN, WHOLESALE FLORIST,

17 CHAPMAN PLACE, (near Parker House.)

SPECIALTIES.

VIOLETS, ROSES IN VARIETY, SMILAX, FANCY CARNATIONS, LILY OF THE VALLEY, TULIPS, HYACINTHS, NARCISSUS, ETC.

WELCH BROS., WHOLESALE FLORISTS,

165 Tremont Street BOSTON MASS.

We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

MR. T. WEBSTER of Hyde Park, Mass., is now engaged as a traveler for Mr. Wm. Meggat.

C. W. DORR has removed from Des Moines, Ia., to Seattle, W. T., where he will engage in law practice.

HOWARD & UNDERHILL will engage in the wholesale pea and bean growing business at Cape Vincent, N. Y.

H. B. GRIFING'S SONS & Co. will be the style of the firm which succeeds the agricultural house of H. B. Griffing in New York.

A Texas Tuberosa Bulb.

The account of a tuberosa weighing 11½ oz. in issue of January 1, spurs me to carry out a long deferred intention of sending you a tuberosa from Texas which I do by to-day's express. It is a blooming bulb and it's sets of this year's growth. The old parent bulb is completely covered with the sets and the sets are themselves blooming bulbs (one has bloomed) with a second crop of sets adhering. This is not unusual in this section with its long seasons, strong soil and long continued heat. The sets of the blooming bulbs make flowering bulbs the first season and sometimes bloom. The bulbs would, I think, pass as extra select any where.

This was one among 125 bulbs devoid of sets, planted out or started in the greenhouse middle of January last, planted in open ground middle of March and dug December 15. I have an ambition to grow tuberosas ten inches in circumference and hope to do it this year. Success to the FLORIST.

Waco, Texas. J. H. HURWOOD.

[The bulb, or rather clump of bulbs and sets weighed 39 ounces and certainly beat anything we have ever seen in the way of tuberosa bulbs.—ED.]

News Notes.

WICHITA, KAN.—F. & A. Kreichenmeister have built two houses, 30 x 15 and 75 x 15 respectively.

COLLEGE HILL, O.—Corbett & Wilson have rebuilt a rose house 60 x 18. Harry Corbett has built two new houses 60 x 15.

RICHMOND, IND.—Hill & Co. have put in natural gas service and are using it for heating. They are much pleased with it as a fuel.

FLEMINGTON, N. J.—L. Bonnot is building a new house 100 x 15, and putting in a No. 19 Hitching's boiler. E. Bonnot has removed to Jersey City.

ROCKFORD, ILL.—J. J. Soper has built a new house 60 x 10. Wm. Melcher has just completed a new house with office down town; this place is heated by steam.

MILFORD, MASS.—Mr. D. B. Brayton of Smeeton, Coleman & Co., florists at Little Rock, Ark., was married to Miss C. Carpenter of this city, on the 5th inst.

NEW ORLEANS.—R. Maitre has added three new houses, 110 x 12, 125 x 12 and 90 x 12 respectively, also remodeled two other houses. He has also added two and a half acres of ground which is plant-

ed with roses and orange trees, and built a new residence. J. H. Menard has added a new house 75 x 22.

DENVER, COLO.—Messrs Braun & Satterthwaite having dissolved partnership, the business will be continued by Geo. J. Braun and J. L. Miller under the firm name of Braun & Miller. Mr. Satterthwaite who retires will devote his attention to improving his city and suburban property which is becoming very valuable.

ST. JOSEPH, MO.—Hans Nielson has built the past summer on new ground nine new houses, eight 17 x 100 and one 12 x 100, also a packing and potting shed 13 x 104 and an office 13 x 15. The sash bars on the houses are of cypress, glass first quality double thick put in the 12-inch way. Raised benches are used in the rose houses.

MONTCLAIR, FLA.—A scourge of rabbits has suddenly and unexpectedly done a vast amount of damage to roses and carnations planted out. The thermometer recently dropped to 28° and the frost did some damage, but much to our surprise it did not touch a vigorous growth of Mahernia odorata. I saw lately an expanded La France rose (budded) that measured five and one-fourth inches in diameter. It was grown out doors.

CINCINNATI, O.—T. W. Hardesty has opened a cut flower store at 195 West Fourth street. It is very neatly and attractively furnished. J. A. Peterson has removed to a larger store at 42 West Fourth street. It is handsomely fitted up. A. Sunderbruch & Son have added four new houses, one 210 x 20, one 75 x 15 and two 75 x 10. All heated by steam. The Cincinnati Floral Co. has added one house 225 x 30 and one 100 x 30. Heated by steam. R. Witterstaetter has added a house 45 x 10. The members enrolled in the new Florists' Club now numbers 110. It is hoped that much good will result from this organization.

YOUNGSTOWN, O.—Miss Anna, daughter of E. Hippard, the florist, was married January 3 to Mr. C. J. Little. The house was magnificently decorated with flowers, vines and plants. The stairway leading from the hall to the second floor was adorned with Passiflora princeps. The windows were curtained with asparagus, as was also a large mirror in the parlor. These curtains were looped with ribbons and bunches of roses. The mantels and grates throughout the house were handsomely decorated with rare flowers. The bridal canopy was erected in the parlor, facing south. It was a hower of smilax, with a great wishbone of Perle and La France roses pendent from it. The bride carried a bouquet of roses and lily of the valley and her mother a bouquet of orchids.

DAYTON, O.—Holiday trade far in advance of previous seasons. Three new stores have lately commenced business. Mr. J. B. Heiss, formerly the asylum florist, has fitted up an elegant room on S. Main street and reports trade brisk. Miss Ida Smallwood has opened a cozy room in the Phillips house. The Gem City Floral Co., under the management of Miss Anna M. Troup, also opens at 23 West 4th street. The Dayton Floral Co. has given up the Main street store and holds fourth at the greenhouses only. H. H. Ritter has added two new houses this season and now has the most glass of any florist in the city. Under Chas. Beck's management the National Soldiers Home has rebuilt entire their

greenhouses. They annually use over 100,000 plants for outdoor bedding. Mr. John Mull, 237 North Jefferson street and Mr. Edw. Herbruck, 1606 East Third street have each erected a greenhouse for their personal pleasure. John Boehner, the Brown street florist, has doubled his glass this fall. All kinds of flowers are scarce in the city and prices are held up at profitable figures. Wm. Kramer's greenhouses were entirely destroyed by fire the night of December 21. No insurance. He will not rebuild.

Well Grown Roses.

Mr. Samuel Murray, foreman for Hans Nielson, St. Joseph, Mo., sends us a box of roses as a sample of what can be done by a western grower. All the roses can be called first quality and some of them are extra well done. One specimen of American Beauty was equal to any we have seen at this season of the year from the most successful growers anywhere. Mermets, Brides, Perles, La France, Gontiers and Bon Silenes were also included and all first class. Mr. Murray's pride in his productions is entirely justifiable. We wish him continued success and trust his example will not fail of emulation by other western growers who have heretofore failed of marked success.

FOR SALE.

ALTERNANTHERAS, stock plants, suitable for division; well wooded for cuttings, \$10.00 per 100. An assortment of some stock; world exchange. Address D. S. HEFFRON, Washington Heights Ill.

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The *Royal New Yorker's* seedling potato No. 2, will be sent to all yearly subscribers without charge. It yielded in the late celebrated "Potato Contest" at the rate of 1,076 bushels to the acre, the report being sworn to by six well-known judges. This seedling is thought to be the nearest approach to a perfect potato yet produced. The price of the *Royal New Yorker* is \$2.00 a year. It will be sent on a trial trip of 10 weeks for 25 cents in order to show progressive farmers, who do not now read it, that it is the best farm weekly in the world. "It has done more to promote the interests of agriculture in its experiment grounds than all the experiment stations put together." So say the editors of the *New York Times*, *Tribune*, *World*, *Farm Journal*, *Inter Ocean*, etc.; so say all who read it and know. It is pure, sparkling and original. Its illustrations are from nature. It commands the best writers in the world. Subscribe at once. Address the *Royal New Yorker*, 34 Park Row, New York.

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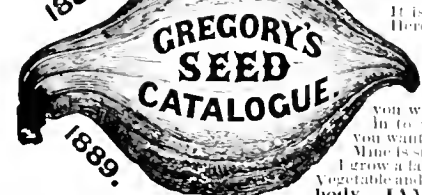
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It is the good things and the new things you want. Here is a Catalogue full of them! Do you want tested seed, raised from stock selected with the utmost care, grown from the best strains, got from the originators? I aim to have mine just such. Do you want new varieties that are really good, and not merely novelties? I aim to have mine such. Do you want seed that the dealer himself has faith enough in to warrant? I warrant mine, as see Catalogue. Do you want an exceptionally large collection to select from? Mine is such. Do you want them directly from the grower? I grow a large portion of mine--few seed-men grow any. My Vegetable and Flower Seed Catalogue for 1889 FREE to everybody. JAMES J. H. GREGORY, Marblehead, Mass.

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which are all our own growing, have been run under with the digger, and can be shipped AT SHORT NOTICE. Plum Seedlings, small, suitable for transplanting. Per 1000, \$1.00; per 100,000, \$10.00. Apple Seedlings, No. 3, \$2.00 per 1000, 1.00 per 100. Prices of larger grades on application. FRASER & LIPPINCOTT, Mention Am. Florist, HUNTSVILLE, ALA.

TREES. Root Grafts 1/2 inch. No Larger stock in U.S. No better, no cheaper. Pike Co Nurseries, Louisiana, Mo.

Seasonable Suggestions.

Now that the rush of the holidays is over the houses should have a thorough straightening up and all plants that have had their day cleared off the benches in order to give as much room as possible for spring stock.

Keep calceolarias, cinerarias, etc. as near the glass as possible; they are both very prone to green fly and as a preventive tobacco stems should be placed between the pots.

Don't let the propagating bed stand empty, this is the best month in the whole year for propagating carnations, and they should be got in as soon as possible. Fuchsias struck last month should be kept growing as rapidly as possible, never allow a fuchsia to suffer for water at the roots and syringe freely overhead.

All plants needed for stock should have special attention; there isn't nearly as much importance attached to this matter as there should be, there is a tendency to treat stock plants as a kind of better class rubbish. I remember last season while being shown through a certain florist establishment I noticed a lot of bouvardia tumbled somewhat carelessly under the benches and chancing to refer to them my escort remarked that they were only stock plants and they didn't bother much with them. I think this is just the trouble with a good many of us, we don't bother enough with our stock plants, and the consequence is frequently much trouble and disappointment to ourselves, and to others who may happen to get a batch of the unhealthy offspring of our neglected stock. Baltimore. A. W. M.

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TRADE LIST OF FLORISTS' SEEDS

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Order early and for Spring Delivery.

Carnations, Rooted Cuttings of

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Roman Hyacinths, Standard Size, in fine condition	\$27.00	\$3.00	
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An Improvement on the Old Variety: Earlier, more vigorous, and larger flowering.
Tulips in fine sorts, comprising *La Reine*, *Kerzeis kronn*, *Re: Kubrim*, *La Candeur*, *Tounevol*, etc., my selection, \$10.50, \$12.00, and \$15.00 per 1000. Will sell CHEAP in lots of 5,000 or 10,000.

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Trade packages of any of the above at \$1.00 each.
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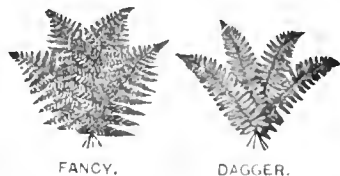
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SPHAGNUM MOSS.
Long, clean fibre, dry, \$1 per bbl., or six bbls. for \$5.
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FINEST PRIMULA AND PANSY SEED.

Apple Geranium Seed, \$3.50 per thousand, Fresh.

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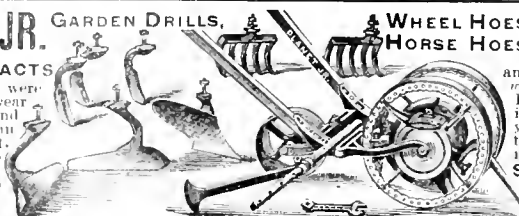
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124 W. 19th Street,
Bet. 6th & 7th Aves., NEW YORK.

BULBS AND PLANTS

IMPORTED BY
C. H. JOOSTEN,
3 COENTIES SLIP, NEW YORK.

SURPLUS BULBS

at the following prices for CASH:

	Per 100
HYACINTHS, White.....	\$2.50
" Red.....	2.00
" Blue.....	2.00
" Pink.....	2.25
" Yellow.....	2.50
" All colors mixed.....	1.75

CROCUSES, Named..... 25
HYACINTHUS CANDICANS..... 2.00
25,000 open ground H. P. Roses, 2 ft. cheap
27 Plants, Bulbs, Etc., by the thousand.

THE PERFECTION VENTILATOR.
SEND FOR PRICES.

E. HIPPARD,
YOUNGSTOWN, OHIO.

Mountain-rose, true, white seed; Anurillus Johnsoni, Hallii, Sarmiensis; Regina, Rosa, Treuten, Atamasco, Candida, Cooperi; Cinnamon vine bulbs, Seed Ampelopsis Veitchii and Royal, Tuberoze and Climbing Hydrangea; Endive, 4 for 10. To trade only. Mrs. J. S. R. THOMSON, Spartanburg, S. C.

FAIR HILL TERRA COTTA WORKS

JACOB C. CASSEL,
No. 2341 N. Seventh St., PHILADELPHIA.

Illustrated Catalogue free upon application.



THE LITTLE CLIMAX SPRAY PUMP
HANDSOME,
USEFUL,
DURABLE.

ITS EQUAL has not been invented for Spraying delicate plants and for using insecticides in greenhouses to destroy MILDW, RED SPIDER, ETC., or for spraying Flowers, and Shrubs on the Lawn. It throws a fine spray 15 feet and a Solid Stream 40 feet; a perfect Pump for washing Windows, Porches, Carriages, etc. Only weighs 21 pounds; legs are unscrewed and it is packed in a neat, strong box for shipping.

FURNISHED COMPLETE FOR \$12.00.
Liberal discount to the trade. Write for large illustrated price list of Spraying Machines and Insect Poison. ADDRESS

THE NIXON NOZZLE & MACHINE CO., Dayton, Ohio.

Chicago.

Some of the best lily of the valley ever seen in this market is being brought in by Aug. Jurgens of Rose Hill.

The best Mermets and Bon Silenes that come to this market are from Geo. Klehm, Arlington Heights.

Chas. F. Krueger has removed to 65 Washington street.

Chas. Woodill, with Thorburn & Co., New York, is taking in the suburbs.

Mr. I. Fosterman, of Sander & Co's. American branch at Summit, N. J. was in the city recently, talking orchids to those interested.

On the 3rd inst. Chas. Reissig cut 600 camellia blooms. This flower gives evidence of emerging from the obscurity in which it has been immured for some years, and owners of old plants may do well to hold on to them.

The Florist Club is making arrangements for the ball to be given by the club early next month. The floral decorations will be on such an elaborate scale that they are expected to linger in the memory of those who view them for many moons.

At the last meeting of the Florist Club it was decided to forward certain recommendations to the Executive committee of the S. A. F. which meets at Buffalo, through President Reynolds who is a member of the committee, covering matters wherein the club believed changes could be made to the benefit of the national society.

The Florists' Clubs.

The Wisconsin Florists' and Gardeners' Club made their notice for the January meeting a sort of prospectus for 1889, and judging from its tenor they propose to combine social and business features in a happy manner. For the benefit of other clubs we give it below:

DEAR SIR:—At our last meeting which, by the way, was a grand success, every officer as well as a large number of members being present, it was unanimously carried that we hold our future monthly meetings in a larger hall where we can have a piano and music and tables for cards or checkers, and after each business meeting we have a social for members and friends. This will tend to make our meetings still more interesting and get new members better acquainted. Prof. Jas. A. Fraser has kindly consented to play the piano and we have plenty of good soloists such as Archie Middleman, Will and Jas. Currie, etc., to insure a good musical treat and we are all good on the chorus.

We shall continue to have papers and discussions on current topics of interest to the club at each meeting—the subject for next meeting being, "Is it good for the business to advance prices on flowers and designs during seasons of great demand or should prices remain about the same?" Mr. F. P. Dilger will take the affirmative and Mr. G. W. Ringrose the negative. All members are invited to take a hand in the discussion. Our question box is yet in use and is becoming one of the best features of the evening. Those who cannot be present and drop in questions may mail them to me and I will put them in the box and notify you the answers. Those who were not in attendance should attend this next meeting (those who were at the last meeting will be there anyway).

As we could not get the large hall for Wednesday evenings our next meeting will be Tuesday evening, Jan. 8, at large hall over No. 1 Grand avenue. Bring any of your friends and florists or gardeners that are not already members along and they may wish to join when they see what we are doing. Hoping to see you Tuesday evening, I am yours truly,

FRANK A. HALL, Sec'y.

CARNATIONS! ROSES!

Rooted Cuttings of Carnations ready by Jan. 20 and after. The best sorts. Prices low.

ROSES—Young plants of MERMET, BRIDE, and PERLES from 2½-inch pots Ready in February and after. Write for prices. A few thousand nice Pansy plants for spring delivery. Write for prices.

E. M. GIDDINGS, Corfu, N. Y.
P. S.—Healthy stock, and well rooted.

New Carnations.

L. L. LAMBORN, WM. SWAYNE, pure white, PRIDE OF KENNETT, dark crimson.

Orders booked now for Spring delivery of these popular new varieties. Send for price list. ROOTED CUTTINGS of other leading sorts of Carnations. I make a specialty of growing Carnations. Stock is true to name, and free from disease.

P. O. Box 226. WM. SWAYNE, KENNETT SQUARE, PA.

CARNATION CUTTINGS.

YOUR TRADE SOLICITED.

HINZE'S WHITE, E. G. HILL, LA PURITE, BLACK PRINCE, MRS. CARNEGIE, ROBT. CRAIG, CHESTER PRIDE, CRIMSON KING, EDWARDSII, PORTIA, GRACE FARDON, SUNRISE, AND OTHER GOOD VARIETIES.

My stock is exceptionally fine and healthy; cuttings will be well rooted and guaranteed true to name. Send for complete list and low prices. Satisfaction assured.

Special bargain on Hinze's White in quantity.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

100,000. CARNATIONS. 100,000.

From Pots, Flats and Rooted Cuttings of 50 standard varieties. Price list FREE. L. L. LAMBORN and WM. SWAYNE, \$10.00 per 100. Rooted Cuttings, \$5.00 per 100. HINZE'S WHITE, Rooted Cuttings, \$10.00 per 1000. Orders booked.

LEROY L. LAMBORN,

Stark County.

ALLIANCE, OHIO.

100,000

ROOTED CUTTINGS OF CARNATIONS of all the leading kinds, ready after January 1st. Having built last summer a house 100 feet long for that purpose, I am ready at any time to supply the trade with any quantity wanted. Send for trade price list.

JOS. RENARD,

Chester Co., UNIONVILLE, PA.

WESTERN FLORISTS

Per 100
5,000 Primulas, single, finest strains of white and colored, nice strong plants from 2½-inch pots, ready for 3 or 3½-inch \$ 4.00
12,000 Splendid Geraniums, all choice var. 3.00
2,000 Oxalis, white and pink 3.00
4,000 Violets, Maria Louise, 3-inch, strong 5.00
3,000 Begonia Rubra Alba 3.00
8,000 Verbenas best varieties only 2.50
2,000 Heliotropes, four best varieties 3.00

ROOTED CUTTINGS.

Per 100 Per 1000
Verbenas, 10 best colors, healthy, \$ 1.00 \$ 8.00
Coleus, 25 varieties50 7.50
Begonia, Rubra Alba and Saundersonii 2.00
Ageratum, Chrysanthemum, Frutescens 1.00

Address N. S. GRIFFITH,

JACKSON Co. INDEPENDENCE, MO.
(Independence is well located for shipping, being 8 miles east of Kansas City.)

STOCK FOR FLORISTS.

Per 100
Alyssum, double \$2.50
Ageratum, four sorts 3.00
Asterantheras, two sorts 3.00
Begonia rubra, strong, 2½-inch 6.00
Flowering sorts 2½-inch 5.00
Fuchsias, double and single 4.00
Geraniums, double and single 2½-inch 3.00
Heliotropes, four varieties, 2½-inch 3.00
Lantanas, six varieties, 2½-inch 4.00
Smilax, strong, 2½-inch 3.00
Salvias, six sorts, 2½-inch 3.00
Fine, healthy stock. Standard sorts. Good packing. Address

HANS NIELSON, St. Joseph, Mo.

CYCLAMEN GIGANTEUM.

Now is the time to sow.

GARDINER'S STRAIN IN THE TRUE GIGANTEUM, and consists of the finest and most beautiful new sorts, unsurpassed for richness and variety of color, and certain to give unqualified satisfaction.

Per 100 Seeds, \$2.00; Per 1000 Seeds, \$15.00.

Sow 100 seeds to the square foot.

JOHN GARDINER & CO.,

21 N. Thirteenth St., PHILADELPHIA, PA.

CARNATIONS.

ROOTED CUTTINGS OF

Edwardii, Scarlet Gem, Phila. Red, Crimson King, Fascination, De Graw, La Purite, etc., \$1.25 per 100. Portia, Duke of Orange, Chester Pride, Peter Henderson, Mrs. McKinsey, etc., \$1.50 per 100. The Century, Robt. Craig or Garfield, Grace Fardon, Grace Wilder, Sunrise, etc., \$2.00 per 100. Buttercup Field of Gold, Dawn, Fancy Andalusia, Mrs. Cleveland, etc., \$3.00 per 100. PLANTS in 2-inch rose pots at double the above rates. Pips when we have them at one-half these rates. Wm. Swayne, L. L. Lamborn (will sell plants only), \$10.00 per 100. Pride of Kennett, fine crimson (plants only), \$8.00 per 100. NOTICE.—We offer the following discounts on pips, rooted cuttings or plants: 500, 5 per cent off; 1000, 10 off; 2000, 15 off; 3000, 20 off; 4000, 25 off; 5000 or over, 30 off. Terms always CASH. Send for circular. W. R. SHELMORE, Avondale, Pa.

ROOTED CUTTINGS OF

CARNATIONS AND VERBENAS A SPECIALTY.

Orders will be booked now and ready for delivery Jan. 1st. Verbenas in 40 varieties, largely scarlet and white, including the best MAMMOTH'S. Rooted cuttings \$1.00 per 100 \$8.00 per 1000. Stock plants 2½-inch pots \$2.50 per 100 \$20.00 per 1000. Carnations, rooted cuttings in 20 fine sorts \$2.00 per 100 \$15.00 per 1000. My stock is strong and healthy, and cannot fail to please. Correspondence solicited. Address J. G. BURROW, FISHKILL, N. Y.

ROOTED CUTTINGS OF CARNATIONS.

Grown in large quantities for the trade, of the Wm. Swayne and L. L. Lamborn. Having the largest quantity, outside of the originator, for sale at the following prices: \$10.00 per 100. Buttercup, \$3.00 per 100, \$25.00 per 1000. Grace Wilder, Grace Fardon, Sunrise, Springfield, Century, at \$2.00 per 100, \$15.00 per 1000. Hinze's White, Peter Henderson, Snowdon, Lady Emma, Phila. Red, Scarlet Queen, Portia, Seawan, Chester Pride, Petunia, Hinsdale, Duke of Orange, Quaker City, \$1.50 per 100, \$12.50 per 1000. Miss Jolliffe, Scarlet Gem, De Graw, Edwardsii, White La Purite, \$1.25 per 100, \$11.00 per 1000. Plants now ready. Also florets of the above varieties at \$1.50 per 100. Cash must accompany all orders. Orders booked now for Spring delivery.

ISAAC LARKIN, Toughkenamon, Chester Co. Pa.

Rooted Carnation Cuttings.

Orders NOW taken for rooted CARNATION CUTTINGS of 20 of the leading varieties, to be ready for delivery in EARLY SPRING. Prices on application.

TUNIS DE PEW, NYACK, NEW YORK.

TO EXCHANGE.

Any person having Geraniums, Vincas, Ivies, Fuchsias, rooted cuttings or in small pots, can exchange for the best varieties of Rose plants in 2-inch or 3-inch pots. Address

GOODING & LEITCH, 1216 Euclid Ave., CLEVELAND, O.

GROW VERBENA PLANTS FROM SEED.

A number of leading florists prefer decidedly to grow Verbenas from seed. Seedling plants produce healthier growth and are more easily handled than from cuttings. Our New Crop of

MAMMOTH VERBENA SEED

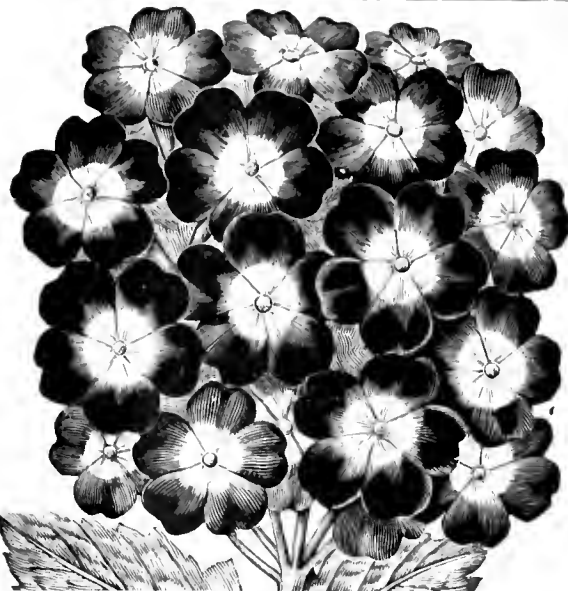
is now ready, grown from stock seed we saved from named plants produced in 1886 WHICH WE GUARANTEE TRUE. The flowers are of mammoth size and of brilliant colors of all shades, from brilliant scarlet to pure white, showing large contrasting colored eyes.

Choice Mixed Seed . . . trade pkt. 50c.; 1/4 oz. \$1.25; 1/2 oz. \$2; 1 oz. \$4
 Smilax Seed, new crop. trade pkt. 50c.; 1/4 oz. \$1.50
 Centaurea Gymnocarpa. 1000 seeds 60c.
 Centaurea Candidissima 1000 seeds 75c.
 Mignonette Mchet, the best for pots trade pkt. 30c.; 1 oz. \$1

SEASONABLE FLOWER SEED LIST of New Crops now ready and mailed to all applicants in the trade.

HENRY A. DREER,

SEEDSMAN AND FLORIST, PHILADELPHIA.



MAMMOTH VERBENA.



VERBENAS.

OUR VERBENAS ARE PERFECTLY HEALTHY.

	Per 100	Per 1000
Stock Plants XX Mammoth Set.....	\$1.00	\$5.00
General Collection.....	3.00	25.00
Rooted Cuttings ".....	1.00	8.00
XX Mammoth Set.....	1.25	10.00

ROSES.

	Per 100	Per 1000
Mermets, Cook, Adam, Sony, d'An Ami, Saffrano and Brides, from 2 1/2-inch pots, strong plants.....		5.00
Ampelopsis Veitchii and Quinquifolia, pot-grown, first size \$8.00, second size \$6.00 per 100.		
Encharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots \$10.00 per 100.		
Geraniums—New and old varieties, 2 1/2-inch pots, per 100 \$1.00; per 1000 \$5.00.		
COLEUS, from pots—Best collection, per 100 \$4.00; per 1000 \$35.00		
Rooted Cuttings, Best collection, per 100 \$1.25; per 1000 \$10.00.		

CARNATIONS, ROOTED CUTTINGS.

Poorless, Hunze's White and Edwardsii, per 100, \$1.50; per 1000, \$12.00. Fred Johnson, The Century, Portia, Snowdon, Jas. Garfield and Algatiere, per 100, \$2.00; per 1000, \$15.00.

Trade List of florist stock on application.

I. C. WOOD & BRO., Fishkill, N. Y.

Bouvardias, Begonias, Etc.

	Per 100	Per 1000
BOUVARDIA BOCKII, new single (pink).....		\$8.00
" Pre-L. Cleveland, new single Scarlet.....		8.00
" A. Neuner, double White.....		5.00
" Vreelandi, single White.....		5.00
" Leiantha, single Scarlet.....		4.00

Fine stock of Begonias, Geraniums, Ivy Geraniums, Chrysanthemums, and general greenhouse stock.

SPRING TRADE LIST NOW READY, MAILED FREE TO ALL.

Address **GEO. THOMPSON & SONS,**

LOUISVILLE, KY.

	Per 100	Per 1000
ASPARAGUS TENUISSIMUS, 5-inch pots.....		\$8.00
" PLUMOSUS NANUS, 5-in. and 6-inch pots, 75 cents and \$1.00 each.		
ADIANTUM ROENBECKII, 4-in. & 5-in., \$15.00 & 20.00		
BOUVARDIAS, all leading vars., 5-in.		6.00
GARDENIAS, 4-in. and 5-in.		\$12.50 & 20.00
MARANTAS, 5-in. and 6-in., 25c. and 30c. each		

SMALL FERNS in variety and at reasonable prices.
 DEUTZIA GRACILIS, for forcing, very large nice plants..... 15.00
 Smaller but strong plants 10.00
 EUPALIA JAPONICA Variegata and Zebrina 15 cents each.

Also a good assortment of other plants for sale by

J. J. HARVEY,

9 E. Broad St., RICHMOND, VA.

100,000 VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

FINE POT PLANTS, \$2.50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for Circular.

CARNATIONS.

Having increased our facilities for propagating, we hope to be able to fill all orders for plants or rooted cuttings. Our list comprises only the best Winter Blooming varieties.

J. L. DILLON, BLOOMSBURG, PA.

GET YOUR VERBENAS FROM HEALTHY STOCK.

I have the NEW MAMMOTH, and all the very best varieties grown for the Florist Trade now ready. (Only first-class varieties kept in stock.)

I shall be able to supply 25,000 good, strong ROOTED CUTTINGS weekly up to May 1, 1889.

CARNATIONS, ROSES AND PANSIES.

A fine healthy stock to select from. Send for my Wholesale Price List before placing your order elsewhere.

FRED SCHNEIDER,

WHOLESALE FLORIST,

WYOMING CO., ATTICA, N. Y.

ROOTED CUTTINGS

COLEUS OF 1888—Robert Craig, J. C. Vaughan, M. A. Hunt, Pres. Cleveland, W. H. Williams, Peter Henderson, R. J. Halliday, John Saul, John Thorpe, Wm. F. Dreer, Wm. C. Wilson, J. N. May, \$3.00 per 100; 2-inch pot plants \$10.00 per 100.

COLEUS—Mikado, Tokio, Kressi, Harry Harold, Louisa Beck, J. Goode, Mrs. Hunt and Rag Carpet, \$1.50 per 100; 2-inch pot plants \$4.00 per 100.

COLEUS, 25 OTHER SORTS—\$1.00 per 100, \$8.00 per 1000; 2-inch pot plants \$3.00 per 100, \$25.00 per 1000.

Price list of Surplus Stock mailed free.

I. N. KRAMER & SON,
 MARION, IOWA.

NEW BEDDING COLEUS "SUNBEAM."

Bright dazzling pinkish scarlet, edged yellow; medium height; stout jointed, and close branching. Selected from a large collection of seedlings of 1888. A clump of 25 plants of the past season grown with all the old bedding varieties and most of the new, attracted the attention of all who saw it; and the universal verdict was the "brightest and most effective bedder of all." Somewhat dull in winter but all summer brighter than "Queen Victoria," and not stiff and coarse like that variety. Every florist should try it. One plant 25c., 3 for 50c., 8 for \$1. free by mail. Rooted Cuttings of Golden Bedder, Verschaffeltii, Firebrand, J. Goode and 25 other varieties—bedding and fancy—\$1.25 per 100 by mail, \$1.00 by express. Alternantheras, best red and yellow vars., ready Feb. 1st. Rooted cuttings same price as coleus. Address with postal note or registered letter. **R. W. HARGADINE,** Felton, Delaware.

VERBENAS.

Mammoth and other Fine Varieties.

Verbenas a Specialty.

Perfectly clean and free from all disease. Can have as many Standard Colors as you desire in your order. Goods packed light. Will guarantee safe arrival of goods.

STOCK PLANTS EXTRA FINE WILL AVERAGE FIVE CUTTINGS EACH.

	Per 100	Per 1000
From pots (Stock).....	\$2.50	\$20.00
Transplanted on benches, EXTRA.....	1.00	10.00
Rooted Cuttings.....	1.00	8.00

Send Ten Cents for Samples.

ORDER EARLY.

Wm. DESMOND,

KEWANEE, Henry Co., ILL.

Verbenas that never knew Rust

Set of 35 distinct sorts, cream of over 1000 seedlings of 1888, from true Mammoth and other best sorts. All most attractive, swabbe colored, and vigorous, rapid growers. Price per Set 5 of each, \$1.00. The Pansy Plants of all the most approved kinds in mixture, 75 cents per 100.
Aster Seed—Best white and dwarf Pansy, 1/2-oz. 75c.
Pansy—Same fine mixture as plants, 1/2-oz. 80c.
Petunia—True yellow throated, pure, 1/2-oz. 50c.
Verbena—My own superb strain 1/2-oz. \$1.00
 All goods sent prepaid. Write for list and description of plants and seeds for plant growers.

DANIEL K. HERR, Lancaster, Pa.

VERBENAS.

Perfectly clean and full of cuttings.

	Per 100	Per 1000
ROOTED CUTTINGS.....	1.00	8.00
TRANSPLANTED.....	1.00	8.00
FROM POTS.....	2.00	16.00
AGERATIUM, Blue, very fine and true.....	3.00	30.00

Satisfaction guaranteed.

W. B. WOODRUFF, Westfield, Union Co., N. J.

New Coleus for 1889.

25 best new and rare sorts, including VER-SCHIAFFELTI, GOLDEN BEDDER, HERO, PROGRESS, from pots, per 100, \$2.00. ROOTED CUTTINGS, per 100, \$1.00.

N. RANSOM & FOLGER,

Highland, Ulster Co., N. Y.

Baltimore.

The holidays have come and gone, and I sincerely hope that my fellow readers of the FLORIST have, without exception, enjoyed a satisfactory holiday trade. It is a little late perhaps to indulge in those sentiments appropriate to the holidays, but it is not too late to express the wish that during the year upon which we have entered we may all abundantly realize that "good time" so pleasantly prophesied by Bro. Kift, "the sweet singer," of Philadelphia. Baltimore florists so far have no reason to complain; trade has been good for some time past and it isn't likely to fall off before Lent. Baltimore society seems determined to enjoy itself this season, and of course that means more or less trade for the florist. Ever since Thanksgiving balls, dinners, weddings, etc. have been the order of the day, and although perhaps none of them so far have been very big affairs, judged from the florists' standpoint, they serve to keep up a good current of trade and long may it continue to current.

Mr. John Cook is quite jubilant over the success of his seedling Rose Souv. De Wootton. He tells me that Strauss & Co., of Washington, D. C., have a bed 200 feet long planted with the Souvenir and they rate it A No. 1. The rose was raised from seed of Bon Silene fertilized with Louis Van Houtte; it is a rich red in color with a fragrance resembling La France. I saw a bench of it at Mr. Cook's before it was put on the market and I didn't notice an unfruitful shoot in the lot. Mr. Cook is at present testing one or two other seedlings of which more anon.

Robert and John Halliday, sons of R. J. Halliday, and who have been hitherto engaged with their father at No. 10 W. Baltimore street, will shortly open a store of their own for the sale of cut flowers etc., at No. 11 E. Baltimore street this city. A. W. M.

Florida Lily.

Who can tell me the name of the wild Florida lily. It is small in size, ranging from nearly white to pale pink in color, blooming in January and February. It is hardy in Florida and is found in moist pine forests. J. C. C. DOWNING, Montclair, Fla.



FOR THE
Mildew on the Rose
Try **GRAPE DUST**.
Sold by the Seedsmen.
For sample send stamp to
SLUG SHOT,
Fishkill-on-Hudson, N. Y.

Delegates to the next convention will travel via the
PULLMAN CAR LINE
TO AND FROM
Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address
T. O. McCormick, Gen. Passenger Ag't, Chicago.

OUR NEW TRADE
DIRECTORY
Contains over
6,000 Names of (Live)
Florists, nurserymen and seedsmen, in the United States and Canada.
PRICE ONLY ONE DOLLAR.
AMERICAN FLORIST CO., Chicago.

SPECIALTIES FOR THE TRADE.

	Price per 100
Alleranthra Paronychioides Major, strong stock plants from 2 1/2-in. pots.	\$ 4 00
Ampelopsis Veitchii and Royalii, fine pot-grown plants 3 feet long.	20 00
" " " " " 2 feet long.	12 00
" " " " " 1 foot long.	6 00
Chrysanthemums, in 12, 25, 50 or 100 best sorts for cut flowers.	4 00
Cannas, New Dwarf, large flowering French (new), mixed colors	16 00
Dracæna Indivisa, in 3, 4, 5 and 6-inch pots.	\$12 00, \$16 00, \$25 00 and \$50 00
Geraniums, 25 best DOUBLE and SINGLE varieties, 3 inch pots.	6 00
" Ivy Leaved.	4 00
Hollyhocks, in 10 distinct colors, flowering plants.	4 00
Hydrangeas in variety, such as OTAKSA, ROSEA, T. HOGG, HORTENSIS, etc., etc.	8 00
Lemon Verbenas, strong plants from 3-inch pots.	4 00
Lilium Harrisii (True Bermuda Easter Lily) for Easter forcing.	6 00
" Auratum, large, sound bulbs, very fine.	12 00
Moonflower (Calonyction Grandiflora) true variety, strong.	4 00
Pandanus Ulifis, plants from 2, 4, 5 and 6-inch pots.	\$16 00, \$35 00, \$50 00 and 60 00
Pelunias, Double Fringed, 12 best named varieties, 3 inch pots.	8 00
Roses, Winter flowering varieties, such as PERLE, PAPA GONTIER, WATTEVILLE, NIPHOTOS, BENNETT, THE BRIDE, LA FRANCE, SOUV. D'UN AMI, and SUNSET, 3-inch pots.	8 00
AMERICAN BEAUTY, DINSMORE and MRS. JNO. LAING, 3 inch pots.	16 00
Smilax, strong plants from 2 1/2-inch pots.	4 00
Salvia Patens, the large blue species, scarce.	6 00
Spiræa Japonica, strong roots for Easter forcing.	4 00
Tuberoses Pearl, fine sound bulbs, 4-in. and over in circum.	\$15 00 per 1000
Tuberoses, Common Double variety.	\$14 00 per 1000
Verbenas, in fine health, 12 best market sorts.	\$25 00 per 1000

We will send single samples by mail of any of the above, so as to show quality of stock at 100 rates. General Wholesale List of Seeds and Plants sent free on application.

PETER HENDERSON & CO.,
35 & 37 Cortlandt Street, NEW YORK.

THE SYRACUSE NURSERIES,
OLD AND RELIABLE,

Are still offering the most complete assortment of young, smooth, thrifty Stock in America.
BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Headed), PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN APRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of
Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality.
Special Inducements to Buyers in large quantities. Trade List out August 1st.
SMITHS, POWELL & LAMB, Syracuse, N. Y.

GOOD OFFER.

	Per 100
ROSES, ass't Monthlies, my selection, 2-in.	\$ 3 00
4-inch, my selection.	8 00
PELARGONIUMS, ass't, 3-in.	6 00
PRIMULA OBCONICA, 4-in.	18 00
2-in.	8 00
COLIUS, 2-inch ass't.	3 00
OLEANDER, Pink and White, 3-in.	4 00
GERANIUMS, Double and Single, 3-in. (new)	5 00
ALYSSUM, Tom Thumb.	50 cents per dozen

A. GIDDINGS, DANVILLE, ILL.

WATER LILIES,
All Colors.

Young plants suitable for late flowering
NOW READY.

Send for prices.

BENJ. GREY, Malden, Mass.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,
CEDAR RAPIDS, IA.

We Have Good, Healthy Plants.

	Per 100
Smilax, strong plants, 3-inch pots.	\$2 50
Cinerarias, all different colors, 2 1/2-inch pots.	2 50
Feverfew White Gem, 2 1/2-inch pots.	2 50
Ageratum White Cap, 2 1/2-inch pots.	3 00
Ageratum Capes Gem, 2 1/2-inch pots.	3 00
Hoya Carnosa, 3-inch pots.	5 00
Pansies, all shades, 2 1/2-inch pots.	3 00

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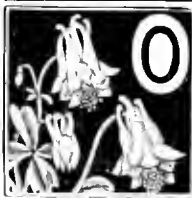
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With reference to an article in your last issue headed, "The heating of greenhouses," I should like to ask Mr. Titus: First, whether in his opinion the English plan of having a maximum of radiating surface with a minimum of furnace temperature is not far more economical in the long run? Second, whether it is not more conducive to good results in plant growing than the fiercer heat of steam to produce which the water in the boiler must of necessity be kept up to a temperature of 212°, whatever the outdoor temperature may be? Third, why it is better (as he says) that our open system of hot water heating should have ten or twenty pounds pressure when the pressure is the same all over the system? Fourth, why is it not better for the hot water to travel naturally up to the furthest point in the greenhouse and return again naturally after being cooled than to run the hot water almost straight from the boiler down to the lowest point in the boiler again? Fifth, is it a disadvantage to have a "cool end" in a greenhouse as is sometimes the case in the old flow and return system? The tenor of Mr. Titus' remarks seems to be in favor of steam and yet nearly all his arguments (good ones too) are in favor of hot water as a means of heating greenhouses.

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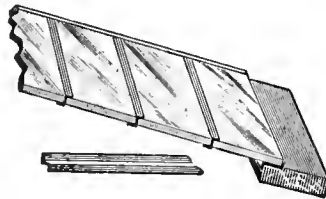
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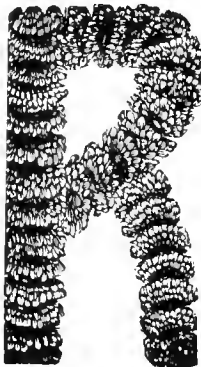
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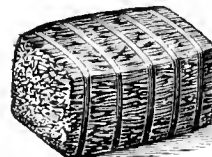


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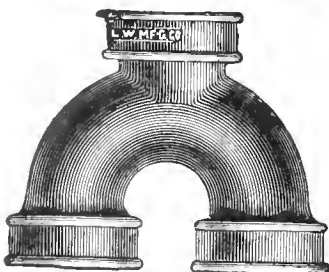
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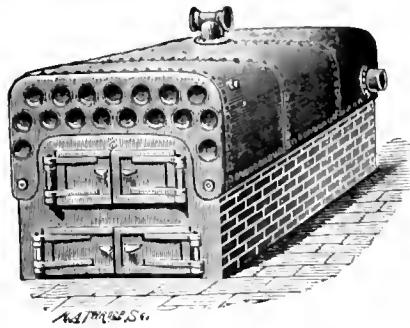
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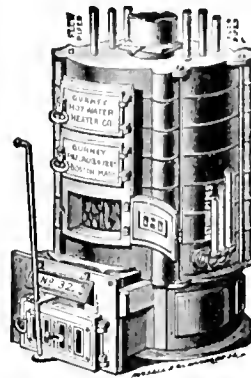
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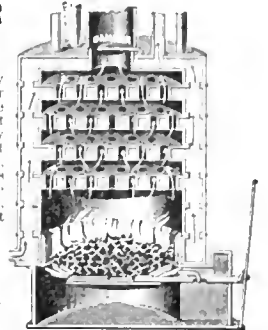


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brick-lined pot I consider a special feature,
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STANDARD SIZES of in-
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have before called 2 1/4-in.
We will begin to make the
"rim" pots, 1 1/4, 2, and
2 1/4-inch Standard shape
and sizes, in a few weeks.
See our "ad." Feb. 1st.
We have lately improved
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Do you wish 3,000 or
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till you ask us for a special
cash price on the lot you
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3 "	4.50	1150	5.25
3 1/2 "	6.30	875	5.50
4 "	7.50	600	4.75
4 1/2 "	11.10	400	4.00
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We deliver free on board
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about 400 lbs. each.

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Convention of the S. A. F., held in New York in Aug.
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you have taken in this matter and for the very com-
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have been submitted to many of the leading Florists
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ENTIRELY SATISFACTORY to all who have seen them.
The Committee intend to furnish the patterns to
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Yours very truly,
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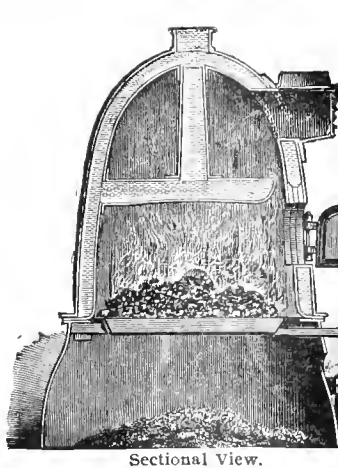
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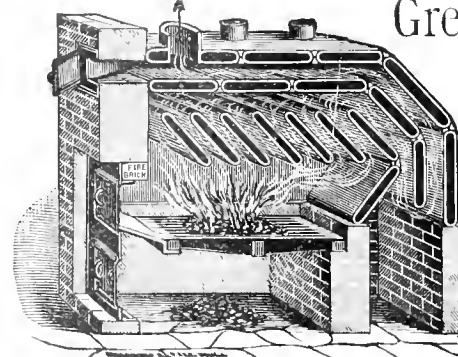
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Vol. IV.

CHICAGO AND NEW YORK, FEBRUARY 1, 1889.

No. 84.

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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The Meeting of the Executive Committee.

The committee met in annual session at Buffalo at 10 a. m. January 15, every member of the committee but one being present. Work progressed rapidly and was completed by the evening of the 16th.

Quite a number of important matters were discussed and action taken upon some of them and recommendations in regard to others will be laid before the society at the next convention.

The Mayor of Buffalo will be invited to make the address of welcome and Mr. A. P. Calder, of Boston, the response on behalf of the society, at the opening of the August meeting. On the first day a recommendation will be made to the society that a change of the by-laws be made, providing for but two sessions each day, from 9:30 a. m. to 1 p. m. and 7 to 10 p. m., instead of three sessions daily as heretofore. This action was taken in response to numerous requests from members.

It was decided to adhere rigidly to the programme at future meetings, and in order that this may be done essayists will be required to deposit their essays with the secretary before the meeting, and in case of non-arrival or illness the president shall appoint some one to read the essay for him so that the programme may not be deviated from. The frequent, though unavoidable changing of the programme at previous conventions has caused much inconvenience to members who being unable to attend every session had arranged their time in such a way as to be present at the reading of an essay upon some subject in which they were especially interested, and then found that through inability to adhere to the programme some other matter in which they were not nearly so much interested had been substituted and the other deferred to the following session, at which time an engagement elsewhere prevented their attendance.

The number of essays for the next convention will be limited to six, two of the essays to be read and discussed at each morning session, and the evening sessions devoted to the question box. Essays will be limited to 1,500 words and answers to questions to five minutes. The president's address will be printed and a copy placed in the hands of each member present immediately following its delivery. The address will then be discussed paragraph at a time.

Several members recommended that the society as a body refuse in the future to accept any excursion tendered it, but no action was taken.

Subjects for eight essays were selected and assigned to competent gentlemen, the two extra ones being selected to fill vacancies in case some of those to whom they were assigned should fail to comply

with the request of the committee. The subjects selected are as follows: The elevation of our business; Education; The establishment of an experimental garden in this country on the plan of the one at Chiswick, Eng.; The relation of the horticultural press to the florist; Roses; Summer cut flowers; What can be done to render horticultural exhibitions more popular and profitable; Landscape gardening.

Questions which had been sent in to the committee or suggested by its members were assigned as follows:

How can the space in greenhouses be used to best advantage, both on and under the benches? Jno. G. Gardner, Jobstown, N. J.

Which is the best way to keep greenfly from roses without fumigating? W. J. Palmer, Buffalo.

Is the electric light of any benefit to blooming plants in dark weather? James Park, Orange, N. J.

Can the general florist add to his business the sale of hardy plants and shrubs for lawn-decoration to advantage? Wm. Scott, Buffalo.

What is the best method of preserving wrought iron boilers? M. A. Hunt, Terre Haute, Ind.

In what way can a florist best start into business in a small town? A. Giddings, Danville, Ill.

What orchids are best for the commercial florist? I. C. Fostermann, Summit, N. J.

How can the local florists' clubs and the S. A. F. work together to best advantage? J. D. Reynolds, Riverside, Ill.

What palms, ferns and foliage plants are now most salable by the retailer? M. H. Norton, Boston.

What per centum of increase over cost should be obtained for flowers by the retailer? John Westcott, Philadelphia.

Is the practice of suddenly advancing prices of cut flowers at times of unusual demand injurious to trade? J. C. Vaughan, Chicago.

What qualifications are necessary to become a successful florist? Peter Henderson, New York.

What has been the experience in using crude petroleum for fuel in heating greenhouses? J. F. Sullivan, Detroit, Mich.

What is the cost of producing water gas for fuel? J. T. Temple, Davenport, Ia.

Does the early housing of violets in the fall have a tendency to induce disease? W. H. Siebrecht, Astoria, N. Y.

Will carnations which have originated from plants grown on light soil do well on a heavy soil? Wm. Swayne, Kennett Square, Pa.

Forcing hardy shrubs. Henry Bird, Newark, N. J.

The following questions will appear in the programme and be assigned by the president when reached on the pro-

gramme: How can we prevent excessive waste of fuel? Where does the rosebug deposit its eggs? Will the larva of the rose bug stand frost? What roses of recent introduction are of value to the florist?

Regarding the committee on nomenclature injustice was noted in the fact that many members of the committee as appointed were makers of catalogues and the president was asked to request the resignations of such members and fill any vacancies by appointments of members of the society who did not issue a catalogue. The sum of \$100 was appropriated to defray any expense the committee might incur in its labors.

Regarding the space for exhibits during the convention it was decided to charge a rental of 25 cents a square foot for all exhibits except those of plants and cut flowers. There was a lively discussion as to the advisability of admitting to the exhibition hall designs of metal, porcelain or other artificial flowers. The matter was finally left to the discretion of the local committee. The executive committee will pass upon all exhibits of new plants, flowers or vegetables which have never before been exhibited and certificates of merit will in future be awarded by it.

The badge for 1889 will be of same shape as in previous years, but of a different colored metal. The Tift house was selected as headquarters, and Music Hall, Main street, as the convention hall. This hall is very nearly perfect for this purpose. It is of just about the right size, very conveniently arranged and the street on one side is paved with asphalt while the one on the other side is unpaved. The noise of many wagons on stone pavements will not be such an annoyance at Buffalo as has been the case in other cities. The space for the exhibition is upon the same floor as the convention hall, which will be an additional convenience.

The treasurer's report showed a balance of about \$500 in the treasury, certainly a very gratifying condition. Should the receipts at the next convention be liberal the society will be in condition to carry forward some of the work which has been lagging for want of funds.

The subject of catalogue illustrations was introduced and considerable discussion ensued. It was suggested by Mr. Reynolds that a standing committee should be appointed to whom illustrations could be submitted by catalogue makers with actual specimens for comparison and if found correct the committee to certify as to their correctness, which certificate could be used and thus give confidence as to the accuracy of the same to the trade and general public who are undoubtedly becoming decidedly sceptical in regard to the engravings which appear in many catalogues. A committee consisting of Messrs. J. D. Reynolds, A. E. Whittle and G. L. Grant was appointed to devise ways and means to accomplish the needed reform. In this connection Mr. John Thorpe related how Mr. Keppler, one of *Puck's* artists, had told him that the pictures in some of the plant and seed catalogues beat anything he could get up in the way of a cartoon. Mr. Whittle told of an engraving of a water melon patch in which the melons were so thick that a man could walk entirely across the field on the melons without once putting foot on the ground. The vines in this remarkable field had no leaves, they run entirely

to fruit. Other ludicrous exaggerations were cited.

It was decided to call a meeting of those interested in the organization of a national chrysanthemum society for the afternoon of the first day of the August meeting and Mr. John Thorpe was appointed a committee to secure the co-operation of others and formulate a plan of organization to be submitted to the meeting at that time.

Members who had expressed themselves adversely on the question of entertainments were obliged to face the issue much sooner than expected, as the Buffalo florists invited the members to a carriage ride through the parks and around the city in the afternoon and a banquet the evening of the last day. Several members of the local club tendered the invitation in person while the committee was in session and none of the members could find strength to move that the courtesy be declined and it was finally accepted. It was indeed difficult to refuse an invitation so heartily and hospitably tendered and it must be said of the Buffalouians that when they undertake anything of this kind they do not do it by halves. While it was a matter of regret that so much should have been spent upon mere entertainment, that it was a thoroughly enjoyable occasion none present will deny.

Buffalo is justly proud of its park system, which is under the able direction of Mr. Wm. McMillan, and the drive encompassed nearly the whole system, containing some 500 acres, as well as the principal residence streets. Stops were made at the greenhouses of Messrs. Wm. Scott and C. Christensen.

The banquet was given at the Niagara Hotel, the site of which is said to be that of the first greenhouse built in Buffalo. The hotel is situated within 100 feet of the Niagara river. A feature of the building is that the veranda on the south side looks into a large conservatory filled with handsome tropical plants. A place singularly appropriate for the occasion. Mr. G. H. Lewis is the proprietor of this charming hotel and Mr. John Miller is the gardener in charge of the conservatories.

The menu was in keeping with the perfect appointments of the hotel and it was heartily enjoyed. Mr. Wm. Scott gracefully presided and toasts were fittingly responded to by Messrs. E. G. Hill, John N. May, Hon. David Day, Jas. D. Reynolds, D. B. Long, Wm. J. Stewart, John F. Cowell, John Thorpe, Wm. McMillan, G. L. Grant, Elias A. Long, W. J. Palmer and A. P. Calder.

Work of the Executive Committee.

The meeting of the executive committee of the S. A. F. at Buffalo, has been characterized by much that was pleasant and encouraging.

No one could have attended this meeting without being impressed by the cordial unanimity displayed by the members in supporting every proposition or suggestion likely to tend to help the society, and consequently florists in general. No person need be discouraged and fear its future degeneration, while so hearty an interest is manifested.

This interest was more than ever apparent this year, and as an illustration of it may be mentioned the fact that some gentlemen of the committee were instructed by local clubs, of which they are members, to mention during the session certain suggestions which they would be pleased to see carried into

effect. We may be sure that where there is discussion there can be no stagnation. Let all local clubs be stirred to offer counsel to the executive body, for advice having improvement for its aim, must ever be welcome.

From some we can still hear the old cry—"What good does the society accomplish?" Argument probably never brings conviction. These pages might be filled with cogent reasons showing how men would be benefitted by joining the society, but all would be powerless to convince those determined to criticise, and whose criticisms are prompted by a spirit of doubt and dislike. No man ever yet helped to pull the wheels out of the mud by standing only to look on and find fault. Determined effort is always sure of success, and this national society can be made a means of immense good to all by co operation from all.

The future of the society should not be underestimated. Already, to an observant eye, may be detected many signs of progress. Not the least of these signs is the respect that is paid by the horticultural world to the opinions that have received the endorsement of the society. It is nonsense to say that the scathing denouncement of unscrupulous men who, in order to reap personal gain, have not hesitated to descend to practice dishonest methods of business, has not produced some result. If a systematic inspection and publicity have not yet been attempted such men know that the eye of vigilance is open, and consequently are not so bold in their nefarious ways. We might as well say that all exposures and articles criticising public affairs, in the newspapers, produce no results, because direct action is seldom brought about by such writing, as to say that all agitation for various reforms that originates in the discussions of the society is useless, because instant action is not at once perceptible.

Besides, it is not possible for men of experience to meet together without evolving some thought likely to benefit themselves and their neighbor. It is perhaps safe to assert that if the essays which have been read in the past had not been compiled for this purpose, much information now available would be still hidden away in the brains of the writers. Where is the man who, reading all these essays, would dare to say that he has gained nothing from them? The writers themselves have also been gainers by their own individual writing. For in order to write a paper that must bear the scrutiny of men thoroughly educated in the profession, an accurate knowledge of one's subject is essential; and all statements must be verified either by the experience of the writer, or that of some other person to whom he refers for the information he needs. It is impossible for a man to be aroused himself without arousing some other, and thus, from year to year, by means of these essays and questions answered by practical men, an immense impetus is given to horticulture at large, though it may not be immediately apparent to the beholder. All progress can not be measured by the eye, but after the lapse of time the distance traversed can be readily seen and astonishes all by its magnitude.

It is very unkind and selfish for men to refuse their presence at the society's conventions on the plea that a copy of the proceedings will be mailed to them, and they can therefore obtain all the information they need without the expense and bother of attendance. Many, of course, have legitimate reasons for their

absence, but it is to be hoped that all the members who can will unite in making the next convention the largest gathering yet witnessed.

A topic broached at the meeting of the committee, and upon which a paper will be presented at the August meeting by Mr. John Thorpe, is one likely to be of infinite value to all. It certainly will be interesting, and if organization can be effected to further the aim in view, a permanent gain will surely result. The reference is to the means available for the establishment of a national experimental garden. There is no man better fitted, by both ability and experience, to cope with this subject than Mr. Thorpe, and we may expect him to give it a thorough examination, in order to present for our consideration practical views respecting it. There is an earnest desire that all interested in such a project will be present, and that their views may be expressed freely, so that discussion may tend to combination. It is in such questions that the national society is of incalculable benefit. Individual action would certainly fail to accomplish any result, but persistence shown by the society in making use of every aid towards the permanent establishment of this and similar ideas must bring a weight and authority that any other effort would certainly fail in securing.

The development of theoretical and practical horticulture is again to receive attention. We shall all agree that no subject can be of greater importance to every man who loves gardening and desires to see gardeners recognized everywhere as men of ability, education and refinement. Is it only a fancy of the writer that the consideration of this topic has already inspired in some minds desires for improvement and elevation? There is an earnestness exhibited concerning improvement, which prophesies great progress for the future. Let us look back but twenty years and dull indeed must be the vision that cannot mark the upward tendency.

Practical work is laid out for the committee on nomenclature, and when the convention meets some conclusions will be forthcoming for the action of the society. Naturally much difficulty must be experienced in making this work a thorough one. It is hardly possible that all the false nomenclature can have come under the personal observation of the members of the committee, but it is to be hoped that any florist in any state who has any facts in his possession bearing upon this subject will communicate them to the chairman of the committee Mr. John Thorpe, some time before the month of April. The desire is that no one should be screened who can be proved to have taken a plant already named, baptized it afresh and sent it out for the purpose of personal gain; let the facts be known that all may guard against such deceit. Also those plants over which there has been argument in the past as to their proper name, will now receive correct classification and all further questioning be ended. If only this work be properly done the national society will have earned the gratitude of all.

Another committee has been appointed to take into consideration the exaggerated illustrations in some florists' catalogues and to try and devise a plan whereby the evil may be checked. This desirable reform was also suggested to the executive committee by a local florists' club, thus evidencing a widespread anxiety that our business methods should

be more generally characterized by perfect truthfulness and fair dealing. Does not this spirit indicate the work that the society is doing? The good that it is accomplishing? It is sometimes said that no success can attend such efforts, that there will always be men who will attempt trickery to sell their goods. We grant this unfortunate tendency of human nature, but we also claim that, given the support of all justice-loving florists, all cheating can be made to hide its head. No man that grows or deals in first class articles ever needs to misrepresent his stock. In fact, he never does so. The stock speaks for itself. It is also requested that any one desiring to call the attention of this committee to misrepresentation in any catalogue will send their facts to Mr. J. D. Reynolds, Riverside, Ill.



FERN BASKET

All who attended these sessions of the advisory board feel firmly impressed with the idea that the S. A. F. is a success and will continue to be a success. Not the least element contributing to the success of the society is the sociability fostered by its conventions. Those who have been constant in attendance at these gatherings can vouch for the truth of this statement. To meet with live men from all sections of this vast country does broaden and develop our own limited range of observation. Last year the meeting in New York was well attended and there are many indications that there will be no falling off when the time arrives for assembling at Buffalo. If it could be generally known how hospitable and kind the Buffalo folks are the attendance in August would be larger than at any previous meeting. Sometimes it is exceedingly pleasant to be surprised, and the members of the executive committee found this to be true at Buffalo. There was rather a feeling that Buffalo was country, and from the country but little must be expected. Would that in all places we meet, the country spirit could be equally manifested, for the florists of this city, both professional and amateur, vied with each other in acts of courtesy and kindness. These gentlemen, not satisfied with showing every attention at this time, wish it to be understood that all will be welcome in August, and that Buffalo hearts are large enough to care for everybody.

Not only is the hospitality of our friends generous, but the situation of their city is most pleasant and attractive. Those that love the beauties of nature can enjoy them here to their heart's content. Besides the magnificent lake and the delightful drives we are all aware of the vicinity of the Niagara cataract, and though many have seen this mighty force yet no one can ever tire of gazing upon its sublime grandeur. Our Buffalo friends have already signified their intention of inviting the delegates to behold the majestic scene.

Before leaving this subject it may not be amiss to mention the handsome hotel where the executive committee was banqueted by the florists' club of Buffalo. The Niagara hotel, under the management of Mr. Henry P. Roesser, is one of the most luxuriously appointed hotels in the country. Some very attractive features are connected with it. A large conservatory filled with some fine plants, magnificent view, perfect table service, all combine to offer advantages possessed by very few others. If any florist, during his trip to Buffalo, wishes luxury and comfort at a comparatively moderate expense he can not do better than patronize this hotel. ALFRED E. WHITTLE.

Fern Basket.

A small six paneled white glass basket splashed and decorated with blue, with large loop of ribbon fastened at two opposite sides, to be slung over the shoulder, as is the English manner of carrying opera glasses. This was filled with adiantums, carnations and a few cyclamens from behind among the ferns. It was used at a wedding, each bridesmaid wearing one and was arranged with great taste by Lee, of Union Square, New York.

F. A. B.

New York Notes and Comments.

The Florists' dinner was a great success, apart from the material side, which endeared Morello in the feelings of the guests, the social side was without flaw. Mr. May was in the chair. Mr. W. J. Stewart led the Boston delegation, while Mr. Craig was chief of the Philadelphia brothers. The latter party included a sweet-voiced vocalist, who added much to the pleasure of the occasion. A little orchestra of three pieces discoursed music during the meal, which began at eight—statements are rather conflicting as to the exact time it was ended. Mr. W. S. Allen and Mr. Chas. Weathered were the committee of arrangements, and the result of their joint labors was highly appreciated. Speeches were made both by officers and guests, and a learned discussion between Mr. Peter Henderson and Mr. Wm. Elliott added much to the botanical knowledge of the audience, the subject being the eccentricities of early dwarf Lima beans. The guests numbered about 70, and they are unanimously of the opinion that the festivity ought to be repeated under the same management.

Ernest Asmus' lilac house looks like a small forest, for most of the bushes are regular trees, but they produce large spikes of fine flowers. Mr. Asmus, who has always been a large lilac grower, has pretty well discarded the French pot plants. They are fine when perfect, but in too many cases the flowers do not open evenly and the sprays are poor in consequence. The home grown plants are preferable, though this season there is much loss caused by the irroads of the mussel scale, which often completely

smothers the plant. Of course it could be cured if application was possible to all parts affected, but it is impossible to touch all the fine twigs in a close-growing bush, consequently the pest soon spreads, especially under glass, and the affected plant must be destroyed. A very bad case of this scale on the laurel leaved willow was completely cured by cutting off all the smaller branches, and thoroughly painting every part of the remainder with thick whitewash.

Like Mr. Roehrs, Mr. Asmus thinks there is not much money in Roman hyacinths, especially when a bulb produces only one good spike of bloom, as is usually the case this season. Growers complain that the bulbs grow smaller year by year; when the steady demand for forcing first began the bulbs were strong and large, producing two or three good spikes apiece. Now they are small and weakly as a rule, and the grower loses in consequence. Seems as if the growers would have to combine and insist on a standard size and quality in Romans. Mr. Asmus is testing some of the new English narcissus recommended for early forcing, and he is also putting in a lot of gladiolus in one of the rose houses. By the way, he thinks that Sunset has produced a smaller average of "bull-heads" this winter than Perle, as far as his experience is concerned.

Rudolph Asmus is happy in the possession of one of the finest lots of Bride and Mermuet seen this winter. Strong, well grown plants, showing a splendid crop of large well shaped flowers. All the stuff at this place is in good order, but the Brides and Mermuets were so exceptionally fine that they were a pleasure to look upon. Bennett Mr. Asmus thinks of giving up; they seem inclined to give a good crop early in the season, and then do nothing for months afterwards, though looking all the time as if just ready to break. Gontier is praised by both the Messrs. Asmus, but like many others, they complain of its liability to drop its lower leaves.

"J. L. Lamborn," the new white carnation mentioned in the last issue of the FLORIST, seems likely to be a fine thing for a market plant. As recently seen at Peter Henderson's it forms a very shapely plant, covered with good leaves right to the ground. It is said to be a good summer bloomer; the habit of growth is rather like the old-fashioned pinks. Very few of our good carnations form shapely plants suitable for sale in pots, so it looks as if the variety under discussion would find a profitable future in this direction.

"Tidal Wave" is another new carnation sent out by W. P. Simmons, of Geneva, Ohio. Some blooms recently received were unfortunately delayed on the road and somewhat faded in consequence, but they were evidently large flowers, something the type of *La Purite*, firm in texture and very fragrant.

Black Dwarf is a new coleus noted at Peter Henderson's—a fine one, too. The foliage is a rich deep purple; the growth compact and a trifle smaller than Golden Bedder. These two will form a striking contrast; Black Dwarf would be noticeable anywhere.

A houseful of Bermuda lilies in pots made a pretty sight at the same place. These lilies, in pint pots, should be thoroughly salable market plants for Decoration Day, sold at a quarter each, could hardly expect a higher price, for this anniversary is an occasion when flowers and plants are wanted at popular prices.

Peter Henderson's new seed warehouse near his nurseries consists of two stories

and basement, 50x100 feet. It will be chiefly used for the bulkier farm seeds which could not be accommodated at the store in Cortlandt street.

EMILY LOUISE TAPLIN.

Washington.

The holidays have proved a rich harvest to florists here, in fact the supply of cut flowers, large as it was, fell short of the demand.

In Washington New Year's day even excels Christmas in its demand upon florists. Such an array of receptions as take place at the National Capital on that day will nowhere else be found in the country. At the head of these stands of course the one at the White House and the florist's art is now recognized as an indispensable adjunct on all such occasions. At the White House alone it takes not less than a thousand growing plants to make anything like a respectable display. Mr. Pfister, in charge of the conservatories there, is well up in such matters, having served in a like capacity at the Luxemburg Palace during the advent of the Empress Eugenie, and Mr. George H. Brown, in charge of the public gardens, is too well and favorably known to be more than mentioned. These two gentlemen supervise all floral decorations at the White House.

The east room contained some fine grouping of plants this year, notably so a cluster of palms, in the center of which stood a superb specimen some 16 feet high; bright poinsettias, exceptional specimens about six feet tall, were interspersed among the palms, giving the group rich coloring while the base was appropriately made of ferns and mosses. Azaleas, begonias, smilax and other trailing plants figured plentifully in the various rooms and corridors. The display of cinerarias deserves special mention, the plants being in exceptionally fine condition and the bloom of rare size and beauty.

The blue room was resplendent with cut flowers, notably so the hearths and mantels, the latter of which were solidly banked. There seemed to be, however, no overcrowding, in fact the spirit of economy which prevails at the White House is quite noticeable in the absence of rare and costly blooming plants, such as orchids and the like.

All along the line florists have had their hands full at fair prices during the past week and the prospects ahead for a good season were never more encouraging.

A subject of considerable interest to florists here and all over the country is the question of decorations on the occasion of the Inaugural ball, March 4 next. It is to be hoped that something in better taste than the conventional display of bunting will be effected this year. The structure where the ball is to be held is peculiarly adapted for floral display. While patriotism dictates a moderate show of bunting on such an occasion it should be remembered that this is not by any means a military hall and that ample and appropriate floral decorations alone can give evidence of the inborn good taste and refinement which pervades Americans as a nation.

OBITUARY.

HENRY J. MCGALL, died January 6 at his home in Orange, N. J., of pneumonia, at the age of 45 years. He leaves a widow and five young children, the oldest only 8 years of age.

Mr. McGall was a thorough business man, upright and just in all his dealings, courteous and popular in his business, always kind and generous with his friends of which he had many. He started in business as a florist in this city in 1871, and his strict attention to it combined with a good practical knowledge of horticulture soon gained him a good business which has been steadily increasing ever since. About two years ago he built a fine store for seed and cut flower business on Main street in conjunction with a conservatory for ornamental and decorative plants, and it was just beginning to repay for the outlay; a few days before his untimely death he remarked that he hoped to so improve his business as to make it profitable and attractive at all times.

His loss will be greatly felt and deeply mourned by his family and a wide circle of friends. The New Jersey Floricultural Society loses in him one of its most valuable supporters. He had been its treasurer from the start. He was also vice president of the Society of American Florists for northern New Jersey, and was always earnest and painstaking in all matters relating to the same.

This is the second death among the florists in the prime of life in this section within five weeks, the other being Mr. Thomas Lyons, of Mountain Station, Orange, who was also a very hard working energetic business man, and at the time of his death was a vice president of the New Jersey Floricultural Society and very much esteemed by a wide circle of friends.

Prize Winning Chrysanthemums.

Our illustration is from a photograph of the chrysanthemum house of Messrs. Davis & Jones, Camberwell, England, and shows the plants from which were selected the lot which won the first prize (gold medal) at the English National Chrysanthemum Society's show November 7-9. The center bench contained 1000 plants, all carrying large flowers of exhibition size and quality. The photograph was secured for the FLORIST by our London correspondent.

Chrysanthemum "Snowball."

In your issue of January 15 a correspondent, "P," says this variety is identical with the "Mrs. S. Humphreys" sent out by me last season. In all probability it is, and it may also be grown under a dozen other different names, for the reason that my "Mrs. Humphreys" is one of a set of thirty chrysanthemums imported from Japan in '87. And that this same set of thirty, such as was received by me direct from Japan, was offered the same season by Berger & Co., of San Francisco, who sold I believe to a dozen or more growers in all parts of the country under numbers—and there is no doubt that their set of thirty was one and the same lot received by me from Japan direct. Mr. M. A. Hunt, of Terre Haute, Ind., wrote to me after receiving his set (I presume from Berger & Co.), in the hope that we might be able to get together and decide on a uniform nomenclature for the set, but we found it to be impossible to trace to whom the sets had been sold, and the scheme for uniform names for the list had to be abandoned. In all probability the white above alluded to, as well as the other twenty-nine kinds, have each six, or may be a dozen different names now, which will lead to great confusion and dissatisfaction, all



PRIZE WINNING CHRYSANTHEMUMS

owing to the stupid way of having them sent to so many different parties under number instead of under name.

This chrysanthemum which I named "Mrs. Humphreys" and your correspondent has also as "Snowball," is in my opinion the best white chrysanthemum yet introduced for cut flowers. It is of great size and substance, and in the New York market sold for nearly twice the price of any other white variety that we grew, and we believe we have nearly everything worth growing among whites.

This confusion among this set of Japanese chrysanthemums, in my opinion will tax the energies of the committee on nomenclature to straighten out, and I much fear that it will be beyond their powers. Of all the stupid blunders that florists and nurserymen can make, the most stupid is to send out plants under number instead of under name. It was

in this way that the grand collection of the Rogers' hybrid grapes introduced over thirty years ago was virtually lost to the country. They were sent out under number instead of under name, and while there were probably a dozen excellent varieties in the thirty or forty sent out, it is doubtful if more than four or five are in general cultivation to day, and even among these there is some confusion about names, as for nearly fifteen years they were known only under number until the National Pomological Society put them under name.

PETER HENDERSON.

Jersey City, N. J., Jan. 10.

Winter Flowering Chrysanthemums.

Another January flowering plant Mrs. Frank Thompson. This plant was a

large one over three feet high, with a trunk fifteen inches long and ten branches stopped at fifteen inches long carrying some forty flowering stems, when lifted from the open ground Sept. 15, root pruned to a six inch ball, and potted in an eight-inch pot. The plant was well cared for, yet lost all its leaves except those on its flowering stems; it also lost largely of its flowering buds, the result of such close root pruning and small potting. A few flowers came to maturity in November by which time the plant was making wood and new flower buds rapidly, which came to maturity all through the latter part of December and first part of January. The stems were disbudded to sprays of three and single crown blooms and the plant has probably matured over 200 blooms. I cut 50 fine large blooms from it to-day cutting the plant down. Other plants of same sort

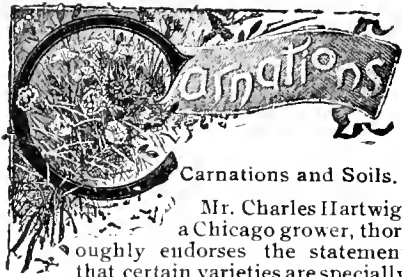
lifted at same time, as usually done, and placed in 12 inch tubs bloomed freely in November and have long since passed blooming.

JOHN LANE.

Chicago, Jan. 10.

A National Chrysanthemum Society.

The action taken by the executive committee in deciding to issue a call for a meeting to organize a national chrysanthemum society during the next convention was certainly a wise one. The awful tangle in which the nomenclature of the chrysanthemum now is calls for work, and immediate work, at the hands of some authoritative body such as the proposed society will be. If for nothing else than this the society should be organized, and there will be abundant chance for effective work in similar channels. We are glad that a man so identified with the history of the chrysanthemum in this country as Mr. John Thorpe has acted upon our suggestion and set the machinery at work towards accomplishing the necessary organization.



Carnations and Soils.

Mr. Charles Hartwig, a Chicago grower, thoroughly endorses the statement that certain varieties are especially adapted to certain soils and success is largely dependent upon soil suitable to the variety grown. He relates his experience with Hinze's White as follows: In 1882 he tried fifty plants of this variety and after giving them a thorough trial threw them out as worthless. In 1884 he saw a house of this carnation at another grower's place in such magnificent condition and so productive that he resolved to give it another trial. He purchased several hundred plants and again gave them a systematic trial with the same result as before and again he threw out his plants in disgust. Since then he has removed to a new location with a somewhat different soil. Last year after seeing several houses of Hinze's White at various grower's places he decided to give the carnation a third trial. He did so and to his surprise had grand success with it, having a crop of bloom way ahead of any he had ever before obtained from any white carnation.

With him E. G. Hill has been a failure and he finds Garfield by far the best scarlet.

He likes Wm. Swayne and L. L. Lamborn, but considers them as not equal to Hinze's White for his soil and requirements.

Western Notes on Carnations.

In a country extending over so vast a range of soil and climate it is but natural that plants, or varieties of the same class, may be a success or failure, in proportion to their adaptability to their surroundings. As an illustration of this, there is not a single broad-leaved evergreen which can be successfully grown in this section, even the common Box, grown so plentifully in the east, in a year or two succumbs to our usually hot summers and dry winters.

But I started out to make a few observations upon a class of plants which have become indispensable to the florist, taking my notes from a standpoint including Western Missouri, Eastern Kansas and the southern portions of Iowa and Nebraska, a scope of territory about equal in extent to the states of New York and Pennsylvania, and while there may be local causes affecting some varieties, yet as a rule plants which do well at any one point within this area can be relied on in any other section of it.

In white carnations we have heretofore largely depended upon President De Graw, growing Peter Henderson and Snowdon to a limited extent. De Graw has not always been satisfactory and we grew it only because it was the best long stemmed variety we could find. Snowdon has always been prolific, but having very short stems can be used for little else than putting up work. Peter Henderson as a plant does well and would be valuable were the flowers more perfect. Hinze's White was received from Mr. Breitmeyer, of Detroit, some eight years ago and after a trial of two or three years was discarded, not producing flowers enough to justify growing it, but after it became so popular north and east I concluded to again try it, but with no better results until this season. The past summer and fall having been exceptionally cool with us, Hinze's White is doing remarkably well. I have no doubt that for a cool climate it is a valuable variety, but for this section it is not always reliable.

If the varieties introduced within the last couple of years sustain their present character it will not be long until they will supersede all other white carnations; first among them is Silver Spray, this variety appears to combine all the qualities of a first class flower and with the year's trial I have so much confidence in it that for myself for a white carnation I shall grow Silver Spray almost exclusively. Wm. Swayne in many respects is a fine carnation, the flowers are pure white, of the largest size, it is an early and abundant bloomer, a large proportion of the flowers borne on long stems, but they have that crimped appearance so objectionable in Peter Henderson. L. L. Lamborn with us is rather a weak grower and only a moderate bloomer, but the flower is perfection itself.

Among red carnations, in my estimation Portia takes the lead. I may be somewhat partial to this variety, but its bright crimson scarlet fragrant flowers are always attractive. It is a heavy cropper, blooming from the earliest to the latest, it makes a strong bushy growth, pushing up numerous stalks with long side branches, usually terminating with a single flower.

Garfield is prolific but late, it makes a strong healthy growth, blooming in clusters; for working up or for pot culture it is valuable.

E. G. Hill in the open ground I formed a poor opinion of, but since it has been planted on the bench it has shown its good qualities. It is producing heavy crops, at first in clusters, but later making long stems. In color it is a shade between Garfield and Portia, it makes a healthy, robust growth and is rather an early bloomer.

La Purite has always been healthy and reliable with us and those who are acquainted with this popular old variety are aware that there are few to equal it, both as to color and blooming qualities, but it requires a warm climate and rather a dry soil to bring it to perfection.

I have grown King of Crimson and Black Knight for a number of years, but never found either of them profitable; they usually produce a fair first crop, then dwindle away, or die outright. I am inclined to think that Anna Webb when better known will supersede other crimson carnations.

It appears somewhat strange that out of all the new varieties brought out within the last few years, there are so few pinks which have proved entirely satisfactory. Grace Wilder, although in the market for several years, is scarce and appears to be hard to grow, and while the flowers command double the price of any other variety in the market, yet I am inclined to believe that except in favorable locations it will not be a profitable variety for general cultivation.

A variety which I received a year ago under the name of Mrs. Cleveland so far appears to have some good qualities and while not so strong a grower as some others, it makes a healthy, bushy plant, rather free, with flowers on long stems, though in color it is not a real pink, being about the shade of the Hermosa rose.

In yellow grounds I have always found Imogen most reliable for general purposes; the individual flowers are not so large and showy as some other varieties, but it is a constant and prolific bloomer, a large proportion of the flowers borne on long stems. Buttercup is valuable only as a pot plant, producing its flowers too sparsely to be of value for cutting.

St. Joseph, Mo. D. M. REICHARD.

Carnation Disease.

Apropos of Mr. Seymour's instructive paper, page 252, I would like to call your attention to a note in the *Gardener's Chronicle*, page 636, Dec. 1, 1888, and headed "Eel Worms." It draws attention to a new treatise in French on these mysterious creatures, and says—"The leaves * * of carnations and even of orchids are affected by creatures of this description." Recently I have been investigating a certain disease in mushrooms, and which till a few weeks ago I had always regarded as caused by a fungus parasite. On submitting specimens to Dr. Farlow, professor of cryptogamic botany at Harvard College, he told me the disease was the work of anguillulae (eel worms), which were present in large numbers, and not of another fungus at all.

Now anguillulae are very microscopic and ill-understood creatures; in fact so much so that we have barely any American literature on the subject. But they abound everywhere; in fact Dr. Taylor, the microscopist of the Agricultural Department at Washington, writes me that the algae (the green dirt) on flower pots is full of them. Now, their work in mushrooms is in general appearance so very like the spots often seen in carnation, orchid and other plants that the above referred to note in the *Chronicle* struck me as being intensely suggestive.

This whole question of plant diseases is one of vast importance to us, but practical men like myself are absolutely unfit to grapple with the subject; it is a matter for the scientist. We can understand fairly well anything we can see plainly, but the obscure diseases bother us. It isn't enough for us to say, "Oh, it's some sort of fungus." Be precise, know for a certainty whether it is a fungus or not, and if a fungus what fungus it is; also whether the fungus is the cause of the effect.

If only one tenth as much scientific attention had been given to the diseases of florists' flowers" as has been lavished upon pear blight, peach yellows or wheat smut, we would not now be wading so deeply in ignorance of what is of such vital interest to us. And surely the florist business of America is important enough to warrant scientific recognition.

Glen Cove, N. Y. WM. FALCONER.



Edith Brownlow and Puritan.

It was a surprise to me to note in the FLORIST of December 15, an article by Miss Emily L. Taplin, stating that Mr. John N. May had rooted out the above named rose. I have watched the same as grown by Messrs. Craig & Bro. for the past six months and have come to the conclusion that it is all that is claimed for it by the florists on the English side. As seen at Messrs. Craig's the plants are entirely free from mildew or any other disease and are in fact the cleanest and healthiest plants in the one house which has also some four or five other varieties in it. The color is somewhat richer than that of the popular Catherine Mermet with a slight though very pleasing shade of salmon. The bud is well formed, the petals having great substance and for free blooming the rose is certainly entitled to a high rank, as it is safe to say that it will produce three buds while the Mermet is making one, but the buds are not so large as those of the latter. It is a rose which keeps exceedingly well, as Mr. Craig informed me it was good after having been cut some ten days; this fact alone ought to recommend it to the dealer.

Mr. Craig says he visited Mr. May last week and the latter expressed himself as pleased with "Edith" and had no intention of rooting it out so there has evidently been a mistake made somewhere, and in justice to the rose it ought to be corrected, as the opinion of Mr. May is highly valued by the trade and if he condemns a rose it is certain to have a depreciating effect on the same. So far as Edith Brownlow is concerned I must be permitted to say that in the opinion of some of the leading florists in the country the above named rose is a very promising variety.

What has become of the Puritan? Last winter nearly every grower around Philadelphia had more or less of them planted and we were told that this winter it was going to be a great favorite, yet I have found but one place where it is grown, and as far as this vicinity is concerned the prediction has failed.

Laudowne, Pa. W. W. COLES.

Notes From Mamaroneck, N. Y.

BY WM. FALCONER

HEATING—The other day I called to see Mr. George Grant, gardener to Mrs. Osborne at Mamaroneck, about twenty miles from New York. This place is one of the finest in the country, and the greenhouse establishment is unsurpassed;

it is the best and most complete effort of Lord & Burnham. Steam and hot water both are used in heating it, and five boilers are at work and stand close by each other in the stoke hole. Mr. Grant would be inclined to favor steam heating in large and commodious, even-sized florists' greenhouses, but for private greenhouses that are a good deal subdivided into compartments he comes out strongly in favor of hot water.

DENDROBIUM CHRYSOTOXUM.—"This is a grand orchid, but to flower it well we have got to ripen it off thoroughly," says Mr. Grant.

ANGRECEM LEONTI is prettily in bloom in a hanging basket. An old and pretty plant, always desirable in a collection, but I don't think of any account for cut flowers, too short stemmed.

ONCIDIUM CAVENDISHIANUM is cheerfully in bloom in a basket overhead. A stiff-leaved, stiff-flowered orchid, but a fine, robust, winter-blooming species well worth obtaining.

THE DECIDUOUS CALANTHES are most desirable orchids; their proper season of blooming is November to January, and their long, gay arching flower spikes are excellent for cutting. These plants are so easily grown and so generous and the flowers last so long in perfection either when cut or on the plant, that they are equally desirable for amateurs or florists. The commonest and about the best sorts are *C. vestita*, both the yellow and the red-eyed varieties; and *C. Veitchii*, a red-flowered, more robust and grander orchid.

CYPRIPEDIUM INSIGNE is going past. What a splendid orchid this is! If you are restricted to one species have this. It blooms from the first of November till the middle of January in great perfection and profusion; and may be had sooner or later by humoring. It isn't a showy flower at all, but this is compensated for in its substance, bold form and staying qualities. Not only do the blossoms last a long time on the plants, but if cut when tolerably fresh they last, under favorable circumstances, in good condition for several weeks after having been cut. And the plants grow "like weeds" and have a thrifty look about them all the time, and when the proper time comes round never fail to bloom.

THE CAMELLIAS are planted out and look very fine, and several are in good bloom. As the flowers are so easily stained when handled they are not as satisfactory cut flowers as are many other things.

TILLANDSIA LINDENI.—One of the loveliest of all bromeliads. I was pleased to see a good many plants of it here and find that it is appreciated. A compact rosetted grower, and bearing from every young growth spikes of the loveliest and richest violet-blue flowers. A native of the Andes of Peru.

ROSE MME. CUSIN.—Mr. G. has a good word for it and grows a lot of it. When well grown and of good size it is one of the loveliest of roses.

CHRYSANTHEMUM CUTTINGS.—Mr. G. is putting in his stock of cuttings now so as to get rid of the old roots, save space and ease up a little on the work later on.

HE GROWS GARDENIAS for cut flowers and likes them very much. They require very careful watering in summer and a little bottom heat in winter to help them bear their finest blossoms. But everybody doesn't appreciate the fragrant gardenia, and many who would like it in

its purest whiteness regard it as past as soon as it assumes its creamy hue. Gentlemen like it for button-hole bouquets on account of its whiteness and sweetness and the glossy green leaves the snowy blossoms nestle among.

CARNATIONS. I was particularly well pleased with Mr. Grant's scarlet carnations. I never saw thriftier plants or ones with more flower buds. He calls the variety Lady Emma. So far as the flowers are concerned it doesn't look much unlike Portia, but the plants are bigger and bushier, and the flower stems longer and leafier. Anna Webb is doing famously. It is in lusty vigor and the flowers are large, full, of fine form and the perfection of a crimson carnation. Crimson King has got to go, it is losing in constitution and its blossoms lack fullness and substance. Hinze's White is preferred in its class for size and fullness of blossom, fine form and lasting both before and after being cut. Rosalind is of a beautiful pink color and the flowers are full, of good form, long but rather weak stemmed, and the plants tall. Columbia is largely grown and well liked. Its flowers are large, yellow and reddish streaked, of fine form and produced very freely. This variety behaves very well with me too. I had it from John Thorpe some years ago, and with it another variety of the same style, but with darker flowers and called "Buff seedling." This is also a fine variety. Has it been named?

Forcing Lily of the Valley.

I think our experience in blooming lily of the valley may be of benefit to others as it has been to us. Before attempting to force any we of course read, or at least attempted to read, all the FLORIST has had to say on the subject. We arranged a bench with moss, good bottom heat, cotton cloth covering etc., and our crop of flowers was merely fair. As we had more pips to start than would go into the prepared bed at one planting we put the balance into a couple of shallow boxes, covered with a light mulching of moss and set under a bench in a warm house, setting the boxes on the pipes and gave no further care other than watering. To our surprise these came far better than the others.

We now grow all our valley in this simple way. The boxes can be had from any grocer at five cents each and they will hold 100 pips. The saving in bench room is considerable. There has been no valley grown in this city finer than ours which has been forced in this simple way. C. B. W.

Milwaukee.

A Place for Everything.

Some time ago while visiting a florist in a neighboring town I was very forcibly impressed with the necessity of "having a place for everything and keeping everything in its place." Going through the houses it happened that in order to get something I wanted, a trowel was needed, my friend called to an assistant to fetch it, but the young man didn't know where to look for it and referred the matter to assistant No. 2, who declared that he hadn't seen it since the carnations were planted," and so finally a piece of stick was made to do duty for the trowel. Wrapping paper and string were next called for, but although my friend declared that there was an abundant supply of both "round somewhere," neither could be found. One of the hands did

subsequently find a pile of wrapping paper under one of the benches, but so saturated with "dampness," from the watering can as to be quite useless for immediate service. A piece of sacking was therefore substituted for the paper and a garden line cut to supply the string.

Such an order of things is not only a source of unpleasantness and inconvenience at times, but also of considerable loss in the course of a year and is a decided reflection on the management. On the occasion referred to the boss had a good deal to say about the carelessness of his men, but I consider that he himself was most to blame and I told him so. Men generally conform to the usages of the place in which they are employed, and if the manager, or head of a concern does not rigidly enforce order and regularity it is a little inconsistent to expect employes to be systematic or careful.

Baltimore. A. W. M.

Long Island Notes.

BY WM. FALCONER.

LOUIS SIEBRECHT has been sick with rheumatism, but is now up and out again.

JANUARY 18.—He had a team of horses plowing in the field. The most open winter we ever remember.

HIS CARNATIONS.—He has a good word for Silver Spray and has a bench of it in fine flowering condition, as well as a big patch of cuttings striking. Black Knight hasn't behaved very well till now. But although he has no blooming plants of Anna Webb, his cutting benches show a big effort in favor of this fine crimson variety. Columbia hasn't given him very much satisfaction. Now, it has behaved splendidly with me.

OF DOUBLE-FLOWERED CALLA BLOSSOMS he had two the morning I was there. They are odd but not beautiful.

IN HIS SMILAX house he had just put up a long raised bench bed and planted gladioluses in it.

ORNITHOGALUM ARABICUM is studded all along the pathways on his carnation benches as he used to have them, and he has used the bulbs he forced last year. He was satisfied with them last year, when they brought 75 cents to \$1 a doz.

VIOLETS.—He used to be champion grower in this neighborhood, but a year or two ago the disease struck his plants and he gave up growing violets altogether. But his neighbor, Julius Scharff, has such a fine, clean lot that Mr. Siebrecht is going to try them again.

THE CHINESE NARCISSUS.—He is growing a multitude of this; batches are past, batches in bloom and batches in the cold shed. And they have grown well and bloomed well, but there is no demand for them. The cry is for paper whites and not for Chinese, which are white with yellow cup. He grows them in pots as he would any other narcissus.

C. H. ALLEN & CO., the bulb growers, formerly of Garden City, but for the past few years of Jamesport, L. I., have leased 30 acres of land at East Hinsdale (next station to Queens) and are to move their business here as soon as the buildings are erected to receive them. Dwelling house, barns, store houses and tenement houses are now being hurriedly put up. And then the two great bulb growing farms of Hallock and Allen will run most side by side.

ANYTHING NEW? Is about the first question I ask when I drop in to see John

Childs. This is because he has got "something new" on the brain.

HIS JUMBLE PHLOXES aren't bad. I saw them growing all last summer. They are a good, compact strain of Phlox Drummondii grandiflora.

I CANNOT find a whit of difference between his Golden Wave coreopsis and my own old strain of C. Drummondii. Coreopsis tinctoria in its various colors and sizes has shown double flowers for some years past, but I think the single ones are the prettier ones.

HE HASN'T floored us yet with the summer poinsettia (Euphorbia heterophylla), but this is because he couldn't get up stock enough of it. Just wait a while.

THE GIANT GHOST FLOWER is a terrible name to give to Datura arborea, far better use the old lady's name of Angel's Trumpet. But it is one of the best selling plants he handles.

CARDAMON PLANT.—Starting in boxes of soil under the benches were a lot of canna or ginger-like roots with a pleasantly aromatic taste and smell. "They are Elettaria Cardamomum," said Mr. Miller, "and we are sending it out this year." It is a native of the East Indies and grows abundantly on the Malabar coast. The flowers are small and white. The seeds contain an aromatic oil and mucilage and are used in medicine.

LEAF MOLD BY THE POUND.—"Yes, we mix a little bone dust with it and put it up in one to five pound packages and send it by mail or express. And it sells well."

STREPTOSOLEN JAMESONI.—What's the matter with it? He can't sell it; the people don't want it. He merely keeps it in stock and includes it as "extras" in orders. Now, I have this plant in the most gorgeous condition just now; even the one year old plants are weighted down with ponderous bunches of gold and orange.

A YELLOW IPOMEEA.—"This is the yellow ipomeea," said Mr. Miller, "and there's nothing pale or washy about the color either; it is a right good bright yellow." What species? "Don't know." Nicholson mentions two yellow-flowered species, namely, I. chryseides and I. dasysperma. The leaves of Child's plant are after the form of those of chryseides.

IS THIS Hibiscus Marmoratus?—A stout woody shrub, woolly pubescent throughout, young wood, foliage and pedicels, and large abutilon-like flowers of a pink-purple color freely and decidedly streaked with white. It is a very striking flower. Childs has it in bloom now and is exultant over it, but much concerned on one point. "How on earth can I get up stock enough of it to catalogue it?" Years ago, I believe, I had this same plant, raised from seeds collected in Mexico and given to me by that eminent naturalist Dr. Edward Palmer.

ITALIAN NAMES.—"These are a lot of bulbs we had from Italy, what do you think of their names?" Don't ask me, I've been in the soup myself. When will the folks in Europe learn that the people in America are not plumed Indians who do not know beans from brose?

PRIMROSES.—Henry S. Rupp & Sons, Shiremanstown, Pa., send us a box of specimen primrose blooms of good size and attractive shades. Owing to the fragility of these flowers they were not in best condition when received.

Overhead Heating.

Seeing recently several articles in the FLORIST on overhead heating prompts me to give my experience with that mode of radiation. In the spring and summer of 1887 I built three new greenhouses, each 110 feet long, two 20 feet and one 10 feet wide. The houses lay north and south with workshop and office running across the north end with boiler house on east end of shop extending past houses. The boiler used is a 10 horse power of the railroad pattern. The houses were piped in the usual way, using 2 1/2-inch pipe for feed and 1 1/2-inch for all the balance, running the pipes all under the benches. In due time the west 20-foot house was planted to roses, the 10-foot on east side to carnations and the middle house filled with mixed stock.

The planting and care of the houses was left to my man in charge for the next few months until circumstances made it necessary for me to take charge of the houses myself, which I did on Christmas morning of '87. I soon found that there was some defect in the heating arrangements that rendered it unsatisfactory, at least it was not working to produce the best results. During the winter I made several changes in the pipes, some of which were improvements, but still it did not come up to my idea of what steam heating should be.

I applied myself more closely to the study of heating greenhouses and the best mode of arranging the pipes to secure the most perfect radiation; the result was, I found myself becoming a convert to the overhead system of heating and after reading an article in the FLORIST on steam heating and overhead radiation (page 323, No. 62), I resolved to experiment on it in a small way. Taking out the pipes from under the middle bench in the rose house I placed one pipe over the bench about five feet above it; I started the pipe from the feed pipe where one running under had been taken out and dropped into the same return pipe at the further end of the house—a valve was placed at each end of the high pipe so that the steam could be let on or cut off at pleasure. I soon found that the one pipe gave more heat and a more perfect radiation than the two pipes that had passed under the bench. The result was so satisfactory that I determined to make the change before another winter. In September last I had an entire change made in all three of the houses. The feed pipe was placed above the upper joist in shop nine feet from the floor and connected with the boiler with a 1 1/2-inch pipe. Two parallel pipes two and a half feet apart were carried over the middle bench from the feed pipe to the extreme end of the house, there each divided into two and returned one along the wall behind and above the side benches a few inches below the glass, the other on a line above the outer edge of the middle bench about two feet below the glass. The 10-foot house has one line of pipe running overhead through the house dividing into two returning along the walls back of and above the benches a few inches below the glass. Each house has a separate pipe to return water to the boiler, which are connected and enter the boiler near the bottom. This arrangement gives the two large houses six pipes each and the small one three. Valves were placed in the pipes so that steam may be put on or cut off as the state of the weather or temperature of the houses may require.

For fuel I use natural gas, the greatest boon a kind providence has ever bestowed

on a florist, not only for its convenience, cleanliness and regularity of heating, but for its cheapness. I do not suppose there is another florist in the United States, perhaps in the world, that is warming over 6,000 feet of glass at a cost of \$10 a year. I use an automatic regulator that controls the supply of gas and can be set for any pressure that is required for a certain temperature and it will maintain that temperature until it is changed. Should the weather change the pressure can be increased or decreased as required. When the weather is regular it can be left in the evening and found all right in the morning, doing away with night stoking, which is no small item. The pressure this winter has not exceeded one pound thus far, although there has been no severe weather, yet I feel safe in saying that one more pound will carry the houses through any weather we are likely to have.

After an experience extending this far into the winter I am more fully convinced than ever that overhead radiation is the correct mode of warming houses for the growing of flowering plants. I have never had as healthy and vigorous a growth in plants as this winter; my carnations are far ahead of any I have ever before raised in healthy vigor and profusion of bloom. Roses are in a good healthy condition with less trouble from insects and mildew than ever before. I find that my houses maintain a more uniform temperature as this distribution of the pipes encourages a better circulation of air throughout the entire house so that the temperature of the floor is but little lower than that of the benches, the hottest place being near the glass, and as all cold must come from the roof, in passing through the strata of hot air that it meets in its descent it becomes warmed before it strikes the plants, so that it carries health and vigor to them instead of a chill.

For bottom heat for a cutting bench I attach a $\frac{3}{4}$ -inch pipe to the nearest hot pipe overhead and carry it under a side bench into a $1\frac{1}{2}$ -inch pipe running under the bench the required distance, then return to starting point from where the water is carried to the boilers through a $\frac{1}{2}$ -inch pipe. This plan of piping a house may not be perfect, it may be susceptible of many improvements, but I feel that it is a step towards that perfection that may ultimately be attained and undoubtedly will be as we have in this country many florists who possess a good share of mechanical genius together with practical ideas of cause and effect who will experiment on it until its many advantages are more fully demonstrated; then I think there will be a revolution in the mode of warming houses for the purpose of growing plants.

Findlay, O. M. B. PATTERSON.

A Square Issue.

Mr. Titus' admirable article upon the heating of greenhouses deserves the careful attention of every progressive florist. But there is one point in regard to which I think he is in error, and that is the proper position of the pipes. In deciding the location of the pipes it is necessary to consider the manner in which the air circulates in a greenhouse, a subject that does not seem to be well understood. If a vessel of water is put over a fire, circulation at once commences, the heated water rising up in the center and as it cools sinking down again at the sides

and so on. If instead of placing the vessel over the fire you put a cake of ice in the water circulation will take place in the same manner and will continue as long as the ice remains.

In a greenhouse, which we will suppose to be without heating apparatus or benches, we have, during the forcing season, the coldest air at the top, often the ice itself. We have therefore all the elements of a perfect circulation, which takes place as follows: When two currents of air of different temperatures meet they do not at once mingle but slide over each other, mingling a little at the point of contact; drop a window a little on a cold day and two currents at once commence,



BASKET TRIMMED WITH THE NATIONAL COLORS.

a cold one entering at the bottom of the opening and dropping down inside the sash, and a warm one sliding out over the cold one at the top of the opening.

Suppose the temperature of the greenhouse in the neighborhood of the plants to be 70° with frost forming on the glass; the air in contact with the glass will be cooled at once nearly to frost point, sliding down the glass, passing behind the side benches and spreading out over the floor of the house where it becomes warmed a little by contact with the air just above it and rises slowly as it is forced up by the never ceasing current of cold air. As the air in the upper part of the house becomes cooled and slides down under the glass the warm air in the middle of the house is forced up to take its place. Thus we have a natural and ideally perfect circulation which will be more or less rapid according to the difference in temperature between the outside and inside of the house. This circulation will be even and regular without currents or eddies, except to a small extent next to the glass, and no particle of air can possibly reach the plants without first having acquired the temperature of the surrounding air and that is the one object we all wish to attain.

In placing pipes in a greenhouse it seems clear beyond debate that they should be placed where they cannot interfere with this natural and perfect circulation, and the only place where they can be so placed is overhead; if placed under the benches the circulation is at once broken up. The idea that if the pipes are placed overhead the heat will all remain in the upper part of the house is of course a mistake. It will always be warmer at the top of the house than at

the bottom no matter where the pipes are placed, but as long as it is colder outside than in, the circulation of the entire body of air is assured. The objections to putting pipes under benches are too well known to need repeating; it is the worst place in the house for them. If they must be below they should be in the passageways.

Overhead heating is no longer a mere theoretical device, it is an accomplished fact. Successful cases have been reported in these columns. It not only proves to be better than the old system, but it surpasses the expectations of those who try it. Its advantages are eminently practical. Where the boiler is placed in a cellar it gives a great increase of vertical rise and fall with consequent rapidity of circulation; where no cellar is possible the boiler can be placed on the level of greenhouse floor with a certainty of good circulation; the temperature about the plants will always be even and regular with no currents of superheated air rising from under the benches; the ventilation can be perfectly controlled in all weathers; the cold air entering from the ventilators will have the chill taken off before reaching the plants; the heat radiated downward from the pipes strikes the upper side of the leaves in a natural manner as the heat from the sun does. At least I used to think so, but my ideas upon the subject of radiation received a severe shock from the announcement at the New York meeting of a new and startling discovery in physics. It seems that the heat no longer comes through the glass but is "generated" by the sun at the lowest point that it strikes inside the house. Just how the sun does its generating without coming through the glass was not mentioned, but that is an unimportant detail. I was pleased to notice that the announcement of this brilliant discovery was received with applause—it should have been.

When overhead heating is combined with the open-pressure system, with a water-tube boiler, we have a very perfect arrangement. Steam has no appreciable advantage over it except for long distance heating in large establishments. With 2-inch pipes we can get heat nearly as quick as with steam; steam will develop its full power a little quicker than the water, that is all the difference. On warm days the superfluous heat from overhead pipes can be allowed to escape from the ventilators before it has had a chance to affect the temperature of the air below it.

The question of economy of fuel does not receive the attention it deserves. It ought to be generally understood that any system of heating that depends upon forcing of fires in cold weather for its efficiency is a bad system. Heavy forcing means an enormous waste of fuel. True economy requires that boilers should be run as power boilers are, under fixed conditions. This requires the use of more than one boiler under all circumstances, and the additional heat required by colder weather should be obtained by firing a second boiler and not by forcing the first, which should always be run at the point of greatest economy regardless of weather; and rather than force the second boiler a third should be added.

Water tube boilers of great efficiency, such as have been described in former numbers, can be put together by any steam-fitter, and they are so inexpensive that several can be furnished for the cost of one of the large cast iron boilers. The relative value of steam and hot water is

by no means settled yet and will not be until the improved methods of using the latter come into more general use. It is a curious fact that just as florists are beginning to abandon water for steam, architects are beginning to abandon steam for water. L. W. Framingham, Mass.

Postage Rates and Cost of Building.

Please publish the postal rates on roots, cuttings, etc. mentioned in a recent issue. Also the probable cost of one such rose house complete as described in January 1 issue, built by Mr. Price, of Lansdowne, Pa. I think a fuller description of the houses in question as to the roof and the way the space inside is divided up, would be useful to many.

Ithaca, N. Y. C. W. WHEELER.

[The postal rate on seeds, bulbs, roots, cuttings and cions is now 8 cents per pound.]

Cost of Building.

Will you kindly inform me through the columns of your valuable paper what would be the cost of a greenhouse made of wood, 300 feet long by 18 feet wide, with sashbars for glass 16x24? Also the probable cost of steam heating apparatus for such a house and oblige.

Boston, Mass. SUBSCRIBER.

[Cost of construction varies so in different parts of the country that only those who have built such houses in the vicinity of Boston could give a reliable answer. Will some Boston man supply the desired information?—ED.]

Crude Petroleum as a Preservative of Wood.

In the FLORIST of October 1, J. G. Burrow stated that petroleum (crude) is a good preserver of wood. I would like to ask through your paper if any one has used it for bottom of benches in greenhouses, and if it has been found satisfactory. J. I.

[It has been so used and we understand that it accomplished the desired object without any injury to plants.—ED.]

Inch Pipes for Heating.

Will those who are using hot water in inch pipes for heating state through the FLORIST what success they have had and how pipes are laid? This system seems to be gaining ground and the experience of those who have tried it will interest many. NEW YORK.

THOS. W. WEATHERED'S SONS, New York, have added a new department to the business. They now undertake the erection of greenhouses complete in any part of the country, as well as supplying heating apparatus for the same. They have an exhibition at their store, at 46 and 48 Marion street, New York, a sample portable greenhouse, also a section of a three quarter span 18-foot rose house with benches and everything complete, for the inspection of intending builders.

TEN-WEEKS STOCKS.—Can these be forced in winter and what temperature is required to bring them to perfection at that season. D. H., JR.

FORCING BULBS.—Will some one kindly inform me through the FLORIST which of the bulbs, after being forced, are worth keeping? A. S. Glenville, Ohio.

News Notes.

NORFOLK, VA.—The Brambleton Floral Co. has made an assignment to M. Metcalf.

HAMILTON, ONT.—Holiday trade larger than last year, quality of flowers and prices realized were about the same. There was an increased call for roses.

COUNCIL BLUFFS, IA.—Holiday trade was very good, Christmas trade in excess of last year, but a considerable falling off in New Year's business. The demand at Christmas was largely in excess of supply.

NEW ORLEANS, LA.—Holiday trade larger than last year, quality of flowers a little inferior, prices trifle lower, supply sufficient to meet demand, loose bunches more in demand than baskets, an increased call for roses.

PEORIA, ILL.—Holiday trade larger than last year, quality of flowers not so good, prices higher, supply sufficient to supply the demand at prices asked. Principal call was for loose flowers. Sales of holly wreaths and green were more than double those of last year.

OAKLAND, CAL.—Holiday trade about equal to last year; quality of flowers better, out-door flowers were more plentiful on account of our mild winter. Good flowers brought better prices, especially roses. The supply was equal to the demand except in good roses. An increased demand was noted for good ornamental and flowering plants. Less demand for baskets and more for loose flowers, and a greater demand for Christmas greens.

JANESVILLE, WIS.—Holiday trade was good; I think full better than last year; flowers were in good supply and brought good prices. Trade in holly larger than ever. Have had more than an average of sunshine this winter, and very little cold weather—first snow to-day. Trade in roses was somewhat restricted owing to the high prices. Four funerals and numerous weddings made the florists busy during Christmas week. January 9.

DETROIT.—Preparations for the flower show to be given April 2-5 are going forward. The daily Journal, under whose auspices the show will be held, is vigorously pushing the project. Twenty-four of the city florists have expressed their intention to compete. The premium list has not yet been issued but will be liberal. Special exhibits from florists in other cities will be solicited, and from the manner in which the exhibition is being advertised it will undoubtedly pay well those who can show novelties or well grown specimens of any plant or flowers at that date, to avail themselves of this opportunity.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—As florist; long experience; single. Address W. J. BAILEY, 44 North Third Street, Harrisburg, Pa.

SITUATION WANTED—By a practical rose grower, also by an assistant. Good references. Address D. A. C. Allegheny P. O. Pa.

SITUATION WANTED—By a first class rose grower and propagator; best of references given. Address H. M., care American Florist.

SITUATION WANTED—By thoroughly experienced man; best references; private place preferred. BERNARD HOFF, 58 Law Ave., Chicago.

SITUATION WANTED—As seedsmen; have a general knowledge of the nursery and floral business. Address T. & F., care American Florist.

SITUATION WANTED—With a reliable florist. I desire to learn the business thoroughly. Address MISS D. R. BURT, 53 Dearborn St., Chicago, Ill.

SITUATION WANTED—Either private or commercial place; 12 years' experience in all branches of the business. Address WOL. HELLMAN, 308 Maxwell St., Chicago.

SITUATION WANTED—Commercial or private by single man, 28 years old; 7 years with Henry A. Dreer, Riverton, to whom he refers. FRANK EBNER, Riverton, N. J.

SITUATION WANTED—By young man at once, with some good florist to learn the business. Best of references. South preferred. E. V. GOODMAN, 45 N. Front St., Columbus, O.

SITUATION WANTED—Practical florist of ability and long experience on all the requisites of the business. Private or commercial. For particulars address A. B., care American Florist, Chicago.

SITUATION WANTED—By a gardener; married; thorough practical knowledge of his profession. Can give very best of reference. Private or commercial. A. T. PETERSON, Riverside, Cook Co., Ill.

SITUATION WANTED—Florist's foreman or gentleman's gardener; 17 years' experience; best of references; married; temperate man. Address VANDERMEULEN, Wright St., Rochester, N. Y.

SITUATION WANTED—By assistant gardener; single; 5 years' experience; good references, reliable and willing. Only first-class private place wanted, where able to get a full knowledge of the business. Address F. G. W., East Orange, N. J.

SITUATION WANTED—A florist and gardener; aged 30, with small family who are coming over from Holland, wants a position about the middle of February; is fully acquainted with the business in all its branches. Address H. H. APPELDORN, 153 Cedar St., Norwalk, Conn.

SITUATION WANTED—By a gardener and florist with 18 years' experience, competent in all its branches. Have full charge where now employed 5 years. Can furnish first class recommendations; German, married, small child; private place preferred. Address D 4, care American Florist.

SITUATION WANTED—By Practical gardener; French; single; age 38; has devoted all his lifetime to cultivate the loving nature of plants principally in rose culture can't be beat. Commercial or private. Best of references. Any person wishing such a man, address E. L., care American Florist.

WANTED—Wholesale price lists of roses, plants, etc. BAKER BROTHERS, Fort Worth, Texas.

WANTED—Catalogues and nursery trade lists. Address MEYER & KHONENBERG, Florists and Nurserymen, Washington, Ind.

WANTED—To buy apple and pear seedlings, cions, etc., also sycamore trees. Send wholesale price lists. BAKER BROTHERS, Fort Worth, Texas.

WANTED—A gardener; a single man to go to Nebraska, that understands greenhouse and vegetable garden. Address J. D. HORTON, care Carrier 30, S. W. Postoffice, Chicago.

WANTED—A florist and gardener, sober, honest, and competent, to take an established place on shares. Equi-distant from New York and Phila. Good home market. CHARLES DAVIS, Easton, Pa.

WANTED—Cash buyer or equal partner; just established; good trade and great chance for rapid development. Booming capital city with fine shipping facilities. Address RIVERSIDE GREENHOUSES, Lansing, Mich.

WANTED—A young man of good habits; must be intelligent and neat, to begin work in Feb'y. Must have had a practical experience of several years in growing roses for cut flowers. No others need apply. Address, stating wages expected, E. W. BREED, Clinton, Mass.

WANTED TO RENT—A good paying florist's business near a flourishing town, or to run a place on shares or salary. Understands the business thoroughly. Can refer to the leading growers in vicinity of New York City. FLORA, care I. W. Carter, Yonkers, New York.

WANTED—A good, thorough florist acquainted with the business in all its branches; single. A German-American or German preferred. A man not afraid to work will have a permanent position—and only such need apply. HENRY EHRENPFORT, 198 to 190 South 11th St., Omaha Neb.

WANTED—A thoroughly practical cut flower grower as first assistant; must be well up in roses. Permanent place to right man. References required. Address, stating age and salary required, etc. ROSEGROWER, care Welch Bros., 165 Tremont St., Boston, Mass.

FOR SALE OR RENT—Florist business of the late H. F. Crowell; established 15 years. First-class opening for an energetic man. For particulars, address EDITH M. CROWELL, 1512 Pacific Ave., Atlantic City, N. J.

FOR SALE OR EXCHANGE—Four greenhouses almost new, 6,000 feet of glass, heated with hot water, located in central Illinois. Plant and cut flower trade well established. Will take land or other property in exchange. Satisfactory reasons for selling. Address CHANDLER, care Am. Florist.

FOR SALE—Eighty acres of land excellently situated for nursery, fruit, or gardening purposes, two miles from Danville, Illinois, a city of 6,000 inhabitants, and a railroad center. Small nursery established on place and doing a good business. This is also a good speculative investment, as land

could be sold in small tracts for building purposes
Address PETER BEYER, JR.,
503 W. North Street, Danville, Ill.

FOR SALE. In a large western city good settled
country. For the right man with some capital
to connect nursery business with it. Located on
Main street—street car line. 7 greenhouses heated
with steam; good stock of plants, 200 hotbed sash,
garden tools, wagon, horses all in good order; plenty
water; 4 years more lease on 50 acres of ground;
cheap rent; large house; stable. Ground for sale
any time. Home good business for 5 years in flowers
and early vegetables. Cause poor health. Address
A. F. S. care American Florist, Chicago.

A FINE OPENING FOR A FLORIST.
I offer for sale the following property in the thriving
city of Rochester: Four greenhouses 62 ft. long,
one 24 ft. wide, three 14 ft. wide, heated by Hitchings
& Co's hot water boiler; all in good running
order. Also large 12-room dwelling house heated by
furnace. The above is located on six building lots
and can be purchased at a great bargain before April
1st, 1889. A good trade already established and can
be increased by a competent man. Address
C. H. POLLEY, 33 Elwood Bldg. Rochester, N. Y.

TO FLORISTS AND OTHERS, FOR RENT.

A pleasantly located house ten miles from
Boston, on two lines of railroad, with three first-
class greenhouses with steam power, and all
modern appliances.

Choice Stock and Tools if wanted, at fair value.
Rare opportunity. Apply to

WILLIAM W. LOWE, or WILLIAM R. GRAY,
Room 12, Traveller Bldg., 31 State St., Boston, Mass.

A. BLANC, Horticultural Engraver, PHILADELPHIA.



**5000 ELECTROTYPES FOR IL-
LUSTRATING FLO-
RISTS, SEEDSMEN, AND
NURSERYMENS CATA-
LOGUES CHEAP.**

A FULL SET OF CATA-
LOGUES ILLUSTRATING
ALL CUTS SENT ON RE-
CEIPT OF 50c., which de-
duct from first order

OUR SEEDS NEVER HAD SEA-SICKNESS, Fresh Home-Grown Seeds of SELECTED PRIMULA OBCONICA.

We are the largest growers, and have the finest
strain of Primula Obconica in this country, and have
harvested an unusually fine crop of seed, which we
offer to the trade at \$1.50 per 1000. Special rates for
large quantities.

FISHER BROS. & CO.,
NEW ENGLAND NURSERIES, MONTVALE, MASS.

COLD FRAME CABBAGE PLANTS 500,000

Now ready for planting. Send for prices.

Address JOHN S. BARNHART,
Denton, Md.

MARGUERITES.

ROOTED CUTTINGS..... \$2.50 per 100
The broad leaved variety; the best paying cut
flower grown.

ALTERNANTHERAS. Stock plants,
\$10.00 per 100

D. S. HEFFRON,

Washington Heights, Ill.

TREE AND PLANT LABELS, MAILING BOXES, SPHAGNUM MOSS, TRANSPLANTING BOXES.

And Supplies of all kinds.

Send for Samples and Price Lists, FREE.

H. W. WILLIAMS & SONS,
BATAVIA, ILL.

MAILING BOXES.

Our 3-Piece Floral Box

is acknowledged to be the Lightest and Safest Box
made. No breaking in the mails. GET FLOWER
BOXES OF ALL KINDS, mailed up or in the
flat. Price list free.

Estimates given on any size or number by re-
turn mail.

SMITH & SMITH,
Box 105, KENTON, OHIO.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved
valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance
of Buds and Flowers all through the season. Flowers are PURE WHITE, show-
ing no trace of Pink, makes good finely formed Buds and is moderately full.
Petals are thick and of good substance, opens well, is a good keeper and very sweet.
We believe it will prove especially VALUABLE FOR EARLY WINTER FORC-
ING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it
for extended trial with the belief that it will be found a valuable acquisition to our
list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25.00
per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

Mention American Florist.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for
forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON,
MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and
many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLVANGER & BARRY,
MOUNT HOPE NURSERIES. ROCHESTER, N. Y.

IMPORTED DWARF BUDDED AND TREE ROSES.

Hydrangeas, Lilacs, Snowballs, Azaleas, Rhododendrons, etc. ALL STRONG PLANTS
from the BOSKOOP, HOLLAND, NURSERY ASSOCIATION. ORDERS FOR SPRING
IMPORTATION SHOULD NOW be forwarded to

C. H. JOOSTEN, Sole Agent for the U. S.,

Mention Am Florist.

OFFICE, 33 Coenties Slip, New York.

NYACK ROSES

PERLES, NIPHETOS \$5.00 per 100
LA FRANCE..... 6.00 "

In 2 1/2-inch pots, ready Feb. 1.

— ALSO —

Rooted Carnation Cuttings.

Orders NOW taken for rooted CARNATION
CUTTINGS of 20 of the leading varieties, to be
ready for delivery in EARLY SPRING.
Prices on application.

TUNIS DE PEW,

NYACK, NEW YORK.

JOHN CURWEN, Jr.,
GENERAL
GREENHOUSE STOCK AND ROSES,
Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

1,076.

The *Royal New Yorker's* seedling potato No. 2,
will be sent to all yearly subscribers without
charge. It yielded in the late celebrated "Potato
Contest" at the rate of 1,076 bushels to the acre,
the report being sworn to by six well known
judges. This seedling is thought to be the
nearest approach to a perfect potato yet pro-
duced. The price of the *Royal New Yorker* is
\$2.00 a year. It will be sent on a trial trip of 10
weeks for 25 cents in order to show progressive
farmers, who do not now read it, that it is the
best farm weekly in the world. "It has done
more to promote the interests of agriculture in
its experiment grounds than all the experiment
stations put together." So say the editors of the
New York Times, Tribune, World, Farm Journal,
Inter Ocean, etc., so say all who read it and
know. It is pure, sparkling and original. Its
illustrations are from nature. It commands the
best writers in the world. Subscribe at once.
Address the *Royal New Yorker*, 24 Park Row,
New York.

A. C. TUCKER,

ROSE GROWER,

P. O. BOX 190.

NYACK, N. Y.

I would like to give my prices for the following
varieties in 2 1/2, 3, or 4-inch pots to any parties desir-
ing the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI,
LA FRANCE, NIPHETOS,
MERMET, BRIDE,
AMERICAN BEAUTY, PAPA GONTIER.

IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best re-
sults to the Florist, blooming freely and giving plenty
of cuttings for propagating quickly. Fine plants
for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,
JAMAICA PLAIN, (Boston), MASS.

NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, Hybrid
Teas, and Hybrid Perpetuals, and novelties in
Chrysanthemums. Also Taberna montana, Bou-
vardias, Carnations, and general greenhouse
stock.

Trade List mailed on application.

JACOB SCHULZ,
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ROSES FOR SALE.

In first class condition, from vigorous plants—
MERMETS, BRIDES, PERLES, GONTIERS,
BENNETTS, BON SILENES AND NIPHETOS.

In 2 1/2-inch pots, \$5.00 per 100
MERMETS, BRIDES and BONS. In 4-inch pots,
from \$10.00 to \$12.00.

GOODING & LEITCH, Cleveland, O.

HERMOSA ROSES.

200 strong plants from open ground, 25.00 per 100.

J. H. CAMPBELL & SONS,
3601 Germantown Ave., Philadelphia, Pa.



February Floral Styles.

The styles have never been more taking than at present. Klunder is leading in the forcing of hardy shrubs, producing unusual varieties for this season of the year. His stock is of the choicest and the plants are beautifully grown. His forsythia is selling for one dollar a spray; he is also selling small bunches of beautiful apple blossoms for the same price, and the lovely *Desmodium penduliflorum* which has not been produced here before this season, may now be bought at his establishment. The novel forcing of these hardy shrubs has been accomplished by Mr. Bird, and has proven a very successful undertaking. The primroses brought in from Mr. Pitcher's and shown in Klunder's window in a bridal bouquet are most beautifully arranged. The bouquet is made loose and the monogram of both parties stamped on a delicately tinted pink sash with which it is tied; the effect is unique and striking, as it is exhibited in the window on a pillow of white velvet, surrounded by choice varieties of ferns. The cyclamen plants also from Mr. Pitcher's shown in deep pink, pale pink and white, are cultivated to a most unusual extent, each in bloom with from three to five flowers and two to three buds; their extra size and delicacy of marking almost surpasses belief.

At the late Astor and Vanderbilt balls the decorations were exceedingly choice; Japanese primroses which are now being cultivated to so marked a degree were abundant and prominent. One room in the Vanderbilt mansion was entirely decorated with *Magua Charta* roses; much attention has been given of late to the cultivation of these roses. A second room was embellished with apple blossoms, a third with orange trees and still another with a combination of blue Roman hyacinths and yellow jonquils; the excessive beauty of this latter arrangement has been rarely seen, as neither time, pains nor expense has been spared in the cultivation of these flowers. At Mrs Webb's ball, which happened about the same time, the favors used at the German were crumb trays, upon which *Mermet* roses, intermingled with white and green ivy were daintily placed—the trays being trimmed with pink ribbon.

Alexander McConnell has opened a new store on Fifth avenue opposite the Church of the Divine Paternity, his business having increased to such an extent that this was rendered necessary in order to be within easy distance of his numerous and wealthy customers. He has in charge the decoration of the Old Guard Ball, which is elite and fashionable, no expense being spared in making it the affair of the season. The back of the stage of the Metropolitan Opera House is to be transformed into a natural forest scene, with baskets of flowers and ele-

gantly bunched bouquets placed at intermediate distances.

The *Souvenir de la Malmaison* rose is occasionally seen, it is now at its best, and is always valued by its numerous admirers. The phenomenal French fish basket which has never been superseded, is still the leader in expensive flower baskets. It is always the choice of those who desire anything in gorgeous flower belongings.

FANNIE A. BENSON.

New York.

Boston.

Roses are scarce. The long continued spell of warm weather extending over the first three weeks of January forced into bloom everything in the shape of a bud and with the advent of more seasonable weather we find that there is but little left to come out.

Prices are not high, however, considering the circumstances. A few *Jacqs* and some good hybrids are now coming in, but in limited quantities as yet. Carnations are plenty, and there is also an abundant supply of violets. "Bulbous" flowers are also in full supply, including *freesia* which has now become as staple a supply as are tulips or Roman hyacinths. The single yellow narcissus is in good demand; also *mignonette*, *forget-me-not* and cyclamens.

Primula obconica is quite fashionable for corsage bunches.

Joseph Tailby, the originator of the *Grace Wilder* carnation, has a number of sports from that popular variety. One of these, a white one, is particularly good as the blooms come singly on long stems.

The sensation of the day is the recent assignment of E. M. Wood & Co., of the *Waban* Conservatories at Natick. This establishment is widely known for its magnificent houses, where very fine roses have been grown, but at frightful expense. The failure is a heavy one and will be felt severely by some of the employes of the establishment, whose salaries are in arrears.

Some of the Boston florists are getting dangerous. A pair of shears was the weapon adopted by one belligerent individual to clear his store of unwelcome visitors. He is minus the shears now, as one of the party more courageous than the rest tackled him and now holds the shears as contraband of war.

The two delegates from Boston to the executive committee meeting at Buffalo, returned with an overpowering appreciation of the hearty hospitality and kindness received there. The fame of the Buffalo brethren will spread all over the country and a great attendance may be counted upon for the August meeting. Buffalo is not so large a city in population as those where previous conventions have been held, but the hearts of her florists are evidently as big as the biggest

W. J. S.

WASHINGTON, D. C.—Trade in cut flowers and plants exceptionally dull for the season, owing to the depressed condition of society people immediately preceding the incoming of a new administration. Another and additional cause may be the action of certain so-called club leaders in tabooing bouquets at balls. The latter to say the least is very ungenerous to ladies, with whom flowers are an important factor to produce fine effects and will always serve as the most pleasure giving mementos of such occasions. A reaction is sure to follow and florists may depend upon a "boom" before spring sets in, invariably the effect of such unnatural and illadvised temporary suppression of "inborn delight." The florists in the Central Market have carried their point and they will be allowed to keep their stands on the ground floor as heretofore. The contract for the floral decorations of the inaugural ball has been awarded to Neal, the Bowery florist of New York, for \$2,700, a mere pittance of what should have been expended for this purpose. A third rate job will of course result as is evidenced by the large order already given by the contractor to a certain manufacturer of tissue paper flowers in this city. A sad commentary on the judgment and taste of the committee having this important educational and aesthetic feature of the inauguration festivities in hand.

Postage on Cut Flowers.

Our postmaster has received a letter of instructions from Third Assistant Postmaster General H. R. Harris which says:

"The law reducing the rate of postage on seeds, cuttings, etc. does not apply to cut flowers. They are still subject to the fourth class rate of postage."

I suppose we shall have to organize a rebellion, and the above formal ruling of the department seems a sufficient *casus belli*.

L. WIGHT.

Framingham, Mass.

CHICAGO.—The Florist Club's ball occurs February 12. The floral decorations will be the principal feature of the affair, for which large quantities of flowers will be required. All growers for this market are expected to contribute liberally. Flowers so contributed should be addressed to the Chicago Florist Club, care of any of the commission houses, to reach the city the morning of Monday, Feb. 11.

KALAMAZOO, MICH.—Holiday trade larger than last year, quality of flowers better, prices about the same, call being almost entirely for loose flowers. W. Kirkham has built a house for roses and bedding plants. Pres. De Graw is the best white carnation here this winter. Trade brisk at present.

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Orders for less than one-half inch space not accepted.

Advertisements for February 15 issue must REACH US by noon, Feb. 9. Address

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

Hill & Co., Richmond, Ind., retail plants; Peter Henderson & Co., New York, retail plants, seeds, etc.; same, trade list for florists; same, trade list for market gardeners; Thos. A. Cox & Co., San Francisco, seeds; J. M. McCullough's Sons, Cincinnati, seeds; Roop & Zile, Westminster, Md., seeds and plants; Michel Plant & Seed Co., St. Louis, garden seeds; DeCou & Co., St. Paul, Minn., seeds; W. P. Simmons & Co., Geneva, O., trade list plants; J. A. Simmers, Toronto, Ont., seeds; Nixon Nozzle & Machine Co., Dayton, O., spraying machinery; Nanz & Nenner, Louisville, Ky., retail plants and seeds; Schlegel & Fottler, Boston, Mass., trade list seeds; Jacob W. Manning, Reading, Mass., trade list hardy border plants; H. Cannell & Sons, Swanley, Kent, Eng., retail plants and seeds; E. H. Krelage & Son, Haarlem, Holland, Dutch bulbs; R. D. Hoyt, Bay View, Fla., greenhouse plants and nursery stock; Dingee & Conard Co., West Grove, Pa., retail roses, hardy plants and seeds; F. W. Wilson, Chatham, Ont., trees, shrubs and plants; Haage & Schmidt, Erfurt, Germany, plants and seeds; J. A. Moody, Youngstown, O., seeds.

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Wholesale Markets.

Cut Flowers.

BOSTON, Jan. 25	
Roses, Ters.	21.00 @ 25.00
" Niphetos, Gontiers.	8.00 @ 8.00
" Perle, Sunset.	8.00 @ 10.00
" Brides, Mermet.	12.00
" Jacq.	54.00
Carnations, short.	1.00
Carnations, long.	1.50
Carnations, fancy.	2.00 @ 2.50
Lily of the Valley.	4.00
Romans, tulips.	3.00 @
Freesia.	3.00
Daffodils.	6.00
Violets.	1.00
Callus.	15.00
Smilax.	12.00
Adiantum.	1.50
Primula obconica, per 100 bunches.	25.00

NEW YORK, Jan. 25	
Roses, Perles.	4.00
" Niphetos, Bon Silenes, Nones.	3.00 @ 4.00
" Gontiers.	4.00 @ 5.00
" Mermet, Brides, Cnslms.	8.00 @ 10.00
" La France.	12.00 @ 15.00
" Bennett.	8.00 @ 10.00
" Am. Beauty, Jacqs.	50.00
" Puritan.	25.00
" Jacq.	60.00
Carnations, long, fancy.	2.00
Carnations, short.	1.00
Smilax.	15.00 @ 20.00
Mignonette.	2.00
Romans.	2.00 @ 4.00
Narcissus.	3.00 @ 4.00
Lily of the valley.	2.00 @ 4.00
Tulips.	3.00 @ 6.00
Harrisii lilies.	15.00 @ 20.00
Violets.	1.00 @ 1.50
Adiantum.	1.00 @ 1.50
Lilac, per bunch.	1.50

PHILADELPHIA Jan. 25	
Roses, Perles, Niphetos.	85.00 @ 90.00
" Mermet, La France, Brides.	10.00 @ 15.00
" Bennett.	8.00 @ 10.00
" Bon Silene.	4.00
" Am. Beauties.	20.00 @ 30.00
" Cooks.	12.00 @ 15.00
" Gontiers.	5.00 @ 8.00
" Puritan.	20.00
" Jacq.	25.00
Carnations, short.	75 @ 151
Lily of the Valley.	4.00 @ 6.00
Roman Hyacinths.	4.00 @ 5.00
Narcissus, tulips.	5.00 @ 6.00
Smilax.	15.00 @ 20.00
Harrisii lilies, callus.	10.00

CHICAGO, Jan. 25.	
Roses, Bon Silene.	4.00 @ 5.00
" Perle, Niphetos.	6.00 @ 7.00
" Mermet, La France.	8.00 @ 10.00
" Am. Beauties.	25.00 @ 40.00
" Brides.	10.00 @ 12.00
" Bennett, Dukes.	8.00 @ 10.00
" Gontiers.	6.00
Carnations, short.	1.00 @ 1.50
Carnations, long.	1.25 @ 2.00
Carnations, long fancy.	10.00 @ 12.50
Callus.	10.00 @ 12.50
Violets.	1.00 @ 1.50
Lily of the valley.	4.00 @ 6.00
Tulips.	3.00 @ 6.00
Narcissus.	4.00 @ 5.00
Romans.	4.00 @ 5.00
Camellias.	12.50
Smilax.	16.00 @ 18.00
Adiantum.	1.25 @ 1.50

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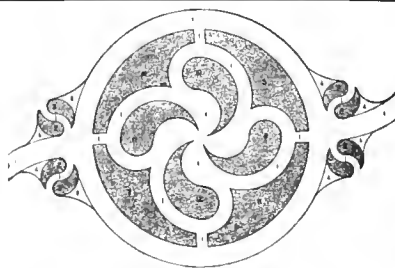
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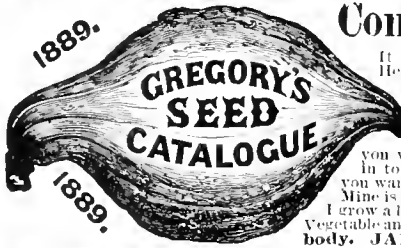
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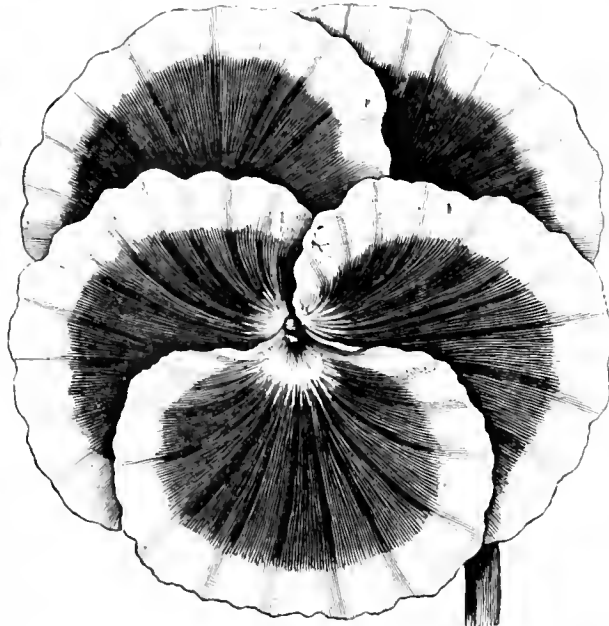
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TYDIA, 6 varieties, one each	2 00
" Mixed, per dozen	3 00

TUBEROUS BEGONIAS, Single.

Scarlet shades	per doz. \$2 00
Rose	" 2 00
White	" 2 50
Yellow	" 3 50
Mixed all colors	" 1 50
DOUBLE, 12 distinct shades	" 5 00
" Mixed	" 4 00

Named varieties from 50 cts. to \$5 (0 each. Best collection in America—descriptions will be given on application.

HERBACEOUS BEGONIAS. Forty varieties

per dozen \$2.00

AMARYLLIS VITATA HYBRIDS, strong bulbs, each \$1.00, per dozen \$10.00

DAHLIAS, 50 varieties, dry roots, per doz. \$1.50

Dry roots, per hundred \$10.00

F. J. MEECH, CHARLEVOIX, MICH.

PELARGONIUMS.

I have 150 plants of Regal Pelargoniums of the very choicest varieties, all good healthy plants in 4-inch pots to sell. Price 50 cents each.

Also choice named double, single, and ivy leaved Geraniums. Colens of choicest kinds.

R. W. RATHBORNE, 125 Quincy Street, CHICAGO, ILL.

VERBENAS.

OUR VERBENAS ARE PERFECTLY HEALTHY.

Stock Plants XX Mammoth Set	Per 100 Per 1000
.....	\$4.00 \$35 00
..... General Collection	3 00 25 00
Rooted Cuttings	1 00 8 00
..... XX Mammoth Set	1.25 10 00

ROSES.

Mermets, Cook, Adam, Souv. d'au Ami, Safrano and Brides, from 2 1/2-inch pots, strong plants	Per 100 Per 1000
.....	5 00 50 00
Ampelopsis Veitchii and Quinquifolia, pot-grown, first size \$3.00, second size \$6.00 per 100.	

Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots \$10.00 per 100.

Geraniums—New and old varieties, 2 1/2-inch pots, per 100 \$1.00; per 1000 \$10.00.

COLEUS, from pots. Best collection, per 100 \$4.00; per 1000 \$35.00.

Rooted Cuttings. Best collection, per 100 \$1.25; per 1000 \$10.00.

CARNATIONS, ROOTED CUTTINGS.

Peerless, Hinge's White and Edwardsii, per 100, \$1.00; per 1000, \$12.00. Fred Johnson, The Century, Portia, Snowdon, Jas. Garfield and Alegratere, per 100, \$2.00; per 1000, \$15.00.

Trade List of florist stock on application.

I. C. WOOD & BRO., Fishkill, N. Y.

VERBENAS. PERFECTLY CLEAN.

ROOTED CUTTINGS	Per 100
.....	3 50
TRANSPLANTED	1 00
FROM POTS	\$2 00 NAMED
AGERATIUM, Blue, very fine and true	3 00

Satisfaction guaranteed.
W. B. WOODRUFF, Westfield, Union Co., N. J.



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Trade pkt. 50c.
Verbena New Mammoth, grown from original stock, 50c \$1.00
Smilax, new crop, 50c \$1.00
Mignonette Machet, 30c \$1.00

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HENRY A. DREER, Florist and Seedsman, Philadelphia.



NEW CROP FLOWER SEEDS NOW READY.

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Alyssum Sweet	.20	.05
Bellis Perennis, Longfellow.		.25
Candytuft, white or mixed	.20	.05
Calceolaria Hybrida		.50
Centauria Gymnocarpa.		.20
" Candidissima.		.25
Chrysanthemum mixed		.25
Geranium Apple.		.25

Ten Week Stock, separate colors	2 50	.20
Verbena, separate colors.	2 50	.25
" choice mixed	2 00	.15
Lobelia Compacta.		.15
" Speciosa		.15
Mignonette Machet.	.50	.10
" Golden Queen.	.50	.10
" Sweet.	.15	.10
Petunia, double choice		.50
" single mixed.	1 50	.15
Pyrethrum Golden	1 00	.15
Hollyhock, choice mixed.	1 00	.15
Nasturtium, tall and dwarf	20	.10

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THE CHOICEST OLD AND NEW VARIETIES.

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NO RUST OR MILDEW.

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Aster Seed. Best white and dw't Peony, 1 doz. 75c

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Verbena—My own superb strain, 1 doz \$1 (0)

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Alternanthera, two sorts	3 00
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" flowering sorts 2 1/2-inch	5 00
Fuchsias, double and single, 2 1/2-inch	4 00
Geraniums, double and single, 2 1/2-inch	3 00
Heliotropes, four varieties, 2 1/2-inch	4 00
Lantanas, six varieties, 2 1/2-inch	3 00
Smilax, strong, 2 1/2-inch	3 00
Salvias, six sorts, 2 1/2-inch	3 00

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Stock Plants	Per 100 Per 1000
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Transplanted on benches, EXTRA	1 00 10 00
Rooted Cuttings	1 00 8 00

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BEST STANDARD SORTS

Stock Plants	2 50	20 00
Rooted Cuttings	1 00	10 00

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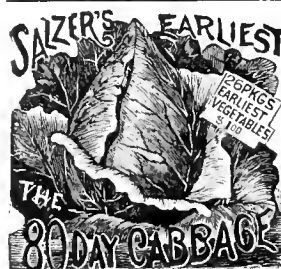
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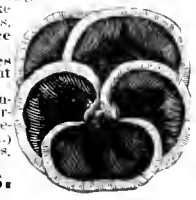
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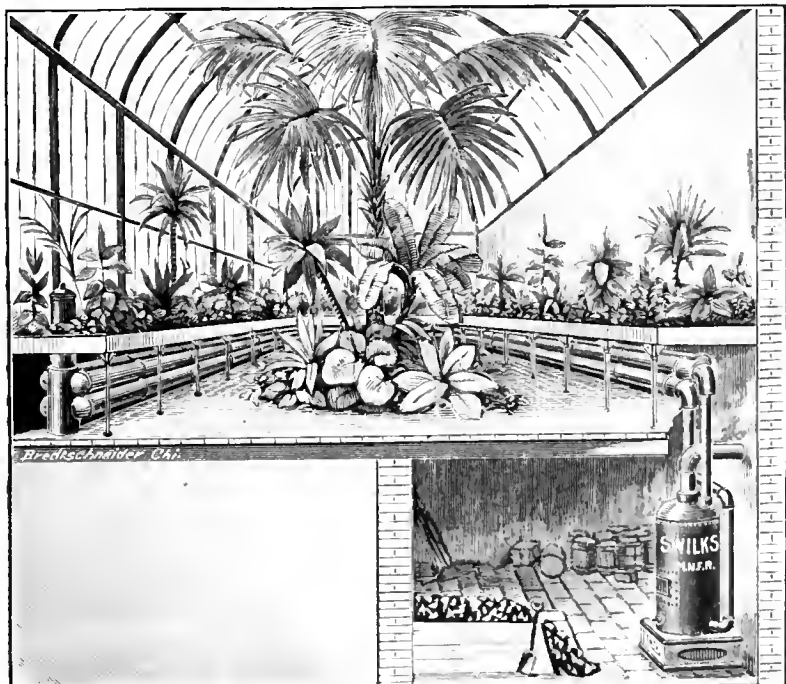
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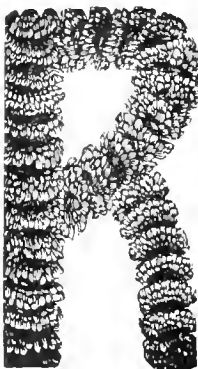
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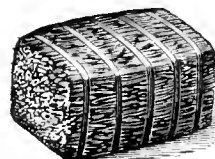
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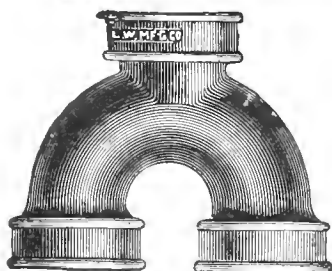
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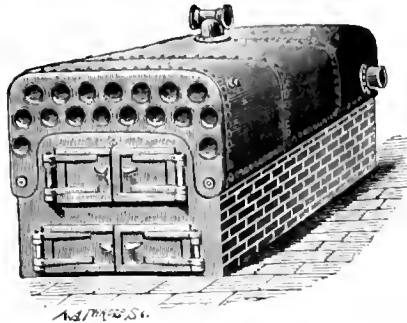
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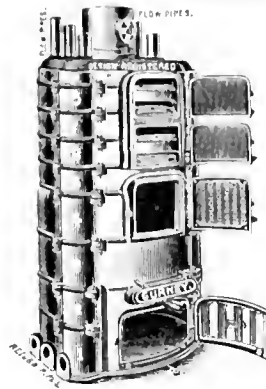
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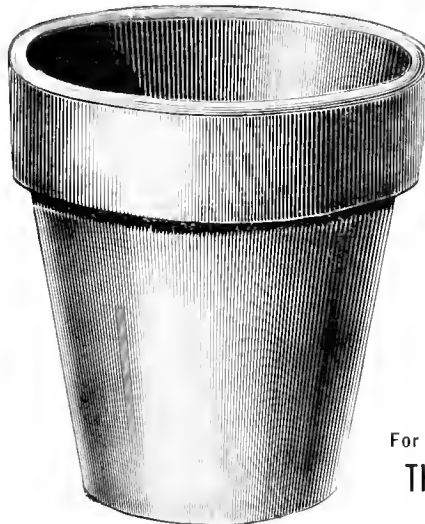
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THE

Whilldin Pottery Co.

NEW YORK, December 17th, 1888.
THE WHILLDIN POTTERY CO.,
713 & 715 Wharton St., Philadelphia, Pa

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Very truly yours,

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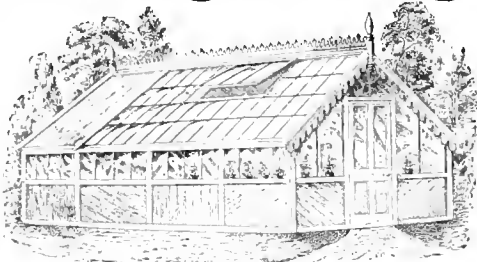
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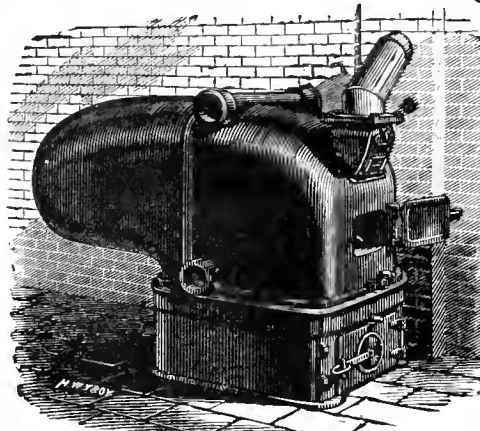
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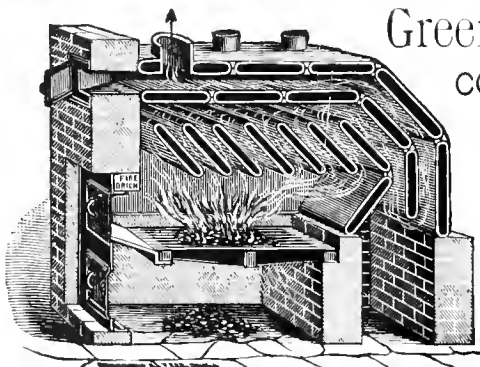
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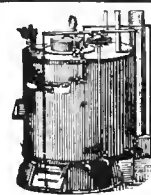
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THE AMERICAN FLORIST



America is "the prow of the vessel; there may be more comfort amidst ships, but we are the first to touch the foreign seas."

Vol. IV.

CHICAGO AND NEW YORK, FEBRUARY 15, 1889.

No. 85.

THE AMERICAN FLORIST

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Entered as Second class Mail matter.

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EASTERN OFFICE,
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TWENTY-EIGHT PAGES this issue.

OF OUR NEXT ISSUE we shall publish 3,000 copies, sending sample copies to all in the trade who are not already on our subscription list. Thus a copy of next issue will be placed in the hands of every florist in the United States and Canada and some 300 leading houses in Europe. A feature of this issue will be a supplement containing the spring price lists of many in the trade, which we believe will be a great convenience to both seller and buyer—to the first in circulating his price list to the *whole trade* at much less cost than he could print and mail his list to half the number himself, and to the latter in having the lists *all bound together* in uniform size and in a manner very convenient for reference. If you desire your price list to appear in this supplement send order and copy at once.

New York Notes and Comments.

"Souvenir de S. A. Prince" (terrible mouthful to get off in a hurry), is the name given to the white sport from Souv. d'un Ami offered by an English firm. A sport from the same variety, originating in this country, has been sent out under another name, "The Queen," and it seems as if the American flower had got here first, too. If they are both white sports from the same rose the only difference 'twixt tweedledum and tweedledee must be in the name—a matter for the committee on nomenclature to investigate. It may lead to a good deal of confusion. The English flower seems a little more high priced at present, but that will not be a permanent difference.

Easter stuff is the chief thing out at Bay Ridge, judging from Messrs. Dean's Kellar's and Weir & Sons'.

At Jas. Dean's the houses are full of genista, hydrangeas, lilies, etc., which will not require such rapid forcing as last year, Easter being so late. The genista, which is greatly increasing in favor, is struck from cuttings and grown cool. The European practice is to keep it well stopped back, so that it makes neat compact little bushes, and this is certainly the best plan when the plants are to be retailed in pots. They are as round and symmetrical as imported azaleas and covered with flowers. For general florists' use they are allowed to throw up their long shoots; a four year old plant left to its natural form makes a very large bush, while a plant of the same age stopped back each year may be barely eighteen inches high. A good many of these plants are imported, though they do not always travel well. Many of the big plants at Mr. Dean's are forced for some years, being hired each Easter to the florists for church decoration. Plenty of hydrangeas here, Thos. Hogg and Otaksa; this is one of the most useful flowers for decorating, because it stands well and easily revives when it does show signs of wear and tear.

Azaleas—Mr. Dean will have plenty of these with the rest of his Easter stuff. It is worth noticing that if a newly imported azalea is dry at the roots when first potted it never really recovers afterwards. The balls are usually as hard as bricks when they get here, being a mixture of leaf mold and sand; the most practical plan is to soak them in a tub of water for about 24 hours before potting, and even then the balls are often quite dry at the heart.

Lilium Harrisii is to be seen in profusion at Bay Ridge, but there is little long-florum; in fact, the latter promises to be very much in the minority. Peter Henderson says that Harrisii gives much larger returns than any other lily, according to his experience; of course it has the advantage of being in so early. Pity it

has not a little more substance, it could then be handled better. Roses are grown but little at this place, the soil being a little too light, though some good flowers were seen.

At J. M. Kellar's like the preceding place, a good deal is done with Easter stuff. Mr. Kellar bought a lot of the foreign grown genista when in Europe last year, in addition to his own stock. Among decorating plants he has a batch of very good Pandanus utilis and a lot of nice palms. Arecas and other similar palms are to be seen three or four in a pot, a large one in the center and smaller ones around it, giving a bushy effect very desirable. A bed of heliotrope here was planted in the upper bed of a rose house, high up near the glass, a light soil being used. The result was remarkably fine. Eucharis was planted out in a bed here, a very satisfactory method when possible. A bed of Mrs. John Laing seemed very satisfactory; color and perfume all one could wish. Mr. Wadley says they have been much pleased with this rose since the holidays; they are growing it in pots and find it very prolific.

At Weir & Sons one of the first things noted was a house containing about 1,500 callas, a fine sight, as most of them were in bloom. Another house contained about 2,000 Lilium Harrisii. Some rhododendrons here were preparing for Easter; these plants make handsome decorations, though they hardly pay as cut flowers, because the plant must be slashed up so much to provide long stems. By the way, Mr. Weir says that he did a good deal towards subduing the smilax caterpillar by the application of Lyons' insect powder, and he found the same insecticide fatal to the tiny flea-like creature that destroys the leaves of the Paris daisy. These daisies seem rather liable to disease in many places now, there seems no reason for it, and the only remedy known is to destroy the plants and get a new stock.

The decorations arranged by Siel recht & Wadley for the recent Zedlitz-Roosevelt wedding are generally considered the handsomest of the season, and it is worth noting that there were scarcely any cut flowers used, except in the bouquets. At the church a row of lilies in pots were put along the chancel rails, with banks of palms down the sides. At the Hotel Bristol the reception rooms were entirely decorated in yellow, chiefly genista and acacia. The bride and groom stood under an archway formed by two big specimen palms, with a bank of palms, genista and other plants filling out the sides and forming a semi-circle. The mirrors had curtains of smilax, looped back with acacia, and the same decorations prevailed throughout the rooms. The mantels were banked with plants, aliantum, genista, small palms,

etc. Most of the plants used were grand specimens. No ribbon was used except on the high square basket which stood on the supper table; this had a sash of yellow and pink to match the flowers filling it, joughils and Mrs. John Laing roses. The prevailing tints of yellow and pink were chosen to harmonize with the Uhlan uniform worn by the groom.

The floral artist of the *New York World* has been giving us a lot of information again, this time relative to the enterprise of growing flowers in Florida for the New York market—"There's millions in it,"—according to the *World*. However, the prospect does not seem to scare our growers very much.

EMILY LOUISE TAPLIN.

Business Methods.

The nature of the complaints frequently made to us by subscribers as to the manner in which they have been treated by others in the trade with whom they have had dealings strongly emphasizes the fact that florists in general are very lax in their business methods. The state of affairs most frequently developed indicates an entire absence of method and it is really remarkable that disputes and misunderstandings do not arise more frequently though they are certainly common enough.

When a member of the craft is approached on the subject of business methods he almost invariably states with some impatience that he hasn't the time nor facilities to keep such a record of his business as do other business men, but it isn't long before he will be wasting much time and considerable money in a law suit, which could have been avoided if a proper record had been kept, or else pocket a loss which would have covered the cost of keeping a good record for several years.

One subscriber relates that he ordered baskets to the value of \$45 from a supply house and when the goods were received there was included a lot of stuff which he did not order and the invoice called for \$75. He admits that he made no move to return the goods, but allowed the matter to drag along, ignoring the statements sent him and drafts made on him until six months had elapsed when he was sued for the amount, neglected to defend the suit, judgment was rendered against him and he had to pay the bill and costs. Had any one but the gentleman himself told us this story we should have refused to believe it, for he is a man of intelligence in most things, and we are surprised that he didn't keep to himself the fact that he was such a fool as to permit such a game to be played on him.

How much loss he would have saved had he on receipt of the goods at once repacked those which he did not order and shipped them back with a bill for packing and cartage on same, deducting this from the \$45 actually due and remitting the balance. That would undoubtedly have ended the matter at once.

We have had several similar, though less aggravated cases brought to our attention which would indicate that there are quite a number in the trade who are at a loss how to proceed when goods are shipped them which they did not order. There is only one thing to do and that is to refuse to receive them, or if included with other stuff which you did order, return at once any which you did not order. If there be any expense incidental to such return, charge it to the shippers. But first be sure that you did not order them. Keep an accurate copy

of your order which shall be conclusive proof in case of dispute. Don't forget that one man's assertion is just as good as another's, and make no assertions that you are not prepared to back up by conclusive proof.

There is a class of men who are very particular to see that all charges are made on their books, but who fail to keep any record whatever of goods purchased, and when a statement is presented never give it any attention. They permit accounts to drag along in this manner, and then when they are pushed for payment dispute the bill because they don't recollect having received all of the goods. The time for such disputes is when the bill is first presented, not months afterwards. When a bill and goods are received check it up at once; if correct give proper credit without delay, if not correct advise the sender of the fact then and there. Adjustment is easy while all the details are fresh in mind, but the seller can not be blamed for looking with suspicion upon complaints made several months afterwards.

A man who does not properly attend to his correspondence can never make a success of his business, especially if he aims to do a shipping trade. The number of complaints we have received at times against reliable firms on this score is really remarkable. And permit us to remark parenthetically that these complaints very rarely refer to firms who do the largest business, but almost entirely to smaller houses which are endeavoring to build themselves up, and who can least afford to give cause for adverse criticism in their dealings. The houses which have reached a prominent position in the trade have done so by careful and considerate attention to their correspondence as much as anything else, and in the maintenance of their position the same policy is an important factor. It is more than probable that the reason the business of these smaller houses does not grow more rapidly is simply lack of proper attention to their correspondence.

Plants in 2½-inch Pots.

The most frequent cause of disputes in our business is as to quality of plants sent, and with the present very crude manner of describing stock they are very difficult of adjustment. It is remarkable that some better system than the present one has not yet been devised.

A dozen different concerns will offer "Mermiet roses in 2½ inch pots, first class condition," and an order sent to each of them will be filled with plants varying as widely in quality as can possibly be imagined. The description is so indefinite that it is practically valueless. We have seen plants sold from 2½-inch pots that should have been offered as rooted cuttings, and others which were superior to some from 4 inch pots.

One man offers his plants from 2½-inch pots at \$5 a hundred, while another one asks \$8. The buyer is puzzled. If he divides his order between the two he may get nearly the same quality from each, but the chances are vastly in favor of his getting some nearly worthless rooted cuttings from one and plants from the other that are really worth four or five times those received from the first one. Again the situation may be reversed; he may get good plants at the lower price and miserable stuff at the higher price. In any event he don't know what he will get until they are delivered, and whatever they are he can't well complain for that the plants all came from 2½-inch pots may be quite true.

Again because he received first class plants from Mr. A one time it is no certain sign that he will be as well treated next time for the best of A's stock may have been all picked out, or he may not have had as good success in growing this season as last. In the meantime A's description of his stock is the same—"Mermiet roses in 2½-inch pots, first class condition." Isn't this a very ridiculous state of affairs?

We are sadly in need of a standard classification for the merchandise we deal in, based upon the same principle as those now in use in other trades. The determination of the quality of grains is fully as difficult as determining the quality of plants and bulbs. We believe that a reliable classification could in the case of plants be based upon the number of healthy leaves the plant possessed, it being an accepted fact that the number of roots and vigor of the plant must be in proportion to the quantity of healthy foliage. Bulb classification could we think be quite accurately based upon weight; solidity could be covered by taking both weight and size into consideration. Classification of a No. 1 Roman hyacinth might be as follows: Weight not less than — ounces, size not more than — inches in circumference. That for a No. 1 rose plant: Number of perfectly healthy leaves —, plant in not less than — inch pot.

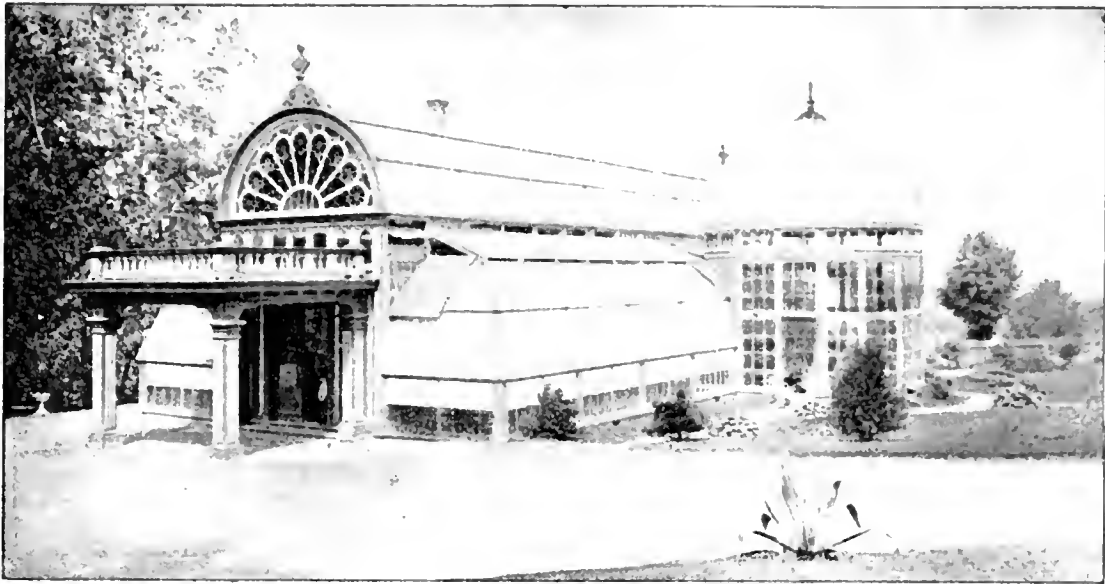
A little thought and investigation would undoubtedly develop a classification which would be a tolerably accurate description of the plant or bulb, certainly far more accurate than the present exceedingly vague terms employed. Such a classification, universally recognized by the trade would be a great blessing to both buyer and seller.

Catalogue Illustrations.

The action of the executive committee of the S. A. F. at its recent meeting in regard to catalogue illustrations is unquestionably a step in the right direction. It can not be expected that the society can at once crush out the practice of using exaggerated illustrations, but that it can by wise measures lessen their use is not to be questioned. It has been stated that "the society has no right to interfere with the business of individuals, and that it can not force any one to use accurate engravings." Very true, but it can give honest men a chance to prove themselves so, and it can place matters in such a light that the dishonest ones shall be unerringly pointed out, and when a swindler is published to the world his ability to deceive is gone, or at least greatly lessened.

We use the word swindler advisedly. A man who publishes an illustration of a plant or flower which represents that plant or flower several times better than it really is must be designated by the same name as he who sells goods from an extra good sample and then fills his orders with fourth class stock. We can not object to any one representing the best actual development that can be made of the plant or flower illustrated, but when that boundary is overstepped he who does it is dishonest and a swindler, for he is attempting to obtain money under false pretenses.

The remedy proposed is to have a standing committee of the S. A. F. appointed to whom may be submitted by any one so desiring, proofs of illustrations with actual specimens of the subjects they represent. If in the judgment



CONSERVATORY AT FOREST HILL CEMETERY UTICA, N. Y.

of the committee the illustration is accurate, they shall issue a certificate to that effect and the words "True to Nature" or "Certified correct," to be followed by the letters "S. A. F.," may be used upon the illustration itself. Buyers from catalogues will soon learn to know what this signifies and increased confidence in illustrations so certified will at once follow.

In justice to the honest catalogue men some means should be taken to remedy the present state of affairs. It is unjust to them that swindlers should be permitted to bring obloquy upon the whole profession and lower it in the eyes of the public. We believe that the plan suggested is the one most practicable as a measure to separate the black sheep from the white. No honest man can possibly object to the method proposed.

Condemnation of trade abuses are well enough in their way, but decisive action only is what accomplishes results, and such action the society can easily take in this matter at its next convention.

Catalogue Spelling.

After all the talk we have had in regard to the correct spelling of the name of the carnation Hinze's White we note that several of the spring catalogues have it incorrectly. Even our very particular friend Mr. Hill has it spelled "Hinzey's White," Mr. Henderson has it "Hintze's White," and other catalogues have it spelled in a variety of ways as of yore. We must give Messrs. Hunt and Dreer credit for having the name spelled correctly.

Synonyms.

If you know of any plant which is parading around your locality under more than one name please report the same to us and we will see that the matter is properly brought before the S. A. F. committee on nomenclature. It will be next to impossible for the committee to thoroughly cover the ground without assistance of this kind. As every one is interested in having present lists cor-

rected aim to do your share. Don't put it off. Do it now while you have the matter in mind.

Packing Plants.

Shippers of plants should not forget that it is the condition of stock upon arrival at destination that their reputations depend upon. No matter how excellent the plants may be when shipped, if they are all smashed to pieces when received by the consignee they are poor stock and probably almost valueless to him. It is the appearance plants present on arrival that the buyer judges you by, therefore you can not expend too much care and attention on packing for it is fully as important as the proper growing of the plants.

Standard Pots.

This is a subject which should receive at once the careful consideration of every one who has the interests of the trade at heart. The necessity for a standard, in size at least, has been so long recognized that it needs no discussion here, and now that the S. A. F. has adopted one it only remains for us to rise up in a body and declare that we will buy only "standards" in future. It will be a long time at best before we can dispose of the stock now on hand and it will be greatly to our interest to hasten this reform in every possible way.

I don't know what measures have been taken by potters in the east towards supplying these pots, but our western potters seem to be in a state of blissful ignorance on the subject. One very prominent concern in answer to our inquiry, "Do you make standard pots?" say, "What is the standard? we have never heard of it," and when explained said they made a good pot, but should not change their pattern because the S. A. F. chose to adopt one. Another said "We have made no standard pots yet and yours is only the second call we have had for them," and proceeded to tell us that they were heavier and tipped over easier

than did his make. Another said that they did not make the standard and informed us that Chicago and Milwaukee florists did not intend to use them as they were not deep enough, etc.

It is out of the question for us to pay freight on pots from the east and we must combine to bring these gentlemen over to our view of the matter. Let every one who thinks the standard pot will do him or the trade generally, good—drop a postal card to the AMERICAN FLORIST saying so and the pottery men will instantly respond in the way we desire. *Write it now.* IOWA.

[We heartily endorse the sentiments expressed by our correspondent. Now that a satisfactory standard has been adopted the florist who will not assist in its immediate universal use by insisting on buying only standard pots is certainly not alive to his own best interests. As regards the slow-going western potters they can either begin making standard pots or lose a large share of their business. Western florists need have no fear that they will have difficulty in securing standard pots at the same cost as other styles of pots. Nothing would suit the enterprising eastern potters better than to have their western competitors persist in a refusal to supply the demand, for it would be a simple matter for them to establish distributing agencies at the large western cities to which they could ship in car lots which would bring the freight down to an inconsiderable item, and by supplying what the trade wanted, easily command the bulk of the western trade. Two of the potters who advertise in this paper are making the standard pot, one making all sizes, the other several of the smaller sizes and is making changes in machinery as rapidly as possible to supply all the sizes. Florists should endeavor to buy all their pots of these potters who have conformed to the wishes of the trade (see their advs. on next to the last page). A sudden diminution of their trade will bring the other potters to their senses quicker than anything else.—ED.]



I noticed in looking over former numbers of the FLORIST that there seems to be some misunderstanding in regard to the hybrid tea rose Mme. Andre Duron, sent out by Bounaire in December, 1887, (at least that is the date at which we received them). Thinking that perhaps I can throw some light on the subject, I will state what I know about this variety.

In the first place it is a distinct variety different from any in our collection. It was fully described by Ex-President Hill in No. 79, page 154, of AM. FLORIST. This description is in general correct after making the usual allowance for the use of the words "very large" in describing the flowers. That is a form used by nearly all the raisers of new roses, but then some persons see every new rose "large" or "very large," probably their eyes magnify; the disease seems to be very common among the French rose growers and has spread badly over this country.

The eternal fitness of things in the description of flowers in our modern catalogues has become a lost art; for example, if we describe a rose two or two and a half inches in diameter as large, or very large, how should one four or four and a half inches in diameter be described? or we say a rose containing twenty or twenty-five petals is "double" or "very double" what words in our language have we left to describe a rose containing from 100 to 120 petals?

But I am getting off the subject I started to write about, namely, how came the hybrid tea rose Mme. Andre Duron to be compared with the old Bourbon rose Appoline. I will try to explain. At the same time Mme. Andre Duron was sent out there was also issued a new Bourbon rose called Mlle. Marie Drivon; this rose I think was sent out by the widow of Joseph Schwartz (Lyons, France). The rose resembles the old Bourbon Appoline very closely in habit of growth and bloom, in fact the resemblance is as close as that between Queen's Scarlet and Agrippina.

It is a puzzle to me how our English friends came to compare Mme. Andre Duron with the rose Sir Joseph Paxton, an old Bourbon (sent out in 1852 by Laffay), which is a deep red in color, while the old Bourbon rose Appoline (sent out in 1848 by V. Verdier) is a deep pink and a different formed flower, in fact one of our most distinct varieties. For description of above roses see H. B. Ellwanger's book, "The Rose," pages 205 and 281, from which the above dates have been taken.

We have grown the above named varieties the past 23 years on our grounds and find Mr. Ellwanger's description correct. If agreeable I will mail a small plant to the AM. FLORIST of Mme. Andre Duron, Appoline and Mlle. Marie Drivon and let any interested florist grow and compare the three varieties and I am sure he will soon see the difference between Mme. Andre Duron and the others.

ANTOINE WINTZER.

West Grove, Pa.

Three New French Roses.

I send descriptions of three new French roses sent out in December, 1888. The descriptions are of the plants as blooming in our houses.

New Tea Rose Mme. Amelie Vlu-berghs: Habit of plant robust, shoots covered with straight thorns, flowers medium, color lemon yellow shaded with light rose, quite double and a free bloomer.

New Polyantha Rose Flora: Plant a neat moderate grower, foliage light green, flowers small, color white with pale yellow center, a promising variety.

New Polyantha Rose Blanche Rebatel: Habit of plant dwarf, foliage a rich deep green, often producing seven leaflets, flowers small, growing in clusters of 20 to 25 or more, color a pleasing violet red, delightfully fragrant; the plant is a very free bloomer and is one of the most promising and distinct of this family.

West Grove, Pa. ANTOINE WINTZER.

Wood Lice in Rose Beds.

On my rose beds in the greenhouse at night wood lice are swarming by thousands. So far I have not noticed any damage done, are they likely to do any? What will kill them or drive them away?
E. D.

Propagating Ficus Elastica.

Do you grow any rubber plants in your place, or are you among those who think they would not sell readily and you would have them on your hands for several years? Then let me assure you that you will sell them if you can offer a few good plants, or even a large quantity may be disposed of by advertising at a reasonable price. Or perhaps you think you have no proper conveniences for their propagation, or have even tried to strike a few cuttings and failed to root them; you think perhaps that your bench had not enough bottom heat for that class of plants.

To all those I would say that they can be grown very easily in most any greenhouse or frame to perfection, the cuttings may be rooted without any bottom heat and with less bother than in a regular propagating house and I am inclined to think good plants will find ready sale quick enough in any place, for this is one of the very best house plants in existence, as it will stand rough usage and neglect to an astonishing degree. It is a favorite with nearly everybody who is in the habit of keeping house plants and deserves to be, for the noble erect appearance and the vigorous habit of the tree. Whether large or small a rubber tree will find admirers. I do not claim this to be a new way of striking the cuttings, but I am sure it is but little known among plantmen.

All we want is a house where you can grow successfully a lot of ferns, palms, or anything of that description, the house being kept moist, close and shaded. About July 1 cut off the top cuttings of your rubber stock plants six to eight inches long, insert them in flats filled with sand, pressing very firm around the cutting and place them in that house between the palms or other plants. About four or five weeks later, when the eyes on the stock plants have swelled out, cut all available wood as far as there are any leaves and cut them to single eyes. We certainly could have cut them before, at the same time we cut the top cuttings, but, as the majority of eyes were dormant then, it would take almost a year for some of them to start out and it is safer

and quicker to force them out on the old plant than to take chances. When all are cut and put in flats same as the tops, place them in the house under the shade of the other plants and leave them there until middle or end of September when all will be rooted. They require no care, not even watering, for in such a house as I have described frequent syringing is necessary and the sand will be kept constantly moist enough by that process alone. I should have said also that three or four year old wood and too thick to be cut with a knife, may also be used by slicing off a chip, with leaf attached, about an inch or two long and about one quarter inch thick, it will root as freely as any cutting and make a good plant.

Pot your plants now singly in 3-inch pots and keep them over winter in a temperature of 50 or 60 degrees; when spring comes give them a liberal repotting, a close and warm atmosphere with plenty of moisture and by fall you will have a lot of good healthy stock in 6-inch pots, from fifteen to twenty inches high, which will most surely find purchasers during the fall and following winter.

Such a grand old plant should be found in every establishment, no matter how small, and wherever plants of any description are offered for sale *Ficus elastica* certainly ought to be one of the first in the list. JOHN B. KELLER.

Rochester, N. Y.

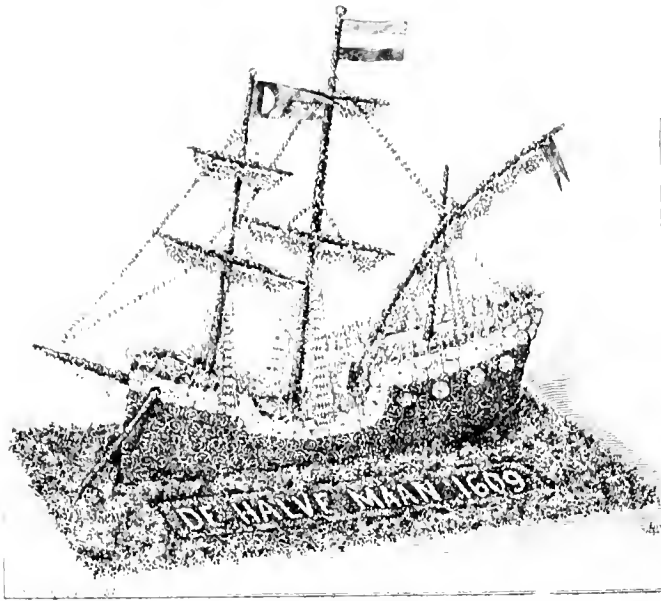
Ipomœa Pandurata.

(Wild Potato Vine, or Man-of-the-Earth)

This is a tuberous rooted native species of very great merit. It is now being pushed by a southern firm who say about it: "We do not know that the beautiful Florida species here offered has ever been introduced to northern flower cultivators," etc. This is true so far as I know, for Woolson, Gillett, Elliott and some other northern florists who deal in hardy plants do not catalogue it, but the Reasoner Brothers, of Florida, advertise it. But it isn't strictly a southern plant at all. In Gray's manual it is given as indigenous to "sandy fields and banks, from Connecticut to Illinois and southward." It abounds in New Jersey. Twelve years ago last September I was visiting Mr. Taplin at South Amboy, N. J., and in the morning went down into the woods and alongside a ditch in an open clearing I found this *ipomœa* in quantity spreading over the bushes and blooming beautifully. But such mosquitoes!

The firm referred to above also say, "they are as easily grown as potatoes, and in the fall after the vines have been killed back by the frost, the tubers can be lifted and stored away over winter with the dahlias, gladioluses, etc." No, no, this isn't at all necessary, the plant is as hardy as a dandelion. I had it for years as an outdoor hardy plant at Boston and never knew it to suffer in the least in winter. The root forms an immense tuber, according to Gray, ten to twenty pounds, but oftener in the form of long, straight down, thick, fleshy tubers or tuberous sticks, that penetrate three to four feet deep into the ground.

Now this is one of the good things as yet asleep and it grows and blooms better here at home than it does abroad, but to show you how much it is appreciated in Europe let me quote from an article in the London *Garden* Sept. 2, 1882, and which was written by the Rev. Henry Ewbank, who has at Rhyde, Isle of Wight, one of the fullest and loveliest



THE HALF MOON.

gardeners in England "Of good things * in bloom now with me I place at the head of the list this (*Ipomoea pandurata*) North American plant.

If the summer be hot it is an exceptionally beautiful plant, and it is at its best in August and September.

In a dry and hot summer it is a glorious sight. It was sent to me by Mr. Falconer, U. S. A., and its arrival marked a red letter day in my calendar. Its large bells, of the purest white, have an eye of deep purple, which serves to accentuate the whiteness in which it lies embedded. For years I have thought that a large white convolvulus which covers the porch of my house and runs riot over an arbor, festooning it everywhere, was quite unapproachable. In its own line it was king * but you would not look upon the convolvulus when the *Ipomoea* had its way.

* I never knew anything to be so completely put out of count before, and I almost grieve over the dethronement of a very old favorite. This *ipomoea* has a large tough root which very much increases through age; it year by year becomes stronger."

WM. FALCONER.

Chrysanthemum No. 27.

In regard to this chrysanthemum known under the two names, Snowball and Mrs. S. Humphreys, Mr. Henderson sends us a letter recently received by him which we give below:

DEAR MR. HENDERSON My confidence in your practical sagacity has a fatal blow. You neglected that opportunity to make the greatest trade surprise ever presented to a chrysanthemum grower when you let Mrs. Humphreys' out as if she belonged only to the common crowd of this family. Did it not occur to you that the æsthetic preferences which are immortal are those that are founded on symmetry and grace while those that are based on eccentricity are transitory? A Yorkshire terrier or a frowzy Topsy may astonish but the grotesque always fades before that which goes to the heart for its intrinsic elements of beauty.

"Mrs. Humphreys" has three lives and in each she is supreme, ist. as an intensely white and imbricated shield with a pale apple green eye, soft as that of an antelope, consisting of the still unblown petals in its center, sitting on its snowy face like an emerald on the bosom of beauty and its uniqueness is something seen in nothing else so harmonious, so very beautiful

in its soft contrast and, when this pale green gem fades by fullness of bloom what a dazzling aspect it presents. It takes nearly a full month to reach this phase of expansion and during both stages it is so thrillingly beautiful. The last stage, of almost another month, it becomes a glittering and perfect sphere which makes the things we have called snowballs seem unpolished and indifferent. To call the thing pictured as "Snowball" identical with this blooming sphere is preposterous. That is what I write to you for (see *FLORIST* of Jan. 15, page 251 and in Jan. 1.)

Just how long we may have this plant in bloom I cannot say as the big plant from you began first of October and the cutting from it bloomed in a 5-inch pot has now, January 27, been robbed of its early expansions, still with their emerald centers. Still I think the snowball phase might be shown in perfect condition nearer to first of March than of February. Looking at this plant in all its aspects it is without a rival among known chrysanthemums and to make this "identical" with a commoner variety inclines one to be profane. Hoping that you will be able to recognize the supreme achievement next time one occurs I am faithfully yours,

JAN. 27.

CONNECTICUT.

[Our illustration of the flower did not do full justice to it we admit, still we are inclined to think that it showed the general appearance of the flower more accurately than any of the engravings in the spring catalogues. As to there being any difference between Mrs. Humphreys and Snowball, they are now admitted by all interested to be identical, hence any further controversy on this point would seem superfluous. That it—whatever its name—will prove a very desirable addition to our list of white chrysanthemums there can be but little doubt, unless next season's experience with it should prove very different from that of the past season.—ED.]

Black Rust on Verbenas—A Few Words of Caution

One of your contributors in a recent issue writes concerning the so-called rust on verbenas and says that the microscopic insect causing it does not seem to be affected by any of the insecticides in common use. He advises throwing out the plants attacked as the only effectual way to fight it. Plant growers have been much too careless in this matter and have sent plants over all the land with the published assurance that they were healthy, but which have carried the pest to stocks previously free from it.

If your stock is really healthy and you get plants from another grower keep them entirely separate from your own until you know it is safe to join them even though it requires a year to decide. Do not use the pots they grow in for your own plants; nor set your plants in boxes that have been used to move the others until pots and boxes have been subjected to some treatment that will destroy all animal life about them. Grow the two stocks in different houses, on different grounds in summer, and propagate them separately. In short, quarantine the new plants perfectly until you know they are free from disease.

Another caution: beware of verbenas seed not of your own saving. Some advise growing verbenas from seed and in this way escape the trouble, but although I have not actually proved it yet

I feel certain that the insect in some stage of its existence can be and is carried on the seed and unless destroyed is ready to attack the new plant as soon as it germinates. Although the insect producing this disease may sometimes be seen on the surface of the leaves it probably burrows in their substance to some extent and is thus less affected by any remedies that are tried in the usual way, but if applied properly and persistently it will certainly yield to them.

Franklin, Pa.

W. T. BELL.

The "Half Moon."

The illustration shows a design arranged for a reception of a society known as "The Hollands." It was between five and six feet in length and represented a ship of the time of Hudson.

The hull was made of dark red carnations with a band of pink ones around the upper edge and with a small spray of hyacinth around the upper edge for rail. The masts were purple violets as were the yards. The rigging was made with hyacinth blossoms strung on fine wire. The steps of the ladders were red bouvardia. The flags were silk. The first one was blue with a half moon. The other one was yellow, white and blue. The furled sails were of bouvardia strings looped together. Two small brass cannons were in the bow. Water was represented by adiantums in which was a panel of purple violets with the name of the vessel in Dutch. It was arranged by Harft Bros., New York. F. A. B.

Mushrooms—Guarding the Secrets.

"A man in New Jersey who grows mushrooms in cellars has made lots of money at it," a friend wrote to me. Samuel Henshaw when he was in business in Staten Island was reckoned the champion mushroom grower around New York. Mr. H. came to see me the other day and I asked him about this Jerseyman. "Oh, no, I don't know him, but I've been to his place. But I only got the length of his fence and looked over when I was confronted by a rough-appearing man who wanted to know what I wanted there, and as he was backed by a couple of big vicious looking dogs I didn't argue the matter with him. He never lets anybody inside his place."

But as I was anxious to see this Jerseyman I went there next day. From over the fence I could not see man, club or dogs; thus emboldened I ventured into the yard. There was nothing here and I couldn't find anybody, but every entrance to the buildings and cellars was securely locked. From the yard I returned to the street and went to the man's house

Here I came in contact with his family and was more completely defeated than if I had met the guardians who intercepted Mr. Heushaw. It was of no use, I talked my prettiest and used every persuasion and persistence and not only would they not let me see inside the mushroom cellars, but they wouldn't even let me see the man himself. Well, what's the meaning of all this secrecy? Money. There's money in it.

WM. FALCONER.



Carnations and Soils.

Regarding the experience of Mr. Chas. Hartwig with Hinze's White related in last issue we will add that the soil at his old place where he met with continued failure is a sandy black muck, low ground, a soil generally described as good celery soil. On his new place where he had such gratifying success with the same variety the soil is a light clay, much heavier than the soil at the old place.

While Garfield always did well with him at his old place it has done still better in the soil at his new location, which has convinced him that this variety also does best on a heavy soil. He says no scarlet carnation has equaled Garfield with him, E. G. Hill having proved far inferior. He believes Garfield is not sufficiently appreciated by eastern growers. He has been cutting Garfields in quantity since November. It is very free.

Carnation Disease.

I wish to express my appreciation of the article in the FLORIST of January 15, by Prof. Seymour, giving a description with illustrations of the fungus *Septoria Dianthi* Desm.

It may be useful to growers of carnations to know the present condition of the plants affected after two months have passed. It is evident that the source of the trouble is the atmospheric conditions and not the soil, as plants not injured by the disease have grown vigorously. It was mostly confined to one variety, No. 82, other sorts being slightly affected. It first appeared during very prolonged damp weather in October on the mature leaves, the ends of the shoots and the buds remaining healthy producing good flowers.

After being satisfied of the fungoid nature of the disease, I syringed once or twice on bright days with the sulphur and lime mixture and evaporated sulphur on the furnace without much effect. I then tried Fir Tree Oil, syringing with a weak solution at night, one bench at a time, that the air might not become too damp. The effect was not marked. Some new spots appeared evidently where drops of water remained longest. For the last few weeks have avoided wetting the foliage at all, carefully watering underneath, and have spent considerable time removing the dead and diseased leaves and burning them. Plants that have been cleaned look healthy and grow and flower well, but of course the number of flowers is diminished. I notice that plants the least injured were those lifted

when the ground was dry from the driest part of the lot, while some lifted after heavy rain from a hollow where the soil was moist were injured most; also the benches underneath the top ventilators suffered more than the side benches.

The "black mold" mentioned in Prof. Seymour's article does not seem to be connected with it, as I have noticed it for years on dead leaves underneath, which were in moist, confined air. The fungus does not seem to poison the whole plant as the stems still convey sap and nutriment, though a spot of fungus may extend entirely around it.

At the present time, January 21, there is little if any appearance of new spots. Perhaps ten or fifteen plants in a thousand have died. Anna Webb, Florence, Silver Lake, La Purite (white), Daisy, Wm. Swayne, L. L. Lamborn, White Gem, Fascination and Mrs. Mangold have been almost free from it.

I have noticed instances of this fungus for several years. From my practical standpoint prevention is the most important thing to be determined, and the suggestions of Prof. Seymour in regard to watering and dry atmosphere are in accord with my observation. I would add that of free ventilation and perhaps early firing in autumn. I have not tried the solution of lime and copper sulphate.

SEWALL FISHER.

Framingham, Mass.

Carnations and Soils.

The question which I propounded to Mr. Whittle seems to have struck a key note. By a comparison of methods and results is it not possible to ascertain to a certain extent what Mr. Whittle is willing to relegate to science to answer?

We had a theory that carnations originated upon a sandy soil would not reach perfection on a clayey soil, and vice versa, and Mr. Whittle's article seemed to look in the direction of our theory, but when we read Mr. Hancock's observations we felt we had struck a snag. He says his Hinze's Whites develop finely in a soil that is "light and porous, rather sandy, having no clay, but rich in vegetable matter," while ours attain the same results in a heavy clayey loam with a liberal admixture of manure. Our experience with Orient, Florence, Alegatiere and Scarlet Gem tallies exactly with that of Mr. Hancock.

Further, while Mr. Herr gets 3-inch blooms in a three quarter span rose house and solid beds we get ours in an ordinary eleven-foot house and on raised benches. This diversity of methods and contiguity of results is a nut for somebody to crack. We would like to hear from Messrs. Whittle, Hancock and Herr concerning temperature, ventilation and water.

We agree with Mr. Whittle in deprecating the sending out of new varieties until fully tested. We have a few new varieties ourselves, one of which has been pronounced by H. A. Siebrecht and others as the "finest of its class," which they have yet seen. When we have tested it for a couple of years and find it is still the "finest of its class" it will be time enough to put it on the market, and even then it will be with fear and trembling, for we firmly believe that in some localities it will be a failure, no matter how nearly it may have reached perfection at the point where it originated.

Saddle River, N. J. JOHN G. ESLER.

CARNATION TIDAL WAVE.—Messrs. W. P. Simmons & Co., Geneva, O., send us

a bunch of two dozen handsome blooms of this new carnation. The flowers were of good size, rose pink in color and very fragrant. The specimens received were all on long stems and from the number of buds with the flowers we should judge the plants to be prolific. The color, size and fragrance should make this a very salable cut flower.

Long Island Notes.

BY WM. FALCONER.

COMMODORE SWAN, of Oyster Bay, N. Y., a gentleman of leisure and means and a sincere lover and cultivator of flowers and pretty plants, has resolved to start in the florist business. He is now building more greenhouses and will soon issue a catalogue. He intends to restrict himself to the plant business and handle only the most desirable sorts.

IN ONE OF MY notes in the FLORIST some time ago I mentioned that I had never known *Musa ensete* to produce suckers. Commodore Swan tells me his experience has been different. Some years ago he bought some plants of *M. ensete* from Chas. Reeser of Ohio, and that one of these, after a year or so, threw out some suckers, which he removed and grew on as separate plants.

DAVID ROSE.—Being in Brooklyn the other day I called on David. He is Mr. Pratt's gardener. What a comfort these suburban gardeners must take in their work, for they have roomy and luxurious greenhouses and every facility to do good work that money can supply. But David is a good gardener, so is his father, and so was his grandfather.

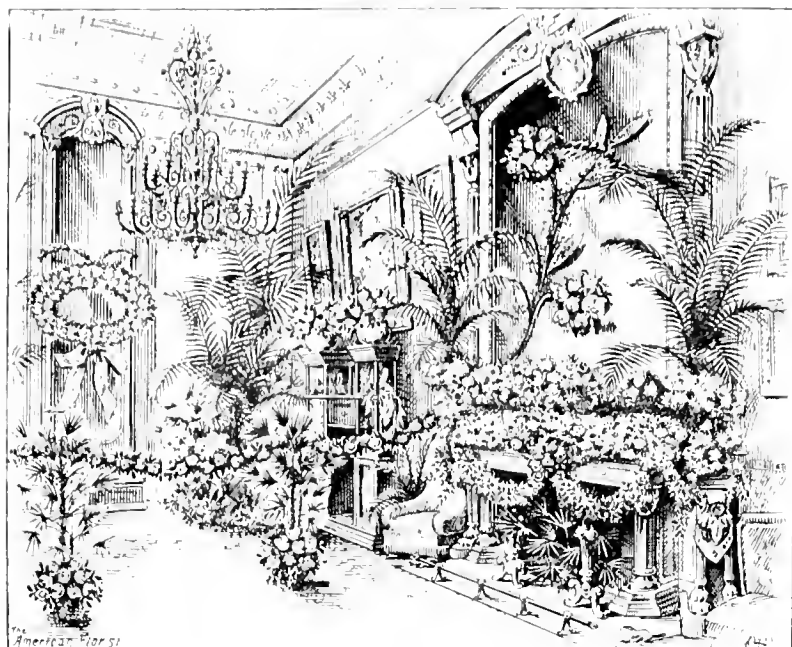
HERE, as in other pretentious suburban gardens, the main conservatories are ample structures, in which water and artificial rock work are happily blended, and palms, tree ferns and other imposing tropical subjects are planted out in natural style, and a variety of lianes, creepers, arums, ferns and mosses and other sun-shunning denizens luxuriate beneath and clamber up the stately stems and spread upon the ground while gay leaved plants are perched around next the glass and gorgeous orchids hang in cabins from the roof.

OF CATTLEYA TRIANE a score of massive plants, more flowers than foliage, were suspended from a crossbar in the conservatory. A splendid species for winter blooming. Some eighteen months ago these plants were bought at auction in New York, they then were newly imported from their native wilds. Rank masses of *Phajus graudifolius* were also in stately bloom. *Laelia anceps* and *calanthes* were just past and lots of dendrobiums in a cooler and drier corner were only waiting for a little encouragement in the way of warmth and moisture to start them into growth and bloom.

PRIMULA OBCONICA is one of the best liked of all greenhouse plants, either for cut flowers, window or parlor decoration, and is making pronounced inroads upon the popularity of the older Chinese primroses, and the order is: "Get more of that."

THE SPOTTED OR HERBACEOUS *calceolarias* are much grown here. They like cool quarters, a place near the glass, but shaded from bright sunshine, rich soil, plenty water, no check from sowing till blooming time and complete deliverance from all insect vermin. These were sown, David told me, about the first of September. This is late enough.

DRACENA GOLDFEANA is the favorite



WEDDING ARRANGEMENT

in its line, and is most preferred when from twelve to thirty inches high. A large specimen is now and has been, for some time in bloom, but so far as we could see there is no trace of seed setting.

THE MARGUERITE LEAF-MINER.—David tells me that two years ago this insect was so destructive about Brooklyn that it completely ruined his and some other gardeners' Marguerites and cinerarias. But he didn't observe it last year nor has it put in an appearance this winter. And this state of affairs seems to be general in the East. In the *FLORIST*, page 297, March 15, 1887, I referred to it as *Phytomyza ajinis*, but Dr. Lintner, our state entomologist, who has thoroughly investigated the subject from specimens contributed from here (see his Fourth Report, 1888, page 73), has decided that it is *Phytomyza lateralis* (Fallen).

GUS BENNETT lives near by and is gardener to Mr. Brown. Gus is the second son of the late Wm. Bennett, of Flatbush, who was one of the best plantsmen who ever came to America, and he loved his plants as he did his children.

SPACIOUS and well appointed greenhouses, well filled and well kept. Majestic, graceful, many colored and rare tropical exotics, orchids, roses and other gay flowering plants.

YOUNG V. OLD PALMS.—"When we started to fill these greenhouses we bought a lot of large palms, but I find it is much better to get young plants that are perfectly free from scale than old ones that are infested. By liberal treatment palms grow pretty fast."

OF HYDRANGEA OTAKSA he has a fine lot of young stocky plants in full leaf and showing flower buds. These plants are a year old; they were struck last spring, planted out in summer, lifted and potted into smallish pots early in fall, kept in a cold frame till New Year's, when they were brought into the greenhouse, and as soon as they had started to grow and showed flower heads they were repotted,

giving them a good shift. By shifting them now Gus claims that he gets finer heads of bloom than when he doesn't repot them. The old specimens he keeps in a cold pit for use on the lawns in summer. He speaks very highly of *H. rosea* as an outdoor blooming plant in summer.

ASPARAGUS PLUMOSUS and flowers of *Ceoloyne cristata*.—"I had a decoration to make some weeks ago and a drapery of this asparagus trimmed with the white *ceoloyne* flowers elicited much admiration."

CYTISUS CANARIENSIS and its variety *racemosus* are now in bloom and much appreciated. Raised from cuttings of the young wood in spring, planted out in summer and the branches allowed to retain their long flowing nature, they certainly display youthful vigor and graceful profusion. They are grown in a cool greenhouse.

FAVORITE DRACENAS.—*Dracena Hendersoni* is one of these, because of its elegant and at the same time stately habit and richly variegated leaves. But we seldom find a large untarnished specimen. Some of the Wellesley (Harris') hybrids also appear to fully as much advantage as do those given to us from Europe.

DAVALLIA PALLIDA (Mooreana) occupies a large pan and forms a beautiful specimen some eight feet across. Once well started it is one of the most ample and comely of ferns. He has the finest specimen of *Polypodium subauriculatum* I have ever seen. The plant is growing in a large pan raised six feet above ground, and the fronds rise up, arch over and hang down to the floor; some twenty of these fronds are nine feet long. The new *Nephrolepis rufescens tripinnatifida* (see Fig. *FLORIST*, Nov. 1, 1887), grows beautifully in a warm stove and is much appreciated. *Nephrolepis davallioides* has fronds six and seven feet long and the comelier crested form *N. d. furcans* is the best of all bold basket ferns for

house decoration or greenhouse work. For small baskets and adapted to a cooler greenhouse is *Davallia Mariess*, whose rhizomes can be so interwoven as to form a basket and the elegant fronds burst out all around forming a ball of green. This is a deciduous species, dying off in November and taking two month's rest. In small hanging baskets *Adiantum caudatum* and *A. Edgeworthii* are grown and their slender fronds bend over on all sides of and hide the basket, and as the tips of the fronds are inclined to the bottom of the baskets they root there and start fresh plants that in their turn emit a fringe of pendant fronds.

Wedding Arrangement.

The illustration is of a portion of the decoration at the Brokaw wedding arranged by Bogert, New York. Of the double banked mantel the upper was of roses and chrysanthemums and the lower of chrysanthemums of mixed colors. From the lower one hung festoons of *Lygodium scandens* caught up at the center with a bunch of pink roses.

The corners in front of the windows were each filled with groups of palms and plants of white chrysanthemums. A large wreath of *La France* roses hung in front of the mirror between the windows where the ceremony was performed.

At the mantel the room was divided by strings of roses supported near the center by two large rhaps with roses at their base. The idea was for the groom to break the string in the center on the way to the place where the ceremony was to be performed.

F. A. B.

Taxing Plants.

During the meeting of the Wisconsin Florists' Club recently, a question was put in the box which proved to be a very interesting one to all growers in our locality, and I believe it will be to the benefit of all to have it freely discussed. The question is "Why do we pay taxes on our plants?" They are taxed as personal property. There is a law, we are told, exempting perishable goods, also one exempting growing crops. It is a question of fairness and of legality which we florists should settle, and before going further ourselves, we wish to ask that the other Florists' Clubs of the country inform us through your columns whether they in their cities have a like grievance? If we find that we are all in the same boat, it seems to me advisable to request the officers of the S. A. F. to take it up, but if it proves to be simply a local trouble we wish to be sure of the circumstances so we can fight it out alone.

Milwaukee.

C. B. WHITNALL.

Bone Meal.

I am perplexed! Bone meal or bone flour is the cause. It used to be said that ground bone as a fertilizer was of very little value—or rather, only the dusty particles were immediately available as plant food; that the larger particles were so slow in decomposing that it was comparatively worthless for greenhouse uses.

One firm of fertilizer manufacturers has made a specialty of making a grade which is ground as fine as flour. Now another set of wise men say that there must be acid in this fertilizer or it could not be ground so fine. It was said in such a way as to lead those who listened to understand that acid in bone of any

kind is a detriment. I am totally in the dark in these matters, so I lay myself before your generous readers to get, if possible, some information and possibly a little consolation.

In referring to a tabulated analysis of commercial fertilizers I find that all the bone submitted contained more or less phosphoric acid, some being soluble, some reverted and other again insoluble. Is it any wonder I am perplexed?

D. Y.

The Floral Decorations at the Vanderbilt Ball, New York.

Last night I enjoyed a rare treat. Accidentally I learned last Saturday that Cornelius Vanderbilt was to give a ball and Mr. Klunder, the florist, had *carte blanche* to decorate the house. This was a chance not to be missed by a florist from "way out west," to see how the New Yorkers are "doing it" not on "dress parade" in a worlds fair or in a competitive display in some floral hall, where a florist is hampered with rules and restrictions of a premium list. No, this display would be far superior to such a one, as it would show the florist in "real action."

Through my connections in this city I had no difficulty to gain entrance to the V. mansion and take a stroll through the gorgeous apartments which, a little while later, should be filled with the aristocracy of New York. The floral decorations were finished, the florists had left the premises and the tables were set for two hundred. All was ready for the guests when your correspondent entered the house from 57th street. The entry has carved oaken walls and ceiling; opposite the door is a broad, beautiful stairway of about eight or ten steps; to the right and left of this hang the life-size oil paintings of Commodore V., and W. II. V.; a half looped up oriental portiere of a creamy white tint hangs across the head of the stairs and divides this apartment from the hall beyond; to the right of the foot of the stairs is an open door leading to the entry room for the billiard and card rooms below; two large antique bronze vases from the caps of the balusters and from two black antique lamp posts falls a mild light over the surroundings.

This entry or stair hall was decorated as follows: The vases, about two feet in diameter, were filled with yellow tulips and yellow narcissus arranged in a loose natural way in a manner that about a dozen of each variety were in a group or cluster; as foliage, sprigs of English ivy stuck in in a careless irregular manner, and native fern leaves were used; the background for this display of "yellow" was formed by a solid bed of orchids on the plants, the flowers hanging to the right and left of the balustrade; at both sides of the head of the stairs, touching the paintings above mentioned, stood two handsome specimens of cocos palms. Standing at the foot of this stairs and turning a little to the right, you caught a glimpse of the entry room. The walls and ceiling of this are polished ebony, decorated slightly with gold and mother of pearl; the mantel, also black and gold, is opposite the door, on this stood two small vases, each containing about one dozen American Beauty roses, and 'heauties' they were, averaging 4½ inches in diameter; these two were just carelessly stuck in, care being taken to have the stems of different height to make them appear natural. The effect produced by these few flowers with their foliage on the polished black background, was simply

immense. From the stairway they appeared like two pictures of roses painted on the wall. Only this and nothing else constituted the floral decoration of this magnificent little room.

Entering over the stairs into the main hall we see before us another stairway leading to the upper floors of the house. This stairway has but one baluster, as it runs alongside of the wall, but at a height of about six feet it makes a turn to the right, displaying its balustrade. Along the entire length of this railing, as far as it was in view, white azaleas in pots were placed, forming the upper border, then followed white lilac intermixed with vinca vines, these were in turn followed by various varieties of orchids hanging irregularly out of what appeared like a rock work and which was formed down to the floor with Virginia laurel boughs. On top of the baluster set a bunch of one hundred Magna Charta roses, while in the corners formed by the stairway stood large specimens of cocos and arecapalms. Immediately to the right there is a large fireplace, the mantel shelf of it is about ten feet from the floor, supported by two large carved oaken figures. In this fireplace lie two rustic logs, apparently burning, the flames being imitated with scarlet tulips and red hot ashes were figured with scarlet geraniums; to the right and left of these burning logs, but without covering or hiding any part of the carved figures, stood two fine specimens of yews in pots, while in the background bunches of single white primroses with their foliage and vinca vines reminded one of the rough coating of an old-time fireplace back; bunches of flowers hung up inside the fireplace in imitation of some useful articles our forefathers used to appreciate I suppose, made the "fireplace of the old homestead" complete. The mantel shelf was covered with orchids, their flowers hanging over the sides in all directions.

Close to this fireplace, about eight feet from the floor is a little window. The decoration of this insignificant little space was in keeping with the old homestead and a perfect little gem of floral decoration. So simple and yet so effective! A *Dracena indivisa*, a white azalea smaller in size than the *dracena* and one conspicuous orchid were all the plants used for it. The bulk of the decoration rested in the right hand corner; the pots were hidden by green foliage, part of which together with the flowers of the orchid hung in a careless natural manner down the wall.

In the drawing-room where the dancing was to go on only a few specimens of palms were used in safe corners. The musicians were on the same floor, but hidden behind a balustrade six feet high made of laurel boughs which again was crested with a compact row of orchids, over this balustrade rose the crowns of three handsome cocos palms and the four spaces thus formed were spanned over by orchids fastened against heavy wire arches. Last but not least I must mention a little fireplace in this same drawing-room close by the gorgeous display of orchids, this was modestly decorated with dark green foliage, native fern leaves, etc., and from the midst of all these, as if by accident, peeped a modest plant of 'Marguerite' daisy.

I found it strange that not a sprig of smilax was used in this decoration and learned since that many people "of society" have a dislike for it, and it is therefore banished from many houses.

The decorations of the dining tables consisted of loose bunches of flowers and

ferns, and among the bunches carried by ladies I noticed some containing white violets as one half and lily of the valley as the other, or Ulrich Brunner roses for one and heliotrope for the second half; others had lily of the valley for one and orchids for the other. I am told that such bunches range in price from \$10 to \$35 each.

Considering the size of the apartments there were not many plants and flowers used in this decoration, but the manner in which they were displayed brought every one to count and the effect was impressive. Quality took the place of quantity and if the New York aristocracy makes the style for America, the American florists are to be congratulated that the old custom once more comes to reign.

CINCINNATUS.

Ranunculus Culture.

Unquestionably one of the most beautiful flowers of spring yet absent from many, if not the majority, of gardens. Formerly collections of named varieties were grown with much care by a few old florists, but these fanciers are now more scarce than growers of florists' tulips are; indeed the ranunculus is scarcely grown as a florists' flower, but for decorative purposes and for market, the cultivation of varieties in mixture is extending. The old florists used to be very particular in choosing suitable positions for their ranunculus beds, also in the preparation of the soil and planting. Here are the instructions of one of them:

Situation.—It is only a waste of time and money to attempt to grow the plants within the influence of a smoky atmosphere near large towns, or upon a high hill in a dry soil, or in a swamp. The florist must choose a place for the ranunculus bed neither too high nor too low; let it be a level surface, and if it be sheltered from the northern blasts so much the better.

Soil.—The soil should be retentive of moisture. The best kind is the virgin mold of some alluvial soil on the banks of a river, or some lowland pasture. It should be of a rather close texture, without any small stones or sand among it. Lay it up for a year, turn it over until it is well incorporated, wheel out the old soil to the depth of a foot or more, place a thin layer of very rotten cowdung at the bottom, and upon that the fresh soil. If the situation is low, with a wet subsoil it must be well drained; but if the subsoil is dry there is no necessity for drainage. If the soil should be thought too poor a small addition of decayed cowdung will be advisable, but it must be so decomposed as to appear like a black powder. Let it be thoroughly mixed with the soil whilst making the bed, in dry weather, about the month of September.

Planting.—The season for planting is in the early spring, as soon as the most severe frosts have passed and the ground has become tolerably dry. Some time about the end of February or the first week in March rake the surface of the bed in the morning of the day previous to that fixed upon for planting. Some recommend steeping the roots for twelve hours in water before planting, but we think this not necessary, except the planting season has been from some cause or other put off till the middle of April; then it may be useful. Supposing, then, that the weather is propitious and all things prepared, commence by drawing with a hoe a drill across the end of the bed, 1½ inches deep, if deeper the roots will be weakened the succeeding



RANUNCULUSES

year, by forming a kind of stem nearer the surface, and if shallower the plants are more liable to be struck with drought. Plant the tubers, if large, four inches apart in the row; if small, $3\frac{1}{2}$ inches will be a sufficient distance, and cover them

with fine sand. This will cause the tubers, when they are taken up in July, to come out of the ground quite clean for keeping.

Very precise instructions were also followed in other details of culture, but

it is not as a florists' flower that the ranunculus is alluded to now, but as an ordinary garden flower that may be grown to give satisfaction by simpler methods of culture than those above described, though the instructions are

good. We have found it is not a waste of time and money attempting to grow ranunculuses near towns, as we have seen brilliant masses of them within two miles of Charing Cross; and, as to soil, they will grow in such as will grow good cauliflowers. In respect to the time of planting, some of the most extensive growers of these flowers for market have probably about finished planting their tubers now. They plant in November onwards, as the ground may be in suitable condition, not deferring the work till spring, but when severe weather follows and the tubers have started, being in what is known as the "milky" state, the surface of the ground is covered with litter, as in the condition indicated they are liable to injury by frost, but when the growth pushes through the ground they are regarded as safe, being quite hardy. When grown on a limited scale in gardens cocoon fiber refuse would answer for protection if litter was considered unsightly. The advantages of late autumn planting consist in the roots taking good and deep hold of the soil, hence the plants better endure dry weather in late spring, which often causes them to wither prematurely when grown from tubers inserted in March. The flowers figured represent ordinary decorative forms and were grown in a London garden from mixed tubers, which are the reverse of costly. A small leaf-mining insect often injures the plants, the larvæ of a small fly similar to that attacking celery. Sprinkling with a solution of soft soap with half a wine glassful of petroleum well mixed in each gallon, applying in the evening, not in the morning, is a safe and good deterrent of the attacks.—*Journal of Horticulture.*

California Notes.

California is the home of the chrysanthemum. Here it shows up its very best everywhere out of doors. Here it needs no snuggling up in greenhouses. Our out of door climate exactly suits it, and every garden with a very little care may have them in perfection from midsummer until Christmas or longer.

The cool summer temperature of the coast counties seems to suit them best. Here in the city of San Francisco this 22nd day of December they may be seen in bloom in nearly every garden, with as yet no frosts to mar their beauty. In the warm interior valleys they bloom much earlier, but by planting in cool situations in the shade their season may be made to last a long time.

The same is true of many other flowers. The nasturtiums are largely used here for out door decoration. Even a plant so tender to frost as this is still blooming here freely. The old well known lemon verbena grows here in door yards and forms a shrub five to eight feet high. We have geraniums in this city ten to twelve feet high that have not been cut down with frost for years. I know of specimens of the night blooming cereus growing and blooming for years trained on a wall out doors. The century plant, or American aloe blooms freely in Golden Gate Park. The broad leaved magnolia grows nicely here in the parks, but instead of only blooming in early spring as it does east, it may be found in bloom in this city nearly every month in the year.

It is a strange country with a strange climate. To-day the valleys and the mountains are covered with fast growing nutritious grasses and wild flowers every

where. The renowned golden California poppy may be gathered in this vicinity every day in the year. Oranges are now coming into market quite freely from the northern interior counties, where they ripen a month earlier than they do at Los Angeles and Riverside. Yet people east will persist in believing northern California cold. It must be cold when we now have ripe oranges from Shasta, one of the northernmost counties of the state, and this after last winter the coldest ever known in the state.

Northern California as yet has never been boomed and homes are comparatively cheap, where wood, water, rain, climate, health, comfort and good soil, where nearly everything can be grown, and all comforts enjoyed except sleigh riding and skating are here attractions. A man may have a fruit farm on which he can grow everything from the orange to the Siberian crab, surrounded with the grandest of scenery, in sight of perpetual snow and with deep snow within a few miles of his orchard during the whole winter, yet scarcely see a sign of frost on his place during the year; such is northern California.

Our state board of trade has at great expense fitted up a train of cars filled to repletion with California's products, which may be called California on wheels, and which will visit every portion of the Eastern States.

San Francisco, Cal. D. B. WIER.

Hail Insurance.

The approach of the hail season suggests reminiscences. At the first meeting of the Society of American Florists at Cincinnati, thirty-six persons signified their willingness to insure in a hail association, provided "a satisfactory plan could be adopted." After nearly two years of practical application no one will have the hardihood to assert that the "Florists' Hail Association" does not fill the bill, yet out of nearly a hundred members of that association only ten are on the list of florists who wanted hail insurance at Cincinnati. To-day the hue and cry is for plant insurance, yet what guarantee would the directors and officers of the "Florists Hail Association" have that those who now desire plant insurance in addition to that of glass, would not follow in the footsteps of the men who wanted hail insurance at Cincinnati.

I am satisfied that the insurance of plants against hail can be simply and satisfactorily arranged, but the "Florists Hail Association" should not attempt the venture until 5,000,000 square feet of glass is placed upon their books. The reserve fund will then have reached a point where plant insurance would be practicable.

It would be well perhaps to perfect a plan of plant insurance to take effect as soon as 5,000,000 square feet of glass are insured. In the meantime it is the privilege of every florist to benefit himself by insuring his glass against hail and at the same time assist in hastening the time when the "Florists Hail Association" will be able to extend its field of usefulness.

If the florists of America could be made to understand the safe and conservative basis upon which the "Florists Hail Association" is founded and the perfection of the practical working of the plan adopted, the million square feet of glass now insured would be quadrupled in the next ninety days. JOHN G. ESLER.

Saddle River, N. J.

New York.

William C. Wilson, the well known florist of Astoria, L. I., has made an assignment to William H. Williams for the benefit of creditors.

It is generally regarded as a temporary embarrassment rather than an actual failure, as it is believed that the assets are sufficient to cover the liabilities. The direct cause of the difficulty was the blizzard of last March which caused a heavy loss.

Boston.

CUT FLOWER TRADE.

The month of February shows a decided improvement in the cut flower trade. The quality of the flowers coming in to the city has also improved. Roses have advanced slightly in price. Carnations not so plenty as they were last month. White, pink and crimson sell best. The scarlet varieties are in very small demand. Tulips are now offered in good variety, but are not selling as well as they did last season. Daffodils still hold their popularity. Heath is beginning to come in in small quantities and is quickly sold. Orchids sell fairly well and among the novelties *Primula obconica* and the yellow English primrose take the lead. A. P. Calder is forcing a house of sweet peas. The same gentleman is making quite a success at forcing ranunculuses. For house plants nothing sells so well at this season as the cyclamen, and the varieties of this favorite which are offered here now are superb.

MASS. HORTICULTURAL SOCIETY.

The society is undecided as to the best course to pursue in repairing the damage which was done to the halls by the recent fire. The central location of the building makes it a most desirable site for a business structure and the income of the society could undoubtedly be largely increased by recognizing this fact in repairing and altering the building. A largely attended meeting was held to discuss the matter and resulted in the appointment of a committee to take the subject under consideration and report at a future meeting. The prevailing sentiment among the members present seemed to be that the society should in any event retain the present location for its library and exhibition halls.

On Saturday, February 2, the essay was upon greenhouse construction and heating, by W. D. Philbrick, of the *Massachusetts Ploughman*. The discussion which followed could scarcely be called a battle of the giants, and compared with some of the encounters in the S. A. F. between the hot water and steam gladiators, it was mild and harmless.

GARDENERS' AND FLORISTS' CLUB.

The annual supper of this organization took place on Tuesday, January 29. Eighty-eight members were present and it was as usual a most enjoyable event. The national society and kindred associations were all remembered when the toasts were called for and the wholesaler, retailer and grower were given their due share of attention in remarks both wise and witty. The musical portion of the entertainment was received with great applause. President Grey presided and Edw. Hatch filled the post of toast master with characteristic volubility.

The February meeting of the club was devoted to an essay on forcing hardy plants, by Jackson Dawson. No man in this country can talk on this subject as

Mr. Dawson can, and those who listened to him were well repaid for their time. The discussion which followed was equally interesting, showing that this subject is one in which many are interested and indicating that in the near future the forcing of hardy shrubs will become a most important and profitable part of the business. W. J. S.

Cincinnati.

The Cincinnati Florists' Association with its 125 members is booming, and prospects are that it will have 150 members by February 15. It is now fully organized with the following officers: Chas. L. Mitchell, president; B. P. Critchell, 1st vice-president; H. L. Sunderbruch, 2nd vice-president; Wm. Nolan, secretary; Rich. Witterstaetter, treasurer; Executive Committee: Fred Walz, Chas. A. Getz and Robt. Murphy.

A committee is now looking for permanent quarters which will when secured, be fitted up in fine style, as the association is promised one of the finest libraries in the country when they get a suitable place as custodians. There is already talk of a big chrysanthemum show for next fall and the chances for an early spring or Easter show are good. The society seems to fill a long felt want, as it is the only method by which to bring the growers and dealers together, exchange their ideas and views on different topics, etc., and a better feeling among them is already perceptible.

Harry Corbett wants every huckster and peddler of plants hung up on a sycamore tree.

B. P. Critchell has a new method of constructing greenhouses by using nothing but iron pipe for bracing, and posts with cement footings, etc. and has applied for patents.

Robt. Murphy has put in a new heating apparatus, his own idea and invention, which he is nursing day and night. He says he don't know whether it is hot water under pressure or steam. (No patent.)

Chas. A. Getz can give you more points about microscopic observations on the "Green Fly" than any man in Ohio.

Richard Witterstaetter, who grows the best violets and chrysanthemums in this section, now lays awake nights thinking what varieties he had best grow for the coming show.

Fred Walz, the conservative end of the executive committee, is bringing in some very fine Niels and Cooks at present.

The boiler shed and workshop at the greenhouses of B. P. Critchell & Co., in Carthage, were destroyed by fire Jan. 14, shortly before noon. Energetic work on the part of the attaches of the place, who were assisted by the people attracted by the fire, kept the flames confined to the building in which they originated, although the adjoining buildings were somewhat damaged by the heat. There was no one in the building at the time the fire started, but it is thought the wooden steps leading down to the furnace were ignited by the heat. The flames spread over the frame structure, which was twenty by thirty feet, so rapidly that even the tools in the workshop could not be saved. A quantity of bulbs were stored near the boilers and were consumed. The loss on the building, tools, bulbs and the damage to other buildings is estimated at \$1,000, with a small insurance. The most serious damage was the cutting off the steam pipes connecting with the various plant houses but these were soon in shape again. S.

News Notes.

HAMILTON, O.—Theo. Bock has added another rose house 85 x 11.

LOS ANGELES, CAL.—W. S. Lyon has withdrawn from the florist business.

ST PAUL, MINN.—Fisher & Fisher, seedsmen, are successors to F. N. Lang.

FREEMONT, ILL.—R. W. Gardner has succeeded to Gardner Bros., seedsmen and florists.

ROSEDALE, KAN.—Edward Bunyor has built three new houses, two 60 x 10 and one 60 x 10.

HUTCHINSON, KAN.—A. Ellsworth has built two houses 75 x 22 and 25 x 12, also an office 18 x 12.

PHILADELPHIA.—Wm. G. Bisele has built the past summer at Torresdale two houses 21 x 100, two 11 x 100 and a fifth of same dimensions is now going up.

DETROIT.—A portion of the greenhouses of Peter Rush were destroyed by fire Dec. 23. His stock of plants was almost entirely ruined by fire and frost.

WICHITA, KAN.—Rose & Mueller have dissolved partnership. C. A. Rose retains the store at 404 North Water street and C. P. Mueller the greenhouse on Twenty-Third street.

NEWARK, N. J.—Fire from an overheated furnace did much damage to the greenhouses of Volhege & Schroedel at 322 Waverly avenue, January 2. Loss estimated at \$1,000.

BETHLEHEM, PA.—The weather here is mild; thermometer has not been to zero yet this winter, the lowest being 10° above. Business good and prospects for spring trade excellent.

LANSINGBURG, N. Y.—Geo. B. Lucas has added two more new houses, one rose house 60 x 16 and the other a propagating and fern house 60 x 6. He now has 5,000 feet of glass all heated by steam.

SAVANNAH, GA.—The Savannah Floral and Art Association has decided to hold a spring flower show in April or May. Geo. Wagner is out of the florist business and is growing early vegetables under glass.

ELMIRA, N. Y.—Mr. Albert Neudahl, the florist, died recently. He was in the greenhouse business in Rochester for thirteen years and was one of the first florists in the southern part of New York early in the '60's. He died suddenly of heart disease.

VICKSBURG, MISS.—A fine new greenhouse 18 x 56 is just being completed at the National Cemetery. The cemetery is becoming more beautiful every year and many more plants are used than formerly. It contains 75 acres and there are interred here 16,818 dead.

TERRE HAUTE, IND.—M. A. Hunt has recently erected eleven new houses, five 90 x 18 each and six 100 x 10 each, also a packing room 70 x 24 and office 18 x 14. The houses are all heated by hot water. Henry Graham has added three new houses, 85 x 23, 50 x 18 and 60 x 12 respectively.

NORFOLK, VA.—You were misinformed in regard to the Brambleton Floral Co. They did not make an assignment; a creditor levied on the houses and stock which were sold at auction and bought in by the agent of the creditor who is

now selling off the stock and will either sell or rent the greenhouses.

LONDON, CANADA.—Holiday trade about the same as last year, quality of flowers rather inferior, prices about the same, supply short during holiday week, principal call was for roses, baskets not in demand. The lack of sunshine in December makes holiday flowers poor and scarce.

NEW BEDFORD, MASS.—The statements as to the holiday trade here which appeared in a recent issue are not correct. The facts are that the trade was about the same as last year; prices about the same; no more demand for anything this year than last and we had enough to supply the wants of the people, but none to spare; roses and violets were in demand; loose cut flowers were more called for than baskets or set pieces. To say that we did not have half enough flowers to supply the demand is far from correct.

PHILADELPHIA.—At the meeting of the Florists' Club on the 5th inst. Mr. Charles F. Evans delivered a short address on the query "are orchids likely to take a prominent place in the cut flower market in Philadelphia," answering affirmatively. March 14 was fixed upon as the date for the annual supper, and Messrs. Cartledge and Westcott were made the committee of arrangements. The club has now, it is reported, over \$900 to its credit in bank. The club has secured a charter from the state legislature.

NEWBURG, N. Y.—A steam boiler at the greenhouses of Henry Carter exploded the night of January 14 doing much damage. The boiler was located in the cellar of Mr. Carter's residence and furnished heat for it and a range of greenhouses adjoining. A nearly round hole about 2½ feet in diameter was made in the boiler. The house was considerably wrecked and the loss will be heavy. No plants were frozen as a second boiler was in operation and carried sufficient heat for all the houses until repairs could be made. The cause of the explosion is not known.

LOUISVILLE, KY.—Joseph Coenen has erected two fine houses 80 x 10 each, at a cost of \$1,000. Jacob Schulz has completed his fine 12 room house. Haupt & Epping have added a new house 100 x 10, heated by steam. Chas. Reimers has built a 9-room dwelling and two rose houses 111 x 27, heated by steam. Ed. Morat has completed eight new houses 100 x 15 each. Wm. Walker has added two new houses, one 100 x 22 and the other 125 x 10; Nanz & Neuner two rose houses 100 x 20; F. E. Hodgeman a house 30 x 17. A. Laner and Geo. Thompson have each recently built new residences. The past year has been a fairly prosperous and profitable one to those in the trade here.

BROOKLYN, N. Y.—Florist Philip Zeh, Jr., will probably remember the night of January 23 for many a year. His father's greenhouses are located near the entrance to Greenwood cemetery and he, like other florists in the vicinity, has a number of lots and vaults in the cemetery to keep in order. After making his rounds on the date named he brought up at the last vault at 5:30 p. m. As he entered he inadvertently slammed shut the outer graded bronze door which is provided with a spring lock, the key falling outside just out of arms length. He was securely locked in. Several women who passed that way shortly after

were badly frightened by what they imagined to be the cries of ghosts. Some of them ran screaming to the gateman at the Fourth avenue entrance. The old gray-headed man had heard all the ghost stories connected with Greenwood, and as they did not coolly describe what they had seen he paid no attention to their stories. It was nearly 7 o'clock the next morning before Zeh's calls attracted some one to liberate him.

BALTIMORE.—The present winter has so far been a most phenomenal one in this section at least. Until within the past two weeks we have really had little that savored of genuine winter weather, previous to that the days were generally mild and warm as May, and the nights not cold enough to make firing laborious. Two or three days before the present cold snap set in I saw on a neighbor's lawn hyacinths pushing up thickly in the beds and defying every effort to keep them under, but a couple of days later we had a regular blizzard that effectually checked their progress. At this writing the weather is more seasonable, but pleasant withal, and in this latter respect it resembles the condition of trade, which probably was never better at this season. Flowers are plentiful, the demand is excellent and prices are firm. By the way, I have been particularly impressed with the felicitous unanimity prevailing among us this season concerning prices. Referring to notes taken during the season of '87-'88, I find that there was a marked difference in the prices asked by different florists, and with nothing to warrant it so far as the quality of their respective stocks was concerned, this year however there is no underselling to "catch a job," and it is to be hoped that this golden rule policy will become a permanent institution.

PITTSBURG.—The floral decorations at the banquet of the Press Club are described as follows in the daily *Commercial Gazette*: "The beauty of the scene was immeasurably enhanced by the exquisite and novel floral environments prepared by the firm of J. R. & A. Murdoch. The central table bore the main design, which, as well as the rest, revealed the handiwork of Mr. James Dell. It showed a miniature of the famous Arctic exploring ship the Resolute, with her sailors and rigging sparkling with frost, and the stars and stripes glistening with ice. The hull was of white carnations and rested upon great blocks of crystal clear ice, illuminated by incandescent electric lights. Near at hand on the same table stood a floral model of Cleopatra's barge, composed of pink carnations and fitted with a pink silk canopy and sail. The oars were of crimson carnations. On the opposite of the Resolute stood a floral column of pink carnations surmounted with a "composing-stick," wrought in white carnations and bearing the word "Press" in darker flowers. At the base of this column a trunk of pink roses and lilies of the valley was placed and the words "Press Club 1889" appeared at this place. On the central table stood also a graceful scroll in pink carnations, roses, etc., in which the figures "1889" were ingeniously interwoven with the word "Press." This was, next to the ship and barge, the most attractive bit of floral work at the dinner. On the other tables were several great baskets of La France and Bride roses, lilies of the valley and vases of rich lined foliage plants, while on one of the ornate columns supporting the ceiling appeared a

large pair of quills placed crosswise. Before the musicians and at one of the doorways stood a verdant screen of cypas and areca palms, through whose interlaced foliage came the music of the orchestra.

Catalogues Received.

M. A. Hunt, Terre Haute, Ind., plants and seeds; Anna B. Nickels, Laredo, Tex. cacti; L. Green & Son, Perry, O., wholesale list nursery stock; H. G. Higley, Cedar Rapids, Ia., seeds and plants; Nanz & Neuner, Louisville, Ky., plants and seeds; Lenault Huet, Ussy, France, wholesale list nursery stock; Boskoop Nursery Association, Boskoop, Holland, trees, shrubs and plants; F. Walker & Co., Louisville, Ky., plants and nursery stock; J. J. Harvey, Richmond, Va., plants and shrubs; Michel Plant and Seed Co., St. Louis, seeds and florists' supplies; H. W. Buckbee, Rockford, Ill., seeds and plants; W. Atlee Burpee & Co., Philadelphia, seeds; Jno. Laing & Sons, Forest Hill, London, Eng., seeds and plants; Thos. S. Ware Tottenham, London, Eng., seeds; same, plants; Joseph Sexton, Santa Barbara, Cal. plants and nursery stock; J. C. Vaughan, Chicago, seeds and plants; E. Hippard, Youngstown, O., plants and seeds; F. G. Mason, San Bernardino, Cal., trees and shrubs; Ludwig & Richter, Allegheny, Pa., seeds; O. A. A. Gardner, Byron, Neb., plants; W. Piercey, Forest Hill, London, S. E. England, chrysanthemums; V. Lemoine & Fils, Nancy, France, plant novelties; Smeeton, Coleman & Co., Little Rock, Ark., plants; J. B. Root & Co., Rockford, Ill., seeds; D. Lee & Son, Madison, O., plants, shrubs and trees; T. H. Spaulding, Orange, N. J., chrysanthemums; A. Giddings, Danville, Ill., plants; Currie Bros., Milwaukee, Wis., seeds and plants; Carl Cropp, Erfurt, Germany, seeds; John Gardiner & Co., Philadelphia, seeds; Iowa Seed Co., Des Moines, Ia., seeds; J. A. Everett & Co., Indianapolis, seeds.

A NATIONAL CHRYSANTHEMUM SOCIETY.—Most heartily do I agree with Mr. Thorpe, page 255, "That the time has come for a National Chrysanthemum Society." Count me one, and the sooner we get about the work the less will be the labor in bringing up the past. Why not commence the work at once under the auspices of the Society of American Florists?
JOHN LANE.
Chicago.

THE FLOWER inquired about by J. C. Downing in the FLORIST of January 15 is a zephyranthes, either *Z. atamasco* or *Z. Treatae*. The flowers of the two species are exactly alike; the only difference is in the leaves. Those of *Z. atamasco* are from $\frac{1}{4}$ to $\frac{3}{8}$ inch wide, while those of *Z. Treatae* are very narrow, almost round.
W. C. STEELE.
Switzerland, Fla.

THE OLIVE, its culture in theory and practice, is the title of a work by Arthur Tappan Marvin, received from the publishers, Payot, Upham & Co., San Francisco. The attention that olive culture is now receiving on the Pacific slope should make this book very acceptable to those interested. The subject is treated in an able and practical manner.

LANDSCAPE GARDENING.—Will some one give a school boy hints in regard to the special preparation which should be made by one intending to become a landscape gardener?
WEST.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advts. not admitted under this head.

SITUATION WANTED—By a good gardener. Address JOHN E. DEWALT, Box 146, Carlisle, Camb. Co., Pa.

SITUATION WANTED—By a florist, of 12 years' experience. First-class references. Address P. care American Florist, Chicago.

SITUATION WANTED—To make-up in flower store. Best of references. Address FLORIST, 175 B Tremont St., Boston, Mass.

SITUATION WANTED—By a practical rose grower, also by an assistant. Good references. Address D A C. Allegheny P. O. Pa.

SITUATION WANTED—As improver in the florist business by a young man who has had two years experience. Address FRED MORLAN, Damascus, Col. Co., Ohio.

SITUATION WANTED—By a young man who has had 15 years' experience in florist business and gardening. Good reference given. Address B. care American Florist, Chicago.

SITUATION WANTED—By a young man in floral store; has had several years' experience in all branches. References exchanged. Address B. P. GADD, 2225 $\frac{1}{2}$ Cass Ave., St. Louis, Mo.

SITUATION WANTED—By a young man as gardener in a large commercial place. American; well educated—competent to keep employer's books. Address GARDENER, Fort Hamilton, L. I.

SITUATION WANTED—A young man, age 21, wants situation with a florist; has spent six years as carpenter, and has had slight experience as florist. Address C. DUNCAN, 1319 N. St., Lincoln, Neb.

SITUATION WANTED—By an assistant florist, well posted in rose growing, will be disengaged by first of March; best of reference. Address S. M., 480 Mulberry St. Frankford, Philadelphia, Pa.

SITUATION WANTED—Practical florist of ability and long experience on all the requisites of the business. Private or commercial. For particulars address A. B., care American Florist, Chicago.

SITUATION WANTED—By a gardener; married; thorough practical knowledge of his profession. Can give very best of reference. Private or commercial. A. T. PETERSON, Riverside, Cook Co., Ill.

SITUATION WANTED—By a first class gardener; single, competent in all its branches to take charge of a commercial or private place. Best of reference. Address GARDENER, 945 Buttonwood St., Philadelphia, Pa.

SITUATION WANTED—By a first class gardener; thoroughly understands his business; married; no family; aged 34; highest reference from present employer. Address GARDENER, P. O. box 4, La Motte, Montgomery Co., Pa.

SITUATION WANTED—As gardener and florist; understands horticulture in all its branches; 20 years with the late Hon. Alex. Mitchell, Milwaukee. Private place preferred. Address JOSEPH POLLARD, 87 10th St., Milwaukee, Wis.

SITUATION WANTED—By a young man (American) of 7 years' experience in designing and retail flower and seed trade. Competent to take charge of such business. Good references from present employer and others. Address JOHN H. MILLER 287 Main St., Springfield, Mass.

SITUATION WANTED—By a gardener and florist with 18 years' experience, competent in all its branches. Have full charge where now employed 5 years. Can furnish first class recommendations; German, married, small child; private place preferred. Address D 4, care American Florist.

SITUATION WANTED—By a good practical gardener; understands the care of flowers, vegetables, stock, and the laying out of grounds; is capable of taking the management of a fine place or private greenhouse and conservatory. Address G. H., care of Arthur G. Lee, 10 N. Clark St., Chicago, Ill.

SITUATION WANTED—By a thoroughly practical florist and gardener, well educated; capable of taking charge of the largest commercial places; can give the very best of references as to rose growing and getting up stock in general for large commercial places. A first class propagator in all branches, 17 years' experience; married; 32 years old, American born, Scotch descent. Address M. W. C., 825 Pearl St., Sioux City, Ia.

SITUATION WANTED—By a practical gardener and florist in the vicinity of New York City, to take charge of either a private or commercial place—private place preferred. 16 years' experience; understands the care of grapes and the general work connected with either place. Also a good cut flower grower. Roses and carnations a specialty. Can furnish good references. Address, giving particulars, GARDENER, basement 25 Old Slip, New York City.

WANTED—Catalogues and nursery trade lists. THEO. WIRTH, 24 E. 5th St., New York City.

WANTED—To contract with special growers, for our next season's stock of garden and field seeds. J. B. SUTTON & Co., Seedsmen, Ocala, Fla.

WANTED—Catalogues of nurserymen, florists, seedsmen and dealers in supplies for greenhouse construction. H. W. TRAYHE, Morgan Park, Ill.

WANTED One or two men florists or gardeners who know and are willing to work out doors as well as in the houses. Only such need to apply. Industrious man of good habits will find steady employment Apply to R. MATTHEW, 19 Canal St., New Orleans, La.

WANTED TO RENT A small greenhouse nursery in the vicinity of Washington or New York, with the view of purchasing it later on. Particulars with number of greenhouses and price to be sent to G. S. NIERER A. FRIEDRICH, New Rochelle, N. Y.

WANTED Partner in an established and rapidly increasing seed business. Must have some practical knowledge of market garden, seed, or nursery business, or both. \$3100 to \$4000 ready cash required. A rare chance is offered. For particulars address J. B. SUTTON & Co., Seedsmen, Ocala, Fla.

FOR SALE-The A. W. Sawyer greenhouses at Sycamore, Ill. Address MRS. ABRAHAM ELLWOOD, Sycamore, Ill.

FOR SALE-A good florist establishment in one of the best parts of Chicago. Address Box 12, care American Florist, Chicago.

FOR SALE-Growing greenhouse business, in best town in Missouri, 10,000 inhabitants; no competition. Small capital. Good reasons for selling. If you mean business, address Box 626, Mexico, Mo.

FOR SALE-\$2,000 cash and \$1,500 in payments will buy an established greenhouse business and good dwelling in an Indiana county seat. If you mean business address WATSON, care American Florist, Chicago.

FOR SALE-In a New England city, greenhouses; 8,000 feet of glass; fine business; long established. Extra good summer trade at the beaches. Nice house; valuable real estate. Good reasons for selling. A rare chance. Address MAY, care American Florist, Chicago.

FOR SALE OR EXCHANGE-Four greenhouses almost new, 6,000 feet of glass, heated with hot water, located in central Illinois. Plant and cut flower trade well established. Will take land or other property in exchange. Satisfactory reasons for selling. Address CHANDLER, care Am. Florist.

FOR SALE-Four greenhouses with business; also old established nursery stock and business. Located near growing city, 30,000 inhabitants, within two hours of New York. Controls good local trade. No other nursery within 15 miles. Splendid chance for florist or young nurseryman with limited capital. Will sell separate and lease cottage and all land required for term of years. For particulars address F. M. R. care American Florist, Chicago.

FOR RENT-Cheap. Extraordinary chance. Six good sized greenhouses; all improvements; hot water boilers and steam heating; croton water. Located at the main entrance to the largest cemetery in the City of New York. Well established trade by the same name that now has charge over 15 years. Over 100 lots to cure for and decorate. Only responsible parties need enquire of L. G. WILSON, Mt. Vernon, N. Y.

FOR SALE.

A half interest for sale in a retail florist store in New York City; located on principal thoroughfare and an assured success. A young practical florist desired. About \$1,200 cash required. For particulars address

W. F. SHERIDAN, 10 W. 30th street, New York City.

TO FLORISTS AND OTHERS. FOR RENT.

A pleasantly located house ten miles from Boston, on two lines of railroad, with three first-class greenhouses with steam power, and all modern appliances.

Choice Stock and Tools if wanted, at fair value. Rare opportunity. Apply to

WILLIAM W. LOWE, or WILLIAM R. GRAY, Room 12, Traveller Bldg., 31 State St., Boston, Mass.

WANTED.

To contract for 25,000 KEISER'S KROON TULIP BULBS which have been forced. Must be ripened off by leaving in boxes under benches until Aug. 1 next. Write stating how many you can furnish and price asked for at your railroad station.

JOHN KLEIM, Arlington Heights, Ill.

WANTED

2000 FICUS ELASTICA

or any part thereof. 2 to 4 inches.

LOW FOR CASH.

F. L. TEMPLE, Cambridge, Mass.

RUSTIC WORK

of all kinds, on hand and made to order.

JOHN C. URE, ARGYLE PARK, ILL.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2 inch pots, \$3.50 per doz; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

Mention American Florist.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,

MOUNT HOPE NURSERIES.

ROCHESTER, N. Y.

IMPORTED DWARF BUDDED AND TREE ROSES,

Hydrangeas, Lilacs, Snowballs, Azaleas, Rhododendrons, etc., etc. ALL STRONG PLANTS from the BOSKOOP, HOLLAND, NURSERY ASSOCIATION. ORDERS FOR SPRING IMPORTATION SHOULD NOW be forwarded to

C. H. JOOSTEN, Sole Agent for the U. S.,

Mention Am. Florist.

OFFICE: 3 Coenties Slip, New York.

ROSES

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand.

Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,

SUMMIT, NEW JERSEY.

IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER, JAMAICA PLAIN, (Boston), MASS.

ROSES FOR SALE.

In first-class condition, from vigorous plants-MERMETS, BRIDES, PERLES, GONTIERS, BENNETTS, BON SILENES AND NIPHETOS. In 2 1/2-inch pots, \$5.00 per 100.

GOODING & LEITCH, Cleveland, O.

HERNOSA ROSES.

2000 strong plants from open ground, \$8.00 per 100.

J. H. CAMPBELL & SONS,

3601 Germantown Ave., Philadelphia, Pa.

LILAC BLOOMS FOR SALE, besides all other choice flowers. If you don't receive our Semi-Monthly circular, please notify us at once. We are strong on Ferns.

THE WISCONSIN FLOWER EXCHANGE, 133 Mason Street, MILWAUKEE, WIS.

GIANT MOON FLOWER: TRUE VAR. WHITE SEED.

I am now ready to contract for above. Full delivery 18 1/2 20 lbs. Also 2nd size Pearl Tuberoses \$7.00 per 1000. Orders solicited now for Antigonish potatoes at \$1.00 per 100. 20 var. Chet from \$c to \$25 each. Mrs. J. S. R. THOMSON, Spartanburg, S. C. 2 years State Vice-President S. A. F.

A. C. TUCKER, ROSE GROWER,

P. O. BOX 190.

NYACK, N. Y.

I would like to give my prices for the following varieties in 2 1/2, 3, or 4-inch pots to any parties desiring the same, for Spring delivery.

PERLE DES JARDIN, SOUV. D'UN AMI LA FRANCE, NIPHETOS, MERMET, BRIDE, AMERICAN BEAUTY, PAPA GONTIER.

NYACK ROSES

PERLES, NIPHETOS, \$5.00 per 100 LA FRANCE, 6.00 per 100 In 2 1/2-inch pots, ready Feb. 1.

- ALSO

Rooted Carnation Cuttings.

Orders NOW taken for rooted CARNATION CUTTINGS of 20 of the leading varieties, to be ready for delivery in EARLY SPRING.

Prices on application.

TUNIS DE PEW,

NYACK, NEW YORK.

NOVELTIES IN ROSES.

Also the leading forcing varieties Teas Hybrid Teas, and Hybrid Perpetuals, and novelties in Chrysanthemums. Also Tabernaemontana, Bouvardias, Carnations, and general greenhouse stock.

Trade List mailed on application.

JACOB SCHULZ,

LOUISVILLE, KY.

JOHN CURWEN, Jr.,

GENERAL

GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co. Pa. Money Order Office. Bryn Mawr, Pa.



Holiday Prices.

I have read with interest the communications from various sources regarding the sudden advance of prices for the holidays. I have always considered it detrimental to the trade generally, and from the holiday reports of the past year am thoroughly convinced of the fact.

While in some localities the average was above last year, in more it was the same or less. Can this not be accounted for from the high prices of '87. That the trade was not larger every where was not because people did not want flowers, but from the fact that they would not pay prices asked. I believe if the prices are advanced next season as for the past two seasons at Christmas our next reports will show a very decided decrease, and more reports similar to Davenport appear: "Evidence of a vitiated taste was noted in a call for metal and porcelain flowers and immortelles." I think it a mistake to call the desire to have flowers of some kind a "vitiating taste." Sensible people suit their flowers to their purse, and if they cannot pay the exorbitant prices asked for natural flowers will be satisfied with metal, porcelain, paper or satin flowers or immortelles.

To be sure we florists need some advance for holiday trade, but let us be satisfied with a legitimate advance, and in this way keep the public taste for natural flowers on the increase. Seldom do we find a customer (or hear of one even) who is willing to pay \$80 for five dozen roses, or even \$30 for the same. There are those who can afford these high prices and there are thousands who cannot. Would it not be better to sell to these thousands also, thereby making up in the aggregate by larger sales at lower prices? When people order two or three dozen choice roses for which they usually pay from \$2 to \$3 per dozen and have bills presented calling for from three to five times usual price it is not to be wondered at that they look ugly and "storm" about the price. Can they be caught again?

I am also convinced that this sudden advance is a temptation to many to "salt" their flowers for some time previous, and until they are worthless to the purchaser and detrimental to the reputation of the retailer and commission men. But says Mr. Advance, "Are not prices governed by supply and demand?" to which I answer yes, no. Such may have been the case in all branches of trade at one time, but where do we find it the case to-day. Why is our business exceptional?

I am in favor of making all the money we can legitimately from our business, but let there be an establishment of more uniform prices. I know it costs treble to grow flowers in winter as in summer, and yet cannot prices be regulated so as

to average the profit? Would it not be of interest and advantage to the trade generally for those who grow only cut flowers for the market to give the cost of producing different sorts per hundred on an average, per cent of loss, etc. throughout the year. A. H.

[The practice of "salting" flowers having in nearly every case proved unprofitable to the grower for the past two years we believe that we shall be but little troubled from it in future. When a man finds that he is working against his own interest he needs no argument to change his tactics. If we had sufficient flowers to meet the holiday demand at usual prices there would be no advance at that time. How we are going "to sell to these thousands" without something to sell them is a poser. If only a portion of the supply was sold and the balance allowed to spoil rather than sell at a lower price the argument would hold good, but such is not the case. There was a near approach to this condition in some markets last December and if any serious losses were made in consequence those who met them have already been chastened and will fight shy of the rod in future. We can not see but what the highest price that all the flowers can be sold at is the actual market value of the same. "The establishment of more uniform prices" will be quite impossible until supply and demand shall be always equal. This brings into consideration the tactics of the buyer at times when the supply exceeds the demand. He will buy where he can get stock the cheapest every time. He is right, he would not be a business man unless he did. It is just as reasonable to ask the buyer to pay high prices when supply is large as to ask the seller to accept low prices when he can sell every flower he has got at higher figures. The suggestion that growers endeavor to throw some light on the cost of producing flowers of various kinds is an excellent one. We hope that any who can give us any reliable data will not fail to do so. Such would be of great interest and benefit to all in the trade.—ED.]

Frankfort, Ky.

The holiday trade in this city was about as usual and the prices were the same as at any time during the year. My customers will not submit to a change at any time in the price of flowers; I cannot make them see why they should pay more for cut flowers at Christmas, New Year's or Easter than at any other time.

The following are standard prices all the year round: Safrano and Bon Silene, \$1 50; Perles and Niphetos, \$2; Mermets, \$2 50; Niels, La France and Brides, \$3 per dozen. I have some American Beauties, Papa Gontiers and Cnsins, but I can

scarcely give them away. I have had some very nice Beauties in the last two weeks, but I have only sold two at 25 cents each and I put the rest of the lot in collections of cut flowers to get rid of them. If I were to ask \$15 per dozen for Beauties as they do at Baltimore, or \$20 per dozen as they do at Chicago my customers would think I was crazy. I can sell all the red carnations I can raise and buy because they are cheap, but red roses won't go at all. There is very little demand for anything but white, yellow and pink roses, carnations of all colors and red geranium bloom with other cheap flowers for table use. P.

[Our correspondent seems to have solved the problem of equalizing prices the year round. It would be interesting to know the amount of sales at the various seasons under this system, also whether he has any competition or not. According to his prices there are times when he receives more than florists in the large cities.—ED.]

The New York Market.

Trade is generally better since the middle of January; in some directions it is considered larger than the same time last year. Prices cannot be considered large, though increase is noted over the rates prevailing just before the holidays. Bulbs are very low and they certainly affect the price of roses.

Hybrid roses are fine and in good demand. Mrs. John Laing is being received in small quantities and seems likely to be a great success; it is much admired. Slaughter is sending in very fine Beauties, but they are generally off crop. Liliun Harrisii is very plentiful and will be more so.

Second class or poor quality flowers are not subject to regular rates; they have small chance of sale. Everything must be of the best.

EMILY LOUISE TAPLIN.

Chicago.

Roses are very scarce in this market, scarcer for this season than for many years past. There is also a shortage on all other flowers except red carnations and tulips, which are in good supply. Last year at this time the supply rather exceeded the demand with occasional decided gluts.

The cause of the scarcity of flowers the past winter is an enigma to all. The weather has been more favorable than for many years, double the amount of sunlight we are usually favored with, and still plants have not bloomed nearly as freely as in more unfavorable seasons. Growers report that roses have grown vigorously, presented every appearance of giving a good crop of bloom, but have rarely done so.

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The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for March 1 issue must REACH US by noon, Feb. 25. Address

THE AMERICAN FLORIST CO., Chicago.

THE PROGRAMME of the Pennsylvania Horticultural Society for the year 1889 has been published. It contains the schedule of premiums for the spring and bulb exhibition, to be held April 2, 3, 4, and the chrysanthemum show November 11 to 16. In the schedule for the spring exhibition we note \$100, \$75 and \$50 offered for best collection of orchids in bloom. In the chrysanthemum show schedule four prizes, \$100, \$85, \$65, \$50, are offered for collection of 12 plants, 12 varieties.

WE HAVE RECEIVED from Mr. A. Giddings, the florist, of Danville, Ill., a very handsome calendar, which he is presenting to his customers as an advertisement of his business. It is of very large size and bears the figure of a little girl surrounded by flowers, lithographed in colors in a very artistic manner. It is really a work of art, the best of its kind that we have seen.

EASTER SUNDAY comes on April 21 this year. Lay your plans for Easter trade accordingly. Lent begins March 6.

**KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.**

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

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Shipping Trade my Specialty.**

Consignments Solicited.

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VARIETIES:

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CHAS. L. MITCHELL, MGR.,
P. O. Box 188, CINCINNATI, OHIO.

Telegraph Address: via W. U. Tel. Co., Cincinnati, O.

Mention American Florist

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165 Tremont Street BOSTON MASS.

We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

Wholesale Markets.

Cut Flowers.

BOSTON, Feb. 9.	
Roses, Teas	\$1.00
" Niphetos	6.00
" Perle, Sunset	15.00
" Brides, Mermets	25.00
" Jaques, Hybrids	4.00
Lily of the valley, Tulips	4.00
Narcissus, Romans	1.00
Carnations, short	2.00
Carnations, long	1.00
Violets, Pansies	1.50
Adiantums	12.00
Smilax	10.00
Callus	

NEW YORK, Feb. 9.	
Roses, Niphetos	\$1.00
" Perles, Gontiers, Soles	5.00
" Mermets, Watteville, Brides	10.00
" Bon Silene	8.00
" Am. Beauty	25.00
" La France	10.00
" Jaques	15.00
" Hybrids	30.00
" Cusin	10.00
" Bon Silene	3.00
Tulips, Romans	2.00
Lily of the valley	4.00
Lilium Harrisii	15.00
Carnations	75.00
Violets	1.00
Smilax	12.00
Lilae, per bunch	1.00

PHILADELPHIA, Feb. 9.	
Roses, Perles, Niphetos	\$5.00
" Mermets, La France, Brides	10.00
" Bon Silene	8.00
" Am. Beauties	20.00
" Cooks	12.00
" Gontiers	5.00
" Parisians	25.00
" Jaques	75.00
Carnations, short	4.00
Lily of the valley	4.00
Roman Hyacinths	5.00
Narcissus, Tulips	5.00
Smilax	15.00
Harrisii lilies, callus	10.00

CHICAGO, Feb. 11.	
Roses, Bon Silene	\$4.00
" Perles, Niphetos	5.00
" Brides	10.00
" Mermets, Mermets	10.00
" La France, Dukes	15.00
" Jaques	20.00
" Am. Beauties	20.00
Carnations, short	1.00
Carnations, long	1.25
Carnations, Grace Wilder	1.00
Callus	8.00
Smilax	16.00
Camellias	8.00
Romans, Valley	4.00
Tulips	3.00
Violets	1.00
Daffodils	4.00
Adiantums	1.25
Heliotrope	1.00
Bonvardia	1.00

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Roses planted for Winter 1888-9.
Souvenir de Woolton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermel.
And other standard sorts

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38 So. 16th Street, Philadelphia, Pa.

Seedling Amaryllis.

Mr. W. Otto Gronen, Davenport, Iowa, sends us two blooms of a seedling amaryllis raised by him from Fidelio fertilized by Brilliant. He has christened it Barbara Pomfret. The blooms are of large size, creamy white penciled and shaded with red, throat green. A very handsome and striking flower.

Mr. Gronen writes that he sends us the flowers at the suggestion of a florist friend to show what an enthusiastic amateur can do in the way of intelligent and careful cross-breeding.

Though not in advance of many excellent varieties we already have it is apparently distinct and worthy of preservation.

Begonia Semperflorens Gigantea Rosea.

Please state in your next issue which is correct: Begonia semperflorens rosea gigantea or Begonia semperflorens gigantea rosea. BEGONIA.

[Our heading is the name as given by the introducer, V. Lemoine.—ED.]

Print your SPRING TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

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The three first New Geraniums ever sent out. Price \$1.00 per 100. Send for trade list, now ready.

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A few Young Callas left. Per 100 \$1.50.

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All Colors.

Young plants suitable for late flowering NOW READY.

Send for prices.

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25 best new and rare sorts, including VER-SCHAFFELTIL, GOLDEN BEDDER, HERO, PROGRESS, from pots, per 100, \$2.00.

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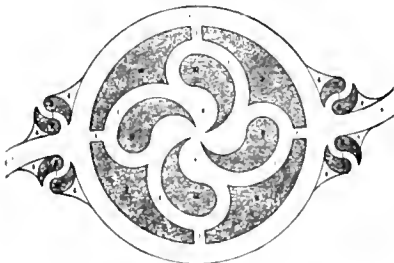
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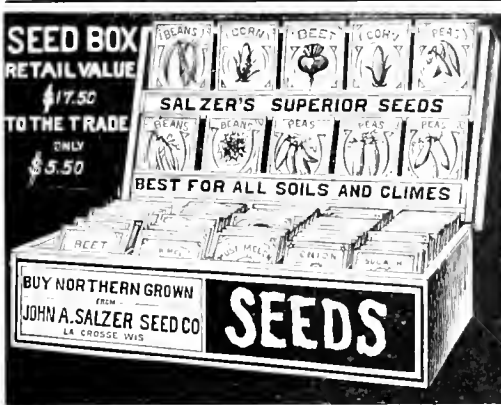
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The accompanying illustration shows our SEED BOX well assorted LIVE, FRESH NORTHERN GROWN SEEDS. This we sell to the trade only, for \$5.50 cash with the order. The retail value of this splendid selection is \$17.50. If any sorts are sold out we allow refilling at wholesale prices. The box contains:

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- 50 " " Vegetable " at 10c. 5.00
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Come, Fellow Farmers!

It is the good things and the new things you want. Here is a catalogue full of the best! Do you want tested seed, raised from stock selected with extra care, grown from the best strains, got from the original sowers? I aim to have mine just such. Do you want new varieties that are really good, and not merely novelties? I aim to have mine such. Do you want seed that the dealer himself has faith enough in to warrant? I warrant mine, as seed catalogue. Do you want an exceptionally large selection to select from? Mine is such. Do you want them directly from the grower? I grow a large portion of mine—few seed-men grow any! My Vegetable and Flower Seed Catalogue for 1889 is for everybody. JAMES J. H. GREGORY, Marblehead, Mass.

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Are still offering the most complete assortment of young, smooth, thrifty Stock in America. BUDDED APPLES, STANDARD PEARS, DWARF PEARS (High and Low Headed), PLUMS, CHERRIES, PEACHES, QUINCES, RUSSIAN APRICOTS, GOOSE-BERRIES, CURRANTS, and a full line of Ornamental Trees, Shrubs, Etc. Also Extra Sized Standard Pears of the Finest Quality. Special Inducements to Buyers in large quantities. Trade List out August 1st. SMITHS, POWELL & LAMB, Syracuse, N. Y.

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Is now published and may be had on application. FRED. ROEMER, SEED GROWER, QUEDLINBURG, GERMANY.



MUSHROOM SPAWN Best Mill-truck, Of unsurpassed quality



Can be thoroughly relied on to produce a fine crop of the best Mushrooms. Our stocks are the largest and freshest in the country. Quality guaranteed the BEST IN THE WORLD. Why spend your money on doubtful quality, when you can get the best at a price that will please you? We sell at rock-bottom prices for first quality spawn. By mail, post-paid, 22 cts. per pound, Five pounds for \$1.00. By express, Ten pounds for \$1.20, Fifty pounds for \$5. One pound of spawn will plant a space 3 feet by 4. Special prices for LARGER quantities. John Gardiner & Co., 21 N. Thirteenth St., Philadelphia, Penna. Mention American Florist.



Cleveland.

A. Schmitt, of Glenville, has some exceptionally fine houses of carnations. Silver Spray seems to excel Henderson; Portia, though not so large, is of a better color and a better keeper than E. G. Hill; the latter seems to get a silvery decayed looking color after standing on the plants a day or two, and when cut it has the same characteristic.

Long has removed his store from the Public Square to a pleasant new location on Erie street.

For system, order, method and neatness commend us to Storrs, Harrison & Co., Painesville. They have great faith in Meteor and are growing it in large quantities. Mr. George reports heavy orders already in for it. Mr. Harrison of this firm is building a very handsome large house with all modern conveniences which is a decided ornament to the neighborhood.

There is talk of a social reunion of the members of the Florists' Club soon. Hope it will materialize. C.

PLANTS AND ROSES, ETC.

PAPAVR ORIENTALE, most gorgeously handsome orange scarlet flowers. Retailing readily at our store for 25c. each. Plants perfectly hardy; rare and most desirable. \$5 per 100; \$55 per 1000.

CHRYSANTHEMUM CHINESE WHITE LA PRITE, the most profitable for florists to grow for market or for cut flowers. Our collection embraces over 200 sorts of the best chrysanthemums in commerce. None surpasses it for usefulness, coming in bloom just in time for All Souls Day. \$3.00 per 100.

50,000 TEA and 10,000 HYBRID ROSES grown in 2-inch pots now ready, in all leading sorts. **CHINESE YAM** (Discorea Batata). Seed Tubers, \$3.00 per 100; 500 for \$10.00.

We carry the largest and most varied stock in the South west. Three acres under glass. Parties in need of stock will please send lists to be priced.

Satisfaction guaranteed. Wholesale and Descriptive Catalogues FREE.

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Select Seed for Florists.

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Trade packages of any of the above at \$1.00 each. The above are our own strains as used by us in our cut flower trade. Every seed produces first-class flowers only, which for quality are not equaled by any imported seed. None genuine unless obtained directly of us.

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Orders for Spring Importation of **ROSES ON OAKN ROOTS** and Ornamental, Nursery and Fruit Tree Stocks by the thousand or hundred thousand **AT VERY LOW PRICES**, from **LENAULT HUET**, Nurseryman at Ussy, France, are now requested.

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Violets, plants, Tuberoses and a large collection of bedding plants. Violets Maria Louise, double blue, Czar single blue, at \$2.50 per 100; \$22.00 per 1000. Swanley, double white, \$2.00 per 100; \$18.00 per 1000. Or will exchange for Violets, Cyclamen, Smilax or Perle de Jardin Roses. Tuberoses, large bulbs \$2.00 per 100; \$18.00 per 1000. Echeverias, \$3.00 per 100. Coleus in 2 and 2 1/2-inch pots, old and new varieties, \$2.50 per 100. Also large stock of Pansies for sale. Cash must accompany orders from unknown parties.

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100,000 Cacti for sale.
1,000 Cannas, strong tubers in six varieties, at \$3.00 per hundred.
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Sets clean..... .50

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10,000 TUBEROSE BULBS.
Choice Bulbs \$2.50 per 100.

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Fine stock of Begonias, Geraniums, Ivy Geraniums, Chrysanthemums, and general greenhouse stock.

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Fine, healthy stock. Standard sorts. Good packing. Address

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10,000 Geraniums, Chrysanthemums, choice, per 100 \$2.00
20,000 Coleus, Fuchsias, Alternantheras, Stevias, Lobelias, Aceratum, Nasturtiums, Gem Alyssums, Heliotropes, mixed plants in variety, per 100 \$1.00.

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Can be furnished in any quantity.

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Can be shipped as far west as St. Louis with perfect safety.

ALL LONG STEMS—Buds count as flowers; never less than two-thirds open flowers in any shipment. Cash must accompany order to receive attention, unless by special arrangement.

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Early White Roman Hyacinths,

PAPER WHITE NARCISSUS,

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LILIUM CANDIDUM,

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\$1.50 per thousand Ferns.

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Long, clean fibre, dry, \$1 per bbl., or six bbls. for \$5.
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TUBEROSE BULBS

At the following rates f.o.b. New York. Special prices on large lots:
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Excelsior Pearls..... \$2.00 \$15.00
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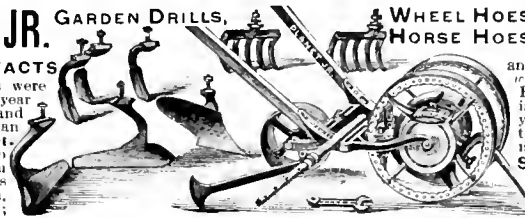
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at the following prices for CASH:

	Per 100
HYACINTHS, White.....	\$2.50
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HYACINTHUS CANDICANS.....	2.00
25,000 open ground H. P. Roses, 2 ft. cheap.	
Plants, Bulbs, Etc., by the thousand	

THE PERFECTION VENTILATOR.

SEND FOR PRICES.

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Menton American Florist.

Moontower, true, white seed; Amaryllis Johnsoni, Hallii, Surinensis; Regina, Rosa, Tretea Atamasco; Cundlia, Cooperai; Cinnamom vine bulbs Seed Ampelopsis Veitchii and Royal, Tuberoze and Climbing Hydrangea; Bulbials, \$1 per 100. To trade only. Mrs. J. S. R. THOMSON, Spartanburg, S. C.

STOCK WANTED.

Aspidistra Green and Variegated; Hydrangea Thus, Hogg and Otaksa; Pelargoniums Fred Dornier and Fred Helmi; Begonia Metallica, and Glauco-phylla; Crotons, Eucharis Amazonica. State size, and name lowest prices for spot cash.

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Piping for Steam.

Will some of your readers be good enough to describe the best way to "pipe," for steam heating, a greenhouse 100 feet long, that grades a few inches less than 3 feet (about 2 feet 8 inches) to the 100 feet? The boiler will be at the lower end of the greenhouse. E.

COST OF BUILDING.—Subscriber, Boston, Mass., can secure estimates on the cost of building from any of the horticultural builders who advertise in the FLORIST.

THE GURNEY HOT WATER HEATER Co. send us their calendar for 1889. It is handsomely gotten up, and we have no doubt they will be glad to mail one to any florist. Their address is 237 Franklin street, Boston, Mass.

COST OF HEATING.—In reply to Enquirer's query, I am heating over 2,000 cubic feet with water at a cost not to exceed \$15 for the whole winter. If he or others desire particulars shall be pleased to give them. H. M. HOFFMAN, Leavenworth, Kan.

AMERICAN POMOLOGICAL SOCIETY.—The 22nd biennial session of this society opens at Ocala, Fla., on the 20th inst. and continues to the 22nd. A programme has been prepared which can not fail to be of very great interest to all nurserymen and fruit growers. Reduced rates have been obtained on all railroads.

STEAM HEATING.—The Herendeen Manufacturing Co., Geneva, N. Y. makers of the Furman steam heater sends us a pamphlet containing a portion of Mr. J. D. Reynolds paper on heating read at the last convention of the S. A. F., and numerous extracts from communications which have appeared in the FLORIST on steam heating, which they are mailing free to those in the trade in connection with an advertisement of their boiler.

PALMS.—Your correspondent "Gardener," in treating the palms referred to on page 107, will find it best to remove as much as possible of the old soil, filling up the tubs with fresh compost, but if the plants are so pot bound and there is such a mass of roots that this is not practicable, then a dressing of sphagnum will be the next best thing. In either case they should be abundantly supplied with strong liquid cow manure, and if liberally fed they will grow and flourish for many moons in very cramped quarters. On the whole the brother has no special cause for uneasiness; it is always desirable to get a good specimen, in as small a pot or tub as possible. Palms don't require to be shifted very often, and the longer "Gardener" can keep his in condition without re-potting the better. Baltimore. A. W. M.

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Again offer an unlimited quantity of Hinze's White Carnation Cuttings from sand-bed at \$7.00 per 1000. Also Mrs. Garfield, a fine pink, and early bloomer, \$1.50 per 100.

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The best for florists' use. Experiment carefully with new varieties. Hold on to those that are known to be good. 2-inch pot plants, \$2.00 per 100, \$30.00 per 1000. Orders taken for Rooted Cuttings in the spring at very low rates. Write how many you want, and get lowest prices.

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New Carnations.

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Orders booked now for Spring delivery of these popular new varieties. Send for price list. **ROOTED CUTTINGS** of other leading sorts of Carnations.

I make a specialty of growing Carnations. Stock is true to name, and free from disease.

P. O. Box 226. WM. SWAYNE, KENNETT SQUARE, PA.

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COMPLETE LIST OF STANDARD VARIETIES.

Send for it and get my prices on well Rooted Cuttings, guaranteed true to name. Don't miss getting special price on **HINZE'S WHITE** in quantity.

CANNA EHEMANI. Have about 300 to spare, at \$10.00 per hundred, \$1.50 per dozen **SMILAX.**

Will have fine stocky plants for delivery from March 1st to April 15th at \$6.00 per thousand, 85 cents per hundred. Write for particulars.

PANSIES. After March 1st will have plants at prices according to size. Have one strain only and that is the best

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

CARNATION PINKS.

CUT BLOOMS of Fancy varieties in colors of Scarlet, Yellow, Pink, Crimson, White and Variegated: all long stems, at \$2.00 per 100; half long and half short, at \$1.50 per 100 by express. Regular supply to florists solicited.

ROOTED CUTTINGS of the best Winter Blooming Varieties, at \$1.50 per 100; \$12.50 per 1000. Well established plants out of 2 1/2-inch pots in March, at \$3.00 per 100. Strong, healthy Pips or side shoots, unrooted, NOW, at \$7.50 per 1000.

Rooted Cuttings of our New Pink Colored Carnation "**ROSEMARY**" at \$5.00 per 100. Sample blooms mailed on receipt of 10 cents.

CHAS. T. STARR, Avondale, Chester Co., Pa.

100,000. CARNATIONS. 100,000.

From Pots, Flats and Rooted Cuttings of 50 standard varieties. Price list FREE.

L. L. LAMBORN and WM. SWAYNE, \$10.00 per 100. Rooted Cuttings, \$5.00 per 100. HINZE'S WHITE, Rooted Cuttings, \$10.00 per 1000. Orders booked.

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Grown in large quantities for the trade, of the Wm. Swayne and L. L. Lamborn. Having the largest quantity, outside of the originator, for sale at the following prices: \$10.00 per 100. Buttercup, \$3.00 per 100, \$25.00 per 1000. Grace Wilder, Grace Fardon, Sunrise, Springfield, Century, at \$2.00 per 100, \$15.00 per 1000. Hinze's White, Peter Henderson, Snowdon, Lady Emma, Phila. Red, Scarlet Queen, Portia, Seawan, Chester Pride, Petunia, Hinsdale, Duke of Orange, Quaker City, \$1.50 per 100, \$12.50 per 1000. Miss Jolliffe, Scarlet Gem, De Graw, Edwardsii, White LaFayette, \$1.25 per 100, \$11.00 per 1000.

Plants now ready. Also florets of the above varieties at \$1.50 per 100.

Cash must accompany all orders. Orders booked now for Spring delivery.

ISAAC LARKIN, Toughkenamon, Chester Co. Pa.

ROOTED CUTTINGS OF CARNATIONS AND VERBENAS A SPECIALTY.

Orders will be booked now and ready for delivery Jan. 1st. Verbenas in 40 varieties, largely scarlet and white, including the best MAMMOTHS. Rooted cuttings \$1.00 per 100, \$8.00 per 1000. Stock plants 2 1/2 in. pots \$2.50 per 100, \$20.00 per 1000. Carnations, rooted cuttings in 20 the sorts \$2.00 per 100, \$15.00 per 1000. My stock is strong and healthy, and cannot fail to please. Correspondence solicited. Address

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Carnations, Rooted Cuttings.

GRACE WILDER, HINZE'S WHITE,

ALEGATIÈRE, GLOWING COAL,

ETC., \$10.00 per 1000. Also other and newer kinds.

100,000 NOW READY. Send for circular to

H. E. CHITTY, Paterson, N. J.

CARNATIONS.

ROOTED CUTTINGS OF Edwardsii, Scarlet Gem, Phila. Red, Crimson King, Fascination, De Graw, La Purite, etc., \$1.25 per 100, Portia, Duke of Orange, Chester Pride, Peter Henderson, Mrs. McKinsey, etc., \$1.50 per 100. The Century, Robt. Craig or Gardeld, Grace Fardon, Grace Wilder, Sunrise, etc., \$2.00 per 100. Buttercup, Field of Gold, Dawn, Fancy Andalusia, Mrs. Cleveland, etc., \$3.00 per 100.

PLANTS in 2-inch rose pots at double the above rates. Pips when we have them at one-half these rates. Wm. Swayne, L. L. Lamborn (will sell plants only), \$10.00 per 100. Pride of Kennett, fine crimson (plants only), \$5.00 per 100.

NOTICE.—We offer the following discounts on pips, rooted cuttings or plants: 500, 5 per cent off; 1000, 10 off; 2000, 15 off; 3000, 20 off; 4000, 25 off; 5000 or over, 30 off. Terms always CASH. Send for circular. **W. R. SIELMIRE, Avondale, Pa.**

TO MAKE ROOM

I offer a few hundred good field grown Carnations

HINZE'S AND GARFIELD'S,

wintered in cool house in pots, at 75 cents per dozen, \$5.00 per 100, cash. This offer not good after March 1st. I also offer Per 100 Smilax Seedlings, transplanted from flats, \$1.00 Begonia Louis Chretien, 75 per doz. . . . 5.00

JOSEPH E. BONSALE, 308 Garfield Ave., Salem, O. Mention American Florist.

Carnations, Rooted Cuttings of

HINZE'S WHITE, EDWARDSII, PETER HENDERSON, PRES. DE GRAW, PHILADELPHIA RED, PRES. GARFIELD, at \$1.25 per hundred; \$10.00 per thousand. **GRACE WILDER, GRACE FARDON, MISS JOLLIFFE, SPRINGFIELD, SEAWAN,** at \$1.50 per hundred.

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UNITED STATES NURSERIES,
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THE NEW CHRYSANTHEMUM
MRS. ALPHIEUS HARDY.

This remarkable and exquisitely beautiful Chrysanthemum has received the highest honors wherever exhibited.

"The most remarkable flower of recent introduction."—*The American Garden.*

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Plants ordered now will be delivered in April. Price of plants, \$1.00 each.
Descriptive Catalogue of New Chrysanthemums mailed on application.
Do not delay in ordering this beautiful Chrysanthemum.

JAMES R. PITCHER.

W. ALBERT MANDA.

PELARGONIUMS.

I have 150 plants of Regal Pelargoniums of the very choicest varieties, all good healthy plants in 4-inch pots to sell. Price 50 cents each.
Also choice named double, single, and ivy leaved Geraniums. Coleus of choicest kinds.

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VERBENAS.

OUR VERBENAS ARE PERFECTLY HEALTHY

Stock Plants XX Mammoth Set Per 100 Per 1000
" General Collection, \$1.00 \$5.00
Rooted Cuttings " 1.00 8.00
" XX Mammoth Set 1.25 10.60

ROSES.

Mermets, Cook, Adam, Souy, d'un Ami, Safrano and Brides, from 2 1/2-inch pots, strong plants, 5.00
Ampelopsis Veitchii and Quinquifolia, pot-grown first size \$8.00, second size \$6.00 per 100.
Eucharis Amazonica, strong plants from 5-inch pots, \$15.00, 4-inch pots \$10.00 per 100.
Geraniums, New and old varieties, 2 1/2-inch pots, per 100 \$1.00; per 1000 \$10.00.
COLEUS, from pots. Best collection, per 100 \$1.00, per 1000 \$5.00
" Rooted Cuttings, Best collection, per 100 \$1.25; per 1000 \$10.00

CARNATIONS, ROOTED CUTTINGS.

Peerless, Huze's White and Edwards, per 100, \$1.50; per 1000, \$12.00. Fred Johnson, The Century, Portia, Snowdon, Jas. Garfield and Allegriani, per 100, \$2.00; per 1000, \$15.00.

Trade list of florist stock on application.

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VERBENA.

New stock, 35 distinct best bright colors; remarkable vigor; none healthier.
Rooted Cuttings, 3 of each, \$1.00; in mixture, 75 cents per 100, \$1.50 per 1000.
Seedlings, once rooted, Panies in finest mixture, Petunia, Yellow Throat and Lilliput, 6c. per 100. Verbenas of my superb strain, 50 cents per 100; \$2.00 per 500. Many other seedlings. Write for descriptive list. All goods first-class, and sent prepaid.
DANIEL K. HERR, Lancaster, Pa.



"SNOWFLAKE" STOCK.

In habit this stock closely resembles the Dwarf Pyramidal; it produces a vigorous main spike of uncommonly large and very double snow white flowers and, when fully developed, numerous flowering side shoots. Its glossy dark green foliage renders the dazzling whiteness of the flowers more conspicuous. It is one of the earliest of the Dwarf Ten Week Stocks, and is admirably adapted for forcing. Seed produces about 60 per cent of dbl flowers. Trade pkt. 50c. Smilax, new crop 50c. Mignonette Machet 1.00
Verbena New Mammoth, grown from original Stock, Trade pkt. 50c. \$4.00
If you do not receive our Trade Price List offering a full line of Seeds, Plants and Bulbs, address a post-paid card to

HENRY A. DREER, Florist and Seedsman, Philadelphia.

100,000 VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.
FINE POT PLANTS, \$2.50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for Circular.

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Having increased our facilities for propagating, we hope to be able to fill all orders for plants or rooted cuttings. Our list comprises only the best Winter Blooming varieties.

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Perfectly clean and free from all disease. Can have as many Standard Colors as you desire in your order. Goods packed light. Will guarantee safe arrival of plants.

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Stock Plants Per 100 Per 1000
Transplanted on benches, EXTRA \$2.50 \$20.00
Rooted Cuttings 1.00 8.00

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BEST STANDARD SORTS

Stock Plants 2.50 20.00
Rooted Cuttings 1.00 8.00

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SOME MONEY, for which I will send as follows

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Per 100
\$35 Ralph, at the low price of 2.75
720 Queen of West 2.00
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COLEUS.

250 nice vigorous plants from 2 1/2-in. pots, with from 2 to 5 cuttings on each plant. 3.75

PRIMROSES.

150 nice strong plants just beginning to bloom. Every plant in bud and bloom, only 1.00

Address N. S. GRIFFITH,

JACKSON CO. INDEPENDENCE, MO.
(Independence is well located for shipping, being 8 miles east of Kansas City.)

Indianapolis.

The third annual meeting of the Society of Indiana Florists will be held at the State House this city Feb. 21 and 22. Programmes may be had from Wm. G. Bertermann, secretary, this city.

Trade has not been very satisfactory this season. While there are the usual number of society events the decorations have usually been on a cheap scale. One exception was the Commercial Travelers Association's ball and banquet. At the latter tables were set for 1,000 people. Wiegand decorated the tables and Bertermann Bros. the hall.

Wm. Langstaff, president of the local club, is now representative from this county in the state legislature.

Miss Christine, oldest daughter of Mr. Fred Dorner, Lafayette, Ind., died Jan. 29. Miss Dorner was a very bright, intelligent young lady and of very great assistance to her father in his business as well as an affectionate daughter. She always took an active part in the exhibitions of the Society of Indiana Florists, and at future ones her work will be sadly missed. A committee of three members of the society attended the funeral bearing a suitable floral tribute. Flowers were also sent by other Indianapolis florists.

The trade at Christmas was larger than last year, but that for New Year's was smaller. The high prices of roses was a drawback. Quality of flowers was somewhat better than last year; carnations and violets were fine and plentiful. Prices obtained were about equal to last year, in some instances less. There was a sufficient supply of everything except roses.

CHRYSANTHEMUMS.

Six of the Finest Novelties ever introduced, viz:

- WM. H. LINCOLN, NEESIMA,
- MRS. FOTTLER, KIOTO,
- BELLE HICKEY, LILIAN B. BIRD,

Strong plants, \$1.00 each, or the collection of six for \$5.00. Orders filled in rotation after February 1st.

The above are from the famous collection which came to us from Japan in Spring of 1887, a present to a Boston lady, who placed them at our disposal. In this collection was the noted variety named for this lady, "MRS. ALPHEUS HARDY," for the stock of which we received last Spring \$1,500.

See Catalogue with full descriptions.

Seeds for Florists

FROM CAREFULLY SELECTED STRAINS
A SPECIALTY.

Our Wholesale Catalogue for FLORISTS ONLY, is now ready, and will be mailed upon application.

No. 1 Bulbs of Excelsior Pearl Tuberoses 1.50 per hundred, \$14.00 per thousand.

SCHLEGEL & FOTTLER,
BOSTON MASS.

CHRYSANTHEMUMS.

Send for our descriptive circular of the NEESIMA collection of Imported Japanese Chrysanthemums. We offer the cream of the collection to which the now famous "Mrs. Alpheus Hardy" originally belonged.

EDWIN FEWKES & SON, Florists.
Newton Highlands, Mass.

CARNATIONS! ROSES!

ROSES.—Young plants of HERMET and BRIDE, from 2½-inch pots
Hinz's White Carnation, \$9.00 a 1000. Rooted Cuttings Portia \$2.00 a 100, and other good sorts now ready.

White Carnation Flowers for sale, long and short stemmed, \$1.00 per 100. Also Pansy Plants for Spring delivery, cheap. Write for prices.

E. M. GIDDINGS, Corfu, N. Y.

P. S.—Healthy stock, and well rooted.
Mention American Florist.



SPRING BULBS.

	Per doz.
Amaryllis Johnsonii	\$5.00
Amaryllis Vittata	4.00
Hollyhock Roots, ass't colors	1.25
Begonia, Tuberos Rooted, 100 \$15..	2.50
Clematis Coccinea, scarlet.	2.50
Clematis Jackmanii	3.00
Clematis Crispa	3.00
Gladiolus, mixed, per 100 \$2, per 1000 \$15	

LILY AURATUM—\$9 per 100, or \$85 per 1000.

LILY OF THE VALLEY—I can still offer fine large Pips at \$11 per 1000, \$100 per 10,000

PEARL TUBEROSE—The same stock that has given so much satisfaction the last three years. \$16 per 1000, \$75 per 5000.

BOUQUET GREEN—I can supply good Green at \$4 per 100 lbs., \$70 per ton.

DYED GREEN—35c per lb., \$30 per 100 lbs.

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Our Floral Guide contains all the new and valuable novelties in Europe, and an immense amount of valuable information; it is the largest, and totally different to any other catalogue. Our plants are so good (and our well-known packing) that we get them out alive all over the world. Messrs. Peter and John Henderson, Thorpe, Dreer, Atlee Burpee, etc., are our personal friends and visitors when in England—sent free for 15 cents.

FOR CUT FLOWERS. Our Begonia "OCTAVIE" which rivals the Camellia and Gardenia, and received almost as many certificates as all other Begonias put together, would be of immense value to the American trade. Tubers 10s. 6d each.

MR. MYRON A. HUNT, florist, Terre Haute, Ind., U. S. A., April 2nd, 1888.

The Begonias are at hand, in the best of order. Allow me to thank you for the very prompt attention to my cablegram.

MR. W. TRICKER, gardener, Indge Benedit, New Dorp, L. I., New York, U. S. A., Jan. 12, 1888.

The box of plants arrived in good condition, notwithstanding twelve days' delay in Customs—thanks to your excellent packing.



CHRYSANTHEMUMS.

Price list of plants now ready. Prize Hybridized Seed by John Thorpe, 25 cents per packet.

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E. O. McCormick, Gen. Passenger Ag't. Chicago.
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We have made special arrangements with a large grower of this charming plant, and offer fresh, new seed at a price never before heard of. As long as stock lasts, we will fill orders from this advertisement at \$1.00 per thousand seeds.

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Many additions of Choice New varieties this season.

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UTICA, N. Y.

CUT BLOOMS AT ALL SEASONS.

ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

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Ferns, Palms, Orchids

FERNS FOR FLORISTS' PURPOSES,
BY THE HUNDRED OR THOUSAND,

GEO. WITTBOLD,
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Our Catalogue of New, Rare and Beautiful Plants for 1889 ready in February.

It contains lists of all the most beautiful and rare greenhouse and hothouse plants in cultivation, as well as all Novelties of merit; well grown and at very low prices. Every plant lover should have a copy.

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A very large stock of choice

East Indian, South American, &c.

— ALSO —

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15 FINEST VARIETIES OF MAPLES, 1-4 ft.
STYRAX JAPONICA, STYRAX OBOSSIA. (Read article in this year's *London Garden*.)
SYRINGA JAPONICA, HARDY MAGNOLIAS,
THE GRAND CONIFER SCIADOPITYS V.

"UMBRELLA PINE,"

in sizes 1-6 ft. (Has been shipped safely by frt. to Boston.)

RARE VARIETIES RETINOSPORAS.
50 VARIETIES TREE PÆONIAS. NEW HERBACEOUS PÆONIAS.
NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEMATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

FOR THE GREENHOUSE.

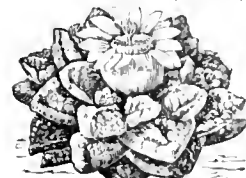
RHAPIS AND CYCAS PALMS, BAMBUSA NANA, AR-AUCARIAS, TREE FERNS FROM AUSTRALIA.
32 VARIETIES OF JAPANESE LILY BULBS.
LARGE ASSORTMENT OF SEEDS FROM JAPAN AND CALIFORNIA.

Send for our Catalogue. Now is the best time to order for Spring delivery East. We have many valuable novelties never before introduced. Send for estimates.

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10 Fine Plants by mail for \$1.00 (each distinct). Wholesale list, catalogue & hints on Cacti free to the trade, others 10 cents.

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Immense Stock, at Low Prices to the Trade.

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ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS. — *New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Viburnum Plicatum, Buxus Variegata, Althea, New Deutzia, New Weigela, &c. Honeyuckles, Wistaria, Clematis, Akobias,* and all best hardy climbing vines. **VERY LOW.**

Chrysanthemums, too selected finest sorts. *Moon Flowers,* extra strong, propagated from blooming plants. *Finest Summer Flowering Bulbs, Gladiolus, Tuberoses and Japan Lilies.*

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One of the finest plants for sub-tropical bedding, strong roots	Per 100
Cannas in 8 best varieties.	\$12 00
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Plumbago, Capensis Alba, strong 3-inch pot plants.	2 50
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Also an Immense Stock of Roses, Geraniums, Chrysanthemums, and other Florists' Stock.

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— NO LESS QUANTITIES AT THESE PRICES. —

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Will you kindly inform me of the best way of erecting a house for raising tomatoes and other early vegetables for market? I am thinking of erecting a house 16 feet wide by about 80 to 85 feet long and would like to know if it is best to set it facing north and south or east and west, also how high to build walls before starting in with glass, then how high glass sides should be to where roof begins and then what slope to give my roof and whether you would advise using brick or stone for walls. I have noticed several inquiries of this kind in your paper therefore put these questions.

Natrona, Pa. P. S. BRACKENRIDGE.

[We believe that nearly all forcing houses, whether for flowers or vegetables are now three-quarter span facing south. On a three-quarter span house the front wall is usually from four to five feet and the back wall from six to eight feet high. In commercial houses glass is rarely used in the side walls. Slope of roof should be about 45 degrees, sharper rather than the reverse. Both brick and stone are good for walls, which had best be hollow. Use which ever material is most convenient and cheapest. Everything else being equal use stone.]



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5000 ELECTROTYPES FOR ILLUSTRATING FLOWERS, SEEDSMEN, AND NURSERYMENS CATALOGUES CHEAP.

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POULTRY HOUSES,

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Rubber Packing for Iron Pipe constantly on hand

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FOR
PARTICULARS.

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PLANTS TO THE TRADE.

We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

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| | Per 100 |
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| Begonia, Flowering Rubra, Weltoni- | |
| ensis Rubra, Alba, Zebrina, Robus- | |
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HAMMOND'S GRAPE DUST.


After nearly two years' experience I should call "GRAPE DUST" the great mildew destroyer. My greenhouses are so situated that I have had much trouble with mildew, hence what I say concerning the Grape Dust is from my experience in its use.
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"GRAPE DUST" has come to stay! We have sent scores of free samples to parties who pay either postage or expressage, so that anyone can try the preparation to their own satisfaction. If you want a sample write to

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5 PKGS EARLIEST OF ALL TOMATO SEEDS

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WITH YOUR NAME AND ADDRESS. We shall send to you our illustrated Catalogue with prices attached of our own grown stock of Trees, Seeds and Plants.

We propagate extensive stock of Fruit, Shade and Ornamental Trees, Grapevines, Berry Plants, Asparagus Roots, Roses, and all kinds of soft wooded greenhouse and bedding plants. Also Seeds, Vegetables, Flower and Field, Garden and Farm Tools of all descriptions.

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Liberal discounts to florists taking orders for our Specialties.

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A LIMITED STOCK OF THE NEW HARDY EVER-BLOOMING ROSE MME. GEORGES BRUANT, \$1 each.

Illustrated Catalogue with retail prices gratis.

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ROCHESTER COMMERCIAL NURSERIES.

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Both Fruit and Ornamental, ROSES, Vines, Clematis, Rhododendrons, etc. Illustrations Catalogue free to customers. Wholesale List FREE.

LAWN ROLLERS.



First Quality of our own make supplied to the trade at low prices.

Write for prices

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Every kind of hardy Fruit and Ornamental Tree or Plant (new or old, true to name and strictly first class), at half the price of most traveling agents and other nurseries.

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Plants by mail to all points of the Continent a specialty.

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Fine Cutlery, Extra Label Wire, Box Clamps, Rattia Spades and other supplies for Nurserymen and Florists. Send for price lists.

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RHODODENDRONS, ROSES AND YOUNG STOCK

FOR FLORISTS AND NURSERYMEN.

We have in our cellars, ready for immediate shipment a very fine lot of Grafted Rhododendrons with bloom buds. Very cheap; also, some extra strong Dormant H. P. Roses, Two years old, including such varieties as Mme. Gabri, Lutetia, Gen. Jacqueminot, Dieback, La Reine, also some fine Free Roses; also, a large and complete assortment of Stocks, Seedlings, Etc., both Fruit and Ornamental. Send for our special price list. Ad dress

W. S. LITTLE, Commercial Nurseries, Rochester, New York.

Freight Rates on Pots.

The new western freight classification which took effect January 10 on all railroads west of Chicago, changed florists' flower pots (earthen ware) in crates from fourth class to second class, same as crockery. This has nearly doubled the freight charges west of Chicago. Southern points remain as before. Texas and Pacific Coast points are still fourth class and only slightly advanced in rate. Rates east of Chicago and St. Louis, including most of Illinois, are same as last year. This brief statement will answer hundreds who ask why they have been obliged for last month to pay such advanced freight charges at places west of Chicago.

J. NEAL PERKINS.
Syracuse, N. Y., Feb. 10, 1889.



THE LITTLE CLIMAX SPRAY PUMP
HANDSOME,
USEFUL,
DURABLE.

ITS EQUAL has not been invented for spraying delicate plants and for using insecticides in greenhouses to destroy MILDEW, RED SPIDER, ETC., or for spraying Flowers and Shrubs on the lawn. It throws a Fine Spray 15 feet and a Solid Stream 40 feet; a perfect Pump for washing Windows, Porches, Carriages, etc. Only weighs 21 pounds; legs are unscrewed and it is packed in a neat, strong box for shipping.

FURNISHED COMPLETE FOR \$12.00.
Liberal discount to the trade. Write for large illustrated price list of Spraying Machines and Insect Poison. ADDRESS

THE NIXON NOZZLE & MACHINE CO., Dayton, Ohio.
Mention American Florist



Greenhouse Pipe and Fittings



Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

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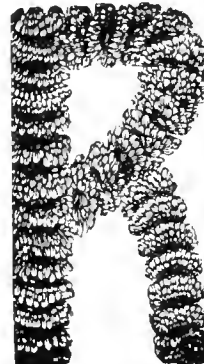


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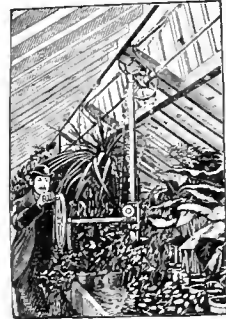


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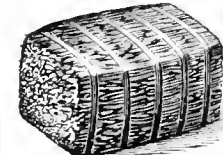
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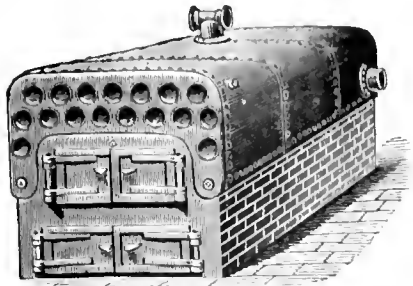
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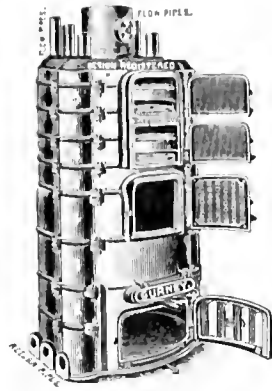
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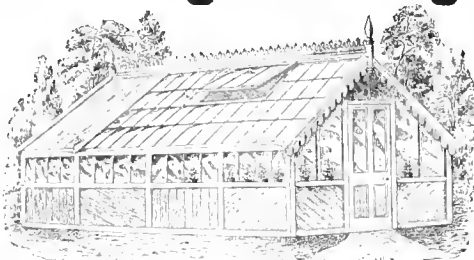
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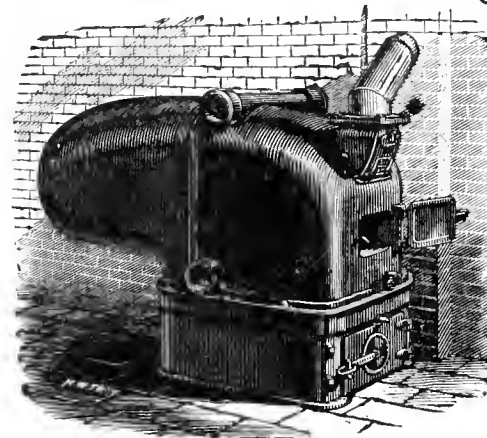
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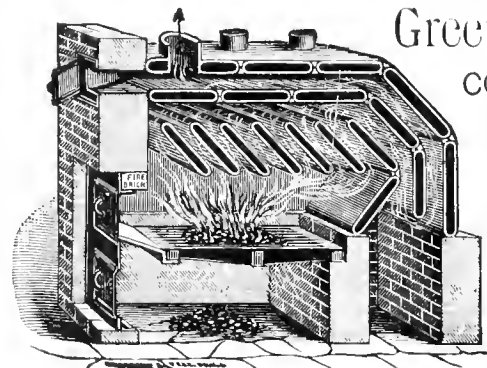
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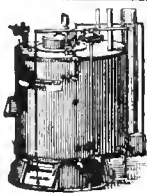
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THE AMERICAN FLORIST



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Vol. IV.

CHICAGO AND NEW YORK, MARCH 1, 1889.

with Supplement.

No. 86.

THE AMERICAN FLORIST

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EASTERN OFFICE,
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JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Tette Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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THIRTY-TWO PAGES this issue.

Spring Trade Price Lists.

In our supplement to this issue will be found a number of spring wholesale lists in a form very convenient for buyers. We hope to make this feature of the paper so valuable to both buyer and seller that the principal ones in the latter class will find it to their advantage to use the columns of the FLORIST in preference to printing and mailing lists themselves. We bespeak for those who have placed their lists in our first price list supplement a liberal share of your patronage. Our many friends in the trade who so continually wish the FLORIST success can materially assist by confining their dealings as far as possible to those who advertise in its columns.

New York Notes and Comments.

Isaac H. Young, senior partner in the firm of Young & Elliott, died suddenly at his home in Brooklyn on February 10, aged 63. Mr. Young has been identified with the seed trade for many years and was widely known in horticultural circles. He was for a number of years treasurer of the deceased New York Hort. Society, and was very highly esteemed in all his business relations. He was unmarried. He leaves a large property, chiefly in real estate. The firm will continue to bear its present name, one of the late Mr. Young's brothers being already a member of it.

Allium Neapolitanum is an old bulb now being forced very successfully. It is a beautiful pearly white and its clusters of bloom are very dainty; it can be had in by Christmas. It was introduced into cultivation in 1823, but seems little known here. It is grown in boxes like freesia; the bulbs are only the size of large peas, but it does not do to plant them too closely together. A. Hermetii grandiflorum is a larger sort, described as an improvement on A. Neapolitanum. A good many of the alliums are very ornamental, but they must be handled carefully, as any bruise is apt to bring out their characteristic odor. Scratch an allium and you'll find an onion.

Relative to the now popular genista, some of the growers are recollecting how a few years ago these plants were really unsalable, except in small quantities; more than one nurseryman has been obliged to devote most of his stock to the rubbish heap, to make room for better paying stuff. But at that time comparatively few plants were used in decoration, and the demand for cut flowers was chiefly devoted to roses and carnations. We can remember the time when cyclamens and aspidistras were thrown away; now there is quite a run on both. Moral: when you have a thoroughly good thing keep it; it will be salable in the future, even if it won't sell now.

Cypripedium flowers have been unusually plentiful of late; the market is apt to become overdone. A bad thing with orchids, because they can't be used for everything, and if they ever become cheap enough to be sold at the street stands they may become popular, but they certainly won't pay.

Some variegated ancubas seen at Weir & Sons, large, well grown plants, are used in decorations; they are fully as showy as crotons, and bear more handling without injury. The ordinary Ancuba Japonica makes a beautiful decorative plant, with its shiny green leaves and large red berries. A fine lot of these admirable shrubs was to be seen at George Such's South Amboy nurseries some fifteen years ago; well grown plants do not seem so plentiful now.

A handsome specimen of the Norfolk Island pine (Araucaria excelsa) was noted at Weir's; it would be a fine thing for decorating if it could be handled more freely. However, a good many people among the general public would not appreciate it at its full worth unless assured that it was more expensive than an everyday pine. Several of our hardier evergreens offer good material for plant decorations. Take, for example, the golden retinospora; well grown plants are not only shapely and symmetrical, but the color, bright gold with an under tint of green, shows up finely with darker plants. Occasionally we hear of these and other evergreen shrubs being used for decorating; the fact that they will bear knocking around adds to their value.

Mr. Falconer's remarks on Ipomoea pandurata will be corroborated by all who admire the beauty of this plant. It certainly does not need protection during the winter, for it used to be a very troublesome weed in some places about South Amboy. The fleshy roots penetrate to such a depth that it is almost impossible to extirpate it when once it gains hold in the soil. It is often seen growing in masses with Calystegia sepium, the hedge bindweed. The rose colored flowers of the last named make a charming combination with the white ipomoea. A good many of our native plants seem more appreciated abroad than here, like the pokeweed, here an undesired dweller in waste lands, while in England it forms a desirable addition to the subtropical garden, a distinction its stately habit entitles it to. It is to be hoped, however, that florists, as well as botanical amateurs, will discourage the destruction of beautiful native plants, many of which are becoming scarcer year by year. This is especially true of ferns; Adiantum pedatum and Lygodium palmatum, two of our most beautiful native varieties, are being destroyed by wholesale, and there is no doubt that the scarce walking fern (Camptoporus rhizophyllus) has been rendered still scarcer through the same cause.

A new edition of "Henderson's Hand Book of Plants" is now being prepared, in which the cumbersome Linnaean system of classification is discarded, the natural system only being retained. Mr. W. J. Davidson is Mr. Henderson's aid in this work.

EMILY LOUISE TAPLIN.

California Notes.

Mr. John Henderson, of Flushing, L. I., is spending the winter at East Pasadena, Cal., and through the kindness of Mr. Chas. Anderson we are enabled to publish the following extract from a very interesting personal letter received by him from Mr. Henderson under date of December 26, '88.

"The hotel is situated at the top of a high hill and the grounds are beautifully laid out. Roses flourish better here than at any other place I have ever been. La France with flowers as large and full as Magna Charta; I never before saw any so fine. The Safranos are simply grand; how they would sell if in New York. Perles are also fine and one I first called Isabella Sprunt was excellent, but the gardener called it Coquette de Lyon and I think it must be Etoile de Lyon. Roses are everywhere. There are forty tables in the dining-room and every one has a vase of roses and other flowers in the center. Roses are placed in every room and in the churches the altars are decorated with roses. Heliotropes as standards are fine, also *Canna Ehemanni*, *brugmansias*, calla lilies, *Musa ensete* in flower, *Asparagus plumosus*, *smilax*, *dracenas*, palms, *abutilons* of all colors, *poinsettias*, *pampas grass*, *Paris daisies*, *Passiflora princeps*, beds of gold and silver leaved geraniums bordered with dwarf *ageratum*s. In fact every flower that we have in July and August.

"Among the trees and shrubs are the *encalyptus* which becomes quite a tree here with trunks thicker round than I can span and 50 to 100 feet high—in fact it is the tree of the country; the pepper tree, drooping like a willow, leaves like a mimosa covered with bunches of a small red berry which when bruised gives out a strong aromatic smell, the only trouble with this tree is that it makes its roots on the surface and the other day we had a heavy rain followed by a high wind and I think I saw some twenty blown down; all they do in this case is to cut off all the branches and set the tree upright again. All the Australian trees do well here; of acacias there are immense bushes of all varieties, some are just flowering, but in about a month's time it will be a glorious sight. *Cassia corymbosa* is now in full flower and fine it is. *Grevillea robusta* is 20 to 30 feet high; *Araucaria excelsa* 50 feet; the variegated New Zealand flax in immense bunches with leaves six feet long.

"The proprietors of the hotel here bought the collection of camellias of the late Mr. Hovey, of Boston, they are generally from 8 to 10 feet high, are commencing to flower and in another fortnight will be in full flower."

Chicago.

The Chicago Florist Club's reception and ball occurred the afternoon and evening of February 12 at the First Regiment Armory. In spite of the present scarcity of flowers an excellent showing was made. The hall is the same that the Chicago convention of the Society of American Florists was held in.

The balconies which run the entire length of the hall on each side were profusely draped with laurel and immense quantities of cedar and arbor vitæ wreathing hung in festoons overhead.

Along the walls below the balconies were placed sixteen huge panels six feet square of holly, one in each space between the windows. On each of these panels was placed a loosely arranged pocket of flowers, each one different. These pockets were filled as follows: white camellias, hybrid roses and lily of the valley, Tournesol tulips, Bon Silene roses and lily of the valley, Am. Beauty roses, callas and red camellias, Bennett roses, Bride and Bennett roses, long stemmed red carnations, callas and red camellias, Bride roses and violets, Bon Silene roses and Harrisii lilies, Am.

Beauty roses and lily of the valley, violets and lily of the valley, red camellias and Harrisii lilies, La France roses and white tulips. Each of the window seats between these panels were banked with loose flowers and blooming plants. A very effective one was a flat of blooming lily of the valley in the center and scarlet tulips at each side. The other combinations were all different and too varied to describe.

Below the musicians balcony, which is over the main entrance, was a solid draping of *smilax* caught back clear to the wall. This was studded with red carnations and created a very graceful and pleasing effect. On the face of this balcony, which was also heavily draped with laurel and cedar, was placed in the center a huge shield of red carnations with a sash of calla lilies diagonally across its face, and on each side of this a large star of the same carnations dotted with callas. At each side of the entrance stood a large vase of tulips while a circular bank of plants stood directly in front and was the first thing to meet the eye.

High up on the wall at the opposite end of the hall was the name of the club in 14-inch letters of scarlet *immortelles* and on each side of a cabinet which occupied the center were handsome panels of roses; in front of the cabinet was a group of foliage plants and at a little distance on each side a large specimen palm stood guard. On a table in front of the central group of plants was a large plateau of tulips in blocks of varied colors. From the central chandelier was suspended a ball of red tulips some four feet in diameter, and from two other chandeliers on each side of this were hung smaller balls of red carnations and calla lilies.

For the afternoon reception which was for the purpose of giving an early view of the decorations, eight tables were placed through the center of the hall, each bearing numerous vases of loose flowers. On one of these tables was a large bowl of magnificent *Mermet* roses, undoubtedly the finest that were ever seen in this city. They were simply grand, every flower a specimen to be proud of; they were grown by George Klehm. There were many other handsome vases of Beauties, hybrids, La France, Brides, Bennetts and other roses in addition to Harrisii lilies, freesias, tulips, etc., and three handsome plateaus, one of daffodils and violets, another of carnations, half white and half red, and the third one-third each of Harrisii lilies, scarlet tulips and yellow *calendulas*. One table was a bed of moss in the center of which stood a blooming plant of the *Jacq. rose*, while on the moss orchid blooms reclined, with a plant of *Lycaste Skinnerii* bearing six blooms in a prominent position.

A handsome vase of cut orchids containing flowers of over a dozen varieties occupied a prominent position in front of a group of tropical plants and attracted much attention. There was also a plant of *Dendrobium Ainsworthii* bearing three superb spikes of bloom. All of the orchids were kindly contributed by Mr. Wm. H. Chadwick, who has undoubtedly the finest private collection of orchids in this city.

Two vases of the new pink carnation *Tidal Wave* were very effective and caught the eye of carnation growers and flower lovers alike. It certainly is a very handsome flower and its color, form and fragrance make it very salable. They were sent by the growers, Messrs. W. P. Simmons & Co., Geneva, O.

At night for the ball these tables were

moved to the sides of the hall to make room for the dancers. The toilets of many of the ladies were decidedly elaborate and quite a number of the club members were sporting full evening dress.

The daily papers all gave lengthy descriptions of the decorations, and the prime object of the affair was thus accomplished, that is to bring the matter of floral decorations prominently before society people and to show them what can be done in this line when a little money is used.

A number of florists from other cities were present including Messrs. H. L. Sunderbruch, Cincinnati, Chas. E. Hay, Springfield, Ill., F. J. King, Ottawa, Ill., and Ed. Jansen, the basket manufacturer of New York.

Boston.

At the meeting of the Massachusetts Hort. Society on Saturday, February 9, an essay on "Forestry as applied to Massachusetts," was read before the society by J. B. Harrison, secretary of the American Forestry Congress. Mr. Harrison is an entertaining and forcible speaker and understands his subject thoroughly. It was one of the most enjoyable essays of the course. One can not listen to Mr. Harrison without being deeply interested.

An adjourned meeting of the society was held on Saturday, February 16, to listen to the report of the committee on the future disposition of Horticultural Hall. The committee reported a plan for restoring the building practically to the original form and to continue the use of it for the society's exhibitions and other entertainments as heretofore. Among the improvements contemplated are enlarged space for the library, a large elevator for hoisting plants, additional dressing-rooms and fireproof partitions. The estimated cost of the improvements is \$12,000. The society also voted to procure duplicate copies of the paintings which were destroyed by the fire.

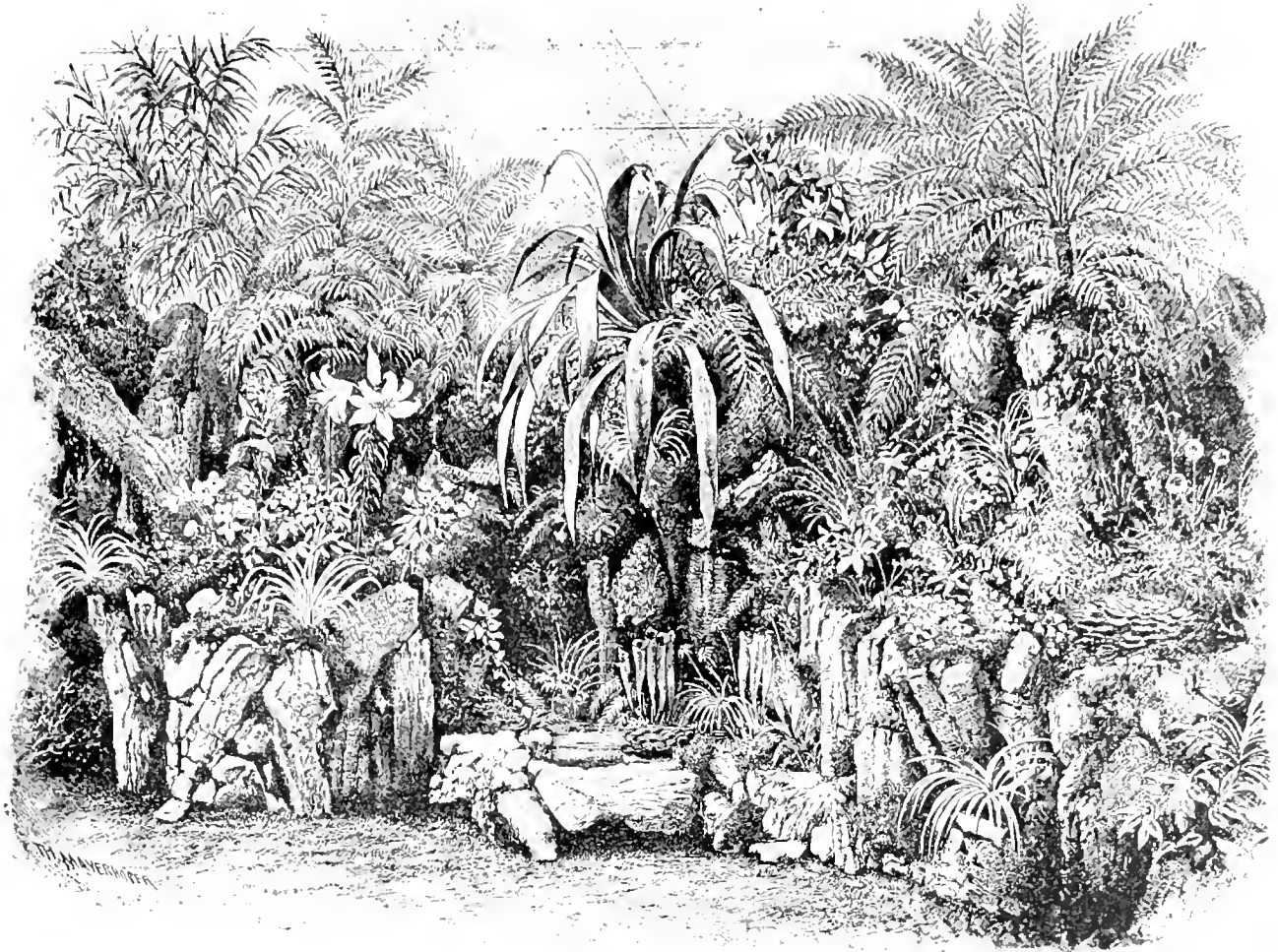
After this matter was disposed of a paper was read by Jackson Dawson on "Shrubs that are perfectly hardy." As is well known Mr. Dawson is at home on this subject. In the course of his remarks he alluded to the nursery catalogues which are circulated so extensively throughout the country and regretted that some of the money expended in getting up these catalogues had not been devoted to giving more reliable and explicit information regarding the hardiness and adaptability of the various trees and shrubs to different locations. People laying out new places are apt to be misled by the descriptions of many things and much time is lost and money expended in planting unsuitable varieties. He made an earnest plea for correct and unexaggerated catalogue engravings.

The Gardeners' and Florists' Club held a special meeting on Tuesday, February 19, to take action on the report of a committee on revision of the constitution and by-laws. The proposition to form a sort of employment bureau for gardeners and florists was favorably acted upon. A scheme for death benefit assessments was voted down by a very decided majority.

NOTES.

Peter Ball says "American Beauty is blooming every day and will produce more money to a given space than any other hybrid rose under cultivation."

"Take your hat off when you look at that!" So says Mr. Wm. Robinson, gar-



CONSERVATORY DECORATION

dener to F. L. Ames, as he shows the visitor some special gem in his orchid collection. Mr. Robinson can not complain of lack of company, for recently there have been several pilgrimages to his establishment. It never looked so well, and is to-day probably the healthiest and most interesting collection of orchids in America. Mr. Robinson is an orchid enthusiast of the most pronounced type and will worship an extra spot or wrinkle on a cattleya with a veneration which would put to shame the most devout follower of Brahma.

"Jim the Penman," the "florists' fiend," is here. But he is letting the florists alone at present. He is introducing a book for yachtmen. But he says he longs for the old days of the "Dictionary of Gardening," and the genial florist friends who were all ready to meet him half way. W. J. S.

Greenhouse Embellishment.

Apropos of the excellent remarks on conservatory decoration (page 231), the late Donald Grant remarked to the writer on several occasions that well kept commercial places were invariably conducted by men who had formerly been private gardeners. But I have certainly seen some very ill-kept places presided over by men who had spent the greater part of their lives as private gardeners, while on the other hand some of the most

orderly and best appointed places I have ever been through belonged to men who had never worked an hour on a private place. Private establishments are doubtless good schools in which to acquire habits of neatness and order that will generally stick to us even amid the hurly-burly of commercial life, but while proper training is an important factor in establishing such habits, considerable depends on a man's natural tendencies, and from what the writer has seen of people and things he feels quite satisfied that there are florists—as there are men in all other vocations—to whom tidiness is an utter impossibility, but they are the exception, and so far as the florist business is concerned the exception is becoming more marked every year. Orderly, neat and well appointed commercial places are more generally met with and although some of us, owing to limited capacity, can't well spare room for a regular show house, we can do our best with the room and stock at our disposal to make our houses as attractive as possible. The appearance of a common every day bench of coleus or geraniums may be vastly improved by a little care and taste in arranging the varieties and a few plants of other species, ferns, begonias, dracanas, etc., dotted about the benches will impart an air of embellishment to the plainest greenhouse. The florist who does not find genuine recreation and enjoyment in devoting an occa-

sional leisure hour to giving a decorative touch here and there about his domain, to whom clean, orderly and attractive houses are not a source of infinite pleasure and personal gratification is lacking in ability to properly appreciate and enjoy one of the most fascinating occupations in the world. A. W. M.

Baltimore.

Conservatory Decoration.

The illustration (reproduced from *Müller's Deutsche Garten Zeitung*), shows an arrangement of plants on pieces of cork in the form usually followed in rock work, and shows what a pleasing picture can be made with but a limited number of plants if arranged to show each individual to advantage. A careful study of the arrangement illustrated will not be time wasted by any of our readers.

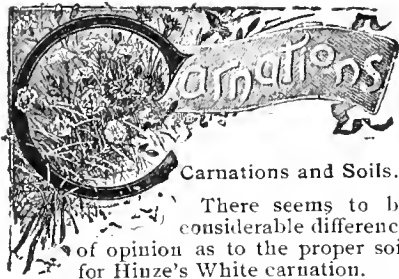
Proposed Import Duty on Plants.

The FLORIST is in receipt of advice that an association of nurserymen has recently, through a memorial petitioned Congress requesting that a duty of 30 per cent be placed upon all plants imported into the United States. These are now free as is well known to our readers. The question of tariff or free trade is so large a one and has in the past year been such a direct political question that at present we do not choose to discuss it in our columns.

Bulbs, as is also generally known, pay at present 20 per cent, the duty having been reduced 10 per cent some three years ago. It may not be generally known that lily of the valley and spirea are always imported as plants paying no duty.

Such of our readers as feel opposed to the proposed duty of 30 per cent on plants should at once write their congressmen plainly their views on the subject and reasons therefor. It was only through active efforts of this kind that the postage on seeds was reduced and our readers may well profit by the results in that direction if they are anxious that plants remain on the free list.

We may say that we can not see any sense in imposing a duty on any plants or bulbs which are not and can not be successfully grown in the United States.



Carnations and Soils.

There seems to be considerable difference of opinion as to the proper soil for Hinze's White carnation.

Here in Corfu there are perhaps 8,000 or 10,000 Hinze's grown annually for cut blooms and all are doing finely; I doubt if any excel us in size of flower. There are three different firms here growing this carnation, one on a light sandy soil, another in a rather heavy soil, the third (myself) in a medium soil—neither real light nor real heavy—and I can see no particular difference in the plants. I recently cut one bloom that measured 3½ inches in diameter.

We all grow them in three-quarter span houses running east and west (regular rose houses) with plenty of heat (from 48° to 54° at night), give all the air possible and syringe on sunny days. I give them plenty of liquid manure, growing in from four to six inches of soil on raised beds in all cases. I think that success depends more upon the heat, ventilation and general care than the soil. In Mr. Hartwig's case I think that perhaps when he moved to his new place he secured better stock plants or came nearer giving them the proper treatment than he had before. Of course carnations in a heavy clay soil require different treatment from those planted in a light sandy soil. Methods which bring success on one soil may result in failure on another. I think that any good soil will do if the treatment is adapted to it.

Portia with me is very free, always blooming well, and with long stems.

Buttercup is another fine sort; the cuttings should be rooted early in the season to do well and to bloom well the following season as the young plants grow very slowly at best, and as the buds do not blight when the plants are lifted from the field it is an advantage to have plenty of buds on them at that time. They will commence to bloom at once after being planted on benches and grow rapidly from that time on. Last year, from a little patch of 300 plants I cut 400 flowers at Christmas and 250 at New Year's which brought me \$4 a hundred, plainly showing that this variety is a free instead of a shy bloomer as I have heard some state.

Would like to hear from others con-

cerning Buttercup, Hinze's White and some of the newer sorts.

Corfu, N. Y. E. M. GIDDINGS.

Carnations.

Two years ago I grew my carnations on such soil as Mr. Hartwig describes, a sandy, black muck, the result being a nearly total loss of stock, many of the plants died in the field and most of those placed in the benches died before spring. I attributed this to excessive wetness of soil due to an unusual amount of rain.

Last summer I grew some DeGraws for flowers in similar soil; they were a failure, while others grown in higher and dryer soil did well. I grew about a thousand seedlings on a slope running down into this low land, the improvement in size and vigor of plants as the higher land was approached was very marked. As far as my experience goes no carnations will do well in a retentive soil.

We can do nothing in this locality with Hinze's White or Buttercup, but the Century, which originated when the Buttercup did, does very well. The Anua Webb seems to do equally well on light or heavy soil.

This season I tried well composted night-soil in my benches, with a light dressing of Bowker's garden fertilizer, there was already some bone in the soil. The result was peculiar, my own seedlings grew with great vigor for a while and then stopped, the older standard varieties grew but very little, they are just starting up now. All alike look healthy and vigorous, but they don't grow. Whether I put in too much manure or committed some other error I can not say. I have never heard that there was any objection to the use of night-soil.

I find that seedlings are more vigorous than the older varieties, probably because they are seedlings and have not been exhausted by forcing.

L. WIGHT.

Framingham, Mass.

About Carnations.

I must certainly agree with Mr. Whittle in regard to soils for carnations; what will do in one locality will not do in another. Here we have a coarse sandy soil with a very coarse gravelly bottom; we can grow Portia, Buttercup, Century and Peerless, but Grace Wilder and Lyon's White are worthless. Of Hinze's White we have only 25 plants, so can not speak of them at present.

What light pink carnation can we grow in place of Grace Wilder? It is such a desirable shade we can not do without it. Our Peerless, Sunrise and Chester Pride this year are badly diseased.

What is the matter with the Edua Craig chrysanthemum? All the stock in this section was diseased so as to be useless. Are chrysanthemums going to be troubled by disease too?

A. B.

Primula Obconica.

If your correspondent, "C. W. Lewis," (page 259), can grow the common Chinese primula to his own entire satisfaction, he should have no trouble in growing *P. obconica*. The same soil, temperature and location that will grow the former will suit the latter exactly. I have never had an opportunity to test the effect of tobacco smoke on *P. obconica* because I always labor to keep them free from fly without subjecting them to smoke. Tobacco stems are kept about the pots and

are generally effective. I have at times syringed the plants with pretty strong tobacco water without, however, injuring them in the least. Plants will begin to bloom generally when a year old and they ought to be in prime condition when two and three years old. The most satisfactory plants are obtained from seed and if we can save our own seed and sow it as soon as it is ripe so much the better.

Baltimore. A. W. M.

Primula Obconica.

In *FLORIST* of January 15 I noticed an inquiry by C. W. Lewis as to best manner of growing *Primula obconica*. Having been quite successful in growing it and as no one has answered the query I propose herewith to give my method of treating it.

Seeds were sown at intervals from fall to early spring and shifted on to 4, 5 and 7-inch pots which by the following December and all through winter were in full bloom, some of them putting up seventy-five or more flowering stems at one time. One 4-inch pot I noticed with sixteen stems in bloom and thirteen more at the same time in bud.

I used the top soil from old hotbeds with some of the manure of the bed mixed in and also added to it about one third part sandy soil from the field. Night temperature averaged about 55° bearing shade well and taking an abundance of water; I think they do a little better for a slight shading. I have never seen any insects on them. They received a light smoking of tobacco generally twice a week, but have never noticed any injury from it either on leaf or flower.

This primula certainly makes a grand plant, blooming nearly all the year round and the flowers keep well after being cut.

Marion, Ia.

I. N. KRAMER.

Verbena Rust.

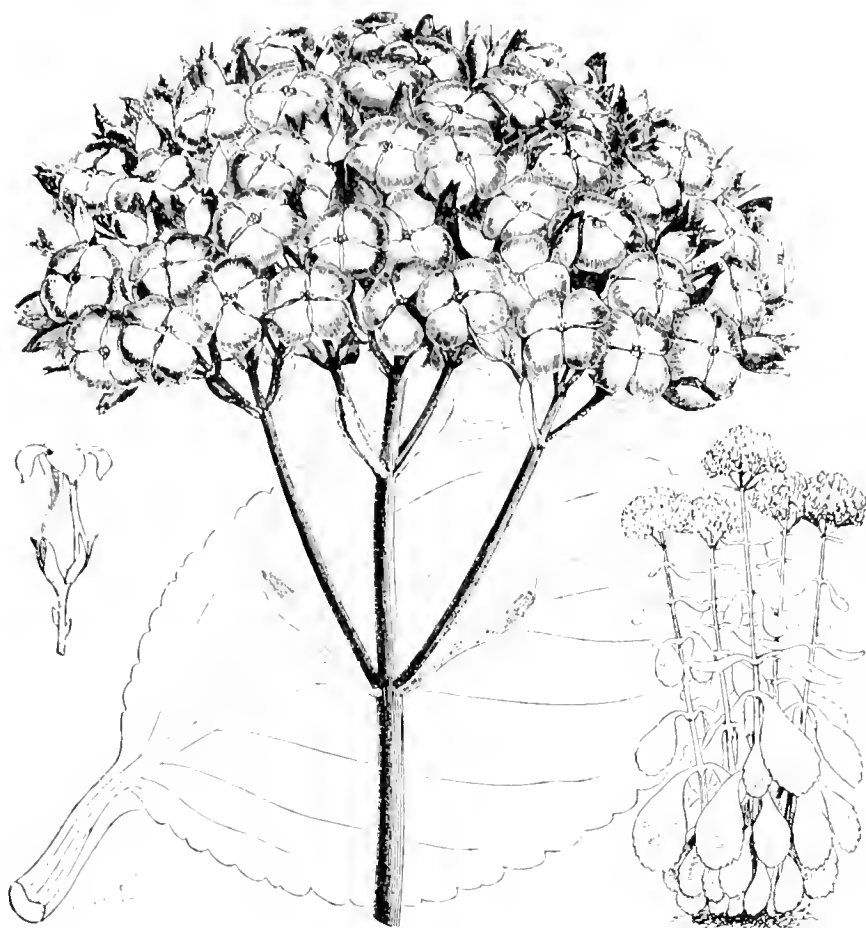
Very general are the complaints at the present time against this "enemy" of the verbena and many are the artifices which are brought to bear against it, but all with the same result and why? For the simple reason that while the majority are using every effort to eradicate and destroy they are unwittingly encouraging, or at least overlooking the real and obvious effect of a simple cause.

The simple rule of cause and effect is here as clear as daylight. The first question we ask ourselves is what is rust? It is applicable to either the effects of microscopical fungus or insect growth above or below the outer tissues of plant life, more especially of foliage, which in this case it attacks curling and deforming the leaves and stunting the whole plant till it gradually dies. In this case it is the result of minute insects. Both the above are the result of a sudden check, either by draught, too high or too low temperature, etc.

By observing one of the largest collections of verbenas in the "States" I have made the following summary, based on the above theory and combined with practice among other plants so affected:

Firstly, that the verbena is a soft wooded plant and therefore susceptible during the fall and winter months to the effects of temperature and liable to disease in the form of mildew or rust (though the former must not be confounded with the latter), and knowing this every effort should be made to equalize temperature and prevent check.

Secondly, the main fault lies in the following: The house in which the ver-



KALANCHOE CARNEA. FLOWERS ROSE-LILAC, TWENTY INCHES HIGH

[SEE NOTE, PAGE 3.]

[REPRODUCED FROM GARDENERS' CHRONICLE.]

benas are grown is kept at a temperature of 70° to 80°, they are then watered daily with water from a hose which is almost at freezing point; now this is utterly contrary to the laws of nature and what is the result? First, a check which is inevitable under such conditions and then follows rust, which is again followed by the usual doctoring which tends only to aggravate and make things worse.

Thirdly, that the secret of prevention (not cure) resolves itself into this simple treatment, let the stock be propagated from non-rusted plants and grown on in the usual way, but watered with water the same temperature as the house and there will be no more rust to contend with, except that which may have been inherited and this they will outgrow if a little stimulant (very weak) is used in the shape of a little pure guano.

I should further advise the plants to be placed on dry slates and not on "sand," which in time becomes sodden and produces a cold "bottom."

Jersey City, N. J. H. A. BUNYARD.

Verbena Rust, Without a Microscope.

If it is a positive fact that verbenas rust originates direct from an insect on healthy plants, and that no known insecticides destroy them, I can not realize why plants so affected often throw out healthy shoots as spring approaches and form good plants. This is a fact many

can testify to. Some years ago complaining to one of our oldest florists that my verbenas rusted so he said: "They will grow out of it in the spring." However, I would not encourage the retaining of rusty verbenas, they are not worth the room. But could this occur, when an insective pest so contagious as to affect healthy plants wherever it is carried to, is at bottom cause?

Last fall I took cuttings from outdoor plants of Mammoth and two weeks later again from same plants. They all rooted well and were treated alike. After they were replanted the first batch rusted badly and were finally cast out. The second grew healthy from the start and are to-day as vigorous as some of my seedling stock. Again, all my verbenas were planted side by side on benches, and while this rusted stock shriveled up others grew right on and have never shown any sign of rust. These are facts that the sun shines on; any one can witness them. It would please me to offer a preventive, even a remedy, but I am not experienced enough to understand the cause.

Most likely if propagators could have some interest beyond mere coin value, to exercise every care and study every means and methods to have healthy, vigorous stock of all varieties of plants to start with, and not force the young stock too much it would be a long step towards lessening the ills, diseases and

degeneracy too common with greenhouse plants.

DANIEL K. HERR,
Lancaster, Pa.

A Simple Method of Blooming Lilacs in Winter.

I was particularly desirous to have some lilacs in bloom as early as possible this season, but having no plants suitable for forcing at hand I decided to try some branches in water, a method of which I had heard and read a good deal. I happened to have several very old trees about the place that required thinning out and shaping up, so from a large tree of the white variety half a dozen branches were cut and placed in water on the pipes under a high stage; they were well syringed several times daily, and two weeks later were taken into the light, a place being arranged for them on the pipes in a convenient corner. These branches were cut December 9, '88, and January 19, '89, I cut the crop which amounted to about two dozen very pretty little bunches. The clusters were small, but they served my purpose, and I was so well satisfied that on January 19 I put in a good stock of both the white and purple varieties. These were placed at once in the light—otherwise they have been treated precisely as the first lot—and they are to-day, February 2, in splendid shape, many of the clusters now being six inches long. None of the branches are less than 1½ inches in diameter and I notice that the larger the stems the better are the results.

Baltimore, Feb. 2. A. W. M.

Landscape Gardening.

A correspondent asks for hints in regard to the special preparation which should be made by one intending to become a landscape gardener.

It is a most difficult profession and demands the broadest culture in addition to varied technical acquirements. The number who have succeeded in becoming eminent is very small, so small in fact that we may say with truth that the landscape gardener like the poet is born, not made.

A thorough technical education is of course necessary, and a college education would be a great advantage, for much of the best landscape work is in behalf of educated and refined people and every professional man should be able to meet his clients upon equal terms.

As to the technical knowledge required, some knowledge of architecture is absolutely necessary, this can best be acquired in an architect's office, where drawing and construction can also be learned with so much of the theory of landscape gardening as can be gleaned from books. In the making of new places the architect often consults the landscape gardener, who should possess a critical knowledge of the different styles and be able at need to design the architectural accessories of landscapes, such as terraces, bridges and so on. Enough civil engineering is required to manage the construction of drains, roads, bridges and embankments.

A thorough knowledge of the flora of the country is essential, the personal characteristics of every tree and shrub, their habits of growth and culture, their relative color value and their general effect in leaf and out of leaf. All this knowledge will avail but little, unless the artistic sense is cultivated to the highest degree, for landscape gardening is high art, and its professors must be artists.

This profession offers a fine career to

an ambitious young man who has confidence in his own ability and is willing to devote the years necessary to that thorough preparation which is essential to success in the liberal professions

L. W.



Notes on New French Roses.

Dr. Reymont (Hybrid Polyantha):—Habit of plant robust, shoots thorny resembling in growth the hybrid teas as also in its freedom of bloom; flowers medium to large produced singly on each shoot; color rich velvety crimson; remains a long time in bloom without fading; quite double and very fragrant. This is one of the most promising varieties sent out for several years.

Marie Pavie (Polyantha):—This variety in habit of growth and color of flowers is something on the style of the polyantha rose Mlle. Cecile Brunner; flowers blush white, quite double and fragrant.

Esmeralda (Hybrid Tea):—Habit of plant vigorous; flowers large not very double; color rosy lilac.

Joseph Metral (Tea):—Plant very vigorous, producing large deep green foliage; flower full to large, very double, often produced in clusters, color deep violet purple, promising as a bedding rose.

Mme. Alegatiere (Hybrid Polyantha):—Habit of plant robust, shoots very thorny; flowers medium, form irregular, color clear rose, fragrant and a very free bloomer; seems to have lost nearly all its polyantha habit and looks more like a hybrid tea.

Mme. Pierre Guillot (Tea):—Plant a vigorous grower, flowers large and double, color rich orange yellow heavily shaded with rosy lilac, probably an improvement on Mme. Angele Jacquier, which it somewhat resembles.

Mme. Magonette (Tea):—Plant a free healthy grower; flowers medium to large, color clear salmon rose heavily edged with rosy lilac, base of petals deep yellow; a free bloomer and promising variety.

Comtesse Julia Hungary (Tea):—Habit of plant vigorous with fine foliage; flowers large, moderately full, color salmon yellow heavily margined with deep rose; a free bloomer producing its flowers singly, fine in bud; this variety seems as changeable in the color of its bloom as Mme. de Watteville, consequently it is difficult to describe; I believe this will be a promising variety for forcing as it is rather a new shade in color.

Conite Henri Rignon (H. Tea):—This variety seems to be a moderate grower with fine healthy foliage; flowers large, moderately full, color soft flesh with a decided shade of yellow; a free bloomer something on the order of Lady Mary Fitzwilliam, only the color is much finer.

Ernest Metz (Tea):—This is a vigorous grower with large solid foliage; flowers very large and double produced on long thick stems, color clear carmine rose, some of the petals striped; the blooms are of great substance and this is a very effective variety. ANTOINE WINTZER.

West Grove, Pa.

NOTE.—Since noting these varieties I

have had several more blooms on one of the roses previously described by me namely: Mme. Pierre Guillot, which are so much finer than the first blooms that my description of this variety does not do this beautiful rose justice. It is at this writing showing some of the most beautifully colored roses I have ever seen; it is far superior to Mme. Angele Jacquier, to which I compared it in my description. A. W.

New Rose Souvenir de Wootton.

Some two dozen blooms of this new rose sent us by Messrs. C. Strauss & Co., Washington, D. C., were a most agreeable surprise. Judging from these blooms this American seedling is a great advance in the most desirable direction. It is stated to be a seedling from Bon Silene fertilized by Louis Van Houtte.

The buds sent us stood the shipment well and arrived in first class condition. In color they are deeper than Bon Silene and much larger and more double than that variety, and with a strong spicy fragrance. In the bud state they much resemble a very large well colored Bon Silene, but when open the resemblance ceases, for then they have more the shape and appearance of American Beauty, owing to the doubleness of the flowers, which are borne on strong straight stems with handsome foliage.

If such flowers as those sent us can be produced easily and in quantity we have no hesitation in saying that this rose will prove an unusually valuable addition to our list of cut flower roses, for its fine color, erect bearing, long stems, good size, doubleness, and above all its strong fragrance will certainly make it a great favorite with flower lovers and flower buyers.

The rose originated with Mr. John Cook, Baltimore, and was named by him in honor of the occasion upon which Mr. Geo. W. Childs entertained the Society of American Florists at Wootton at the time of the Philadelphia convention.

Rose Vick's Caprice.

Three blooms of this rose have been received from Mr. Vick. They are of about the size and shape of *Hermosa*, of a dull scarlet splashed with white. The colored lithograph on his letter head gives a good idea of the marking, but the color of the blooms sent us was decidedly washy and not nearly as bright as that in the lithograph.

Orchids and Tobacco Smoke.

Will you please inform me through your valuable paper whether tobacco smoke is injurious to orchids such as *Laelias*, *oncidiums*, *odontoglossums*, *phalaenopsis*, etc. A. H. LANGE.

Worcester, Mass.

Tobacco smoke does injure the leaves of many orchids, more particularly the "cool" ones comprising nearly all the *odontoglossums*, the thin leaved *oncidiums*, the *lycastes*, many of the *caelogynes* more particularly *occellata*, *pandurata*, *Massangeana* and *media*, and in a less degree the commoner species. The majority of the *calanthes* both deciduous and evergreen may be injured, also the thin leaved *phalaen* and many *dendrobiums*. Among those genera which may be fumigated with comparative freedom are *phalaenopsis*, *laelia*, *cattleya*, *cypridium*, *vanda* and *terides*, and generally those species that have thick leathery leaves. I do not like to fumigate orchids

at all and never resort to it except when all other means fail. Our *odontoglossum* and cool houses have not been smoked for many years. We found an equally effectual and more harmless substitute in steaming the hot pipes with strong tobacco water. This does no injury whatever and if practiced about twice a week will keep the house perfectly clean. In warm weather when this can not be done the hose liberally applied will soon clean the plants of aphid or thrips.

F. GOLDRING.

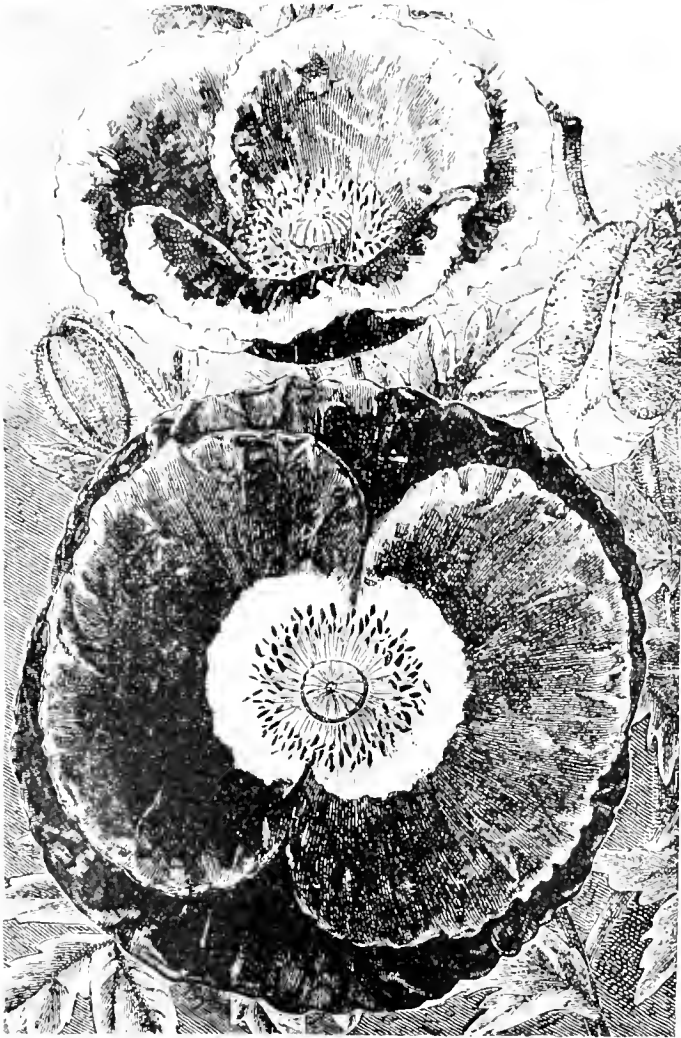
The Violet, Its Cultivation and Disease.

Since acquainting the secretary with the subject of this paper, an able article has appeared in the *AMERICAN FLORIST* from the pen of a Milwaukee grower which so fully covers the ground as to cultivation, and is also so in accord with my own experience, I will pass this division of the subject with only one or two suggestions.

In relation to soils most suitable, having tried several with varying results, am satisfied that a heavy loam is the best, by this I mean one which will not bake or crack though the admixture of sand be very slight. As to the method of growing, I do not believe that as far north as we are it is advisable to grow them in frames, either with or without fire heat, the uncertainty of the weather rendering it difficult to clean the plants properly, or gather the flowers with any degree of regularity. Give them bench room near the glass in a house by themselves, where the temperature can be kept under perfect control. I have found them to thrive best when kept about ten degrees above freezing at night, and on sunny days maintaining as low a temperature as possible without chilling the plants. The small grower who requires but a few each day for his own work, would in my opinion save money by buying of a brother florist who raises them in large quantity, or of some commission house rather than undertake to grow a few under sash or in a house with other plants.

Of the disease to which the violet is subject much has been written during the past year, but I have failed to see any cause assigned that was not disproved by the practice of other growers in different localities, methods which in the one case resulted in failure, in the other proved successful. So serious has this disease become that many large growers have entirely abandoned their cultivation, and it will be remembered Mr. Siebrecht, of New York, offered a reward of \$100 to any one who would solve the problem, and notwithstanding many writers have given their experience with the pest, as well as advanced theories and surmises as to its cause, I still have to learn that any of them have drawn on friend Siebrecht for the reward.

The true solution may be as far in the future as ever, but in a visit not long since to Mr. John Cook, of Baltimore, Md., he was able to show results, the fruit as he believes of careful thought, observation and experiment, which it seemed to me would be of interest to violet growers to know. It will be remembered that Mr. Cook was the originator of that charming variety, *Marie Louise*, which was first placed on the market in 1872, and he now has two new varieties, the rose colored *Mme. Millet*, offered last spring, and another a sport from *Swanley White* which he calls *Robt. Garret*, not yet disseminated. In color this resembles *Neapolitan*, but its



THE SHIRLEY POPPIE. LATE NOTE, PAGE 3.

promise of supremacy is in the great size of the flowers. The original stool as seen in January a year ago, literally bristled with buds while one fully expanded flower was one and one half inches in diameter by actual measurement. Mr. Cook grows about 120 sash of violets annually, and a varied experience of forty years in their care, coupled with the magnificent appearance of his plants at the time I saw them, would seem to show that whether his theory is correct or not his practice brings success.

He stated that the disease appeared with him about ten years ago, Marie Louise which he had then been cultivating about eight years, being so much affected as to become practically valueless. The plants of this so badly affected that season were grown on his lowest bottom land, the disease showing itself about August 1, previous to which the stools had been very large and fine. The following season, having some planted in frames for summer growth on his highest land, he noticed early in September that the stools under the sash rests, or bars of the frame, were clean and healthy, while those exposed to the full rays of the sun were badly affected with the disease. At first he thought this was the result of shade, observation

in another line tending to confirm him in this conclusion, and this was the pear blight. Among his fruit trees was a row of pears, west of which ran a row of large evergreens. Both rows were at such an angle as to cause a complete shade to cover the pears from 11 o'clock through the day. Every tree so shaded was free from blight, while trees at either end of the row in the full sunlight were much diseased; but to return to the violet. Careful and patient watching convinced him it was not the shade that prevented, but the dew that caused the mischief, and his theory is this: The same fever-producing agency—be it what it may—which will bring a strong man down when exposed for any length of time to the dews and miasmatic influences of the night air, is the producing agent of the disease in the violet. The drop of dew on the leaf exposed to an August sun evaporates, leaving whatever there may be of poison, in a concentrated form on the leaf. Acting on this theory he plants all his violets for summer growing in narrow beds, and as soon as there are any signs of dew covers them by stretching water proof fibre cloth on frames so prepared as to keep the cloth well above the plants, thus securing a circulation of air. This covering is carefully removed

in the morning, and the same process gone through with each day until they are housed in winter quarters.

Whatever may be thought of the theory as to the cause, the cure with him seems to be effectual, as plants grown near the others and given the same treatment in every way, save in the matter of night covering, are badly diseased. We are apt to look upon long continued, intelligent and successful methods as proofs of the system followed, and if any of our violet growers desire to test this method for themselves, and should it prove as effectual with others who have been troubled with the disease as with Mr. Cook, I have no doubt he could be prevailed upon to receive Mr. Siebrecht's check for \$100.

[Read before the Society of Indiana Florists February 22, by M. A. Hunt.]

Violets.

Mr. Valentine Burgevin, Kingston, N. Y., writes enumerating the many diverse opinions which have been expressed as to the mode of treating violets to attain the best success and expresses the hope that "if there is a certain way of growing violets to secure an abundance of flowers of good color and large size without failure," the possessor of the details would receive the gratitude of the whole trade by sending them to the *FLORIST* for publication.

While considerable has been written in regard to violet culture, there probably remains much to be said, but we are afraid we shall have to wait indefinitely for the "certain way" mentioned by our correspondent. There is no royal road to success in plant growing. While we can always learn from the work of others unless we have the ability to successfully change and adjust their methods to our probably different conditions we need not look for the best success. This fact has been frequently stated in these columns, but it will bear repetition.

Standard Pots.

The Whilldin Pottery Co., Philadelphia, send us a set of samples of the standard pots, from 1 1/2 to 12 inches in size. They conform in every particular to the standard adopted by the Society of American Florists at the New York convention, and we do not see how a better pot could be made. The measurements are all inside and shape exactly as shown in our supplement to the January issue. They are also well made and a credit to the manufacturers. The breakage of such pots should certainly be very small.

The Whilldin Co. also send us a letter from Mr. Peter Henderson wherein he says: "If the Society of American Florists had never done anything else than adopt the standard pot, that alone, in my opinion, will (in the next five years) have paid to its members who will 'practice as they then preached' the whole cost of the organization. We have only used the standard pot made by you for six months, but that has been long enough to convince us of its great value, and of the mistake we have made in not using it before. No other pot but the standard shall be used by us."

In response to Iowa's request in last issue postal cards are coming in from those who intend to use only standard pots. Let all others who have decided to use standards only send in their names. We shall print the list in an early issue to show refractory potters that those in the trade know what they want and mean

business in this matter of uniform style and size of pot.

Some of the Flower Seed Novelties.

BY WM. FALCONER.

"I have got disgusted with novelties in general and have about concluded not to even offer one again that I have not tested myself unless it is very promising." This is what one of our chief seed growers and dealers writes me. Well, no matter how disgusted we are, we have got to buy them and try them in order to keep posted, if for nothing else; this is what I do year after year anyway. I don't care how glowing the description of a novelty may be I am never disappointed, no matter how poor it may turn out, one gets hardened after a time. But it is galling to pay a high price for a packet of seed and then need a microscope to detect the presence of the seed in the packet. Very few of the novelties apart from asters, pansies or sweet peas are adapted for florists' use as cut flowers but florists who are interested in the plant trade have got to grow all the hardy and tender perennials, and others interested in the seed business have got to grow these and the annuals as well to test them if for nothing else.

PRATIA ANGULATA is the proper name of the *Lobelia littoralis* which is catalogued among novelties. It is a slender stemmed, creeping perennial species from New Zealand and not at all hardy. But in its way it is a real pretty little plant with white lobelia-like flowers and purplish-red berry-like fruit and useful for small baskets and brackets. It has been in obscure cultivation for a good many years and is now, as it were, resurrected.

PAPAVER LÆVICATUM is a new annual poppy from Persia. It grows "2 to 2½ feet high, forms a tuft of deeply pinnatifid foliage and bears in rich profusion flowers four inches across, with petals of a brilliant deep scarlet with a black spot at the base of each petal, margined with white on its upper half. * * The flowers remain on the plant for several days." But I can not find out much about it. But the packet contains a good many seeds.

BEGONIA SCHARFFIANA is a new species from Brazil, and is said to have white flowers and large thick velvety leaves, green above, purple beneath. But you can hardly see the seed in the packet it is so scarce.

YELLOW CARNATION GERMANIA.—We are offered a packet of eight seeds for 1s 6d or 40c. 50c., and E. G. Hill offers us plants for 20c. As varieties of carnations are not apt to be very strict in reproducing their kind from seed, I am inclined to look upon the plant as the better bargain.

KALANCHOE CARNEA is a new and beautiful winter blooming species introduced a few years ago by Veitch of London. They exhibited cut flowers of it for the first time at the meeting of the Royal Hort. Society, London, January 11, 1887, when a first class certificate was awarded to it. A few weeks after that it was figured and described in the *Gardeners' Chronicle*. The plant is succulent throughout, not unlike the *kalosanthes* we used to grow, of bushy habit and grows about 18 inches high. The flowers are waxy and of a delicate pink color, very fragrant and borne in terminal cymose heads on stout leafy stems. It is said to be of easy culture

and free blooming, still, considering that it was exhibited a couple of years ago, we seem to know very little about it.

ERIGERON CHRYSOPSIDIS a new golden yellow flowered perennial from Oregon, where it grows on stony hills and mountain sides. Yellow is a very rare color among erigerons. "According to Dr. Asa Gray's synopsis of the N. American flora, yellow colored flowers are confined to this species and *E. peucephyllus*, the remaining 70 species having either white, pale purple or violet blue flowers." For amateurs.

GILIA DICHOTOMA, a sweetly pretty little thread-leaved, white-flowered Californian annual allied to the leptosiphon section of this genus. "Found wild in dry or moist ground, nearly throughout the western part of the state (Cal)." "*Linanthus dichotomus*, Bruth. formerly." For amateurs.

NEMESIA PUBESCENS comes from the Cape of Good Hope and is a copious and long lasting annual about 12 to 15 inches high and of bushy habit. "The flowers are borne in long terminal racemes * * 4-inch across * * white and delicately but conspicuously veined with deep blue and purple lines." The more common species *N. floribunda* and *versicolor* I have grown for many years; they are pretty, extremely profuse, but not showy. For amateurs.

PENTSTEMON HUMILIS, a very neat little alpine species "common about Pike's Peak in the Rocky mountains, growing in tufts on rocky places," also "In the mountains from S. Colorado to the British boundary and westward." "Matted tufts of bright green foliage, the flowers being bright blue. * * Admirably adapted for the rockery." For amateurs.

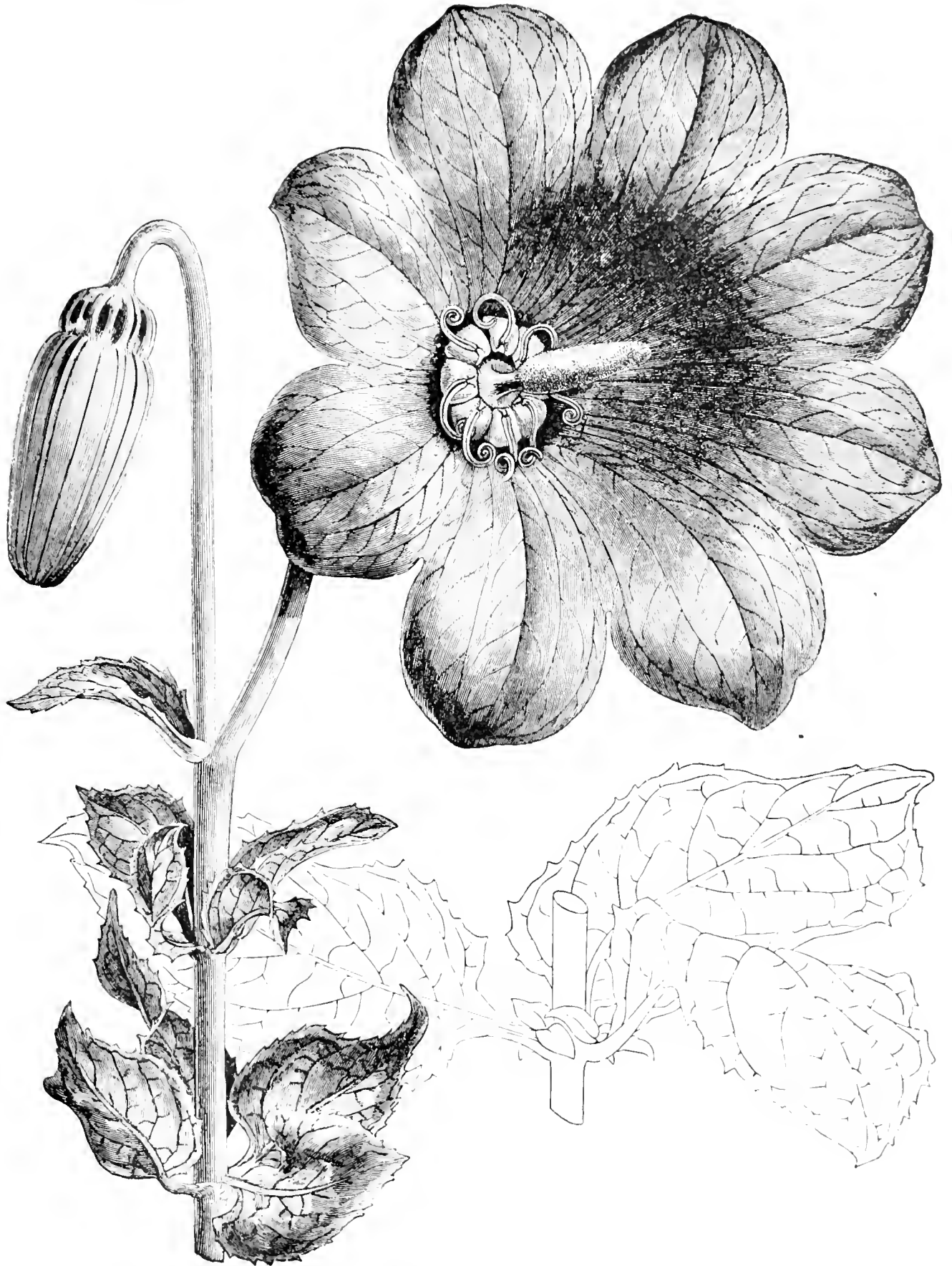
PENTSTEMON ROTUNDIFOLIUS, a new and highly ornamental species, indigenous to the mountains of Chihuahua, Northern Mexico and where it was first discovered by Mr. Pringle in 1886, and first introduced to cultivation by Mr. Wm. Thompson, of Ipswich, England. It flowered at Kew last summer (the *London Garden*, page 15, July 7, 1888), for the first time in cultivation. It was figured and described in the *Gardeners' Chronicle* September 8 last, and again in *Garden and Forest* November 28 last. According to Mr. Pringle, the discoverer, "In the autumn of 1886 was found hanging * * from thinnest seams of dry granitic cliffs among the dry mountain chains southward from Chihuahua, a most singular pentstemon of much beauty. * * The plant is evergreen with short stems which branch freely; its leaves are broad, very thick and leathery, glaucous; its flowers tubular, scarlet."

ROMNEYA COULTERI.—One of the finest of California's herbaceous perennials and one that has been in cultivation in Europe for several years. The plant is of upright but straggling habit, has glaucous pinnatifid leaves, and large, showy, white, poppy-like single flowers that are five to seven inches across. It is easily raised from seed and grown, but it is not hardy here and seldom blossoms the first year from seed. I grew and flowered it eleven years ago. There are two colored plates of it in the *Garden*, but the best one is that of November 8, 1884. In California it is found "Borders of streams near San Diego" and "From Diego to Santa Barbara county; branching from a shrubby base and growing four to eight feet high, flowering from May to August."

AUBRIETIA LEICHTLINI is a little mat-like hardy herbaceous perennial that blooms in early spring. All of the aubrietias are pretty, carpet-forming little plants suitable for rock work, and they are easily raised from seed and seedlings as a rule come true to kind. This new comer came from a capital source, namely, Max Leichtlin of Baden-Baden, a most enthusiastic and critical amateur who has introduced and given to cultivation many of our finest hardy plants. But this plant has also been grown and flowered in England for at least a couple of years. A correspondent writing in the *London Garden* May 14, 1887, says of it: "It is one of the finest acquisitions of late years to the hardy alpine garden and, like the others, is quite hardy in the open air. * * It has rosy red flowers which when first open are very striking." But "A. D," another correspondent of the *Garden*, insists that the A. Leichtlini he saw in bloom from Kew "represented exactly a seedling form of *A. violacea* such as I have here in quantity."

THE SHIRLEY POPPIES are so called because they have been raised at Shirley, Croydon, near London, the raiser being Rev. W. Wilks, Hon. Secretary to the Royal Hort. Society and a most enthusiastic lover and grower of flowers. These poppies have been exhibited in London and made quite a sensation in England for the last few years. Mr. Wilks himself tells all about them in the *London Garden* July 2, 1887, and the editor remarks parenthetically, "The most refined and charming flowers we have seen for many a day." They are all single and semi-double varieties of the common European field poppy and the result of ten years' assiduous selection. In color they run from the purest white through the most delicate shades of rose and pink and carmine to deepest crimson, and some of the intense colored flowers are bordered with white and Mr. Wilks mentions some white flowers with a colored border and flaked and marbled flowers. Full double flowers are weeded out of this select race. I will vouch for the loveliness of these flowers for I've been working with them for some years myself. I sow them in the fall or spring broadcast and let them take care of themselves. They are very hardy. As cut flowers for home use nothing can be prettier; if cut in the forenoon before they are fully expanded they will last two to three days in good condition. Always cut poppies before the anthers open and show the pollen and then they will keep, but if you don't you will find that "you seize the flower its bloom is shed."

OSTROWSKIA MAGNIFICA noted in the *FLORIST* last Vol., page 326, is again offered, but by fewer dealers. It bloomed with Max Leichtlin in 1887 at Baden-Baden for the first time in Europe and at Veitch's, London, in 1888, for the first time in England. Veitch had bought Max Leichtlin's stock plants, hence his success, had he only got some seed he would not yet have had flowering plants. It is a magnificent hardy herbaceous plant from the mountains of Eastern Bokhara, hardy as a weed, grows four to five feet high, and early in July bears mauve-lilac flowers four to six inches across. It forms a deep reaching tuberous root some two feet long and after the fashion of *Platycodon grandiflorum* or *Michauxia campanuloides*. Veitch exhibited it in London, July 10, of last year, when it was awarded a first class certificate by the Royal Hort. Society. It was figured in the *Gardeners' Chronicle* July



OSTROWSKIA MAGNIFICA SEE NOTE PAGE 320

(REPRODUCE FROM GARDENERS CHRONICLE)

21, and a capital colored plate of it appeared in the *Garden* December 29 last. An English writer tells us "It is very easily obtainable, seeds being now offered by our English dealers. They readily germinate in a cold frame, etc." But the most experienced man in raising hardy herbaceous plants from seed in England writes: "The seeds are somewhat slow to germinate, when sown in spring they may remain until the autumn but grow more quickly if sown soon after being gathered. * * * It is not likely to flower till the tuberous root has attained some size, probably not till the fourth year." Not very comforting news, but true, for I bought and sowed seed of it last spring and they are dormant yet!

SOME OF THE OLD NOVELTIES.

Among asters the Comet is good and we have a few slightly different shades of color in it. But aster Triumph is a long way off from scarlet. *Salvia coccinea* var. *lactea* has pure white flowers, but we can not regard it as very desirable. That wretched *Lupinus albo-coccineus nanus* again looms up in some lists; among lupinus, with me last year, it was the most miserable. The rosy scarlet annual delphinium is to the front again; well, it is all right in its way and distinct enough in color—rose-pink and rose-purple, but not scarlet. Some people must have had good luck with *Delphinium Zaili*, for it is more plentiful this year than it was last and the seeds are of better quality. None of the seeds of it that I sowed last year came up. *Delphinium nudicaule* var. *aurantiacum* is a real pretty form of a pretty plant, but the species in any form is very hard to manage.

MINA LOBATA doesn't give us too much satisfaction, there are many complaints about its shy blooming nature. Six seeds for 25 cents just as before. It is hard to keep track of the sweet peas we get so many new kinds every year, and there are very few seeds in the packet. We have got to get them by the ounce before it will pay us to touch them. The Star of Queedlinburg Drummond phloxes as a rule contained only one purple variety last year, but we expect them to contain a regular mixture this year, as all colors are now represented among them. They, at best, are more odd than beautiful. Some advertise poinsettia seed. I have raised poinsettias in this way, but never got as good heads of bracts as from cuttings. *Lapagerias* are also offered; well, they are often raised in this way. And I see Farquhar offers seeds of *Allamanda Schottii*.

Western Notes on Double Geraniums.

Twenty-two years ago, in the spring of 1867, the original double geranium was first disseminated in this country (a variety, if I am not mistaken, called *Ranunculaflora*). The same season I became the happy possessor of a plant of this rare and valuable acquisition to our then limited list of geraniums. As a matter of course I gave this plant the best possible care and attention, and as far as growing was concerned I was well rewarded for my pains, for the plant grew rapidly and soon attained gigantic proportions, but in its blooming qualities I was disappointed, producing as it did but two clusters of flowers during the entire season. While a geranium of this rank, coarse character would be worthless at the present time, yet in this instance it was a grand achievement, it broke the record and the floral world had added to it a double geranium.

During the next three or four years other varieties were produced, each new introduction being a slight improvement on the former, but all still bearing the same characteristics so objectionable in the parent plant; but along in the early part of the '70's there was another break, this time giving us semi-double flowers in varied colors, clean, short jointed wood and profuse blooming qualities of which Asa Gray is a fair type. After this new varieties were multiplied in quick succession until now their name is legion. It is out of this mass that I propose culling a few varieties which will be of special value to the florist and which will invariably give satisfaction to all lovers of geraniums.

Among white geraniums *Candidissima plena* has always held its own through our most trying summers; the clusters and the single florets are only of medium size, but they are borne profusely; it is always of the purest white, remaining fresh upon the plant longer than any other white geranium I have ever grown. *La Victorie* is another equally prolific variety with clusters of immense size, large white flowers, never showing the least tinge through our hottest weather; in its general character, this might be called a double Queen of the Belgians. Another popular variety in this vicinity is *Heroine*, not so much for its value as a bedder, but as a pot plant and for winter cut flowers it is constantly in bloom producing quantities of large white florets on long footstalks; it is rather a slender grower, but compact and bushy.

Among bicolors *Gloire de France* has quickly come to the front as a leading variety, it is of strong, short jointed branching growth, constantly in bloom, often presenting the appearance of a great ball of flowers, each floret distinctly marked with a white border, shading to a deep rosy salmon center, a geranium that never fails to attract attention. This variety and *Belle Nancienne* can easily be mistaken one for the other, but I imagine that *Gloire de France* is more decided in color, it is also a stronger grower and a more profuse bloomer. *Queen of the Fairies* is another desirable variety belonging to this class, it is a strong, rather tall grower, producing enormous crops of flowers almost continuously. *Mary Hill* is proving to be one of the best among pink geraniums, it might be called a semi-double *Master Christine*, being about the same shade in color and partaking of all the qualities of that sterling old single variety. A splendid old variety grown here is one called *Lafayette*, which, judging from the catalogues, appears to have been lost to general cultivation. In growth and blooming qualities it is similar to *Gloire de France*, but in color a soft shade of rose, as a bedder of its color it is unequaled.

Among salmons *Asa Gray* still holds its own; I first grew this variety fifteen years ago, I have grown it ever since and shall continue to grow it until I find something better of its color, a soft rosy salmon. Another old variety that is a favorite with us is one sent out I understand by Mr. Thorpe some ten or twelve years ago and called *E. G. Hill*, it makes a strong compact growth and is a constant and prolific bloomer, in color a deep shade of rosy salmon.

Among bright varieties *Paul Charbonnier*, scarlet; *Le Pilote*, crimson-scarlet; and *Graud Chacellor Faidherbe*, deep crimson overlaid with scarlet, combine all the qualities of first class geraniums; out of hundreds of varieties tried

within the last few years I have found none to equal them, either as winter bloomers or for bedding purposes. *Ernst Lauth* is another of our standard varieties, it makes a strong compact growth, early and constant in blooming, color of flowers a blending of crimson and carmine.

While there is no doubt that there are other varieties in the long list of double geraniums equally as good as the varieties named, yet I do say that for general cultivation there are none to excel them and if the grower confines himself exclusively to these kinds he need have no fears as to the final results. I am inclined to think that it is rather an unusual occurrence for three or four thousand geraniums in 2½-inch pots to be a mass of buds and bloom during the Christmas holidays, but such was the case in one of the houses here this season with the above named varieties, and although they have been potted up into larger sizes they are still in bloom and will continue so until they go out of the house.

D. M. REICHARD.

St. Joseph, Mo.

Is This Fraud?

In the February issue of *Popular Gardening* is advertised what purports to be a new plant, under the name of the "White House Fuchsia." This is the first time that the name "White House" to a fuchsia has been made public. It is possible that it is a new variety, but hardly probable. The cut used in the advertisement is a fac simile of one which in several catalogues is doing duty illustrating the merits of fuchsia Mrs. E. G. Hill. It is to be hoped that the advertiser is not so unscrupulous as to rename a variety already in commerce. Whether he has done so or not the using of an engraving of another variety is to be condemned.

The Society of American Florists has already done great good, but it has much work before it, or such practices as instanced above would not be possible in this country.

While on this subject or something akin to it, who knows the botanical name of "The Sweet Nightingale" and the "Rainbow Plant," which are being largely advertised all over the country? In some magazines in which the advs. appear there is some excuse, but journals devoted exclusively to horticulture should rigidly exclude such advertisements. Popular names are sometimes appropriate and often pretty, but let us have the scientific name in addition, so that there may not be any semblance of deception.

EDWIN LONSDALE.

In a later note Mr. Lonsdale adds: "At the time of sending my first communication I wrote the advertiser of the 'White House Fuchsia' enclosing \$1 and requesting that its value be sent me in the new fuchsia if it really was new and not another variety with a new name. I asked that in the event of its being the latter the money be refunded, to which he responded as follows: 'The fuchsia I have named White House was imported under the name of Snow Wreath. I bought all the stock and named as above. I am sure you have none of it.' If this is the case possibly no wrong has been done, though the use of a cut of another variety certainly deserves censure."

Mr. H. A. SIEBRECHT, of Siebrecht & Wadley, New York, is in the West Indies on a business trip. Mr. Siebrecht has a palm nursery at Trinidad.

News Notes.

BALTIMORE.—E. Frederick has opened a floral store at 922 West Baltimore St.

JOLIET, ILL.—J. H. Conklin has purchased the Stone City greenhouses and succeeds A. R. Starr.

NEW YORK.—The third annual orchid show of Messrs. Siebrecht & Wardley occurred at the Eden Musee Feb. 27.

PASSAIC, N. J.—A. Van Lenwen who has greenhouses and nursery at Garfield, has opened a floral store in this city.

NASHUA, N. H.—C. W. Hoitt has sold out his establishment and bought a new place where he proposes to erect a range of new houses.

CLEVELAND.—F. W. Ziechmann is about to open a flower store in the Cyclorama building, corner of Euclid avenue and Erie street.

PHILADELPHIA.—S. Hunter & Son have opened a floral store at 9 North 13th street. Jacob C. Cassel has opened a salesroom at 709 Arch street for the sale of his terra cotta ware, aquarium goods, etc.

HARRISBURG, PA.—About two-thirds of the decorations for weddings, balls, etc. here are furnished gratis, or nearly so, by the state greenhouses and those of private people. The effect on the regular trade can be imagined.

INDIANAPOLIS.—The Society of Indiana Florists held its third annual meeting February 22 and 23. A very interesting programme was discussed. The meeting concluded with a banquet the evening of the 23d.

ELMIRA, N. Y.—Grove P. Rawson has nearly completed another 160 foot rose house heated by steam. It is rather a novel feat to build a greenhouse of this size in the dead of winter, but of course the weather has been exceptionally mild.

MILWAUKEE.—Frank Whitnall, of the firm of Frank Whitnall & Co., has sold his entire interest to C. B. Whitnall. The firm name is now C. B. Whitnall & Co. John Bohan, of Chicago, has purchased land near the fair grounds and will build a range of rose houses on it.

NORFOLK, VA.—The assignment of the Brambleton Floral Co. was made to P. M. Metcalf as trustee. The greenhouses and city salesroom were sold under distress warrant for rent. The assets in the trustee's hands are city bills, total amount very small. The liabilities are quite large and the prospect of a dividend to creditors very slim.

WASHINGTON.—At the late White House reception held in honor of the army and navy officers the following well known florists were presented to President and Mrs. Cleveland: Mr. John N. May, Mr. Robt. Craig, Mr. W. K. Harris and Mr. Edwin Lonsdale. By some unaccountable error Mr. Harris was announced as "Dr. Harris," by which title he is now pretty well known in New York and Philadelphia.

PROVIDENCE, R. I.—Robt. Hogg, the veteran florist of Providence, retires from business. He has sold out his establishment to Wm. A. Appleton, Jr. T. O'Connor has a house 100 feet long with twenty-two foot rafters entirely covered by three roses. Two of the plants are La Marque and one Marechal Niel. The stems or rather trunks of these plants

are of enormous size and Mr. O'Connor has grafted on to them a score of other popular varieties. He claims that this house produces more buds and better than it possibly could under any other arrangement.

MINNEAPOLIS, MINN.—Trade has been very good here since the holidays, and prospects are very good for trade until Lent begins. The weather has been so warm here this winter that coal bills have been very materially reduced and quality of stock correspondingly advanced. The Minneapolis Florists' Club is no longer an experiment, but an established fact; membership about twenty-five. Three very interesting monthly meetings have been held and a much better understanding exists among the florists than before the formation of the society. One of the first actions of the society was to agree on an established price and published a list of prices covering cut flowers, baskets and designs. This list was published by the society, but no penalty is to be inflicted if members do not abide by it. It simply establishes a standard price for everything in the cut flower line.

Philadelphia.

The Pennsylvania Hort. Society has inaugurated a new departure in having essays on matters of interest read at each meeting.

This is a step in the right direction and it is to be hoped will be kept up. W. A. Reed, M. D., one of the first vice presidents, will prepare a paper to be read at the meeting to be held in March on "The History and Future of the Pennsylvania Horticultural Society." Dr. Reed should write to the effect that the blunders made in the past of appointing inefficient judges to act as members of the standing committees on awards will not be repeated in the future.

Papers entitled "Contributions to the Life Histories of Plants," by Professor Thomas Meehan, will also be read. These will furnish food for thought to those of a scientific turn of mind. And papers on cultural subjects will be furnished by Mr. Robert Craig and others.

E. L.

Chicago.

Huffert Bros. have succeeded L. Dreher & Co. at 205 North Clark street.

August Dressel has sold to Samuel Pierce his Clybourn avenue place and has built five greenhouses on a new place in Jefferson.

T. J. Corbrey has added a conservatory to his store on West Madison street with 42 feet of glass frontage on the street, and remodeled his store. His place now presents an unusually attractive appearance.

H. R. Hughes has bought land near Douglas Park and built thereon three greenhouses. He still retains his Van Buren street place.

Juo. Lang has succeeded J. Lang & Co. at Gross Park. Jos. Lang, who retires, will build a new place in the vicinity of the old one.

E. Weinhoeber, of Elm St., and his partner, E. Boettner, are on a trip east.

SAMUEL HENSHAW, of Staten Island, is in poor health, and as his physician advises him to try an ocean voyage, he has about concluded to go to England to visit his brother who has a charming place at Kingwood, near Bristol.

Our Hot Water Boiler.

This is a subject that interests all florists, and as the result of twelve or fifteen years of study and experimenting, we last winter constructed a boiler that we think is near perfection. We designed it especially to burn soft coal, but we can use anything that will burn, hard or soft coal, coke, wood or slack.

The boiler is horizontal, the heads are about the shape of the front half of a horse shoe, it is five feet long and three feet wide at the bottom, the two shells are four and one half inches apart, the space being filled with eleven three-inch flues, there is very little space for water and quick circulation is the result. The boiler is very simple and there is nothing to get out of order, the fire is underneath and passes to the back, then to the front through the flues cut into the chimney. It is made entirely of copper, rivets flues and all, the shell is No. 14 gauge and the flues quite thin, about twenty gauge. Copper being one of the very best conductors of heat very little goes up the chimney. With the draft wide open and the heavy cast iron door to fire box red hot the front of the breeching or pipe leading to the chimney never gets so hot but that you can hold your hand on it without burning.

The boiler was designed to heat a house 20 x 150 feet long for roses; it is now heating a house 20 x 75 feet and have never had to keep the bottom damper open, in fact have kept it closed up as tight as possible; even in the coldest weather this winter (9° below zero) have had fire on only one third of the grate surface, the whole surface being seven and one half square feet. Being made of copper it is not affected by dampness, which is very destructive to iron boilers in summer. We have a good cast iron hot water boiler which burns fully one third more coal to heat the same amount of glass, and in cold weather heats the brick chimney quite hot. We also have a very economical steam boiler which works nice, but give us a copper boiler and hot water.

It may be interesting to some to know the cost of boiler. The material cost \$110; as one of the members of our firm is a practical mechanic we made the boiler ourselves, but any coppersmith or boiler maker could make one for twenty-five or thirty dollars.

Lansing, Mich. R. MANN & SON.

Care in Stoking.

I have read with a great deal of interest to say the least, the essays on hot water and steam heating in the columns of the FLORIST the past year, and have at times been pleased, at others indignant.

I do not write at the present time because I have anything particularly new to add, but because I have been stirred up a little lately by a statement in a circular on steam heating which chanced to come to my notice. For thirteen years past it has been my lot to act as stoker almost constantly on a place where at different times three to six fires had to be tended, and never in that time—even with the mercury 20° below zero—did I use 300 pounds of coal in twenty-four hours to keep 1,000 feet of glass warm enough for general purposes, (circular of Furman steam heater page 2), and this winter for a house with exactly 1,000 feet of glass surface and 800 feet of bench room, 2,000 pounds of broken coal lasts me about twenty-five 25 days, the last

ton doing just that. During this time there were only three times when the temperature inside fell below 54° Fahrenheit and the mercury outside has been at zero several times.

With the thermometer fourteen or even twenty degrees below zero I do not consider it very hard to keep houses warm; not nearly so difficult as when at as many degrees above with a strong wind, for usually here with mercury below zero the houses are banked up with snow and everything is still.

Every house we have is heated by the much berated flue, none working better than the last built. A well built flue, long, with quite a good rise on last end will generally get all the heat out of a ton of coal that there is in it. I confess I have looked out for these fires and watched them night and day. I am up sometimes during the night, but I never yet saw or heard of that arrangement for heating in actual use that did not require watching in order to keep an even temperature. All modes of heating have that failing which probably will never be remedied until men reach that point of excellence where they do not need watching. A house built substantially and tight, some kind of apparatus which does not send any great amount of heat out of the chimney and a man whose interest in affairs forces him not to waste fuel, and to keep the care of the fires on his mind are, as I look at it, the great requisites to proper heating, and be it steam, hot water or flue, care not to waste must be in the mind of constructor and care taker. EDWARD H. GODDARD.

Woodfords, Me.

Construction and Heating of Green-houses.

Much has been and much more might be written about constructing and heating greenhouses, and all give satisfactory results in their several localities.

Last spring I built a set of five houses, three 90 feet, one 40 and one 135 feet. My rose and carnation houses are 20 feet wide with two four-foot benches and two three and one-half feet, two two-foot walks and one of twelve inches. They are built three-quarter span, 16 feet on south side and 8 feet to the north; south side built with stationary sash bars, using 16 x 24 double-thick glass butted together with white lead. There is hardly a leak to be found on the entire roofs.

This mode of laying glass does away with the place for dirt to collect where the glass is lapped and I think it makes a tighter roof, as where the lap system is used water will get in and when it comes to freeze presses the glass apart and lets in more or less cold air.

I am using a 16 foot (60 H. P.) boiler with 33 2 1/2-inch flues, fire box 3 x 4 feet. Rose-house has four runs of 1 1/2-inch pipe, carnation-house the same, but as the boiler is under the center of rose-house it is kept sufficiently warm.

What I find pays well for time spent is: First, to stop every hole where cold air can possibly enter; second, to clean the boiler flues at least once a week, once in five days is better; third, blow the boilers off once each month, as with a fresh lot of clean water steam can be made much more freely; fourth, keep a clean fire box, allowing no cinders to collect on grates and no ashes around the edge of fire box.

Try it and see if it does not pay.

Rutland, Vt. W. D. LANE.

[The four recommendations are all

good, but we hope there are few in the trade to whom the admonitions will not be superfluous. Still as we mentally view quite a number of places we have visited where these simple operations were not properly attended to it may not be amiss to call their attention to these details simple as they are. We call to mind now a very erudite gentleman who had all the arguments pro and con in regard to hot water circulation at his tongue's end, but his boiler was almost entirely choked up with soot and ashes. His heating apparatus was not working satisfactorily then and had he asked us to recommend some change it would have been to the effect that he give his boiler a good cleaning out and then keep it clean. But it kept him so busy explaining to florist friends "where the other fellows were away off in their theories as to circulation" that he probably had no time to attend to such menial work as carrying out ashes or cleaning flues.]

What Florists Hear and Know.

The retail florist can hardly help becoming more or less familiar with the inside workings of fashionable society and the Philadelphia *Times'* reporter probably had to draw but little on his imagination in writing up the following interview recently published:

A leading florist was caught in a very good humor after his Christmas dinner and easily induced to talk over a small table and something else) in the cafe of the Bellevue Hotel. He said: "You may think I am joking, but I assure you I am quite serious, when I say that a florist ought to be a married man just as much as a doctor. Why, sir, think of the confidential relation that a florist occupies toward his patients—I mean his customers. I have in my possession secrets which would not only wreck the happiness of half a hundred happy homes, but break one-half the engagements which you have seen announced in the newspapers this winter to boot. Come a little nearer. I don't want to be overheard. I've been in business now twenty-five years—twenty-five! and do you want to know the opinion which I have formed of a man in that time? I'll tell you. Come a little nearer. A man is not fit to send junon weed to a woman. I've known bright, faithful, hard-working little wives that were just sunbeams at home, tide over Christmas with ten cents' worth of greens and a dollar's worth of hyacinths, while their husband's cards were going out on Christmas Eve snug as you please in big boxes of Puritan roses at a dozen to women that would no more smile inside their own doors than carry wood up out of the cellar.

"Does that happen only on Christmas? No, sir, it happens just ten times a week in my store and in all the other stores in town in proportion. Now what is a young man's temptation? Why to smile at his customer when he gets that order; to establish an affinity between that customer and himself. Now, sir, that is a wrong principle on which to do business, and I hold that it is the duty of the florist to deprecate such proceedings on the part of his clients as strongly as he can; to be utterly opposed to them and to calculate his bills accordingly. Come a little nearer. Let me tell you. A man who sends roses from my store to a woman who is not his wife, I don't care what square in Walnut street she lives in, that man buys his roses in the dearest market. I tell you, there are a great many things go to make up political economy.

"Then you take the young men about town. Why, if a newspaper was wise, if it really wanted the fresh, lively inside news of the day about our prominent society young ladies, it would buy a controlling interest in a florist's establishment. Indeed, it would. Come a little nearer. You may depend upon what I say. There isn't a prominent young lady in town but what I know whose bouquets she carries to parties and whom she favors. How do I know? Well, sir, suppose Mr. Smith and Mr. Jones—of course, I mention no names—both send a young lady flowers on the same evening and she walks into the place the next morning with two La France roses pinned on her muff and Mr. Smith has La France roses charged on his account for the day before. What conclusion are you to draw from that, especially if you are a man who knows the ways of women? That is what I say. In such a case, you can't wonder why, of course, the counter of a young fellow behind the counter would be to laugh, because he would know that Mr. Smith had sent her only a dozen roses and had sent two dozen to her best friend. But with a married man the age of cynicism has arrived, and he looks on it only as a question of human degeneracy.

"My dear friend, I assure you I know the love affairs of all the young gentlemen in all the clubs in this city, and I'll make you a bet that I can sit down now and write you a list of where the bouquets will go for the first Assembly, who will send them and how high, unless there's quarrels between now and then, the senders will pay for them. And what's more, a young man who had had as good a dinner as I would tell you; but I'm not going to."

Catalogues Received.

H. A. Dreer, Philadelphia, retail plants and seeds; F. W. Ritter, Jr., Dayton, O., seeds; L. L. May & Co., St. Paul, Minn., plants and seeds; Schlegel & Fottler, Boston, seeds and plants; Evergreen Lodge, Clarksville, Tenn., plants; Ellwanger & Barry, Rochester, N. Y., roses; L. Templin & Sons, Calla, O., plants and seeds; Webster Bros., Hamilton, Ont., plants and seeds; Steele Bros. & Co., Toronto, Ont., seeds; Frederick Mau, Weehawken, N. J., orchids; Pike & Pillsworth, Jessamine, Fla., plants and bulbs; Robt. Drumm & Co., Fort Worth, Tex., plants, trees and seeds; H. A. Dreer, Philadelphia, wholesale seeds and plants; Alfred Bridgeman, New York, seeds; A. M. & J. B. Murdoch, Pittsburg, Pa., plants and seeds; Louis C. Lischy, Nashville, Tenn., plants trees and shrubs; Mrs. T. B. Shepherd, San Buena Ventura, Cal., flower seeds and bulbs; N. S. Griffith, Independence, Mo., plants; Jno. Saul, Washington, D. C., plants; Geo. Pinney, Evergreen, Wis., evergreens; J. T. Lovett Co., Little Silver, N. J., nursery stock, Stockholms Frohandel, Stockholm, Sweden, seeds; J. Lambert & Sohne, Trier, Germany, seeds; Wm. B. Hartland, Cork, Ireland, seeds; same, daffodils, etc.; United States Nurseries, Short Hills, N. J., chrysanthemums; same, dahlias; same, miscellaneous plants; A. W. Livingston's Sons, Columbus, O., seeds; W. L. Swan, Oyster Bay, N. Y., plants and seeds; H. Cannell & Sons, Swanley, Kent, England, seeds; same; plants; A. D. Perry & Co., Syracuse, N. Y., seeds; Geo. S. Josselyn, Fredonia, N. Y., grape vines; Jno. R. & A. Murdoch, Pittsburg, seeds, plants and nursery stock; C. E. Allen, Brattleboro, Vt., seeds and plants; E. Bonner & Co., Xenia, O., plants; D. M. Ferry & Co., Detroit, Mich., seeds; Henry A. Aldrich, Neoga, Ill., plants and seeds; A. Whitcomb & Son, Lawrence, Kan., plants; F. E. McAllister, New York, seeds; Green's Nursery Co., Rochester, N. Y., nursery stock; Monroe County Nurseries, Rochester, N. Y., nursery stock.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a thoroughly experienced rose grower. Good references. Address J. P. H., care Jos. Hart, 111 W. 30th St., New York City.

SITUATION WANTED—By a first class rose grower and plantsman. Unmarried; sober and industrious. State salary. Best of references. Address P. P., care American Florist, Chicago.

SITUATION WANTED—In a commercial place, or a cut flower place, by a first class propagator and rose grower. Competent to take full charge. Best of references. Address H. M., care Am. Florist.

SITUATION WANTED—As improver in commercial place. 9 years' experience in all branches. Single; age 24. First class recommendations. Address Y. M. C. A., Madison St., Chicago, Ill.

SITUATION WANTED—By thorough practical gardener and florist of 20 years' experience in all branches in private or commercial place, having had charge of largest private and commercial places in the east. First class references from past and present employers. 34 years old; married; small family. Address S. A. P., care American Florist, Chicago.

SITUATION WANTED—By a florist, German; practical; conversant with culture of cut flowers and culture of plants. Roses a specialty. Capable of superintending the building of greenhouses for commercial or private use. Would like a liberal salaried position. Capable of taking charge of commercial or private concern. Can furnish first class proof of his ability. Address F. M., care A. Wollmers, 215 & 217 25th St., Brooklyn, N. Y.

WANTED—Catalogues of seeds and florists' stock. TRAVERS, 378 Quincy St., Brooklyn, N. Y.

WANTED—To contract with special growers, for our next season's stock of garden and field seeds. J. B. STROX & Co., Seedsmen, Ocala, Fla.

WANTED—A sober and thorough florist, which can take full charge of a commercial place, in a large western city. No others need apply. Address D. care American Florist, Chicago.

WANTED—To rent, a florist business, having 5000 to 10,000 feet of glass, where a good paying business can be worked up. Best of references given. Address M. H. care American Florist.

WANTED—Partner in an established and rapidly increasing seed business. Must have some practical knowledge of market garden seed, or nursery business (or both). \$3100 to \$5000 ready cash required. A rare chance is offered. For particulars address J. B. STROX & Co., Seedsmen, Ocala, Fla.

WANTED—One or two men florists or gardeners who know and are willing to work out doors as well as in the houses. Only such need to apply. Industrious man of good habits will find steady employment. Apply to R. MAITRE, 110 Canal St., New Orleans, La.

WANTED—To correspond with a practical florist with \$1500 or \$3000 capital, with view of establishing business at Anchorage, Ky., near Louisville, Ky. Can furnish ground and equal amount of capital. Location good, with mail, express and railroad facilities. Ad. T. C. H., box No. 1, Anchorage, Ky.

FOR SALE—Greenhouses, with 4 acres of good ground, dwelling with five rooms, good cellar, good water; no competition, can use natural gas for heat and light—the city owns plenty which they will furnish cheap. Will be sold at a sacrifice. Enquire of E. M. MAITRE, Greenville, Darke Co., Ohio.

GREENHOUSES, Cottage, Barn, etc. Will rent cheap or work on shares. TRAVERS, 378 Quincy St., Brooklyn, N. Y.

FOR SALE—The A. W. Sawyer greenhouses at Sycamore, Ill. Address MRS. ABRAM ELI WOOD, Sycamore, Ill.

FOR SALE—Growing greenhouse business, in best town in Missouri, 10,000 inhabitants; no competition. Small capital. 40000 reasons for selling. If you mean business, address Box 626, Mexico, Mo.

FOR SALE—Greenhouses and salesroom, in fine location in Chicago. Stock, buildings and lease \$1,500. An excellent chance. Must be sold. Address P. KROHN, 175 North Clark Street, Chicago.

FOR SALE—About 5000 good salable plants, and rent out four greenhouses 55 and 60 feet long; 125 feet hotbedding; and want to sell horse and wagon, which I will sell cheap. Address Mrs. J. B. CRAWFORD & SON, 330 Chatter Street, New Albany, Ind.

FOR SALE—In a New England city, greenhouses; 8000 feet of glass; fine business; long established. Extra good summer trade at the beaches. Nice house; valuable real estate. Good reasons for selling. A rare chance. Address MAY, care American Florist, Chicago.

FOR RENT—Cheap. Extraordinary chance. Six good sized greenhouses; all improvements; hot water boilers and steam heating; croton water. Located at the main entrance to the largest cemetery in the City of New York. Well established, trade by the same name that now has charge over 15 years. Over 1000 lots to care for and decorate. Only responsible parties need enquire of L. G. WILSON, Mt. Vernon, N. Y.

FOR SALE—Bargain for a florist. 300 ft of hot-houses with best steam arrangement and choice stock of flowers, hotbed sashes, tools, etc. (Doing excellent business); grounds 150x125 fronting one of the finest boulevards in Chicago, where property is fast increasing. A nice cottage, barns, sheds, etc., on premises. Price, \$1500. Terms easy (only small payment required). FRICKE, DORSE & Co., 150 Washington St., Chicago, Ill.

RARE OPPORTUNITY—At Manhasset, L. I., two greenhouses 100x25 each, hot water apparatus; built last year at cost of \$2500 with cottage, 8 rooms, stables, etc.; 1/2 extra sash, 3 acres of land; one hour from New York City. Apply to TRAVERS, 378 Quincy St., Brooklyn, N. Y.

WANTED.

To contract for 25,000 KEISER'S KROON TULIP BULBS which have been forced. Must be ripened off by leaving in boxes under benches until Aug. 1 next. Write stating how many you can furnish and price asked for at your railroad station.

JOHN KLEHM,
Arlington Heights, Ill.

ROSES.

Orders taken for Beauty, La France, Perle, Niphetos, Souv. d'un Ami and Bennett, in 2 1/2, 3 or 4-inch pots, for shipping in March.

La France and Gontiers, in 3-inch pots, ready for immediate delivery.

Prices on application. Correspondence solicited. Address

GERMOND & COSGROVE,

Box 62, Sparkill, Rockland Co., N. Y.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2 inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

Mention American Florist.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,

MOUNT HOPE NURSERIES.

ROCHESTER, N. Y.

ROSES.

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand. Also all the best select varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,

SUMMIT, NEW JERSEY.

IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

STANDARD ROSES.

Pot grown plants. A No. 1 stock of all the best leading sorts of H. P. and Tea varieties.

Gabriel Marc,

WOODSIDE, L. I., N. Y.

A TRULY EVERBLOOMING HYBRID PERPETUAL ROSE

"SOUTHERN BEAUTY."

Introduced by us two years ago. We feel more than ever convinced of the good qualities of this continuous blooming variety. Flowers fine satiny rose; large bloom in clusters of 4 to 6. Never without blooms, and extremely vigorous in habit.

10 cts. each; \$1.00 per dozen; \$8.00 per 100. **NANZ & NEUNER,** Louisville, Ky.

HERMOSA ROSES.

3000 strong plants from open ground, \$8.00 per 100.

J. H. CAMPBELL & SONS,

3601 Germantown Ave., Philadelphia, Pa.

ROOTED CUTTINGS Coleus, and Heliotrope, good varieties, 50c. per 100; \$7.50 per 1000.

ROOTED CUTTINGS Geraniums, good varieties, \$1.50 per 100; \$15.00 per 1000.

ALTERNANTHERA AUREA NANA, 50c. per 100; \$4.50 per 1000.

JOHN J. CONNELLY, Bryn Mawr, Pa.

A. C. TUCKER, ROSE GROWER,

P. O. BOX 190, NYACK, N. Y.

I would like to give my prices for the following varieties in 2 1/2, 3, or 4-inch pots to any parties desiring the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI
LA FRANCE, NIPHETOS,
MERMET, BRIDE,
AMERICAN BEAUTY, PAPA GONTIER.

NYACK ROSES

PERLES, NIPHETOS, \$5.00 per 100
LA FRANCE, \$6.00 per 100
In 2 1/2-inch pots, ready Feb. 1.

ALSO—

Rooted Carnation Cuttings.

Orders NOW taken for rooted CARNATION CUTTINGS of 20 of the leading varieties, to be ready for delivery in EARLY SPRING. Prices on application.

TUNIS DE PEW,

NYACK, NEW YORK.

NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, Hybrid Teas, and Hybrid Perpetuals, and novelties in Chrysanthemums. Also Tabernaemontana, Bouvardias, Carnations, and general greenhouse stock.

Trade List mailed on application.

JACOB SCHULZ,
LOUISVILLE, KY.

GIANT MOON FLOWER; TRUE VAR. WHITE SEED.

I am now ready to contract for above, fall delivery 1889, 20 lbs. Also 2nd size Pearl Tuberosa, \$5.00 per 1000. Orders solicited now for Antigonon leptopus at \$10.00 per 100, 20 var. Cacti from \$5. to \$25 each. Mrs. J. S. R. THOMSON, Spartanburg, S. C., 2 years state Vice-President S. A. F.

WANTED.

Two large tree Ferns of any of the following var.

DICKSONIA ANTARCTICA,
DICKSONIA FURCATA,
CIBOTIUM GLAUCUM,
CIBOTIUM REGALE.

Address CHAS. DISSEL, 604 Chestnut St., Philadelphia, Pa., stating height of trunk from earth to first frond, and price.



Holiday Prices.

The subject of holiday prices has evoked much discussion recently in the horticultural papers and elsewhere.

Retail florists complain that the prices of cut flowers are for certain special occasions advanced by the commission men and growers to such unreasonable figures that it is impossible for the retailers to serve their customers satisfactorily or with profit to themselves. It has been asserted that the growers and commission men deliberately combine at such times for a specific purpose, that purpose being to force prices up, and that they succeed.

It is true that prices of certain flowers do advance sharply at the holidays, but it is equally true that prices of the same varieties do fall with equal suddenness at other times. What is the cause? If it is possible for the wholesalers and the growers to successfully make such a deal as has been referred to once or twice a year, say at Christmas and Easter, why is it not just as practicable for them to do it to a greater or less extent at other times or continuously? And might not the growers with equal reason charge the retailers and commission men with combining to put the prices down at other times?

As he whose situation affords him a view of both sides in such a controversy should be competent to judge impartially it would seem that the commission dealer, standing as he does midway between the producer and the consumer, under equal obligations to both and having corresponding facilities to become familiar with the necessities and opportunities of each, should be able to throw a little light on this question, and possibly at the same time disprove some of the absurd charges that have been made against himself.

The whole question seems to me to be simply and wholly one of supply and demand. It is an accepted principle of trade everywhere that overproduction of any article of commerce will bring a tumble in prices, and as surely will an insufficient supply be accompanied by a very decided rise in values. The wheat crop fails; we expect to pay more for our flour in consequence. There is an unusually heavy crop of apples, peaches, or other fruit; the grower knows from experience that he is lucky if at such times he gets anything beyond the cost of marketing. Let the demand for any article, be it coal, iron, wool, or anything else, exceed the available stock and prices are bound to advance. Let the supply exceed the demand and prices must come down. If this be the case as regards imperishable goods how much more true it must be when perishable material is handled.

An increase in the market prices of cut flowers results not so much from combi-

nations or from the fact that it is Christmas, but simply because the demand does or is expected to exceed the supply ready for use at that time, and he who is fortunate enough to hold any of the goods naturally takes advantage of his opportunity, while there are sure to be buyers enough who in their eagerness to possess the goods are ready to meet him more than half way. The assertion that the growers being compelled all through the balance of the year to sell at unremunerative rates are obliged to depend on excessive prices at the holidays may be and in all probability is true, but the grower is by no means master of the situation on that account. For should the weather turn unexpectedly warm or the crop of flowers from one cause or another be in excess of all demands, then the combined efforts of commission men and growers will be of no avail in advancing prices, even though the balance of the year should be so disastrous to both as to force the whole crowd into the poor-house.

This will be readily understood by a study of the market in the case of lily of the valley, tulips, freesias, hyacinths, etc. These varieties can be produced for special occasions in any desired quantity and barring occasional failure through accident or neglect it is an easy matter to provide in advance for all expected requirements, and consequently there is little or no increase in the price of such goods at the holidays. Could the cut of roses be as readily controlled and future demands provided for with the same certainty we should hear nothing of high holiday prices. In fact roses and violets are about the only varieties which at the present day occasion complaint. Carnations advance slightly, but they seldom cost at wholesale more than two or three dollars per hundred, and surely no one can find fault with that.

Certain retail florists have been threatening to close up their stores in future during the holidays "to teach the growers a lesson." Such a course would have but little immediate and no permanent effect on prices one way or another. For there would still be florists enough to use up all the good stuff obtainable and to profit by their opportunities of supplying their neighbor's customers.

Much sympathy has been expressed for the purses of the poorer classes of flower buyers who are supposed to be deprived of the pleasure of buying and giving flowers at the holidays. This seems to be, in the main, gratuitous and unnecessary. We can have jewelry without spending a fortune in diamonds, good fruit without buying hothouse strawberries at two dollars a pint, and fresh flowers without investing our all in mid-winter Jaqs, Beauties and Marie Louise violets. These things may well be left for those who can afford such luxuries and who will be all the more eager for

them if they feel that they are out of the reach of the "plebeian folk." With the wholesale price of hyacinths and tulips at 50c per dozen, smilax at 12c to 15c per string, and stevia, bouvardia, heliotrope, etc. but a penny a spray there is no need that the owners of slender purses should suffer for flowers at Christmas.

Least of all should the commission men be charged with any irregularities existing in the flower market to-day. They do not claim perfection, and in fact they have become so thoroughly accustomed to having all the misfortunes and sins of the business saddled on to their patient backs that they are almost persuaded and convinced that they are all that they have been painted and secretly in league with the evil one.

But in our reflective moments we can not but remember that before the advent of this method of distributing flowers the irregularities and fluctuation in prices were much more frequent and pronounced than now. Every cold snap was a Christmas for the retailers in those days and every warm spell a Waterloo for the growers. Other causes, it is true, have contributed to bring about this changed state of affairs, but the old conditions would prevail much more generally than they do to-day if it were not for the wholesome influence of the wholesale dealer, who from the very nature of his obligations to his customers and to his consignors is bound to resist sudden advances as well as sudden breaks, and who by his facilities for obtaining and distributing vast quantities of flowers acts as a check upon the raids of the growers on the retailers and of the retailers on the growers, which once gave such a spice to the flower trade under the old "bull and bear" regime.

A bad omen for the future is the enormous annual increase in production, an increase far beyond the current demands of the business. The average price of cut flowers throughout the year has shown a steady decline every year for some time past, until it is now undoubtedly true that the grower has to part with his commodities during a large part of the year at a figure below the cost of production. Methods of buying and selling are not alone responsible for this. The annual decline in prices must necessarily go on just as long as the present rate of greenhouse construction continues. But "rock bottom" will be reached some time, and the sooner the better for all of us.

WM. J. STEWART.

ILLUSTRATION HORTICOLE.—The last number of this publication contains colored plates of *Vriesea fulgida* hybr., *Oncidium orthatis*, Rchb. f.; *Codiaeum* (*Croton*) *Le Tzar*, hort.; *Cypripedium* *X* *Crossianum* Rchb. f. and figures of *Roupellia grata*, Wallich, and *Ostrowskia magnifica*, Rgl.

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The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for March 15 issue must REACH US by noon, March 9. Address

THE AMERICAN FLORIST CO., Chicago.

New York Market.

Business is very quiet still, in spite of bright weather. Comparatively few good Bennetts are in now; the finest of the season are from John N. May. Jacqs are poor, many being short-stemmed, and consequently unsalable. Ernest Asmus is sending in fine Gloire de Paris; hybrids generally are plentiful. John N. May is sending in fine Mrs. John Laing, which is received with favor.

Dutch hyacinths (double) sell feebly at 75c a dozen; they do not take very well.

Russian violets are to be seen in moderate quantities, but they are flimsy of texture and small; they do not sell so well as the double flowers.

The highest priced carnations are Grace Wilder and Buttercup; they always bring more than the red or white.

Lilium Harrisii is still over plentiful, and the same may be said of most bulbs. Trade is generally considered poor.

EMILY LOUISE TAPLIN.

KENNICOTT BROS., WHOLESALE FLORISTS,

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Cut Flowers.

Table listing cut flowers in Boston, Feb. 23, including Roses, Carnations, and Violets with prices.

Table listing cut flowers in New York, Feb. 23, including Roses, Carnations, and Violets with prices.

Table listing cut flowers in Philadelphia, Feb. 23, including Roses, Carnations, and Violets with prices.

Table listing cut flowers in Chicago, Feb. 23, including Roses, Carnations, and Violets with prices.

WM. J. STEWART, Cut Flowers & Florists' Supplies

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67 BROMFIELD ST., BOSTON, MASS.

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CHAS. E. PENNOCK, WHOLESALE FLORIST,

38 So. 16th Street, Philadelphia, Pa.

A Dear Friend Remembers Us.

We now hold up to the envious gaze of the private citizen one of the trophies which occasionally fall to the lot of the editor, and at the same time acknowledge with pleasure a favor delicately extended us by a whole-souled friend. He sent last week a communication from Rochester, which begins:

Mr. Editor, DEAR SIR:—It gives us real pleasure in continuing the practice established by the founder of our house nearly half a century ago, to present you with a collection of seeds of your own selection, to the amount of five dollars, with the best of wishes for the New Year.

The words "Vick's Seed House" are printed at the head, which show our admirer's calling to be one which really fosters that occupation ennobled by the historic sufferer from the first earthly eviction. It is natural that he should emphasize his rarest and freshest wishes for our New Year by a gift of the fruits of his labors. We might betray an unseemly avidity in an inquiry as to how the presentation would be made, but this is forestalled by the ideal friendship which prompts the following particulars:

Please select what seeds you may desire from Vick's Floral Guide" of 1889, mailed herewith. These we will send by express or mail, free of charge, or if you wish us to select them, please notify us of the fact, and also state whether you prefer flower or vegetable seeds, or a part of each.

The upright editor's reluctance to be forced into business relations with a grasping, slinging and smashing monopoly is recognized by Mr. Vick in his prepayment of express charges, and if an editor has acquired a habit of using flower seeds, or possesses an inherited preference for vegetable seeds, or a Mugwumpian propensity to get "a part of each," the services of the donor may be had in their selection. He continues:

Your order will be filled any time when presented, our flower and vegetable seeds need no recommend to the press, and we wish every editor in the country to try them. Of course we do not mean a peck of beans, or a bushel of grass seed, or the like, as some have misunderstood, but a collection of choice seeds for trial. If you think the "Guide" worthy of notice, the favor will be greatly appreciated.

We cannot suppress our exultation at the fact here kindly but firmly set forth, that our contemporary will be cut off from any attempt to get a peck of beans with which to increase the strength or improve the flavor of his soup, and the scheme (which would instantly occur to editors) for getting a winter's supply of provisions under the guise of seeds is wisely made impracticable. But one of the true signs of gentility and refinement is seen in Mr. Vick's graceful way of conferring a great favor and, in the last sentence of the foregoing paragraph, giving the recipient at the same time an opportunity to imagine that he is returning even a small one. People who have expressed the opinion that we would never amount to much, anyway, cannot overlook our friend's gratifying insinuation that we are worthy to notice the "Guide"

Mr. Vick incidentally refers in the next paragraph to a strange freak of some former editorial friends, and has gone to the expense of making various electro-types, in good natured compliance with many requests:

We offer you these seeds free, same as in years past, as will be seen in first few lines of this article, but many of our editorial friends in former years have requested a cut of our advertisement, that they could slip it in their paper occasionally, either in payment of the offer of plants, bulbs, etc., or for old acquaintance sake.

To meet this demand we have now on hand electrotyped advertisements, celluloid (if metal on wood is preferred please notify us), thirteen ems wide, no type to set.

Slip it in the paper occasionally! Dear

Mr. Vick, with what a rare knack do you make us feel perfectly at home with you! The appropriateness of the suggestion grows on us, too, the more we think of it. Of course we will! Informally, too, you know, and at unexpected times—just as your dear old grandmother used to slip a cake or a big apple into the side pocket of your jacket when you were going away, after you had munched cubes of fruit cake, eaten quince preserves, and picked the only ripe raspberries in the garden, acquiring unconsciously a taste for the seed business, together with lasting practical lessons in the art of getting something for nothing! And for "old acquaintance sake!" Don't touch too frequently that responsive chord, dear Vick, or, instead of demanding the "35 agate lines double column electrotype," we will insist on the four other convenient sizes, described further on, and gleefully pop them in one after the other, in the lusty vigor of an unalterable friendship—*Brooklyn Standard Union.*

A Good Man, Too.

"Heard about the latest Cincinnati candidate for a government position?"

"Don't know as I have. Who is it?"

"H. W. Gardner, the Fourth street florist. He wants to be head gardener at the White House, and is making a vigorous canvas for the position. Good man, too."—Cincinnati Daily.

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25 best new and rare sorts, including VERSCHAFFELTII, GOLDEN BEDDER, HERO, PROGRESS, from pots, per 100, \$2.00. ROOTED CUTTINGS, per 100, \$1.00.

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25 Copies for.....	\$ 3.00
50 " "	5.00
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Send Catalogue with full descriptions.

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LOW FOR CASH.

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The three first New Geraniums ever sent out. Price, 4 for \$1.00. Send for trade list, now ready.

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Send for samples.

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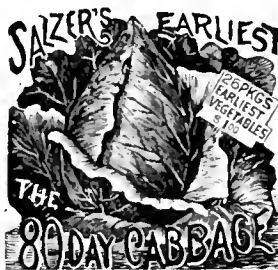
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\$2.00 for Package 80-Day Cabbage and Superbly Illustrated Catalogue—containing a bewildering Collection of Beautiful Flowers, Early Vegetables, New Wheat, White Wonder (at 2 1/2 bu. per acre) Lucerne Clover, Etc. Warehouse area over 2 acres.

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SEEDS



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Send for your EARLY SEEDS, NOW.

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- Smith's Perfection Celery per 100 40c.
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MOUNT HOPE NURSERIES--SPRING 1889

FRUIT AND ORNAMENTAL.

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of every class. The finest

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We offer the largest, most complete and carefully cultivated collections in the United States. Every PLANTER should send for OUR ILLUSTRATED AND DESCRIPTIVE CATALOGUES which give information of the highest importance. FREE to all REGULAR CUSTOMERS; To others: No. 1, Fruits, 10 Cents; No. 2, Ornamental Trees, etc., Illustrated, 15 Cents; No. 3, Strawberries; No. 4, Wholesale; No. 5, Roses, FREE. *Mention this Publication.*

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Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

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Best Mill-truck, of unsurpassed quality. Can be thoroughly relied on to produce a fine crop of the best Mushrooms. Our stocks are the largest and freshest in the country. Quality guaranteed the BEST IN THE WORLD. Why spend your money on doubtful quality, when you can get the best at a price that will please you? We sell at rock-bottom prices for first quality spawn.

By mail, post-paid, 22 cts. per pound, Five pounds for \$1.00. By express, Ten pounds for \$1.20, Fifty pounds for \$5. One pound of spawn will plant a space 3 feet by 4. Special prices for LARGER quantities.

John Gardiner & Co., 21 N. Thirteenth St., Philadelphia, Penna.
Mention American Florist.



Mention American Florist.

Steam Heat.

Mr. Titus in his article on heating in the issue of January 1, argues very strongly for the hot water system as being more economical and a superior heat to steam.

The writer used the hot water system for six years and is now using steam the third year, and for economy, ease of management, perfect control of temperature and cheapness of construction we believe steam has no equal. It is not a question with us as florists how hot or cold the chimney should be kept, but how we can heat our houses in a satisfactory manner with the smallest consumption of coal possible. Granted that Mr. T.'s steam chimney would be much hotter than would be the case with a hot water system in open circulation, but I challenge him to show by practical demonstration that it takes more coal to maintain a steam plant than a hot water apparatus.

We may very well ask ourselves the question can we grow as good plants and cut flowers with steam heat as with hot water? In practical experience no difference can be noted and the "fierce heat" coming like a "hot blast" on our plants is unknown in our houses and some of our rose plants grow up around the pipes overhead and are never injured unless they actually touch the pipe.

In our Minnesota climate it is probably as difficult to heat greenhouses as any place in the country, yet we heat about 14,000 feet of glass with a boiler capacity of thirty-two horse power, about two hundred and twenty-five square feet of glass surface to the horse power. For fuel soft coal is used and the boilers can be left for several hours, but experience shows it to be the safer and more economical plan to keep a man to look after the fires at night whether water or steam is used. S.

Minneapolis.

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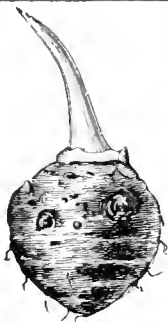
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Forced white lilac has been much in demand of late years. The forcing of this, in the way that the Parisian market gardeners treat it, is not fully understood by every one engaged in the production of flowers in winter in this country. It may be taken as a rule that if plants are hurried into bloom in a very high temperature it causes the flowers to come thin in texture. This is particularly the case when the plants are hardy, as the lower the temperature they are naturally able to bear, the more they are weakened by being subjected to strong heat. To this lilac is an exception, as the plants will stand a higher temperature than most things while being brought into flower without its having any effect on the flowers in the way named. Even when the plants are forced in the dark it has little influence on them as far as affecting their durability when exposed to a dry atmosphere. A temperature of from 80° to 90° is not too much to force lilac in. When white varieties are used there is no need to darken the plants with the object of having the flowers white, but the darker colored sorts will not come so pure in color if exposed to too much light. The objection to large bushes for forcing is that they take up much room, smaller or medium-sized examples that have been especially prepared for the purpose being best, as when these have been well managed they will give more flowers proportionate to their size. The plants may be either potted in the ordinary way or they can be put into boxes or baskets. In lifting the plants the roots should not be broken more than necessary, as the more fibres they have the less will the flowering be affected. During the time they are in heat the syringe should be freely used. In a high temperature, approaching that mentioned, the flowers come on quickly. When the plants are wanted in bloom soon after the commencement of the year they should be started without delay.—*London Garden Dec. 22.*

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Now ready for planing. Send for prices. Address JOHN S. BARNHART, Denton, Md.

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Strong Runners of VIOLETS in perfect health of

MARIE LOUISE, NEAPOLITAN and SWANLEY WHITE at \$10.00 per thousand.

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Per 100 Per 1000 Stock Plants \$2.50 \$20.00 Transplanted on benches, EXTRA 1.00 10.00 Rooted Cuttings 1.00 8.00

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Stock Plants, 2.50 20.00 Rooted Cuttings, 1.00 10.00

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New stock, 35 distinct best bright colors; remarkable vigor; none healthier.

Rooted Cuttings, 3 of each, \$1.00; in mixture, 75 cents per 100, \$3.50 per 500.

Seedlings, once reset; Panics in finest mixture; Petunia, Yellow Throated and Lilliput, 15c. per 100. Verbenas of my superior strain, 50 cents per 100; \$2.00 per 500. Many other seedlings. Write for descriptive list. All goods first-class, and sent prepaid.

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SOME MONEY, for which I will send as follows:

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Per 100 \$35 Ralph, at the low price of \$2.75 720 Queen of West, 3.00 600 Mrs. M. E. Page, 3.00 870 Ash Gray, 2.40 2400 Star of Luck, 2.75 1100 G. Mangilli, 2.50 900 Gen'l Grant, 3.00 1220 Queen of Fairies, 3.00

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on price of our transplanted Cabbage, Tomato and Lettuce Plants at \$4.00 per 1000. Egg plant and Cauliflower \$1.50 per 100. Not transplanted Cabbage, Tomato Celery and Sweet Potato \$2.00 per 1000. Send for Wholesale and Retail Price List of bedding plants. Seed Catalogue free. 1000 2 1/2-inch Smilax at \$3.00 per hundred

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NEW BLACK ALTERNANTHERA

A sport from Paronychnoides Major, raised at Newport, Rhode Island. The color, when at its best is similar to a newly polished stove, of a shining black color. For carpet and ribbon bedding it certainly takes a place unfiled by any other plant. Habit and growth of plant similar to its parent. \$1.25 per dozen, \$8.00 per 100.

Address HANS NIELSON, St. Joseph, Mo.

Moonflower, true, white seed; Amaryllis Johnson, Halli, Sarracenia; Begonia, Rosen, Trenton, Atamisco, Candida, Cooperal; Cimnifera vine bulbs. Seed Ampelopsis Veitchii and Royalii, Tuberosa and Climbing Hydrangea; Eubulbia, \$4 per 100. To trade only. Mrs. J. S. R. THOMPSON, Spartanburg, S. C.

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FLOWERING PLANTS of the best kinds.

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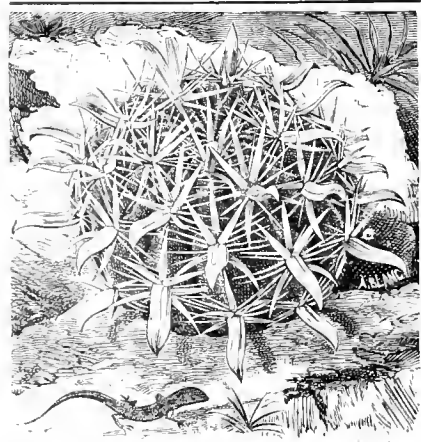
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One of the finest plants for sub-tropical bedding, strong roots	Per 100	\$12 00
Cannas in 8 best varieties		6 00
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15 FINEST VARIETIES OF MAPLES, 1-4 ft. STYRAX JAPONICA, STYRAX OBASSIA. (Read article in this year's *London Gardener*.) SYRINGA JAPONICA, HARDY MAGNOLIAS, THE GRAND CONIFER SCIADOPITYS V.

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in sizes 1-6 ft. (Has been shipped safely by frt. to Boston.)

RARE VARIETIES RETINOSPORAS, 50 VARIETIES TREE PÆONIAS, NEW HERBACEOUS PÆONIAS.

NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEMATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

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"Nymphaea." A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. A so the *crème de la crème* of older varieties. Send stamp for plate of "Nymphaea" and Catalogue.

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PLANTS FOR SPRING BLOOM READY.

Send for prices.

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WHITE WATER LILY ROOTS (N. Odorata)

\$5 00 per 100, by express. Not less than 50 at hundred rate. By mail, 25 cents each; 3 for 50 cents; 12 for \$1.50. Cash with order.

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Offer to the Trade a few very fine ORANGE TREES

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These trees are five years old, and have large well shaped heads; are clean and very thrifty. If put into 24 or 30-inch tubs this Spring, they will become thoroughly established during the Summer, and be in condition to force next Winter for either flowers or fruit.

Until stock is exhausted we offer them at the low price of \$1.00 each, \$10.00 per doz., securely packed.

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SUCCESS AT LAST!

COOK'S AMERICAN SEEDLING RED ROSE

THE UNRIVALLED SOUVENIR DE WOOTTON.

BON SILENE X LOUIS VAN HOUTTE.

BROTHER FLORISTS:

You have wanted for years a continuous blooming red rose, for culture under glass.

First, Came ANDRE SCHWARTZ, the red SAFRANO, which has proved utterly unfitted to our climate.

Second, WILLIAM FRANCIS BENNETT, the superb red bud, which at times is unexcelled. Its faults, however, we all know by this time. No one can prevent its habit of resting or its tendency to black spot. Very few can grow it with sufficient stem. Its fugitive color will always be a great drawback, and its serious lack of lasting qualities, cannot be denied successfully.

Third, Came AMERICAN BEAUTY (synonym, MADAME FERDINAND JAMAIN). That majestic flower, superb in color, in perfume, in growth, but not so free flowering, and occasionally producing defective blooms. We could not get along without it. It has had no equal among the hybrid teas for large work.

Fourth, Came PAPA GONTIER, with good shape, good color, and good foliage, but liable to crop, and with a tendency to drop its leaves, caused probably by its Bourbon parentage. This rose is an excellent shipper and keeper, but alas it has no perfume.

Fifth, Comes our WOOTTON, a genuine American Seedling, with the following good qualities:

First, Color, velvety red, equal to Jacqueminot.

Second, Perfume which cannot be excelled.

Third, Continuous flowering qualities. It has no resting period—blooms and new growth existing at the same time.

Fourth, The most prolific bloomer in existence, every shoot containing a flower bud.

Fifth, Habit, exceedingly vigorous and in foliage quite equal to the American Beauty.

Sixth, It never makes imperfect buds and dark weather but deepens the color, giving it a richer shade of crimson.

Seventh, It retains its color for a long period; flowers having been kept by us in good condition for two weeks after being cut.

Eighth, It is a full double rose, and is good in bud, half open, or fully expanded. Full open flowers frequently are six inches in diameter.

Ninth, The color is even more intense and brilliant at night than in the day.

Tenth, It is free from black spot, the great enemy of the Bennett.

Eleventh, Its shipping qualities are perfect.

Below we give you the daily record of the number of perfect flowers cut from five hundred bushes, during the month of December, 1888:

Table with 2 columns: Date (Dec. 1-31) and Number of flowers. Total: 2731

Or on an average of 88 per day. A large portion of these blooms brought 40c. each at wholesale.

Since the first of Jan. the bushes have been disbudded to secure wood for propagation, and some days as many as 1400 buds have been pinched out. We shall bloom not less than 6000 plants during the next winter, and cast aside every other red rose.

OPINIONS OF PROMINENT FLORISTS.

JOHN HENDERSON & CO.,

FLUSHING, Dec. 11, 1888.

"This rose (Cook's Souvenir de Wootton) is among the best continuous flowering ones, being beautiful in color, form, and fragrance, which will undoubtedly commend it to all."

MRS. GEO. W. CHILDS,

January 7, 1889.

"Mrs. Childs received this afternoon, the beautiful Wootton roses Mr. Durfee so kindly sent her, and which she admires not only for their beautiful color, but for their delicious odor."

WM. J. STEWART,

BOSTON, January 8, 1889.

"The Woottons arrived in good condition. The La France, American Beauties were faded and gone, and the Puritans were brown as a bean."

JOHN BURTON,

CHESTNUT HILL, PHILA., Jan. 25, '89.

"Have just received box of roses. The Woottons are fine, and I think it cannot fail to be a profitable cut flower rose."

ROBERT CRAIG

PHILADELPHIA, PA., Feb. 5, '89.

"I think the Wootton will be a popular rose because it is such a free bloomer and so vigorous in growth. Many growers have failed to get entire satisfaction with Bennett and Beauty, but the Wootton will, I feel sure do well in almost any soil with fair treatment."

Remember, No Imperfect Flowers like the American Beauty produces.

60,000 YOUNG PLANTS FOR THE TRADE AT REASONABLE PRICES, AS FOLLOWS:

Price list: \$180 per thousand, \$100 per five hundred, \$25 per hundred, 50 cents each.

From 2 1/2-inch Rose pots. Orders delivered in strict rotation, by Mail or Express.

FOR SALE BY

C. STRAUSS & CO. WASHINGTON, D. C.

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MESSRS. STRAUSS & CO.

Beg to add, that they have a Large Stock of Young Plants of the following Roses at very reasonable rates:

AMERICAN BEAUTY, PAPA GONTIER,

ANNIE COOK, MADAME CÉSIN,

CATHERINE MÉRMET, THE BRIDE,

THE GEM, LA FRANCE,

PURITAN, PÉRIE.

Their PURITAN and LA FRANCE have been pronounced the finest in the United States. A complete change of stock every two years seems to be essential to continued success in rose culture under glass.

A Florist Who Has No Use for This Paper.

One of our leading(?) florists says he "knows more than the AMERICAN FLORIST or any other paper can teach him." Customers who visit his model(?) establishment report the mud in the walks to be from two to five inches deep, that certain plants have lain in the same position for a year or more and that even geraniums refuse to flourish except in bean-stalk fashion.

Added to his eminent qualifications as a florist he is an excellent customer of the nearest wet grocery. His employes on leaving him are usually obliged to sue for their wages, which gives him something to do and helps pass away the time he disdains to waste on "them papers, what don't amount to anything anyhow." While it is sad that the FLORIST can not have the support of this influential man I question whether it would be of any great value to you.

[We shall make a mighty effort to struggle along without it.—Ed.]

ILLUSTRATION HORTICOLE for January contains excellent colored plates of three new chrysanthemums—Jane, Admiral Sir Th. Symonds and Lady Randolph Churchill—and Passiflora Watsoniana.

PLANTS AND ROSES.

- H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
 - Moss Roses, 1 year, open ground, \$12.00 per 100.
 - Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
 - Hydrangeas Hortensis, Otakua, T. Hogg, 4-in., 5-in., 6-in., \$10.00, \$12.00 and \$15.00
 - Carnations, newest and best varieties, from 3c. to 6c.
 - Fry, English, 20 inches long, \$5.00 per 100.
 - Amaryllis Formosissima \$5.00 per 100.
 - Cannas, \$2.50 per 100.
 - Chrysanthemums, best sorts, \$3.00 per 100.
 - Crape Myrtle, \$5.00 per 100.
 - Palms, 18 var. Dracaenas, Pandanus, 4 varieties.
- A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

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FREE BY MAIL.

	per 100	per 1000
Verbenas, mammoth strain in 20 named varieties, mostly our own seedling, (very fine), named	\$1.00 \$8.00
All varieties mixed, (hard to beat)	.....	.75 6.00
Geraniums, mixed, finest strains, double and single, including Le Pilote, Bliss, White Swan, B. Darenton, Sherman, Snow, Overall, &c., &c.	.....	1.50 12.00
Heliotrope four best varieties	.....	.75 6.00
Fuchsias, in varieties long	.....	.75 6.00
Agapanth, White Cap and Blue Bird	.....	.80 5.10
Feverfew, Double White	.....	.60 5.00
Stevias, tall growing, dwarf and variegated	.....	.60 5.00
Euphorbia, everblooming white, best for florists' use, for cutting	1.00 8.00
Sweet Alyssum, large double, and Dwarf Tom Thumb60 5.60
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Pansies—Parisian Beauties, Woodbury's celebrated strain in every conceivable shade of color, (fine for stock, try them)40 3.00
Above in light and yellow colors	.....	.50 4.10
Tustin & Bastian's Philadelphia Cap Sheet Pansies, (none better)	.....	.50 4.00
Droer's White Pansies, (the largest and whitest)	.....	1.00
Gibson's Special Selection, being the cream of all the above fine varieties	.....	1.50
Fresh seed of Parisian Beauties, 200 seeds,	20c per paper,	
Fresh seed of Philadelphia Cap Sheet,	50 seeds,	
	15c per paper,	
Carnations, Bouvardias, &c., &c., &c.		

Send list of what you want Satisfaction guaranteed. Gibson pays the expenses and guarantees safe transit of money and plants.

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ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS.—New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achille, Alba, Viburnum Plicatum, Buis's Variegated Althea, New Drutzia, New Weigelias, &c. Honeysuckles, Wistarius, Clematis, Akebias, and all best hardy climbing vines, VERY LOW.

Chrysanthemums, 100 selected finest sorts, Moon Flowers, extra strong, propagated from blooming plants. Finest Summer Flowering Bulbs, Gladiolus, Tuberoses and Japan Lilies.

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First Class PALM-LIKE LEAVES \$10.00 per hundred.

WILD SMILAX, PALMETTO LEAVES, MAGNOLIA BRANCHES, ETC. shipped on short notice. FERNS, 1000 Cut Dagger Ferns for \$2.00

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JANUARY, 1889.

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Low Budded Roses, in the best leading varieties, \$7.00 per 100; \$60.00 per 1000.

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Some well ripened Bulbs, first class, warranted true to name:

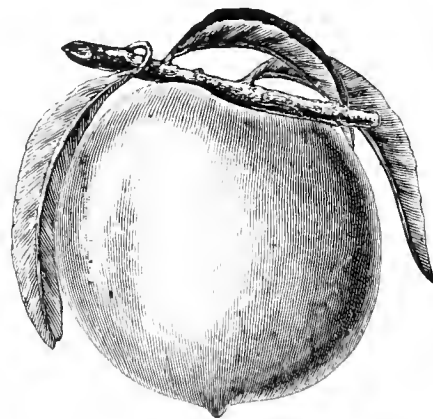
DOUBLE ITALIAN, DWARF PEARL, DIAMOND PEARL, AND EARLY SINGLE FLOWERED.

at \$2.00 per 100; \$10.00 per 1000. Special rates on lots of over 5000. Second size bulbs at half the above rates. Offsets of all the above suitable for growing large bulbs first season, at 50c per 100; \$2.00 per 1000. In lots of over 5000, at \$1.50 per 1000. Smaller sizes, 25c per 100; \$1.00 per 1000.

Variegated Foliage, beautifully striped green and white, single and early flowering, \$3.00 per 100; \$20.00 per 1000. Offsets \$1.50 per 100; \$5.00 per 1000.

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The cut shows the form one-half diameter or quarter natural size. Largest specimens measure a foot in circumference and weigh nearly a pound. Rich yellow with carmine cheek; of very uniform size, shape and mould; firm, rich, juicy, excellent; the flesh is yellow and bright red at the pit; a perfect freestone; ripens the second week in October (or after the Smock) and lasts two weeks after it is picked. The tree is a strong grower, bears every year and more than the tree can carry. The best yet for canning and evaporating. As remarkable for flavor as for size and beauty. Its name has been spoken spontaneously without knowing it by hundreds of people on seeing it for the first time, "Wonderful!" As good as Crawford's Late in other respects and bears on the average three times as much fruit. The only time it was placed upon exhibition it was awarded a first premium over all others and a special premium of a Silver Medal. Full information (history, description, prices of trees, testimonials of experts, &c.) and a colored picture of it mailed free. Also a pamphlet on the culture of the Peach with descriptions and prices of all the standard and new varieties.

Lovett's Guide to Horticulture, a handsome book of nearly 100 pages, finely printed and over 200 illustrations, describing every kind of hardy Fruit and Ornamental Tree and Plant, new or old, giving both defects and merits; replete with instruction on planting, pruning, culture, &c., and quoting Trees and Plants at half what they are usually sold for, will be mailed, with colored plates for 10 cents, or without plates free.

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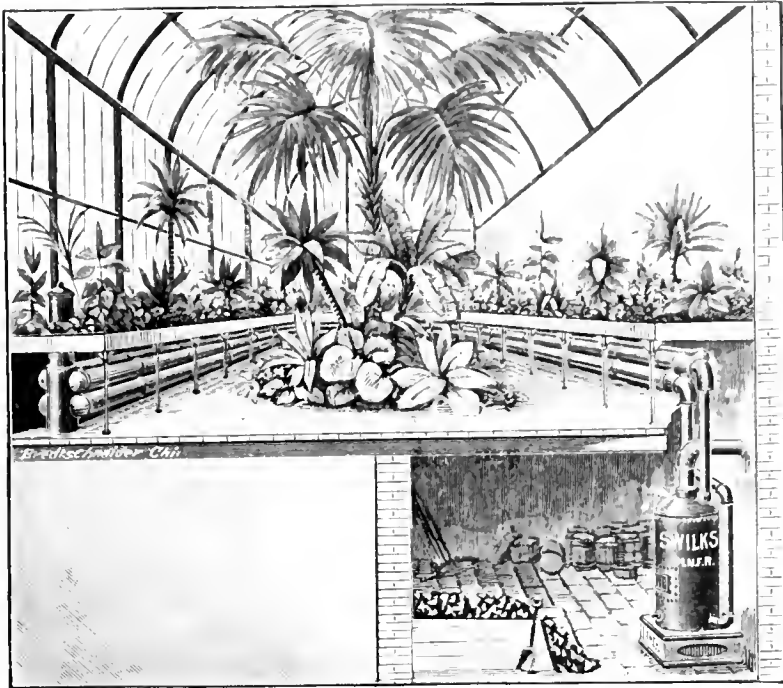
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STOCK FOR FLORISTS.

Alyssum, double	Per 100	\$2.50
Aceratum, four sorts		3.00
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Begonia rubra, strong, 2 1/2 inch		6.00
" flowering sorts, 2 1/2 inch		5.00
Coloas, 24 standard sorts		2.50
" 10 new sorts		6.00
Chrysanthemums, 10 sorts		3.00
Fuchsias, double and single, strong		4.00
Geraniums, double and single, 2 1/2 inch		3.00
Heliotropes, four varieties, 2 1/2 inch		3.00
Lantanas, six varieties, strong, 2 1/2 inch		4.00
Salix, strong, 2 1/2 inch		3.00
Sallyas, six sorts, 2 1/2 inch		3.00

Healthy stock; best sorts; good packing. Address
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HAND-TURNED POTS. Standard Size.

2 inch, per 100,	\$.50	6 inch, per 100,	\$ 2.20
2 1/4 "	.50	7 "	3.75
2 3/4 "	.50	8 "	5.50
3 "	.70	9 "	8.75
3 1/2 "	.70	10 "	8.00
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5 "	1.38	14 "	50.00
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No charge for cartage or package. Send \$1.00 for sample bill. Our Pots are all hand-turned and well built. All kinds of ware made to order at low prices. Address
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 These pots are made of the best quality Iron; the top and back handles are riveted on, an 1 1/4 inch iron rim riveted on the bottom. They are then Galvanized, thus making every part secure. The spout is riveted on, and has a brace around it, riveted to the body. Are acknowledged by all florists who have used them to be the best pot made.
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 Copper faced Rose with each, extra rose 25 cents each.

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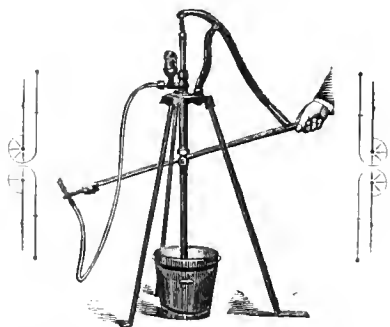
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127 Strand,
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Regarding the Expansion Tank.

In the article on greenhouse heating in January 1 number, Mr. E. S. Titus states that "the height of tank is sufficient to create a pressure in the pipes of about 15 lbs."

Allow me to ask through your valuable paper what height above the pipes the tank should be to give a pressure of about 15 lbs? Is the tank on the return pipe near the boiler? JNO. STEWART. Benmiller, Ont.

CORRECTION.—In Mr. A. Giddings' adv. on page 310, last issue a typographical error made the price of his geraniums \$1 per 100 instead of 4 for \$1, as it should have read.



THE LITTLE CLIMAX SPRAY PUMP
HANDSOME,
USEFUL,
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ITS EQUAL has not been invented for spraying delicate plants and for using Insecticides in greenhouses to destroy MILDW, RED SPIDER, ETC., or for spraying Flowers and Shrubs on the Lawn. It throws a Fine Spray 15 feet and a Solid Stream 40 feet; a perfect Pump for washing Windows, Porches, Carriages, etc. Only weighs 21 pounds; legs are unscrewed and it is packed in a neat, strong box for shipping.

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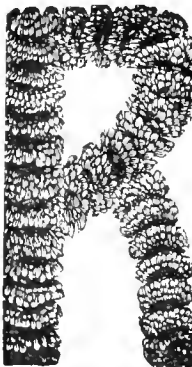
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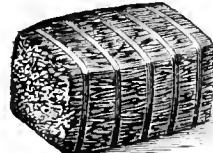


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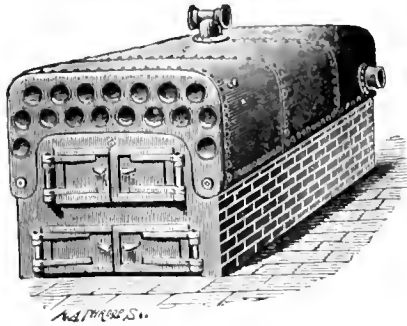
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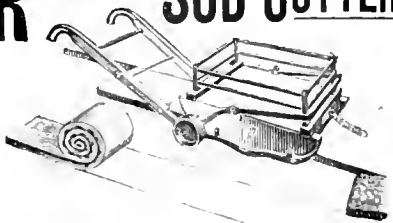
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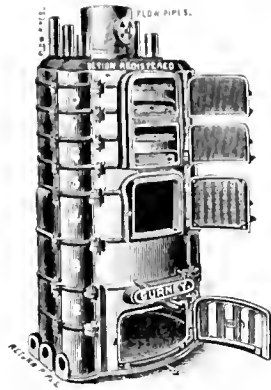
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THE
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CHEAPEST

and most durable pots manufactured.

Endorsed by all the leading florists.

For price list of the "STANDARD" POTS, address
THE WHILLDIN POTTERY COMPANY,
No. 713 & 715 Wharton St., PHILADELPHIA, PA.

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are shipping immense quantities of the New "Standard" Rim Pots in all sizes under 3 1/2 inch. Don't you believe it? Order a crate or send 6 cents for postage on a sample. These are far superior to our old style smooth pots, and are sure to take their place. They nest better, we pack more in a crate and they go very safely indeed. They are exact inside measure. The 4-inch will be ready March 1st, and the 3 1/2 and 5-inch March 15th, while the 6-inch expect April 1st. The machinists have delayed us a month.

PRICES OF "STANDARD" POTS,

Size.	Price of 1000.	Crate No.	Price Crate.	Size	Price of 1000.	Crate No.	Price Crate.
1 3/4 -in.	\$2 80	4000	\$11 20	3 -in.	\$ 5 00	1400	\$7 00
2 "	3 20	3168	10 00	3 1/2 "	7 00	1000	7 00
2 1/4 "	3 60	2500	9 00	4 "	8 50	600	5 00
2 1/2 "	4 00	2100	8 40	5 "	16 00	360	5 75

We pack and deliver here f.o.b. 400 lbs. is the weight of a crate. The freight rate to Boston is 10c; New York, Philadelphia or Baltimore 18c; Pittsburgh, Wheeling or Cleveland 16c; Detroit or Columbus 16c; Cincinnati 21c; Nashville 20c; Memphis 20c; East St. Louis 20c, and Chicago 20c. These are samples of the rates, and smaller places are just as low. Syracuse has great fire facilities. Try a crate. Samples, all sizes, in first crate. We shall always keep a stock of our Rose Pots and all sizes of fine hand-turned pots from 7-inch to 16-inch. Now about our stock of "Old Style" smooth pots. 2 1/2 and 2 3/4-inch are all gone; 3, 3 1/2 and 4 1/2-inch are nearly gone, but plenty of 4 and 6-inch. Here are the prices and crates of "Old Style":

Size.	Price of 1000.	Crate No.	Price Crate.	Size	Price of 1000.	Crate No.	Price Crate.
2 1/8 -in.	\$3 40	2625	\$ 8 90	4 -in.	\$ 8 00	600	\$4 75
2 1/2 "	4 00	1875	7 50	4 1/2 "	12 00	360	4 25
3 "	5 00	1150	5 75	5 "	14 00	320	4 50
3 1/2 "	7 00	875	6 00	6 "	22 00	160	3 50

The 2 1/8 and 2 1/2-in. we will make to order, and as soon as the 3-in., 3 1/2, and 4 1/2-inch are sold out we can only make them and ship 10 days after ordered. We cannot agree to keep up a full stock of both styles of pots, but we aim to be always ready for big orders of "Standard." You may now order heavy on all sizes under 3 1/2-in. Finally, we make this EXTRAORDINARY OFFER: Until March 15th, discount five per cent on sizes 3 1/2-in and UNDER, when ordered in ready packed crates (both "Old Style" and Standard), and cash with the order, by Money Order or New York Draft. This is to have you try us at once. Every word of this offer is important. Everybody write and ask questions. We have a stenographer to answer every one fully and promptly. Remit to

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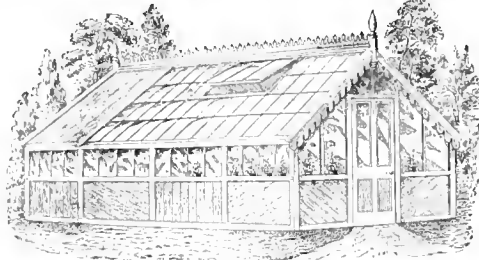
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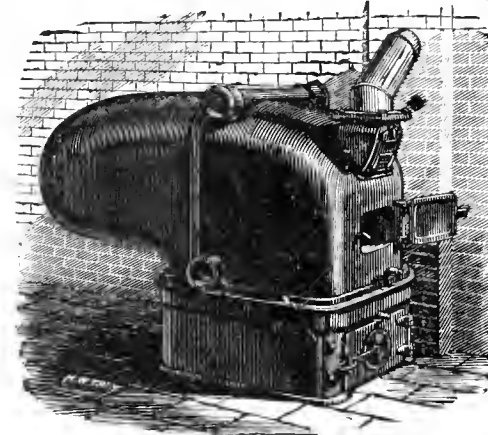


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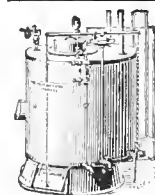
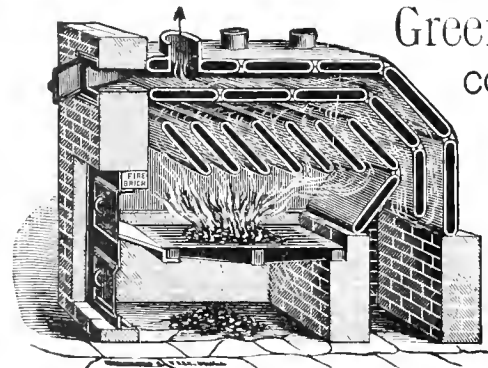
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E. H. LIBBY, editor of the *American Garden*, has been dangerously sick of typhoid fever, but is now, we are happy to hear, recovering.

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Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

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THE AMERICAN FLORIST

Vol. IV.

CHICAGO AND NEW YORK, MARCH 1, 1889.

Supplement to No. 86.

The Mail Trade.

General advices indicate that the mail orders from seed and plant catalogues are from 10 to 20 per cent less than last year up to February 15. There are many surmises as to the cause, such as: "Buyers are waiting to be sure the winter is over," "present prices of many vegetables are very discouraging," "Hard Times." However, "all signs fail in dry times," and the facts as above stated are undoubtedly true to date.

Youngstown, Ohio.

Plants of all kinds are looking well, strong and healthy, the weather having allowed plenty of air and not very severe firing necessary to maintain the desired temperature being favorable to their welfare. And as the days are beginning to lengthen we expect to reach the spring with a large stock of healthy plants. The general business prosperity of the country along with the increasing taste for the culture of flowers makes the outlook for spring favorable to the florists. For the last year or two everybody who wanted to work has been steadily employed, giving him means over and above what is necessary for bodily support, a good part of this surplus, with those owning houses, shall go to the purchasing of flowers, trees and seeds for the decoration of the same.

MANSFIELD MILTON.

Print your SPRING TRADE LIST in the AMERICAN FLORIST. It will cost you less money and do you more good than

MARCH OFFER.

	Per Doz.
Hydrangea, new fringed white (S. Umbriata)	22.00
1 year dormant plants, 2 1/2-in. pots	22.00
Gloxinias, Cassiopea varieties, good bulbs	1.00
smaller bulbs	.50
Geranium Sir Robert Napier, the best golden tri-color	1.50
Geranium Blanchi Perfection. This variety received a certificate from the Royal Horticultural Society, London, as the best double white in commerce	1.25
Geranium Evening Star (true), single white with pink eye. The model geranium	.75
Geranium Golden Dawn	.75
Begonia Metallina	.50
Sutton's White Perfection	.50
Pink Perfection	.50
Fuchsia Phenomid	.50
Storm King	.50
Improved Venus Victoria. Very oddly colored	1.00
Abutilon Golden Fleecce	.75
Eucharis Amazonica, good medium bulbs	1.00
smaller	.50
Per 100	
Verbena, finest named sorts, 4-inch pots	2.50
and 4 1/2-in. pots	4.00
Alyssum, New Double Iron Thumb	1.00
Feverfew Little Gem	3.00
Pansy, New Yellow Giant. Pot plant ready just of March	3.00

Pansy Seed of above Yellow Giant, which is the best yellow variety known. Price, trade packet of about 1,000 seeds, \$1.00.

No order filled from above list (seed excepted) for less than \$2.00. No Trade list, Retail Catalogue with trade discount mailed upon application.

ELLIS BROS.,
Keene, N. H.

to print and mail your list yourself. We will print and mail your list, in the columns of this paper, to 5,000 buyers for much less than the postage alone would cost you. A full page in the FLORIST costs only \$42 for one insertion. It would cost you twice that sum to get up a list of your own and mail it to 5,000 addresses. Think it over! We can save you money and secure you better results at the same time, for the FLORIST is preserved while your trade list otherwise mailed would rarely be kept on file. We will print extra copies for you—from the type after being set—at a nominal rate if you wish extra ones to mail in response to requests. If half a page is large enough it will cost you but \$21 for the service.

ISMENE CALATHINA.—I want a picture of a lily called Ismene calathina. Can some reader send one?

GEO. W. CALDWELL.

Evergreen, Ala.

FLORISTS TAKE NOTICE.

ROSES—Have a fine stock of our own importation of Hybrid roses, budded low, of the following varieties: Earl of Pembroke, Anna de Diesbach, Captain Christy, Mabel Morrison, Paul Neron, Magna Charta, Baroness Rothschild, Coquette des Blanches, Star of Waltham, Merveille de Lyon, Mme. Gabriel Luizet, Victor Verdier. Price \$3 per doz.; \$20 per 100.

Also have a fine stock of Hybrids in 2-inch pots of the following: Boule de Neige, Crown Prince, Dr. Hogg, Fontanelle, Gen. Washington, Giant of Battles, H. Schultzeiss, M. A. Dureau, M. C. Wood, Mme. Masson, Mme. Plantier, Marie Baumann, Magna Charta, Paul Neron, John Hopper, Triumph d'Angiers, Victor Verdier. Price \$7 per 100.

Gen. Jacqueminot, 2-inch, \$6 per 100; 3-inch, \$10 per 100; 4-inch, \$15 per 100.

A large stock of Teas, some of the leading varieties, such as Bride, Perle, C. Mermet, Bon Silene, Safrano, I. Sprunt, Comtesse de La Barthe, M. J. Schwarz. Price \$4 per 100.

NOVELTIES IN GERANIUMS These comprise some thirty different varieties, and have put them at the low price of \$10 per 100, equally divided.

GENERAL ASSORTMENT OF GERANIUMS—Both single and double, ready to shift in 3-inch pots; 2-inch, 50c. per doz., \$4 per 100; \$30 per 1000; 4 inch pots ready April 1st at \$10 per 100; Mountain of Snow at \$5 per 100; Mme. Sallerol, \$4 per 100; 3 inch, \$8 per 100.

NEW SET OF IVY GERANIUMS—All double and of a very fine set of five varieties, worthy of cultivation. \$10 per 100.

GENERAL COLLECTION OF IVY GERANIUMS—These are some of the old and last year new ones. \$5 per 100.

COLEUS—Consisting of 20 distinct varieties at 50c. per doz., \$3 per 100.

ACHYRANTHES—Aurea Reticulata, Gilsonii, Wallisii, Acuminata aurea. Lin-

CHRYSANTHEMUM MOONLIGHT.—English growers make frequent complaint that this chrysanthemum too frequently bears deformed flowers. Several state that it will certainly not be grown for market purposes.

FLOWERING SHRUBS, BULBS, &c.	
H. P. and Moss Roses, strong 2 yr. dormant	\$1.50 \$10
H. P. and Monthly Roses, in pots to bloom	1.50 10
young plants	.50 3
Dahlias, whole roots, choice named	1.50 10
unnamed	1.00 6
Ampelopsis Velluti, Boston Ivy, fine plants	1.00 6
Flowering Strawberry, hardy, prolific, reliable	50 3
Palozys, choice assortment, named kinds	1.50 8
Grapevines, 10 choice, Niagara, &c. 2 yr. \$2; 1 yr. 1/2 price.	
Clematis, Greenhouse and Vegetable Plants.	

IMPORTED H. P. ROSES,

Worked low upon the Manetti Stock.

BARONESS ROTHSCHILD, LA FRANCE, MME. GABRIEL LUZET, MAGNA CHARTA.

Extra strong plants for florists use, in fine condition. Address

WILLIAM H. SPOONER,
JAMAICA PLAINS, (Boston), MASS.

denii, Verschaffeltii. Price per doz.; 50c. \$3 per 100.

FUCHSIAS—Good assortment in 20 varieties. Price \$4 per 100.

HELIOIROPIS—Albert Deleaux, Camellion, Etoile de Marseilles, Mina, Pres-Garfield, Le Renouuu, Saphir, Springfield, White Lady. Price, 2-inch 50c. per doz.; \$3 per 100.

LANTANAS—A splendid assortment of 12 varieties in 2 1/2-inch pots. Price, 50c. per doz.; \$4 per 100.

DAHLIAS—These are grown from cuttings and bloom as early and as free as from roots; of these I have a selection of 16 distinct var. at 75c. per doz.; \$5 per 100.

PHILOX—In eight varieties, these are plants made from last fall. Price 60c. per doz.; \$4 per 100.

CARNATIONS—Wm. Swayne, a fine white, 75c. per doz.; Emperor of Morocco, deep maroon, 75c. per doz.; Hinz's White, Pres. Garfield, Snowdon, Snow White, Sport. 50c. per doz.; \$3 per 100.

MYRTUS—Communis, Multiflora, 3-in \$1 per doz.

SALVIA SPLENDENS—Price 50 cts. per doz.; \$4 per 100.

VINCAS—Major Variegata 2 inch, \$4 per 100; 5-inch, \$1.75 per doz.; Harrisonii 2-inch, 50c. per doz.; \$4 per 100.

VIOLETS—Marie Louise. Price 2 1/2-inch, \$1 per 100.

PANSIES—2 1/2 inch pots \$3 per 100.

CALADIUM ESCULENTUM—Fine strong dry bulbs at \$1.50 per doz.

IPOMEA NOCTIFLORA Price, 60c. per doz.; \$4 per 100.

TIBBEROSE BULBS—These are selected bulbs, double \$1.75 per 100; \$15 per 1000; Pearl Dwarf \$1.75 per 100; \$15 per 1000.

FEVERFEW—Little Gem. Price 50c. per doz.; \$4 per 100.

EUCCHARIS AMAZONICA—Good strong flowering bulbs. Price, 4-inch, \$1.50 per doz.

Descriptive Catalogue now ready sent free on application. All orders should be

GEO. W. MILLER, P. O. Wright's Grove, Chicago, Ill.

PAUL BUTZ & SON'S Wholesale Trade List for March, 1889.

The plants offered in this list are grown in 2 1/2-inch pots (except noted), are strongly rooted, and in the best possible condition, for immediate shipments. The list includes the leading Novelties and other Florists' Stock on hand, which we can furnish in the quantities and at the prices quoted.

	Per Doz.	Per 100		Per Doz.	Per 100
Ageratum, Cope's Pet.	50	\$3 00	Geraniums Ivy, scented & var.	60	\$4 00
Abutilon, 6 best sort	60	4 00	Glaadiolus, best mixed	35	2 00
Achyranthes, 4 sorts	50	3 50	Heliotrope, 3 sorts	50	3 50
Asparagus tenuissimus	60	4 00	Hibiscus, dbl. and sgl., 3 inch.	75	5 00
Alternanthera, 3 sorts	50	3 00	Hydrangea T. Hogg, Otaksa, 3-III.	1 00	6 00
Bouvardia, 5 sorts	75	5 00	"	4 in. 1	50 10 00
Carnations, from flats, 1000	\$18	2 50	" Rosea, strong, 4-in.	2 00	
Coleus, 20 sorts	50	3 00	Ivies, English, 2 to 3 ft. long	75	5 00
Clematis, strong 2 yr. old	2 50		" German or Parlor	50	3 00
Callas, strong, 4-in. pots	1 25	8 00	Lantanas, 8 best sorts	50	4 00
Cannas, 6 best sorts	50	3 00	Pansies, best German strain	40	2 50
" Ehemanni	2 00		Passiflora C. Elliott	60	4 00
Centaurea gymnocarpa	50	2 50	Pelargoniums, 10 best sorts	1 00	7 00
Chrysanthemums, 20 sorts	50	3 00	" strong, 3 in.	1 50	
Cuphea platycentra	50	3 00	Paris Daisy	50	3 00
Daphne odorata, 3 inch	75		Poinsettia, strong, 4 & 5 yr old	4 00	
Dahlias, in variety	75	5 00	Phlox, hardy, 10 sorts	75	5 00
Daisies, white, red and pink	50	2 50	Roses, best varieties	75	5 00
Euphorbia jacquiniiflora, 3-in.	1 00		" " 4-inch	1 50	10 00
Fuchsias, best double & single	50	3 00	Smilax, fine young plants, 1000	\$25	3 00
" Storm King, fine	60	4 00	Tuberose, Pearl, large	50	2 50
Feverfew, Little Gem	50	3 50	Verbenas, Mammoth strain, 1000	\$22	2 50
Geraniums, 12 best new sorts	60	4 00	Violets, Swanley White and Marie Louise,		
" general collection	50	3 00	strong runners, 1000	\$10; 100	\$1 50.

R. S. BROWN & SON PLANTS TO THE TRADE.

We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

	Per 100
Abutilons of sorts	4, \$6 and \$8 00
" Eclipse, new, var. foliage	8 00
Ageratum, W Cap, Cope's Gem	\$3, 4 00
Anthericum Vittatum	8 00
" Picturatum	12 00
Achyranthes, 2 kinds	3 00
Alyssum of sorts	4 00
Asclepias, white flowers	6 00
Alternanthera Spectabilis, new var.	6 00
" Aurea Nana	3 00
" Paronychioides	3 00
" Versicolor & Tricolor	3 00
Begonia, Flowering Rubra, Welttoniensis Rubra, Alba, Zebrina, Robusta Alba Picta G. Scandens, Bruntanti, Metallica, etc.	\$4, \$6 and 8 00
Balm, variegated	4 00
Calla, Richarda Maculata	6 00
Cobæa Scandens	8 00
Chrysanthemums in variety	3 00
Coronilla Glauca Variegata	8 00
Caladiums, fancy leaf of sorts	16 00
Coleus of sorts, best new and old	3 00
" Verschaffeltii, Golden Bedder	3 00
" Rag Carpet, Louise Beck and Mrs. Hunt	4 00
Cannas of sorts	5 00
Cuphea (cigar plant)	3 00
Centaurea Gymnocarpa	\$4 and 6 00
Cineraria Maritima	4 00
Cyperus Alternifolius	8 00
Daisies, white and pink	4 00
Dew Plant	4 00
" variegated foliage	6 00
Echeveria Glauca	5 00
Euphorbia Splendens	\$4, \$6 and 8 00
Ferns of sorts named	\$8 and 12 00
Fuchsias, best dbl. & sgle.	\$3, \$4 and 6 00
" new of sorts	10 00
Geraniums of sorts dbl & sgle	\$3, \$4, 6 00
" of sorts scented	\$3, \$4, 6 00
Heliotrope, \$3, 4, \$6 White	6 00
Hollyhock double, nice plants	8 00
Hibiscus of sorts	\$4, \$6 and 8 00
Isolepis Glauca and Gracilis	6 00
Ipomœa Learii, Blue Moon Flower	6 00
" Palmata, Mexican	12 00
Impatiens Lucy and Sultana	6 00
Lycopodiums of sorts	8 00
Lantanas of sorts	\$6 and 8 00
Lobelias for Baskets	\$3 and 4 00
" Ribbon lines or Beds	\$3 and 4 00
Money Wort	4 00
Moon Flower, true	5 00
Oxalis double yellow	\$4, \$6 and 8 00
" single yellow	\$4, \$6 and 8 00
" pink and white	4 00
Passiflora Incarnata, hardy true	4 00
Petunias, best double of sorts	\$6 and 8 00
Pansies, large flowering	3 00
Perennial Phlox of sorts	6 00
Pothus Variegata, fine for vases	8 00
Pilea Arborea or Artillery plant	\$4, 6 00
Rosemary	8 00
Roses Everblooming of sorts	4 00
Salvias of sorts	6 00
Stenotaphrum	6 00
Strawberry Geraniums	5 00
Smilax	3 00
Thyme Golden	4 00
Vincas, shrubby for bedding	6 00
" trailing for baskets, 2 kinds	6 00
Verbenas of sorts	3 00

ADDRESS

R. S. BROWN & SON,
BOX 99. KANSAS CITY, MO.

Not less than 25 sold at 100 rates, or six at dozen rates. Our selection of varieties. No charge for boxes or packing.

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To the Florists and Plant Dealers of America

HAMMOND'S SLUG SHOT.

An Insecticide USED FOR TEN YEARS. Tried, tested and found by experience safe to use and effective in destroying ALL leaf-eating insects, such as POTATO BUGS, CATERPILLERS and SLUGS, and many juice suckers like APHIDES; also very effective against SPINACH BUGS, FLEA BEETLES, etc. The "GREASY CRT WORM" and others are deterred very largely in their destructiveness for they avoid plants around which it has been placed.

Put up in 5 and 10 lb packages in barrels; Barrels in bulk 235 lbs.; Kegs 125 lbs; Canisters with screw top filled.

THRIP JUICE.

A Concentrated Liquid Insecticide bearing an average dilution of 200 times its own bulk in water making it probably the cheapest insecticide in the world, for SCALE, APHIDES, RED SPIDER, CODLING MOTH, CATERPILLERS, etc.

Put up in Cans, size half-pint, one pint, quarts, gallons, 5, 10, 25 and 50 gallon packages.

GRAPE DUST.

Called by users "THE GREAT MILDEW DESTROYER," a fungicide for MILDEW AND ROT of the indoors of ON GRAPES, POTATOES, GOOSEBERRIES, POTATOES, PINKS, PEARS, etc.; a powder possessing great diffusibility and thoroughly effective. Also useful in destroying many insects.

Put up in Packages of 5 and 10 lbs. in barrels; Kegs, in bulk 100 lbs.; Barrel 200 lbs.

SCROFULARIA

Kills Carpet Bugs. A Compound Powder effective against Moth, Roaches, Bed Bugs, etc. After two years' use, so far as we can learn, wherever used against the larva of the CARPET BEETLE or so-called BUFFALO MOTH. NO DAMAGE has come to either carpets, furs or woollens. The value as a destructive agent of this powder against all sorts of insects, excepting scale, is great.

Put up in Packages retailing for 25 cents, 50 cents and \$1.00 each. Also in cans, boxes and barrels, bulk.

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All new varieties of 1888, the extra choice of many hundred select Seedlings. Thirty-five distinct best colors - shades of Scarlet, Red and Pink predominate. Robust, healthy growers, forming plants rapidly. ROOTED CUTTINGS, 5 of each, \$1 00. In mixture, 75c. per 100, \$3.50 per 500.

SEEDLINGS of my superb strain, 50 cents per 100, \$2.00 per 500.

PANSIES, in unexcelled mixture of all notable strains, from seed of my own growing. Cold Frame and Winter grown plants. Let me price your orders.

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The Largest Stock in the West.

Fine 2-inch Pot Plants \$1.50 per dozen, \$10.00 per hundred.

Price per thousand given on Application.

GENERAL LIST PLANTS.

	Per Doz.	Per 100
Abutilons in variety.	\$.50	\$ 4.00
Alternanthera ready Aprilist.	.50	4.00
Asparagus tenuissimus.	.75	7.50
Ageratum, four varieties.	.20	4.00
Anthemis Coronaria.	.75	5.00
Alyssum in variety.	.50	3.00
Agathaea Celestis.	.60	4.00
Anthericum Repens-Vittatum var.	.75	5.00
Aloystia Citriflora.	.60	5.00
Begonias, flowering, in var.	.60	4.00
Rex in variety.	.75	6.00
Balm variegated.	.60	1.00
Canpa Phenanni.	1.50	10.00
Adolph Weick & G'adioflora	.60	6.00
French Hybrids, named var.	.50	20.00
Caladium Esculentum.	1.50	10.00
Callas, 5-inch pot plants.	3.00	
small.	.75	5.00
Campsidium Filicifolium.	.75	
Coleus, New of 1888.	1.00	6.00
25 varieties, per 1000.	\$25.00	
Daisies English.	.50	4.00
Snowball (true).	.75	6.00
Deutzia gracilis.	.75	

	Per Doz.	Per 100
Euonymus Radicans Var.	.75	
Echeveria Metallica and Hoveyii.	.50	
Secunda Glauca.	.60	4.00
Fuchsias Phenominal.	1.00	
Storm King and Sunray.	.75	
in variety.	.60	4.00
Ficus Repens.	.75	
Ferns.	1.25	
Farfugium Grande.	1.50	10.00
Geraniums, fine collection.	.50	3.00
Golden Dawn and S. A.		
Nutt.	.75	5.00
Tricolors in variety.	1.00	8.00
Mt Snow, H. Thought.	.60	1.00
Mme. Sallerol.	.50	3.00
Apple Scented.	1.50	
Scented in variety.	.60	4.00
Ivy Leaved, in variety.	.60	4.00
L'Elegante.	.75c.	1.00
Helianthus Multiflorus Plenus.	.50	3.00
Heliotrope in variety.	.60	4.00
Hoya Carnosa Variegata.	2.00	
Hydrangea Rosea 3-inch.	2.00	
in variety, 3-inch.	1.00	8.00

	Per Doz.	Per 100
Ivy English and German.	.75	4.00
Impatiens Mariana.	.75	
Leonotis Leonurus.	.60	4.00
Libonia Floribunda.	1.00	
Lobelia blue.	.75	
Marguerite Daisies, white.	.60	4.00
Madeira Bulbs.	.40	
Mahernia Odorata.	.60	6.00
Moon Flower (true).	.75	
Oxalis white and pink.	.50	1.00
Othonna Crassifolia.	.50	1.00
Primula Single, 3-inch.	1.00	
Pelargoniums, 5 varieties.	1.00	5.00
Passiflora in variety.	.75	6.00
Petunias Double.	.75	
Pilea.	.60	1.00
Ruellia Juncea.	.60	4.00
Richardia Albo Maculata large.	2.00	
small.	.60	
Thyme, two varieties.	.60	4.00
Tuberose Bulbs.	.60	2.00
Streptos den Jamesoni.	.60	
Vinca Major Var., strong 1/2 m.	1.50	
Violets, four varieties.	.60	1.00

I. N. KRAMER & SON, FLORISTS, MARION, IOWA.

E. BONNER & CO., XENIA, O.

ROSES.

in 2 1/2-inch pots, good strong plants for shipping
Papa Gontier, Perle des Jardins, Niphetos, Countess de Frignouse. Price, \$5 per 100.

Roile de Lyon, Andre Schwartz, La France, Souvenir d'un Ami, Hermosa, Mme. Cusin, Cornelia Cook. \$4 per 100.

Safrano, Bon Silene, The Bride, Mme Watterville, Melville, Isabella Sprunt Mrs. Bosanquet, Coquette de Lyon, Duchess de Brabant, Vallee de Chamounix, Bella, Mme. Welche, Mme Margottin, Marie Guillot, La Pactole, Marie Van Houtte, Countess Riza du Parc, Souvenir de David, Marie Ducher, La Princess Vera, Caroline Kuster, Mme. Pauline Labonte, Agrippina, Lady Warrender \$3.50 per 100.

Purchaser's selection from this list not more than one hundred of a kind, \$50.00 per 1000.

Strictly our selection not more than one hundred of a kind \$25.00 per 1000.

GERANIUMS.

Strong plants ready to shift into 4 or 4-inch pots:
Streak of Luck, Le Simon, Cygnet, Henri Beurier, Evangeline Peter Henderson, White Perfection, Levinthan, Lady Bishop The Blonde, New Life, Mrs. Jas. Vick, Dazzler, Queen of the West, Gen. Sheridan, Mrs. Beach, Mons. Geliene Lowagie, Gilded Gold, Cardinalis, Sam Sloan, Jas. Vick, J. P. Kirtland, Jas. Y. Murkland, Longfellow, Grand Chancellor, Faidherbe, Le Pilote, Guinea, Flocon de Neige, Mary Hallock Foote, Jasper, William Cullen Bryant, Mme. Thibaut, Beauty of Kississing. \$3 per 100.

ROSE GERANIUMS, \$3.00 per 100.

CHRYSANTHEMUMS.

A few good sorts: Christmas Eve, Fair Maid of Guernsey, Mikado, Duchess, Mrs. Geo. Rundle, Diana, \$3 per 100. Other varieties in limited quantities can be given.

BEGONIAS.

Semperflorens Gigantea, Rosea, Metallica Moonlight. \$6 per 100; 75 cents per doz.

Rubra, Alba Picta, Incarnata Metallica, Feastii, Subpeltatum Nigricans, Sanguinea, Teuscheri, Weltoniensis, Hybrida Richardsonii. \$4 per 100; 60 cents per doz.

Margaritae, Rubella, Ricinifolia Maculata, Lobata Variegata, Saudersii, Mme. Treyve, Hybrida Multiflora. \$3 per 100; 50 cents per doz.
Rex in Variety \$5 per 100; 75 cents per doz.
New Upright, Edward Pynaert. \$1 per doz.
Countess de Neverlee. \$1.25 per doz.

PEPEROMIA, Maculosa and Magnoliafolia \$3 per 100; 50 cents per doz.

TRADESCANTIA MULTICOLOR. 30 cents per doz.

ABUTILONS.

E. Laveillon, Lemonii, Rosta, Mesopotamicum and Mesopotamicum Variegatum. Two New Abutilons, crosses between the upright and trailing, originated by Mr. Geo. Engle, of this city, both steady growers and very distinct. Mesopotamicum Hybrida Rosea, Mesopotamicum Hybrida Aurea. \$1 per doz.

SENSIVERA ZEBRINA. 75 cents per doz.

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New Violet Mad. Millet. We have thoroughly tried this Violet and find it a strong grower and profuse bloomer. We consider it a valuable acquisition to the list of Violets. 75 cents per doz. \$5 per 100.

Marie Louise, Swanley White, Victoria Regina, White Czar. \$ per 100.

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Splendeus, Alba, Mrs. Stevens, M. Issachon Atro Purpurea, Rutilans. \$2.50 per 100.

HELIOTROPE.

Mme. Blonay, Chieftain, Louis Delaux, Bernie. \$3.50 per 100; 50 cents per doz.

COLEUS.

Mixed varieties. \$2 per 100. Golden Bedder Vetschaffeltii. \$3 per 100.

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Jno. Douglas, Cope's Pet, White Cap. \$2.50 per 100; 30 cents per doz.

NASTURTHUM Double.

Betmine Grashoff. 50 cents per doz.

ALYSSUM.

Alyssum Double plain green and variegated. 40 cents per doz.

LOPEZIA ALBA.

40 cents per doz.

CHRYSANTHEMUMS.

Frutescens (White Marguerite) 1 tole dor (Yellow Marguerite) \$3 per 100; 40 cents per doz.

LEONOTIS LEONURUS, (Lion's Tail). 50 cents per doz.

E. BONNER & CO., Maple Grove Greenhouses, XENIA, OHIO.

WHOLESALE PRICE LIST.

20,000 Rooted Cuttings of Geraniums the best market sorts, single and double. Stock plants got mixed in rebuilding; they comprise the very best sorts.

Price, \$2.50 per hundred, \$20.00 per thousand.

Rooted Cuttings of Carnations of the following sorts: Hinze's White, Gen'l Garfield, Mrs. Garfield, Sunrise and Peter Henderson, \$1.25 per hundred, \$10.00 per thousand. Buttercup, E. G. Hill, Columbia, \$3.00 per hundred, \$25.00 per thousand.

Very fine Seedling of Longfellow Daisy, transplanted, \$1.50 per 100, \$12.00 per 1000.

Seedling Palms in 2½-inch pots ready for shifting, following sorts: Latania Borbonica, Chamærops Excelsa, Corypha Australis, Phoenix in several sorts, all good healthy stock, \$1.25 per dozen, \$8.00 per hundred.

Crotons, best large-leaved sorts, all high colored kinds in 4-inch pots, \$1.50 per dozen, \$10.00 per hundred.

Seedling Pansies of Trimardeau and Fancy sorts, transplanted stock, \$3.00 per hundred, \$25.00 per thousand.

5000 strong Roses in 4 and 5-inch pots that were also mixed in rebuilding; they are all of the best sorts, mostly Teas, Noisettes and good Hybrid Teas; for market they cannot be surpassed, have been kept cool all winter and just now starting to grow. \$12.00 per hundred.

3000 Marechal Niels in 3, 4, 5 and 6-inch pots, fine stock for early market. 3-inch \$10, 4-inch \$15, 5-inch \$20, 6-inch \$30 per hundred.

FINE STANDARD AND DWARF BUDDED FOR PLANTING OUT IN GREENHOUSES. PRICE ACCORDING TO SIZE, ON APPLICATION.

C. Mermet, La France, Papa Gontier, Bride, Perle des Jardins, Niphetos, Bennett, Bon Silene, Safrano, 2½-inch pots, \$5 per hundred, \$45 per thousand.

American Beauty, \$6.00 per hundred, \$55.00 per thousand.

Pandanus Utilis, fine plants in 2½-inch pots ready to shift, \$1.50 per dozen, \$10.00 per hundred.

A full line of Florists' Seeds such as Pansy, Petunia, Balsam, Asters, Phlox, Mignonette, Gloxinia, and all seed for Spring growing, just received from Europe. We keep a full line of reliable Flower Seeds and all the Novelties.

Contracts made now for Roses for Summer planting, grown from vigorous and blooming plants. If you want anything write to us.

B. P. CRITCHELL & CO.,
Cincinnati, Ohio.

THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, MARCH 15, 1889.

No. 87.

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

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The New York Orchid Show.

Siebrecht & Wadley held their third annual orchid show in its previous home, the Eden Musee, opening on February 27. It had been arranged for an earlier date, but Mr. Siebrecht's absence in Trinidad caused some delay.

It is a difficult matter to arrange a show of similar character year after year, and yet present new features, but so far each orchid show has been distinct in character and arrangement. However, this year's exhibition may justly be considered the most tasteful and gracefully arranged we have yet seen; it was really charming, and some of the plants shown were of unusual interest.

The most unique oddity present was *Ceologyne pandurata*, the property of Siebrecht & Wadley. This plant has rarely been flowered in this country, and is comparatively unknown to many. The flowers are large, petals and sepals light green; an extraordinary lip is greenish-yellow, warty and marked with large black veins terminating in a broad black blotch, the disk is covered with large warts.

A decided contrast to the oddity of this plant was the other "star" of the show. Mr. W. H. De Forrest's white *Cattleya Trianae*. This was mentioned as the most costly plant in the show, being valued at \$1,000; it was certainly the most beautiful. It was a large piece, bearing thirteen flowers, a number having been cut. Bloom clear white, with yellow throat. Evidently a strong variety, the bloom being of better substance than in the case of many albinos; certainly the beauty of the plant was beyond all words. Another fine specimen belonging to Mr. De Forrest was a very large *Cattleya Trianae* bearing 39 flowers; a very beautiful plant. Both these *Cattleyas* were imported last spring by F. Mau.

The largest display was of course from Rose Hill Nurseries; next in size was the exhibit from the United States Nurseries, which extended down one side of the hall. Other exhibitors were Messrs. Kimball, of Rochester, Matthews, of Utica, F. Mau, of Weehawken, Eyerman, of Easton, Pa., Lockwood, of Stamford, Conn., and Burroughs, of Fishkill.

The general arrangement consisted of the usual border down each side, while on the main floor were seven tables or groups, three on each side, and a long irregular plateau in the center. On the right side recesses were formed, backed with foliage plants, and chiefly filled with orchids. The largest recess on this side was especially charming. The mirror at the back was covered, all but a narrow space, with standing pine, making a good background for *Oncidium varicosum*. The recess contained *lycastes*, *Ceologyne cristata*, a few *Cattleyas* and

anthuriums. A few *nepenthes* hung above; at one side were a few *cyclamens*, at the other Mr. De Forrest's white *Trianae*. Next was the large *Trianae* from the same place, familiarly called the Kent Square Nurseries' baby. Next to this was a most charming recess filled with plants from F. Mau, of Weehawken. A specimen of *Oncidium sarcodes* with its showy flowers stood in one corner, fine *O. varicosum* hung at one side, while above were plants of *Odontoglossum citrosimum* with long pendant spikes. Several plants of *Calanthe vestita gigantea* in this lot were especially fine, and so were the *Cattleya Trianae*; in cut bloom Mr. Mau exhibited 50 distinct varieties of *Trianae*, and not a poor one in the lot.

The opposite side was taken up by the United States Nurseries, *cyclamens*, *Primula obconica* and *cyripediums*. They formed three very tasteful groups; the *cyripedes* were especially well arranged; they displayed eighty varieties of this orchid. Specially worthy of note were *C. Dayanum*, *C. Leeannum superbum*, *C. Chantini* (very fine), *C. nitens* and *C. cenanthum superbum*. Among their cut flowers were some blooms of that singular form of *C. insigne*, in which the lip is corrugated. Hung above the *cyripedes* were many *phalaenopsis*, both *grandiflora* and *Schilleriana*, bearing fine spikes. A big *Adiantum Farleyense* was also from the United States Nurseries.

The groups in the center of the hall each consisted of some large palms with smaller plants or cut flowers arranged about its base. The United States Nurseries occupied space on some of these groups with a general collection, among them were *Masdevallias Harryana*, *triangularis* and *mycterina*; *Lycaste Skinnerii* and *Skinnerii alba* very good, *Odontoglossum crispum* and *Rossii majus*; *Oncidium Cavendishii* and *Kramerii*. Among their cut flowers was a white *Cattleya Trianae* and a very good one.

Mr. Eyerman's cut flowers formed one group, his *cyripediums* were especially interesting. The beautiful Mrs. Canham was among them; also good flowers of *C. Selligerum*, *C. plenum* and *C. venustum pardinum*. Among the *Cattleyas* in this group were fine forms of *Trianae*, *bogotensis*, *chocoensis* and *Schroderae*. Five varieties of *phalaenopsis* were in this group, namely, *amabilis*, *leucorrhoda*, *grandiflora*, *Schilleriana* and *Stuartiana*.

Mr. Kimball's display of cut flowers showed its usual number of good things; the charming *Zygopetalum Mackayii* was among them, and there were some fine *cyripedes*; *leucorrhodium*, *hirsutissimum* and *euryandrum* were especially good. There were ten *dendrobies* in this group, *chrysoxum* and *leechianum* being especially attractive. Among *Cattleyas* there was, of course, a white

Triangæ; very good speciosissima and maxima. Mr. Kimball's collection embraced some seventy-five varieties.

Wm. Matthews, of Utica, sent some good cut blooms, which were arranged in a pretty group.

The central plateau, filled with plants from Rose Hill, formed the handsomest group in the room. It can't be very accurately described, because it did not look as if it had been regularly arranged, seemed as if the plants must have grown there. It was a long irregular oval, some straggling rustic branches were in the middle; irregular uprights at the end supported other branches, and these were all hung with plants. Quantities of dendrobies, good noble and Wardianum; buff *Epidendrum Stamfordianum*, which is not very much grown; *oncidiums* and *odontoglots* and almost everything else. Below were quantities of cattleyas, lycastes and, in fact, a general collection. The arrangement of this group can not be too highly praised; it was done with an apparent carelessness that was the perfection of good taste. Some masses of *bougainvillea* were put at either end; a lot of this plant was used about the hall, being put wherever it would prove effective. In front of the music platform were two big tree ferns; on one of them hung a good plant of *Dendrobium Ainsworthii*. Between these ferns was a case in which reposed the *Cecylogyne pandurata*, a very good plant of *Cypripedium hirsutissimum* and some other nice things. Among them were two new ferns, of which great things are promised. *Adiantum rhodophyllum* and *A. reginum*. Both have somewhat the character of *Farleyense*, but are hardier and deeper in color; the first named has a beautiful red tinge on the young fronds. Good exhibition ferns one would think.

A most beautiful thing received towards the end of the show was the white *Lælia anceps* (cut flowers). The petals and sepals were pure white, the lips also; the throat was yellow, veined with dark red. A very handsome thing.

Mr. Burroughs, of Fishkill, showed some seedling carnations, among them was a most attractive scarlet as yet unnamed. It is a seedling from Buttercup and Portia, giving the bright scarlet of the latter with the large round flower of the former. A very promising infant.

Mr. Lockwood showed a single plant of *Odontoglossum crispum* worthy of special honor—a very fine flower.

An odd-looking flower, a novelty to most people, was the Bottle Brush; it is quite an old thing, but rarely seen. The flower is exactly like a bottle brush, bright crimson in color. This was exhibited by John Ryan, gardener to St. John's College, Fordham.

A good many decorative plants were used, together with the orchids, so that the hall was well filled. As far as actual prettiness goes, it was the most attractive show we have had yet, and it reflects great credit on its energetic promoters.

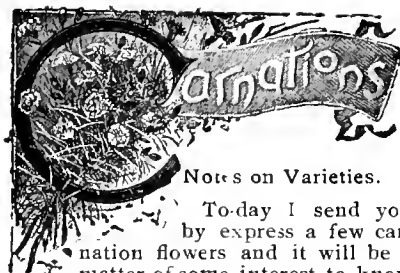
EMILY LOUISE TAPLIN.

Problems for That Committee on Nomenclature.

Why should the "Chinese Yam" be changed into a "Cinnamon Vine" and offered to the public at 25 cents each when its value should approximate that of its first cousin, the Sweet Potato—say \$1.50 per bushel.

What is the "Vegetable Peach?" that is, what is its correct name?

NOMENCLATURE.



Notes on Varieties.

To-day I send you by express a few carnation flowers and it will be a matter of some interest to know if they arrive in fair condition and how these varieties grown in light New Jersey soil compare with the western product. Each variety is accompanied by a few of its own shoots, which show as great a diversity of color and habit as do the flowers.

First I will speak of Grace Wilder. This lovely pink variety has become a great favorite, and its popularity increases year by year immensely. With me the question is how to get enough of it; as will be seen by the growth and flowers I send, there is nothing delicate or puny about this sort, but on the contrary it is a bold vigorous grower, requiring perhaps at the outset a little care, but when once started it keeps pace with the best; plants that I set out for my own flowering are always grown in thumb pots and any that show signs of disease are discarded.

Hinze's White:—I have always regarded this more as a fancy than as a white variety, although if the flowers are allowed to remain long enough on the plants they generally become white enough for any purpose. The flowers I send you to day are from a house that has been quite cool all winter, 50° being the maximum, and you will notice that some are a pretty good white, while some are cream color and others tinged with pink; the first have been longest open, next the creamy ones, while those tinged with pink are the least developed, and none of them were fit to gather; even those most developed and whitest should have been allowed to remain on the plants for two or three days longer, in which case they would have been a much purer white as well as a great deal larger, for though the flowers sent are a fair size yet they are small compared to many that I gather, as the bunch was rather intended to illustrate my subject than for exhibition. Early in October, 1887, I put in a lot of cuttings of this variety, and when rooted they were put into small pots and from the small pots into larger (4½-inch) ones; on the 6th of last April they were planted nine inches apart in a cold frame previously prepared for them and protected with sash during nights and cold days for a short time. I gathered the first flowers on the 20th of June and they flowered from that time right into August; the flower stems were cut off soon afterwards, and about September 20 the plants were removed to a bench inside and the flowers sent to your office to-day are from the same plants. I have several hundred plants in half pint pots now ready for the same process soon as spring opens. I found it a first rate investment, and in addition I will say that these outside grown Hinze's White were pure white, that is in my estimation they were white enough for any purpose, being used in my business in all cases where such were needed.

Buttercup:—I have often thought that if I could only grow one carnation that this would be my choice, and if you could see the bunch of flowers I send to-day as it went into the box I believe you would

in a measure agree with me. I was much amused when I came to the conclusion of Mr. D. M. Reichard's instructive remarks (FLORIST Feb. 1), where he says that Buttercup is "valuable only as a pot plant, producing its flowers too sparsely to be of value for cutting." I can assure Mr. Reichard and others that Buttercup is by far the strongest and most vigorous grower of any carnation that I handle, in fact it makes such strong heavy sappy shoots that it is difficult to get shoots of a suitable size for cuttings, and I presume this must be the case with others, as I notice that the advertised price of this variety is generally twice and a half or three times the price of other established sorts. With me Buttercup is an immense grower and a most prolific flowerer and so satisfactory in every way that the trade will not suffer while expecting a better.

Frederick Johnson:—Three years ago I grew some plants of Grace Fardon. In the field they did well and made fine large bushy plants, but after being planted inside and about the time they began to flower they also began to die, and they kept on dying, a piece at a time until but little was left of them; when about midwinter it was necessary for me to pull them up and consign them to the rubbish heap; the variety seems to have descended from the old La Purite, and like that good old sort seems to have inherited its failings. But with Frederick Johnson, however, things are different, it is about the same shade of deep rich pink so desirable in Grace Fardon, but it is a strong, clean, vigorous grower without spot or blemish; the flowers are a good size and produced in great abundance, and it will flower early and late same as Grace Wilder. Any brother florists who have suffered the difficulty with Grace Fardon above mentioned will find it to their advantage to try Fred Johnson.

Florence:—This variety came to me highly recommended last year and I like it for its distinct shade of red, being a sort of happy medium between a deep pink and bright scarlet which blends charmingly with the other colors. The flowers are medium to large, deeply fringed and fragrant, the plant is a good grower and profuse flowerer.

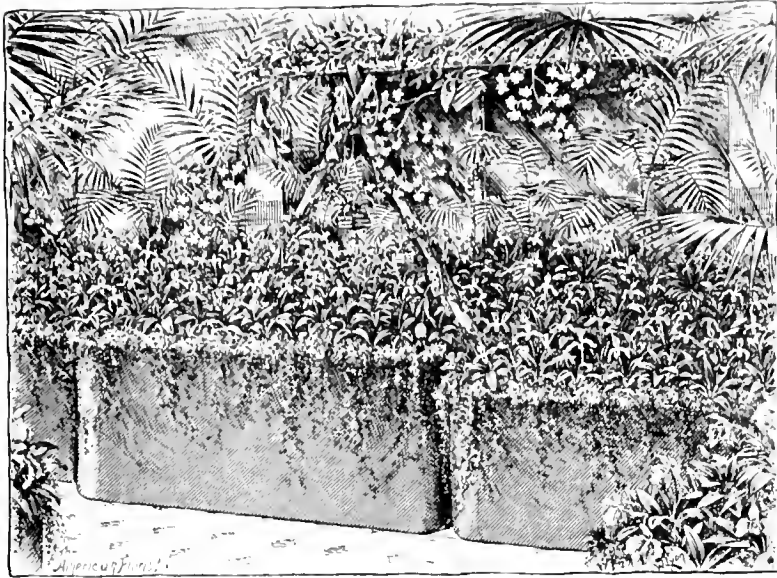
Glowing Coal, or Portia, as some growers claim it to be, is in my opinion the scarlet of scarlets, and for size, brilliancy, length of stem, fragrance, perfect growth, continuous bloom and every other desirable quality that we expect in a bright and glowing carnation, is condensed in this one, and until a better one comes in everything that can be desired.

In concluding these remarks I may say that I grow several other varieties of carnations, but the above form by far the greater part that I depend upon for flowers for the supply of my local business.

H. E. CHITTY.

Paterson, N. J., March 5.

[The blooms sent consisted of a large bunch of each variety noted, all on long stems and for quality it is doubtful if they could be surpassed. The clean, strong, handsome foliage added not a little to their beauty. The bunch of Buttercup was particularly fine, the best blooms of this variety we have ever seen. The stems and foliage were very strong and vigorous showing that the plant is certainly a very vigorous grower with Mr. Chitty. The specimens of Grace Wilder were very deep in color with hardly a trace of the washiness which so frequently detracts from its value. The



A PEEP AT THE ORCHID SHOW.

blooms of Fred Johnson excited instant admiration. If all can grow them to the same perfection we need look no further for a better carnation of its color. The peculiarities of Hinz's White noted by Mr. C. were plainly observable in the bunch of blooms sent, which were also extra well done. The flowers arrived in most excellent condition, showing apparently no effect whatever from their two days journey, which goes to show that Mr. Chitty in addition to knowing how to grow good flowers knows how to pack them for shipment, an accomplishment not as common as it might be, judging from the condition in which many of the flowers arrive which are sent to us for comment.—E.D.]

New Carnations.

Mr. Isaac Larkin, Toughkenamon, Pa., sends us blooms of his seedling carnations.

Morning Ray is a very handsome deep pink flower of good form and substance, the specimens sent being on stems of generous length. The petals are fringed and the flower strongly fragrant. Mr. Larkin states that it is a very early bloomer; Eclipse is a dark crimson; Amy, white lightly penciled with purplish crimson; Mrs. Benj Harrison, red, described as an excellent bloomer, with many long stems; Lady Rachel, purplish crimson, of good size and form, striking color, and fragrant, described as a very early bloomer.

Several unnamed seedlings were also enclosed. One is a light yellow ground heavily penciled with carmine, another buff penciled with crimson, a third light red and still another light red.

Vinca Rosea.

Many a time I have been wondering why this beautiful everblooming plant is not more generally grown for bedding purposes. I am sure we can produce them as cheaply as geraniums and they should sell readily in quantity if they were only offered. We plant a little bed of them nearly every year and it always gives us the best satisfaction, being in

bloom from the time of planting until frost kills them.

They can stand the heat and dry weather better than most plants and are not injured by wet seasons as long as the soil is loose and the bed well drained, nor does the strongest wind do any damage to them, because there are no straggling branches to be broken off and whipped about by the storm, the plants all growing an even height and forming a compact mass of green, white and rose or red. Even as a border plant, planted singly, the growth remains compact and staking or tying is unnecessary. The flowers are produced freely by all three varieties and I should hesitate to discard either one of them; they are all good and we can not do without them. I have planted them with good effect in long ribbon borders and also in designed beds together with coleus, achyrantes, centaureas, variegated stevia, etc., keeping the colors separate.

If the plants are grown in 3½ or 4-inch pots with three or four branches we can get a better price for them than we do for a good geranium in the same pot, although the latter plant may be twice as large. Many private people are tired of geraniums and coleus and would like a change; they probably have never seen the vincas, but if offered would be glad to take them, provided we can assure satisfaction, and this we may safely do in every case where the bed to be planted is not situated in a densely shaded place, but wherever geraniums will flower the vinca will surely do admirably. Certainly vincas do not possess the gay and dazzling colors we admire in geraniums, but those softer shades peculiar to them are not objected to by anybody, they are not dull colors. I do not mean to say that we could sell as many of them as we do geraniums, or that vincas should take the place of geraniums as a bedding plant, but for variety or as a change it seems to me just the right thing.

To grow good strong plants it is preferable to sow the seeds not later than October and plant singly in thumb pots, repotting afterwards as they may require. When three or four inches high we pinch out the tops to induce them to break out

and get branchy. In a temperature of 50° to 60° in winter they will do well and make nice plants by the time spring sales commence, attracting the attention of buyers by the flowers as well as by the dark glossy foliage and clean appearance of the whole plant. Propagation by cuttings is practiced in some places and where enough stock plants are kept, this way answers just as well, but we had rather sow the seed and do away with the extra labor of making and attending to the cuttings. The young seedlings are liable to damping off if kept in a close house, therefore as soon as the little plants are above ground we place the box containing them in an airy position near the light and pot off when large enough using a rather sandy soil for the first, afterwards when the plants are well established in the thumb pots repotting into larger sizes and into stiffer soil. Wintering the plants in cool houses will delay growth and late seedlings also will be behind time, in this case it may be necessary to use a hotbed by the first of April or sooner to advance growth and get them to bloom in time, but the plants under such treatment are liable to draw and be rather soft to withstand the changes of the atmosphere when planted out.

JOHN B. KELLER.

Rochester, N. Y.

Forcing Bulbs.

"Which of the bulbs after being forced are worth keeping?" asks "A. S." p. 280.

That depends on a good many things. If you are a commercial florist growing cut flowers for the wholesale trade, I believe the best thing for you to do with Roman and Dutch hyacinths, tulips, narcissus of sorts, lily of the valley, as soon as you have gathered the flowers is to dump the bulbs into the rot pile. If you are a private grower you may keep them growing as long as you can after securing the flowers, then dry off the bulbs and keep them dry till next fall when you may plant them out, and in this way secure a few indifferent flowers. But I would even then hesitate to keep over Roman hyacinths, as they often are infested with bulb mites that spread to narcissus, eucharis, crinum and others.

In the case of lilies opinions differ. I keep mine—especially *L. Harrisii*—over, and by not forcing them for very early flowers, get good flowers year after year and an increase of stock beside. The disease has struck my home-grown candidum lilies, and this being the case I dump them out every year. Well, but if you get a fresh clean stock don't you think you could keep them over successfully? some may ask. No, I have tried it and failed. Perhaps after a few years' time the disease may pass away. It is odd but true that this lily disease is far less virulent in the case of pot grown plants than in that of those grown in the open ground. Questions, of soil, drainage, manures, protection in summer or winter may suggest themselves; all of these I have considered carefully and practically and still the disease is master of the situation.

Freesias should always be kept over. They can be forced year after year and at the same time multiply exceedingly. *Allium Neapolitanum*, a lovely white flowered species, is also as accommodating, but always a homely looking plant. *Ornithogalum Arabicum* also does well when kept over. *Ixias*, *sparaxis* and *babianas* have got to be kept along year after year for the winter months are their proper season of blooming; but I ques-

tion if they would pay the commercial cut flower grower. Lachenalias too, except that they are vastly more accommodating and multiply more numerous, and while of little good for florists' flowers make handsome decorative plants for hanging baskets.

Then the host of winter blooming amaryllises and nerines submit freely to vigorous forcing year after year providing they otherwise get judicious treatment. Evergreen bulbous plants like eucharis and *Pancreatum ovatum*, of course require and perennial greenhouse care and can be forced into bloom with apparent impunity.

Then we have many tuberous and otherwise thick rooted plants that we keep along year after year. Among these are cyclamen so gay from December till April, gloxinias all the year round but with most difficulty in winter, tuberous rooted begonias at any time according to treatment, but with less favor in winter and most convenience in summer. Achimenes, gesneras, caladiums, etc. extend this section. W. F.



Essential Points in Chrysanthemum Culture.

Pot Culture.—How to produce finely formed chrysanthemum bushes and splendid flowers upon the same? is the question uppermost in the minds of many in the profession; and it is hoped that this paper may bring to mind a few things essential to the production of fine plants.

The ideal plant in this country and the standard at our exhibitions is what is popularly known as the bush plant. This is supposed to be anywhere from two and a half to four feet in diameter, of nice contour and each branch terminated with a good sized finely formed flower. Your essayist will treat of pot culture believing that by this method finer flowers and better results can be obtained than by growing in the open ground and lifting as the season of flowering approaches.

Cuttings should be selected from strong healthy plants that have enjoyed a season of rest immediately following their flowering. Plants propagated from plants thus treated assure us a more vigorous and healthy growth. Root the cuttings in a moderately cool house and place in 2½-inch pots as soon as sufficient roots are formed. Place the newly potted plants in a nice snug position and as close to the glass as possible; the temperature of the house should be kept at 48° Fahrenheit at night; if kept too cool growth is arrested and a check to the plant ensues. Plants where sufficient air is denied them and when placed too far from the glass are apt to become weakened in growth.

An important question frequently asked is, when to repot? the answer is: when ever the ball or pot becomes well filled with nice working roots; do not allow the plants to become pot bound. Supposing the cuttings to have been potted off in February the next shift will be from the 2½-inch pots to 4-inch; this will probably require to be done the end of March. If the plants have progressed

nically the next shift will be into 6 inch pots, and this will need attending to early in May. It is advisable to replace again in the house for a few days, at least until root action commences, when if danger of frost is past they may be placed in the open air in a place suitably provided for them.

The summer quarters should be a nice level piece of ground arranged so that surface water from summer showers will readily pass away. Care should be taken not to set the pots in immediate contact with the earth else earth worms will find their way into the pots to the detriment of the plants. Some use boards for placing the pots on; others set upon pieces of slate, but perhaps the better method is to set the pots upon a bed of coal ashes; these prevent the ingress of worms and also allow the water to pass away freely. Set the plants in rows with aisles between each third row, making it wide enough to allow a man space to work in and to water. In no case crowd the plants, but set them far enough apart so that air and sunlight may have free circulation around each plant. When plants are thus set exposure to the sun's rays and drying winds necessitates frequent waterings on hot days or windy weather; to prevent trouble from excessive evaporation it is advisable to surround the pots with refuse hops or leaves.

Grass or other shading used judiciously is certainly beneficial in midsummer, but care must be taken to remove the same on the occurrence of wet and cloudy days else black mildew and rust are sure to make their appearance when thus neglected. To return to the matter of potting; shift from 6-inch into 8-inch pots when ever the soil is filled up with nice working roots, and give the final shift into the pots it is intended to exhibit in not later than August 1. Size and other considerations will determine the size suitable for the last shift.

Soil: One half nice fibrous loam (rotted sod), one fourth leaf mould, one fourth old thoroughly rotted manure, constitute an excellent compost for the growth of chrysanthemums, the above would be still better by having four quarts of pure bone flour to every six bushels of compost.

Pinching out the points of growth and tying the young shoots are co-related and must be conducted systematically and in unison. The grower must first fix in his mind the kind of plants he desires to grow, and then it is a simple matter to form and construct the plant as it develops and grows. If bushy plants are desired the tender shoots must be carefully tied down, before the growth matures sufficiently to become brittle, when it breaks easily. In tying care should be used so that the loop that holds the branch in position be not so tight that it cannot move with the rapid growth as it progresses. Simple wire hoops fastened to sticks serve admirably for tying the shoots to where a spreading bushy plant is desired; there may be three or more of these to each plant, thus giving a nice contour to the bush, they may be removed when staged for exhibition. The last pinch should not occur later than the first of August if the plants are desired for exhibiting by November 10 or thereabouts.

Dishudding: When finely formed flowers of good size are desired all but the terminal or crown bud should be removed. This is best performed by using a pointed stick or penknife, care must be taken however else rough handling will destroy the work of months.

Feeding: Chrysanthemums and plants are like human beings; they can exist and flourish on some one or other staple food but a change of food is best and will bring with it surprising results. Use one week a very light dressing of fine old cow manure well pulverized, the next week use liquid manure and so on. Feed commences after the buds are set, and the interested and observant grower can readily judge the quantity and time to apply the stimulant. Soot water may be used with advantage throughout the whole season—at intervals, and with beneficial results. Removing suckers from the plants should be performed carefully so that the surface roots may not be injured or torn.

Watering: This is perhaps the most important matter incident to success in chrysanthemum growing. It is best that one man be entrusted this task as he—if a little observant—will soon find out the nature and requirements of the different varieties. Some varieties require much more water than others, and this fact soon becomes apparent to one who is entrusted with their keeping. An interest in the final outcome—say one-fourth of the prize money—will wonderfully quicken and energize the man in charge, and many of the successful ones attribute not a little of their success to this feature. If the plants suffer for water and their foliage wilts from inattention, every occurrence of the kind militates against your success; hence the importance of careful, judicious watering.

For the black aphid use either tobacco water, or tobacco powder; moderate applications systematically used will rid the plants of the pest. Sulphur dusted on foliage will check and eradicate mildew.

Remove the plants from the open as soon as danger from frost occurs but use only sufficient heat to keep the frost out of the house in which they are placed, taking the precaution to give plenty of air even on cloudy and wet days. Improvised structures covered with cheap or oiled muslin with a temporary steam or hot water pipe running through the structure—in case of necessity—will answer every purpose and is often preferable to placing the plants under glass. Getting the plants to the show in good condition and getting the premiums are the two very interesting items in the history of him who grows chrysanthemums for exhibition.

[Read before the Society of Indiana Florists, Indianapolis, Feb. 22, by E. G. Hull, Richmond, Ind.]

Seedling Chrysanthemum.

I send you some blooms of a chrysanthemum which I raised from seed in 1887. The plant began to bloom in September 1888 and continued to bloom to the present time. Every branch makes such flowers as I send you. I have been unable to propagate any stock from it, owing to its continued blooming. I think it will be very valuable for cut flowers, as it is a good selling color.

Louisville, Ky. ED. MORAT.

[The blooms sent were of a bright yellow, very similar to *Gloriosum*, and one bloom nearly equaled the flowers of that variety in size. If it retains the continual blooming qualities related by Mr. Morat it should prove valuable to the cut flower grower. Of course time alone will demonstrate this point.—ED.]

Ismene Calythemata.

Your correspondent who wants to get a picture of *Ismene calythemata* reminds



MANTEL BANKED WITH PLANTS PLATE NO. 1

me to remark that this plant seems to be more scarce than formerly. It has been our experience that most of the bulbs sold as *Ismene calythemata* are really *Ismene undulata*, which is practically a worthless plant although the bulb is identical. *Ismene calythemata* is a valuable plant and blooms much freer than the others. The flowers are large, well formed and of good substance; makes a fine bulb to bed out to bloom. If inside it is a valuable flower for cut flower purposes.

Many years ago we used to sell what we supposed to be *Ismene calythemata* but after a while we learned we were selling the wrong thing. Since then I believe we have got it out of our list entirely, as we have only been able to get a few bulbs. A couple of years ago we imported several hundred at least from a very reliable house, but at least 50 per cent of these were wrong. I mention this to show how mistakes or lack of knowledge can run for years without being detected. I will

say this also, that during the time that we sold *Ismene undulata* for *calythemata*, we never had one complaint that they were the wrong thing.

If I run across a print of this plant I will send it to your correspondent.

Queens, N. Y. E. V. HALLOCK.

Mantels Banked With Plants.

We give herewith two illustrations of mantels banked with plants, from photographs sent us by Mr. J. M. Gasser, Cleveland, O. Both decorations were arranged for the wedding of his daughter, which occurred a few months since.

In plate No. 1 the plants are principally Rex begonias, marantas, dracenas and small palms, with larger palms on the floor below.

On the mantel shown in plate No. 2 mainly adiantum ferns are used with vases of cut bloom. The adiantums do not show up well in the plate; being so

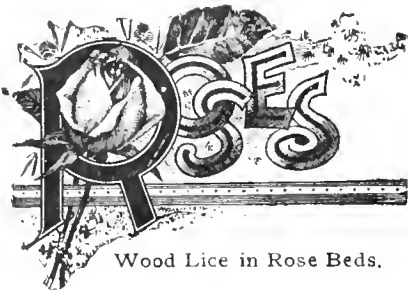
delicate the slightest breath of air or jar moves them and blurs when photographed.

Begonia Semperflorens Gigantea Rosea.

This is undoubtedly one of the best, if not the very best, of all the winter blooming begonias. I have had it now for three years, it gives better trusses, more of them and has a better color than any of the others and is very useful for table decorations.

The only drawback I see is its tendency to grow tall. To overcome this I start my cuttings late in spring, keep them in 3-inch pots all summer and in September shift them into 5 and 6-inch pots. I use the heaviest kind of soil, one half decayed sod and the other half yellow loam. None of my plants are over eighteen inches to two feet high and are literally covered with flowers. With other florists I have seen this begonia (grown in lighter

soil) four feet and over in height, slim and unsightly. Old plants are useless.
Pittsburg. GEO. DOERR.



Wood Lice in Rose Beds.

E. D. can capture the wood lice by taking some 4-inch flower pots, placing a little hay in the bottom of each and setting them inverted at intervals on his beds. The wood lice will go into the pot above the hay. Go round each morning with a pail of water, take the pots one by one, remove the hay holding over the water and give the pot a gentle tap against the inside of the pail. By following up these instructions thousands can be caught and if persisted in they will be soon exterminated.

Riverside, Ill. THOS. EVANS.

Number of Buds Produced by Certain Varieties.

Will some of the rose growers when telling how to grow roses also give the number of buds cut from a certain number of plants of the different kinds. An advertisement in the last number giving buds cut each day suggests a matter to be discussed along with steam and hot water.

Q. U. ALITY AND Q. U. ANITY.

[The suggestion is a good one. If we could secure accurate records from a goodly number of growers an average could be secured which would be of great value in determining the cost of production, of which as yet we have no positive data.—ED.]

English and American Rose Growers.

Mr. A. H. Ewing, Toronto, Ont., writes as follows: "Last month I sent to my brother (a nurseryman and florist in the south of England) a description of the American method of forcing roses with a plan of some houses I had seen. I also sent him the AMERICAN FLORIST of December 1, 1888, drawing his attention to a paragraph therein signed by one Fred Moore. The following is a copy of the reply received and which he says I can send to the FLORIST as a reply to Fred Moore's letter on page 184:"

SEA VIEW NURSERIES, HAVANT, Dec. 30, '88.—Many thanks for your letter of the 13 inst., containing particulars of an American plan of forcing roses. The plan is not altogether new to me, as it was described to me three or four years ago by an American nurseryman and I have often thought that if I ever went specially into the forcing of rose blooms I would try it, but the cut flower trade is not exactly in my line—my business is to propagate, grow and sell the plants and to produce the maximum result at the minimum expense. Of course the plants before they are sold produce at times immense quantities of flowers which so far as possible I turn into money. I do not know if the American plan which you describe would answer in the short days in England. We are above the 50th parallel of latitude, you are about the 44th, or over 30 miles closer to the equator, and New York is about the 41st parallel or about 600 miles closer to the equator than we are and we have a more cloudy sky than you. As far as heat goes there is no difficulty, but to increase the intensity of light is beyond us. Our days are shorter in winter sky more cloudy and sun lower than with you, this may make a difference. Many of the large London market growers are self-made men and extraordinarily successful; probably not only the American plan, but many

others, Belgian, French, Dutch, Japanese, etc., have been tried, but in such tremendously fierce competition as they have to face only the fittest ways and the fittest men for the purpose can survive long. They have no aid from protection as I suppose their American brethren in the same line have. The south of France where roses and oranges bloom in the open air at Christmas is only a day and a half or two days at most off.

Cut flowers not being specially in my line I have never visited the establishments of any of the big market growers of cut flowers but have often read descriptions of their places as well as come into contact with those who know them well. With regard to "Perle des Jardins" roses, it is I believe a good deal grown for cut bloom, but the yellow rose grown in the most enormous quantities all over England is "Marechal Niel." There is a plant in Havant which produces from 2,000 to 3,000 blooms per annum, and from this single plant I believe from 100 to 200 are sometimes cut during its time of blooming in one day. In July—the time when the writer in the FLORIST says he could not see 200 Perle des Jardins buds in Covent Garden—is a time when roses are at their cheapest in England, but few are got from under glass at that time and last summer tea roses in the open air rotted on the plants from the unusual wet and cold, therefore tea rose blooms were scarce last summer, yet I expect if 2,000 had been wanted of Perle des Jardins instead of 200 they could have been had at short notice. The said writer says "they graft nearly all their roses on the Manetti Stock." This is wrong with regard to teas, which when grafted are usually put on the seedling brier, but the "Griffonia" is also used, the Manetti hardly at all for teas. Hybrid perpetuals when grafted are usually grafted on Manetti. Jackman strikes teas largely on their own roots for pot sale and as I believe do some of the market growers. Teas are also being very largely grown now by being huddled out of doors on seedling or cutting brier (Dog Rose). Teas stand out all winter here without injury. We graft all through the winter in heat, but in the open ground during summer and put in cuttings on a border out doors in early autumn.

If any one will come this way and tell me how I can improve my methods I should be very pleased to give him respectful attention whether he were a Yankee, Dutchman or Hottentot, but if he simply showed that he knew much less of the matter than I did I might say something uncomplimentary and send him away with a "flea in his ear" and then when he got home he might write to his pet paper and say I was behind the times. It is impossible satisfactorily to compare English and American florists and nurserymen, the circumstances of climate and latitude are so entirely different that many of their methods must be different also, and it is not only in horticulture that vast differences exist. J. E. EWING.

I INTEND fitting up a rose house the coming season. One bed is to be planted with American Beauty. Will rose growers kindly inform me what other two varieties will do best in the same house? Can any other rose be grown in the same house with the Beauty and best success be attained? How about La France?

WISCONSIN.

THE JOURNAL DES ROSES publishes with its December issue a colored plate of the new tea rose Madame Philemon Cochet. As shown in the plate the rose is of good size, a delicate shade of rose pink in color.

Seasonable Hints.

Now that the sun is gaining in power, air should be admitted more freely and the syringe used liberally in all plant houses.

Rose benches should have a top dressing of cow manure—it is safer than if applied in liquid form. I have always top-dressed as above along about this time, but this season, instead of cow manure I have used guano mixed with fine soil and scattered over the beds about every two weeks, the result has been highly satisfactory.

Chrysanthemums may be propagated this month; except however for getting them out of the way before the rush of spring work is upon us, they are quite as well left until middle of March.

Fuchsias struck in December and spring stock of geraniums should have their final potting.

A batch of H. P. and tea roses, dormant through the winter, should now be moved along.

Every florist should handle a few gloxinias; tubers may be started at once, or seed sown now will give a batch of plants to bloom next summer, and if customers won't buy them, they will be none the less a delight to ourselves.

Lilies, astilbe, hydrangeas, etc. for Easter use ought now to be pushed ahead. Easter is late this year, but it is best to be a little ahead with things so as to allow a few days for hardening off stuff that has been forced.

Where it is desired to propagate dahlias by cuttings, the tubers should now be planted in a shallow bed, and watered freely. When the young shoots are two or three inches long cut them off and place in the cutting bed.

If not already attended to the stock of tea roses for next season should be propagated at once. Let the cutting bed for roses—and everything else—have a sunny position. Shade, when necessary, can always be supplied, but we can't manufacture sunlight.

Baltimore.

A. W. M.

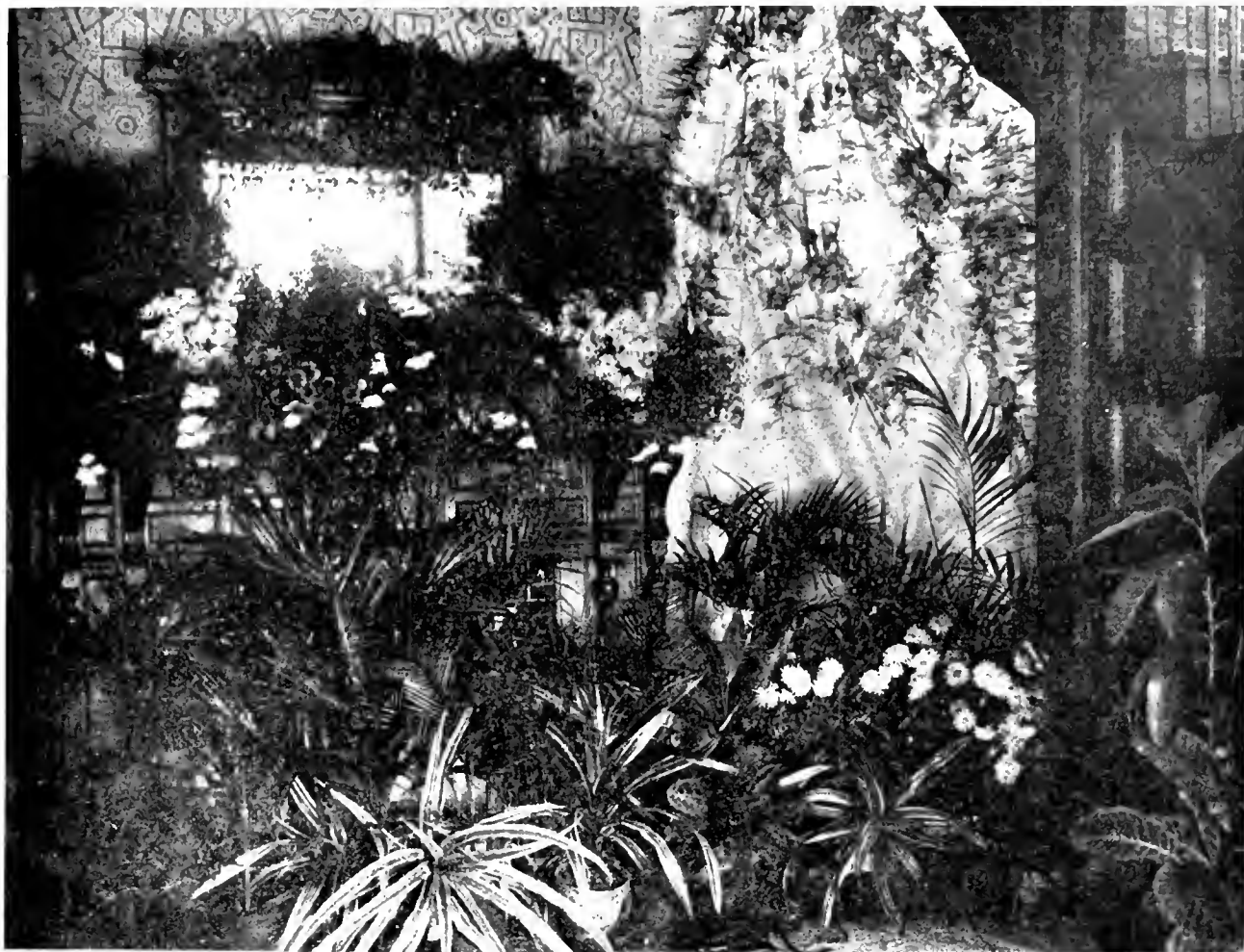
Value of Exhibitions.

Opinions differ as to the value of floral exhibitions to the florist. Many do not appreciate their value and feel that if they are unable to carry off some of the first premiums it will not pay them to attend. "Why should I trouble myself?" they say. "It is of no benefit to me. I can not compete with them, they have too much advantage over me." Others again are entirely indifferent to progress and the elevation of our business, and some are blinded by envy and jealousy; they cannot see any good in a public exhibition because they are afraid a neighbor may get ahead of them. Still others do not want to be burdened with the work arising from such an undertaking and simply stay at home.

First let us see as to the value of exhibitions to all in common, second to the individual exhibitor, and last as to the ability of any florist as an exhibitor.

When any progress, any achievements are made in any of the different trades, not only the individual but the whole craft is benefitted by it. Why not doubly so when their achievements are shown in a public exhibition open to the inspection of all. It shows those interested where they may improve and brings our goods prominently to the notice of those who are expected to buy, and this is especially necessary and desirable in our trade. Consider the progress made in our profession in the last decade and the improvement in taste which has accompanied it. See the improvement which has been made in one plant—the chrysanthemum. Would this have come to pass had it not been for the grand exhibitions of our products which have acquainted the public with our advance, and by bringing us into competition spurred us on to still greater achievements? Will any one say that the public taste has not been cultivated by viewing the best products of our skill. No less has been the benefit to ourselves by inspection of the result of others' work.

Was not our show of last fall an improvement on the one held the previous year? Does not that improvement show progress? When our success is heralded all over the country is it not of value to the whole trade? Have not the many flattering notices we have received and the prominence given our society raised us in the esteem of the public?



MANTEL BANKED WITH PLANTS PLATE N. 1

As to the benefit derived by the individual exhibitor, even those carrying off the first premiums may not receive adequate compensation for their labor, but the establishment of the fact that they have the best is worth much more. A point gained in honest competition is of great value and well worth the time and labor required. In addition to the pleasure of having your efforts crowned with success there is the rising esteem of your fellow men and an immediate beneficial influence on your business. I can not estimate the actual value to me of the prizes I have won at our exhibitions, but it was certainly very great, and plainly to be seen. You may have a better lot of plants in your greenhouses than those shown at an exhibition, that I may readily admit, but will the public in general do so too after you have neglected a chance to place them in competition. We can not all receive first premiums but nevertheless we can all share in the beneficial influence the exhibition exerts for the whole trade.

The main feature at our exhibitions has been the chrysanthemum. Is there one among you who will admit that he can not grow a chrysanthemum worthy of exhibiting? If you cannot devote the space necessary for specimen plants you can at least show specimen flowers and that the cut blooms are as much of an

attraction as the plants was fully shown at our last exhibition. What then should prevent you from taking an active part?

My brother florists let me entreat you to throw away all indifference, banish all jealousy, selfishness and envy, rouse yourself from your lethargy and fall in line in our onward march. We need your help and you cannot afford to be left in the rear.

[Extracts from a paper read before the Society of Indiana Florists at Indianapolis, Feb'y 15, by Fred. Dozier, La Fayette, Ind.]

Various Moon Flowers.

Of these plants there are several very distinct varieties both in manner of growth, color of flowers and desirability. Some are perennial, having tuberous roots, and when well established grow to immense size, proving a "joy forever" to the lucky owner. These can not be propagated from cuttings, but are increased from divisions of tubers. Blooms are in varied sizes and colors. I obtained from a far southern dealer six distinct varieties of these. Of one the foliage is as finely cut as a fern leaved geranium.

But the varieties of ipomoeas which command best sales and widest culture are those now known as "Moon flowers" or evening glories. Of these I know of two distinct varieties bearing white flowers, one variety with exquisite deep-toned

pink tubular shaped blooms. Of the white flowered varieties the seeds are so distinct as to have caused many to speak of them as the black seeded and white seeded. I believe that the real botanical name is shrouded in mystery, as some of our most prominent dealers to my certain knowledge, catalogue them variously *I. noctiflora*, *I. noctiflora*, *I. grandiflora* alba, *I. Mexicana grandiflora* alba, etc., all claiming heirs to be the true variety. What they mean by true is a mystery, as all are true varieties, while it is an undisputed fact that one must be the superior variety over all the others.

Last season I grew in my grounds nine distinct varieties and feel bound to assert that the variety bearing white seed, no matter what is its true nomenclature, bears the palm over all those varieties I have seen in flower. I had 100 plants of the variety of "black seed" sent me as "Moon flower" and about twenty of that bearing "white seed." 'Tis said comparisons are odious, but "justice is justice for a' that," and I proceed to draw these same odious comparisons for the moon flower's sake. I found by comparison that the two were equally profuse bloomers, but the "black seed" variety was twice as vigorous a grower. The 100 plants I had nearly filled one of my largest beds, running on the ground and rooting the whole distance, full 50 to 60

feet, but there this superiority ceases. In the blooms of the "white seed" they had from one inch to two inches the advantage, full wide open, smooth and satiny in texture, with a long slender tube full five and six inches long, with a deep rich heavy jessamine fragrance, which at night made the air intoxicatingly sweet. The "black seed" had a shorter tube, smaller flower and no fragrance worth speaking of, whilst as the season advanced and abundance of bloom increased the size daily diminished until none ever measured over three and a half to four inches in diameter and the least breeze would tear the flower and split it up in three to five sections, which was not the case with the "white seeded" variety. To the last flower in November they remained a uniform size, full five and a half to six inches in diameter.

Of the "pink moon flower" which I grew for the first time last season and received under the name of *Ipomœa grandiflora rosea*, I can not speak in too high terms. This variety grows with equal rapidity with the white moon flower, but to me is far more beautiful in leaf growth which is, in shape, much like a grape, sub-divided, smooth on top, but under side covered with a profuse hair like growth with a roseate tinge. The vines are similarly covered which where it reaches the terminal flower shoot is exquisitely beautiful, a deep rose color. When the bloom opens, having hoped to see a flower similar in shape to the white moon flower, one suffers a keen disappointment which remains, however, only a short time, as it gains upon you each day; blooming in large clusters of one to six open at one time I think it more attractive than the single flower of the white. The seed germinates in a very short period of time, from five to ten days, while of the "white seed" planted March 10 some sprouted in August following. In writing about this pink moon flower Peter Henderson made a true remark that: "no matter how lovely it could not replace the white as an evening bloomer, for the reason it did not make the display, its color being against its showing at a distance." Both varieties open with me by 6 p. m. and remain open until 9 a. m. next day.

I am just as anxious to know its real name as others and will the coming season try to lay this question at rest by submitting a complete plant to a competent botanist. Awaiting their decision I will follow Mr. J. L. Child's example and call it "Giant Moon flower" or "*Ipomœa Childsii*," although I have no authority for thinking his "Giant Moon flower" is from the "white seed" instead of "black seed" only from his description fitting so exactly to the variety grown by me from "white seed."

MRS. J. S. R. THOMSON.

Spartanburg, S. C.

Catalogue Errors.

An examination of a batch of current catalogues shows a wide diversity in the spelling of many names of varieties, which is not only offensive to any one loving accuracy, but also confusing in many cases. Two notable instances of this may be found in "Hinze's White" carnation and "*Bouvardia Davisonii*"; both of these have been the subject of special corrections in the *FLORIST*, and yet they are misspelled oftener than not this year.

We have "standard" pots, and a good thing they are for all but the clams yet among us; why not have a "standard"

spelling? This is worthy the attention of the committee on nomenclature, or even a special committee less important and cumbersome.

In this connection, let me ask why the new rose apparently an "acquisition," and "filling a long felt want," is named *Souvenir de Wootton*? Isn't *Souvenir of Wootton* good enough for an American rose, sent out by an American, and named in honor of the princely courtesy of one of the grandest and most representative Americans of the day? And what is the French dragged in at all for, anyway? If the rose is a "go," it will be just plain "Wootton" in less than a year, and the daddy of it might just as well pull off the French handles he has tacked onto a good name, letting the rose go out as an honest American production.

J. HORACE MCFARLAND.

Harrisburg, Pa.

Standard Pots.

The adoption of a "standard" by the S. A. F. adds one more good thing to its list that the florists of this country have reason to be thankful for. Every progressive florist recognizes the advantages of a standard without being twice told. I have reasons to believe that the flower pots in Europe are hand-made at the present day, judging from the pots in which new varieties of plants and consequently very small plants are shipped over to this country in. We cannot hope to have any influence over the European flower pot manufacturer, but we can and should give the "potter" in this country to understand that we will use no other than the style and size adopted by the S. A. F. at the convention held last August in New York.

It seems to me that flower pot manufacturers are blind to their own interests in not at once adjusting their moulds or dies and machines to the making of standard pots. The patterns of the various sizes of pots made by the Whildin Pottery Co. of this city, have been submitted to the committee appointed by the S. A. F. and have been approved and accepted by that body, but so far as I know no other pottery firm has done so. In making inquiries, for my own satisfaction, and getting samples of the standard pot from other manufacturers, I find they do not "nest" with those that the committee have accepted. It is due to the Syracuse Co. to say that the sample received from them, although a trifle smaller than the accepted standard, was the very best pot that I have seen.

It is necessary that samples of all the sizes be submitted by the various manufacturers to the committee, and receive its indorsement before they can be accepted as standard, for it is essential that they should be alike in every particular, or one of the main objects—that of uniformity in size—will be defeated. Philadelphia florists and those of neighboring cities are to be congratulated on having the only pottery company within easy shipping distance that has been equal to the occasion and has so far complied with the requirements, as laid down by the society. Manufacturers will be serving themselves well, in addition to the benefit it will be to their patrons, by falling in line as rapidly as possible.

The Society of American Florists would be continuing its good work by having a competitive exhibition of flower pots at the Buffalo meeting next August. Then the florists there assembled could judge for themselves, which potter made the best pots. This is respectfully submitted

to the attention of the executive committee, or the standing committee, or whatever committee may have such matters in charge.

Philadelphia. EDWIN LONSDALE.

Standard Pots.

Below we give the names of those who have up to date placed themselves on record as agreeing to buy "Standard" pots only in future. Send in your name to be added to the list.

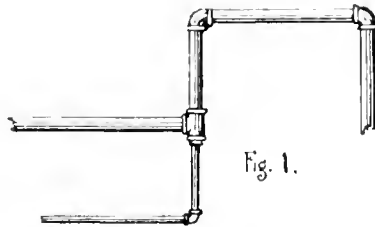
Aitchison, W C, Oil City, Pa
 Allen, C L, Garden City, N Y
 Allen, James K, New York City
 Anderson, Geo
 Asmus, Ernst, West Hoboken, N J
 Asmus, Rudolph, New Durham, N J
 Auger, B L, Ft Wayne, Ind
 Austin, J H
 Ball, Chas D, Holmesburg, Pa
 Ballantine, J D
 Banyard, E & Son, Philadelphia
 Barkham, W B, Saddle River, N J
 Bauer, P J, Cleveland, O
 Bearn, D, Philadelphia
 Bennett, W, Flatbush, N Y
 Berger, T V W, Bay Ridge, N Y
 Bertermann Bros, Indianapolis, Ind
 Bishop, W R
 Black, J E, Grove City, Pa
 Bock, Wm A, North Cambridge, Mass
 Boke, Francis S, Metuchen, N J
 Brown Robt S & Son, Kansas City, Mo
 Burton, Jno, Chestnut Hill, Pa
 Bussard, Henri, Yonkers, N Y
 Butz, Paul & Sons, New Castle, Pa
 Campbell, C G, Baltimore
 Campbell, J H, Philadelphia
 Carmody, J D, Evansville, Ind
 Cartledge, Thos, Philadelphia
 Casper, L A, Council Bluffs, Iowa
 Chaapel, Harry, Williamsport, Pa
 Chilson, A A, Vinton, Iowa
 Clark, C E
 Clark, Wm, Colorado Springs, Colo
 Cliffe, David, Philadelphia
 Cole, C C, Des Moines, Iowa
 Comes, W W, Pearl River, N Y
 Congdon, A R, Oberlin, O
 Cook, John, Baltimore, Md
 Copper, Jno C, Newtown, Pa
 Corp, Z R, Providence, R I
 Craig & Bro, Philadelphia
 Creighton, Wm, Poughkeepsie, N Y
 Critchell, B P & Co, Cincinnati, O
 Dailedouze Bros, Flatbush, N Y
 Dean, James, Bay Ridge, N Y
 Deans, D, Long Island City, N Y
 De Pew, Peter, Nyack, N Y
 Donaghue, A, Omaha, Neb
 Donn, Jno, Baltimore, Md
 Dorner, Fred, La Fayette, Ind
 Doswell, Geo W, Ft Wayne, Ind
 Dreer, Henry A, Philadelphia
 Driscoll, James, Passaic, N J
 Drumm & Baker Bros, Ft Worth, Texas
 Edwards S & Son, Bridgeton, N J
 Eger, W C, Schenectady, N Y
 Eisele, C, Philadelphia
 Elliott, B L, Pittsburg
 Ellis Bros, Keene, N H
 Emmerich, Aug, Bethlehem, Pa
 Esler, Jno G, Saddle River, N J
 Evans, Chas F, Philadelphia
 Farson, D D L, Philadelphia
 Feast, Wm, Baltimore, Md
 Field, Geo & Bro, Washington, D C
 Finn, Jno, New York
 Forbes, H E, Ridgewood, N J
 Foulles, David
 Fries, Jacob A, Bethlehem, Pa
 Gale, W F, Springfield, Mass
 Gardner, T A, Wakefield, R I
 Geduldung, G, Norwich, Conn
 Giddings, A, Danville, Ill
 Goldring, Samuel, Albany, N Y
 Graham, A, East Cleveland, O

Grant, Geo, Mamaroneck, N Y
 Hale, Chas F, Washington, D C
 Halliday, Robt J, Baltimore, Md
 Harris, W K, Philadelphia
 Harries, E C, Bedford Station, N Y
 Hart, H A, West Cleveland, O
 Harvey, J Harry, Richmond, Va
 Henderson, Peter, Jersey City Heights, NJ
 Herr, A M, Lancaster, Pa
 Hess, C, Baltimore, Md
 Hill, E G, Richmond, Ind
 Hillebrand, Chas W
 Hornebrooke, E G, Berwyn, Pa
 Hunter, F D, New York
 Jordan, J M, St Louis, Mo
 Kemble Floral and Seed Co, Oskaloosa, Ia
 Kift, Joseph, Philadelphia
 Kinsling, G
 Kohler, Julius, Philadelphia
 Lamb, James M, Fayetteville, N C
 Lane, Jno, Chicago
 Lee, Daniel, Madison, O
 Leominster, J F, Fitchburg, Mass
 Long, D B, Buffalo
 Lonsdale, Edwin, Chestnut Hill, Pa
 Lucas, Geo B, Lansingburgh, N Y
 Lutz, August, Philadelphia
 Manning, Jacob W, Reading, Mass
 Mansfield, Thos
 Matheson, Donald, Tremont, N Y
 May, John, Summit, N J
 McLean, Chas A, Sunbury, Conn
 McVey, John, Rondout, N Y
 Michel Plant & Seed Co, St Louis, Mo
 Moss, Isaac H, Govanstown, Md
 Otter, Harold
 Palmer, W J, Buffalo, N Y
 Parsons, E W, West Chester, N Y
 Patterson, Alma, Ft Scott, Kan
 Patterson, Robt C, Pittsburg
 Pentland, Jas, Baltimore
 Pickelman, S W
 Pfister, Henry, Washington, D C
 Phillips, J V, Brooklyn, N Y
 Pierce, A H, Raynham, Mass
 Quinlan, P R, Syracuse N Y
 Ramsden, C, Morton, Pa
 Randolph P S, Pittsburg, Pa
 Reynolds, James D, Riverside, Ill
 Reeves, Geo F
 Reist, Nathan E
 Robertson, Jno, Alexandria, Va
 Schmalz, Louis, Fltush, N Y
 Schultz, Alex, Phillipsburg, N J
 Scott, Wm, Buffalo, N Y
 Siebrecht, Louis, East Hinsdale, N Y
 Siebrecht & Wadley, New York
 Simmons, J M, Vestal, N Y
 Shaw, E D
 Shelby, Jno P, Tuckahoe, N Y
 Slaughter, T J, Madison, N J
 Small, J H & Sons, Washington, D C
 Smith, Wm G, Yonkers, N Y
 Smith, Nathan & Son, Adrian, Mich
 Smith, W R, Washington, D C
 St John, Benj, Darien, Conn
 Strickler, T S
 Swanson, Aug S, St Paul, Minn
 Terwilliger, S F, Saratoga Springs, N Y
 Thomas, Mrs A, Kalamazoo, Mich
 Thorpe, Jno, Pearl River, N Y
 Towell, Joseph, Paterson, N J
 Vaughan, J C, Chicago
 Walsn, Jno, Melrose Highlands, Mass
 Wood, L E, Fishkill, N Y
 Wiedy, Jno, Mt Washington, Md
 Westcott, Jno, Philadelphia
 Westcott, W H, Philadelphia
 Whitnall, C B & Co, Milwaukee, Wis
 Whittle, A E, Albany, N Y
 Wolff, Julius, Jr
 Young, C & Sons, St Louis, Mo.
 Zeller, Emil, Fltush, N Y

Piping for Steam.

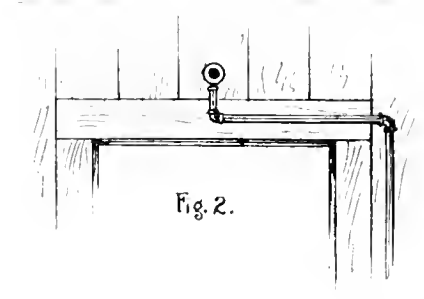
On page 314 "E" asks how to pipe for steam heating a greenhouse 100 feet long, with a grade of about 2 feet 8 inches running up from the boiler.

He does not give the width of the house, but presuming it is a wide house, it can be done in two ways. In the first the supply pipe from the boiler should be carried perpendicularly to a height corresponding to the highest point of the eud of the house next the boiler, then running into the house three inches below the ridge, suspend to the ridge pole and run the pipe to the opposite end of the house, giving a fall of one inch in ten feet; at a point directly over the end of the middle table, connect a one inch pipe, carrying it down and under the table, back to the boiler end of the house and connect with the return pipe; returning to the upper pipe, carry it perpendicularly to the desired height above the walk, then across it and dropping down to the front of the end table, (as shown in Fig. 1), and connect with the pipes



under the side tables, the grade of the house giving all the fall required in returning.

This arrangement gives for the upper pipe an actual fall of about ten inches, but at the same time an apparent fall of 3 feet 6 inches. If this plan brings the lead pipe too low for the purposes "E" wishes to use the house he can connect a 1 inch drain pipe to and under the upper pipe just inside the door of the house, (care being taken not to screw the pipe above the inner surface of the T), if the door is in the way, with two angles carry this pipe across and down (as shown in Fig. 2), and connect with the return,



then run the upper pipe suspended 16 inches below the ridge the full length of the house and connecting with the lower pipes as shown in the cut on page 323, No. 62, of the FLORIST.

This plan is equally applicable to a narrow house with a walk in the center. St. Joseph, Mo. D. M. REICHARD.

Hot Water in Small Pipes.

I saw in a recent issue that some one wanted some information as regards small pipe; I will give my experience as best I can. I have four greenhouses, two 100x20, one 60x20 and one 35x10, and all but one are heated with small pipe. One house 100x20 is heated with 4-inch pipe, the rest are heated with 1 1/4-inch pipe. I am using hot water to heat with and where I am located I am unable to get very low with my boiler, which is one of Hitch-

ings' largest, on account of getting into water. My houses all run north and south with work shed at north end. In the house heated with 4-inch pipe, which is 100x20, I grow roses, and in one 100x20, carnations, in one 60x20, I grow mixed stuff, and in one 35x10, I force bulbs.

At the north end of the house I have a header which is of 2 inch pipe, laid on a level eight inches higher than the top of the boiler, from this I run 1 1/4 inch pipe to heat the houses in the following manner: Start from the header on the outside of the houses with my flow pipe keeping on the same level as the header until I reach the expansion tank, from there I drop under the flow pipe back to the return header which is 8 inches lower than the flow pipe and also 2 inches; then I run both a flow and return on the side of the walk next to the center bed, dropping the return below the flow from expansion tank same as on the outside, making eight runs of 1 1/4-inch pipe; four flow and four return in a house 100x20, and can maintain a temperature of 45° in a zero night. When I reach the return header it is carried on a small descent until it reaches the boiler where it drops to the bottom, a distance of only two feet.

I prefer the small pipe to the large as it takes up less room, can be put up easier and you can get just as much heat from small pipe with the same number of inches of radiation as you can from the large pipe and not have so much water to heat as when you use large pipe, and if you want any extra heat you can put in a run or so of small pipe at any time without any very great trouble or expense.

I grow all my plants on solid benches and have good success with them. I grow my bulbs on benches with bottom heat.

E. W. SMITH.

West Haven, Conn.

Capacity of Boilers.

I wish some one would rise and explain what a horse power is, or how we may know the capacity of our boilers. I have a boiler 3x12 feet with 26 2 1/2-inch flues. What is its capacity? How many feet of heating surface is required to constitute a horse power? I believe there are many florists like myself who would like information on this point.

GEO. M. KELLOGG.

Pleasant Hill, Mo.

[With steam boilers makers estimate from 12 to 15 square feet of heating surface to the horse power, but 15 feet is the safest estimate.—ED.]

Cleaning the Old Brick Flue.

In the columns of the FLORIST much has appeared on the subject of greenhouse heating by the steam and hot water systems, all of which may be very beneficial and entertaining to those who are using those methods or are contemplating putting them in in the near future. But I see comparatively little said about the old flue system, which we poor frontier fellows are obliged to use till we get up to where we can indulge in the luxury of steam or hot water.

I have hit upon a plan of building a flue that I have never seen used (although it may not be new), that has proven this winter to be the best for heating and the easiest cleaned of any I have ever tried or seen before. It consists of a furnace built at the north end of the house, 32 inches long, 15 inches wide and 20 inches from grate to top of arch, from this runs

a straight flue 8 x 14 to the south end of the house to the chimney built on the outside of the building. Opposite to where the flue enters the chimney I left a hole the size of the flue, into which bricks can be laid loosely so as to be easily removed.

When the flue needs cleaning I remove said bricks and having secured a stout smooth fence wire about 10 feet longer than the flue, on one end of it I bend a ring about 1½ inches in diameter and into this ring insert another short piece of wire six inches long with a ring on each end. At the other end of the long wire, about six feet from the end, I fasten a stout brush or limb that will go into the flue and following this a bunch or wad of old gunny sacks that will just go through the flue without pressing it too hard. I take this wire and pushing it through from the chimney towards the furnace the short link in the wire will drop down the incline into the furnace and can be readily caught and drawn through the furnace. The brush preceding the swabs of gunny sacks will sweep the sides and top clean and the drag will bring all the soot down into the furnace where it can be burned or taken out. The whole operation can be performed in ten minutes without removing a brick or disturbing the flue at all, and without getting the least dirty or begrimed with soot.

I have three flues built on this plan and alone can clean them effectually in 20 or 30 minutes. It can be done with quite a fire in the furnaces and still no gas escape in the houses, as the furnace doors being open the gas will come back and out of the door into the coal sheds. By the old return flues it took a half day to clean one and it was necessary to draw all the fire, and when through one was about the color of the inside of the flue himself. I give this for what it is worth, hoping it may prove of benefit to some one of the fraternity.

Larned, Kan. W. T. JACKSON.

Anemone Jap. Alba (Honoreine Joubert).

We call it a hardy herbaceous plant, for it generally will live out and endure our severest winters, still if we should have an open winter and but little snow we had better cover the plants with some material to prevent alternate freezing and thawing too often, for by these sudden changes the roots will suffer and may be killed, although if only a very small portion of a root remains sound in the ground a plant will spring up from it and bear flowers the same year. The plants delight in a rich deep soil and will send up flower stems in great profusion, blooming from September until hard frost puts an end to them.

The pretty white flowers are very lasting and should be grown more generally by our florists. I have a row of them 300 feet long, giving us abundance of flowers, and yet we could dispose of a great many more if we had them. This row in October is a complete mass of white and will keep in bloom even after a sharp white frost. There is no difficulty in getting up a stock, for by cutting up a lot of roots any time in winter or early spring, spreading them out in boxes with an inch of soil for covering we can get any quantity of young plants. For our own planting we do not go to the trouble of potting off, because the little plants once established and growing are not easily killed and will take care of themselves under ordinary circumstances.

Those intended for sale are potted off and will have good tops on them in time to plant out. I prefer these potted plants for my trade, because people can see green leaves and life in them, while old roots dug up from out doors may make stronger plants the first season, but show no sign of life and we have often seen them rejected as half dead by people unacquainted with the habit of the plant. The flower stems are stout and stiff, very branchy and we are enabled to cut all flowers with long stems, the remaining side buds developing and their stems elongating again in a very short time and the plants thus continue to give us a new supply of flowers every few days. I do not know how long this renewing process would be kept up if frost did not put an end to it, but I know that every fall when hard frost sets in we have thousands of flower buds killed on the plants, which under more favorable circumstances would have developed into flowers and thus prolonged the flowering season perhaps two months longer.

These flowers are in growing demand for the last two years; made up in bunches of 25 or more, they sell well in florists' stores; they are of good substance, excellent keepers and do not soon drop the petals like other similar single flowers. They come in when flowers in general are rather scarce and will last until chrysanthemums are plentiful. I know but a few florists who appreciate the value of this plant for our purpose and there is not many who make it a practice to grow enough of them for their own use. Therefore instead of looking for something new and experimenting with one thing and another, let us take up the old reliable things and grow them until we actually have found something better to take their place. I certainly should not want to discard the anemone at present, for I do not know of any other plant, blooming so profusely at this time of the year, that could fill the place and yet many do without it entirely, but they would not object to it, I think, if they knew the value and good qualities of this favorite of mine. JOHN B. KELLER.

Rochester, N. Y.

New York Market.

Some especially fine hybrids bring \$9 a dozen. Julius Roehrs is cutting magnificent Ulrich Brunner, which command the highest price in the market. Gabriel Luizet and Magna Charta from the same place are also fine. There are comparatively few first class Beauties. Wiegand of Union Hill, is cutting fine Jacqs, which affect the price of Bennetts. When Jacqs are really good they are taken in preference to Bennetts, but many growers say there is little money in the first named rose.

Business has been very poor for the last few days, and is expected to remain dull for the next week. After the first week in Lent business is expected to improve again. The dealers do not anticipate any continued dullness during Lent, unless the weather is bad.

Many dealers have shut down on Lillium Harrisii for the present; the production is large and there is absolutely no demand now; it can't be given away. Flowers are generally very good, in spite of warm weather. EMILY LOUISE TAPLIN.

CHICAGO MARKET.—In the last two weeks the supply of all flowers has steadily improved and with the falling off in demand usual at the beginning of Lent there is a surplus of many varieties.

News Notes.

LYNCHBURG, VA.—M. & R. Driver are new florists here.

TRENTON, CANADA —D. J. Hawley has started into the florist business here.

PHILADELPHIA —Mr. Paul Berkowitz has been admitted as a member of the firm of M. M. Bayersdorfer & Co.

PORTSMOUTH, VA.—Three greenhouses built at the "Seaboard Floral Gardens" last summer are heated by steam, overhead, and the system is giving perfect satisfaction.

SPRINGFIELD, ILL.—The salesroom at the greenhouses of H. L. Phelps was with its contents destroyed by fire on the 5th inst. Loss about \$500 more than the insurance, which was \$300.

PITTSBURG.—Trade in cut flowers was dull for first half of February; fairly good since then and likely to continue so until beginning of Lent. Flowers in fairly good supply and of better quality than could be had during December and January.

NEW YORK.—Andrew Smith, an old man who is said to have kept a florist store at 388 Broadway for many years where he prospered until he lost \$20,000 through a bank failure, is reported by the daily *Herald* to be in absolute want at 237 Spring street.

PHILADELPHIA.—Mrs. Rosalie Woltemate, formerly a well known and leading florist of Germantown, died February 23, at her residence, 4646 Germantown avenue, of heart failure. Mrs. Woltemate was in her 73d year, and was born near Wittenburg, and came to this country in 1845. In 1850 she married Mr. Henry Woltemate, a florist on Germantown avenue, opposite Brighthurst street, and after his death, in 1859, successfully carried on the business until 1886, when she retired in favor of her sons, Albert and William. She leaves four sons.

MONTREAL.—The first show of the Florists' and Gardeners' Club will be held March 26 and 27. Over \$300 is offered in prizes. At a meeting of the growers, held for the purpose, a scale of prices for all kind of spring stuff was agreed upon, also the question of private places selling plants for less than the price of production was discussed and action is to be taken to try and stop the practice which is carried on to a large extent here. The city greenhouses also seem to do the same thing. Murray's tulips are the wonder and admiration of all who see them. Wilshire Bros. have to move in the spring. J. Montgomery joined the Benedict society March 5, may he never regret it.

DETROIT, MICH.—Preparations for the flower show to be held April 2 to 5, are nearly completed. The premium list has been published; \$906 is offered in premiums and in addition there are a number of specials. Twenty-one of the city charities have been interested in the success of the exhibition and they will have booths in the hall. Mr. W. H. Brearley, proprietor of the *Detroit Journal* who originated and is managing the enterprise agrees to turn over to the charities the net receipts over expenses and guarantees that there shall be no deficit. This will be Detroit's first flower show and it is to be hoped that it will prove so attractive and successful that regular annual exhibitions will be the result.

INDIANAPOLIS.—The annual meeting of the Society of Indiana Florists which was held February 22 and 23, was a very interesting and profitable one. Among the papers read were: "Essential points in chrysanthemum culture," by E. G. Hill; "The value of exhibitions," by Fred Dorner; "Elevate your profession," by J. S. Stuart; "Cryptogamous Plants," by Pierre Valandeghem; "Violets, their culture and disease," by M. A. Hunt; "Beautifying Home Grounds," by W. H. Lawrence. The following officers were elected for the ensuing year: President, M. A. Hunt, Terre Haute; Vice-president, Anthony Wiegand, Indianapolis; Secretary, W. H. Bertermann, Indianapolis; Assistant Secretary, Jno. Hartje, Indianapolis; Treasurer, Frederick Dorner, Lafayette. The banquet the evening of the 23d was a very enjoyable affair.

WASHINGTON, D. C., MARCH 1—The cut flower trade has been quite active during the past week and there is every prospect of a steady increase in the business until Lent begins. The President elect arrived here early this week, and probably the eyes of no predecessor greeted so perfect and lavish a display of floral beauty. His rooms at the Arlington were redolent with the odor of choicest roses. No set pieces—but great masses distributed around in vases of exquisite form. Violets in one, lilies of the valley in another; a third vase contained upwards of a hundred select long stemmed Magna Chartas of exceptional size most gracefully arranged, and another huge porcelain vase had even more superb Jacques gracefully bending over its sides, etc. All very simple and natural but wonderfully choice, reflecting great credit upon Small & Sons who I learned furnished and arranged the flowers. President Cleveland's dinner to the President elect was also rich in floral display.

DANBURY, CONN.—Florist J. H. Ives has a greenhouse roof which probably has no duplicate in this country. Mr. Ives found it necessary to replace much of the glass in one of his houses, and, thinking that some of the photographers of the place might have the size he wanted, called on them. E. D. Ritton is the oldest artist in town, and he had at one time some 20,000 negatives. Mr. Ives purchased enough of them to replace the entire roof, and now his plants are shaded by the faces of old citizens, many of whom are now dead. The scene inside as the sun shines through is a novel one. Mr. Ives has arranged them in groups. One represents the old graybeards who have long since gone to their rest. Next comes men of middle age, who are now old and bent. The women follow and then we see the young men and young women who are to day grandfathers and grandmothers. The children represented by the negative are married and have their children. In one corner, over the heliotrope bed, Mr. Ives has placed the lovers—those who were so far gone in the days before they were married as to have their pictures taken holding each other by the hand. It is expected by the ingenious florist that his heliotrope, which represents love, will thrive and flourish with extraordinary strength under the influence of the snickers on the faces of the love sick people.

Catalogues Received.

Michel Plant & Seed Co., St. Louis, retail plants and seeds; Paul M. Pierson & Co., Topeka, Kan., plants; Falls City Wire Works, Louisville, Ky., florists'

wire designs; John N. May, Summit, N. J., trade list roses; H. W. Hales, Ridgewood, N. J., chrysanthemums; Jno. S. Collins, Moorestown, N. J., nursery stock; J. Palmer Gordon, Ashland, Va., plants; Max Deegen, Jr., Kostritz, Germany, bulbs and roses; Wm. H. Smith, Philadelphia, seeds; Paul Butz & Son, New Castle, Pa., plants; Parker & Wood, Boston, Mass., seeds; M. Tritschler & Sons, Nashville, Tenn., plants; A. P. Leonard & Co., Springfield, Mass., seeds; Chas. T. Starr, Avondale, Pa., plants; L. W. Goodell, Dwight, Mass., seeds; S. N. Cox & Co., St. Joseph, Mo., seeds; Geo. W. Miller, Wright's Grove, Chicago, wholesale plants; Benj. Rimbaud, Toulon, France, bulbs; J. L. Dillon, Bloomsburg, Pa., wholesale plants; Jno. Goode & Co., Hyde Park, Ill., plants; Wisconsin Flower Exchange, Milwaukee, Wis., cut flowers; Horace Rimby, Collegeville, Pa., seeds and plants; B. P. Critchell & Co., Cincinnati, O., plants, seeds and bulbs; M. B. Faxon, Boston, Mass., seeds; Ellwanger & Barry, Rochester, N. Y., roses; same, strawberries; same, ornamental trees; same, fruits; same, wholesale nursery stock; E. S. Nixon, Chattanooga, Tenn., plants and trees; Mendenhall Greenhouses, Minneapolis, Minn., plants; Dutchess Nurseries, Poughkeepsie, N. Y., seeds and nursery stock; E. L. Koethen, Zanesville, O., plants; Thos. S. Ware, Tottenham, London, England, chrysanthemums; same, herbaceous peonies; same, miscellaneous hardy plants.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By a good vegetable gardener. Address Box 143, Carlisle, Pa.

SITUATION WANTED—By a practical gardener; single; 6 years' experience. Best of references. D. E. SUTHERLAND, Winchendon, Mass.

SITUATION WANTED—By young man to learn florist business. Best of reference. Address E. V. GOODMAN, 45-N. Front St., Columbus, O.

SITUATION WANTED—By a thoroughly experienced rose grower. Good references. Address J. P. H. care Jos. Hart, 111 W. 30th St., New York City.

SITUATION WANTED—Private or commercial, by competent man, 5 years' experience. Good references. Address Box 30, care American Florist.

SITUATION WANTED—By a florist of 12 years' experience. Perfectly competent. First class references. Address Box 22, care American Florist, Chicago.

SITUATION WANTED—Commercial or private by single man, age 30; practical rose and bulb grower; 15 years' experience. State wages. Address GARDENER, box 177, Madison N. J.

SITUATION WANTED—By a young man as florist and gardener; 15 years' experience; good reference given; private place preferred. Address Box 3, care American Florist, Chicago.

SITUATION WANTED—By first class rose grower and plantsman. Unmarried; sober and energetic; 15 years' experience. Good references. Address P. M., care American Florist, Chicago.

SITUATION WANTED—Florist, foreman or position in first class commercial place; used to propagation and growing of all kinds of plants. JAS. FROST, 1 Baker St., Watertown, N. Y.

SITUATION WANTED—By florist, first class greenhouse man, 11 years' experience; prefers inside work. Also a good gardener for gentleman's place. Address ED. VAN HEBLOX, Carlisle, Pa.

SITUATION WANTED—German gardener, 7 years in this country, with good references; understands the cultivation of flowers and vegetables. Address M. BAUER, 427 Gross Parkway, Chicago.

SITUATION WANTED—By florist with experience in raising flowers for the trade; also can take care of gentleman's place preferred on Hudson River. Address Z, care American Florist.

SITUATION WANTED—Gardener; experienced in growing plants, flowers under glass and vegetables, and care of lawns. Age 28. References. Address E. LEE, 349 University Ave., Rochester, N. Y.

SITUATION WANTED—By a competent, sober florist; 25 years of experience; to take charge of either cut flower or stove plants. Best N. Y. references. Address A. C., care American Florist, Chicago.

SITUATION WANTED—By a young man of 20 years of age, with a general assortment of pot plants are grown. Two years' experience with Mr. J. M. Keller. Address P. H. SASS, care J. M. Keller, Bay Ridge, L. I.

SITUATION WANTED—Gentleman competent in floral seed and nursery business. Theoretically as well as practically, desires to enter an active engagement. He speaks several languages. Address GARDNER 2111 St. Leonard, Cook Co., Ill.

SITUATION WANTED—In small greenhouse private care preferred. vicinity of Boston, by young man of some experience. Situation more of object than salary. Correspondence solicited. Address W. F. MACOMBER, 16 Hudson St., Rutland, Vt.

SITUATION WANTED—By a practical rose grower and plantsman well up in the commercial business; capable of taking full charge of commercial place; best of references, 3 years out, and single. State salary. Address MATHEW, care American Florist, Chicago.

SITUATION WANTED—Gardener, Scotchman; single, age 4; desires engagement in either private or commercial establishment. Is a thoroughly experienced landscape gardener; also the growth of roses, stove and greenhouse plants, orchards, berries, etc., and all branches of the gardening and florist profession. Address FLORIST GARDENER, P. O. Forest Glen, Cook County, Ill.

SITUATION WANTED—By a florist—German; practical; conversant with culture of cut flowers and culture of plants. Roses specially. Capable of superintending the building of greenhouses for commercial or private use. Would like a liberal salaried position. Capable of taking charge of commercial or private concern. Can furnish first class proof of his ability. Address F. M., care A. Wolfmeyer, 215 & 217 25th St., Brooklyn, N. Y.

SITUATION WANTED—Private or commercial, by a first class florist; German, age 33, married, no children; fully experienced in all branches of the business; is capable to act as propagator, or take full charge of a large commercial place. Wages expected, \$10 per month; steady employment for the future expected; can furnish first class references. None but those meaning business need apply. Address S. A. BARR, care Hill & Co., Richmond, Indiana.

SITUATION WANTED—By a practical florist and gardener; single, age 21; 10 years' experience North and South. First class rose grower; thoroughly understands the business in all its branches. Also good greenhouse tender, and thoroughly familiar with heating apparatus—steam and hot water both. A competent man for parties wishing to start up a new business in the South. None but first class parties need apply. Address H. E., care American Florist, Chicago.

GARDENERS—We have several customers who want men VAUGHAN'S SEED STORE, Chicago.

WANTED—A competent nursery foreman; none other need apply. Address, naming salary, references, etc., JNO. R. & A. M. RHOEN, Pittsburg, Pa.

WANTED—A thoroughly reliable man; one who understands seed growing, the culture of vegetables and greenhouse management. In short, I want a gardener, seed grower and florist, all in one; one who neither drinks or gambles, who is not a crank, nor full of crazy notions. Let the man who thinks he can fill this bill, state terms and wages desired. Address G. J. LAMBERT, Cold Spring Seed Farm, Seedsmen and Florist, L. Box 62, Big Horn City, Wyoming.

FOR SALE—The E. Y. Teas Dunreith, Saginaw. Price \$500, will improve \$500. This is a great bargain. Address A. T. HILFSON, Dunreith, Ind.

FOR SALE—A beautiful place in Southern Texas, 11 acres with 2,000 bearing grapes and orchard, the residence—a mild climate—only \$2,500 on easy payments. G. C., care American Florist, Chicago.

FOR SALE CHEAP—5 acres of land, two greenhouses full of plants; plenty of water; fruit of all kinds; 1 mile from city. Proprietor is old, wants to go South. Address JOHN M. EDELMAN, Box 14, Youngstown, Ohio.

FOR SALE—In a New England city, greenhouses, 8,000 feet of glass; fine business, long established. Extra good summer trade at the holidays. Selling; valuable real estate; good reasons for selling. A rare chance. Address MAY, care American Florist, Chicago.

FOR SALE—Greenhouses with 4 acres of good ground, dwelling with five rooms, good cellar, good water; no competition, can see natural gas for heat and light; the city owns property which they will furnish cheap. Will be sold at a sacrifice. Enquire of E. M. MARIZ, Greenville, Darke Co., Ohio.

FOR RENT—Cheap. Extraordinary chance, six good sized greenhouses, all improvements, hot water boilers and steam heating, croton water. Located at the main entrance to the largest cemetery in the City of New York. Well established, trade by the same name that now has charge over 15 years. Over 1000 lots to care for and decorate only responsible parties need enquire. Address L. G. WILSON, Mt Vernon, N. Y.

WANTED

A strictly sober man, no children; for small private place; wages, free house and \$40 per month. First class recommendations necessary. Address

John Reek,
BRIDGEPORT, CONN.

WANTED 2000 FICUS ELASTICA

or any part thereof. 2 to 4 inches.
LOW FOR CASH.

F. L. TEMPLE, Cambridge, Mass.

Greenhouses for Sale.

In one of the best locations in the State, near New York City.

Eleven Greenhouses, with windmill, tank, etc., unfailing supply of water, well stocked and doing a thriving business. Nine acres of land with a neat comfortable cottage. The whole forming a most eligible plant for a florist.

Terms very reasonable. Apply to

AUGUSTUS TABA,
GRAND UNION HOTEL, NEW YORK.

JOHN CURWEN, Jr.,
GENERAL
GREENHOUSE STOCK AND ROSES.
Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

Hydrangea P. G., Clematis, Etc.

6000 Hydrangea P. G. 3 to 6 inches, fine.....	\$ 3 00
2000 Variegated leaf Weigela, 18 to 24 inches...	5 00
2000 Clematis Virginia, 1 yr. layers well rooted	5 00
1000 " Flamula and Viticella, 2 yr. strong	6 00
400 " Crispa, 1 year, strong.....	10 00
1000 Climbing Roses, 1 year, heavy.....	7 00
800 Altheas, named colors, 3 to 4 ft.....	12 00

D. LEE, Madison, Lake Co., Ohio.

100 PELARGONIUMS, very choicest varieties, budding, all good healthy plants, got mixed when moving, 3-in. pots 15c, each; 4-in. 25c, each. CYN-
ERARIAS, budding, 4 & 5-in. pots 10c, each. Fine
CALCEOLARIAS, 2 & 3 in. pots 10c each. Cash
with order. A. M. MOOR, Florist, Niles, Mich.

RETAIL FLORISTS

Secure a quantity of the handsome supplements mailed with December 15 issue and present them to buyers of flowers. No better advertisement of your business could be devised than the numerous handsome illustrations it contains. We have printed several thousand extra copies with blank spaces on the title page where you may print or stamp your business card, and will supply them at the following rates, cash with order:

25 Copies for ..	\$ 3 00
50 " " ..	5 00
100 " " ..	9 00
200 " " ..	16 00
300 " " ..	20 00
400 " " ..	23 00
500 " " ..	25 00

AMERICAN FLORIST CO.

54 La Salle Street, CHICAGO.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25 00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

Mention American Florist.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,

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ROSES.

All the best NEW and Standard Varieties of
Teas, Hybrid Teas and Hybrid Remon-
tants, in extra fine plants,

From two inch, three inch and four inch
pots Standard sizes.

By the Dozen, Hundred or Thousand.
Also all the best selecte 1 varieties of Everbloom-
ing and Hybrid Remontants for Bedding.

At prices as low as strictly first-class stock can
be produced for.

Price list now ready and will be mailed to all
applicants in the trade.

JOHN N. MAY,

SUMMIT, NEW JERSEY.

Mention American Florist.

IMPORTED H. P. ROSES,

Worked low on the Manetti Stock, offer the best re-
sults to the florist, blooming freely and giving plenty
of cuttings for propagating quickly. Fine plants
for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

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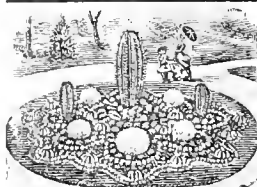
JAMAICA PLAIN, (Boston), MASS.

STANDARD ROSES.

Pot grown plants. A No. 1 stock of all
the best leading sorts of H. P. and
Tea varieties.

Gabriel Marc,

WOODSIDE, L. I., N. Y.



CACTI FOR BEDDING.

\$5 00 per hundred
and upwards.

Wholesale & Re-
tail Price List free
72 page Illustrated
Catalogue 10 cts.

A. BLANC & CO.,
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to be mailed for \$1.00

COLEUS FOR BEDDING.

We have good clean stock of the following varie-
ties to offer, in 2-inch pots:

Golden Bedder, Verschallertii, Firebrand,
Chicago Bedder, G. Goodei, Black Butter-
fly, Golden Dawn, Crimson Scarlet, New
Verschallertii, @ \$2 00 per 100, \$15.00 per 1000.

Send for samples.

J. W. DUDLEY & SON, Parkersburg, W. Va.

A. C. TUCKER, ROSE GROWER,

P. O. BOX 190.

NYACK, N. Y.

I would like to give my prices for the following
varieties in 2, 3, or 4-inch pots to any parties desir-
ing the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI
LA FRANCE, NIPHETOS,
MERMET, BRIDE,
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In 2 1/2-inch pots, ready Feb. 1.

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Teas, and Hybrid Perpetuals, and novelties in
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In first-class condition, from vigorous plants:
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BENNETTS, BON SILENES AND NIPHETOS,
in 2 1/2-inch pots, \$5.00 per 100.

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GIANT MOON FLOWER; TRUE VAR. WHITE SEED.
I am now ready to contract for above, fall delivery
1880, 200 lbs. Also 2nd size Pearl Tuberoses, \$5 00 per
1000. Orders solicited now for Antigonon leptopus
at \$10 00 per 100. 20 var. Cacti from \$c. to \$35 each.
Mrs. J. S. R. THOMSON, Spartanburg, S. C.
2 years State Vice-President S. A. F.

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Stock for Florists for Coming Spring

	Each.	Per Doz.	Per 100
Abutilon Eclipse, new foliage, variegated	15	\$1.75	\$10.00
Abutilon Thompsonii plena dble. flowering	10	1.40	6.00
Asparagus Tenusshims, strong	10	1.00	6.00
Ardisia Crenulata, from 3-in. pots	15	1.50	10.00
Azalea, assorted kinds, blooming plants, 5-inch pots	50	2.00	10.00
Azalea, assorted kinds, blooming plants, 4-inch pots	50	3.00	20.00
Azalea, ass't kinds, matting size	15	1.50	10.00
Begonia Metallica, glaucophylla Scandens, Semperforens Gigantica, Brantia	10	1.00	8.00
Cape Jasmine (Gardenia Florida, Fortuna, Radicans, Variegata)	1.20	8.00	
Camellia Japonica, matting size, Alba Plena	1.50	15.00	
Camellia Japonica, matting size, assorted	1.50	15.00	
Cestrum Parqui (Night blooming Jasmine)	1.20	8.00	
Daphne Odorata, strong, 3-inch	25	2.40	15.00
Fuchsia from Emma Topfer, best double white	1.20	8.00	
Fuchsia Phenomenal, best double purple	1.50	10.00	
Farfugium Grande, foliage spotted	25	2.40	15.00
Glechoma Hederacea (Nepeta Glechoma) Ground Ivy	1.50	10.00	
Geranium Gloride de France, best double purple	1.50	10.00	
Geranium LeCygne, White Swan, best double white	1.50	8.00	
Geranium Glory of Belgium, best single white	1.20	8.00	
Hydrangea Rosea, flowers satin pink	1.50	12.00	
Ipomoea Grandiflora, the new improved Moon Flower (true)	1.20	8.00	
Ipomoea Fleifolia, violet crimson, tuberous rooted	1.50	10.00	
Ipomoea Learii, rich violet blue	1.20	8.00	
Jasmine G. acutillum, white flowered in clusters	1.50	12.00	
Jasmine Catalpa, sweet-scented white	1.50	10.00	
Linum Tryginum, flowers yellow, very profuse bloomer	15	1.70	10.00
Leonotis Leonurus (Lion's Tail), flowers orange scarlet	1.20	8.00	
Mahonia Odorata (Honey Bell), flowers yellow, very sweet	1.20	8.00	
Passiflora Corsicae Elliott, hardy, white flowering	1.00	6.00	
Passiflora Quad Variegata, foliage beautifully marked	1.50	10.00	
Rhynchospermum Japonica, flowers white, Spring blooming	1.50	10.00	

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COLEUS—Mikado, Tokio, Kress, Harry Harold, Louise Beck, J. Goode, Mrs. Hunt and Rag Carpet, \$1.50 per 100; 2-inch pot plants \$1.00 per 100.

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FOR SPRING FORCING.

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- Narcissus Albicans, large creamy white trumpets one of the best
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- Narcissus Bulbocodium, "Yellow Hoop Petticoat," fine strong bulbs for forcing.
- Narcissus Bulbocodium Citrinus, pale sulphur flowers, and very early.
- Narcissus Emperor, the largest; immense stout flowers of a rich yellow
- Narcissus Golden Spur, immense deep golden yellow flowers, and wonderfully early
- Narcissus Henry Irving, rich yellow, large bold trumpets.
- Narcissus Incomparabilis Cynosure, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white.
- Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.
- Narcissus Major, true, one of the best forcing sorts, large yellow trumpets, similar to maximum.
- Narcissus Nobilis, a first class variety for florists, free and early
- Narcissus Obvallaris, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.
- Narcissus Odorus Campenelle, the well known Campenelle Jonquil, very strong bulbs.
- Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.
- Narcissus Pallidus Præcox, the earliest of all, forces very freely, single, sulphur colored trumpets
- Narcissus Rugifolius, true, large yellow trumpet very free and very early
- Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.
- Narcissus Van Sion, true, the double deep yellow daffodil.
- Freesia Refracta Alba, large bulbs for forcing
- Freesia Leichtlini, a nice contrast to preceding and forces well
- Gladiolus The Bride, flower pure white, fine for forcing
- Helleborus or Xmas Roses in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

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We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

- Abutilons of sorts, \$4, \$6 and \$8.00
- " Eclipse, new, var. foliage \$6.00
- Ageratum, W. Cap, Cope's Gem, \$5, 1.00
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- " Picturatum, 12.00
- Achyranthes, 2 kinds, 7.00
- Alyssum of sorts, 4.00
- Asclepias, white flowers, 6.00
- Alternanthera Spectabilis, new var., 6.00
- " Aurea Nana, 3.00
- " Paronychoides, 3.00
- " Versicolor & Tricolor, 3.00
- Begonia, Flowering Rubra, Weltoniensis Rubra, Alba, Zebrina, Robusta Alba Picta G. Scandens, Brantia, Metallica, etc., \$4, \$6 and \$8.00
- Balm, variegated, 4.00
- Calla, Richarda Maculata, 6.00
- Cobea Scandens, 8.00
- Chrysanthemums in variety, 3.00
- Coronilla Glauca Variegata, 8.00
- Caladiums, fancy leaf of sorts, 16.00
- Coleus of sorts, best new and old, 3.00
- " Verschaffeltii, Golden Bedder, 3.00
- " Rag Carpet, Louise Beck and Mrs. Hunt, 4.00
- Cannas of sorts, 5.00
- Cuphea (cigar plant), 3.00
- Centaurea Gymnocarpa, \$4 and 6.00
- Cineraria Maritima, 4.00
- Cyperus Alternifolius, 8.00
- Daisies, white and pink, 4.00
- Dew Plant, 4.00
- " variegated foliage, 6.00
- Echeveria Glauca, 5.00
- Euphorbia Splendens, \$4, \$6 and 8.00
- Ferns of sorts named, \$8 and 12.00
- Fuchsias, best dbl. & sgle. \$3, \$4 and 6.00
- " new of sorts, 10.00
- Geraniums of sorts dbl & sgle \$3, \$4, 6.00
- " of sorts scented, \$3, \$4, 6.00
- Heliotrope, \$3, 4, \$6 White, 6.00
- Hollyhock double, nice plants, 8.00
- Hibiscus of sorts, \$4, \$6 and 8.00
- Isolepis Glauca and Gracilis, 6.00
- Ipomoea Learii, Blue Moon Flower, 6.00
- " Palmata, Mexican, 12.00
- Impatiens Lucy and Sultana, 6.00
- Lycopodiums of sorts, 8.00
- Lautanias of sorts, \$6 and 8.00
- Lobelias for Baskets, \$3 and 4.00
- " Ribbon lines or Beds, \$3 and 4.00
- Money Wort, 4.00
- Moon Flower, true, 5.00
- Oxalis double yellow, \$4, \$6 and 8.00
- " single yellow, \$4, \$6 and 8.00
- " pink and white, 4.00
- Passiflora Incarnata, hardy true, 4.00
- Petunias, best double of sorts, \$6 and 8.00
- Pansies, large flowering, 3.00
- Perennial Phlox of sorts, 6.00
- Pothus Variegata, fine for vases, 8.00
- Pilea Arborea or Artillery plant, \$4, 6.00
- Rosemary, 8.00
- Roses Everblooming of sorts, 4.00
- Salvias of sorts, 6.00
- Stenotaphrum, 6.00
- Strawberry Geraniums, 5.00
- Smilax, 3.00
- Thyme Golden, 1.00
- Vincas, shrubby for bedding, 6.00
- " trailing for baskets, 2 kinds, 6.00
- Verbenas of sorts, 3.00

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R. S. BROWN & SON,
BOX 69, KANSAS CITY, MO.



New York.

The violet is in great demand this season, ladies wearing them on their boue's corsage and even pinned on their muffs. Neapolitan violets are special favorites of the Germans; they are considered more fragrant than the Marie Louise.

The little floral muffs carried by bridesmaids this winter are very charming affairs. They are formed upon a frame like other flower pieces and covered with moss on the side towards the dress and with a pretty arrangement of maiden hair fern or rose leaves at either end to conceal the absence of the lining. At a very pretty wedding last week some very effective muffs were made of yellow and white carnations with a spray of roses and maiden hair ferns for the center decoration. These muffs are beautiful made of violets set in maiden hair ferns, with roses at the side contrasting with the bridesmaids' toilets.

At the Astor ball, which occurred on the 14th, the most telling floral decorations were in the ball room. A large wheelbarrow made of straw and decorated with crimson ribbons, was wheeled about after the dance and its contents, which were bouquets of hybrid roses, were distributed among the ladies. There was a large display of orchids of marvelous beauty. The art gallery was decorated with American Beauty and Magna Charta roses. At one end was a large screen of smilax and roses. To the right of this a statue was garlanded with roses and ferns. The cotillion favors were pink roses, tied with wide crimson ribbon; these were deposited in a wheelbarrow trimmed with laurel before their distribution. Yellow acacias and superb carnations filled the great vases in the hall and calla lilies drooped before the mirror and in the reception room.

The last of the Patriarchs' Balls, which took place recently at Delmonico's, was beautifully decorated with garlands of roses which were looped across the thirteen windows of the ball room. This was almost the sole decoration and was intended by Klunder to show off the beauty of the roses which were phenomenally large. Mr. Klunder also had the honor of making the bouquet for Mrs. Harrison to carry at the inauguration ceremonies. It was composed chiefly of cattleyas, lily of the valley, Bride and Cusin roses and was very elegantly arranged. The bouquet was tied with a white ribbon, embroidered with a flag and the name of Mrs. Harrison. A boutonniere of white roses and lily of the valley and tied with red, white and blue ribbon was sent to Mr. Harrison.

Baskets were never so much used as at present in sending flowers. The introduction of the fish basket seems to have opened the way for other varieties, and the shepherd's crook, Marie Antoinette and all the larger baskets that can be

trimmed with silk and ribbon seem to be the favorites. The Marie Antoinette basket was superbly draped with white corded silk and filled with orange blossoms, with a small spray of bridal wreath for a bride coming home last week. The shepherd's crook basket was filled with Roman hyacinths, Niel roses and cyclamens for a gentlemen at the Langham. Hanft Bros. filled a basket oblong and deep, with round handle, which was beautifully constructed with bunches of La France, Jacqueminots, American Beauties, Mermets, lilies and lilacs most gracefully arranged. The handle was covered with roses and the whole was edged with white lilac.

The burial casket of Mrs. Allen, sister of Mr. Vanderbilt, was covered with violets; it was fringed at the bottom with white lilacs and at the breast was a cluster of white roses.

FANNIE A. BENSON.

Boston.

The beginning of Lent finds the market well stocked with flowers of every kind. Roses are of exceptionally good quality. The same is true of carnations, violets and pausies. Smilax is getting scarce and quality none too good. Heath is plenty, orchids are in their prime, and *Primula obconica* has become so regular a supply that it is to be seen even in the hands of the street fakirs.

The florists' windows are as usual at this time of the year gay with *Harrisii* lilies, *Acacia pubescens*, azaleas and other brilliant things.

The season just closed has been very lively during the past few weeks, in some measure atoning for the dullness of the early part of the winter. Prices have averaged lower than ever before, but have been comparatively regular with few sharp advances or declines. As Lent comes in so late this year it is probable that very low prices will rule until Easter. Growers say that on account of the mild weather which has prevailed they have not used nearly so much coal this year as customary. This fact will to some extent offset the low prices received.

There is no rose in the market this season which sells so well here for regular every day supply as the Bride. Mermet also holds its popularity, while La France seems to be fast losing ground. Hybrids of all kinds have sold very poorly. *Adiantums* are very scarce and of inferior quality at present. Everybody is now looking forward to Easter and the stereotyped question this year is not, "Do you think I will get those lilies in time for Easter?" but, "Do you think I can hold this stuff back?"

Mr. Thos. Young, one of our oldest suburban florists, died at his home in Somerville, February 27, after an illness

of but three days. Mr. Young was a native of Scotland and 61 years of age, but has resided in Somerville, Mass., for the past 50 years. He was a skillful gardener and has made a special success in the cultivation of heaths. Above all he was a thoroughly honest and conscientious man, a kind husband and father and devoted friend.

The annual spring exhibition of the Mass. Hort. Society will take place on March 27, 28, 29. Premiums are offered for spring flowering bulbous stuff in variety, Indian azaleas, roses, orchids, cyclamens, cinerarias, etc. On Saturday, February 23, a new and distinct variety of *Cattleya Trianae* was exhibited at Horticultural Hall by Pitcher & Manda. It was awarded a first class certificate of merit.

The numerous friends of Mr. Fred L. Harris will be sorry to know that he has been quite ill for the past four weeks, and will heartily wish him a speedy and thorough recovery.

Mr. A. P. Calder has also been seriously ill with pneumonia, but is now convalescing.

The recent orchid show in New York attracted several of the Boston brethren to that city. They went off together, but came home in detachments. Judging from appearances they had made good use of their time and had done but little sleeping. They all say that they had a good time.

A novel and quite effective innovation in floral work was seen at a funeral recently. The design consisted of a magnificent "Gates Ajar," over which was the conventional crown surmounted by a cross. The novelty consisted of a tiny electric light which shone like a star on the apex of the cross. The effect was beautiful.

M. B. Faxon, the seedsman, has added a cut flower department to his business. His decoration on the occasion of Mayor Hart's reception on February 22, was artistic and appropriate and gave great satisfaction.

A slight fire at the greenhouses of W. E. Page, Brookline, on the night of February 25, caused a damage of about \$100 to house and contents.

C. R. Dane has given up his branch store on Park street.

Wm. Doogue has been re-elected superintendent of common and public gardens for 1889. W. J. S.

PHILADELPHIA.—There is always a lull in the demand for flowers in the opening days of Lent, and this season has been no exception. A little later on the demand will increase; only the choicest flowers, such as fine hybrid roses, find ready sale just now. February was a much better month than January. Prices generally have ruled lower than at the same period last year.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements 10 Cents a Line, Agate, Inch, \$1.50, Column \$15.00, Cash with Order.

No Special Position Guaranteed, Discounts, 3 months, 5 per cent; 6 months, 10 per cent, 12 months, 20 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted. Advertisements for April 1 issue must REACH US by noon, March 25. Address THE AMERICAN FLORIST CO., Chicago.

PROVIDENCE, R. I.—At a meeting of the Rhode Island Horticultural Society held recently the following officers were elected to serve for the current year: President, Amasa M. Eaton; Vice-Presidents, Levi W. Russell and Thomas K. Parker; Recording Secretary and Treasurer, Charles W. Smith; Corresponding Secretary, Thomas K. Parker; Botanist, Wm. Whitman Bailey; Executive Committee, President Eaton, ex-officio, Levi W. Russell, Henry T. Root, Silas H. Manchester; Ormand E. Fitzgerald.

The Wisconsin Flower Exchange
WHOLESALE CUT FLOWERS.

ROSES, Fancy Stock	Per 100	5 00
" Jacks		10 00
" American Beauties		15 00
Carnations, Short		1 25
" Long		1 50
Valley and Narcissus		1 00
Tulips and Daffodils		4 00
Smilax		20 00
Callas		10 00
Pansies and Daisies		1 40
Candiliums, long		5 00
Lilacs		15 00
Primroses, all white		.75
Palm Leaves		1 25
Hurrisii		10 00
Amaryllis		25 00
Heliopsis and Mignonette		1 00
Adiantum Ferns		1 00
Common		.30
Ivy Leaves		.50
Dutch Hyacinths		5 00
Palmetto Leaves	per dozen	1 00

Prices subject to change without notice.

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J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

BOSTON, March 11.

Roses, Teas	\$2.00 @ \$4.00
" Perles, Sunsets	5.00 @ 6.00
" Brides, Mermets	6.00 @ 10.00
" Jaques, Hybrids	8.00 @ 15.00
Carnations, short	.75
Carnations, long	1.00
Carnations, fancy	2.00
Violets, Phibes	.50 @ .75
Valley, Daffodils	3.00 @ 4.00
Tulips, Hyacinths	3.00 @ 4.00
Heath, Spider	2.00
Smilax	15.00
Callas, Hurrisii	10.00 @ 12.00
Acacia	25.00

NEW YORK, March 11.

Roses, Bon Silene	\$3.00
" Gontiers, Souvs	4.00
" Perles, Niphotos	4.00
" Mermets, Brides	6.00 @ 10.00
" Casus	8.00 @ 12.00
" La France	6.00 @ 8.00
" Bennetts	25.00 @ 75.00
" Am. Beauty	6.00 @ 25.00
" Jaques	25.00 @ 40.00
" Other Hybrids	25.00 @ 40.00
Mignonette	2.00 @ 8.00
Smilax	12.00 @ 20.00
Carnations	1.00 @ 2.00
Hyacinths, Narcissus	2.00 @ 4.00
Lily of the valley	1.50 @ 3.00
Tulips	2.00 @ 3.00
Violets	.40 @ .75
Adiantum	1.50
Lilac, per bunch	1.00

PHILADELPHIA, March 11

Roses, Perles, Niphotos	\$4.00 @ \$5.00
" Mermets	8.00 @ 12.00
" La France	5.00 @ 10.00
" Bennetts	6.00 @ 8.00
" Bon Silene	3.00 @ 4.00
" Am. Beauties	15.00 @ 25.00
" Jaques	20.00
" Puritans	15.00
" Gontiers	6.00 @ 8.00
" Brides	8.00 @ 10.00
Carnations, long	1 25
Carnations, short	1 00
Carnations, Grace Wilder	2 40
Lily of the valley, Romans	3 00 @ 4 00
Daffodils	5 00 @ 6 00
Tulips	3 00 @ 5 00
Callas	8 00 @ 15 00
Smilax	15 00 @ 20 00
Hurrisii lilies	10 00
Adiantum	1 00 @ 1 50
Camellias	6 60
Single Violets	25
Double Violets	50

CHICAGO, March 13.

Roses, Bon Silene	\$4.00 @ \$5.00
" Perles, Niphotos	5.00 @ 6.00
" Am. Beauties	15.00 @ 20.00
" Jaques	12.50
" Mermets, Brides	7.00 @ 8.00
" Bennetts, Dukes	7.00 @ 8.00
" La France	7.00 @ 8.00
Carnations, short, white	1.00 @ 1.25
Carnations, long, white	1.25 @ 1.50
Carnations, short, colored	.75 @ 1.00
Carnations, long, colored	1.25 @ 3.00
Romans, Valley	4.00
Tulips	3.00 @ 4.00
Daffodils	4.00
Smilax	18.00 @ 20.00
Callas	8.00 @ 10.00
Violets	.75 @ 1.00
Camellias	10.00
Adiantum	1.00 @ 1.50
Candiliums, long	8.00

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American Beauty. Annie Cook. Mad Cusin.
Papa Gontier. The Bride. La France.
Bennett. Parle. Mermets.
And other Standard sorts

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☉ The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

THE SENSATION of the past ten days has been the disappearance of A. B. Cleveland, president of the New York seed company under that name. The matter has been so thoroughly written up by the daily press that our readers are no doubt acquainted with all the details that are public. So far nothing is known of his whereabouts, and his best friends fail to deny reports of serious defalcation, something less than \$40,000.

THE MARCH *American Garden* congratulates the country on its escape from the annual government distribution of alleged seeds. We do not read our *Congressional Record* with such hopeful eyes; (see extracts elsewhere in this issue). We should be glad to see friend Libby's authority for such a happy prospect.

THE COLD SUMMER on the Continent brings its fruit, or rather lack of fruit, in a partial failure of the flower seed crop. Many seedsmen complain of delay in shipment of their stocks as well as considerable shortage. It will be well if there be not further complaint as to their germination.

A. W. LIVINGSTON'S SONS, of Columbus, O., burned out Sunday morning, March 10. They are well insured and will go ahead. The trade will sympathize with them. The loss could hardly have happened at a more unfortunate time, as their spring trade was just at its height.

SECRETARY McCULLOUGH of the Seed Trade Association, expects to send out the programme for the Washington meeting about May 1. The headquarters will be at the Arlington (\$3) and the sessions begin Tuesday, June 11. He anticipates a good meeting.

A FEW spring-like days since our last number encourages somewhat the catalogue men who say the people may want a few garden seeds after all. But who will buy all the onion seed?

HOW ABOUT seed potatoes? Will they go lower yet? The Rural New Yorker No. 2 rots badly. Where is the "iron constitution" Bro. Carmen should have bequeathed it?

WHAT KIND of tomato seed is this we hear of at 75 cents per pound? Baltimore stock?

NOW DON'T let anybody offer the new Secretary of Agriculture stock in a seed company.

The Government Seed Distribution.

B. A. Enloe, of Tennessee, made the following remarks in the House of Representatives on February 8, 1889. It is also worth noting that the following gentlemen opposed Mr. Enloe and defeated his amendment, mark them: W. H. Hatch, of Missouri, R. W. Danham, of Illinois, J. B. Morgan, of Mississippi.

Mr. ENLOE.—If the gentleman desires to have the entire paragraph read I have no objection. But I offer this amendment, Mr. Chairman, with the object in view of trying to retire the United States Government from the wholesale seed business, and to try to retire the members of Congress from the retail seed business. I offered a similar amendment to the same paragraph of a similar bill in the first session of the Fiftieth Congress, proposing to cut this abuse down then one half.

This amendment now proposes to cut

it up by the roots, and if I could succeed in getting the amendment adopted I should propose also to strike out that part of the bill which provides an appropriation of \$8,400 for the pay of the superintendent and clerks in the seed division. In addition to that, I should also propose to go further and strike out the sum of \$4,200 appropriated for printing seed-packets, labels, postal cards, circulars, etc. So that if the proposition shall be adopted the amount in the aggregate that would be saved would reach the sum of \$112,600.

I know that this is a proposition that will not meet with the favor of many gentlemen on this floor, because it proposes to deprive them of the privilege of distributing seeds to their constituents. I understand that the object of the Government is establishing this bureau, or the object of Congress in making the first appropriation for the purchase of seeds, rather, was a very proper one. It contemplated the buying of new and valuable varieties of seeds and letting the Government take the risk and expense of making the experiments and tests to see whether they were adapted to our soil and climate, and thus save the farmers of the country that risk, in which way the appropriations for this purpose were designed to promote agriculture.

But, sir, we have departed very far from the original object in making the first appropriation. That appropriation was made in 1839, and the amount provided for the purchase of seeds and plants was the small sum of \$1,000. Congress in 1851 increased the appropriation to \$5,000 per annum. In 1862 the Bureau of Agriculture was established and the sum of \$62,000 was appropriated for this purpose. It has thus continued steadily to grow in popularity with the members of Congress until to-day we are appropriating \$100,000 annually for the purchase of seeds and for distributing them amongst our constituents. Congress, when it created the Bureau of Agriculture, declared the general designs and duties of the bureau to be:

To acquire and to diffuse among the people of the United States useful information on subjects connected with agriculture in the most comprehensive sense of that word, and to procure and propagate and distribute among the people new and valuable seeds and plants.

So it will be seen that the original idea was that the bureau should propagate and distribute new and valuable seeds and plants, but it was not within the contemplation of Congress at that time to go to the seed growers and buy the same seeds that are sold everywhere by merchants and distribute them among the farmers.

While this system is perhaps a boon to some people in this country, and has the approval and support of a great many men who have become attached to it, especially members of Congress who send these seeds to their constituents for campaign purposes, yet it does seem to me that it has grown into such an abuse, and a moss covered abuse at that, that we can no longer permit it to pass the House in an appropriation bill without at least an effort to abolish it. The time has come when the object which was originally sought in purchasing seeds for distribution no longer furnishes a reason for such legislation.

It was an evil principle in the beginning, however much we may approve the purpose in view. Insignificant as the sum expended may appear, and small as

the benefit received by the individual citizen who receives the seed is, still it is part and parcel of the legislation of a political school in this country which is steadily seeking to destroy self-reliance and to teach people to look to the Federal Treasury for gifts.

I can remember the good old days when the good women in the country homes carefully saved their own garden seeds every year and always had, not only enough for their own use, but some to give away to their neighbors. It is not generally so any more. Some look to the Government for a supply and some look to the seed stores. A few of the more provident still pursue the wise plan of caring for small things and saving garden seeds at home.

Of the thousands of papers of seeds sent out by members with the request from the Bureau of Agriculture for reports of results, how many are ever heard from? Instead of sending back reports to the Commissioner of Agriculture of the failure or success of the experiments with the seeds as the law intends, the majority think nothing about it and care less.

Some persons who receive the seeds do not even save seed from them when they are satisfactory, and often the very next season the member who sent them will receive postal cards and letters asking for the same seeds, and frequently the order of one constituent is of such proportions that even the Bureau of Agriculture can not supply all the varieties embraced in the order.

In 1880 the politician laid his relentless grasp upon the seed division, and took for his own perquisite, to be distributed as he might elect, two-thirds of all the seeds purchased by the Commissioner of Agriculture.

The number of papers received this year by each member is seven thousand, and such great agricultural centers as New York and Chicago, where they raise no other agricultural product but "bulls" and "bears" to toss the prices up and to ride the prices down, receive the same quantity that goes to the great agricultural empire in the "wild and woolly West" represented by my friend from Texas (Mr. Lanham).

Now, let us work out the scheme for distribution. Seven thousand papers of seeds to be distributed among 150,000 inhabitants would give each inhabitant of a Congressional district one paper of seeds about every twenty-one years if equitably distributed, and if you were to count the seeds perhaps each inhabitant would receive about one seed every year, and every one knows that a farmer can not do much good with one seed.

Mr. Chairman, if you are going to continue this business and the Government is going to run a wholesale seed house, I am in favor of putting it right down on a business basis and making the appropriation large enough so that everybody who pays taxes shall get seeds. Let the postmaster make the distribution. Let every man make his requisition upon the postmaster for the quantity of seed he wants, and let the postmaster draw upon the Department and thus give everybody an equal chance.

As it is, the distribution is unequal, unjust and unfair, and I am opposed to taking money out of the pockets of one set of people to buy seed and giving all the seed to another portion of the people—because a great many of them never see a seed from the Department, because no man can distribute them equally. I know, furthermore, that there is great

difficulty growing out of the transmission of these seeds through the mails. A man sees that his neighbor is receiving seed, and he says that he wants some, too, and he sits down and writes to his Representative, and the consequence is that the mail of members of Congress is burdened with applications for seed, and the members are said to be so overworked that there is a proposition now pending to give them clerks in order to relieve them of the burden of work that is cast upon them by this seed business and other duties outside the legislative business.

I am opposed to the seed distribution and against the proposition to give clerks to members, but if this system is sustained it will not be long before we will be called upon to pay from two to three hundred thousand dollars annually for clerks for the members of the house. I entertain the opinion if one man is to have his garden seeds furnished by the United States Government that every other tax payer is equally entitled to them. But if you are going to have tests made, and reports made, and are going to disseminate information among the farmers according to the original purpose in creating the Bureau of Agriculture, then this appropriation is much larger than is necessary for that object.

Another view of the matter is this, and it is the business view: We appropriate \$100,000 for seed annually, but the actual amount that is invested in seed, common seed at that, is only \$49,137.97. The expense of handling them is \$50,862.03. The expense of transmitting them through the mails, 205 tons of matter, as estimated by the Commissioner, is \$32,500 more, for I am informed by the Third Assistant Postmaster-General that it costs about 8 cent's a pound to handle this class of matter in the mails.

Sir, when you come to sum it all up—how much you spend for seed, how much you pay for clerks and officials to handle them, how much you pay for the transmission of the seed—you find that in order to send out \$19,000 worth of seeds you expend \$96,000 for salaries and expenses of handling generally. Therefore I say it is not a good business operation.

There are a number of gentlemen upon this floor who have a decided advantage over me as members in many respects. Many gentlemen can hire clerks to distribute seeds and conduct their correspondence. They have the money; I have not. They can buy seeds and distribute them. They have the money; I have not. But I can afford to serve the people for as little money as any gentleman on this floor, and if there is anybody here who thinks that he gets more salary than he earns he can cover it back into the Treasury.

We have passed a bill through both Houses of Congress proposing to make the Commissioner of Agriculture a Cabinet officer and to give him a seat in the Cabinet, and I think he ought to be charged with some more responsible duty than that of distributing seed. I think this department ought to be elevated so that the people might look to it for light and knowledge on the subject of agriculture, but not look to it as an agency for the distribution of garden seeds that can be bought cheaper at home, or better still, raised at home.

I have occupied about as much time on this question as I care to occupy. I only want to say that the farmers of this country, as I understand them, are not begging the Government for seed, but they are demanding that the hand of the tax

gatherer shall be taken out of their pockets, and that they shall be given an opportunity to keep some part of that which they earn by their toil. If you will do that for the farmer, his own industry, and the God above us, who sends the sunshine and the rain, and imparts fertility to the soil, will do the rest.

Mr. Chairman, with these remarks I submit this amendment. If the House sees proper to vote it down, all right; I will still distribute all the seed allotted to me, but if I had the power to prevent it, there should never be another seed distributed by a member of Congress.

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Excelsior Pearls.....	\$2.00	\$15.00
Dwarf Pearls, fine stock.....	1.75	14.00

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Make your contracts now for Fall of 1889.

Mrs. THEODOSIA B. SHEPHERD, Grower of Bulbs & Seeds
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 SPECIALTIES—Smilax, Coben Strands, Stocks,
 Calla Lilies and Cyclamens. Send for trade list.

Bouvardias, Begonias, Etc.

	Per 100
BOUVDIA BOCKII, new single Pink.....	\$ 8.00
" Prest. Cleveland, new single Scarlet.....	8.00
" A. Neuner, double White.....	5.00
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Fine stock of Begonias, Geraniums, Ivy Geraniums, Chrysanthemums, and general greenhouse stock.

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Seeds for Market Gardeners or Florists

Send for my Seed Catalogue and Trade Lists.

I offer also a choice collection of Spring Bulbs, such as TUBEROSE, GLADIOLUS, DAHLIAS, AURATUM and other leading Lilies, HOLLYHOCK, PEONIES, CLEMATIS, CALADIUMS, etc., etc.

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Loban McClintock has the old Schmidt place in better shape than it ever was, and is getting up a good stock for spring, despite the fact that he has to contend with steam heating in its worst estate—a badly arranged and wasteful system, which illustrates why some people condemn a good thing because they see a very bad abuse of it.

Gustaf Peterson has been quite unwell since the first of the year. His houses were damaged by the "blizzard" early in January. He has carnations in grand shape—Buttercup is superb here.

A carnation specialist is John Schofmeister, who is marketing grand flowers. He is especially successful with Anna Webb.

John Schmidt is devoting his entire time to his cut flower store on Third street, and seems to make it pay. He has a fine location.

Col. McFarland's greenhouses are improving in shape under the control of Anton Potherick.

John Laurence has been marketing some grand plants of Primula obconica; a specimen before the writer has thirty-six open flower clusters, rising from a mass of healthy foliage and flower stems yet to come; it is in a 4 inch "standard" pot, and is a perfect beauty. Mr. Laurence shows also exceptionally fine cyclamens, they are truly "giganteus," some so ne having flowers two inches long.

Retail cut flower sales are hurt by the fact that private places send their surplus into the semi-weekly markets at any price. The writer bought yesterday a really fine Marechal Niel bud and a large Beaconsfield pansy for *nine cents* at seller's offer in the market.

KEYSTONE.



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GARDINER'S STRAIN IS THE TRUE GIGANTEUM, and consists of the finest and most beautiful new sorts, unsurpassed for richness and variety of color, and certain to give unqualified satisfaction.

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We have in our cellars, ready for immediate shipment a very fine lot of Grafted Rhododendrons with bloom buds. Very cheap; also, some extra strong Dormant H. P. Roses two years old, including such varieties as Mme. Gabr. Lauzet, Gen. Jacquemont, Deshaich, La Reine, also some fine Tree Roses; also, a large and complete assortment of Stocks, Seedlings, Etc., both Fruit and Ornamental. Send for our special price list. Address

W. S. LITTLE, Commercial Nurseries, Rochester, New York.

Carnation Cuttings.

HINZE'S WHITE at a bargain price. Send for list of STANDARD VARIETIES.

SMILAX.

Fine stocky plants ready for delivery March 15th to May 1st, at \$6.00 per thousand, 55 cents per hundred. Write for particulars. Pot plants later on.

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I attend personally to the selecting and improving of my strain by the continual addition of the best only from noted European and American growers, and can guarantee that they will give the best of satisfaction as they have the past season.

Cold Frame plants, \$12.00 to \$15.00 per thousand. Spring grown, transplanted, \$6.00 per thousand, 75 cents per hundred.

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Edwardsii, Scarlet Gem, Phila. Red, Crimson King, Fascination, De Graw, La Parite, etc., \$1.25 per 100. Portia, Duke of Orange, Chester Pride, Peter Henderson, Mrs. McKinsey, etc., \$1.50 per 100. The Century, Robt. Craig or Garfield, Grace Fardon, Grace Wilder, Sunrise, etc., \$2.00 per 100. Buttercup, Field of Gold, Dawn, Fancy Andalusia, Mrs. Cleveland, etc., \$3.00 per 100.

PLANTS in 2-inch rose pots at double the above rates. Pips when we have them at one-half these rates. Wm. Swayne, L. L. Lamborn (will sell plants only), \$10.00 per 100. Pride of Keonett, fine crimson (plants only), \$8.00 per 100.

NOTICE. We offer the following discounts on pips, rooted cuttings or plants: 500, 5 per cent off; 1000, 10 off; 2000, 15 off; 3000, 20 off; 4000, 25 off; 5000 or over, 30 off. Terms always CASH. Send for circular. W. R. SHELTON, Avondale, Pa.

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Storm King Fuchsias	Per 100
Phenomenal	\$2.50
Prize Chrysanthemums	5.00
Mrs. Geo. Bullock, L. Adorable and M. Lemoine white, pink and yellow.	1.00
Hinze's White Carnation	1.00
White Swan Geranium	3.00
Will exchange.	

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Alyssum, double	Per 100
Ageratum, four sorts	\$2.50
Asteranthus, two sorts	3.00
Begonia tuba, strong, 2 1/2-inch	6.00
" flowering sorts, 2 1/2-inch	5.00
Coleus, 24 standard sorts	2.50
" 10 new sorts	6.00
Chrysanthemums, 40 sorts	3.00
Fuchsias, double and single, strong	4.00
Geraniums, double and single, 2 1/2-inch	3.00
Heliotropes, four varieties, 2 1/2-inch	3.00
Lantanas, six varieties, strong, 2 1/2-inch	4.00
Smilax, strong, 2 1/2-inch	3.00
Salvias, six sorts, 2 1/2-inch	3.00

Healthy stock; best sorts; good packing. Address HANS NELSON, St. Joseph, Mo.

NEW CARNATIONS

WM. SWAYNE

AND

L. L. LAMBORN.

Plants from rose pots, \$10.00 per 100. Send for Price List of other sorts.

WM. SWAYNE,

P. O. Box 226. KENNETT SQUARE, PA.

New Perpetual Yellow Carnation

J. B. TACQUIER.

Here we have at last a good bright pure Yellow Carnation for florists' use; more than commonly free, long stems, not bursting, of dwarf, strong and healthy habit.

Plants at \$1.00 each, six for \$5.00, mailed free. (Owing to late importation, stock very limited.) Also plants of ORIENT, FLORENCE and SILVER LAKE, at \$5.00 per 100.

DENYS ZIRNGIEBEL, NEEDHAM, MASS

ROOTED CUTTINGS OF CARNATIONS AND VERBENAS A SPECIALTY.

Orders will be booked now and ready for delivery Jan. 1st. Verbenas in 40 varieties, largely scarlet and white, including the best MAMMOTHS. Rooted cuttings \$1.00 per 100 \$8.10 per 1000. Stock plants 2 1/2-inch pots \$2.50 per 100, \$20.00 per 1000. Carnations, rooted cuttings in 20 fine sorts \$2.00 per 100, \$15.00 per 1000. My stock is strong and healthy, and cannot fail to please. Correspondence solicited. Address J. G. BURROW, FISHKILL, N. Y.

Carnations, Rooted Cuttings.

HINZE'S WHITE, FRED. JOHNSON, GLOWING COAL, BUTTERCUP, Etc., Etc. Send for Circular.

H. E. CHITTY, Paterson, N. J.

CARNATIONS STANDARD VARIETIES.

ROOTED CUTTINGS.....\$1.25 to \$2.00 per 10

VIOLETS

MARIE LOUISE.....2 1/2-inch pots, \$1.00 per 100

H. DALE,

P. O. Box 35, Brampton, Peel Co., Ontario. Mention American Florist.

Carnations, Rooted Cuttings of

HINZE'S WHITE, EDWARDSII, PETER HENDERSON, PRES. DE GRAW, PHILADELPHIA RED, PRES. GARFIELD, at \$1.25 per hundred; \$10.00 per thousand. GRACE FARDON, MISS JOLIFFE, SPRINGFIELD, SEAWAN, at \$1.50 per hundred. J. J. HARRISON, \$2.00 per hundred.

C. B. HUMPHREY, Waterville, Oneida Co., N. Y. Mention American Florist.

Special Offer TO THE TRADE ONLY OF * THE * EVER-BLOOMING * PRIMROSE OBCONICA.

BY MAIL, POSTAGE PAID.

Strong Plants per hundred, \$ 5.00
" " " " per thousand, 50 00

BY EXPRESS, IN LIGHT CASES.

Larger Size per hundred, \$ 7.00
" " " " " " " " per thousand, 60 00

SEEDS.

Per Thousand Seeds, \$1 50. Ten Thousand Seeds, \$12.50. Twenty Thousand Seeds, \$20.00

We WARRANT every seed to be HOME GROWN, saved by ourselves, and crop of 1888, with no SEA SICK or old seeds amongst it. We are the largest growers of Primula Obconica in this country, but have made no special arrangements with any firm to sell our seeds.

The PLANTS we offer are strong, healthy stock, and a genuine bargain. Distance no hindrance to shipping, as we pack in first class order. During the past season we have shipped all over, from Maine to California—plants arriving in first class condition at San Francisco; and have YET to receive the FIRST COMPLAINT.

Orders filled Strictly in Rotation All Checks, Money Orders, &c. should be sent on Boston.

FISHER BROS. & CO.,

NEW ENGLAND NURSERIES, MONTVALE, Middlesex Co., MASS.

MENTION AMERICAN FLORIST.

Come and see OBCONICA in bloom, at our greenhouses at Oakland Depot, 10 miles from Boston, on Stoueham Branch of Lowell Railroad, 15 trains EACH WAY per day.



FRESH SEED! CROP 1888! We have only about 250,000 seeds left to dispose of, so if you want any come quickly. As long as stock lasts we will fill orders from this advertisement at \$1.00 per thousand seeds. John Gardiner & Co., 21 N. 13th Street, Philadelphia, Pa.

PRIMULA OBCONICA.

The best "ALL THE YEAR ROUND" greenhouse plant in cultivation. Specially adapted for florists. New crop seed 1888, own selection.

Trade price, 1/4-ounce 20 shillings; 1/2-ounce 75 shillings; ounce 130 shillings.

WM. BAYLOR HARTLAND, Seedsman, F. R. H. S., 24 Patrick St., CORK, IRELAND.

Trade offer of Irish grown Daffodils in June.

500,000

Strong Runners of VIOLETS in perfect health of

MARIE LOUISE, NEAPOLITAN and SWANLEY WHITE at \$10 00 per thousand.

For larger quantity, price on application.

JOS. RENARD,

Chester Co., UNIONVILLE, PA.

CHEAP LIST.

- Geraniums, fine stock 3.00
Primroses, in bud and bloom 4.00
Coleus, strong stock plants 3.50
" young plants, 2-inch 2.00
Anaplopsi Veitchii, fine 4.00
Verbenas, healthy plants 2.50
Begonia Tubra Alba 2.50
Fuchsias, single var., 2 1/2-inch pots 2.50
Asparagus Tennisimus 3.00
Hibiscus, strong, 2-inch 4.00
Alyssum, double white 2.50
Alternanthera, Aurea Nana 3.00
Canna Adolpb Weick 15.00
Violet Marie Louise, 2 1/2-inch 3.00

Address N. S. GRIFFITH, JACKSON CO. INDEPENDENCE, MO. (Independence is well located for shipping, being 8 miles east of Kansas City.)

100,000 VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES. FINE POT PLANTS, \$2 50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000.

NO RUST OR MILDEW.

Packed light, and satisfaction guaranteed. Send for Circular.

CARNATIONS.

Having increased our facilities for propagating, we hope to be able to fill all orders for plants or rooted cuttings. Our list comprises only the best Winter Blooming varieties.

J. L. DILLON, BLOOMSBURG, PA.

VERBENAS A SPECIALTY

Perfectly clean and free from all disease. Can have as many Standard Colors as you desire in your order. Goods packed light. Will guarantee safe arrival of plants.

VERBENAS.

Table with 2 columns: Plant type and Price. Stock Plants \$2.50/1000, Transplanted on benches, EXTRA 1.00/100, Rooted Cuttings 1.00/100.

COLEUS.

BEST STANDARD SORTS.

Table with 2 columns: Plant type and Price. Stock Plants 2.50/2000, Rooted Cuttings 1.00/1000.

WM. DESMOND,

KEWANEE, Henry Co., ILL.

VERBENA.

New stock, 35 distinct best bright colors; remarkable vigor; none healthier.

Rooted Cuttings, 3 of each, \$1.00; in mixture, 75 cents per 100, \$1.50 per 200. Seedlings, once reset; Pansies in finest mixture; Petunia, Yellow Throated and Lilliput, &c. per lot; Verbenas of my superb strain, 50 cents per 100; \$2.00 per 500. Many other seedlings. Write for descriptive list. All goods first-class, and sent prepaid.

DANIEL K. HERR Lancaster, Pa.

ROOTED CUTTINGS.

Coleus, 20 best varieties, Verschaffeltii, Hero, Yellow Bird, Tricolor, J. Goode, Firebrand, Mrs. Baist, etc., 75c. per 100. Heliotrope Chieftain, best, 75c. Double Alyssum, 75c. Chrysanthemums Japanese and Chinese, named, 75c. ALEXANDER MEAD, Greenwich, Conn.

VERBENAS.

OUR VERBENAS ARE PERFECTLY HEALTHY.

Table with 2 columns: Plant type and Price. Stock Plants XX Mammoth Set \$1.00/\$5.00, General Collection 3.00/25.00, Rooted Cuttings 1.00/8.00, XX Mammoth Set 1.25/10.00.

ROSES.

Mermets, Cook, Adam, Souv. d'un Ami, Sarano, Brides, Perles and Niphotos, from 2-inch pots, strong plants, 5.00

Anaplopsi Veitchii and Quinquifolia, pot-grown, first size \$5 00, second size \$6 00 per 100. Heliotrope, Rooted Cuttings, \$1.50 per 100. Geraniums - New and old varieties, 2 1/2-inch pots, per 100 \$4.00; per 1000 \$35.00.

COLEUS, from pots Best collection, per 100 \$4.00; per 1000 \$35.00. Rooted Cuttings, Best collection, per 100 \$1.25; per 1000 \$10.00.

CARNATIONS, ROOTED CUTTINGS.

Peerless, Hoze's White and Edwardsii, per 100 \$1.50; per 1000, \$12.00. Fred Johnson, Fortin, Jas. Garfield and Alexatere, per 100, \$2.00; per 1000, \$15.00.

Trade List of florist stock on application. L. C. WOOD & BRO., Fishkill, N. Y.

Cape Cod Pink Pond Lily

For price list, Plants and Cut Flowers, address the original cultivators.

CHIPMAN BROS., SANDWICH, (Cape Cod,) MASS.

WHITE WATER LILY ROOTS (N. Odorata)

\$5 00 per 100, by express. Not less than 50 at hundred rate. By mail, 25 cents each; 3 for 50 cents; 12 for \$1.50. Cash with order.

Wm. F. Halsey, WATER MILL, N. Y.

ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

WM. MATHEWS,
UTICA, N. Y.

CUT BLOOMS AT ALL SEASONS.

ORCHIDS

Cheap as Good Roses.

Send 5 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., Govansdown, Md.

JAMES R. PITCHER. **W. A. MANDA.**

THE UNITED STATES NURSERIES,
SHORT HILLS, N. J.

Importers and Dealers in

Orchids, Exotic and Hardy Plants.

CYPRIPEDIUMS, the largest and finest stock in the world.

ORCHIDS, the largest stock of established plants in the country.

CHRYSANTHEMUMS, over three hundred best varieties in stock.

The "MRS. ALPHEUS HARDY" is the finest flower ever introduced. Send your order now, to receive plants in April, at \$1.00 each.

FOLIAGE PLANTS of any description and size.

FLOWERING PLANTS of the best kinds.

PRIMULA, ORONICA and CYCLAMEN

GIGANTEUM a specialty.

HARDY HERBACEOUS PLANTS by the acre of the best kinds.

SINGLE DAHLIAS. The finest collection in the country. Write for Catalogues and Price Lists, free on application.

JOHN SAUL'S Washington Nurseries

Our Catalogue of New, Rare and Beautiful Plants for 1889 ready in February.

It contains lists of all the most beautiful and rare greenhouse and hothouse plants in cultivation, as well as all Novelties of merit; well grown and at very low prices. Every plant lover should have a copy.

ORCHIDS.

A very large stock of choice

East Indian, South American, &c.

— ALSO —

Catalogues of Roses, Seeds, Orchids, Fruits, etc., all free to applicants.

JOHN SAUL, Washington, D. C.

Mention American Florist.



SOLD

BY

Seedsman

Chrysanthemums.

THE GRAND NOVELTY

MRS. W. K. HARRIS,

(raised from seed by W. K. Harris), and other good novelties and older kinds are now ready for distribution. For list

H. WATERER,

56 North 38th Street,

PHILADELPHIA.

CHRYSANTHEMUMS.

Price List of Plants Now Ready.

Prize Seed Hybridized by John Thorpe. 25c. per pkt. T. H. SPAULDING, box 995 A, Orange, N. J.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

ORCHIDS. ORCHIDS.

F. SANDER & CO.

IMPORTERS AND GROWERS,

Are constantly receiving large importations from the East and West Indies, etc., and are now offering them at very reasonable figures. If you have not received one of their special offers apply to

SUMMIT, N. J.

CANNA EHEMANNI.

One of the finest plants for sub-tropical bedding, strong roots	Per 100	\$12 00
Cannas in 8 best varieties.		6 00
Dahlias, whole roots in splendid assortment.		10 00
Caladium Esculentum, large bulbs		6 00
" second size, 2 to 2 1/2 inches in diameter		4 00
Gladiolus, mixed varieties, \$12 per 1000.		1 50
Cyclameu Persicum, flowering bulbs		8 00
Clematis, Coccinea, selected roots.		10 00
Begonia, Rex		5 00
Primulas, single, splendid strain		4 00
Palm, Latania Borbonica 3 1/2-inch pots		10 00
" " 2 1/2-inch pots		6 00
Hydrangea, Stellata Fimbriata		20 00
Violets, Marie Louise, Neapolitan and Swanley White, 2 1/2-inch pots.		4 00
Bouvardias in variety.	Per Doz.	5 00
Bouvardia, Hagarth fl. pl., new double carmine very large flowers.		2 50
" Flavescens fl. pl., creamy white.		2 50
Plumbago, Capensis Alba, strong 3-inch pot plants.		2 50
Cissus Discolor 3-inch pots, strong		1 25

Also an Immense Stock of Roses, Geraniums, Chrysanthemums, and other Florists' Stock.

Fruit and Ornamental Trees, Shrubs, Grape Vines and Small Fruits by the million. Send for Price List.

THE STORRS & HARRISON CO., Painesville, Lake Co., Ohio.

速 HARDY AND RARE JAPANESE PLANTS FOR THE EAST.

15 FINEST VARIETIES OF MAPLES, 1-4 ft. STYRAX JAPONICA, STYRAX OBASSIA. (Read article in this year's *London Garden*.) SYRINGA JAPONICA, HARDY MAGNOLIAS, THE GRAND CONIFER SCIADOPITYS V.

"**UMBRELLA PINE,**" in sizes 1-6 ft. (Has been shipped safely by frt. to Boston.)

RARE VARIETIES RETINOSPORAS. 50 VARIETIES TREE PÆONIAS. NEW HERBACEOUS PÆONIAS.

NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEMATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

FOR THE GREENHOUSE. RHAPIS AND CYCAS PALMS, BAMBUSA NANA, AR-AUCARIAS, TREE FERNS FROM AUSTRALIA.

32 VARIETIES OF JAPANESE LILY BULBS. LARGE ASSORTMENT OF SEEDS FROM JAPAN AND CALIFORNIA.

Send for our Catalogue. Now is the best time to order for Spring delivery East. We have many valuable novelties never before introduced. Send for estimates.

H. H. BERGER & CO.,
315 & 317 Washington St., SAN FRANCISCO, CAL.
P. O. Box 1501. (ESTABLISHED 1878.)

Mention American Florist.

NEW SWEET SCENTED CHRYSANTHEMUM "Nymphaea." A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. A so the cream of the cream of older varieties. Send stamp for plate of "Nymphaea," and Catalogue.

H. W. HALES, Ridgewood, N. J.

ROOTED CUTTINGS.

COLEUS, Verschaffeltii, J. Goode, Fire-brand, Etc.	Per 100	Per 1000
GERANIUMS	\$.90	\$ 7.50
ALTERNANTHERA Aurea Nana	1.50	13.00
.50	4.50	

JOHN J. CONNELLY, Bryn Mawr, Pa.

*** MUMS. ***

I shall sell **ONLY 150** more plants of **MRS. ANDREW CARNEGIE** this season, at \$2.00 each, 6 plants for \$10.00; ready April 1st.

SPECIAL LIST OF VARIETIES FOR MARKET CUT FLOWERS:
Moonlight, Grandiflorum and Gloriosum, yellow; Puritan and Christmas Eve, white; M. Boyer and Triomphante, pink; Valle d'Andorre, bronze; Cullingfordii, crimson.

- Per hundred, \$3.00.
- 10 Finest varieties for pot culture for market or decoration; per 100, \$3.00.
- 25 Finest varieties for Exhibition Cut Flowers, including several new ones, for \$2.00.
- 25 Finest varieties for pots for exhibition, \$2.00. 100 Varieties, sterling kinds, \$5.00.

I am making as ever a specialty of growing chrysanthemums and am growing the **BEST ONLY** to offer to my customers. I have no catalogue this year but can supply nearly everything in the trade.

STOCK IN FINE CONDITION.

John Thorpe,
PEARL RIVER, N. Y.

CHRYSANTHEMUMS.

Send for our descriptive circular of the **NEESIMA** Collection of Imported Japanese Chrysanthemums. We offer the cream of the collection to which the now famous "Mrs. Alpheus Hardy" originally belonged.

EDWIN FEWKES & SON, Florists, Newton Highlands, Mass.

SUCCESS AT LAST! COOK'S AMERICAN SEEDLING RED ROSE

THE UNRIVALLED SOUVENIR DE WOOTTON.

BON SILENE X LOUIS VAN HOUTTE.

BROTHER FLORISTS:

You have wanted for years a continuous blooming red rose, for culture under glass.

First, Came ANDRE SCHWARTZ, the red SAFRANO, which has proved utterly unfitted to our climate.

Second, WILLIAM FRANCIS BENNETT, the superb red bud, which at times is unexcelled. Its faults, however, we all know by this time. No one can prevent its habit of resting or its tendency to black spot. Very few can grow it with sufficient stem. Its fugitive color will always be a great drawback, and its serious lack of lasting qualities, cannot be denied successfully.

Third, Came AMERICAN BEAUTY (SYNONYM, MADAME FERDINAND JAMAIN). That majestic flower, superb in color, in perfume, in growth, but not so free flowering, and occasionally producing defective blooms. We could not get along without it. It has had no equal among the hybrid teas for large work.

Fourth, Came PAPA GONTIER, with good shape, good color, and good foliage, but liable to crop, and with a tendency to drop its leaves, caused probably by its Bourbon parentage. This rose is an excellent shipper and keeper, but alas it has no perfume.

Fifth, Comes our WOOTTON, a genuine American Seedling, with the following good qualities:

First, Color, velvety red, equal to Jacqueminot.

Second, Perfume which cannot be excelled.

Third, Continuous flowering qualities. It has no resting period—blooms and new growth existing at the same time.

Fourth, The most prolific bloomer in existence, every shoot containing a flower bud.

Fifth, Habit, exceedingly vigorous and in foliage quite equal to the American Beauty.

Sixth, It never makes imperfect buds and dark weather but deepens the color, giving it a richer shade of crimson.

Seventh, It retains its color for a long period; flowers having been kept by us in good condition for two weeks after being cut.

Eighth, It is a full double rose, and is good in bud, half open, or fully expanded. Full open flowers frequently are six inches in diameter.

Ninth, The color is even more intense and brilliant at night than in the day.

Tenth, It is free from black spot, the great enemy of the Bennett.

Eleventh, Its shipping qualities are perfect.

Below we give you the daily record of the number of perfect flowers cut from five hundred bushes, during the month of December, 1888:

Dec. 1	148
Dec. 2	132
Dec. 3	52
Dec. 4	82
Dec. 5	153
Dec. 6	195
Dec. 7	91
Dec. 8	204
Dec. 9	36
Dec. 10	69
Dec. 11	159
Dec. 12	94
Dec. 13	113
Dec. 14	82
Dec. 15	96
Dec. 16	112
Dec. 17	156
Dec. 18	83
Dec. 19	55
Dec. 20	93
Dec. 21	20
Dec. 22	43
Dec. 23	45
Dec. 24	83
Dec. 25	90
Dec. 26	96
Dec. 27	81
Dec. 28	40
Dec. 29	46
Dec. 30	33
Dec. 31	93
Total	2731

Or on an average of 88 per day. A large portion of these blooms brought 40c. each at wholesale.

Since the first of Jan. the bushes have been disbudded to secure wood for propagation, and some days as many as 1,400 buds have been pinched out. We shall bloom not less than 6,000 plants during the next winter, and cast aside every other red rose.

OPINIONS OF PROMINENT FLORISTS.

JOHN HENDERSON & CO.,

FLUSHING, Dec. 11, 1888.

"This rose (Cook's Souvenir de Wootton) is among the best continuous flowering ones, being beautiful in color, form, and fragrance, which will undoubtedly commend it to all."

MRS. GEO. W. CHILDS,

January 7, 1889.

"Mrs. Childs received this afternoon, the beautiful Wootton roses Mr. Durfee so kindly sent her, and which she admires not only for their beautiful color, but for their delicious odor."

WM. J. STEWART,

BOSTON, January 8, 1889.

"The Woottons arrived in good condition. The La France, American Beauties were faded and gone, and the Puritans were brown as a bean."

JOHN BURTON,

CHESTNUT HILL, PHILA., Jan. 25, '89.

"Have just received box of roses. The Woottons are fine, and I think it cannot fail to be a profitable cut flower rose."

ROBERT CRAIG

PHILADELPHIA, PA., Feb. 5, '89.

"I think the Wootton will be a popular rose because it is such a free bloomer and so vigorous in growth. Many growers have failed to get entire satisfaction with Bennett and Beauty, but the Wootton will, I feel sure do well in almost any soil with fair treatment."

Remember, No Imperfect Flowers like the American Beauty produces.

✽ 60,000 YOUNG PLANTS FOR THE TRADE AT REASONABLE PRICES, AS FOLLOWS: ✽

\$180	per thousand.	\$25	per hundred.
\$100	per five hundred.	50 cents each	in quantity less than 100.

From 2 1/2-inch Rose pots. Orders delivered in strict rotation, by Mail or Express.

For Sale by

C. STRAUSS & CO. P. O. Box 422 **WASHINGTON, D. C.**

Also for Sale by

JOHN COOK, 318 CHARLES STREET, BALTIMORE, MD.

MESSRS. STRAUSS & CO. Beg to add, that they have a Large Stock of Young Plants of the following Roses at very reasonable rates:

AMERICAN BEAUTY. ANNIE COOK. CATHERINE MERMET. THE GEN. PURITAN,
PAPA GONTIER. MADAME CUSIN. THE BRIDE. LA FRANCE. PERLE.

Their PURITAN and LA FRANCE have been pronounced the finest in the United States. A complete change of stock every two years seems to be essential to continued success in rose culture under glass.

Holiday Prices.

ED. AM. FLORIST:—In answer to your comment on my note in February 15 issue I would state that my sales of cut flowers never exceed \$200 a month and sometimes go as low as \$75 a month. I have practically a monopoly of the cut flower trade such as it is, but if I did not sell plants in the spring I would come out only about even. The highest priced design I ever made was only \$12, and the largest amount I ever made up for any one occasion amounted to only \$50. I have 5,000 square feet of glass.
P.
Frankfort, Ky.

[The fact of our correspondent having a monopoly of the local trade explains why he is enabled to equalize prices as related in his former communication. Competition would quickly change the condition to that prevailing elsewhere.—Ed.]

**LOOK AT
OBCONICA
HALF PAGE ADV. ON
Page 375.
PLANTS AND ROSES.**

H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
Moss Roses, 1 year, open ground, \$12.00 per 100.
Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
Hydrangea Hortensis, Otakan, T. Hogg, 4-in., 5-in., 6-in., \$10.00, \$12.00 and \$15.00
Carnations, newest and best varieties, from 3c. to 6c.
Ivy, English, 20 inches long, \$3.00 per 100.
Amaryllis Formosissima \$8.00 per 100.
Cannas, \$2.50 per 100.
Chrysanthemums, best sorts, \$3.00 per 100.
Crape Myrtle, \$5.00 per 100.
Palms, 18 var. Dracenas. Pandanus, 4 varieties.
A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

E. HIPPARD,
YOUNGSTOWN, OHIO.
Mention American Florist.

**ROOTED CUTTINGS
FREE BY MAIL.**

Verbenas, mummoth strain in 20 named varieties, mostly our own seedling (very fine), named.....	per 100	per 1000
All varieties mixed, (hard to beat).....	.75	6.00
Geraniums, mixed, finest strains, double and single, including Le Pilote, Bliss, White Swan, B. Darenton, Sherman, Snow, Overall, &c., &c.....	1.50	12.00
Heliotrope, four best varieties.....	.75	6.00
Fuchsias, in varieties.....	.75	6.00
Ageratum, White Cap and Blue Bird.....	.70	5.00
Feverfew, Double White.....	.60	5.00
Stevens, tall growing, dwarf and variegated.....	.60	5.00
Euphorbia, everblooming white, best for florists' use, for cutting.....	1.00	8.00
Sweet Alyssum, large double, and Dwarf Tom Thumb.....	.60	5.00
Lobellias, Trailing and Dwarf.....	.50	
Pansies—Parisian Beauties, Woodbury's celebrated strain in every conceivable shade of color, fine for stock, (try them) Above in light and yellow colors.....	.40	3.00
Tustin & Bastian's Philadelphia Cap Sheaf Pansies, (none better).....	.50	4.00
Dreer's White Pansies, (the largest and whitest).....	1.00	
Gibson's Special Selection, being the cream of all the above fine varieties.....	1.50	
Fresh seed of Parisian Beauties, 200 seeds.....	20c.	per paper.
Fresh seed of Philadelphia Cap Sheaf, 101 seeds.....	15c.	per paper.

Carnations, Bouvardias, &c., &c., &c.

Send list of what you want. Satisfaction guaranteed. Gibson pays the expenses and guarantees safe transit of money and plants.

WEST JERSEY NURSERIES
Established 1851.
J. C. GIBSON, WOODBURY, N. J.
Mention American Florist.

ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. straight 2½-inch plants, propagated from thoroughly matured field grown stock, and grown in ordinary soil without manure or any other stimulating material whatever. Our Roses resist disease, start quickly, grow rapidly, and always give best results.

ALL THE FINEST NEW AND SCARCE ROSES.—Mrs. John Laing, Dinsmore, Marshall P. Wilder, Merveille de Lyon, Barouess Rothschild, Mad. Gabriel Luizet, Mad. Masson, Meteor, Princess de Sagan, Mad. Hoste, Comtesse Anna Thun, Vicountess Folkstone; Primrose Dame, Annie Cook, and ALL THE CHOICEST NEW POLYANTHAS AND HYBRID TEAS.—ALL THE BEST STANDARD SORTS IN LARGE SUPPLY AT REASONABLE PRICES.—The Puritan, Sunset, Papa Gontier, American Beauty, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Genl. Jacqueminot, Perle des Jardins, Niphotos, C. Mermel, M. Robert, Luciole, Mad. Welche, Pierre Guillot, Souci, d'un Ami, Mad. Cassin, C. Cook, Marie Guillot, Mad. Honore Defense, and hundreds of others at lowest living prices.

HYDRANGEA GRANDIFLORA a specialty, large stock, strong open ground plants, all sizes at reasonable prices.

ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS.—New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Uburnum Plicatum, Buist's Variegated Althea, New Deutzia, New Weigelia, &c. Honeyuckles, Wistarias, Clematis, Akebas, and all best hardy climbing vines. VERY LOW.

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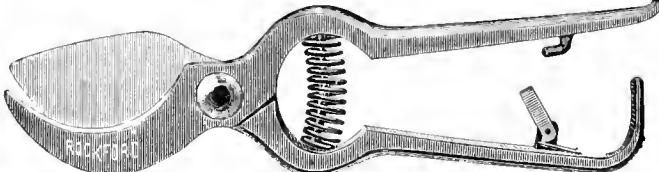
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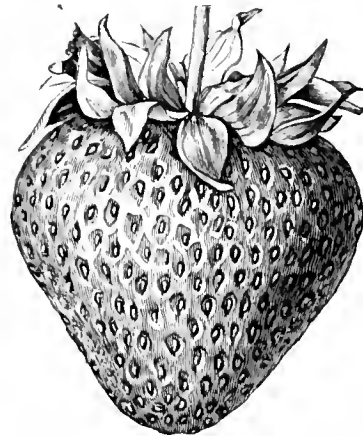


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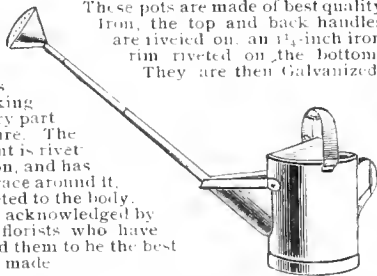
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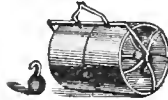
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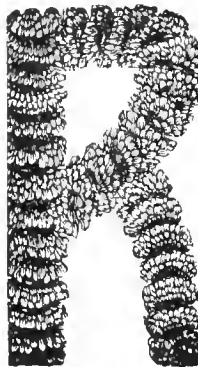
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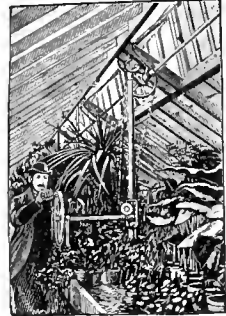
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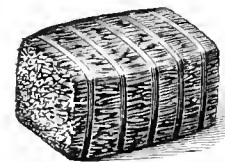


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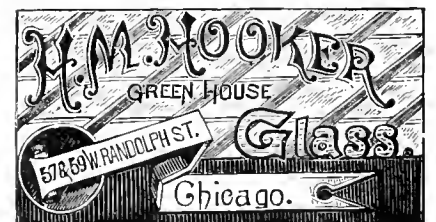
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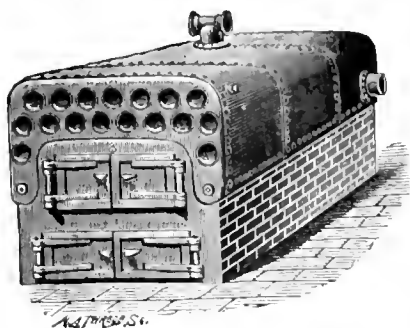
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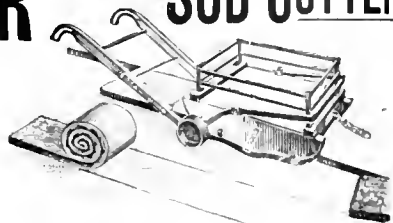
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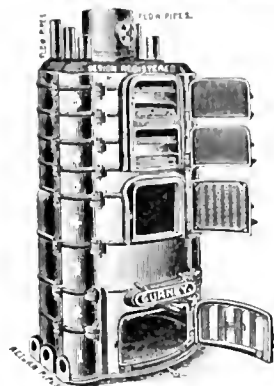
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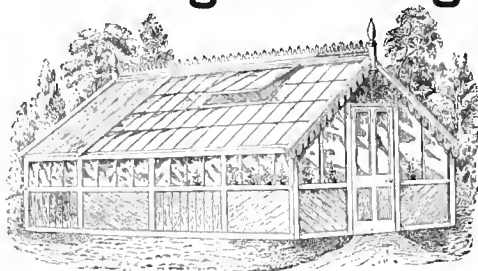
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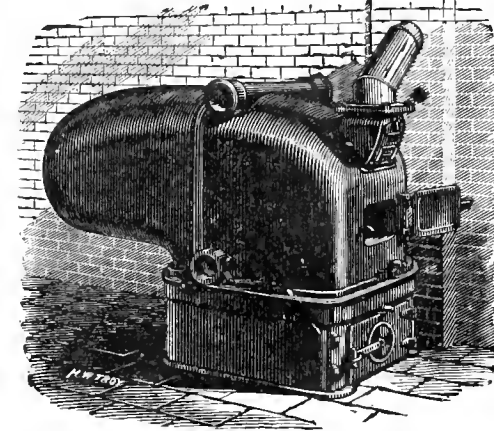
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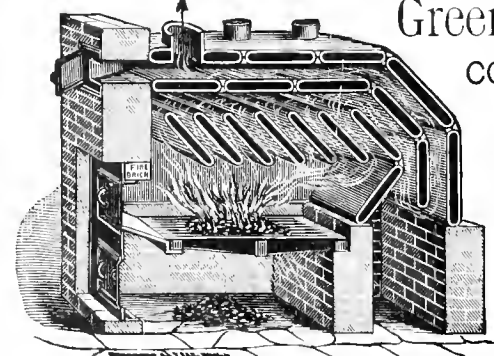
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THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, APRIL 1, 1889.

No. 88.

THE AMERICAN FLORIST

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SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

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Robt. J. Halliday.	Edwin Lonsdale.
Boston.	Evans & Battles
Wm. J. Stewart.	New York, W. S. Allen.
Cincinnati.	Ang. Kolker & Sons.
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Cleveland, O.	Siebrecht & Wadley.
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Detroit.	J. R. & A. Mirdoch.
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Hamilton, Ont.	& Seed Co.
Webster Bros.	San Francisco.
Harrisburg, Pa.	Thos. A. Cox & Co.
J. Horace McFarland	Toronto, Ont.
Louisville, Ky.	J. A. Simmers.
George Thompson &	Washington, D. C.
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OF FIFTY-TWO REPORTS received from 41 cities and towns in 23 states (including two Canadian provinces) 36 state that the trade for the winter season compared with last season up to same date has been better (estimates varying from 10 to 50 per cent increase; probably averaging 15 per cent); 7 state that it has been about the same as last year, and 9 that it has been somewhat less. Regarding collections to reports describe them as better than last year, 23 as about the same and 19 as slower. In response to the query "How has trade since Lent began compared with last year at same time?" 21 reply "better;" 23 "about the same," and 8 "less." The reports were practically unanimous that bedding plants are in much better condition than usual at this time, owing to the very favorable winter. The replies to a query as to whether any increase or decrease had been noted in the demand for any particular flowers varied greatly. The principal increase noted was in the call for roses, long stemmed carnations and violets. The large proportion reporting collections as slower than usual is the only unwelcome fact presented by the reports, as slow collections are usually the precursor of lessened sales. In view of this it will be wise to make no delay in working for early orders and pushing sales of spring plants.

GENERAL REPORTS received from the seedsmen and florists who do business through the mail advise us that orders to date average somewhat lighter in proportion to catalogues issued and advertising done than last season.

The Winter's Trade in New York.

The past winter is generally regarded as a fairly good one. The quantity of stuff handled has been much greater than previous years, and has been disposed of with comparatively little loss. Prices have been much the same as the preceding season, perhaps somewhat less rather than more. The demand has been emphatically for good flowers.

There has certainly been an increased demand for large roses. Retailers who make a specialty of orchids say there is an increase in the demand for these flowers, the general taste being decidedly in favor of cattleyas. It is a lamentable fact, however, that retailers who do not keep orchids are apt to dissuade people from buying them, under the mistaken impression that they injure the sale of other flowers. That they certainly do not; they offer no competition whatever to such flowers as roses, but fill a place of their own.

The violet crop this winter has been extremely large, but owing to an increased demand these flowers have usually sold well.

Many of the retailers say that their returns have been prompt and satisfactory, but most wholesale men complain bitterly of slow collections, saying that in most cases they have to be content with something on account, instead of full payment.

While Lent has certainly seriously affected business, it is hardly so dull as the same season last year. One great trouble this year is that everyone is sending in a full quantity of stuff, even more than at the busiest season, and of course the depressed market can not take it. If the growers would only arrange to be off crop at the beginning of Lent it would aid business wonderfully. Many of the largest flower buyers go South at this season, and the retailers feel the loss of their patronage.

Bedding plants look extremely well and prospects are good for this branch of trade. Plant trade is looking up with most nurserymen, and the general impression is that trade generally is increasing in volume. It is certainly better than after the preceding Presidential election.

EMILY LOUISE TAPLIN.

Baltimore Trade Report.

A review of the situation in Baltimore for the season of 1888-9 shows that trade has been excellent and generally ahead of last year; indeed as one florist remarked, "he must be a crank indeed who would find fault with trade this season." In cut flowers La France roses have pretty well held their own in public favor, but violets have undoubtedly been the popular flower, they were somewhat scarce during the early part of the season; they are a glut now and can be bought for a song. Palms, ficus, pandanus and all decorative plants suitable for house culture have sold well, there has also been a decided increase in the use of plant decorations, but this departure has in no measure affected the sale of cut flowers.

Trade since the advent of Lent has been better as compared with the corresponding period last year. A good many of our leading florists declare that they don't notice any difference, and that while there are no large balls or dinners the average daily sales of cut flowers are quite as good as they were before Lent began.

There is, however, a wide difference of opinion as regards collections, for while a majority of our dealers declare that collections are slower than ever, there are others equally emphatic in asserting the very opposite. But it is freely conceded on all hands that the season has been characterized by a gratifying increase of "cash sales."

Bedding plants, both as to variety and condition, are quite equal to last year,

but in this department we are sorry to note a very decided falling off, especially in the wholesale trade, which is not nearly so good as at this time last year. But for all that deficiencies may be noted, trade in general has been eminently satisfactory and sufficient to make the most chronic growler among us sanguine as to the future.

A. W. M.

March 19.

The Mild Winter; Its Effect on Greenhouse Plants.

We have probably had no such winter as we have just passed through in fifty years. Not only has the temperature averaged higher—probably 10° since December 1—but we have also had a much greater amount of sunlight, and its effects have been apparent in the unusual vigor and health of all kinds of greenhouse stock throughout the entire season. Roses nearly everywhere are free from mildew and black spot, verbenas are free from rust and mildew and show a luxuriance this season that bids fair to bring them again into repute.

But the most marked difference of the season has been in its effects on plants raised from seed. Our market gardeners had almost become discouraged in their attempts to raise plants of lettuce in this vicinity in midwinter in consequence of the young plants in greenhouses and hotbeds "damping off." The plants used in forcing too from the same cause often did not give half a crop, but this season there has been no such trouble. Every crop that I have examined in this vicinity shows a vigor such as we see in crops outside in May and June.

Flowering plants from seed show the same vigorous growth; pansies, verbenas, hollyhocks, all of which have a tendency to damp off in the seed bed when sown in the winter months, have this season grown as freely as cabbage or radish seeds. This chance climatic advantage, judging from the past, we are not likely for some time to have again but the lesson is worth noting, it proves by nature's work on a large scale, what we all believed, that the greater the amount of light that plants can receive in winter the better will be their growth. This should teach us that in every practical way that can suggest itself the greatest amount of light must be given. That the nearer we can get the roof of a greenhouse to an unbroken sheet of glass the better. That the glass should be kept clear from snow, dust, or anything that will obstruct light, and that the roof should be placed—if the crop of fruit, flowers or vegetables is to be forced in winter—so that it will get the greatest amount of the sun's rays.

We are coming nearer to these conditions every year, nearly all the best forcing houses now being built detached far enough apart so that the one will not shade the other, built on the three-quarter span system with the long slope direct south at an angle of about 35 degrees.

PETER HENDERSON.

Jersey City, N. J., March 12.

An Open Letter to the Committee on Nomenclature.

GENTLEMEN:—The writer recently learned from a friend engaged in the florist business that at the convention of his society held last summer a committee was appointed whose duty it should be to properly name and classify all plants and seed offered for sale by the florists and seedsmen in the country, and that

the committee invited the co-operation of every one interested in this matter. As I include myself in the latter class, being an occasional purchaser of seeds and plants, and therefore desirous of rendering you every assistance, I wish to call your attention in this public way to the following:

The various magazines devoted to horticultural and agricultural topics, and which also serve as a medium through which the florist and seedsman brings his wares to public notice, are now and have for some time been liberally sprinkled with advertisements of startling novelties in the floral world, bearing euphonious and poetical titles, the origin and history of which a careful scrutiny of the latest standard works on botany fail to throw any light upon. Is it because they were unknown to these writers and "wasting their sweetness on the desert air" until discovered by their present possessors? or are they old favorites which the enterprising advertiser has re-baptized without the formality of announcing it to those most interested, *i. e.*, the possible purchaser, and if so, why is not the reason for such action given? Are we certain that in purchasing these "Eurekas" we are getting something new? is the question respectfully referred to the committee, as the advertisements carefully conceal the date of their discovery, botanical names, and everything which should naturally inspire confidence in the buyer who has naturally become suspicious of these "meteors" which flash across the horticultural world, leaving nothing but disappointment in their wake.

I do not wish to be understood as objecting to the use of English names for plants, or denying any one the right to apply such titles, but it should be in conjunction with the proper botanical name used parenthetically so that we may know what we are buying. Out of the west comes the announcement of a wonderful curiosity bearing the title of the "Sunset Plant." This it is to be presumed is a descriptive name inspired, no doubt, by its fancied resemblance to the glory of the sun as it makes its diurnal journey across the Sierras and disappears in the broad bosom of the Pacific. Is it really so gorgeous as to merit its title? and is it a new discovery? Is the "cinnamon vine" a new name for an old plant; and if so, what should we call it? Is the "Rainbow plant" some obscure species which the advertiser puts forward to dispute that title with *Alternanthera p. major*, which that useful plant has already pre-empted and which it can justly claim? From the picture accompanying the adv. and the description annexed to it I am led to believe that it is an *amaranthus*, and if so it is easy to see why its name is suppressed, as the number of seed packets at 50 cents each which would be sold of any of that species would hardly pay for the printing. If the *sine qua non* desired in naming a plant is to have its title descriptive of its good qualities did the author of "Sweet Nightingale" wish to imply that vocal powers were granted to it in addition to the other grand attributes which he claims it possesses? and can not the same plant be procured under another name? From the same prolific source of prodigies—which are usually so fleeting—comes another wonder ycleped the "Satin Flower," and announced as a new variety of marvelous beauty. A new variety of what? This question will no doubt be answered if the price of this "Rara Avis" is sent to its present proprietor, but if it is all he claims why not offer it under its botanical name? Is it

because this would enable buyers to procure it elsewhere at a lesser cost? There is a fuchsia widely advertised under the name of the "White House," which is illustrated by an engraving that has already done service as the picture of another new variety recently introduced. Is not this then a pseudonym applied at this particular time because of the popular interest centered in that "Mecca" of all Americans in the hope that particularly verdant, but patriotic purchasers may be found for it under its alias? It is certainly open to suspicion.

I also wish to protest against the reckless use of the word "new" when prefixed to old plants as calculated to mislead the unwary. For instance, "The New Perpetual Flowering Carnation Emperor" is announced in heavy type, while its old name (for it is old, having done service for 20 years), the "*Dianthus Querterii*, or German Pink" is barely discernible. This is, by the way, not a carnation at all, but a pink, and is properly a variety of *Dianthus hybridus multiflorus*. The point I wish to make is that being offered as "new" they may be bought by some who already have them and consequently cause annoyance, which will surely result to the disadvantage of the seller. In the same way we have the "New Moonflower" offered, but it is not stated in what particular it is "new." The suspicion is well founded that it is employed as a means to reap the aftermath from the sale of this excellent old plant.

In this connection I would ask what is the difference between the lucerne so widely offered as the "New Forage Plant" and that usually sold? Have the advertisers discovered at this late date that lucerne is a valuable forage plant? I fear they are sadly behind the times.

The foregoing are some of the dubious advertisements to which the attention of the committee is directed and if you are to do practical work should be looked into at once. Let us have your views on this subject.

OBSERVER.

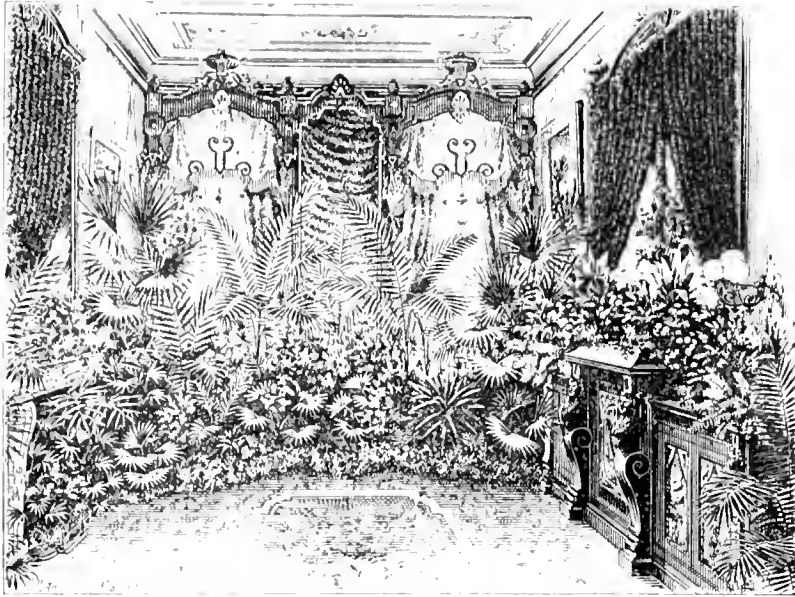
Is This Fraud?

In a recent issue of the FLORIST I discovered an article under above heading that looks as if it were intended to bring discredit to the fuchsia White House, which I am positive is all in my hands and is the same as if I had raised it from seed myself. The temporary name it had does not amount to so much mention as it received from my friend, since it is no horse of a registered pedigree that requires a life-long name to identify its offspring.

Again the article says that the cut does the fuchsia Mrs. E. G. Hill a great injustice. Does the writer really know what a cut of the E. G. Hill fuchsia looks like? I am sure that there seems to be a great mistake somewhere, as the firm of Hill & Co. have the fuchsia both in wood cut and colored lithograph that are as different from the White House cut as the geranium from the cineraria.

Who has the true cut? It would seem to me that Hill & Co. would have the true cut as it receives its name from the wife of the head of the firm; and no doubt the plant was first brought to this country by the same firm. If not where did it get the name? If you notice, the cut used by Hill & Co. has long pointed and stiff well reflexed petals, while the cut used for the White House has blunt and incurved sepals and not as a rule reflexed.

Can you point to any similarity in the two cuts? If so, please do so through the columns of the FLORIST. I confess



WEDDING DECORATION

that I can not say which is the true cut of Mrs. E. G. Hill fuchsia, but would naturally think Hill & Co. had the correct one. But one thing I do know is that the White House fuchsia has the habit and appearance of the cut it has adopted, while one firm has the Hill fuchsia drooping, and another has it a stiff erect grower. E. HIPPARD, Youngstown, O.

[Regarding the main point raised by Mr. Lonsdale—namely, the use of a cut which had already appeared in many catalogues illustrating another variety—our correspondent begs the question. Engravings of the same flower or plant drawn from life at different times can never be exactly alike in every detail, though differences do frequently appear that should not. But it is the use of an engraving as a portrait of one variety which has already been used to represent another one that is condemned, and the condemnation is just. Our correspondent does not deny that he has purchased an electrotype of a cut engraved from the Mrs. E. G. Hill fuchsia and used it as an illustration of a different variety.

And we regret to note that he is not the only one who has been so unwise as to use engravings of one variety to illustrate another. It is a growing evil. Other similar cases may be noted by a careful inspection of the spring crop of catalogues. While some of these engravings may well represent the flowers with whose names they are labeled the effect upon the possible buyer who notes the same illustration with two different names is certainly bad, for doubt at once arises as to the correctness of either. In this way an injury is unjustly done to him who has used the cut to illustrate the flower which it was originally designed to represent. We do not believe that in any of these cases there was any intention to deceive buyers. Probably the matter had not occurred to them in the light in which we have presented it, and that now the matter has been brought to their attention they will discontinue the practice.—E.D.]

Long Island Notes.

BY WM. FALCONER.

THE SWEET NIGHTINGALE enquired about by Mr. Lonsdale, page 332, is catalogued by the florist who sends it out as a datura, but from the description or illustration the species remains in obscurity. This is wrong. While he has a perfect right to give a common name to any plant that has not already got one, in order that the name may become generally adopted, we should know what plant is referred to, if it be not a garden variety, cross or hybrid, and unless we get the specific as well as the generic name, we have a right to ignore his common name. Nightingales is a common name for *Geranium Robertianum* and *Arum maculatum*, but the name Sweet Nightingale has not before now been recognized as identified with any plant.

THE RAINBOW PLANT also enquired about by Mr. Lonsdale is catalogued as an amaranthus. In this the florist is safe. Many of the garden forms of amaranthus have, by intermixing, lost their specific identity, and if he has secured a different form from any before now fixed named variety, he is justified in calling it *Amaranthus* "Rainbow," or the "Rainbow Plant." The name Rainbow flower is applied to iris blossoms in general, but the name "Rainbow Plant" has never before now been applied to any plant so far as I can find any trace of it.

IRIS SUSIANA comes from Persia and Asia Minor. Large quantities of dried bulbs (rhizomes) are imported every year into this country, sold, planted and most of them lost. They are quite cheap, especially at wholesale rates. It is useless to treat them as hardy plants for they are not satisfactory as such. Potted and treated as cool greenhouse plants or grown in well protected frames we get along with them first rate. It takes them a year to recover from the enervation of being dried off like tulips and kept dry so long; but if they fail to bloom the first year after importing, keep them over and growing all the time and winter them in a cool house or frame and they will re-

ward you with some of the largest and finest iris flowers you ever saw. Mine are in bloom now, end of February; they had been kept in a frost proof frame.

THE CHINESE NARCISSUS—Fourteen years ago F. W. Burbidge, curator of the Botanic Garden, Trinity College, Dublin, wrote a pretentious elaborately illustrated book, "The Narcissus, Its History and Culture," and in it told us all about the Chinese "water" narcissus except its origin and variety. But the oddest thing about it is that never till this winter has he had or grown this variety himself. He writes me (last month) a gentleman in America "sent me a great ugly bulb at Christmas time that would have given a Dutch bulb grower a fit. I put it into a pudding basin in water and stones and changed its water milk warm every day and it now has five spikes and is very pretty and much admired. They grow much more rapidly in water than earth. It is a good variety of *N. tazetta* with white petals and yellow cups." He got the genuine article. But using milk warm water and changing the water every day were unnecessary. Now while this plant has been grown in America for twenty years, in limited numbers till recently, but now in vast quantity, why has it such difficulty in entering Europe?

ANTS AND SEEDS.—I sowed some boxes of *Vinca rosea* seed and in a few days observed common ants very busy on the soil in the boxes; they were carrying off the seed, but every seed they had was bursting in germination. And in the case of seedlings that had started so far as to have grown half an inch the ants cut off the tops with the seed husk attached and carried them away. Of course by raising the boxes on pots set in saucers of water their little game was lost. Can some entomologist tell us what they wanted with the vinca seed which they selected in preference to fifty other kinds on the same bench?

Dutch Roman Hyacinths.

I notice "Dutch Roman Hyacinths" quoted among this year's early offers of bulbs for fall delivery. Is this in accordance with the expressed desire for a correct nomenclature. The article in question is nothing but a Dutch miniature hyacinth, which means a bulb that has not attained its full growth and size on account of lack of age. W. ROELKER, New York

Wedding Decoration.

The illustration shows a portion of the decorations arranged by Siebrecht & Wadley for a recent wedding at the Hotel Brunswick, New York City. The mirror at the right had a double curtain of smilax with a large bunch of acacia bloom holding the center, and the one on the left a single curtain of the same. Blooming plants of genista, daisies and cyclamens were used with effect among the palms, dracenas and ferns.

Worth \$5 Each.

Mr. J. N. Gerard, of Elizabeth, who is sadly afflicted with "Mum" fever, wrote me the other day: "Here's something to keep worms out of pots; a sure cure. Take wire mosquito netting—jersey size—cut into squares large enough to cover the holes in pots, on this put your drain-ages. Result, no worms to make you say cuss words." This is supposed to be for "mum" growers, but rose men can use it. Any donations can be sent to make premiums for mums. JOHN THORPE.

Philadelphia.

It is the universal opinion among florists here with the exception possibly of the top-heavy light weight from whom the screed, as copied by the FLORIST from the Philadelphia Times emanated, that it had better have been suppressed ere it were expressed.

"Beans."—What does W. J. Stewart mean in his note relative to the comparative shipping qualities of Souvenir de Wootton when he says, "and the Puritans were brown as a bean"? Hereabouts beans are white, red and black and frequently speckled.

"The National Emblem" was down on the cards as the subject for a paper to be read at the last meeting of the Florists' Club, and Mr. H. H. Battles was appointed to prepare it, but owing to that gentleman having a few days previous taken sides with the Benedicts his absence from the meeting was pardonable. The readers of the FLORIST are acquainted with Mr. Battles' views on the subject, he having voiced his sentiments in its columns in a very interesting paper last summer. The oak is his choice, and certainly no better emblem could be selected. The dress worn by the wife of the President of the United States was decorated with the pattern of "the burr oak leaf" as if to verify Mr. Battles' hopes and convictions.

I have no sympathy with what is here-with reproduced from the *American Garden* for December last. Editors are mortal and even they make mistakes sometimes. They are proverbially overworked, and this is sufficient evidence or the following would have been excluded from its columns, or severely pruned by a judicious use of the blue pencil. Listen to what is said:

The discussions now going on in regard to adopting a national flower are amusing, but that is the best that can be said of them. We venture to predict that our country will be without national floral emblems, other than those now used upon our coins, until some flower is distinguished in some essentially national event. The discussion is especially interesting from the part taken by worthy foreigners in trade here. Some of the florists seem to think if they can agree upon a flower they will immediately start a boom in the sale of it. The number of florists' flowers chosen is noticeable. Our earliest decorators used the Indian corn, and the tobacco was often employed to distinguish us abroad. So far, those who feel the necessity for a national flower have been unable to agree. We fear, friends, you will have to wait until some flower rises into prominence from causes over which florists and gardeners exercise little control.

The above was inspired (save the mark) by a small voice from Pittsburg which said the committee appointed at the convention held last August in New York, was composed of foreigners excepting Miss Taplin, who, as noted in a later issue of the FLORIST was also foreign, for she happened to be English. Now it turns out that the chairman, Mr. Robert Craig, is an American both by birth and instinct, and no better man could have been selected for the position. Mr. Peter Henderson is a member of that committee. Although Mr. Henderson was born in Scotland, who can point out a better citizen or more thorough American? And so on through the list, some of whom may happen to have been born on foreign soil.

That fling at "foreigners in trade here" is in exceeding bad taste, because in the first place, the foreign element "in trade here" is not more anxious to start a boom in the sale of what might happen to be adopted as the national flower than the born American, and no florist worthy of the name, so far as has come to my knowledge, has advocated any flower from a mercenary point of view.

There are excellent men who share the opinion as expressed in the extract, but who can deny that the body of florists composing the national society are as noble and high-minded a class of men as are to be found in any profession or trade in this or any other country? And as to the occasion, they are capable of making *that*.

EDWIN LONSDALE.



Notes From the Recent Show at New York.

BY WM. FALCONER.

MR. LOW, of London, is here again.

VEITCH'S AGENT has not yet arrived and no one seems to know who is coming.

MR. FOSTERMAN doesn't look as well as he did before he went to Chicago; but his health now is improving.

FREDERICK MAU says "It's coming. A specimen of *Vanda Sanderiana* 8 feet high and with 18 growths."

WHILE MANY of the plants were good specimens, well flowered and capital examples of artificial cultivation, a large number of them were small and not such as we would expect to find at a competitive exhibition. But altogether it was a beautiful and meritorious display and answered well the purpose intended, namely, to popularize orchids and familiarize the people with these lovely flowers.

WHILE I think it is very well to exclude roses, carnations, hyacinths, tulips and other general flowers now so abundant in our florists' windows, from a strictly orchid show, I firmly believe that an effort to include new and rare and particularly striking flowers of any kind wouldn't detract from the orchid show at all, but add largely to the general interest of the public in the exhibition.

THE CATTLEYS were the gayest, and *C. Trianae* in variety composed the great majority. Mau had a splendid white variety with 13 flowers. It was imported from South America last May. A multitude of the cattleyas in bloom were also last year's introductions from their native wilds. Some of our most astute orchidists have an idea that white-flowering cattleyas which display no trace of purple the first year after being imported are apt in later years to show a tinge of purple coloring.

SIEBRECHT says "of all orchids, either for my own private or commercial purposes give me first, cattleyas; second, phalaenopsis; third, odontoglossums."

CATTLEYA FLOWERS stuck into phials of water wired in among large masses of *Lælia anceps*, appeared perfectly at home, and many a thousand visitors failed to observe that they were not the real blossoms of the plants they were stuck among.

CELOGYNE PANDURATA was in a glass case and had one greenish flower. It comes from Borneo and Siebrecht says it is "the rarest flower in the exhibition." Well, its beauty needn't keep you awake nights.

CALANTHE VESTITA OCVLATA GIGANTEA had strong, upright arching-tipped

spikes 3 feet long and in fine bloom. It is a decidedly gigantic variety and much later in blooming than the typical vestita, and the bulbs are larger, smoother and not so abruptly ended. The eye is red as in *rubra oculata*, the individual flowers are exactly three inches across. Mr. Fosterman collected some four thousand bulbs of it in Borneo a few years ago and sent them to England. But it is still very scarce in the market. There were lots of *C. Regneri*, a rosy pink flowered deciduous species from Cochinchina, but the blossoms are not bright enough to arrest attention.

A GOOD white variety of *Dendrochilum glumaceum* is, I think, one of the sweetest and most graceful of orchids, and it is easy to grow, always green and a good looking plant and a sure bloomer, but Terry Walsh wouldn't grow such a thing and Mangold chucked it out of doors. Now give us some pæonias and Oriental poppies.

RED FLOWERING ORCHIDS are few. *Lælia harpophylla*, a Brazilian species, was the brightest and most showy; *Masdevallia Harryana* and *Sophranites grandiflora* also added to the list, and so did the odd but distinct little *Odontoglossum roseum*.

MR. SIEBRECHT thinks it would pay to grow *Oncidium Cavendishianum* for cut flowers. But more beautiful is the showy yellow *O. Rogersii* and other forms of *O. varicosum*.

AMONG DENDROBIUMS *D. Deari* and *D. formosum giganteum* were the ones that seemed to outlast without finching the heat and draught; the other species representing better and more showily flowered specimens quickly succumb to arbitrary treatment.

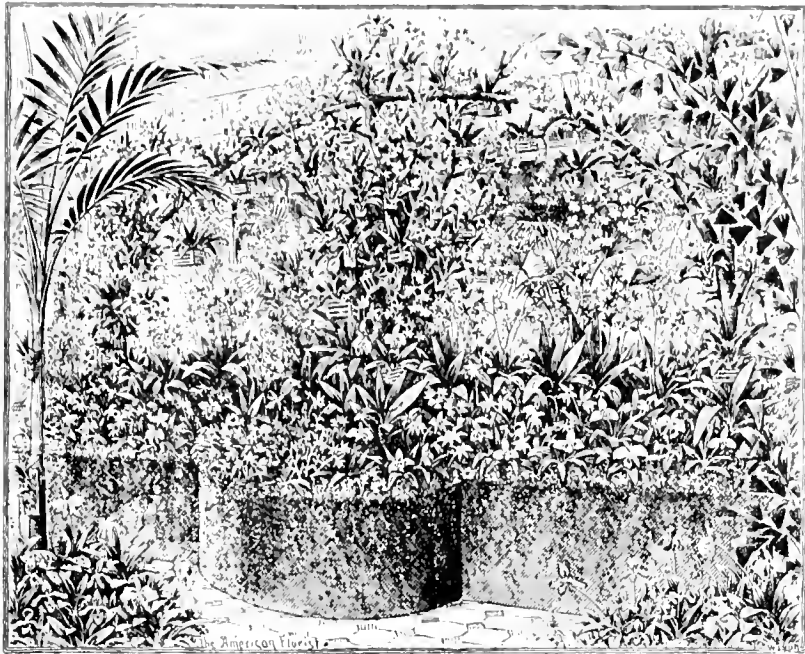
THE CYPRIPEDIUMS of Pitcher & Mandala were a revelation to orchidists. Here we had the plants in bloom. Eighty kinds were catalogued, but there were others as *marmorophyllum*, *vernixum* and *Measuresianum* that were not in the catalogue. *C. nitens*, a hybrid between *C. villosum* and *C. insigne* Maulel, was especially beautiful; *C. villosum aureum* was one of the largest, glossiest and most striking in the hall; and *calurum Rougeri*, *euryandrum*, *Harrisianum* *superbum*, *intermedium* and *Leeanum superbum* deserve special mention. Rather an odd flower was one of *C. insigne* with a corrugated lip. Still there are among cypripediums, even among the rarest and most valuable of them, some kinds that are plain enough. Among jewels in a glass case Mr. Siebrecht had a little plant of *C. hirsutissimum* with one bloom of unusual large size. "That plant is worth \$50."

EPIDENDRUM COCHLEATUM is a weed among Jamaican orchids. Henry Siebrecht calls it the "Owl Orchid," because he can see an owl in the blossom. It was then but high noon, a few hours too soon for my imagination to become so elastic.

IT IS reported that Mr. Wallace had lots of it at one time and tiring of them pitched them out into the rot pile; Mr. Scholes had also accumulated a lot of them, but with an eye to business landed them at Young and Elliott's. Green and vigorous, leafy, but without blossoms, "something new I hope!" Wallace bought the lot! The house "came down!"

Easily Caught, Slugs and Snails.

Being troubled badly by the depredations of slugs and snails, my neighbor,



CENTRAL ARRANGEMENT AT THE RECEIPT ORCHID SHOW AT NEW YORK.

Blauvelt, gave me this remedy: take some fresh crushed oats, lay on boards—about a 2-inch pot full—place them where the enemy congregates, and in the evening take a light and go over the ground; there you will find your game without fail if there is any. Try it brothers afflicted with *Helix*. It is right to say that this recipe appeared in the AM. FLORIST years ago. JOHN THORPE.

Black Rust on Verbenas.

Your correspondent, Mr. H. A. Bunyard, writing on this subject in your March 1 issue, is so hopelessly floundered that some one must extricate him from the position into which he has blundered. He has arrived at the sage conclusion that the verbeua is a soft wooded plant, and gives a learned dissertation on cause and effect. For his information I will say that it is already settled beyond the shadow of a doubt that the "Rust" is caused by a microscopic insect whose ravages are first invited by a debilitated condition of the plant. I have frequently counted from eight to ten of these little pests browsing on the "field" of the microscope, which is about one-sixteenth of an inch in diameter. This, taken as the basis of a calculation, will show in what appalling numbers they must exist on a bench containing say ten thousand plants, and how utterly useless it is to try to cope successfully with an enemy which is so numerous and has proven itself so tenacious of life. The only remedy I believe is the one recommended by Mr. Peter Henderson, viz.: throw the plants away as soon as they show the slightest symptoms of the disease, as it is quickly infectious. Mr. Bunyard's assumption that the disease is generated by using cold water is absurd. I was employed for years in an establishment where verbenas were grown by hundreds of thousands, and where the only water used was that furnished by the city, yet a "Rusty" plant was prac-

tically unknown. He also advises us to take the sand from our benches and grow the plants on the bare slates, but does not consider that numerous florists grow verbenas successfully who do not possess that luxury. To carry out his idea in this case would require a man's time to keep the plants watered and would surely result in a crop of insignificant flowers.

Another correspondent recommends a rigid quarantine against all plants infected with the disease. This is sound advice, but to extend his caution to seeds is I think carrying the point too far. That the disease is infectious is freely admitted, but that it is carried on the seeds is preposterous. A careful examination of hundreds of flowers and seed pods from diseased plants failed to discover an insect on one of them.

The true remedy for this pest is prevention. Assuming that the stock is free from it, if the following method of culture is adopted it can be kept in that condition: The plants should be set in the open ground early in May in a rich mellow soil, care being taken that they do not suffer from excessive drought, as a dry condition checks the growth and invites the insect producing the disease. By the middle of August they will have grown to two or three feet in diameter and about this time will show signs of lessening vitality, caused by abundant flowering and consequent exhaustion of the vital forces of the plants. To check this natural waste and reinvigorate the plants cut back the shoots six or eight inches all around; cut off all the flowers and any wood in the center of the plants which is not rooted on the ground; fork up the soil around the plant and then spread a compost of equal parts fresh soil and well rotted stable manure—which should have a fair proportion from the cow shed—to a depth of about two inches, putting some on the plant, particularly in the center. This will restore lost vitality and produce a growth of young

shoots—soft and vigorous—just what is wanted for cuttings. The first propagation is usually done about the middle of October and the greatest care should be exercised in selecting the cuttings. Do not risk putting in any hard or stringy wood, as although these will root, they will not make good stock and are usually the source of all the ills the other plants become heirs to. The cuttings should be potted as soon as they show roots—every day in the bench after that is an injury to them. When they are well rooted in the pots such as are wanted for stock should be shifted into a size larger and as the season advances should they show signs of exhaustion water them freely with liquid cow manure. The proper temperature for verbenas during the winter is from 40° to 45° at night and 50° to 55° during the day, with plenty of ventilation—a free circulation of air is most important.

If this treatment is religiously followed success is certain and we would soon hear the last of the "Black Rust." As the verbeua—like other plants of its character—is not as vigorous when grown from cuttings for a lengthy period as when produced from seed, it is well to sow some seed each year, early enough in the season to flower before the planting out time, so that a selection can be made of such as are equal to, or superior to the old varieties, and planted out for stock. If this practice is followed a fresh stock direct from seed may be had every year and will prove a most valuable safeguard against all diseases. The present season there is very little rust seen in this vicinity. The weather having been particularly favorable for the best development of plant growth. FLORIST.

New York, March 8.

Some Lantanas Which are Worth Growing in Addition to the Older Varieties.

Californica: This is dwarf in habit, compact in growth and a good pot plant as well as a good bedder or border planter. Color, a lemon yellow with a bright center, making a beautiful contrast. It is greatly admired by all who see it.

Diadem: This variety is of great merit. It is half dwarf in habit, well adapted for pot culture and bedding. The flowers are very large and full, a lovely shade of pink.

Colibre: This is the finest of all the reds, color a bright dark red when fully open. A good grower, fine pot plant and bedder.

Drap d'Or: A great improvement on *Pluie d'Or*, being of better habit, branching of its own accord and a trifle taller. The color is a darker yellow and the foliage a deeper green. Good for all purposes. Sweet scented.

Mine d'Or: Much the same as the preceding, but of dwarf habit and the flowers of a lighter color, sweet scented. Both these varieties are well worth growing and it is safe to say that when well known they will replace the now popular *Pluie d'Or*.

Triumph de Commerce: A stiff sturdy grower; flowers, center yellow bordered with a pleasing lavender.

Iris: Much the same as the preceding, but the border of the flower is of a much darker color. The plant is of sturdy growth. DAILEDOUZE BROS.

Flatbush, N. Y.

CUT WORMS.—Will some one tell me through the FLORIST what should be done to prevent or destroy cut worms in the greenhouse? F. C. S.



A New Bug.

For some time I have noticed a trouble amongst my Perle roses for which I could not account. Many of the buds when about one half developed would become discolored and gradually drop to pieces. A couple of weeks ago I made a post mortem examination of one of these buds and found near the center of the flower a small greyish bud, probably $\frac{1}{4}$ -inch in length and quite distinct from the common rose bug; searching further I found about a dozen. I have caught them several times since, although I failed to find the insect in a good many of the buds examined. Rose buds may become blasted or rot off at the neck from a variety of causes, none of which however existed in this case, on the contrary all the conditions under which the roses are growing are particularly favorable to a healthy and vigorous growth. There are several other varieties growing on the same bench, but so far the trouble is entirely confined to the Perles. I am satisfied that this bug is "the elephant in the wood pile," and will be glad to hear the opinion of others on the subject.

Baltimore.

A. W. M.

New York Rose Notes.

Mr. J. N. May has a lot of new roses at his place, but so far he has been unable to find the one particular star among roses for which he is longing. He is yearning to meet with a new yellow rose—it must have the color of a Buttercup, clear bright yellow, and the shape, size, habit and constitution of Catherine Mermet. When he meets with a rose which completely fills this bill, Mr. May expresses his perfect readiness to mortgage his last garment for the purpose of buying up the entire stock.

Souvenir de Wootton, the new hybrid tea recently noted in the *FLORIST*, was seen at Mr. May's; it is somewhat suggestive of Beauty in size and color, but distinct in shape, exceedingly fragrant and apparently very vigorous. It is a cross between Louis Van Houtte and Bon Silene.

Gloire de Margottin is a new hybrid which M. Margottin himself considers the finest thing he has yet produced. The color appears to be much the same bright cherry red we admire in Ulrich Brunner. Margottin prophesies great things of this rose, though it is as yet comparatively untried.

Mr. May says he is going to try Ma Capucine the coming season, it has been in a state of innocuous desuetude the past few years, but it is a charming little rose, with a color unapproachable by any other.

Marquis de Vivens, that is another rose likely to be brought forward next season; so is the Duchess of Albany. This is a sport from La France and is like its parent, only more so. The same pink as La France, but much deeper; it seems to make more and harder wood than its parent, a decided advantage.

Viscountess Folkestone is not a new rose, but it is not much grown. Flowers are similar in shape and texture to La

France, color a delicate shell pink, with a yellowish tinge. Put it by brighter flowers in daylight and it is too pale, but alone it is charming, and it lights up wonderfully by artificial light.

EMILY L. TAPLIN.

Wood Lice in Rose Beds.

In answer to E. D.'s query, I have found nothing that will keep them in check so well as the toad.

Like E. D., we had wood lice here by the thousands; they could be seen everywhere. In June we gave the houses a good cleaning out under the benches and used plenty of whitewash in their breeding quarters. When planting was finished in July we introduced about 200 toads. We have toads on the benches now as big and fat as they are out of doors in the summer time, and they take care of the wood lice and other insects as well. Try the above next summer. In the mean time try the following: The last thing at night place peroxide of silicates on small pieces of dry boards and lay them about on the rose borders. Scatter it also on any convenient wood work. I think this will bring relief.

Bristol, R. I.

M. J. EDMONDS.

Madame Hoste.

I send you four buds of Madame Hoste which will give you a little idea of the style of bud and length of stem with which they are produced. The plants from which these were cut have been cropped for cuttings four times this winter, hence they are fully one fourth to one third less in size than when grown on strong bushes. We think highly of this rose for forcing and predict it will take rank with Perle, Bride and Niphetos.

Richmond, Ind.

E. G. HILL.

[The blooms sent were on straight stems from seven to eleven inches in length with good clean foliage. The buds were about the size and form of a good Perle, of a very pale yellow in color. Certainly a very charming rose.—ED.]

Rose Mrs. John Laing.

Will some of the growers who have handled this rose in quantity please give their experience with it through the *FLORIST* and say whether it will force like Am. Beauty or not? I feel sure that replies will be of great interest to others besides myself who have not yet grown it, but think of doing so.

J. B.

A Propagating Feat and a Barquet.

In the spring of 1887 Mr. W. W. Coles, of Lansdowne, Pa., bought from Craig & Bro. for one dollar a thrifty young plant of the celebrated rose Mrs. John Laing. By skillful handling it developed into a fine plant and grew so satisfactorily that Walter could not resist the temptation of calculating how many young "Laings" he would have the following spring. One day in July, '87, Mr. Coles met Mr. John Burton and the subject came up in conversation as to how many young rose plants could be raised from one stock plant, in one season. I forget how many Mr. Burton said he thought it was possible to raise, but Mr. Coles very emphatically asserted that he could raise 500 by the following April (1888). This was just as vigorously disputed until a wager was proposed—a champagne supper for those present—which was accepted and put on record.

The plant continued to improve, and

as the time for operations approached stocks suitable for grafting had to be secured, for there were no restrictions as to how the propagating should be done, either by grafting, budding or on own roots. After some slight difficulty the necessary number of Manetti stocks were obtained and on December 24 the first lot of plants were grafted, amounting in number to something less than 180; most of them grew and made a rapid growth. In the following February these plants yielded a number of scions—considerably over 1,000—and on the day specified, namely, April 15, 1888, Mr. Coles had the extreme satisfaction of pointing out to the referee, Mr. John Westcott, upwards of thirteen hundred plants fit to ship to any point in this country.

So confident were the principals in the wager during the progress of the contest that the number to be catered for at the supper was increased to ten.

From a number of causes over which neither Mr. Burton nor Mr. Coles had any control, the banquet did not take place until a few evenings ago. Covers were laid for ten. The participants were Messrs. Burton, Coles, Craig, Colflesh, Fancourt, Lonsdale, Savage, Whiteley, Westcott and Weiss. It is the universal verdict that it was the most pleasant affair of the kind any of the guests had attended. Our host had provided with an unsparing hand, nothing was lacking to make the occasion memorable and complete.

After the menu had been disposed of Mr. Robert Craig proposed the health of "Walter W. Coles, the hero of the hour." Mr. Coles modestly responded, briefly stating the origin of the wager and the manner in which it was won, and predicted a great future for the rose with which he had recently been so closely associated. Mr. Burton proposed a bumper to "American Beauty, the best rose that has ever been introduced," coupling with it the firm of George Field & Bro., of Washington, D. C., to whom belongs the credit of discovering its good qualities, and called upon Robert Craig to respond. Mr. Craig did so in his usual happy style, and related among other things, that one morning about four years ago he received a rose from Washington, which was a revelation to him; the flowers were large, of good color, with long stems and deliciously fragrant. The following morning he received letters from John N. May and Ernest Asmus, both of which stated in effect that there was a fine rose at Washington, and asking for a date to be named when it would be convenient to go and see it growing. Nearly everybody in the business is familiar with the subsequent history of the Beauty.

The only rival of the Mrs. John Laing—Mme. Gabriel Luizet—was next toasted, and the writer of this was called upon to respond and said that although the Laing may possibly force with greater certainty for an early crop and may render a good account of itself generally yet it can never dim the lustre which the Luizet has shed around the city of Philadelphia.

Mr. Burton called upon the last speaker to relate a circumstance which had come under the latter's notice during a visit to Washington in January. He spoke in substance as follows: When, in company with Messrs. Craig, May, Harris, Scott and Whilldin, we called upon the wide awake firm of J. H. Small & Sons, the conversation drifted towards roses. One which H. A. Dreer has on trial for winter forcing was referred to, and Mr. Henry

Small said that Mr. Dreer's representative called upon them a short time before with blooms of this rose for their inspection, which were pronounced good. "but," continuing, Mr. Small said, "we found flowers of it in a box of smilax which had been received from Mr. Burton and remained in the box three days before they were discovered and they certainly were the finest that had ever been in their store." Mr. Burton had been in Washington earlier in the month and had mentioned that he was cutting some fine hybrids and had put a few in the box of smilax to prove it. On my return home when I referred to the matter to John he laughed and declared it was a good joke, as it was not Mr. Dreer's rose at all, but Mrs. John Laing. Speeches and singing were kept up until a little after midnight when we dispersed, everybody well pleased with his entertainment.

The question now uppermost in many of our local propagators' minds is: Can W. W. Coles' record be beaten?

Philadelphia. EDWIN LONSDALE.

Mantel Decoration.

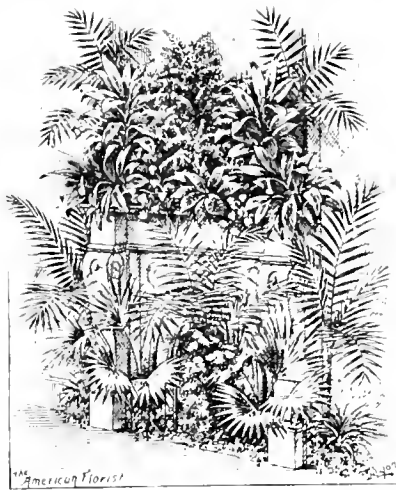
Our illustration shows a fireplace as decorated by Siebrecht & Wadley, New York, for the occasion of the Zeidlitz-Roosevelt wedding. There were palms and daisies below and genista, cyclamens, palms and dracenas above. No cut flowers were used, plants alone forming the entire arrangement, which was very favorably commented upon.

Baltimore Odds and Ends.

The standard flower pot is becoming quite an institution. Calling on "another fellow" who doesn't live a hundred miles from me, I found him mending his benches, using the while a 5 inch standard pot as a nail box, he gave me a big standard pot to sit on, and before parting we exchanged civilities over a 3-inch standard pot full of sparkling —, however, that is immaterial, sufficient to say it wasn't city water. Potteries here and elsewhere will soon find that if they want to do business with florists in their vicinity they must manufacture the standard pot. I am informed that one concern in this city is making, or about to manufacture them; this will be particularly convenient for those of us who feel bound to support only home trade, even at the cost of inconvenience to ourselves. I am as much in favor of patronizing home industries as the next man, but when the sentiment leads one to the wilful use of an inferior article, it looks like carrying the principle too far.

The Charity Ball recently held in this city, was—so far as the decorations went—far ahead of any that preceded it. The "hop" was held in the armory of the Fifth Regiment, and a more suitable hall could not have been selected. The room is 135x95 feet with a wide gallery extending all round, the ceiling is arched and braced together with iron rods twenty-five feet above the floor. These rods were festooned with double rows of wreathing, handsome streamers being fastened at the intersections. The galleries were draped with red and white bunting upon which four rows of wreathing were very tastefully arranged. Five immense gun racks on each side of the hall were completely hidden from view by magnificent groups of plants, a first rate specimen palm or other plant being used for the center and the groups filled

in with azaleas, camellias eight and ten feet high in bloom, echeverias, Dracenas, rhododendrons, lilies, ferns, palms, etc., each group presenting a perfect harmony of flower and foliage. A platform fifty feet wide—occupied by the musicians—was the most effectively decorated point about the room. A row of very large arbor-vitae ran along the back, and in front a superb bank of the choicest flowering and foliage plants extended the entire width of the stage, the center of this group was a splendid *Euterpe edule*, and among the other plants were some pretty specimens of *Acacia pubescens* in bloom. Miniature forests were arranged in the corners of the room and on either side of the entrance, and the ante-rooms, supper rooms, etc., were appropriately decorated. In these decorations 1,500



MANTEL DECORATION

yards of wreathing and thirteen large furniture wagon loads of plants were used. James Pentland arranged the decorations, which were pronounced by Baltimore "society" and society lights from other cities the best ever seen at a public ball in this town.

Reading of "A florist who has no use for this paper" (page 346), brought to my mind another of similar type with whom—to my great edification—I am very intimately acquainted, although a sense of his attainments prevents him from consorting with his less gifted craftsmen. I have never known him to be present at a flower show, or any gathering of florists, or to make a friendly call on any of his brethren, and I have never known him to take part in any movement to promote trade interests except to make caustic remarks about the efforts of others, but if there is anything under the sun connected with horticulture that this man doesn't know, on which he isn't a profound authority, it hasn't yet been discovered. It is an unfortunate thing—at times anyway—for a man to know too much. "A many years ago," while yet a comparative greenhorn, the writer applied to the late Robert Buist for a "job," being inquired of as to whether we were an outdoor or indoor "hand," we modestly intimated that we could fill either position with equal grace and ability, and we thereby put our foot in it, for Mr. Buist gravely replied, "Captain, you and me can't make a hitch, you know too much for my place." Later, when better acquainted

with Mr. B., he frequently warned us to "keep clear o' men" who knew everything and could do anything, an admonition that has frequently stood us in good stead.

At the meeting of the Florist Club held March 6, the old officers of the society were "put in" for another term. On general principles we are not in favor of re-electing the old officers, in this case, however, we don't think a wiser policy could have been adopted. At least Mr. Halliday's re-election as president was but a fitting recognition of his untiring efforts in behalf of the club. The reports of the financial and other officers shows the society to be in a very prosperous condition.

A run through the principal commercial places hereabout shows spring stock to be abundant and in excellent condition. Pentland, as usual, has a splendid lot of verbenas, "clean as a whistle," and in all respects quite as good as any I have ever seen here or elsewhere. Verbenas are popularly regarded as among the plants that "any one can grow," but however simple the cultural necessities of a plant may be it can't be grown well without proper care and attention. We have seen in the Baltimore and other markets verbenas with two or three stems, a foot or eighteen inches long, and strung up to a stake, which the most elastic courtesy wouldn't permit us to call well grown plants, yet it doubtless cost the florist as much to raise such unsalable stock as to grow stout bushy plants, requiring no stakes and bound to sell on sight at the highest market price.

R. J. Halliday is fairly under way in his new store, No. 8 South Charles street, in which building the florist club also meets. The store is a very pretty and commodious one, but personally, we feel a little regret that Mr. Halliday has moved from his old stand on Baltimore street, which had become a sort of landmark, particularly to florists from other cities. Halliday & Bro. have not quite completed the "fixins" of their store at No. 11 East Baltimore street, when finished it will be one of the prettiest florist stores in the city; the firm have been enjoying a good trade so far and feel quite sanguine as to the future. These young men represent the third generation of Hallidays who have been engaged in the florist business and our good wishes are best expressed in the hope that their business career may be attended by the same success and prominence that has so abundantly fallen to the lot of their father and grandfather.

A. W. M.

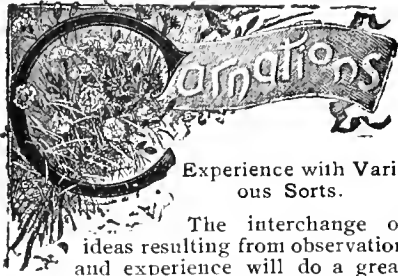
Greenhouse Construction.

In this issue we give the first of a series of articles on greenhouse construction by Mr. John N. May, which will we believe, be of considerable assistance to many. The figures with which the articles will be liberally illustrated are drawn to a scale which will add much to their practical value.

We do not believe in fancy structures for commercial purposes, but we do believe that it pays well to build substantially; to build for 25 years rather than 10.

But while we favor the erection of first class houses where any are to be built, we believe that in many sections the area of glass is already sufficient to meet all demands, that the yearly additions have been rather in advance of the increase in demand and that growers should be conservative in the matter of making further additions. The experience of the

past year is convincing proof that profit to the grower lies now not so much in increasing the quantity of his output as in improving the quality of the same.



Experience with Various Sorts.

The interchange of ideas resulting from observation and experience will do a great deal toward solving the problems as to what varieties of carnations to grow and how to grow them so as to attain the best results, after taking into consideration the probable effects of soil, climate, construction of houses, ventilation, etc. Even were these conditions exactly the same, two florists might take each a house of carnations, or any other plants, and through a single mistake or accident on the part of one achieve very different results. Thus we see that the success or failure of others under apparently the same conditions will not serve as an infallible guide but each must to some extent experiment for himself.

In reply to Mr. Esler, page 300, would state that in spring our carnations are planted in sandy soil, rich in vegetable matter, without a trace of clay and further enriched with stable manure and bone meal and when taken up in the fall are placed in the same kind of soil in the houses, seven of which are three-quarter span 20 feet wide and 85 to 100 feet long, with raised benches in all of them except three which have solid center beds.

As to climate, we might ask what is climate but the condition of the atmosphere in regard to heat and moisture? Then do we not, to a certain extent, make our climate what we choose in our houses during the cooler parts of the year.

We heat with steam and during the winter, in all houses excepting one, a night temperature of from 48° to 50° is maintained, slightly higher during the day, always giving plenty of fresh air in mild weather. In the one house we expected above—20x100 feet, and filled with various kinds of carnations—we have during the past winter kept a little temperature of from 60° to 62° with the following result: Snowdon, Garfield and Hinz's White yielded blossoms a little earlier than in the cooler houses but the flowers were much smaller and very inferior in quality, and the plants are at this writing (March 7) very much exhausted, especially Snowdon; while in the cooler houses they are still covered with a profusion of buds and blossoms.

Our soil is kept only moderately damp but the foliage is sprayed thoroughly and often in bright weather, and owing to the light and porous soil we can use plenty of water without danger of injuring the plants.

We followed the above treatment with nearly 11,000 plants of over fifty standard varieties and are pleased with the results, but are satisfied that the best has not yet been reached.

We have secured for the coming season thirty other new varieties, some of which we imported from Europe, many of them offered this year for the first time, and it is our intention to give them a careful trial.

JAS. G. HANCOCK.

Grand Haven, Mich., Mar. 7.

More Notes on Carnations.

Such notes as Mr. Chitty's, together with the proof of his statements, are of great value to those interested in carnations. If we can only get at the facts in all our undertakings there would not be so much guess work.

I feel that I am doing my duty by making the following corrections as to varieties in Mr. Chitty's notes: Fred Johnson is a light red carnation with fringed edges, raised by W. Tailby, of Boston, and sent out with Grace Wilder and Princess Louise; the one described as Fred Johnson is May Queen, a seedling of mine raised previously to Chas. Henderson and Rosalind; when the latter bloomed I did not further propagate May Queen, thinking Rosalind the best. It was about this time I gave to Mr. L. Siebrecht a few cuttings of it together with some of each of Tailby's set. Portia is undoubtedly the correct name of the one called Glowing Coal, and should be kept as Portia.

The fungus which made such deadly attacks on carnations the past winter had probably the most favorable season for its growth ever known. The incessant wet weather beginning on the 9th of November and continuing without intermission, excepting two days, until the 22nd was without parallel; the most complete conditions for the spread and growth of fungus growth.

A house of E. G. Hill of over 1,500 plants suffered more than any other variety with me. There was in this sadly afflicted lot about 50 plants dotted here and there over the bed that never suffered and came through scathless, which proved that there was a positiveness of the condition of these plants which enabled them to repel the attacks of the fungus. How these conditions were obtained and why they differed from the 1450 seemingly under the exact conditions is not for me to say, but that they escaped is a fact.

As a remedy I applied very freely with the syringe a mixture made of lime, sulphur and potash, boiling the whole together for two hours in two gallons of water, which reduced it to one gallon, the mixture was allowed to settle and then bottled; when used a 3-inch pot full was put into three gallons of water and the plants syringed every morning for three weeks. I find that to kill fungus of all kinds it is also highly necessary to continue the treatment for at least two weeks, as the spores are continuously spreading for eight or ten days. I may say that my Hill house is now in fine condition, but I lost my January crop. Pearl River, N. Y. JOHN THORPE.

SEEDLING CARNATION.—Mr. J. G. Burrow, Fishkill, N. Y., sends us specimen blooms of his seedling carnation. They are bright crimson in color, of good size, and the specimens sent were on extra long stems. One stem bore four flowers and two buds and another one flower and four buds nearly all of which could have been cut with separate long stems. We should consider it worthy of trial, though an unfortunate tendency to burst the calyx will probably detract from its value.

Seedling White Pink.

Morgan & McVittie, Barrie, Ont., send us two blooms of a white florists' pink, which they state was among a lot of seedlings from carnation seed imported from England. It much resembles "Snow" (Mrs. Sinkins) in appearance. The blooms sent were possibly a little

larger than those from that variety and the petals more fringed. They were very double.

The senders describe it as perfectly hardy at Barrie, where the thermometer goes to 30° below zero; a very free bloomer with flower stems 6 to 8 inches long; good for forcing and valuable as a plant for spring sales.

The flowers sent were certainly good and if the plant maintains the very desirable characteristics ascribed to it we should consider it a welcome addition.

Greenhouse Construction.

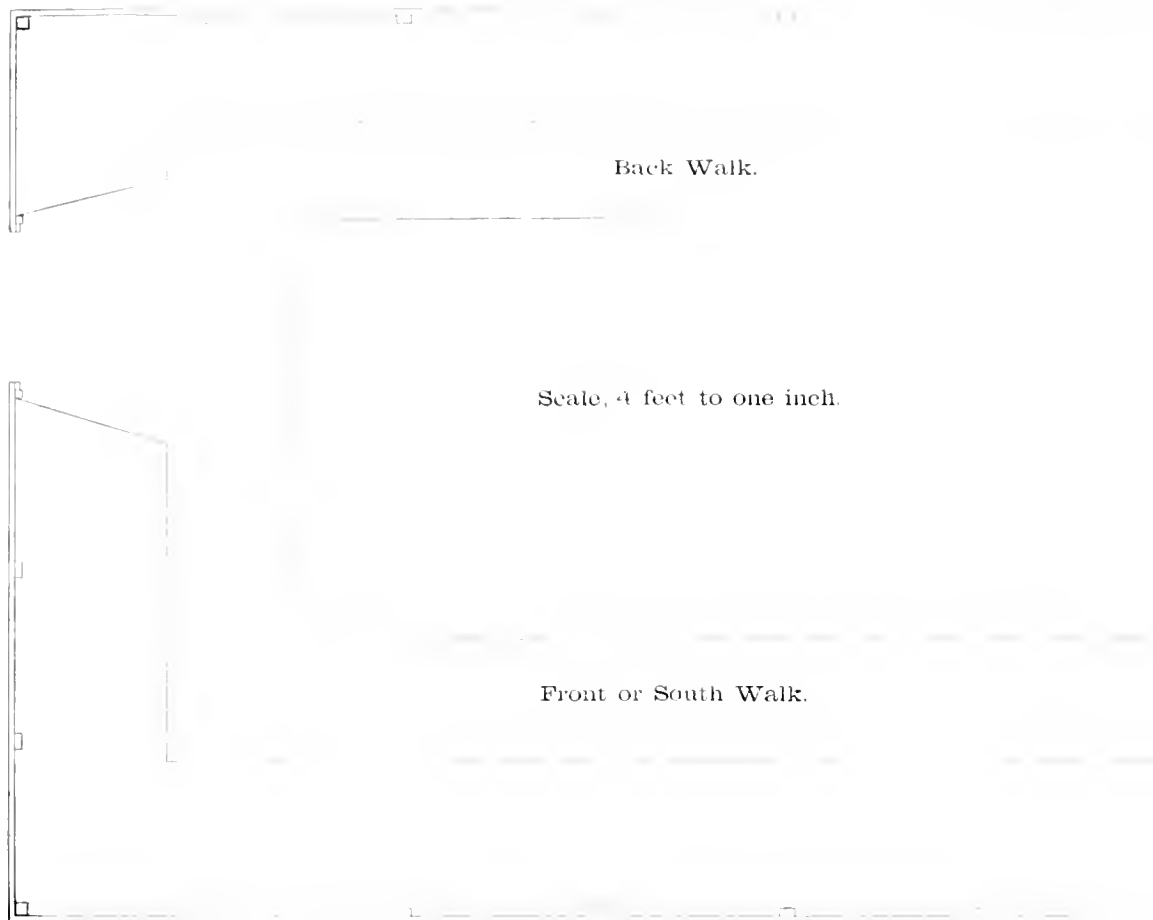
BY JOHN N. MAY.

I.

How to build commercial greenhouses suitable for a general business in a manner to best secure all the advantages of light, strength and durability at a moderate outlay is an important matter to the florist, and one which is evidently not fully understood by many in the trade. To assist such I will give the readers of the FLORIST the benefit of my experience and observation, the subject being one which I have made a study ever since I began as a boy to work among plants in greenhouses. Having had the opportunity of noting errors in the construction of houses which have failed to produce the best results I have been enabled to profit by such experience and avoid some of the mistakes made therein and may save others a similar unprofitable experience. I offer this explanation fearing that some may think I lay unnecessary stress on some apparently trivial items. Many will I doubt not differ with me on many points, and if any can suggest improvements on my mode of building no one will be more grateful for the information than myself.

Before starting to build the first thing to consider is position. If merely an additional house the choice is probably limited to the space adjoining houses already erected, but it should be borne in mind that it is very important to build all the houses so that they connect conveniently with a shed at one end, for if otherwise arranged there will be a perpetual nuisance and loss of time in running from one house to another, to say nothing of the inconvenience where stock has to be moved from one house to another in cold weather. For those who are starting to build for the first time there are several things to consider, all of which are of vital importance. First: drainage. Be sure the land on which you are about to locate your houses can be readily and well drained deep enough to allow of a good deep boiler pit, not less than eight feet if possible below the level of where your houses are to be built, so that you will never have trouble by water collecting in the boiler pit. Next in importance is the grade of the land. Some think that a hill side facing south is very desirable. It may be to a few but a level or nearly level piece of land is for all purposes much the best in my opinion. If a level place can not be had a very gentle slope to the south is the next best. Another item deserving more than a casual thought is the quality of the soil. It should be of a character good enough to grow good crops with a little assistance from fertilizers, or such soil should be conveniently near by where it can be obtained in sufficient supply, for if the soil for growing has to be obtained from distant points the expense eats considerably into the profits.

Having decided these points satisfactorily the next thing is to make a ground



GREENHOUSE CONSTRUCTION FIGURE 1

plan of the houses it is intended to build now, arranging so as to provide for any number that may be wanted in the future. By planning ahead in this way future additions can be much more conveniently made and being part of a definite plan will form a complete range, uniform in length, all the houses being connected at one end or by a vestibule running through the center. The lack of a regular system of arrangement is a serious drawback to many establishments, detracting from their utility as well as appearance, and those about to build should certainly profit by the mistakes of others in this direction. By starting right considerable after trouble and additional yearly expense may be avoided, for it certainly costs much more for labor to run an inconveniently arranged place than one arranged systematically and conveniently. When these matters have been satisfactorily settled the next thing to consider is the style of house to build.

After trying almost every conceivable size, shape, length, width and form of house for all purposes—growing plants, flowers, fruits, etc. I have come to the conclusion that for almost every purpose an intermediate width, length and height is the best. Very wide houses have many disadvantages and there is always considerable loss in space; very long houses are very inconvenient to work in—emptying, refilling, etc. very narrow houses are not desirable as the limited amount of atmosphere they contain will fluctuate too closely with the outside temperature and are generally inconvenient

to attend to. Avoiding any of these extremes I prefer a house not less than 16 feet or over 20 feet in width and from 100 to 150 feet in length. In finally deciding the size and shape it should be borne in mind that light is a very important factor. Although we do not get our direct rays of light from the north still the northern skies reflect considerable light and it is always advisable to have some glass facing the north where houses run east and west, though it takes nearly double the amount of coal to heat one foot on the north side that it does to heat the same area facing south. To meet this I have adopted a uniform length of rafter (6 feet) for the north side and with my next paper will give a drawing illustrating its advantages.

The accompanying engraving (Fig. 1), shows a ground plan of the style of house I have found most desirable. The posts are set 3 feet 11 inches apart measuring from center to center. The house is 18 ft. 6 inches wide from outer face of posts.

Look Out for Him.

Messrs. H. Cannell & Sons, the well known English florists, inform us that they and others in the trade were recently victimized by a party formerly a florist at Bristol, and enclose a letter from the police department which states that the swindler had been traced to Liverpool, where he took passage for America, buying a ticket through to Chicago. His correct name is given as Allen, and is described as follows: height about 5 feet

7 inches, stout built, ruddy complexion, healthy look. Adopts the alias Edmunds and hails from Bristol.

Philadelphia

Sixty members and guests of the Florists' Club sat down to its sixth annual supper the evening of March 21.

President Robert Craig presided over the table. In introducing the speakers of the evening, Mr. Craig said that the club was in a prosperous condition. Its membership was steadily increasing, and during the past year had been incorporated and hoped, before long, to occupy its own building.

Toasts were responded to as follows: "The National Society," John N. May, President S. A. F.; "The Horticultural Press," W. A. Stiles; "The National Flower," C. F. Evans; "The Seed Trade," George Watson; "Mrs. John Laing," George Evans; "Mme. Gabriel Luizet," Edwin Lonsdale; "Souvenir de Wootton," Walter Coles. Addresses were also delivered by James Kent, Gilbert Moore and others.

Among others present were Benjamin F. Durfee, of Washington; Ernest Asmus, of New York; James A. Penman, of New York; William J. Stewart, Secretary S. A. F., of Boston; Ed. Jansen and August Rolker, of New York; John Brogan, of Flushing, N. Y.; P. Welsh, of Boston.

A CALLA with three spathes is sent us by R. J. Groves, Atchison, Kan.

News Notes.

WASHINGTON, D. C.—An effort is being made to organize a local florists' club here.

ALLEGHENY CITY, PA.—Fred Burki, the Bellevue florist, has opened a store at 322 Beaver avenue.

CHARLESTON, S. C.—The floral exhibition of the Agricultural Society of South Carolina will be held commencing April 23.

LEADVILLE, COL.—Mrs. H. Stockdorf has purchased the florist business formerly conducted by Mrs. E. Cliffe, who died recently.

NEW ORLEANS.—The third annual flower show of the New Orleans Horticultural Society will be held at Odd Fellows' Hall April 4 to 7.

MILWAUKEE.—Miss Ida Fourness will continue the florist business formerly conducted by Mrs. Ver Bryck at 408 Milwaukee street.

ELIZABETH, N. J.—The Elizabeth Nursery Company last fall erected three houses, each 60 x 10, for the propagation of young stock for the nursery.

BUFFALO, N. Y.—A large rose colored rhododendron four feet in height and in full bloom proved an excellent window attraction at the store of G. D. Hale recently.

LONDON, ONT.—John Craig, eldest son of S. H. Craig, died February 20 after a brief illness. Deceased was about 19 years of age and a bright courteous young man.

PEORIA, ILL.—William Cation, the florist, and a man widely known, died March 17 of typhoid fever. He was 74 years of age. The business will be carried on by his son Matthew.

BALTIMORE.—On account of the treacherous state of the weather the March flower show of the Horticultural Society lacked much of the proportions which characterize it at other seasons.

CLEVELAND, O.—J. M. Gasser has purchased ten acres of land on Lake avenue fronting the lake, and has commenced building thereon thirteen rose houses to contain 40,000 feet of glass. The new houses will have all modern improvements.

MILWAUKEE.—D. L. Dagleish has sold his place to C. C. Collins, of the Garfield Park Rose Co., Chicago. It is his intention to run a branch rose growing establishment here. The Wisconsin Florist Club will discuss the standard pot at their next meeting, April 2.

HARTFORD, CONN.—A local florists' club has been organized and officers elected as follows: President, A. J. Sloper; Vice-President, John Gerard; Secretary and Treasurer, W. R. Stone. Regular meetings will be held the first Tuesday evening of each month. A committee has been appointed to report as to the best time for holding an exhibition.

LOUISVILLE, KY.—Wm. Mann has bought a new place and will this spring build thereon four new 100-foot houses to be heated by hot water under pressure. Since Lent began certain florists have cut prices on cut flowers to a ridiculously low figure, selling Perles, Mermets and other roses at 5 cents each, and Jonquils at 10 to 15 cents a dozen. The other

florists are of course indignant and it certainly would seem that such a heavy reduction is suicidal for those making it as well as a serious injury to those who are obliged to meet such competition.

MONTREAL.—At the annual meeting of the local club, which occurred March 18, the treasurer's report showed a balance of \$73 on hand. As soon as a suitable room can be secured there are to be meetings twice a month, one evening for discussions, reading papers, etc., and the other for social purposes only; in this way it is expected a lot of talent will be brought out which is now lying dormant. Officers for the ensuing year were elected as follows: President, John Doyle; 1st Vice, Geo. Trussell; 2nd Vice, Jas. McKenna; Treasurer, Jas. Nairn; Secretary, W. Wilshire; Assistant Secretary, A. Wilshire; Ex. Committee, J. Walsh, J. Eddy, J. Kirkwood, J. Dunbar and C. Campbell. At the close of business the members adjourned to supper, at which 49 sat down; after supper toasts and songs filled up a pleasant evening.

Buffalo.

The first annual meeting and election of officers of the Buffalo Florists' Club was held the evening of March 8. There was a good attendance and a large vote was polled with result as follows: President, W. J. Palmer; Vice-President, Wm. Scott; Secretary, Dan'l B. Long; Treasurer, Thomas Clayton; Recording Secretary, W. A. Adams; Executive Committee, E. J. Mepsted, John Miller, Fred Katoll. After the election some thirty members did ample justice to an appetizing lunch. A flow of oratory followed the substantial and much good feeling was promoted.

Though only three months old the club boasts of over fifty active members and the list is increasing. Meetings are held the second and fourth Fridays of each month. At the meeting held March 22 a paper on "The Parks and Trees of Buffalo" was read by Wm. McMillan, being the seventh paper enjoyed by the club. On April 12 John Miller will read a paper on "Palms," and April 26 E. S. Bartholamew, Westfield, N. Y., will give his views on overhead heating. Preparations are being actively made for the meeting of the S. A. F. here in August. Metropolitan extravagancies in entertaining members can not be promised, but strong efforts will be made to ensure a pleasant time to all attending. Several committees are already at work.

W. Scott's hobby is building. Another large house is going up.

Taken altogether the season has been a slow one. Few large party or reception calls for flowers.

James Milley says "no more second year tea roses for me!" His beds of this class resulted very unfavorably this season.

Sebastian Pickelman, Jr., has forced a few rhododendrons successfully and promises to open our eyes with more at Easter. He has a fine showing of azaleas for the same time. Good benches of *Harrisii* are prominent with many of our growers. "If only we can hold them back!" they all say.

Wm. Legg has re-established on Elliott street, near Dodge.

J. H. Kendle has erected houses and is starting in at Tonawanda (ten miles north from Buffalo) in a general trade.

A dealer in high art pictures going by the name of Gerault M. Dunne, a man of Irish extraction, recently mulcted a leading hotel proprietor here to the

tune of some hundreds, and also one of our retailers to the amount of over \$20. Beware of him fellow-florists. His movement from here was ostensibly Philadelphiaward.

As secretary of our local club, Dan Long rather enjoys a little chaffing, instead of smarting under it, and he respectfully encourages the disgruntled to keep it a going, for it promotes the "good of the club."

An impromptu flower show is in project in connection with the Music Hall Prize Fair in the week following Easter.

W. A. Griffin, of Orchard Park, a veteran grower in this vicinity, has nobly come forward in joining the local club. The "Deacon," as he is popularly known, still feels young in years and will show off as frisky as the youngest at next summer's meeting. D.

Notes From Pearl River, N. Y.

I CALLED to see John Thorpe, our ex-president, the other day and found him in good spirits, heels over head in work, and his place in first rate condition. I was astonished at the fullness of the greenhouses and the excellence of the stock considering how short a time Mr. Thorpe has occupied the place.

PEARL RIVER is a small country village, 27 miles from New York on the N. J. & N. Y. R. R., in a beautiful undulated well wooded, but nice agricultural section of the country. Mr. Thorpe's place is on a gentle slope, half a mile from the depot, and consists of a large and unusually well equipped greenhouse establishment and 26 acres of land. The greenhouses are span roofed and nine of them are over a hundred feet long each. He has also added a new propagating house. Adjoining Mr. Thorpe's place was another florist's and which contained three greenhouses, and Mr. T. has rented these and runs them in connection with his own place.

HIS STOCK consists mostly of "flowering" stuff, as roses, carnations, callas, cyclamens, cinerarias, and the like, but he also has a goodly miscellaneous assortment of plants.

CHRYSANTHEMUMS are still his friends and he has gone into them heavily. Little seedlings an inch high are abundant in pots near the glass, and thousands upon thousands of sturdy young stock of named varieties occupy the greenhouses. Near by is the skeleton frame of a temporary span-roofed chrysanthemum house 12 feet high in middle, 12 foot sash bars, and over 100 feet long. Here last fall the plants were brought and flowered. The lower part of the roof all round was covered with the spare sashes from the hybrid rose house, the upper part was covered with canvas, lowered or raised at will, and as a protection against frost four common stoves—one at each end and two near the middle—and strings of sheet iron smoke pipes were brought into use. These are now stored in one of the sheds. Mr. T. insists that there is money yet to be had from chrysanthemum cut flowers, but these flowers must be better than an average, they must be large, fresh, bright, full and have stiff necks, and in order to produce such flowers as these we have got to give the plants good attention, abundance of food, plenty of light, and they must be disbudded.

AMONG HIS ROSES I was much impressed by the unusual vigor of *Niphetos*. The plants had been budded on Marechal Niel, which also had been budded on seedling briars.

E. G. HILL was his finest carnation in bloom. And I was surprised to find both De Graw and Crimson King behaving as well as they used to years ago, for I have discarded both of them.

BESIDES the perpetual carnations he has many hundreds of the summer blooming clove carnations that are so common in Europe, but so infrequent here. He protects them in cold frames in winter, and this is the only sure means of saving them.

FREESIAS are great favorites and the flowers have fetched fair prices till recently; now he is letting the blossoms go to seed with the view of increasing his stock. The bulbs have been planted along the edges of the benches.

SOME LITTLE bantam fowls had the run of the rose houses. "Capital things they are too. They don't do any harm, but they do a great deal of good in picking up grubs and other vermin." So says Mr. Thorpe.

IN BUILDING greenhouses, be they hip roof, span roof, lean-to, or ridge and furrow, Mr. T. is strongly in favor of running them east and west with the broadside facing full to the south. And I certainly agree with him.

HE USES THE Evans' ventilating apparatus in his greenhouses and is extremely well pleased with it.

INSTEAD of growing his early roses in pots he has them in long narrow trough-like boxes—5 feet long by 5x6 inches, and several plants in a row in each box. In this way they get more soil than they would in pots, and are easier to manage in the way of watering and feeding, and the saving in the breakage of pots is considerable.

WHAT HAVE you been painting your boxes with, Mr. Thorpe? "I prepare a bath of hot lime wash with some salt in it, and when the boxes are empty and dry I dip them into this bath. It kills vermin and fungi and is a capital preservative for the wood."

SHEEP MANURE is his favorite fertilizer. For top dressing he would sooner have it than cow manure or any other kind. He gets the pure article, the cleanings from the railroad cars, and keeps it dry in a shed till required for use.

W. P.

THE DICTIONARY OF GARDENING—A supplement to this valuable work has been published and a copy sent us by the American agent, Mr. J. Arnot Penman, 44 East 9th street, New York, shows it to be a most valuable addition. It is bound in style uniform with the seven volumes of the "Dictionary" and entitled "Division VIII." Among the contents are: An index to all the genera (3512 in number) described in the work with the names of their authors; a pronouncing dictionary of the ordinal, generic and specific names of plants described in the work; an index to herbaceous plants for special purposes; an index to the colors of flowers; an index to shrubs and subshrubs in which the colors of the flowers, height and degree of hardness of the shrubs are stated; an index to flowering, periods covering annuals, biennials, perennials and shrubs; an index to height of hardy and half hardy herbaceous plants as a guide in planting; an index to synonyms and cross references and a list with descriptions of new introductions. This supplement is certainly a singularly valuable addition to an indispensable work and will be heartily welcomed by practical men as well as those scientifically inclined.

Catalogues Received.

Jacob Schulz, Louisville, Ky., plants; Jno. A. Balmer, Vincennes, Ind., plants; Cold Spring Seed Farm, Big Horn City, Wyoming, seeds; Joseph Bancroft, Cedar Falls, Iowa, plants and seeds; B. A. Elliott Co., Pittsburg, Pa., plants, shrubs and trees; F. J. Meech & Son, Charlevoix, Mich., begonias, etc.; P. J. Berckmans, Augusta, Ga., plants; S. M. Isbell & Co., Jackson, Mich., seeds; Geo. W. Caldwell, Evergreen, Ala., Easter greens; United States Nurseries, Short Hills, N. J., hardy perennials; C. Petrick, Ghent, Belgium, plants; Jno. Laing & Sons, Forest Hill, London, Eng., chrysanthemums; B. L. Coleman, Hamilton Square, N. J., seeds; C. Wm. Turnley, Camden, N. J., plants; Ketten Bros., Luxembourg, Europe, new roses; Parsons & Sons Co., Flushing, N. Y., nursery stock; S. L. Allen & Co., Philadelphia, Pa., garden tools; Harry Chaapel, Williamsport, Pa., plants and seeds; Harkett's Floral Nursery, Duquesne, Ia., plants; Fred. W. Kelsey, New York, trees, shrubs and plants; Wm. Toole, Baraboo, Wis., pansies; McMath Bros., Onley, Va., nursery stock; Jno. S. Hay, Oneida, N. Y., seeds and plants.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—To take charge of florist's office, by a lady of 15 years' experience. Address: **FLORIST**, No. 15 Union St., Utica, N. Y.

SITUATION WANTED—By a mushroom grower and florist, thoroughly practical and competent man. **G. GARLICK**, Wright's Grove, P. O., Ill.

SITUATION WANTED—By a competent man, age 25, to work under foreman in houses; strictly temperate. **J. T. TURNER**, Gardfield Ave., Salem, O.

SITUATION WANTED—By a thoroughly experienced rose grower, 30th references. Address: **J. P. H.**, care Jos. Hart, 111 W. 70th St., New York City.

SITUATION WANTED—By a first class rose grower and plantsman. Unmarried; sober and energetic; 15 years' experience. Good references. Address: **P. M.**, care American Florist, Chicago.

SITUATION WANTED—A first class gardener, German, wants a private place; understands greenhouse, grapey, and all kinds of gardening. Address: **WM. SCHMEIKE**, 217 S. Twelfth St., Philadelphia, Pa.

SITUATION WANTED—By a first class florist and gardener; am thoroughly posted in all branches of the business, commercial or private. Single; first class references. Address: **J. B. H.**, 39 Prospect Ave., Brooklyn, N. Y.

SITUATION WANTED—By a thoroughly competent man as superintendent of cemetery, landscape law plan preferred. Good reference as to character and ability. Address: **CEMETERY**, care John Sanderson, Bristol, Pa.

SITUATION WANTED—By a gardener; married; thorough practical knowledge of his profession. Can give very best of reference. Private or commercial. State wages. Address: **A. T. PETERSON**, box 4, Riverside, Cook Co., Ill.

SITUATION WANTED—As gardener and florist; understands horticulture in all its branches; 20 years with the late Hon. Alex. Mitchell, Milwaukee. Private place preferred. Address: **JOSEPH POLLARD**, 87 10th St., Milwaukee, Wis.

SITUATION WANTED—Gentleman competent in floral, seed and nursery business (theoretically as well as practically), desires to enter an active engagement. He speaks several languages. Address: **GARDNER-ZETTEL**, No. Lombard, Cook Co., Ill.

SITUATION WANTED—By a thoroughly practical and competent rose grower and general propagator; capable of taking charge of commercial or private concern. Single man; good references. Address: **F. N.**, care American Florist, Chicago.

SITUATION WANTED—By a practical rose grower and plantsman, well up in the commercial business; capable of taking full charge of commercial place; best of references; 30 years old, and single. State salary. Address: **MALCOLM**, care American Florist, Chicago.

SITUATION WANTED—By a good gardener and florist of 13 years' experience in all branches; German; single, age 29; competent to take full charge or will run a place on shares. Address: **HELMANN WILK**, Steam Laundry, 115 Prince Street, New York City.

SITUATION WANTED—After April 18, by a young single man, of 4 years' experience in growing roses and propagating. Well experienced in forcing bulbs, designing, decorating, building of greenhouses, glazing and all general florist work. Best of reference from present employer and others. Address: **Box 25**, F. E. C. Gowanstown, Balto. Co., Md.

SITUATION WANTED—As gardener, married, desiring engagement, either private or commercial, 15 years' experience in orchid growing, stove and greenhouse plants, vineries, etc., and all branches of gardening and florist profession. Can produce the best of references. Address: **ARTHUR**, care Siebrecht & Wadley, New Rochelle, N. Y.

SITUATION WANTED—By a florist, German, practical, conversant with the culture of cut flowers and culture of plants. Roses a specialty. Capable of taking charge and managing commercial or private place. Can furnish first class proof of his ability. Address: **HERMAN BERTH**, care Charles Matties, R. R. Ave. Hotel, White Plains, N. Y.

SITUATION WANTED—Private or commercial. By a first class florist; German, age 33, married, no children; fully experienced in all branches of the business; is capable to act as propagator, or take full charge of a large commercial place. Wages expected, \$30 per month; steady employment for the future expected; can furnish first class references. None but those meaning business need apply. Address: **S. A. BAI**, care Hill & Co., Richmond, Indiana.

SITUATION WANTED—Landscape gardener and florist; German, married, age 35, desires engagement as superintendent or manager in public park, cemetery or any such responsible position. Has previously held such positions, and has good references; is well posted in the growth of roses and all classes of stove and greenhouse plants; making up floral designs, etc., and everything pertaining to the above profession. Address: **G. C. L.**, Forest Glen, Cook Co., Ill.

SITUATION WANTED—By a practical florist and gardener; single, age 21, 10 years' experience North and South. First class rose grower; thoroughly understands the business in all its branches. Also good greenhouse builder, and thoroughly familiar with heating apparatus—steam and hot water both. A competent man for parties wishing to start up a new business in the South. None but first class parties need apply. Address: **H. E.**, care American Florist, Chicago.

WANTED—To rent a small greenhouse business; well located. **M.**, care American Florist.

WANTED—25 to 50 strings of snailx per week regular, if good. **J. M. GASSER**, 101 Euclid Ave., Cleveland, Ohio.

WANTED—Young man as gardener's assistant in handling bedding stock. Wages low at first. **W. N. RUDOLPH**, Supt., Mount Greenwood, Ill.

WANTED—Competent florist who understands growing plants and cut flowers for market. Situation permanent. State terms and wages required. Address: **F. B. BIRD**, Bellevue, Pa.

WANTED—A young man who understands making up bouquets and floral designs, and knows the names of bedding plants, to act as salesman; must have references. **CHAS. KROMBACH**, 181 25th St., Brooklyn, N. Y.

WANTED—A good, thorough florist acquainted with the business in all its branches; single. A German-American or German preferred. A man not afraid to work will have a permanent position—and only such need apply. **HENRY EISENTHORST**, 118 to 120 South 11th St., Omaha, Neb.

WANTED—A young, sober and industrious first class florist, with \$2000 or \$3000 cash can hear of a first class chance to share in a well established business in one of the largest and liveliest cities in the Northwest by addressing: **PARTNER** 30, care American Florist, Chicago.

WANTED—General manager for a large nursery; a man with good business ability, well posted in all branches, including herbaceous plants and orchids also some knowledge of bookkeeping. Liberal salary will be given to right man. Address with full particulars and references to: **W. A. M.**, care American Florist, Chicago.

WANTED—A thoroughly competent florist, who understands the care and cultivation of general greenhouse stock, and forcing of roses and bulbs. Must be strictly sober, honest and industrious. No children. Must have a permanent position. To the right party a permanent position is assured. Address, stating salary expected and references: **G. W. CURRY & CO.**, Nashville, Tenn.

FOR SALE—The E. Y. Teas Dunreith Nurseries. Price \$200, will invoice \$300. This is a great bargain. Address: **A. T. HEDGECOCK**, Dunreith, Ind.

FOR SALE—To florists. Two greenhouses in perfect condition, containing choice roses, grapevines, camellias and many other plants, in Arlington, five minutes walk from steam and horse cars. The lot containing about 2000 feet. Has also a double house; each house containing six rooms. More land adjoining can be bought if desired. Terms easy. Address: **KIRBY & FAY**, 170 W. 4th St., Boston, Mass.

FOR SALE—Owing to poor health, I will sell my greenhouses with business and cottage of five rooms, situated in a live town of 10000 inhabitants, 12 miles from Chicago, 30 trains daily. 7000 square feet of glass, heated by hot water, supplied by a run from water works. Good established trade of 10 years standing. A bargain to the right party. For particulars, address: **JOHN S. FOSTER**, 7 S. Oak Ave., Evanston, Ill.

FOR RENT—Cheap, extraordinary chance. Six good sized greenhouses, all improved with hot water boilers and steam heating, croton water. Located at the north entrance to the largest cemetery in the City of New York. Well established trade by the same name that now has charge over 15 years. Over 1000 lots to care for and decorate. Only responsible parties need apply. Address: **L. G. WILSON**, Mt. Vernon, N. Y.

WANTED 2000 FICUS ELASTICA

or any part thereof. 2 to 4 inches.
LOW FOR CASH.

F. L. TEMPLE, Cambridge, Mass.

Roses, Etc. Wanted for Spot Cash.

I want 1000 or more each, of Jacqs, Dinsmore, La France, Ball of Snow, American Beauty, Lady Mary Fitzwilliam, Pierre Guillot, well rooted in 2 1/2 or 3-in. pots. Also same in 2 year old plants. Parties sending quotations on any of above, must mail sample of 3-in. pot plants and state height of average 2 year old. Goods must come up to sample when ordered. Also quote price for 1000 Dwarf Pearl Tuberoses, flowering bulbs and sets.

J. S. BAKER, Peekskill-on-Hudson, N. Y.

WANTED. 500 GEN'L JACQUEMINOT ROSES.

strong plants, own roots, dormant, 2 years old. Address with price,

J. NEWMAN & SONS,
Winchester, Mass.

FOR SALE.

Great chance to buy first class Florist business, 500 feet of glass, retail trade, long established. Business never better, fine Summer Beach trade. Good reasons for selling. Nice Dwelling and Five Acres of Land make property valuable. Part can remain on mortgage. This is a rare chance and can be easily investigated. Address

M. E. HUTCHINSON & CO.,
PORTSMOUTH, N. H.

Greenhouses for Sale.

In one of the best locations in the State, near New York City.

Eleven Greenhouses, with windmill, tank, etc., unfailing supply of water, well stocked and doing a thriving business. Nine acres of land with a neat comfortable cottage. The whole forming a most eligible plant for a florist.

Terms very reasonable. Apply to

AUGUSTUS TABA,
GRAND UNION HOTEL, NEW YORK.

ROSES.

	Per 100	Per 1000
50,000 Teas, healthy stock, 2-in. pots...	\$4 00	\$40 00
10,000 Hybrids, 2-inch.....	5 00	50 00
Many NEW Sorts at Special Rates.		
Poppy Perennial and Firebrand, ex. fine	5 00	35 00
BIGNONIA GRANDIFLORA, deep red, 2 feet.....	4 00	35 00
Agapanthus Umbellatus (African Lily) 1 year.....	4 00	40 00
Cyclamen Gigantea, 1 year, finest strain	4 00	40 00

Send for WHOLESALE PRICE LIST or send lists to be priced. We carry the largest and most varied stock in the South-West. 3 acres under glass

Address **NANZ & NEUNER,**
LOUISVILLE, KY
Mention American Florist.

B. B. NOURSE & CO.,
WESTBORO, MASS.,
MANUFACTURERS OF
GARDEN TRELLISES,
PLANT STAKES AND WOOD LABELS.
Mention American Florist.

GIANT MOON FLOWER; TRUE VAR. WHITE SEED.
I am now ready to contract for above, fall delivery 1889, 300 lbs. Also 2nd size Pearl Tuberoses, \$5.00 per 1000. Orders solicited now for Antigonon leptopus at \$10.00 per 100. 2 1/2 year. Cacti from 5c. to \$25 each.
Mrs. J. S. R. THOMSON, Spartanburg, S. C.
2 years State Vice-President S. A. F.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

NEW PEDIGREE ROSES FOR 1889.

CELEOPATRA, Tea; first class certificate Royal Horticultural Society.

DULCE BELLA, Tea. MAID OF THE MIST, Hybrid Tea; a white sport from Lady Mary Fitzwilliam.

MULTIFLORA ALBA, Polyantha; first class certificate Royal Horticultural Society; first class certificate Royal Botanic Society.

Grafted plants ready in May. Descriptive Price List will be mailed to all correspondents free on application.

H. BENNETT, Pedigree Rose Nursery.

SHEPPERTON, MIDDLESEX, ENGLAND.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,
MOUNT HOPE NURSERIES, ROCHESTER, N. Y.

ROSES.

All the best NEW and Standard Varieties of
Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand.
Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first-class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,

SUMMIT, NEW JERSEY.

Mention American Florist.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, offer the best results to the florist, blooming freely and giving plenty of cuttings for propagating quickly. Fine plants for sale by the 100 or 1000, at low rates.

Price Lists to applicants. Address

WILLIAM H. SPOONER,

JAMAICA PLAIN, (Boston), MASS.

SURPLUS.

5,000 Young Jacqueminot Roses,

well established in pots. Out of pots, at \$4.00 per 100.

JNO. G. EISELE,

20 Ontario Street, PHILADELPHIA, PA.

JOHN CURWEN, Jr.,

GENERAL

GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

A. C. TUCKER, ROSE GROWER,

P. O. BOX 190.

NYACK, N. Y.

I would like to give my prices for the following varieties in 2, 3, or 4-inch pots to any parties desiring the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI
LA FRANCE, NIPHETOS,
MERMET, BRIDE,
AMERICAN BEAUTY, PAPA GONTIER.

Mention American Florist.

STANDARD ROSES,

4 to 5 feet high.

The largest collection in the United States.
All first class pot grown plants.

Gabriel Marc,

WOODSIDE, L. I., N. Y.

NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, Hybrid Teas, and Hybrid Perpetuals, and novelties in Chrysanthemums. Also Tabernaemontana, Bouvardias, Carnations, and general greenhouse stock.

Trade List mailed on application.

JACOB SCHULZ,

LOUISVILLE, KY.

ROSES FOR SALE.

In first-class condition, from vigorous plants:
MERMETS, BRIDES, PERLES, GONTIERS,
BENNETTS, BON SILENES AND NIPHETOS.
In 2 1/2-inch pots, \$5.00 per 100.

GOODING & LEITCH, Cleveland, O.

APRIL PRICES

— FOR —

FIRST CLASS

STOCK.

Roses, strong, 1 year old, from 3-inch pots. Per 100

Appoline, Aline Sislev, Ophelia, Queen's Scarlet, Pink Daily, Mme. Camille, Louis Philippe, La Pactole, Mme. Melaine Villermoz, Homer, Gerard Desbois, Mme. C. Kuster, Comt de la Barth, Arch Duke Charles, Mme. Alex. Bernaix, Paquerette, Mignonette, Little Pet, Mme. Cecile, Brunner . . . \$7 00

The Bride, thumb pots . . . 3 00

Catherine Mermet, thumb pots . . . 3 00

" " 2 in. pots, strong . . . 4 00

Hermosa, 2-in pots, strong . . . 5 00

Annie Cook, the "New" forcing variety . . . 10 00

Hydrangeas Thos. Hogg and Otaks, 2-in. pots . . . 4 00

" Paniculata Grandiflora, 2 inch pots . . . 4 00

Lemon Verbenas, 2-in. pots . . . 3 00

Ageratums, 3 varieties, 2-in. pots . . . 3 00

Rose Geranium Mrs. Taylor, 2-in. . . 3 00

Geranium Nutmeg Scented, 2-in . . . 3 00

" Lemon Scented, 2-in . . . 4 00

Abutilon Thompsonii plena, 2-in. . . 3 00

" Fl. Layellou, 2-in. pots . . . 2 00

Salvias, four varieties, 2-in. pots . . . 2 00

" Pateus, fine blue flowers, 2 inch pots . . . 3 00

Hibiscus Grandiflora, 2 in . . . 3 00

" Lutens plena, Cooperii tricolor . . . 4 00

Bouvardias A. Neuner and Vreelandi . . . 4 00

" Bockii and Cleveland . . . 6 00

Jasminums Grandiflorum and Revolutum . . . 4 00

" Multiflorum, strong, 2 1/2 in. . . 5 00

Allamadas Hendersonii and Nerifolia 2 1/2-inch pots . . . 7 00

Allamadas Hendersonii and Nerifolia 2 inch pots . . . 5 00

Chrysanthemums in variety, 2 in. . . 2 00

Ipomœa Noctiflora (Moon Flower) 2 inch pots . . . 3 00

" " strong, 4 in . . . 6 00

Cissus Discolor, 2-in. . . 3 00

Cestrum Parqui 2-in. . . 3 00

Erythrina Hendersonii, 2 in . . . 3 00

Begonia Sandersonii, 2-in. \$3, 3 in. . . 5 00

Vincas, blooming varieties, 2-in . . . 3 00

Smilax, 2-inch pots . . . 3 00

Honeysuckles Aurea Reticulata, Halleana and Red Coral, 2-in. . . 3 00

Passiflora Constance Elliott, 2-in. . . 3 00

Swanley White Violets, 2 in . . . 3 00

Cobœa Scandens, strong, 2-in . . . 4 00

Lobelia and German Ivy, 2-in . . . 2 50

Thurbergia Fragrans and Laucifolia, 2 inch pots . . . 4 00

Rhycospermum Jasminoides, 2-in . . . 3 00

Clerodendron Balfourii, 2 in. . . 3 00

Cupheas, two varieties. . . 2 50

25 Plants of above Stock at 100 rates.

ADDRESS

GEO. THOMPSON & SONS,
LOUISVILLE, KY.

FORCING BULBS

FOR

Fall Delivery.

NARCISSUS

AND OTHER

POPULAR BULBS

FOR SPRING FORCING.

Special Prices upon Application.

Narcissus Albicans, large creamy white trumpets, one of the best.

Narcissus Bicolor Empress, the Queen of the bicolors, immense trumpets, a great favorite

Narcissus Bicolor Grandis, similar in color to Horsfieldi; but with stouter flowers and much later.

Narcissus Bicolor Horsfieldi, a great beauty and fine for cutting.

Narcissus Bulbocodium, "Yellow Hoop Petticoat," fine strong bulbs for forcing.

Narcissus Bulbocodium Citrinus, pale sulphur flowers, and very early.

Narcissus Emperor, the largest; immense stout flowers of a rich yellow.

Narcissus Golden Spur, immense deep golden yellow flowers, and wonderfully early.

Narcissus Henry Irving, rich yellow, large bold trumpets.

Narcissus Incomparabilis Cynosure, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white.

Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.

Narcissus Major, true, one of the best forcing sorts, large yellow trumpets, similar to maximum.

Narcissus Nobilis, a first class variety for florists, free and early.

Narcissus Obvallaris, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.

Narcissus Odonus Campernelle, the well known Campernelle Jonquil, very strong bulbs.

Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.

Narcissus Pallidus Præcox, the earliest of all, forces very freely, single, sulphur colored trumpets.

Narcissus Rugilobus, true, large yellow trumpet, very free and very early.

Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.

Narcissus Von Sion, true, the double deep yellow daffodil.

Freesia Refracta Alba, large bulbs for forcing.

Freesia Leichtlini, a nice contrast to preceding and forces well.

Gladiolus The Bride, flower pure white, fine for forcing.

Helleborus or Xmas Roses in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

R. S. BROWN & SON

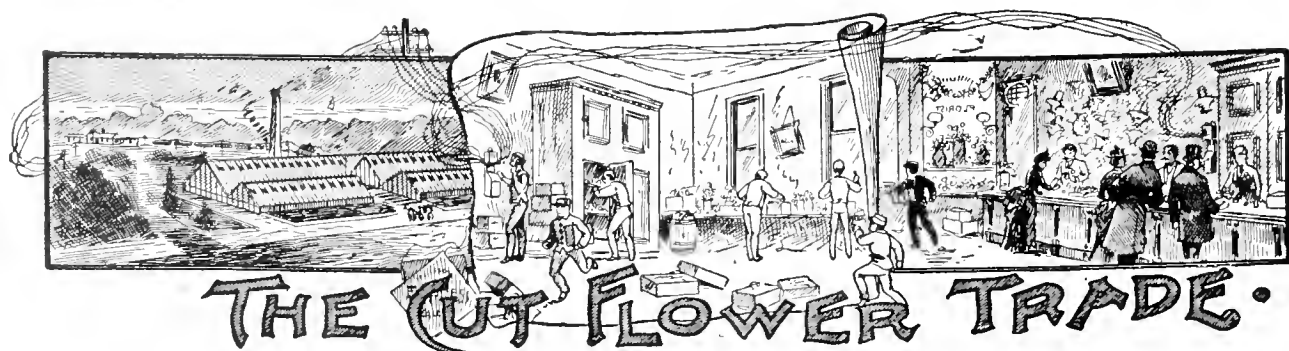
PLANTS TO THE TRADE.

We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

- Abutilons of sorts . . . \$1, \$6 and \$8 00
- " Eclipse, new, var. foliage 8 00
- Ageratum, W. Cap, Cope's Gem, \$3, 4 00
- Anthericum Vittatum . . . 8 00
- " Picturatum . . . 12 00
- Achyranthes, 2 kinds . . . 3 00
- Alyssum of sorts . . . 4 00
- Asclepia, white flowers . . . 6 00
- Alternanthera Spectabilis, new var. . . 6 00
- " Aurea Nana . . . 3 00
- " Paronychoides . . . 3 00
- " Versicolor & Tricolor . . . 3 00
- Begonia, Flowering Rubra, Weltoniensis Rubra, Alba, Zebрина, Robusta Alba Picta G. Scandens, Brunanti, Metallica, etc. . . \$4, \$6 and 8 00
- Balm, variegated . . . 4 00
- Calla, Richarda Maculata . . . 6 00
- Cobœa Scandens . . . 8 00
- Chrysanthemums in variety . . . 3 00
- Coronilla Glauca Variegata . . . 8 00
- Caladiums, fancy leaf of sorts . . . 16 00
- Coleus of sorts, best new and old . . . 3 00
- " Verschaffeltii, Golden Bedder . . . 3 00
- " Rag Carpet, Louise Beck and Mrs. Hunt . . . 4 00
- Cannas of sorts . . . 5 00
- Cuphea (cigar plant) . . . 3 00
- Centaurea Gymnocarpa . . . \$4 and 6 00
- Cineraria Maritima . . . 4 00
- Cyperus Alternifolius . . . 8 00
- Daisies, white and pink . . . 4 00
- Dew Plant . . . 4 00
- " " variegated foliage . . . 6 00
- Echeveria Glauca . . . 5 00
- Euphorbia Splendens . . . \$4, \$6 and 8 00
- Ferns of sorts named . . . \$8 and 12 00
- Fuchsias, best dbl. & sgle. \$3, \$4 and 6 00
- " new of sorts . . . 10 00
- Geraniums of sorts dbl & sgle \$3, \$4, 6 00
- " of sorts scented. . . \$3, \$4, 6 00
- Heliotrope, \$3, 4, \$6 White . . . 6 00
- Hollyhock double, nice plants . . . 8 00
- Hibiscus of sorts . . . \$4, \$6 and 8 00
- Isolepis Glauca and Gracilis . . . 6 00
- Ipomœa Learii, Blue Moon Flower . . . 6 00
- " Palmata, Mexican . . . 12 00
- Impatiens Lucy and Sultana . . . 6 00
- Lycopodiums of sorts . . . 8 00
- Lantanas of sorts . . . \$6 and 8 00
- Lobelias for Baskets. . . \$3 and 4 00
- " Ribbon lines or Beds, \$3 and 4 00
- Money Wort . . . 4 00
- Moon Flower, true . . . 5 00
- Oxalis double yellow . . . \$4, \$6 and 8 00
- " single yellow . . . \$4, \$6 and 8 00
- " pink and white . . . 4 00
- Passiflora Incarnata, hardy true . . . 4 00
- Petunias, best double of sorts, \$6 and 8 00
- Pansies, large flowering . . . 3 00
- Perennial Phlox of sorts . . . 6 00
- Pothus Variegata, fine for vases . . . 8 00
- Pilea Arborea or Artillery plant, \$4, 6 00
- Rosemary . . . 8 00
- Roses Everblooming of sorts . . . 4 00
- Salvias of sorts . . . 6 00
- Stenotaphrum . . . 6 00
- Strawberry Geraniums . . . 5 00
- Smilax . . . 3 00
- Thyme Golden . . . 4 00
- Vincas, shrubby for bedding . . . 6 00
- " trailing for baskets, 2 kinds. 6 00
- Verbenas of sorts . . . 3 00

ADDRESS

R. S. BROWN & SON,
BOX 99, KANSAS CITY, MO.



New York Notes and Comments.

Abutilon "Eclipse" was recently noted at Hendershott's. It is a seedling which in growth and character of flowers suggests *A. mesopotamicum*, but it is very much larger and more striking. The variegation is exceedingly handsome and distinct; in fact, it may be called the handsomest variegated abutilon we have.

Mr. Klunder recently gave an opening at his new store, Broadway and 26th street, which is much larger and better arranged than his old place. It is as yet unfinished, but the intention is to arrange a pretty little reception room at the back of the store, for the convenience of customers. The exhibition at the opening was really charming, giving evidence of the fine taste for which Mr. Klunder is noted. In one window was a very large Marie Antoinette basket of silvered willow, standing on a bed of lycopodium. It was filled with an apparently careless mass of pale-tinted lilac, bordered with *Primula obconica*; Mabel Morrison roses were in the midst of the lilac, and a few sprays of lily of the valley were above. A bow of white ribbon was on the handle; the arrangement in all these pale tints had a look of exquisite purity. Another larger window had the ceiling covered with smilax, dotted here and there with cattleyas; some pillars were twined with smilax and hung with orchids. The lower part of the window was filled with plants and flowers, chiefly orchids and fine roses.

Another very showy basket on exhibition was a very large French fish basket, filled with a loose mass of yellow daffodils, with a large ruby colored sash tied around it. A charming arrangement in yellow was a tripod basket filled with yellow tulips and genista. The great charm of all the arrangements seen here was their look of natural simplicity, which was really the perfection of art. They were confined to one tint, if not one variety. The main exhibition, apart from the baskets, consisted chiefly of roses, and very fine ones; all the leading varieties were shown. It was a most charming exhibition, remarkable alike for fine flowers and for the exquisite taste displayed in their arrangement.

A very pretty arrangement was noted in Thorley's window the same day. A ground work of smilax had eucharis flowers dotted amongst it; this had a border of violets. In the center stood some large vessel (I have a suspicion that it was an everyday barrel in disguise) wearing a tremendous sash of pale lavender ribbon. This was filled with a loose mass of orchids, chiefly cattleyas, relieved by maidenhair fern. The arrangement was tasteful and the coloring was most harmonious. Florists' windows, as a rule, are now arranged with far more taste and profusion than formerly.

Mr. J. G. Esler is the happy possessor of a batch of new seedling carnations; one with the color of a La France rose has, he thinks, a future before it. We want another thoroughly reliable marketable pink carnation; Grace Wilder is not always satisfactory, though about the best yet.

Some of the patriotic florists are trying to arrange for a floral arch to be erected somewhere on the line of the procession at the Centennial Inauguration celebration. It is a laudable undertaking, no doubt, though hardly a remunerative one.

EMILY LOUISE TABLIN.

Boston.

Reports from other markets indicate a bad break in the flower trade, with little demand and ruinous prices. It is gratifying to be able to report a better state of things here. Prices have of course fallen, but the drop has been gradual and the demand has remained remarkably steady. The general verdict of florists in this vicinity is that Lent has never before made so slight an impression on their business. The quality of flowers in the market now is excellent. Jacqs and hybrids are not so plenty as they were. *Adiantums* are still scarce, and smilax is also in short supply with price advanced.

Messrs. Anderson, Taylor, Roehrs and Assmus came up from New York and made a visit to some of the prominent establishments about the Hub. The only serious obstruction they met with was a certain "stone fence" out at the Arnold Arboretum, which proved to be more than a match for one of the party.

The delegation from Boston to the annual supper of the Philadelphia Florists' Club consisted of two commission men. The fact of their being seen together gave rise to divers rumors of combinations and dangerous schemes, and an additional guard has been placed at the outer gate. In the meantime the two aforesaid commission men enjoyed to the utmost the unbounded hospitality of their Philadelphia friends.

Norton Bros. are showing fine specimens of Ulrich Brunner. W. J. S.

Washington.

So much was promised us in the way of floral decoration on the occasion of the inauguration ball that your readers will no doubt expect an elaborate description. These decorations we were told would "cost \$7,000" and it would "require at least seven car loads of flowers to carry out the decorator's very elaborate designs." The facts are: that the committee in charge only agreed to pay \$2,700, or about one half the amount suitable decorations for such an occasion and such a place could have been put up for. The result, as might have been ex-

pected, despite of laudations in the daily papers, is, that the committee received just about what it paid for.

The less said in regard to the floral feature of the decorations the better. The display of rare plants was meagre in the extreme and did nowhere equal what can be seen in the east room of the executive mansion at any ordinary reception. Cut tops of the crowns of our commoner variety of sabals, badly withered at that, graced(?) the seventy handsome vases arranged along the upper balustrade. The only redeeming feature was a liberal festooning with smilax and the generous supply of well made garlands of laurel. Were floral decoration confined to twining laurel around columns and festooning from every available point, then indeed no one could have found fault with the display here, but to call the "Ship of State," the "Floral Globes," "Departmental Emblems," and "Presidential Chairs" anything but abortions would belittle the profession throughout the country.

I shall therefore refrain from saying anything more than to express the hope that at future inaugurations the art in this country may be represented in a manner commensurate with the high standard it has attained. Z.

Chicago.

Cut flower trade very fair for the season. Quality not quite as good as a few weeks since. Smilax is in short supply and Jacqs not very plentiful. Other flowers are all in good supply with a surplus of some varieties of roses.

N. Singler, of Washington Heights, is cutting some of the finest Jacqs ever seen in this market. They are beauties.

Walter Kreitling will remove to 231 Wabash avenue May 1, where he has rented a large double store and basement. He will add fruits to his present cut flower business. Walter is one of the most popular "city bouquetists" and should do well at the new stand.

Chas. Reissig has returned from a trip east.

NEW YORK MARKET.—Since the beginning of Lent the commission men have been loaded right down; the market is glutted and flowers are low in consequence. Everyone is cutting a great deal of stuff, which naturally affects the market, already dull. Some fine Christys have brought \$6 a dozen since Lent began, but as a rule hybrids are cheap, like everything else. It is expected that within another week the market will materially improve. Jacq roses are very plentiful and are good; a few fine Prince Camille de Rohan are meeting with approval. Flowers generally are very good.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements, 10 Cents a Line, Agate; Inch, \$1 10, Column, \$14 00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent, 6 months, 10 per cent; 12 months, 20 per cent

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it

Orders for less than one-half inch space not accepted.

Advertisements for April 15 issue must REACH US by noon, April 9. Address

THE AMERICAN FLORIST CO., Chicago.

E. V. HALLOCK, of Hallock & Son, expects to sail for Europe in June, as will E. G. Hill, and we presume President John N. May.

FINE CYCLAMENS—Mr. John Lawrence, Harrisburg, Pa., sends us a dozen cyclamen blooms of extra large size and good colors. The petals measured from 1 1/2 to 2 inches in length.

VAUGHAN'S CELERY MANUAL, a treatise on celery culture, has been received from the publisher, J. C. Vaughan, Chicago. It will undoubtedly prove of interest to growers of this vegetable.

	Per 100
Roses, Fancy Stock	\$ 5 00
" Jacqs.	8 00
" Am. Beauties	15 00
Carnations, short	1 25
long	1 50
Valley and Narcissus and Tulips	4 00
Smilax	20 00
Callas	10 00
Pansies and Daisies	1 00
Candi-tums, Longiflorum	8 00
Violets	.75
Harrisii Lilies	12 00
Heliotrope and Mignonette	1 00
Adiantum Ferns	1 00
Common	.30
Hyacinths	5 00
Palm Leaves	\$1 25 each
Palmetto Leaves	\$1 00 doz.

Prices subject to change without notice.
NOTE.—We will have a good supply of Trailing Arbutus in a few days. Write us for supply. Parties having good Smilax to spare for Easter, please drop us a line.

THE WISCONSIN FLOWER EXCHANGE,
133 Mason St., MILWAUKEE, WIS.

**KENNICOTT BROS.,
WHOLESALE FLORISTS,**

TO THE TRADE ONLY.
ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.

**A. S. KIMBALL,
WHOLESALE CUT FLOWERS,**

Shipping Trade my Speciality.

Consignments Solicited.
170 LAKE STREET, CHICAGO.

**WELCH BROS.,
WHOLESALE FLORISTS,**

165 Tremont Street, BOSTON MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.
Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rate shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

BOSTON, March 25.

Roses, Ters.	\$2 00 @ \$4 00
" Niphetos	4 00 @ 5 00
" Perles, Sunsets	5 00 @ 6 00
" Brides, Mermets	6 00 @ 10 00
Carnations, short	.50 @ .75
Carnations, long	1 00 @ 1 50
Valley	3 00 @ 4 00
Tulips	3 00 @ 4 00
Daffodils	1 00 @ 1 00
Callas	6 00 @ 8 00
Harrisii	12 00 @ 15 00
Violets	.50 @ .75
Smilax	15 00 @ 20 00
Primula obconica	4 00

NEW YORK, March 25.

Roses, Mermets, Brides	\$3 00 @ \$6 00
" La France, Cusins	5 00 @ 8 00
" Bon Silene, Gontier	1 50 @ 2 00
" Perles, Niphetos, Sonvs.	2 00 @ 4 00
" Bennetts	2 00 @ 5 00
" Jacqs	6 00 @ 10 00
" Am. Beauty	10 00 @ 25 00
" Hybrids	10 00 @ 25 00
Lily of the valley	2 00 @ 3 00
Daffodils, Tulips	2 00 @ 3 00
Violets	.35
Carnations, long	1 00
Carnations, short	.50
Smilax	15 00 @ 20 00
Asparagus	.25 @ .35
Callas and Harrisii	1 00 @ 8 00
Lilac, per bunch	.50

PHILADELPHIA, March 25.

Roses, Perles, Niphetos	\$5 00
" Mermets, Brides	8 00
" Jacqs	15 00
" Bennetts, La France	8 00
" Gontiers	5 00
" Am. Beauties	20 00
Carnations	1 00
Callas	10 00
White Camellias	5 00
Roman hyacinths	5 00
Lily of the valley	4 00
Lilium longiflorum	14 00
Narcissus	6 00
Tulips	4 00
Smilax	15 00 @ 20 00
Double Violets	.75
Single Violets	.25
Jonquils	5 00
Adiantums	1 00

CHICAGO, March 27.

Roses, Bon Silene	\$3 00 @ \$4 00
" Perles, Niphetos	15 00 @ 30 00
" Jacqs	12 50
" Mermets, Brides	7 00 @ 8 00
" Bennetts, Dukes	7 00
" La France	7 00
Carnations, short, white	1 00 @ 1 25
Carnations, long white	1 25 @ 1 50
Carnations, short, colored	.75 @ 1 00
Carnations, long, colored	1 25 @ 3 00
Romans, Valley	4 00
Tulips	3 00 @ 4 00
Daffodils	4 00
Smilax	20 00
Violets	50 @ 1 00
Adiantums	1 00 @ 1 50
Candi-tums, long	8 00
Harrisii lilies	10 00 @ 12 50

**WM. J. STEWART,
Cut Flowers & Florists' Supplies**

WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

**N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS**

and Jobbers in Florists' Supplies,
1 MUSIC HALL PLACE, BOSTON, MASS.

Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

—Auction Sales of Plants Spring and Fall.—

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety.

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

#2—For further particulars, address

GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.

**Thos. Young, Jr., & Co.,
Wholesale Florists,**

INCORPORATED 1885,

20 W. 24th St., NEW YORK.

CUT FLOWERS.

We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,

PROMPT SERVICE,

GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEP'T,
Telegrams, 88 State, CHICAGO.
Letters, box 688,

**W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

**LaRoche & Stahl,
Florists & Commission Merchants**

—OF—
CUT FLOWERS,

1237 Chestnut Street, PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

**C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,**

Telephone 977. WASHINGTON, D. C.

Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermel.

And other standard sorts.

**EDWARD C. HORAN,
WHOLESALE FLORIST,**

36 WEST 29TH STREET,
The Bride, Mermel,
and Am. Beauties,
SPECIALTIES. NEW YORK.

**HAMMOND & HUNTER,
Wholesale dealers in
Cut Flowers and Florists' Supplies**

61 West 30th Street, NEW YORK.
**GEO. MULLEN,
WHOLESALE FLORIST**

17 CHAPMAN PLACE, 17 (near Parker House.)
SPECIALTIES.
VIOLETS, ROSES IN VARIETY, SMILAX, FANCY
CARNATIONS, LILY OF THE VALLEY, TULIPS,
HYACINTHS, NARCISSUS. ETC.

**CHAS. E. PENNOCK,
WHOLESALE * FLORIST,**

38 So. 16th Street, Philadelphia, Pa.

**THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.**

Beauty, Bride, La France, Perle,
Bennett, Niphetos, Mermel, Papa Gontier
CHAS. L. MITCHELL, MGR.,
P. O. Box 188, CINCINNATI, OHIO.

Also plants of above by doz., 100 or 1000. 2, 3 & 4-in. Select Stock. Plants in quantity at discount.
* WHITE FOR PRICES.

The Seed Trade.

SEED TRADE ASSOCIATION.-Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

C. A. EICHMAN has re-opened his seed store on West Randolph street, Chicago, with Thorburn's seeds.

WE NOTICE eastern seedsmen advertise Alfalfa in California at \$9 per bushel. There's nothing like enterprise.

PHOTOGRAPHS of the American Seed Trade Association taken at Chicago last June may now be had at \$3 each.

THE A. B. CLEVELAND CO. will continue business; they are reported to have recently assessed stockholders \$50,000.

LIVINGSTON'S SONS fortunately saved the mailing department of their business and were thus enabled to go ahead with their mail trade.

WILLIAM CURRIE, of Milwaukee, sailed for Europe March 23. He will spend six months or more abroad, as he has been recently a sufferer from paralysis.

VISITED CHICAGO March 14 to 20: Albert McCullough, Geo. S. Haskell, J. E. Northrup, Frank T. Emerson, T. Webster, C. B. Whitnall, William Currie.

ELMER E. SUMMEY seems to be getting in great work in booming Stachys affinis, even taking in the Country Gentleman with his Choro-Gi. How much has he for sale? Why not advertise it in the AM. FLORIST? ten cents per line.

THE COMMITTEE of the Seed Trade Association appointed at the Chicago meeting to report concerning papers who offer seeds as premiums to their subscribers and which list was to be sent to the trade to aid them in making out their advertising business for the season, report to the FLORIST March 5, as follows: "Owing to lack of files of last spring's papers, the committee found it impossible to make an intelligent report."

WM. HENRY MAULE, Chairman.

THIS IS A SPECIMEN of the seedsmans' mail about this date:

"GENTLEMEN:-Some time since, in fact a considerable some time since, if not a longer period, I enclosed postal note to you with order for 'American Wonder Peas,' etc., since which time I have not heard from the peas, you or the 45 cents. Your receptive capacity seems to be good, but evidently there is a languor pervading your responsive faculties which may be chargeable to the 'spring fever.' If the peas are out of season as seems to have been the case with the bulk of my order this spring, send something that will grow and is fit to eat. If it is necessary I can wait until next spring, as soon it will be too late for this. All this without regard to something written in the second order this spring. Yours, &c., _____, Texas.

PLANTS AND ROSES.

- H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
Moss Roses, 1 year, open ground, \$12.00 per 100.
Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
Hydrangeas Hortensis, Otaksa, T. Hogg, 4-in., 5-in., 6-in., \$10.00, \$12.00 and \$15.00
Carnations, newest and best varieties, from 3c. to 6c.
Ivy, English, 20 inches long, \$3.00 per 100.
Amaryllis Formosissima \$8.00 per 100.
Cannas, \$2.50 per 100.
Chrysanthemums, best sorts, \$3.00 per 100.
Crape Myrtle, \$5.00 per 100.
Palms, 18 var. Dracaenas, Pandanus, 4 varieties.
A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

E. HIPPARD, YOUNGSTOWN, OHIO. Mention American Florist.

APRIL OFFER.

Table listing various plants and their prices per dozen. Includes Hydrangeas, Gloxinias, Geraniums, Begonia, Fuchsia, Abutilon, Eucharis, Verbena, and Bouvardia.

Pansy Seed of above (Yellow Giant), which is the best yellow variety known. Price, trade packet of about 1000 seeds, \$1.00

No order filled from above list (seeds excepted) for less than \$2.00. Add postage if ordered sent by mail. No trade list. Retail catalogue with Trade Discount mailed upon application.

ELLIS BROS., Keene, N. H.

Mention American Florist

Pansies that are Pansies

BUGNOT'S AND CASSIER'S EXCELSIOR STRAIN.

At a trial of all the leading strains obtained direct from the introducers, and planted side by side, by Mr. Denys Zingiebel, in his large trial house (150x15 ft.)...

We contracted with Mr. Zingiebel to save the seed of these strains, and we have the entire stock.

For anyone who wants a Pansy to compete against all comers, this is the one.

In packets of 100 seeds each, 50 cts, 1000 seeds, \$4.00.

SCHLEGEL & FOTTLER, BOSTON MASS.

THE BAY VIEW NURSERIES

Have a splendid assortment of rare Tropical Fruit and Ornamental Plants suitable for conservatory culture.

50,000 PANCRACTIUM CARIBBAEUM. flowering bulbs 2 to 2 1/2 inches in diameter, at \$3 per 100, \$25 per 1000.

Anyone in the trade who wants Southern grown stock can not do better than apply to us. Address

R. D. HOYT, MANAGER, BAY VIEW, FLORIDA.

CHAS. T. SIEBERT,

The Restless and Sleepless

WHOLESALE FLORIST OF PITTSBURGH, PA.

Grows and sells Carnation Silver Spray because they pay. By all odds the very best long-stemmed white that grows; best bloomer, best grower.

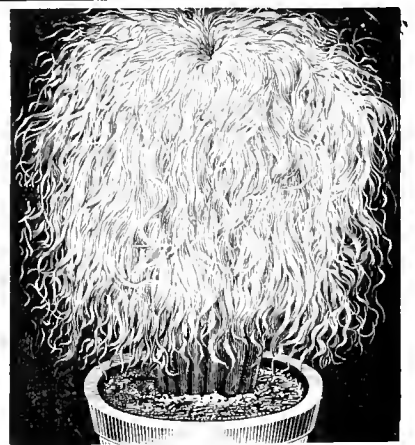
Illustration of an elephant with 'WELL ROOTED' written on its side, next to text: 'For Cash Only. Healthy Well Grown and True to Name. PLANTS AND Rooted Cuttings.'

- List of various plants and cuttings with prices: Carnations Hinze's White, Snowdon, Grace Wilder, etc.

NOTICE:-Please do not send private checks. I have no Catalogue but give the worth of your MONEY in every order. Every order is packed with the greatest of care, with my own personal attention, in the lightest possible way. I study to please ALL.

CHAS. T. SIEBERT, Stanlon Ave. East End, PITTSBURG, PA.

Mention American Florist



HEADQUARTERS FOR RARE CACTI.

A. BLANC & CO. PHILADELPHIA.

Wholesale price list free. 72 page illustrated catalogue 10 cents.

CLEMATIS.

- List of Clematis varieties and prices: LARGE-FLOWERED SORTS, HYDRANGEA P. G., IERMOOSA and MALMAISON ROSES, SMITH IMP. GOOSEBERRY, CLEMATIS VITALBA, etc.

CASH WITH ORDER.

W. H. SALTER, Rochester, N. Y.

NOVELTIES IN FLOWER SEEDS

FOR 1889.

Offered by **John Gardiner & Co., 21 N. 13th St., PHILADELPHIA, PA.**

SHIRLEY POPPIES The most chaste and beautiful of all single Poppies. The colors are very waxy and graceful in the sun, and run through all shades of bluish and white to rose and crimson. Surprisingly lovely. Packet 25 cents. See *Gardener's Chronicle* for March 9th, '89, for full history of this.

CUP AND SAUCE CANTERBURY BELL An odd and remarkable strain of this favorite old-fashioned flower, comprising great variety in color and much diversity in form and habit. Packet 15 cents.

AUBRETIA LEICHTLEINI A very fine variety with flowers of a brilliant carmine-rose; much larger and finer than any other *Aubretia*, and a welcome addition to our list of dwarf, early, spring-flowering perennials for rock work, etc. Pkt. 25c.

KALANCHOE CARNEA This promises to be one of the most valuable additions to our list of winter-flowering plants. Flowers in mid winter, like the *Florea*, and bears large numbers of delightfully fragrant pink flowers. Being long-stemmed and free flowering, it will make a good subject for cutting, etc. Packet 25 cents.

NEW MINIATURE SUNFLOWER This very charming sunflower was in great demand last season for cut flowers. The blooms are small, single, bright golden yellow, with dark centre. The plant covers, literally, itself with flowers from July to October. Perfection for cutting. Packet 10 cents.

SEND FOR OUR LIST OF NOVELTIES AND SPECIALTIES FOR THE TRADE.

Address all orders and communications to **JOHN CARDINER & CO., 21 North 13th Street, Philadelphia, Pa.**

HUGHES' SOLUBLE FIR TREE OIL.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants; such as ferns, etc., if used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

E. GRIFFITH HUGHES,
Operative Chemist,
MANCHESTER, ENGLAND.

PRICE: { Put up in 1 gallon tins, \$3.25 } in New York
 { Put up in 1 quart tins, \$1.00 }

TO SECURE THE GENUINE ARTICLE, see that each tin shows a white label with red trade mark, full directions how to use, and the name of

AUGUST RÖLKER & SONS,
Sole Agents for America.
New York Depot 41 DEY STREET.
Mention American Florist.

PAPER SEED BAGS.
Samples sent to Florists, Nurserymen and Seedsmen. ADDRESS
CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.



TRY **DREER'S GARDEN SEEDS**
Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.
HENRY A. DREER,
Philadelphia

ROFFEA (for tying).

Direct Importation. First Class Stock.
15 cents per pound in small lots.
\$12.00 per hundred pounds.

SALTER BROS., FLORISTS,
ROCHESTER, N. Y.

Faxon's ASTERS

Description AND Price.

My "ROYAL MIXED ASTERS" (a mixture of Truffaut's Peony-Flowered Perfection, Victoria, and Pompon, in twenty-five distinct colors) are unsurpassed for Florists or Private Gardens, giving a great variety for a little money.

Per large packet, 25 cents.

Send for a package, and if you mention this paper I will send you FREE a copy of my essay "ANNUALS AND THEIR CULTIVATION," and my NEW ILLUSTRATED SEED CATALOGUE.

W. B. Faxon
Boston Mass.

Quality.

UNITED STATES NURSERIES,
ORCHIDS,
EXOTIC AND HARDY PLANTS.

THOMAS R. FITCHER
W. A. MANDA.

SHORT HILLS, N. J., Jan. 23^d 1889.

Mr. W. B. Faxon.

My Dear Sir,
Having had the pleasure for the few past years while serving on the Flower Committee of the Mass. Hort. Society to know the excellent strain of your Asters which always carried first prizes on Exhibitions and although we do not carry on seed business yet I think it would be well for us to keep your strain of Asters as we could recommend them very highly to our customers. Please send us one hundred packages to begin with and we hope to write soon for more.

Truly Yours
W. A. Manda
of Fitcher & Manda

BENJAMIN RIMBAUD,
HORTICULTEUR,
QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address. BENRIMBAUD. TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

- PAPER WHITE NARCISSUS,
- DOUBLE ROMAN NARCISSUS,
- LILIUM CANDIDUM,
- ALLIUM NEAPOLITANUM,
- FREESIA REFRACTA ALBA ODORATA,

And many other French Bulbs (good for forcing.) Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

CHOICE STRAINS OF FLORIST'S FLOWERS

AND

SPECIALTIES FOR CUTTING,

Offered by **John Gardiner & Co.,** 21 N. 13th St., PHILA., PA.

- Aster, Prince of Wales, dark crimson, 15 \$3.50
- Aster, Zingebel's Improved, double white, 15 6.00
- Achillea Parmacia fl. pl., double white, 10 1.00
- Balsam, Covent Garden, double white, 10 1.50
- " " scarlet, 10 1.50
- Bellis Perennis " Double English Daisy White, 15 5.00
- " " mixed colors, 15 5.00
- Candytuft, Zingebel's Giant White Rocket, 10 2.00
- Centaurea Sauveoleus, 5 5.00
- Cobaea Scandens, blue, 10 1.00
- " " white, 10 1.00
- Mignonette, Elmwood Giant, 5 5.00
- Stock, Double Florist's White, 10 5.00
- Leposyne Maritima (the New Coreopsis), 10 1.00
- Sweet Pea, "Gardiner's Fairy," extra, Oz. 10c. Lb. 1.00

SEND FOR TRADE LIST OF NOVELTIES AND SPECIALTIES.

JOHN GARDINER & CO., 21 North Thirteenth St., Philadelphia, Pa.

TUBEROSES.

Some well ripened Bulbs, first class, warranted true to name.

DOUBLE ITALIAN, DWARF PEARL, DIAMOND PEARL, AND EARLY SINGLE FLOWERED.

at \$2.00 per 100; \$10.00 per 1000. Special rates on lots of over 5000. Second size bulbs at half the above rates. Offsets of all the above suitable for growing large bulbs first season, at 50c. per 100; \$2.00 per 1000. In lots of over 5000, at \$1.50 per 1000. Smaller sizes, 25c. per 100; \$1.00 per 1000.

Variegated foliage, beautifully striped green and white, single and early flowering, \$3.00 per 100; \$20.00 per 1000. Offsets \$1.50 per 100; \$5.00 per 1000.

JOSEPH W. VESTAL, Little Rock, Arkansas.

BOTTOM KNOCKED OUT

on price of our transplanted Cabbage, Tomato and Lettuce Plants at \$1.00 per 1000 Egg plant and Cauliflower \$1.50 per 100. Not transplanted Cabbage, Tomato, Celery and Sweet Potato \$2.00 per 1000. Send for Wholesale and Retail Price List of bedding plants. Seed Catalogue free. 1000 2 1/2-inch Smilax at \$3.00 per hundred.

ROOP & ZILE, Seed and Plant Growers, Westminster, Md.

PAUL BUTZ & SON'S
Wholesale Trade List for April, 1889.

The plants offered in this list are grown in 2 1/2 inch pots (except noted), are strongly rooted, and in the best possible condition, for immediate shipment. The list includes the leading Novelties and other Florists' Stock on hand, which we can furnish in the quantities and at the prices quoted.

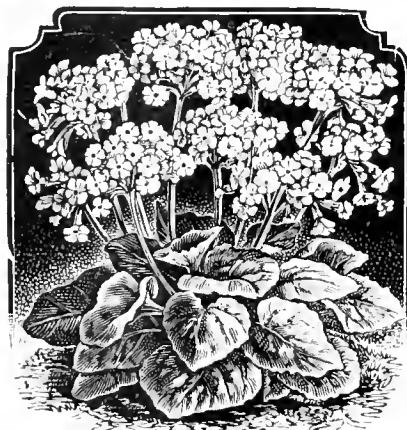
	Per Doz	Per 100		Per Doz.	Per 100
Ageratum, Cope's Pet.	\$ 50	\$ 3 00	Hibiscus, double & single, 3-in.	\$ 75	\$ 5 00
Abutilou, 6 best sorts	60	4 00	Hollyhocks, double, 5 sorts	75	5 00
Achyranthes, 4 sorts	50	3 50	Hydrangea T. Hegg & Otaksa	60	4 00
Asparagus tenuissimus	60	4 00	" " strong, 4 in.	50	10 00
Alternanthera, 3 sorts	50	3 00	Ivies, English, 2 to 3 ft. long	75	5 00
Bouvardia, 5 sorts	75	5 00	" " German or Parlor	50	3 00
Carnations from flats, 1000	\$18	2 50	Lantanas, 8 best sorts	50	4 00
Coleus, 20 sorts, including Verschaffeltii and Golden Bedder	50	3 00	Lobelia, of sorts	50	3 00
Clematis, strong, 2 yr old	2 50		Musk Plants, strong, 3-in	75	5 00
Callas, strong, 4 inch pots	1 25	8 00	Nirembergia gracilis	50	4 00
Cannas, 6 best sorts	50	3 00	Pansies, best German strain	40	2 50
Centaurea gymnocarpa	50	3 00	Passiflora C. Elliott, etc.	60	4 00
Chrysanthemums, 20 sorts	50	3 00	Pelargoniums, 10 best sorts	1 00	8 00
Cuphea platycentra	50	3 00	" " strong, 4 in. pots	2 00	
Daphne odorata, strong	75	6 00	Paris Daisy, fine plants	50	3 00
Dahlias, in variety	75	5 00	Poinsettia, strong, 4 & 5 yr. old	4 00	
Daisies, white, red and pink	50	2 50	Phlox, hardy, 10 sorts	75	5 00
Euphorbia jacquiniiflora, 3 in.	1 00		Roses, Mermet, Bride, Perle, Niphotos, etc., strong	75	5 00
Fuchsias, best double & single	50	3 00	" " ex. strong, 4 in.	50	10 00
" " Storm King, strong	60	4 00	Salvias, 3 best sorts, 3-in	75	5 00
" " double & single, 4 in.	90	6 00	Smilax, fine young plants, \$25 per 1000		3 00
Feverfew, Little Gem	50	3 50	Tropeolum, in variety	50	4 00
Geraniums, 12 best new sorts	60	4 00	Tradescantia, of sorts	50	3 00
" " General collection	90	3 50	Tuberose, Pearl, extra strong	50	3 00
" " strong, 4 in.	50	6 00	Verbenas, Mammoth strain, 1000	\$22.	2 50
" " Ivy, scented & var.	60	4 00	Violets, Marie Louise and Swanley White, fine young plants, 1000	\$15, 100 \$2	
Glaudiolus, best mixed	35	2 00			
Heliotrope, 3 best sorts	50	3 50			

Not less than 25 sold at 100 rates, or six at dozen rates. Our selection of varieties. No charge for boxes or packing.

Catalogue and Wholesale Trade List on Application.

PAUL BUTZ & SON,

Lock Box 97. NEW CASTLE, PENNA.



PRIMULA OBCONICA

Fine 2 inch pot plants \$10 per 100, \$70 per 1000. 250 at thousand rates.

- Coleus, 2-inch pots, in variety Per 100 Per 1000
- " Rooted Cuttings " 2 50 \$20 00
- Geraniums, 2 inch, in variety 1 00 8 00
- " Mme. Sallerot " 3 00 25 00
- Alyssum " " 2 50
- Chrysanthemums in variety " 3 00 30 00
- Fuchsias in variety " 3 00
- " Stern King " 5 00
- " Phenominal " 8 00
- Pelargoniums " 8 00
- Canna Ehemani " 10 00
- " French Hybrids, named " 15 00

I. N. KRAMER & SON,
MARION, IOWA.

HOLLAND FORCING BULBS

And Flower Roots of all kinds. FIRST CLASS Goods.

Great Reduction in Prices. Send for our Price List.

ORDER EARLY. **C. H. C. MACHEN & SONS,**
WHOLESALE BULB GROWERS,
WHOLESALE ONLY. **WARMOND,** (NEAR HAARLEM), HOLLAND.

TUBEROSES.

DOUBLE PEARL AND ITALIAN.

- 12 Large Flowering Bulbs by mail..... 50c.
- 36 Medium " " " " " " " " \$ 1.00
- 1 Barrel (1,500), f.o.b. " " " " " " 12 00
- 1 Barrel Sets or Pips, f.o.b. " " " " " " 5 00

Henry Gulick, SUMMIT, Marion Co., FLA.
Mention American Florist.

BULBS.

TUBEROSE, large double 3 to 5-in Per 100 Per 1000
" " 4 to 6-in. 1.50 10 00
(Special prices on large lots.)
" " Sets clean..... .50

Will exchange Tuberose Sets for Roses.
CANNAS AND GLADIOLI, mixed colors, \$2.00 per hundred.

H. M. HOFFMAN, Leavenworth, Kas.
Mention American Florist.

AUGUST RÖLKER & SONS,
 44 Dey St., NEW YORK,
 Supply the Trade with
SEEDS, BULBS,
 And all kinds of
FLORISTS' SUPPLIES.
 Price List Free on application with
 business card.

DAHLIAS.

50 choice named varieties (dry roots),
 \$1.25 per doz., \$10 per 100, \$80 per 1000
 Mixed varieties, (dry roots), \$1.00 per doz.,
 \$6.00 per 100, \$50.00 per 1000.
 Pot Plants, (ready April 1st), \$1.00 per
 doz., \$6.00 per 100, \$50.00 per 1000.

MICHEL PLANT AND SEED CO.,
 718 Olive Street,
 ST. LOUIS, MO.

"A GREAT HELP IN CUT FLOWER WORK, AND HAS BEEN GREATLY NEEDED"

So say many of FLORAL DESIGNS, concerning which more can be learned by addressing

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The result of many years' careful selection and hybridizing. Habit dwarf, erect and vigorous; blooms of great size and substance. Awarded many prizes and certificates.

10 First Prizes by One Exhibitor, 1888.

TESTIMONIALS.

Cambridge, July, 1888.—"I am pleased with the Begonia you sent me. The habit of the plants is very dwarf, flower stems erect, the flowers looking one in the face as if not ashamed to be seen."
HENRY RIDGEWELL.

MR. E. MOLYNEUX Swanmore Gardens, writes: "I consider the Tuberosa Begonias raised from your seeds are splendid in habit of growth. The blooms are large of perfect form, and borne on stout, erect stalks, just the thing for either pot culture or bedding."

MR. J. P. KENDAL, Templeton Gardens, Rockhampton, writes: "The Tuberosa Begonia seed I had from you last season produced the finest flowers I ever saw, and of every color and shade imaginable. Seed sown in March and August produced enormous flowers of great substance; they were the admiration of all who saw them."

Price of seed in Trade Packets, 10s. 6d. and 21s. each; Tubers, 31s. 6d. per 100; 42s. per 100; 63s. per 100. R. OWEN, F. N. C. S. Floral Nursery, Maidenhead, England.

5000 WHITE ALIUM NEAPOLITANUM in Exchange for PRIMULA OBCONICA BOURVARDIAS or CARNATIONS.

ECKHART & CO., Nashville, Tenn.

CLEMATIS JACKMANNI

And other large-flowering varieties; all on their own roots. Grown in pots in the greenhouse all winter and outside all summer, fine strong plants, now dormant in the cold frame; can be shipped at any time.

W. M. ADAIR, Detroit, Mich.

ROOTED CUTTINGS.

Per 100 Per 1000
COLEUS, Verschaffeltii, Firebrand, J. Goode, etc. \$.50 \$ 7.50
ALTERNANTHERA Aurea Nana..... .50 4.50
STEBIA and Achyrantes Lindum..... .75

JOHN J. CONNELLY, Bryn Mawr, Pa.

Chrysanthemums.

THE GRAND NOVELTY

MRS. W. K. HARRIS,

(raised from seed by W. K. Harris), and other good novelties and older kinds are now ready for distribution. For list

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56 North 38th Street,

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Send for our descriptive circular of the NESIMA Collection of Imported Japanese Chrysanthemums. We offer the cream of the collection to which the now famous "Mrs. Alpheus Hardy" originally belonged.

EDWIN FEWKES & SON, Florists,
Newton Highlands, Mass.

NEW SWEET SCENTED CHRYSAETHUM
"Nymphaea." A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. A so the cream of the collection to which the now famous "Mrs. Alpheus Hardy" originally belonged.
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Offer Selected Specimens of
Japanese Maples, Climbing
Hydrangeas, Rhododendrons,
Golden Oak,

And many other Rare Trees and Shrubs.
Catalogues free for four cents postage.

Per 100
ROSES, Teas..... \$3.00 to \$5.00
H. P..... 4.00 to 6.00
PANSIES, transplanted..... 1.00 to 2.00
CENTAUREA Candidissima..... 4.00 to 6.00
Gymnocarpa..... 3.00 to 4.00
DRACENA, 3/4 to 4-inch pots..... 12.00 to 16.00
ROOTED CUTTINGS, Chrysanthemums,
Begonia Metallica, Geraniums, Coleus, etc. 2.00
Will exchange for Verbena Cuttings.

W. W. GREEN, SON & SAYLES, Watertown, N. Y.

25,000 FINE YOUNG CARNATIONS planted over one month in boxes of 100. Hize's White, P. Henderson, Grace Wilder, Chester Pride, Portia, Scarlet Gem, King of Crussons, Seawan, Anna Webb, strong plants, \$2.00 per 100 \$15.00 per 1000.

Per Doz. Per 100
Begonia Louis Chretien..... \$.75 \$ 8.50
Bonvardias, rooted cuttings from flats..... 1.00
Nemesia Elegans..... per 1000 \$8.00
Fuchsia Phenomenal..... .75 5.00
" Rooted cuttings..... .50 2.00
" Storm King..... .50 4.00
Poinsettia, 2 year, dormant..... 3.00
Palm, Chamaerops humilis..... .75 5.00
All strong, from 2-inch pots unless noted.
JOSEPH E. BONSELL,
308 Garfield Ave., Salem, Ohio.

SUCCESS AT LAST!

COOK'S AMERICAN SEEDLING RED ROSE

THE UNRIVALLED SOUVENIR DE WOOTTON.

BOX SILENE X LOUIS VAN HOUTTE.

BROTHER FLORISTS:

You have wanted for years a continuous blooming red rose, for culture under glass.

First, Came ANDRE SCHWARTZ, the red SAFRANO, which has proved utterly unfitted to our climate.

Second, WILLIAM FRANCIS BENNETT, the superb red bud, which at times is unexcelled. Its faults, however, we all know by this time. No one can prevent its habit of resting or its tendency to black spot. Very few can grow it with sufficient stem. Its fugitive color will always be a great drawback, and its serious lack of lasting qualities, cannot be denied successfully.

Third, Came AMERICAN BEAUTY (synonym, MADAME FERDINAND JAMAIN). That majestic flower, superb in color, in perfume, in growth, but not so free flowering, and occasionally producing defective blooms. We could not get along without it. It has had no equal among the hybrid teas for large work.

Fourth, Came PAPA GONTIER, with good shape, good color, and good foliage, but liable to crop, and with a tendency to drop its leaves, caused probably by its Bourbon parentage. This rose is an excellent shipper and keeper, but alas it has no perfume.

Fifth, Comes our WOOTTON, a genuine American Seedling, with the following good qualities:

First, Color, velvety red, equal to Jacqueminot.

Second, Perfume which cannot be excelled.

Third, Continuous flowering qualities. It has no resting period—blooms and new growth existing at the same time.

Fourth, The most prolific bloomer in existence, every shoot containing a flower bud.

Fifth, Habit, exceedingly vigorous and in foliage quite equal to the American Beauty.

Sixth, It never makes imperfect buds and dark weather but deepens the color, giving it a richer shade of crimson.

Seventh, It retains its color for a long period; flowers having been kept by us in good condition for two weeks after being cut.

Eighth, It is a full double rose, and is good in bud, half open, or fully expanded. Full open flowers frequently are six inches in diameter.

Ninth, The color is even more intense and brilliant at night than in the day.

Tenth, It is free from black spot, the great enemy of the Bennett.

Eleventh, Its shipping qualities are perfect.

Below we give you the daily record of the number of perfect flowers cut from five hundred bushes, during the month of December, 1888:

Dec. 1	148
Dec. 2	132
Dec. 3	52
Dec. 4	82
Dec. 5	153
Dec. 6	195
Dec. 7	91
Dec. 8	204
Dec. 9	36
Dec. 10	69
Dec. 11	159
Dec. 12	94
Dec. 13	113
Dec. 14	82
Dec. 15	96
Dec. 16	112
Dec. 17	156
Dec. 18	83
Dec. 19	55
Dec. 20	63
Dec. 21	20
Dec. 22	43
Dec. 23	45
Dec. 24	83
Dec. 25	90
Dec. 26	96
Dec. 27	81
Dec. 28	40
Dec. 29	46
Dec. 30	33
Dec. 31	63
Total	2731

Or on an average of 88 per day. A large portion of these blooms brought 40c. each at wholesale.

Since the first of Jan. the bushes have been disbudded to secure wood for propagation, and some days as many as 1,000 buds have been pinched out. We shall bloom not less than 6000 plants during the next winter, and cast aside every other red rose.

OPINIONS OF PROMINENT FLORISTS.

JOHN HENDERSON & CO.,

FLUSHING, Dec. 11, 1888.

"This rose (Cook's Souvenir de Wootton) is among the best continuous flowering ones, being beautiful in color, form, and fragrance, which will undoubtedly commend it to all."

MRS. GEO. W. CHILDS,

January 7, 1889.

"Mrs. Childs received this afternoon, the beautiful Wootton roses Mr. Durfee so kindly sent her, and which she admires not only for their beautiful color, but for their delicious odor."

WM. J. STEWART,

BOSTON, January 8, 1889.

"The Woottons arrived in good condition. The La France, American Beauties were faded and gone, and the Puritans were brown as a bean."

JOHN BURTON,

CHESTNUT HILL, PHILA., Jan. 25, '89.

"I have just received box of roses. The Woottons are fine, and I think it cannot fail to be a profitable cut flower rose."

ROBERT CRAIG

PHILADELPHIA, PA., Feb. 5, '89.

"I think the Wootton will be a popular rose because it is such a free bloomer and so vigorous in growth. Many growers have failed to get entire satisfaction with Bennett and Beauty, but the Wootton will, I feel sure do well in almost any soil with fair treatment."

Remember, No Imperfect Flowers like the American Beauty produces.

✽ 60,000 YOUNG PLANTS FOR THE TRADE AT REASONABLE PRICES, AS FOLLOWS: ✽

\$180 per thousand. \$25 per hundred.

\$100 per five hundred. 50 cents each in quantity less than 100.

From 2 1/2-inch Rose pots. Orders delivered in strict rotation, by Mail or Express.

For Sale by

C. STRAUSS & CO. P. O. Box 422 **WASHINGTON, D. C.**

Also for Sale by

JOHN COOK, 318 CHARLES STREET, BALTIMORE, MD.

MESSRS. STRAUSS & CO. Beg to add, that they have a Large Stock of Young Plants of the following Roses at very reasonable rates:

AMERICAN BEAUTY. ANNIE COOK. CATHERINE MERMET. THE GEN. PURITAN.
PAPA GONTIER. MADAME CUSIN. THE BRIDE. LA FRANCE. PERLE.

Their PURITAN and LA FRANCE have been pronounced the finest in the United States. A complete change of stock every two years seems to be essential to continued success in rose culture under glass.

Violets.

Having been unusually successful with our violets this season we give a description of the method adopted in response to a recent query in the FLORIST.

We separated the young plants from the old ones about the latter part of September; prepared a frame of ordinary width (about 5 feet) and with sufficient good, rich soil and planted the young violets in it. Outside of this frame we placed a larger and higher one, allowing about one foot space between them, which we filled with manure to keep the frost out at the sides and ends. The outside frame was made high enough so that the sash for it were about eight inches above the sash covering the inside frame, all the sash being placed close together at the edges. The soil in the smaller frame was from an old hotbed, no warm manure being used. The plants had been outside all summer and are still there, not having been brought in the houses at all. We have had an abundance of bloom all winter and the plants show no signs of "going back" yet, being full of flowers and buds and in a fine healthy condition.

Whether the same treatment will be successful another season remains to be seen, but one thing is certain, this is the first time we have had them do so well in six years. We give our experience for what it is worth. J. H. WADE & Co. Evansville, Ind.

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- B. K. BLISS, Boston, Mass.
- HOVEY & Co., Boston, Mass.
- F. L. TEMPLE, Cambridge, Mass.
- B. L. BRAGG & Co., Springfield, Mass.
- J. C. VAUGHAN, Chicago, Ill.
- PITCHER & MANDA, Short Hills, N. J.

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PEACH TREES.

RELIABLE. Standard Old and New Sorts. Free from any disease. All sizes. By Freight, Express and Mail.

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Milford, Delaware.**

WILFORD NURSERIES. Established 1870.

ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. straight 2½-inch plants, propagated from thoroughly matured field grown stock, and grown in ordinary soil without manure or any other stimulating material whatever. Our Roses resist disease, start quickly, grow rapidly, and always give best results.

ALL THE FINEST NEW AND SCARCE ROSES.—Mrs. John Laing, Dinsmore, Marshall P. Wilder, Merveille de Lyon, Baroness Rothschild, Mad. Gabriel Luizet, Mad. Masson, Meteor, Princess de Sagau, Mad. Hoste, Comtesse Anna Thun, Vicountess Folkstone; Primrose Dame, Annie Cook, and ALL THE CHOICEST NEW POLYANTHUS AND HYBRID TEAS. ALL THE BEST STANDARD SORTS IN LARGE SUPPLY AT REASONABLE PRICES.—The Puritan, Sunset, Papa Gontier, American Beauty, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Gen'l Jacqueminot, Perle des Jardins, Niphelos, C. Meunet, M. Robert, Luciole, Mad. Welche, Pierre Guillot, Souv. d'un Ami, Mad. Casin, C. Cook, Marie Guillot, Mad. Honore Defense, and hundreds of others at lowest living prices.

HYDRANGEA GRANDIFLORA a specialty, large stock, strong open ground plants, all sizes at reasonable prices.

ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS.—New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Viburnum Plicatum, Buist's Variegated Althea, New Deutzia, New Weigelia, &c. Honeyuckles, Wistarias, Clematis, Akebias, and all best hardy climbing vines, VERY LOW.

Chrysanthemums, 100 selected finest sorts. Moon Flowers, extra strong, propagated from blooming plants. Finest Summer Flowering Bulbs, Gladiolus, Tuberoses and Japan Lilies.

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HARDY PLANTS, ROSES,

== CARNATIONS, ==

MUSA ENSETE, ETC.

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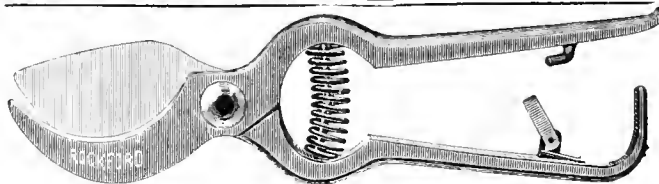
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Once and twice transplanted.

	Per 100	Per 1000
8 to 12 inches.....	\$ 5.00	\$ 35.00
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24 to 36 ".....	15.00	100.00
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Rooted Cuttings in May \$20.00 per 1000; 6000 for \$100. General assortment Nursery and Greenhouse stock.

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NEW AND RARE OLD and RELIABLE

Both Fruit and Ornamental. ROSES, Vines, Clematis, Rhododendrons, etc. Two Illus. Catalogues. Free to customers. Wholesale List FREE.

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—SPECIAL PRICE LIST FOR—

EASTER TRADE, ^{AT} WHOLESALE ONLY

500 AZALEAS, perfect heads a foot diameter covered with buds. Best sorts all for Easter, \$15.00 per dozen.

300 RHODODENDRONS for Easter, fine bushy plants in 9-inch pots, 10 to 15 large buds, pure white and colored; can be shipped without pots, \$10 per doz.

200 PALMS, *Seaforthia Elegans*, perfect and clean plants for immediate use, three feet, \$5.00 per pair.

500 PANDANUS VEITCHII, perfect specimens, all finely colored, 1½ to 2 feet, per pair, \$4.00 and \$5.00.

400 PANDANUS UTILIS, eighteen inches to two feet, well furnished; perfect plants, \$15.00 to \$18.00 per dozen.

500 DRACÆNA FRAGRANS, clean and well furnished plants, 1½ to 2 feet, \$15.00 to \$18.00 per dozen.

800 " " 12 to 15 inches, stocky plants, \$10.00 to \$12.00 per dozen.

300 " TERMINALIS, brilliantly colored, fine specimens, 2 to 2½ feet, \$15.00 to \$18.00 per dozen.

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500 CROTONS, nice thrifty young plants, all colored, in twelve distinct sorts, 12 to 18 inches, \$300 per dozen; \$20.00 per hundred.

100 FINE SPECIMENS of *Dracenas Amabilis*, highly colored, 2½ to 3 ft. \$5 to \$7.50 per pair.

800 CYCAS REVOLUTA (*Sago Palm*), all fine specimens with full heads, thoroughly established, \$5.00, \$7.50, \$10.00 to \$25 00.

2000 " " with strong Bulbs and good leaves, the making of specimens, all well established, now is the time before they make their growth, price, \$2.00, \$2.50, \$3.00, \$3.50, \$4.00 and \$5.00.

800 ADIANTUM FARLEYENSE, good, full and well furnished plants in 4-inch pots, \$5.50 per dozen.

200 " " large specimen plants, \$10.00 to \$15.00 per dozen.

2000 Plants of LILIUM HARRISII and LONGIFLORUM, strong plants, with two buds 60c., three 75c., four 90c., five \$1, six \$1.25, seven \$1.50, eight \$1.75. Buds just right for Easter.

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Confucius was full of white whiskered wisdom, and, no doubt knew how to meet most emergencies; but will venture to say that a Rochester tree agent could have tackled him on a bet that he could sell him a lot of shrubs that he wouldn't accept as a gift, and won. PUCK.

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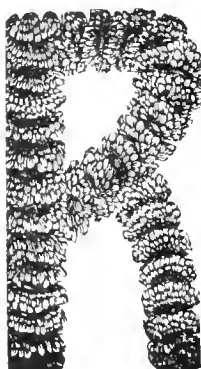
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Average 500 lbs. to the Bale. Delivered Free on board.

We claim to have the Best, Cleanest and Strongest Stems in the market.

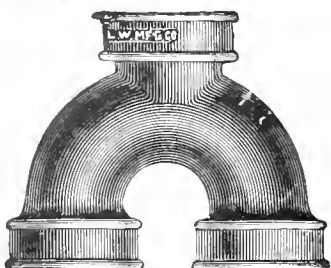
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Large quantities of our Pipe are in use in Greenhouses throughout the West, to any of which we refer as to its excellent quality.

Pipe can be easily put together by any one, very little instruction being needed.

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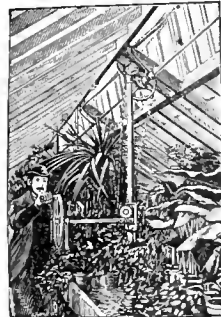
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NO WIDE-AWAKE FLORIST need be told It will pay him to use Sash Bars, etc. made from

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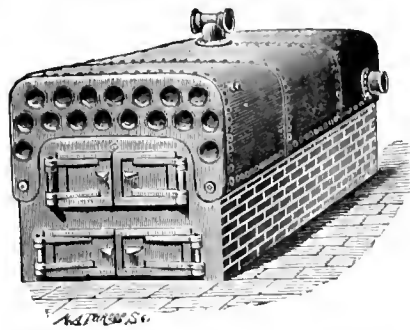
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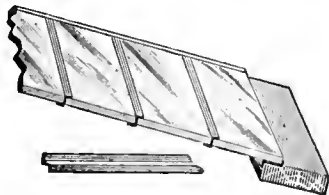
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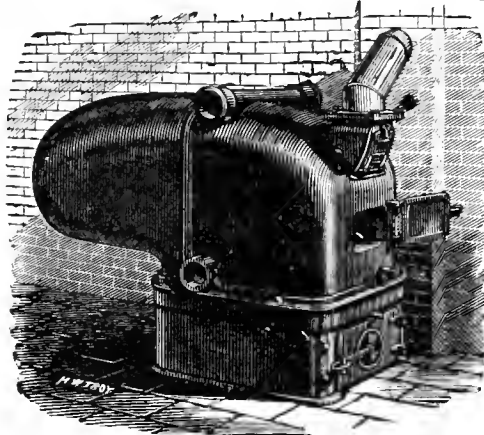
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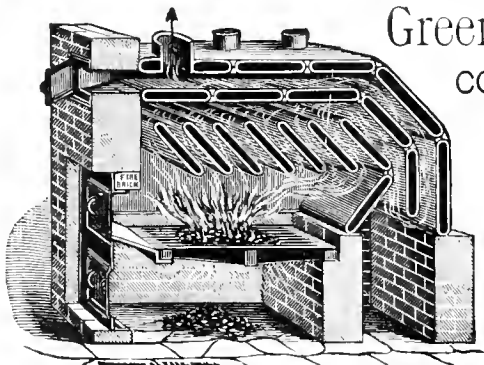
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Vol. IV.

CHICAGO AND NEW YORK, APRIL 15, 1889.

No. 89.

THE AMERICAN FLORIST

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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THE NURSERYMEN'S ASSOCIATION will hold its fourteenth annual meeting at Chicago, beginning Wednesday, June 5, at quarters at the Grand Pacific Hotel. Chas. A. Green is secretary, Rochester, N. Y., and can furnish all particulars in regard to hotel and railroad rates. The reduction of freight rates secured by this organization last season was of great benefit to the nursery trade throughout the United States and probably the greatest concession ever made by railroads to any commercial interest.

THE STANDARD POT.—In next issue we shall publish the list of those who up to that time have signified to us their intention to buy only standard pots in future. Many new names have been received since the list was last published. Send in your name now to be added to it in time for next issue. All should avail themselves of this opportunity to show manufacturers the necessity of conforming to the standard.

Spring Exhibitions.

Philadelphia.

The Pennsylvania Horticultural Society held its spring show on April 2 to 5 inclusive. To the credit of this time honored institution it must be said that for the number of meritorious exhibits, and the quality of the same, it was the best show ever held at this time of the year. There were even more orchids than last year, and the roses were the finest ever seen in Horticultural Hall. The dinner table designs were a new feature at spring shows. The Lenten season was possibly responsible for the number and quality of the flowers and handsome designs. Azaleas and cinerarias made the hall gay with their coloring, as also did tulips and hyacinths. The latter added just enough fragrance to be agreeable without being oppressive, and the music was the best obtainable in this city. Yet, withal, the attendance was less than can be remembered in the history of the society.

The premiums were awarded as follows: 1st, \$100, for the best collection of orchids (plants) in bloom to Pitcher & Manda, Short Hills, N. J., 2nd, \$75, to Siebrecht & Wadley, New Rochelle, N. Y., 3d, \$50, to David Emery, gardener to Charles Dissel, Esq., Wyndwood, Pa.; 1st \$15 and a special \$5 for three orchid plants in bloom to William Jamison, gardener to R. S. Mason, Esq., Germantown, Pa.; 1st \$25, for orchid blooms to Pitcher & Manda, 2nd \$15, to Evans & Battles, 3d \$10, to Siebrecht & Wadley. The arrangement of the collection of orchid blooms from Evans & Battles deserves more than a passing notice. A cave or grotto was very artistically decorated with the flowers and the light and airy asparagus or "Mermaid's Hair," making just such a place one would imagine fairies would delight to sport about in.

1st premium, \$20, for 6 azaleas to W. K. Harris, 2nd, \$15, to Fred R. Sykes, gardener to Mrs. Harry Ingersoll, 3d, \$10, to Hugh Graham's son William; 2nd premium, \$8, to F. R. Sykes for 2 azalea plants; 1st, \$8, to Hugh Graham's son for specimen white azalea, 2nd to F. R. Sykes; 1st, \$8, for specimen any color, to David Emery, 2nd, \$5, to Hugh Graham's son, 3d, \$3, to F. R. Sykes. Strange as it may seem, although liberal premiums were offered for zonal pelargoniums, not one plant was exhibited, and only two fuchsias. David Emery secured 1st prize for specimen plant, \$4, and 2nd went to Gebhard Huster, gardener to Mrs. Jane C. Heyl, Darby, Pa.; collection of 25 plants in bloom, different varieties, Hugh Graham's son received 3d premium, \$10.

In the class for "decoration of growing plants not to occupy over 100 square feet," there were two competitors. These decorations occupied each side and at the

foot of the stage, so that both exhibitors had equal advantages; 1st, \$50, was awarded to William Joyce, gardener to Miss M. L. Baldwin. Every plant in the collection was a "specimen." In the center of the group was one of the best plants of *Kentia Belmoreana* in this country, but if I am not mistaken it was labeled *K. Forsteriana* when on exhibition last autumn. Who is an authority on palms? It would be well to have some of these matters cleared up! Second, \$30, went to Hugh Graham's son; the same exhibitor was awarded 1st, \$25, for "roses in pots, 12 plants, not less than 6 varieties," 2nd, \$5, to William K. Harris for a specimen rose; 1st, \$15, for 12 ferns to Thomas Long, gardener to A. J. Drexel, Esq. This exhibit was a credit to Mr. Long, who is one of the best cultivators in this vicinity; 1st, \$5, for a specimen fern to Robert Wark, gardener to Clarence Clark, Esq.; 2nd, \$3, to David Emery, gardener to Charles Dissel, Esq.; 1st for 12 carnation plants to Edward Banyard & Son; 1st, \$10, for 6 hydrangeas to W. K. Harris; 1st for specimen hydrangea to the same exhibitor—a few years ago efforts were made to have the hydrangeas blue, now the trouble seems to be to keep them a bright pink; 1st, \$3, for *Astilbe Japonica* to W. K. Harris, 2nd to Hugh Graham's son, 3d to Thomas Long; 1st, \$10, for 12 cinerarias to Thomas Long—these were a well grown lot of plants, but the varieties were very poor; David Emery secured 2nd and Gebhard Huster 3d; 1st for 6 *amaryllis* to Hugh Graham's son; 1st for 25 pansy plants to Fred R. Sykes, 2nd to W. F. F. Murray. Atco, N. J.; 1st for 6 *Chrysanthemum frutescens* (Marguerites), to W. K. Harris; 1st for English or hybrid primroses, to Hugh Graham's son, 2nd to W. Craigmile, gardener to Miss S. M. Wain; 1st for daisies (*Bellis perennis*), to W. K. Harris; 1st for *Primula obconica* to Pitcher & Manda, 2nd to Wm. Craigmile, 3d to Hugh Graham's son; 1st for 6 cyclamen to Walter F. Fancourt, 2nd to W. Craigmile—the plants exhibited by Mr. Fancourt were the best ever exhibited here, the foliage was dwarf and compact and the flowers were numerous and long in stem; for 6 *calceolarias*, 1st to Gordon Smirl, gardener to W. M. Slingerly, Esq., 2nd to W. Craigmile—the judges were so well pleased with Mr. Smirl's *calceolarias* that in addition to the 1st premium a special notice was bestowed upon them, which was richly deserved, they were indeed fine as to variety and the plants were exceedingly well grown; 50 bedding plants in bloom in not over 4-inch pots, 1st, \$10, to Gebhard Huster; special premium was awarded to David Emery for 6 plants of *mignonette*, and the same honor was awarded F. R. Sykes for a collection of flowering plants.

The gold medal offered by "The General Union of Holland for the promotion

of the cultivation of bulbs under the patronage of the King of the Netherlands," for the best collection of 50 hyacinths in bloom grown in pots not more than two of a sort, was awarded to William Jamison, gardener to R. S. Mason, Esq., 2nd, silver gilt medal, to Henry Surman, gardener to E. W. Clark, Esq., Germantown, 3d, silver medal, to Fred R. Sykes, gardener to Mrs. H. Ingersoll, Oak Lane. First prize, silver gilt medal, for tulips, early single, 25 pots, 3 bulbs of the same sort in a pot, 25 distinct sorts, to William Jamison.

The Pennsylvania Horticultural Society's premiums were awarded as follows: 1st, \$10, for 25 hyacinths, not more than two of a kind, in not over 6-inch pots, 1st to Henry Surman, 2nd to William Jamison; 12 hyacinths, 1st to Henry Surman, 2nd to W. K. Harris, 3d to William Jamison; for tulips, 6 varieties, 6 inch pots, 6 of a kind in each pot, 1st to William Jamison, 2nd to W. K. Harris; 1st for a box of tulips containing 50 bulbs in bloom, to W. K. Harris, 2nd to W. Jamison.

Premiums were offered for hyacinths grown in glasses, the object being to encourage lady exhibitors, but there were no entries. 1st for 6 *Lilium Harrisii* went to Hugh Graham's Son, 2nd to Albert Smith, gardener to Mrs. Mary Wharton; 1st for *Lilium candidum* to William K. Harris; specimen *lilium*, any variety, to William K. Harris, 2nd to Hugh Graham's Son.

In the growers' list Joseph Heacock received 1st for collection cut carnations, and best dozen each of cut roses Sunset and Cusin, 2nd for Perle, Bride and Am. Beauty; Coles & Whiteley 1st for Perle, Bride, Gontier, Mermet, Bon Silene and Magna Charta, 2nd for La France, Cusin and Mrs. John Laing; John Burton 1st for Jacqueminot, Mme. G. Luizet and Baroness Rothschild; C. S. Price 1st for Niphotos, 2nd for Mermet; C. F. Evans 1st for La France, any other variety (Meteor), Mrs. John Laing, Puritan, 2nd for Gontier, Sunset and Jacqueminot; Gordon Smirl 1st for American Beauty, 2nd for Puritan; C. Strauss & Co., Washington, D. C., 1st for 6 of any new variety (Souvenir de Wootton); E. Banyard & Son 2nd for collection of cut carnations.

In the florists' list Pennock Bros. received 1st for collection of cut carnations, dozen blooms each of Bennett, Sunset, American Beauty, Mme. Cusin, 2nd for Perle, Niphotos, Magna Charta, Mermet, Jacqueminot and Mme. Gabriel Luizet; Heron & Nisbet 1st for Mermet, Mme. G. Luizet, Mrs. John Laing, Bride, 2nd for Puritan; H. Graham's Son 1st for Perle, Niphotos, Gontier, Magna Charta, 2nd for Am. Beauty, La France, Mrs. John Laing, Bride and Sunset; Evans & Battles 1st for any other variety (Meteor), La France, Jacqueminot, Puritan, 2nd for Gontier; J. Kift & Son 1st for Baroness Rothschild.

For basket of flowers H. Graham's Son received 1st, \$15; Heron & Nisbet 2nd, \$10; Evans & Battles 3d, \$5; 6 corsage bouquets, Heron & Nisbet 1st, \$10; plateau of flowers (20 inch basket) Heron & Nisbet 1st, \$10; bride's bouquet, H. Graham's Son 1st, J. Kift & Son 2nd; pair bridesmaid's bouquets, H. Graham's Son 1st, \$10; vase of roses, Heron & Nisbet 1st, \$10, H. Graham's Son, 2nd, \$5; dinner table decoration, Pennock Bros. 1st, \$75, H. Graham's Son 2nd, \$50, J. Kift & Son 3d, \$25.

Charles Fox made a fine display of foliage plants in the center of the hall, which added greatly to the general effect.

Thomas Weathered's Sons' exhibit of one of their portable greenhouses—which

is set up ready for operation in a few hours, heating apparatus included—was the novel feature of the show, and consequently attracted much attention. If there were more of such structures scattered throughout this country there would be a better attendance at the flower shows, because the people would appreciate such a show if these educational greenhouses were more in use. Craig & Brother filled the greenhouse with a creditable collection of plants.

John Burton is the only grower cutting "Baroness Rothschilds" at this time and they are the finest that have been seen in this city for some years past.

EDWIN LONSDALE.

Boston.

The spring exhibition of the Mass. Horticultural Society was held on March 27, 28, 29.

On account of repairs now in progress the upper hall could not be used, so the show was confined to the lower hall. The crowding was not so objectionable, however, as it would have been in an exhibition of tropical and show plants, since the hyacinths, tulips and other things which go to make up the spring shows, look full as well when closely massed, and the gorgeous display of color so obtained is most acceptable to the eye after months of winter dreariness.

The Holland medals competed for in former seasons were not offered this year, and the incentive to the exhibition of large quantities of Dutch bulbs was lessened just so much. But the display as a whole was very creditable. The principal competitors in the bulbous section were K. Findlayson, gardener to Dr. Weld, Wm. Martin, gardener to N. T. Kidder, E. W. Fewkes and Thos. Clark. The hyacinths and tulips in pots and pans shown by Mr. Fewkes, Mr. Martin and Mr. Findlayson were unusually well grown. Thos. Clark excelled in *Polyanthus Narcissus*, jonquils, anemones and freesias.

The first premium for general display of spring flowering bulbs was awarded to Mr. Clark, and the second prize for the same to Wm. Martin. Mr. Martin showed fine pots of lily of the valley and Mr. Findlayson well grown *Harrisii* lilies. The cyclamens from Mr. Clark and Mr. Findlayson were also very good.

The Lyman Plate for six distinct Indian azaleas was awarded to Mr. Martin and Mr. E. W. Gilmore captured both first and second Lyman Plate premiums for orchids. The society's prizes for azaleas were won by Mr. Findlayson, A. W. Spencer and Wm. Martin, and those for orchids by Benj. Grey. Two very fine irises were exhibited, the noble *Iris Susiana* by E. W. Fewkes, and the tiny jewel *I. pavonia* (Peacock Iris) by Mr. Findlayson.

One of the prettiest features in the hall was the display of *Primula obconica* and *Cocos Weddelliana* from the New England Nurseries. The arrangement of these was exquisite.

Mr. J. Brydon, gardener to N. S. Simpkins, exhibited a lot of forty-four blooms of Her Majesty, Baroness Rothschild and Merveille de Lyon roses which have never at any season of the year been excelled here. On hybrid perpetual roses James Comley took first prize with a very nice collection, and Thos. Meade was equally successful with tender roses. His Brides, Cooks and Niphotos were exceedingly fine.

The hardy primulas are becoming very popular here and the specimens of them

shown by E. W. Fewkes, Wm. Martin and Wm. Patterson must certainly help to increase their popularity. They were the best ever seen here. The cinerarias from Mr. Martin and Thos. Clark were also unusually good.

Mr. Zirngiebel was on hand with his superb pansy blooms and as usual distanced all competitors. F. C. Fisher showed some very fine carnations, T. Rowland well grown Mignonette, John Irving some good deutzias and assorted plants, and Pitcher & Manda a collection of cut cypripediums and other orchids.

The new rose Souvenir of Wootton from Strauss & Co., received a certificate of merit.

On the stage at the rear of the hall were some enormous specimens of the Umbrella Pine and rare cupressus from Temple & Beard, and varieties of cytiscus from Wm. Martin. In the center of the hall was a large and interesting collection of violas, aquilegias, trilliums and other hardy spring favorites from the Harvard Botanic Garden. An extensive display of oranges from O. P. Rooks, Florida, attracted much attention.

Messrs. Norton Bros. won first premium for table design and Mrs. A. D. Wood second. In making the awards on designs the committee invited opinions from a number of prominent society ladies who were present, an innovation worthy of being repeated.

Among the visitors from a distance were J. N. May, President of the S. A. F., John Burton, of Philadelphia, W. A. Manda, of Short Hills, N. J., Robt. Hogg, of Providence, R. I., and E. S. Haskell, of New Bedford.

WM. J. STEWART.

Detroit.

The "Flower Show" which occurred April 2-5 at Detroit, was remarkably successful financially and the floral display was certainly excellent, especially for a first attempt—this being Detroit's first floral exhibition.

The enterprise was started and managed by Mr. W. H. Brearley, proprietor of the *Detroit Journal*, who had called to his assistance ladies interested in twenty of the city charitable organizations, one representative from each of these organizations forming an advisory board of managers. In this way the personal following of all of these ladies and their friends were interested in the success of the undertaking. This with the extensive advertising the manager was enabled to give the affair through his paper resulted in an attendance which was certainly remarkable, over 4,000 admission tickets being sold at the box office the first day and evening, over 8,000 the second day, and 11,000 the third day, the tickets being sold at 25 cents each.

The exhibition proper occupied the center of the large rink, while around the walls on three sides were the booths of the various charitable organizations, each of which had for sale some variety of flower. The plants shown were all placed on the floor on beds of sawdust. A long center bed was filled with the exhibits of palms and decorative plants of Messrs. S. Taplin, John Breitmeyer & Sons and B. Schroeter. Mr. Taplin's exhibit was the most extensive and all were very tastefully arranged. Large beds of hyacinths, tulips and other bulbs were very effective, Jno. Breitmeyer & Sons having the largest display in this line. A group of very large azaleas shown by S. Taplin, a "carpet bed" of succulents by B. Schroeter, a very hand-



somely arranged bed of azaleas, roses, geraniums and hydrangeas by F. W. Lemke, a very large bed filled with miscellaneous plants, including decorative and blooming plants by the Detroit Floral Co., and a bed of roses and geraniums by Halznagel & Noel were very effective and well placed to aid the general effect.

A table along one side of the hall held the entries of designs and cut flowers, and a gallery at one end was devoted to the table decorations. The most taking feature among the cut flowers was a very pretty display of cut orchid bloom brought from Cincinnati by Mr. B. P. Critchell. The crowd which was always to be seen around this display shows the interest the general public takes in this class of flowers. Some forty varieties were represented, mostly dendrobis, lycates, cypripedes, oncidiums and odontogloss.

Among floral arrangements the rooms containing the table decorations were the greatest attraction. There were four entries and all were very effective, undoubtedly largely due to the fact that the elegant furnishings of each room harmonized perfectly in color with the flowers used. This matter was arranged for the florists by one of the ladies connected with the management who ascertained from each florist the prevailing tint of the flowers he intended to use and

then selected the furnishings of the room to harmonize with them. Taking the decorations of the whole room into consideration that decorated by D. C. Jones was certainly first. The mantel arrangement was a most artistic piece of work. At one end was a small palm and a few cycas leaves from which extended an extremely graceful arrangement of ferns, Rex begonias and asparagus to the other end over which drooped a dozen handsome Jacq roses. His table decoration consisted of a low centerpiece of Jacq roses tied in the center with broad cream colored ribbon, and favors of the same roses. The Detroit Floral Co.'s arrangement was in pink flowers and was certainly a harmony in color. Both the table centerpiece, favors and mantel banking were of Mermets, the table and mantel being very effectively draped with Asparagus plumosus. Jno. Breitmeyer & Sons had two arrangements, one of American Beauty roses and the other of Perles and Niphetos.

Among designs an urn of ivy leaves with a bunch of roses on its face and filled with Harrisii lilies was very handsome; it was arranged by B. Schroeter, as was also an Easter design which was a framed ivy panel bearing in relief a lamb very accurately worked out with carnations and spirea (the latter giving it a remarkably natural woolly appearance), holding a cross of scarlet geraniums.

The frame was of smilax and asparagus with bunches of various flowers placed at effective points. A baby gift arranged by D. C. Jones was a cushion of carnations bearing a pair of baby's shoes of violets, and knots of small flowers at the corners of the cushion. It was a very dainty arrangement. A very pretty thing also arranged by Jones was a small screen of white with a frame of crimson carnations. Across the lower edge was a very simple and graceful arrangement of ferns and Marguerites in which nestled a small bird on its nest. The design symbolized "Spring" in a very happy manner.

In one of the galleries the Detroit Flower Pot Manufactory had a very extensive display of standard pots of very excellent quality, and John Petzholt an excellent exhibit of florists' wire work.

Following is the awards of first premiums:

D. C. Jones Baby gift, table decoration.

B. Schroeter—12 cinerarias; original design; Easter design; arrangement of carpet bedding plants.

Jno. Breitmeyer & Sons—Begonia Rex, 6 plants; fern (pteris), 6 plants; Marguerites, general display; spirea, 12 plants; general collection of flowering bulbs; hyacinth (Dutch), 12 plants; jonquil, 25 plants; lily of the valley, collection of 50; tulip, collection; carnation (red), 50 blooms; Lilium Harrisii; mignonne, 50 blooms; pansy, 100 blooms; roses, general collection; rose (American Beauty), 12 blooms; rose (hybrid perpetual), 12 blooms; tulips, general collection; decorative plants, general display.

A. Breitmeyer—Begonia (blooming), 6 plants.

Geo. Hancock, Grand Haven—Carnations, white, 50 flowers; carnations, largest variety.

Fred W. Lemke—Azalea, 12 plants in 6 to 8-inch pots; rose (hybrid perpetual), 6 plants.

Charles Warncke—Hanging plants, best collection; coleus, 25 best; pair hanging baskets; pair window boxes.

J. F. Sullivan—Camellia, general display; camellia, finest; camellia 12 flowers; rose (Bon Sileue), 12 blooms; rose (Bride), 12 blooms; rose (Perle), 12 blooms; rose (Sunset), 12 bloom.

Detroit Floral Co.—Candidum, 6 best; hydrangea, 6 plants; hydrangea, 3 plants; spirea, 6 plants; hyacinth (Dutch), 25 plants; hydrangea, finest; calla, 6 flowers; candidum, 6 spikes; rose (Niphetos), 12 blooms; basket of flowers; table decoration; best arranged lawn vase.

Holznagel & Noel—Geranium, 12 plants of 6 kinds; geranium, 6 plants of 3 kinds; geranium, best general display; rose, hybrid perpetual, 6 plants; geranium, finest; lily of the valley, 25 sprays.

S. Taplin—Calla, 6 plants; fern (adiantum) 6 plants; Lilium Harrisii, 12 plants; palm, largest and best group; palm, 12 in 6 to 8-inch pots; azalea, finest; azalea, 6 plants in 8 to 15 inch pots.

G. H. Taepke—Carnation (red), 12 plants; carnation (white), 12 plants; rose, everblooming, 12 plants; rose, everblooming, 6 plants.

Grevillea Robusta.

The purpose in calling attention to this beautiful plant is that it may find its way into general cultivation as an ornamental pot plant for house decoration. It has been grown for several years in California as an ornamental shade tree, planted on the lawn or along the sidewalks of the beautiful homes of that state as we would plant maples in Pennsylvania.

The grevilleas are natives of Australia,

most of them shrubby in habit and with leaves differing greatly in form. *G. robusta* is a vigorous tree reaching a height of 60 feet and more, it is commonly known as the "Silk Oak" in its own country. The leaves are over one foot long and eight inches broad at the widest part, they are twice pinnatifid or almost pinnate-pinnatifid with lanceolate acute segments, in all appearances like the compound fronds of a fern; they are alternate on the branch and not deciduous, which fact makes the plant doubly beautiful.

This notice is written (Jan. 10) from a specimen two feet high that was raised from seed sown April 4 of the previous year and every leaf formed since the seed leaves appeared are still upon the plant looking fresh and green. The curved drooping habit of the frondose leaves is a very graceful feature of the plant. The plant grows with a straight upright stalk and no branching until it has gained considerable height, but by "pinching" out the head it can be made to throw out lateral branches at any height desired. For pot culture, to which we would be confined in this latitude on account of low winter temperatures, a plant headed back at two or three feet would soon form a specimen foliage plant that would command as much admiration as a stately palm or spreading tree fern, and be as useful for parlor or stage decoration.

The plants do not bloom until they have become quite large, so that this element of beauty can not be counted on with confined roots. The flowers are produced in profusion and prominence on the trees, arranged in flat panicles about the size of one's hand, and are of an orange yellow color. Seeds are produced quite freely and by this means the best plants are propagated, although I think that cuttings will strike root in sand. The plants seem to be of easy growth in a greenhouse, and several good specimens that have lived in the dry atmosphere of a parlor heated by steam for the last four months show little or no check in their growth and promise to give continued satisfaction.

The grevilleas were so named by Mr. Robert Brown in honor of the Right Honorable Charles Francis Greville, an English promoter of natural history.

State College, Pa. GEO. C. BUTZ.

The Narcissus.

Last fall some seventy varieties of narcissi were sent us by Thos. S. Ware, Tottenham, London, Eng. Coming too late to be planted out of doors, Mr. C. J. Stromback, head gardener at the Lincoln Park greenhouses, Chicago, kindly took charge of them, potted and plunged them in frames and now a dozen or fifteen varieties are in bloom and most of the remainder in bud.

Of the varieties already in bloom Henry Irving and Golden Spur are the largest blooms, and they are certainly handsome flowers, rich golden yellow in color. *Obvallaris* (the Tenby daffodil), while smaller in size is very distinct in shape and color and a very attractive flower. Among the other varieties in flower are *pallidus præcox*, Golden Plover, nanus, Blondin, princeps, rugilobus, cernuus and others. We shall probably give illustrations of some in later issues.

ILLUSTRATION HORTICOLE.—The last number of this handsome publication contains colored plates of *Cypripedium X Maesereelianum hort.* and *Impatiens Rodigasi L. Lind.*



Odontoglossums.

In cool houses with temperature 45° to 65° from November 1 to March 1 orchids are easy to manage, provided proper houses are used for them, and they need not necessarily be expensive ones. Some growers prefer a northern aspect for the cultivation of *Odontoglossum crispum* and *pescatorei*, I have seen them the acme of perfection in such houses, but I am not certain that they produce as many flowers as they would with a little more of the direct influence of the sun's rays. I will, however, give my experience.

About five years ago in one of my crazy orchid fits I started to build a cool house for the cultivation of *Odontoglossum crispum*, *O. pescatorei* and other cool plants, such as *Cœlogyne cristata*, *Cypripedium insigne*, *Lycaste Skinneri*, etc. A house that is suitable for the cultivation of the plants named is a good place to rest or retard such plants as *Dendrobium nobile*, *D. Wardianum* and many of the *lælias* and *oncidiiums* which can be suspended from the roof above the odontoglots; the moisture necessary for the odontoglots will be sufficient for the plants above and will keep them in a fine healthy condition, and they can at any time be removed to the forcing house in batches to suit the requirements of the cultivator, whereas if kept in a warmer temperature direct watering would be necessary to keep the bulbs from shriveling and consequent damage from decay. Many of these plants when growing will stand a very high temperature and plenty of moisture, but in their resting season will stand almost any amount of cold, provided you do not use water injudiciously. I could not find a place to suit me with a northern aspect, but I had just a nice spot for a house span roofed, aspect southeast and northwest, and as I had for many years previously grown good stove plants and some orchids, such as *cypripediums*, *vandas*, *arides*, etc., in what I will call a "dug out" house.

I commenced by digging out two trenches 2 feet 3 inches wide by 2 feet deep for paths, leaving a center of solid soil 5 feet wide. From the outside of the paths (about 3 feet 6 inches) post holes were dug at regulation distances and 3 feet 6 inches deep. Good stroug cedar posts were used and left 1 foot above the surface for the purpose of a hollow wall. I then selected some yellow pine 8 inches square and had them cut through at opposite angles, then laid the wide side on the post, cutting out the end of the sash bars to fit the angle, I use good sized bars placed one foot apart and put at a rather steep grade, as I have an idea that it ventilates easier and gives you very valuable space in the roof to suspend either resting, retarding or flowering plants without being at all detrimental to the growths of the odontoglots that are grown on the benches.

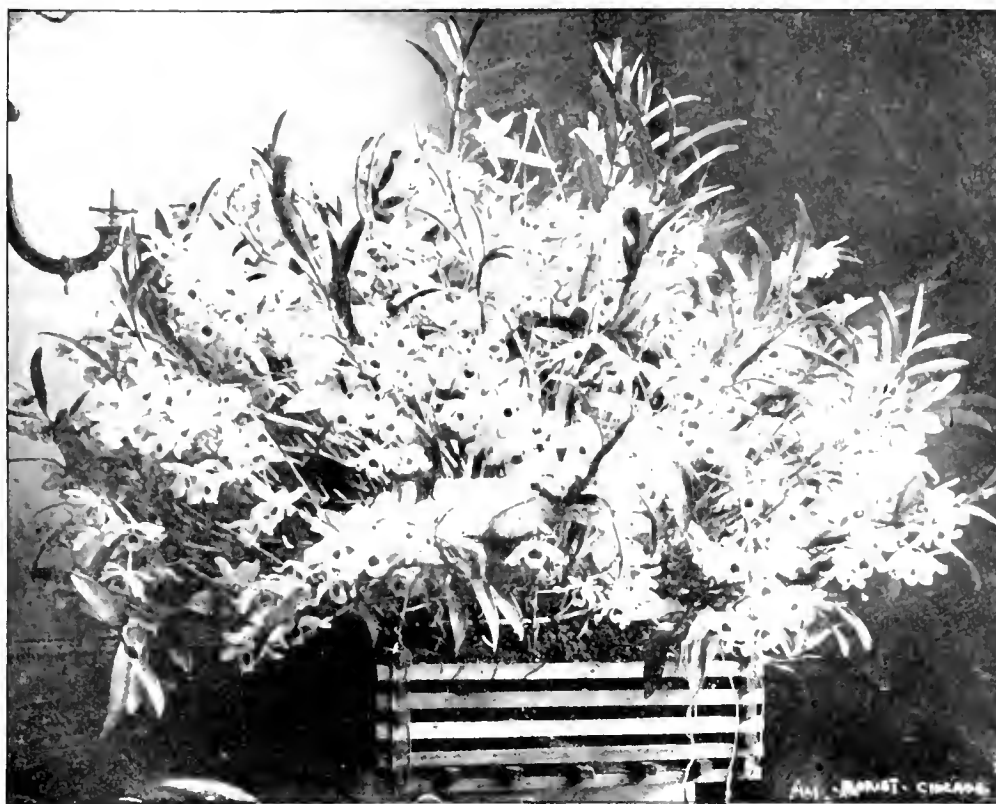
The benches are of soil covered with a thin coat of cement; over this is placed rackwork 4 to 5 feet long, so that they can be easily moved to clean the bench

when required and allow a circulation of air, which is most essential for the cultivation of all the orchid family. Between the rackwork and the bench copious waterings on all fine days, winter and summer, is given. I think fresh water put on the cement benches every day is far ahead of water tanks and stagnant water. I think clean benches, clean water and clean pots are three things that should be strictly enforced in all orchid culture. From November 1 to March 1 the glass is kept perfectly free from shade of any kind and about the turn of days the sun creeps in and seems to enliven the foliage and in a few weeks the foliage on many of the crispums and pescatoreis looks about the color of a copper beech.

When I first cultivated the odontoglot I was afraid that I had injured them by this treatment, but on careful investigation and noting their different growths I find all those that take on this color are the most robust and healthy plants and have stronger bulbs and better spikes of bloom. About the time (this year early in March) the sun gets strong I shade with white lead and naphtha on the south side, which answers till the weather gets warm and the sun very piercing, then I put on shades made from cutting $\frac{7}{8}$ pine board into thin strips and making shades about four feet wide to shade the whole length of the glass roof; this remains till the autumn. These shades I find keep down the temperature and admit plenty of light and air, which should be given when possible at all seasons of the year through the ventilators at top and bottom.

Water should be given sufficiently to keep the sphagnum in a growing condition; it is generally the case that when the sphagnum grows well the plant does well also, provided it is a healthy plant. When the growth is well up and the weather so warm as to give all the ventilation possible, they (the odontoglots) enjoy copious showers of water two or three times a day. But the plants must be well drained; three-fourths of the pot should be filled with good clean drainage, over this and raised two inches above the rim of pot, use good clean fine fern root free from dust or soil and at intervals (if a 5 or 6 inch pot) of two or three inches place some nice heads of sphagnum that have been collected in the openings or margins of the woods; it often can be found with a reddish brown look and short, this kind, if placed in clumps of a dozen or fifteen heads, will be pretty sure to grow and in a little time make a very pleasing appearance. If sphagnum is used in a chopped state most of it will decay in a short time, and if allowed to remain long in the pot it will sour and become just what the root of the odontoglot abhors. I think too much pot room and consequently too much potting material (unless intense care be taken) will prove very injurious to odontoglots of all varieties; they seem to revel in fresh moss, fresh air and healthy moisture and on the other hand to revolt at dirty pots, sodden potting material and a close and warm atmosphere.

In the center of this house is a solid bed 5 feet wide and about 15 inches over this is a board bench. On the top of this, 15 inches above the bench, is raised a narrow bench for such plants as *lycates*, *cœlogyne*, etc. On either side of this and wide enough to arrange two deep, is a rackwork to stand the odontoglots as they show their bloom spikes; then in the front on the bench proper all kinds of plants such as *Cypripedium insigne*, *Oncid. Forbesi*, *O. Rossi* and others.



DENDROBIUM NOBILE.

Under the bench are the 4 inch pipes for hot water (I do not like steam for orchids).

I have an idea that it brings up the spike more gracefully when in the center of the house and consequently nearer the light and a little warmer; and being a little drier than on the side benches the flowers keep longer and come out a little finer too. My mode of watering is with a hose; water is taken from a pond two miles distant (city water), and on fine days in their growing season the floors and benches are flooded two or three times each day. *Odontoglossum grande*, *O. Insleyi* and that tribe of *odontogloss*, also the new and beautiful *O. Harryanum* like a little warmer temperature and I think a little drier house or place in the warm end of the *odontoglossum* house proper, giving more rest after flowering than is required by the *O. crispum* and varieties of that kind.

I really think the *odontoglossum* should be grown in much larger quantities in this country, as I know from experience that they are of the easiest possible culture and are so satisfactory and remunerative as to commend themselves to all lovers of beautiful and graceful flowers, suitable alike for the embellishment of the plant conservatory and for all kinds of choice decorations.

Utica, N. Y.

WM. MATHEWS.

Dendrobium Nobile.

Truly, the most noble of dendrobies. The illustration is from a plant grown and flowered by Norton Brothers of Boston. They exhibited the same at the Massachusetts Horticultural Society's show last spring, and received a well earned gold medal. At that time it had over one thousand blooms, their beauty

being much enhanced by an abundance of its growing bulbs, and glossy evergreen foliage. They grow it part of the year in one of their rose houses, and Mr. Norton says "We are going to see it again this year in as good form."

Dendrobium nobile can be grown in a mixture of fern-root fibre, sphagnum moss and pieces of charcoal, firmly planted in well drained pots or baskets, but the pots should not be too large; a little plant in a big pot, or basket, is sure to grow less under any circumstances. A healthy dendrobe is generally three or four times larger to the eye than the space where the roots are confined; those grown in pots ought to be in a low house near the glass, while those in baskets can hang from the roof of a large house. Water sparingly until the young bulbs are up a few inches, at the same time the young roots will be active. Through the summer months they can be watered and syringed over with the hose, in bright weather twice a day if the water is not extremely cold. They like to be somewhat dry once a day, with very little shade only in the early summer when the young growths are soft, are fond of lots of air, but at the same time do not permit the east wind to blow in on them while growing. In the fall after they have finished their growth a house with a temperature suitable for carnations will be sufficiently warm for them, until they show for flower, when they may be brought into a warmer house, and forced as they are required.

Dendrobium nobile is the best known, easiest to grow and is an evergreen besides, which makes it the most beautiful of all our dendrobies. Our good friend and plant lover Mr. Menand, of Albany, says: "If I had my choice and could

only get but three orchids I would have all three *D. nobile*. Like most other orchids *Dendrobium nobile* has a great many varieties. Although all are beautiful, some are exceptionally so. There are many rare, high priced and high colored varieties, yet like the original type, all of these are of easy growth. *D. n. nobilium*, *D. n. elegans* and *D. n. Sanderiana* are the three brightest I have seen; *Cooksonia* is the most curious sport, with lips on its petals. I purchased from a London firm two years ago a plant of *D. n. nobilium* with three bulbs five inches long and one lead an inch long. This plant has now four leads, one of them twelve inches long. It is at the present time in bloom, and shines like the evening star among the others. Some extra varieties have originated among collections throughout the United States, such as *Eyerman's* variety and *Sheppard's* variety, the latter being in the way of *Wallachianum*. A variety recently imported from its native habitat, was shown at the New York orchid show last year, with deep amethyst purple on the tips of its petals.

Our worthy Secretary W. J. Stewart says he has got a plant of *D. nobile* that he has been growing for two years in his dwelling house, showing flower. As this is something unusual he should write and tell us how he does it.

Mt. Auburn, Mass. DAVID ALLAN.

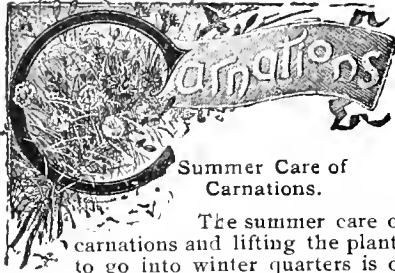
Forcing Shrubs.

A. W. M.'s letter in March 1 issue about lilac flowers from branches placed in water is very interesting. I have not succeeded with lilacs, but have had *for-sythia*, *Pyrus Japonica* and apple blossoms in winter from twigs put in water and left to themselves, and have had red

hawthorn nearly out. The forsythia bloomed beautifully—as freely as in its natural state—but the apple blossoms and Pyrus Japonica were rather pale and small.

T. M. CLARK.

Boston.



Summer Care of Carnations.

The summer care of carnations and lifting the plants to go into winter quarters is of more importance than the care of the plants after they are housed.

So much depends upon the condition of the plants during April, May and June that perhaps a brief account of my experience in the preparation of winter flowering plants, although worth little in itself may result in bringing out some valuable papers on the subject by others.

As soon as cuttings are rooted, about the first week in February or earlier, transplant into shallow boxes two inches apart either way, lower the temperature gradually and about March 25 if the weather is fair put them into cold frames. About April 20—the time for planting out—I find the plants have completely filled the boxes with roots; to separate properly shake the boxes while holding at an angle of 45 degrees, the plants will fall apart with their own roots.

The most rapid growth and finest plants can be obtained by selecting a light rich soil and giving plenty of room, three feet from row to row and one foot in the row is a good distance; this allows for cultivation with a horse, and not only saves labor, but must be practiced if you wish to grow good stock on light soil. Those who think 1 by 3 feet too much should remember that 14,520 plants to the acre can be grown at this distance.

The carnation, although needing continual moisture and frequent syringing in sunny weather, does not attain its highest state of perfection if the soil remains wet for any length of time; the very fact that the disease appears during the dampest and darkest month in the year (November), and the disease being a fungus growth proves this, also a peculiar blue tinge the plants assume. I very much doubt if a commercial florist can select any better soil for carnations than what might be styled sand well enriched. In this we have a combination of advantages—early planting, rapid growth, and lastly, a soil we can dig into at any time wet or dry.

The advantages of a sandy soil for carnations does not stop with the outdoor care, let us follow the plants to the greenhouse. Eleven years of experience proves to me that plants bedded in a rich sandy soil give twice as many long stemmed carnations, a point not to be overlooked by the commercial florist. The nature of rich porous sandy soil is to push a crop along, the nature of a clayey soil is to dwarf; hence the plants in the heavy soil may perhaps be more heavily loaded with buds, but what is the use of sacrificing so much side growth to get long stemmed bloom. If roots of anything can ramble easily and freely in the soil the top will also spread quickly. I have seen a splendid crop of stock plants for winter bloom stay in the ground week

after week, after it was time to lift them; there had been no rain for some time and as the soil was of a clayey nature and packed like a brick I could see at a glance that my neighbor must lose his crop either from frost or loss of root if he attempted to take them up.

He who selects a sandy soil and gives the plants plenty of room can laugh at a drought. The careful reader will notice how much earlier all growers move in their stock now than ten years ago, showing plainly that the plants must be established before getting good flowers.

The exact time for lifting carnations can not be given, it depends entirely upon the weather—some time during August for the main crop, as early as July for the very early bloom, and all plants should be in by the 7th of September, but choose a dry sunny time for moving the plants. Such advice as this has been laughed at and more than once I have been compelled to swallow a pitiful humiliating smile from some brother florist as he asked me, why? Because, after three or four weeks of dry weather both roots and foliage are in a semi-dormant condition, and when moved into moist and shaded quarters at such time start into growth at once and do not wilt.

I generally have two men in the field when I lift the plants, and as fast as one digs them up the other plunges them into tubs of water, as soon as the tubs are full of plants both men take them out and shake dry soil over the roots, the dry soil completely covers all the roots and the plants are moved safer than in any other way.

Pruning should be begun early and done often, but be very careful when the plants are more than half grown. Leaf pruning is better than stem pruning. Cut off the tops when three or four inches high, about three weeks after they are boxed off; the center leaves will soon push up, nip them again, it is better to trim often than to butcher the plants at one slash to save time. I seldom prune later than July 1, and never cut off the tops when moving into the houses. If any pruning must be done cut off a whole branch and cut well down into the hard wood. The flower stalks should be well started when the plants are lifted, and if the treatment of moving the plants I have set forth is practiced, those in bud and bloom can be moved with hardly any perceptible difference in their appearance.

THOMAS L. BROWN.

Grandville, Mich.

Carnation May Queen (Syn. Fred. Johnson.)

When I wrote my notes on carnations which appeared in the *FLORIST* March 15, I little suspected that Mr. John Thorpe was lying in wait to demolish me, but such seems to have been the case. However, I gladly raise my chapeau in graceful acknowledgement of his valued and timely corrections, and I have no doubt my many friends who have drawn on me for a supply of—of—well, of May Queen will also cheerfully accept this ultimatum that has gone forth from Mr. Thorpe, and in all cases where Frederick Johnson was formerly used as the name of this fine carnation will now and in the future use that of May Queen.

And perhaps it may not be out of place for me here to briefly state how I became victimized in this matter. It happened thus: In the fall of '87 I treated myself to a visit to the establishment of Messrs. Hallock, Son & Thorpe, at Queens, N. Y., and from there it was a matter of easy

transition to Mr. Louis Siebrecht's. Louis' carnations at the time were in prime condition and it took me just about one second to ask the name of the one in question, and it required of Louis about an equal space to answer "Fred Johnson," hence the whole trouble. My stock was received and propagated in good faith under that name. And may I ask if it is not now in order for Mr. Siebrecht to explain how things became so badly mixed with him?

Mr. Thorpe's reference to Rosalind reminds me that I grew that variety for two seasons. It is a perfect little beauty, a splendid grower, and about the same shade as May Queen, but no amount of skill or coaxing would induce it to flower before the holidays; it therefore had to go. I gave it the bounce to make room for its successful rival, May Queen, which seems to be exactly the opposite of Mr. Thorpe's action, as he discarded May Queen for Rosalind.

H. E. CHITTY.

Paterson, N. J., April 3.

Kansas Carnation Notes.

Having seen no notes on carnations from this state I will relate my experience with the varieties I have tried. The soil here is a very light sandy loam.

My stock secured from a wholesale grower last October comprised the following varieties: La Purite, DeGraw, Scarlet Gem, Miss Joliffe, Astoria, Snowdon, Diadem, Silver Spray, Columbia, Robt. Craig, Century, Philadelphia, Springfield, Buttercup, Fairy Princess, Wm. Swayne and J. J. Harrison.

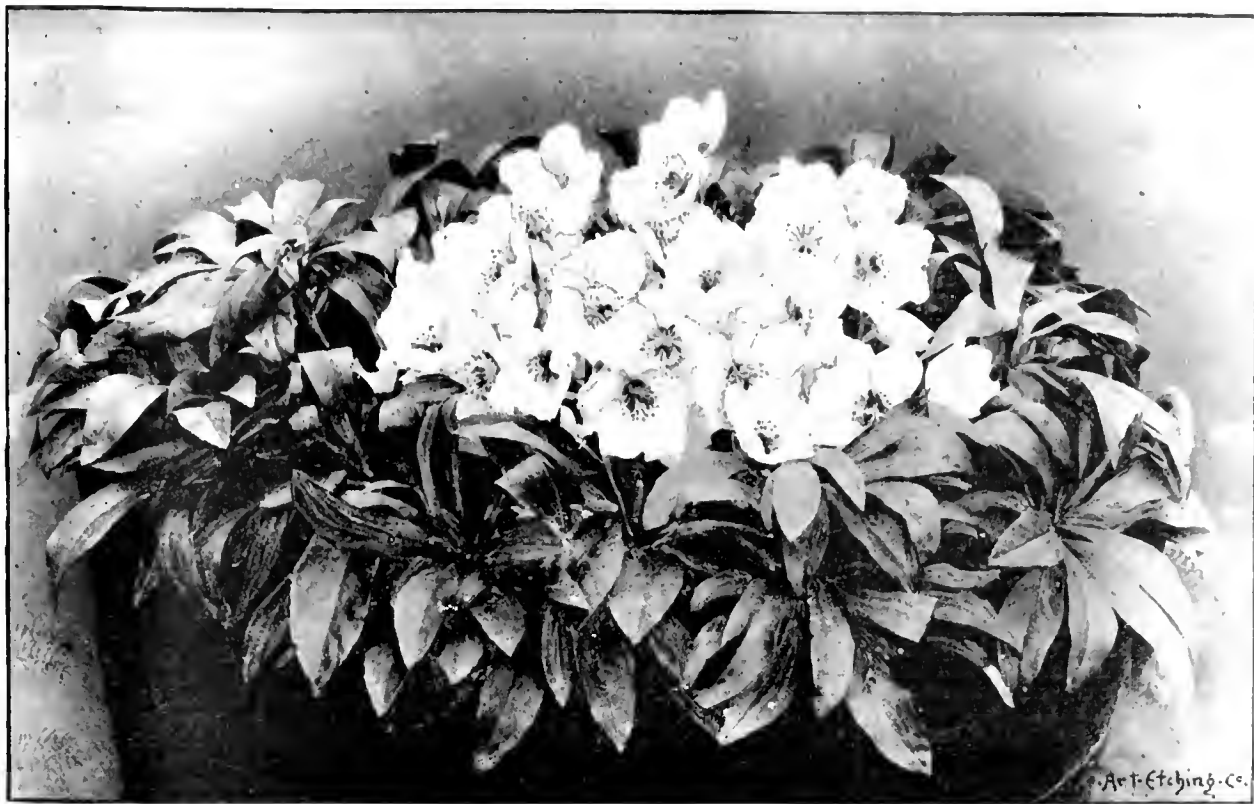
Scarlet Gem has shown the disease from the first and has given very poor and few blooms. Century gave the earliest and very fine blooms, but only a few in the first part of the season. Buttercup and Snowdon did likewise. Every one of the other varieties has since November 1 yielded a steady supply of magnificent blooms; as I write I can count on one stalk of Robt. Craig 39 fine fully developed flowers, 13 blooms on one stalk of DeGraw, many 2 1/4 inches in diameter. Fairy Princess is a magnificent variety and worthy of a place in every stock. I have not yet tried Hinze's White; will try it next season and report.

Larned, Kan. W. T. JACKSON.

Helleborus Niger.

The varieties of this plant, commonly termed "Christmas Roses," while very popular in Europe are but little known in America. In England "Christmas Roses" are relied upon to furnish a goodly share of cut bloom for the winter season, and it is thought by some that they would prove a profitable addition to our list of cut flowers. The fact remains however that commercial growers who have tried them in this country have so far met with limited success, the plant failing to readily adapt itself to our climate. But it may come to pass that the difficulties heretofore met may yet be overcome by some enterprising grower. If the flowers can be produced at a cost which will allow of a profit to the grower we will have increased the variety of our cut flowers by a very welcome addition.

Our illustration is of one of the beautiful white varieties, (St. Brigid) engraved from a photograph sent us by Mr. W. B. Hartland, Cork, Ireland, who states that the clump shown was bloomed under glass in a cold house the past winter. The tub was three feet in diameter.



HELLEBORUS NIGER, VARIETY ST BRIGID

Climatic Influence on Plants.

On page 356 of the FLORIST, Mr. H. E. Chitty, in his interesting notes on carnations, says he was much amused at the closing paragraph in my article on the same subject.

I must admit that if Mr. Chitty can profitably grow such Buttercups and Grace Wilders as he describes, (and which is corroborated by the editor of the FLORIST), at Paterson, N. J., then he has a right to be amused. But I must remind Mr. Chitty, that he does not live in this "parish"; there is an intervening territory of a thousand miles separating us, and it by no means follows, that because these varieties are a success at Paterson, they must necessarily do equally well at St. Joseph. Then there is another thing which must be taken into consideration. Mr. Chitty is located in close proximity to the center of the great cut flower marts of the continent, where in flowers as in other things, the fickle goddess of fashion holds imperial sway, and just at this time she has taken a fancy to the unusual colors of Buttercup and Grace Wilder. If the supply is meagre and the price is high, so much the better, as with her votaries, price is no object, it only makes the flower the more exclusive. And now, our brother florists, who are in a position to take advantage of this freak of the wily goddess are smiling. But a question I should like to ask Mr. Chitty, is this: Does he consider these varieties equally as profitable to grow, as the leading kinds in white and red, provided their market value is the same? For it must be remembered that a large majority of the florists of the country are not so favorably located and cannot get the high prices which

these fancy varieties command in the neighborhood of the large cities.

But admitting for Buttercup all that Mr. Chitty claims for it, will he allow me to turn the tables on him. In his woful description of Grace Fardon, he closes up by saying: "The variety seems to have descended from the old La Purite, and like that good old sort, seems to have inherited its failings." Now let me assure Mr. Chitty that we have no more healthy, robust carnation than the old La Purite, our climate agrees with it and it never fails us.

Coming to Portia, my description of this variety is a counterpart of Mr. Chitty's description of Glowing Coal, and I believe it is generally admitted that Glowing Coal is a synonym of Portia.

Then again, Miss Taplin in her correspondence to the FLORIST, (page 232, Jan. No.) says: "Silver Spray was seen to great advantage as grown by H. E. Chitty of Paterson. Mr. Chitty, who is rather a specialist in carnations, intends to depend on this sort for his main supply of white ones next season." Of this same carnation, in my notes Feb. 1, I say, "This variety appears to combine all the qualities of a first class flower, and that for myself, for a white carnation I shall grow Silver Spray almost exclusively."

Now here are two varieties, of opposite colors, upon which we have reached the same conclusion. They can be successfully grown at Paterson, N. J., and do equally well at St. Joseph, Mo. This brings me to the subject which I started out to discuss.

Looking upon a map it will be found that Paterson is situated a little south of the 41st degree, north latitude, while St. Joseph is about the same distance south

of the 40th degree, a difference of but one degree from being on the same line of latitude, consequently their seasons correspond, yet in their climatic relations they are almost at antipodes.

At Paterson, situated as it is near the sea coast, the climate is modified by the ocean breezes, the atmosphere at most times is charged with moisture, having protracted rains in summer and snows in winter, rarely if ever suffering from severe and long continued droughts. Shielded on the north and west by mountain ranges, the force of the air currents is broken, sudden and extreme changes of temperature are avoided and the climate is equable.

On the other hand, St. Joseph is located five hundred miles away from any large body of water. As a consequence, the atmosphere is almost invariably dry, at times arid, rarely having settled rains in summer or snow in winter; situated in the midst of a vast, unbroken plain reaching up to the arctic regions on the one side and extending to the tropics on the other; subject to high winds and extreme changes of temperature. Gales from the southwest, with the hot winds of New Mexico and Arizona often reaching us in summer, and the piercing blasts of a polar wave sweeping down upon us in winter, with the temperature dropping thirty or forty degrees in as many minutes. In the latter part of September we have cool, showery weather, after which it turns warm, frost not appearing before the middle of October, often holding off until the first of November. In the meantime vegetation of all kinds is started into active growth, then when frost does come it is a killing one. Plants which are naturally hardy if matured, are cut

down or severely crippled by this first frost.

But turning again to carnations. We usually take advantage of a few cooler days about the middle of October to lift the plants, and just after we have got them nicely housed, it is no unusual thing for a southwest wind to spring up and with a bright sun shining blow a gale for two or three days, sending the mercury into the 90s. Perhaps Mr. Chitty would like to know how we manage in an emergency like this; well, we protect the plants the best we can and grow such varieties as we feel assured are adapted to the climate and can withstand these sudden and extreme changes.

Perhaps from no other cause is there so much disappointment and dissatisfaction created in this section of the country, as in finding trees, shrubs and flowers, catalogued by eastern firms with glowing descriptions and ending up as being perfectly hardy. These descriptions are no doubt given in good faith and the trees or plants may be hardy in the locality from which they are disseminated, but many of them are worthless for this section. Only a few days ago I had a letter from central Kansas written by one of my customers, asking my opinion as to certain everblooming climbing roses, stating that he had seen them described in an eastern catalogue as being hardy. In my answer I had to say that I had tried them and found them unsuited to our climate.

Now the idea I propose advancing (and it is only a theory, without data, upon which to base positive conclusions) is this: Taking a plant, or class of plants, which from practical experience it is found can be successfully and profitably grown at any two remote points, then this plant, or class, can be relied upon with safety in any locality corresponding to a line between these two points. But if on the other hand there is undoubted evidence that while they are a success at one of these points and at the same time they are a failure at the other, then their value between the two specified points can only be determined by a practical test.

Taking the above expressed view of the subject, the advantages to be derived (through the medium of the FLORIST) by an interchange of personal experience in the cultivation of different plants, will be seen at a glance by all who take an interest in the subject.

This information coming from every section of the country and concentrated in the organ devoted to the interests of the profession would become a mine of knowledge to the thinking florist, enabling him to form a correct opinion as to the value of plants for his immediate locality and placing a check upon the dissemination of varieties of doubtful character; putting the grower in a position to choose such sorts as he has the assurance will be adapted to the climate of the locality in which he resides.

St. Joseph, Mo. D. M. REICHARD.

Long Island Notes.

BY WM. FALCONER.

NARCISSUS THAT HAVE BEEN FORCED.—Apropos of my note on forcing bulbs, page 357, I may say that John Thorpe does not throw away his narcissus bulbs after he has cut the flowers, but keeps them growing as long as he can spare room for them then removes them to a cold frame to ripen their bulbs, and afterwards plants them out to remain there

for a couple of years before being lifted again for forcing.

DEUTZIAS IN WINTER.—We had a row of big bushes of *Deutzia gracilis* that I wanted out of the way last fall, so I lifted them with good roots, laid them in a patch all close together and packed around and among them with tree leaves. About New Years I began bringing a few a week into a cool greenhouse (45°-50° at night) and stuck them up close together on a side bench, nailed a board close up in front of them and put a little soil around their roots. They came along very nicely and bore profusely and excellent flowers. The early winter exposure, uncramped roots and the cool greenhouse treatment suited them exactly and we had none of the blind racemes common on early forced potted plants.

AMARYLLISES.—I cannot understand why florists don't grow more of these than they do. I have them all winter long and now in quantity. There is very little trouble with them. When I bring them in in the fall I lay them on their sides dry and keep them dry some weeks before I want them to bloom, then take those that show most signs of growth or flower buds, and set them up on the benches to the light. They soon grow and are sure to bloom. The carnation house suits mature bulbs exactly. My young hybrid seedlings in a corner in the propagating house are growing like leeks; they get no rest till big enough to bloom.

PRUNUS TOMENTOSA is a shrub from northern China and Japan and new to our gardens. It will be in bloom in a few days; so be sure to look out for it. If any of you florists who have a passion for surprising the people with novelties in the way of forced shrubs in bloom in winter know of anything more profuse and beautiful than is this prunus when it is in flower, please tell us what it is. It comes into bloom just before the leaves appear, and is smothered in flowers from its base to the end of its topmost twig. The flowers are white tinged with pink, cherry-like, and set closely to the branches as is the case with "flowering almonds." But unlike the "almonds" it is a capital grower, and judging from the behavior of our plants, it shows no susceptibility to blight or borer.

LILIUMS FROM SEED.—On December 15, 1887, I sowed a large quantity of seed of *Lilium auratum* and *L. superbum* in 3-inch deep flats (boxes) filled with sandy soil and chopped sphagnum moss, and laid a layer of chopped moss over all. The boxes were wintered in cold frames and summered in a cool somewhat shady place out of doors. Last fall the boxes were again returned to the cold frame and they froze solid as they also did the previous winter. Last summer many of the seeds had burst in germinating, but only a few grew enough to make leaves, just now (April 3), however, the boxes are a sward of young seedlings with leaves an inch long. This is tedious work, but it pays. There is very little trouble attached to it, even the cold frame isn't necessary. The boxes may be left out doors summer and winter, but slightly protected in winter to keep the frost from heaving the dirt out of them. Sown immediately they are ripe and left outside to soak and freeze over winter, a large proportion of the seeds will germinate the following spring. Some kinds of liliiums, as *tenuifolium*, *callosum* and *pulchellum* germinate in nine to twenty days after being sown; others take one or more months. But home raised seedling

lilies are always considered preferable to imported bulbs, and especially is this the case with *L. auratum*.

CHOPPED MOSS.—I have great faith in this. Take the fresh sphagnum moss and with a sharp hatchet chop it up fine, and we have an excellent material for mixing with the soil in which to sow the lily, clematis, hellebore, aconite and other slow seeds, also for mulching over seed boxes. Did we use the unchopped moss the seedlings would root into it and grow up through it, and in separating them we would be apt to tear their roots; but in the case of chopped moss they are separated without any difficulty.

The "New" Moon Flower.

Let me quote from a letter recently received from a gentleman in Florida, and which I herewith enclose to the editor: "*Ipomœa Bona-nox* (the common "Moon Flower" of our florists) is a native of this state (Florida), being particularly plentiful in the hammocks along the St. Johns river and around some of the large lakes. Four years ago last December I saw it in bloom along the St. Johns, and tall bushes just curtained with it around the great lake Apopka. * * Now what is this white-seeded moon flower? That it is something distinct from the ordinary *I. Bona-nox* I know. * * It is a most rank grower, leaves and flowers monstrous and seeds white. *I. Bona-nox* has black or very dark brown seeds every time and smaller leaves and flowers. A correspondent in Louisiana grows this white seeded sort and she says cuttings of it *will not rot*. * * Have you any idea what it is? At present I have but five seeds of this sort, but if I can procure more I shall send you some to try." He sent me some seeds. They are white or yellowish white, and every one has germinated. W. F.

Nomenclature.

THE CHINESE YAM, or "Cinnamon Vine," page 356—As an agricultural product Chinese Yam is all right, but such a name would never popularize the plant as an ornamental vine, every general plant merchant knows this. Now, this plant (*Dioscorea Batatas*) is a handsome ornamental vine, beautiful in foliage and attractive in bloom, and when it is in blossom there is no other plant in our gardens as cinnamon-scented as it is. The name "Cinnamon Vine" as applied to this plant is not new at all. I think it is about a dozen years ago that my good old friend Dr. George Thurbur protested against using it, and I thought then, and still think, without just cause. And as the name "Cinnamon Vine" referring to *Dioscorea Batatas* has been in general use for at least a dozen years, and is so descriptive of the plant in its ornamental sense, I know of no good reason why we should try to suppress it. We must not be so arbitrary as to endeavor to restrict our plants to one common name and that one derogatory to our interest. To avoid confusion is a laudable excuse, but in this case extenuation outweighs the confusion. As regards the price of the tubers, at \$1.50 a bushel no American could grow it and live. The tubers penetrate into the earth, 3 to 5 feet deep. Digging Chinese Yams is tough farming. I have grown them and dug them.

THE "VEGETABLE PEACH," page 356.—I have not grown it, but from seeds just received from Iowa I can see that it is a cucurbitaceous plant. There is no

attempt made by the seed firm to deceive. On the seed packet is printed "Vine similar to mush melon." Then they describe its cultivation and use. And they elsewhere state that they do not know what is the botanical name of the plant.

MRS. THOMSON'S MOONFLOWERS, page 361, reminds me. While it may seem all right to kick against the name of "Cinnamon Vine," a name that has been in common use for a dozen years or more, what would the people say to any one who would attempt to kick against the name "Moon Flower" as applied to the white night-blooming ipomæas? That "the fellow is crazy," I believe. Now the fact of the matter is "Moon Flower" is the old common name of the pernicious, though beautiful, white weed of our hay fields, and the first intimation I can find of it as applied to the ipomæas is by Peter Henderson. "Moon creeper" is the old name for *I. Bona-nox*. I merely mention this to show that the common names for species of plants are decided by the will of the people and not by the florist or botanist; the florist may suggest, but it takes the people to decide; if they don't like the name they never will take to the plant no matter how good it is. WM. FALCONER.

The Rainbow Plant.

"Observer," page 384, mentions that this name has already been pre-empted by *Alternanthera p. major*. Will he please tell us when and by whom this name was first given to the *alternanthera* and where recorded? I ask this for information's sake and because I keep a record of such things so far as my limited opportunities of observation extend. W. F.

The Correct Cut.

In answer to Mr. Hippard's enquiry as to which is the correct cut of Fuchsia Mrs. F. G. Hill, I would say that the one he used is an exact reproduction from a negative of that variety sent to me by Messrs. W. P. Simmons & Co., Geneva, O. I send you a photo by this mail and print of cut enclosed which please compare. A. BLANC.

Philadelphia.

[The print of cut was identical with that which appeared in the advs. of the "White House" fuchsia, and the engraving is a very accurate reproduction of the photograph. Certainly further comment is unnecessary.—ED.]

Slugs and Snails.

I noticed in the last issue of the FLORIST, a note on using oats, for catching slugs and snails.

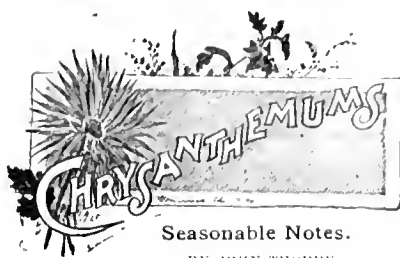
I have been troubled by them, and have found the best way to get rid of them to be by placing turnips cut in slices, at intervals along the edge of the benches. Proceed with a light as mentioned in the former article. They prefer this bait to any I have tried.

I think if Mr. Thorpe will try this plan he will find them much more easily caught than with oats, as they can be so readily seen on the white discs.

Ridgewood, N. J. H. E. FORBES.

Not That Kind of an Orchid.

A well known florist from another city was recently observed endeavoring to light his cigar from an incandescent electric light at a hotel in Rochester.



Seasonable Notes.

BY JOHN THORPE.

Those plants intended for exhibition, whether for cut flowers or specimen plants, should now be well under way. Select always double the quantity required for any purpose; for instance, where three plants of any variety will be the number finally, select six.

In repotting give a shift two sizes larger, using soil open and porous with a dash of bone meal rather than green or strong manure.

In stopping plants for specimens take out the centers carefully and as soon as the plant is high enough to secure a clear stem of 2 inches, be careful in watering after stopping, as frequently plants will get too wet; they should not be allowed to suffer however from the other extreme.

If a frame can be devoted to them after this time and the plants set wide enough apart so as to allow a free circulation of air the root action will be more even than when crowded; remember that if the growth of any chrysanthemum becomes hard or ripens at this season it will be better to discard it and pick up a plant soft and thrifty, be it only half the size.

I have just selected my plants for cut flowers, for exhibition, and for pot culture. My first lot of cuttings to grow cut flowers for market will be put in between now and the 20th of the month, strong thrifty tops either from old plants grown cool or the tops of young plants which have been previously struck; from the time they are rooted until the buds are well formed they will be kept up to the quickest time. A later batch will be put in the first week in June for 6-inch pots and to grow on shallow benches.

Here is a list of varieties from which I intend to finally select six of each to grow on.

JAPANESE.

[Varieties for cut flowers for exhibition twelve of each, except where noted in 5-inch pots.]

Alycon, Baronne de Prailly, Ceres (6), Carew Underwood (6), Comte de Germiny, Delie, Ed. Molyneux, Grandiflorum, G. F. Moseman, La Triumphant, Jeannie Delaux, La Dauphinoise, Marvel, Mrs. I. Canning, Mrs. I. C. Price, Mrs. Irving Clarke, Mrs. J. N. Gerard, Mme. C. Andiguier, Mme. B. Rendatler, Mr. H. Cannell, Robert Bottomley, Troubadour, Ralph Brocklebank, Soliel Levant.

[Varieties selected six of each from which finally to select three plants to grow in pots for exhibition.]

Amy Furze, Alycon, Coquette de Castelle, Cullingfordii, Eclatant, Elaine, Gold, Gorgeons, Ed. Molyneux, Mrs. L. Canning, Mrs. W. Howell, Mrs. I. C. Price, Perle Precieuse, M. Boyer, Robert Bottomley, Puritan, Ornement.

CHINESE.

[Varieties selected for cut flowers and pots; those marked p will be grown in pots as well as for cut flowers.]

Alfred Salter, Bronze Queen of England, Bronze Jardin des Plantes p, Empress of India, Jardin des Plantes p, John Salter, Lord Derby p, Lord Wolsley,

Jeannie d'Arc p, John Salter p, Mrs. Heale p, Mrs. Weston p, Mrs. N. Davis p, Prince Alfred, Nil Desperandum, Princess Teck, Venus p, White Venus p, Pearl River, N. Y.

SEEDLING CHRYSANTHEMUM.—Mr. John McGowan, Orange, N. J., sends us a specimen bloom of one of his seedling chrysanthemums. It is cream white with pale yellow center; measures $3\frac{1}{2}$ inches in diameter and the florets are quilled. It is certainly a very pretty flower.

A Square Issue.

I was sorry to see in an article which appeared under above heading, a few remarks which appeared to me to reflect somewhat on the general intelligence and fairmindedness of the florists assembled at the New York convention. In discussion a member stated that the sun's rays generated heat where they struck the surface of the earth. This your correspondent pronounces a new and startling discovery, and further that the announcement of this brilliant discovery was received with applause (derisive implied).

Now common observation (unassisted by the more careful investigation and comparison of the scientist) would naturally lead to this conclusion. The sun's rays coming to us through 30 or 40 miles of air below zero, passing through the glass roof of our greenhouse, striking some opaque objects, such as boards, become warmed, impart heat to the air by contact with the surface so warmed and the air. The same thing takes place of course outside, but if the surface of the earth is below zero it will necessarily be slow, first in warming the surface of the earth and then in warming so large a volume of air. I do not claim that the sun's rays have no effect in warming the air in their passage through it, but that the amount of heat imparted is in proportion to the amount of obstruction met in the shape of particles of dust, watery vapor, etc.

The writer in the FLORIST makes the further claim that heat radiated from pipes downward strikes the upper sides of leaves in a truly natural manner as the heat from the sun does. Is this true? It is the commonly received opinion of men that the leaves of plants after sunset become colder than the air and on clear nights sufficiently so to condense moisture in the shape of dew, checking or stopping the evaporation from the leaf and resting certain actions of the plants. I think his proposition may be fairly stated in the following words: Sunlight is accompanied by heat, as this is natural through the day, consequently it is natural that I should place my pipes so that the upper sides of the leaves of plants shall receive radiant heat during the night; or perhaps he thinks the neglect of nature to furnish such radiant heat to the leaves of plants through the night only a proof of her stingy step-mother character.

Milwaukee. FRANK WHITNALL.

The Standard Pot.

Potters who have decided to manufacture the standard pot may secure sample pots of the style adopted by the Society of American Florists, by addressing Mr. Robert Craig, 19th and Market streets, Philadelphia, who is chairman of the committee. Such a set should be secured for models before starting to manufacture.

Steam Heating.

Will some florist who is using steam please state how many feet of 1½ or 1¼ inch pipe is necessary for each 100 cubic feet of air space to maintain a temperature of 60° with the thermometer 20° below zero outside? ENQUIRER.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED. By a gardener well up in the plant business. East preferred. Address Box 100, Aurora, Ill.

SITUATION WANTED. By a florist of 10 years' experience. Address Box 7, care American Florist, Chicago.

SITUATION WANTED. By a thoroughly experienced florist, private or commercial; long experience. W. J. WATTE, 41 N 3rd St. Harrisburg, Pa.

SITUATION WANTED. By a good steady, sober and industrious German florist; married, no children. State wages. Address W. H. HETTEL, care Oscar Uhle, 1317 Chicago St., Omaha, Neb.

SITUATION WANTED. As gardener and florist by a young man who thoroughly understands fancy gardening and greenhouses; good reference given. Address J. S. EDGEMORTH, Sewickly, Pa.

SITUATION WANTED. A first class gardener, German, wants a private place; understands greenhouse, grapeery, and all kinds of gardening. Address WM. SCHMELKE, 217 S. Twelfth St., Philadelphia, Pa.

SITUATION WANTED. Gentleman competent in floral, seed and nursery business (theoretically as well as practically), desires to enter an active engagement. He speaks several languages. Address GARTNER-ZEITUNG, Lemont, Cook Co., Ill.

SITUATION WANTED. Having a practical knowledge of propagation, all kinds of florist stock and the business, in any department. First class rose grower and designer. Sober, capable and reliable. References. FLORIST, 117 Washington St. N. Y.

SITUATION WANTED. As head gardener to take sole charge where two or three men are kept, or single handed. Scotch, good florist, used to hot water and steam heating, fair carpenter. First class references in Toronto. Openings April 8. Address MR. MILLER, 280 Carlton St., Toronto, Ont.

SITUATION WANTED. As gardener or florist, 15 years' experience in the best private and trade establishments in England, and 1 year in this country; a first class all-round man; age 32; single. For particulars apply to W. MATHEWS, Florist, York St., Utica, N. Y., or J. H. TROY, Wellesley Hills, Mass.

SITUATION WANTED. After April 18, by a young single man, of 4 years' experience in growing roses and propagating. Well experienced in forcing bulbs, designing, decorating, building of greenhouses, glazing and all general florist work. Best reference from present employer and others of reference from present employer and others. Address Box 26 F E C, Govanstown, Balto. Co., Md.

WANTED. 25 to 50 strings of smilax per week regular, if good. J. M. GASSER, 101 Euclid Ave., Cleveland, Ohio.

WANTED. Young man, experienced florist, sober and competent to take charge of large commercial place. MEMPHIS FLORAL CO., Memphis, Tenn.

WANTED. A man of good, steady habits, to take charge of small greenhouse, make up bouquets, etc. State wages. Address LEWIS R. FOX, 117 E. Fulton St., Gloversville, N. Y.

FOR SALE. About 2,000 feet 4-inch greenhouse pipe with valves and fittings. Address PAUL F. LAT, Turner Park, Ill.

FOR SALE. The E. V. Teas Dugreth Nurseries. Price \$3000, will take \$2000. This is a great bargain. Address A. T. HEDGECOCK, Dugreth, Ind.

TO EXCHANGE. Verbenas, fine plants grown in frames from 2-inch pots, \$2.00 per 100. Will exchange for Tea roses, carnations, or clematis. Address ROSCOE SAUNDERS, Bradford, Ill.

FOR SALE. A 3-horse power boiler and fittings and No. 0 Deane steam pump, also a cedar tank for \$75.00 cash. Have no further use for them. Address LINCOLN HEIGHTS NURSERY, Newtown, Bucks Co., Pa.

FOR SALE. A small good established greenhouse business in Nebraska; three houses and cottage all in good condition. This is a good chance for a young man with small capital. Address H. F. CARE American Florist.

FOR SALE. A good established floral store in Chicago, West Side. Will be sold very cheap if taken at once. Owner has other business and can't attend to both. Address H. C. MILLER, 729 West Madison St., Chicago.

FOR SALE. Greenhouse in town of 50,000 inhabitants, in central Illinois. Greenhouse in elegant shape for spring sale. Will sell with property, or alone, rent dwelling house and grounds. Address H. B. CARE American Florist, Chicago.

FOR SALE. To florists—Two greenhouses in perfect condition, containing choice roses, grapevines, camellias, and many other plants, in Arlington, five minutes walk from steam and horse cars. The lot containing about 9,000 feet. Has also a double house; each house containing six rooms. More land adjoining can be bought if desired. Terms easy. KIDDER PEABODY & Co., 113 Devonshire Street, Boston, Mass.

Pansies that are Pansies

BUGNOT'S AND CASSIER'S EXCELSIOR STRAIN.

At a trial of all the leading strains obtained direct from the introducers, and planted side by side, by Mr. Denys Zirngiebel, in his large trial house (150 x 15 ft.), which he had erected expressly for Pansies, these were **PRE-EMINENTLY SUPERIOR** to anything in the house; the colors were **SIMPLY ASTONISHING, BEING ALL THAT ARE KNOWN TO THE SPECIES, AMONG WHICH A WELL-DEFINED, CLEAR RED MARKING WAS STRIKINGLY PROMINENT;** for **COLOR, SIZE AND SUBSTANCE** they were **FAR AHEAD OF ANYTHING EVER SEEN IN THIS COUNTRY.** Cut blooms were sent to **LEADING HORTICULTURAL PUBLICATIONS** and to **CONNOISSEURS** of this flower, and their **PRAISES ARE LEGION FIRST PRIZE WAS A CERTAINTY AT ALL EXHIBITIONS WHERE SHOWN.**

We contracted with Mr. Zirngiebel to save the seed of these strains, and we have the entire stock.

For anyone who wants a Pansy to compete against all comers, this is the one.

In packets of 100 seeds each, 50 cts., 1000 seeds, \$4.00.

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ROSES.

A splendid collection of imported Hybrids, worked low on Manetti stock, well established in pots.

Price, \$3.00 per dozen; \$30.00 per 100.

A large stock of Teas, Hybrid Teas, and Polyanthus, prices sent on application.

Good stock of Genl Jacqueminots in 2-inch, at \$5.00 per 100; 3-inch, \$10.00 per 100; 4-inch, \$15.00 per 100.

Novelties in Geraniums, at \$10.00 per 100.

General collection of Double and Single, at \$4.00 per 100; \$30.00 per 1000.

Per 100 Geranium Mmc. Sallerol.....\$ 4.00

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Eucharis Amazonica, 4-inch..... \$1.50 per dozen

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50,000 PANCRATIUM CARIBBAEUM, flowering bulbs 2 to 2½ inches in diameter, at \$3 per 100, \$25 per 1000.

Anyone in the trade who wants Southern grown stock can not do better than apply to us. Address

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BAY VIEW, FLORIDA.

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FOR SALE.

Great chance to buy first class Florist business, 800 feet of glass, retail trade, long established. Business never better, fine Summer Beach trade. Good reasons for selling. Nice Dwelling and Five Acres of Land make property valuable. Part can remain on mortgage. This is a rare chance and can be easily investigated. Address

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SECOND HAND.

For Sale, 1,500 feet, with Fittings, IN GOOD CONDITION.

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Eleven Greenhouses, with windmill, tank, etc., unfailing supply of water, well stocked and doing a thriving business. Nine acres of land with a neat comfortable cottage. The whole forming a most eligible plant for a florist.

Terms very reasonable. Apply to

AUGUSTUS TABER,

GRAND UNION HOTEL, NEW YORK.

Mention American Florist.

JOHN H. TAYLOR,

ROSE GROWER,

BAYSIDE, L I, N. Y.

Offers to the Trade the Great TEA ROSE

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889

— ALSO —

MME. DE WATTEVILLE, CATHERINE MERMET,

PAPA GONTIER, BRIDES, and

PERLE DES JARDINS, NIPHETOS.

Write for particulars.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, best kinds for forcing. Orders received now for delivery in November. Address

WILLIAM H. SPOONER, Jamaica Plain, Mass.

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GREENHOUSE STOCK AND ROSES.

Villa Nova P. O., Delaware Co. Pa.

Money Order Office: Bryn Mawr, Pa.

ROSE, CLIMBING NIPHETOS.

CLIMBING

NIPHETOS

ROSE,

The Most Valuable Introduction Since Marechal Niel. A small plant in a pot exhibited before the Royal Horticultural Society in London bore forty-eight splendid blooms, and was awarded a First Class Certificate, differing from those of old Niphotos (from which it is a sport) only in that they are of a purer white, not showing the pink tinge, and that they seem more delicately scented. **SHOOTS HAVE RUN UPWARDS OF TWENTY FEET IN ONE SEASON.** This variety blooms only from the lateral shoots while the main stem grows on with a most decidedly climbing habit. A valuable help to those who supply **CUT FLOWERS FOR MARKET.** To be distributed in the United States in May, 1889, by JAMES VICK, SEEDSMAN. Send for particulars to KEYNES, WILLIAMS & CO., Salisbury, England, or

JAMES VICK, SEEDSMAN, ROCHESTER, N. Y.

ROSES.

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand. Also all the best select varieties of Everblooming and Hybrid Remontants for Bedding. At prices as low as strictly first-class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,
SUMMIT, NEW JERSEY.
Mention American Florist.

A. C. TUCKER, ROSE GROWER,

P. O. BOX 190. NYACK, N. Y.

I would like to give my prices for the following varieties in 2, 3, or 4-inch pots to any parties desiring the same, for Spring delivery:

- PERLE DES JARDIN, SOUV. D'UN AMI
- LA FRANCE, NIPHETOS,
- MERMET, BRIDE,
- AMERICAN BEAUTY, PAPA GONTIER.

STANDARD ROSES.

4 to 5 feet high.

The largest collection in the United States. All first class pot grown plants.

Gabriel Marc,
WOODSIDE, L. I., N. Y.

NOVELTIES IN ROSES.

Also the leading forcing varieties Teas, Hybrid Teas, and Hybrid Perpetuals, and novelties in Chrysanthemums. Also Tabernaemontana, Bourvardias, Carnations, and general greenhouse stock.

Trade List mailed on application.

JACOB SCHULZ,
LOUISVILLE, KY.

ROSES, ETC.

We offer out of 2-inch pots, all the principal varieties of Tea Roses, at \$4 per 100. Hybrids at \$7 per 100. List of sorts on application. Also Per 100

- Stevia Variegata \$ 4.00
 - Santolina Tomen'osa 4.00
- Papaver "PIREBRAND" the largest Poppy in existence, and most brilliant in color, perfectly hardy, showiest garden plant out, \$4.00 per 100. Flowers of this variety retail from 15c. to 25c. apiece here.

100 page Catalogue Free.

Address **NANZ & NEUNER,**
LOUISVILLE, KY.

ROSES.

Fine healthy plants of standard varieties of Everblooming Roses now ready for shipment.

- Strong plants in 5-inch pots, \$15.00 per 100.
- " " in 6-inch pots, \$18.00 per 100.

Also a limited stock of young plants in 2 1/2-inch pots, struck from hard-wood cuttings. Prices and varieties furnished on application.

J. L. PURPLE,

(Successor to S. H. PURPLE.)

COLUMBIA, Lancaster Co., PA.

Mention American Florist.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

ROSES.

VERY CHOICE YOUNG STOCK

— FROM —

DUNDEE LAKE ROSERIES.

Having finally decided not to build any new rose houses this year, I am now able to offer the 10,000 very choice young plants I had prepared for the contemplated new houses. Every cutting for this stock was made under the conviction that the resulting plant would be flowered on my own benches. Only carefully selected wood from healthy, vigorous plants has been used for cuttings.

To parties wanting any of the following kinds, I shall be pleased to quote prices, on either large or small orders:

- | | | |
|--------------------------|---------------------------|------------------------------|
| <i>American Beauty,</i> | <i>La France,</i> | <i>Madame de Watteville,</i> |
| <i>Catherine Mermet,</i> | <i>Bon Silene,</i> | <i>Souvenir d'un Ami,</i> |
| <i>The Bride,</i> | <i>Perle des Jardins,</i> | <i>Papa Gontier.</i> |

My place is near stations on THREE Railroads, viz: New York, Lake Erie & Western; Delaware, Lackawanna & Western, and New York, Susquehanna & Western, to either of which stock will be delivered, free on board cars. I shall be glad to have intending purchasers inspect my stock before placing orders. My nearest station is Clifton, on N. Y., L. E. & W. R. R.

S. C. NASH,

Clifton, Passaic Co., N. J.

NEW PEDIGREE ROSES FOR 1889.

- CLEOPATRA, Tea; first class certificate Royal Horticultural Society.
- DULCE BELLA, Tea. MAID OF THE MIST, Hybrid Tea; a white sport from Lady Mary Fitzwilliam.
- MULTIFLORA ALBA, Polyantha; first class certificate Royal Horticultural Society; first class certificate Royal Botanic Society.

Grafted plants ready in May. Descriptive Price List will be mailed to all correspondents free on application.

H. BENNETT, Pedigree Rose Nursery,
SHEPPERTON, MIDDLESEX, ENGLAND.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,
MOUNT HOPE NURSERIES. ROCHESTER, N. Y.

News Notes.

ST. LOUIS.—On February 1 Mr. Julius E. Jaeger, a florist at 1813 Sidney street, was found dead in his bed.

DENVER, COLO.—Emil Glauber has just completed two new houses 18 x 100 feet each connected with a new packing room 18 x 36.

ALBANY, N. Y.—The firm of L. Menand & Sons was dissolved April 1. Louis Menand will continue the business at the same locations.

MILWAUKEE.—Jos. Money, the florists' wire worker, has sold out to the Reliance Wire Work Co., with whom he will remain as an employe. Miss A. L. Hendee has opened a floral store at 138 Mason St.

RICHMOND, VA.—The Richmond Florist Club has issued a schedule of premiums for its first annual chrysanthemum and plant show to be held next November. Jno. R. Hooper is president and J. H. Harvey secretary of the club.

MILWAUKEE.—Wm. Gregory, of Humboldt avenue, has sold out to Benjamin Gregory. The first named gentleman will remove to Ludington, Mich. C. Baumgartner, one of our pioneer florists is quite ill.

WORCESTER, MASS.—The County Horticultural Society gives its next exhibition on the 18th inst, which will be followed by weekly shows throughout the summer, closing with the annual chrysanthemum show November 13-14.

LARNED, KANS.—Cut flower trade in this section has been about the same—probably a little better than last year with the demand nearly altogether for loose flowers. The winter has been unusually mild; only once did the mercury settle down to zero. Stock is all in fine condition and look for spring business to open early.

PITTSBURG.—The Western Pennsylvania Botanical Society has monthly meetings, its object being to create a more widespread study of plants and particularly of those indigenous to western Pennsylvania. The society expects soon to publish an accurate flora of Allegheny county and subsequently one of the entire western part of the state. Dr. Wm. R. Hamilton is president and Miss Willa Z. Mathews corresponding secretary.

WASHINGTON.—At a meeting of the florists of the city and vicinity held in the lecture room of the Botanical Garden on the 4th inst, the "Washington Florists' Club" was organized and officers for the ensuing year elected as follows: J. R. Freeman, president; R. Bowdler, vice-president; W. S. Clark, recording secretary; C. F. Hale, treasurer; G. W. Oliver, corresponding secretary; E. Cadmus, A. Glorious and E. Miller, auditing committee. The club will meet on the first Thursday evening of each month.

San Francisco.

As I shall soon leave here for Portland, Oregon, I took the opportunity today to visit Golden Gate Park and the Cliff House, also the beautiful residence of Mr. Adolph Sutro.

On entering the park we find the acacias and tritomas in full bloom, and they are certainly very effective. California seems to be the home of the acacia; they are used quite extensively as shade

trees on the streets and avenues, and the only objection I see to them is that they get at times so full of black scale that they have to be cut down to prevent the scale from spreading to the other trees. It is a common thing to see trees from 25 to 30 feet high. In the park there are very many choice conifers which cannot be grown in the east, many of them being natives of Japan, and they are certainly beautiful.

In going through the conservatory I felt quite interested in the way they grow their orchids. Part of the side benches are encased with sash, and inside, the orchids (too many to mention) were in their glory, blooming to perfection. The conservatory certainly does credit to those in charge, and the park in general looks well.

After leaving the park our next trip was by the steam cars to Cliff House, a distance of five or six miles, and almost the whole distance we saw the acacias in full bloom, growing wild. We visited Sutro Heights and here we were well repaid for climbing the hill. The gardens are open to the public and I saw there more outdoor flowers in bloom than at any other place around San Francisco. Instead of grass borders they use mesembryanthemum quite extensively; (about 12 to 15 inches wide), it is kept trimmed and it answers the purpose nicely. Variegated thyme is also used for lettering and borders and does very well. The flowers in bloom were too many to mention, but they all seem to be doing their part. The evergreens here are in almost endless variety and are in fine condition.

I must not close without a word in regard to the statuary; it is certainly fine and placed amongst the shrubbery and trees and on the terraces assists greatly in increasing the effect. Mr. Adolph Sutro deserves our appreciation of his generosity. Would there were more like him. He has certainly a magnificent place and I hope he will live long to enjoy it. This place (so different from most large places in Europe) has no signs informing us that "all trespassers will be prosecuted"; on the contrary, all lovers of flowers and trees are welcomed. SIDNEY CLACK.

Boston.

The April meeting of the Gardeners' and Florists' Club was an interesting one the members being entertained and instructed by Mr. Edw. Hatch who delivered an essay on the "Auction Plant Trade." He will soon commence to give practical illustrations on the subject.

Mrs. E. S. Joyce of Medford, aged 83, and possibly the oldest active florist in the country, sustained a very severe fall March 25. Her recovery is doubtful. Mrs. Joyce has been a familiar figure about the horticultural exhibitions for a quarter of a century, and has many friends. Her two sons died in southern prisons during the war.

"You don't know, Mr. X., how bare our table looked with that one Mermet and nothing to relieve it!" Thus spoke a customer who had ordered one Mermet and some ferns for her table. The florist had forgotten to send the ferns and she had come to reprimand him for his neglect of so important an order.

Mr. Edwin Lonsdale comes out in the last number of the FLORIST with a conundrum about "beans." His curiosity is truly laudable, and if he will but take a flying trip to the "Hub" some bright Sunday morning, he will be enabled to carry back with him the information he so much desires, and he won't need any

steam engine to pull him home afterwards neither.

The delegation which attended the exhibition, from New Jersey and Pennsylvania, visited a number of the local establishments while here, and when they departed for home they were accompanied by a Boston escort which saw them safely across the border into Rhode Island. One of the latter party came home with an overcoat twice as good as the one he started out with, all of which leads us to wonder whether Rhode Island is as dry a state as it is reputed to be. By the way, who got the new necktie?

Mr. James Cartwright, an old and well-known florist died March 25, at his home in Wellesley. He was born in Burslem, Staffordshire, England. He started in the florist business at Wellesley, Mass. in 1866, and soon became well known for the good quality of the cut flowers which he brought to market, his specialties being roses, violets and gladioluses. Of the latter he had a fine collection which took many first premiums at the horticultural exhibitions. In recent years he was also a large grower of cyripediums. He served for a number of years on the flower committee of the Mass. Hort. society. He leaves four sons, all of whom are in the florist business. Mr. Cartwright was a hard working, conscientious man and well worthy of the respect which he received from his brother florists, quite a delegation of whom attended his funeral. His age was 68. W. J. S.

MISS EMILY LOUISE TAPLIN, well known to the trade through her contributions to the columns of the FLORIST was married to Mr. Edwin Royle, March 27, at Hackensack, N. J.

CLIANTHUS DAMPIERI.—Mr. J. Shanley foreman for J. Condon, Brooklyn, N. Y., sends us some blooms of this odd flower. He states that the plant from which they were cut has seven stems from one to two feet long and forty racemes of bloom.

ROSE REINE MARIE HENRIETTE.—Mr. E. Haentze, Fond du Lac, Wis., sends us three handsome blooms of this rose, one of them the largest we have ever seen of this variety. If it was only more uniformly productive how valuable it would be to the cut flower grower.

Washington Florists.

Listen to what Olive Logan says about florists and flowers in Washington, D. C., in the Philadelphia Times March 31st.

I fancy that the florists' trade must be prosecuted in this city under rather more favorable conditions than in most others. Elsewhere flowers are a luxury; here they are a necessity. Diplomatic life is so much more subtle than any other sort of existence, that flowers and bon bons are constantly required as supplementary to the usual vocabulary. Necessarily this must make great trade for the florists, in addition to the customary demand. Undoubtedly, also, the florists here are in a position to know all the latest news from Flora's Kingdom. The government hothouses receive every thing that is beautiful as soon as known.

All who have the good fortune to know the Washington florists can heartily congratulate them on their superior advantages. L.

Wanted Bugs on Them.

Citizen (at florist's): "Have you any plants with bugs on them?" Florist: "No, indeed! I don't keep such things," Citizen (disappointed): "I was in hopes you did. My wife never lets me smoke in the house except when there are bugs on the plants."—*Burlington Free Press.*

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements: 10 Cents a Line, Agate; Inch, \$1.40. Column \$14.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent, 6 months, 10 per cent; 12 months, 20 per cent

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for May 1st issue must REACH US by noon, April 25. Address

THE AMERICAN FLORIST CO., Chicago.

Catalogues Received.

R. J. Groves, Atchison, Kan., plants; Wm. C. Wilson, Long Island City, N. Y., wholesale plants; V. Lemoine & Son, Nancy, France, plants; Hans Nielson, St. Joseph, Mo., plants; Souper & Notting, Luxembourg, Europe, roses.

IF YOU WANT CHOICE, FRESH

CUT FLOWERS,

WELL PACKED, AND SHIPPED PROMPTLY. YOU SHOULD ORDER OF

CHAS. H. FISK,
Wholesale Florist

116 & 118 DEARBORN STREET, CHICAGO.

AND RELY ON GETTING THE BEST STOCK IN THE MARKET.

Store Open Day and Night.

I keep a full stock of **WIRE DESIGNS** of superior workmanship and at lowest prices. Extra pieces of any description made to order on short-est notice. Send for Catalogue.

KENNICOTT BROS.,
Wholesale Florists,

TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety.

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address

GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.

WELCH BROS.,
Wholesale Florists,

165 Tremont Street, BOSTON MASS.

We make a speciality of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

BOSTON, April 9.

Roses, Teas	\$2.00
" Niphetos	4.00
" Gontiers	1.00
" Perles, Simeon	6.00
" Brides, Mermets	8.00
Carnations, short	50 @ 75
Carnations, long	1.00 @ 2.00
Violets	2.50
Tulips	3.00 @ 4.00
Peonies	3.00 @ 4.00
Valley	3.00 @ 4.00
Stocks	2.00
Mignonette	2.00
Pansies	.50
Callas	8.00
Harrisii	15.00
Smilax	25.00
Adiantums	1.50

NEW YORK, April 9.

Roses, Bon Silene	\$2.00
" Gontier	2.00 @ 3.00
" Perles, Niphetos, Simeon	3.00
" Mermets, Brides	4.00 @ 5.00
" Cousins	4.00
" La France	6.00
" Bennetts	3.00 @ 4.00
" Am. Beauty	25.00 @ 30.00
" Puritan	15.00
" Jura	8.00 @ 10.00
" Hybrids	20.00 @ 30.00
Mignonette	2.00
Carnations	1.00 @ 2.00
Hyacinths	4.00
Narcissus, Valley, Tulips	3.00
Violets	.50
Adiantum	1.50
Smilax	20.00
Lilac, per bunch	1.00

PHILADELPHIA, April 9.

Roses, Perles	\$3.00
" Niphetos	3.50
" Bennetts, La France	6.00
" Bon Silene	2.00
" Mermets	8.00
" Am. Beauties	20.00
" Niels Jacqs	10.00
" Gontiers	6.00
" Brides	10.00
Carnations	1.00
Romans, Valley	4.00
Harrisii lilies	10.00
Callas	8.00
Smilax	20.00
Double Violets	.50
Single Violets	.25

CHICAGO, April 11.

Easter Prices.

Roses, Bon Silene	\$4.00
" Am. Beauties	15.00 @ 20.00
" Jacqs	12.00 @ 15.00
" Brides	8.00
" La France, Bennetts, Mermets	7.00 @ 8.00
" Perles, Niphetos	5.00 @ 6.00
Dutch hyacinths	6.00 @ 8.00
Callas	15.00 @ 20.00
Violets	.75 @ 1.00
Candidums short	4.00 @ 6.00
Candidums long	8.00 @ 10.00
Carnations, short	1.25 @ 1.50
Carnations, long	1.50 @ 2.00
Romans, Valley	4.00 @ 5.00
Tulips	3.00 @ 3.00
Narcissus	2.00 @ 4.00
Gladiolus	20.00 @ 25.00
Smilax	20.00 @ 25.00
Adiantums	1.00 @ 1.50
Pansies	.75 @ 1.00
Mignonette	1.00
Harrisii lilies	75 @ 1.00
Harrisii lilies	20.00 @ 25.00

WM. J. STEWART,
Cut Flowers AND Florists' Supplies

WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
Wholesale Florists
and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.
We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.
Auction Sales of Plants Spring and Fall.

W. F. SHERIDAN,
Wholesale and Commission Dealer in
CUT FLOWERS,
NO. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.

THOS. YOUNG, JR.,
Wholesale Florist
20 West 24th Street,
NEW YORK.

CUT FLOWERS.
We are on deck DAY and NIGHT to give your orders
CAREFUL ATTENTION,
PROMPT SERVICE,
GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEP'T,
Telegrams, 88 State, CHICAGO.
Letters, box 688.

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36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

LaRoche & Stahl,
Florists & Commission Merchants
—OF—
CUT FLOWERS.
1237 Chestnut Street, PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,
Wholesale Rose Growers,
Telephone 977. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermets,
And other Standard sorts.

EDWARD C. HORAN,
Wholesale Florist,
36 WEST 29TH STREET,
The Bride, Mermets,
and Am. Beauties,
SPECIALTIES. NEW YORK.

HAMMOND & HUNTER,
Wholesale dealers in
Cut Flowers AND Florists' Supplies
61 West 30th Street, NEW YORK.

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17 CHAPMAN PLACE, 17 (near Parker House.)
SPECIALTIES.
VIOLETS, ROSES IN VARIETY, SMILAX, FANCY
CARNATIONS, LILY OF THE VALLEY, TULIPS,
HYACINTHS, NARCISSUS, ETC.

CHAS. E. PENNOCK,
Wholesale Florist,
38 So. 16th Street, Phil'delphia, Pa.

THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.
Beauty, Bride, La France, Perle,
Bennett, Niphetos, Mermets, Papa Gontier
CHAS. L. MITCHELL, MGR.,
P. O. Box 188, CINCINNATI, OHIO.
Also plants of above by doz., 100 or 1000. 2, 3 & 4-in.,
Select Stock. Plants in quantity at discount.
WRITE FOR PRICES.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

ST. LOUIS.—J. P. Gadd is now established at the stand known as the Lindell Flower Store under the hotel of that name.

J. J. H. GREGORY delivered an address at Boston March 23 on the cultivation of the onion, giving some very interesting facts concerning varieties, sets, fertilizers, seeders, etc.

MR. J. H. MUNSON, late with Jos. Breck & Son, of Boston, is said to have purchased an interest in the Emerson Seed Co. at Omaha and will locate there.

THE Albert Landreth Seed Co. has been incorporated at Manitowoc, Wis.

ANOTHER letter to a seedsman, we give it literally:

"I am agent for 4 seeds firms Mr. Maul living (evidently Levings Bros.) goodwin and i v fosi and shumway that is five and i had twenty catalogues this spring." Ills.

Mailing Circulars With Canceled Stamps.

J. E. Everitt, of Everitt & Co., dealers in seeds and publishers of the *Agricultural Epitomist*, was arrested yesterday afternoon by Postoffice Inspector Stewart, on the charge of violating the postal laws. The accused was brought before Commissioner Van Buren, who heard a portion of the evidence and then continued the case until this morning at 10 o'clock. The evidence was to the effect that Mr. Everitt, among those whose mail is the heaviest at this office, has been having trouble with Postmaster Jones for several months. For several years it has been the custom of the firm to send out every winter and spring several hundred thousand catalogues advertising the seeds in which they deal. The catalogues were always arranged in size so as to be carried through the mails for 1 cent, and last year, according to Mr. Everitt's evidence, he got along very well with the postoffice officials. This year, after he had mailed about 50,000, the stamp clerk in the office claimed that they were too heavy to be carried for 1 cent. The edges of the pamphlets were trimmed and the postal authorities then said the weight was too much for 1 cent. But the postoffice people again objected to circulars he mailed, and leaving out an envelope he had inclosed in that of a circular, he was informed that these packages were not too heavy. But it is said that after this a large number with envelopes were again mailed, and a third time the postoffice officials complained.

Mr. Everitt says he then went to the postoffice and called the attention of the officials to the fact that the scales on which they were weighing the mail matter were not balanced, but he was not treated courteously by the employes. Seeing it was impossible to get his mail matter sent out through the Indianapolis postoffice he made arrangements with the postmaster at Lawrence and the postmistress at Brightwood to have his circulars mailed from those offices. Accordingly 21,000 circulars were delivered at the Brightwood office and 3,000 at Lawrence. The Brightwood postmistress, taken sick soon after receiving the circulars, was unable to mail them promptly. Finding that several thousand had not been mailed Mr. Everitt took them from that office and brought them back to his place of business on West Washington street.

A few days afterward the same circulars was delivered to the Indianapolis postoffice. They still bore the stamps canceled at the Brightwood office and no additional postage had been paid. Mr. Everitt was notified of the discovery, and he says he informed the authorities that the circulars had been sent to the office by mistake, and asked that they be returned to him for new stamps. The postoffice authorities refused to allow the return of the matter and directed Mr. Everitt's arrest. He says very positively that the circulars bearing the canceled stamps were delivered at the office by mistake on the part of the persons who had his mailing in charge.

Commissioner Van Buren held that the defendant had committed no offense by mailing his circulars at Brightwood or Lawrence, even though they were too heavy to be carried for 1 cent, but he desired to hear more evidence upon what Mr. Everitt claimed was a mistake in attempting to mail circulars bearing canceled stamps.—*Indianapolis Journal* March 29.

Burpee on Renaming Varieties.

We are just in receipt from our London office of a copy of the *Gardening World* of February 23d, in which we note the letter of Mr. James Muir on "How Synonyms are Multiplied." We must express to you our appreciation of your courtesy in publishing this article, and also our sense of the importance of the subject. As you will see by the marked paragraph enclosed from our Farm Annual for 1889, we are trying to curb to the best of our ability this iniquitous system of selling the same variety of

seed under several names. Mr. Muir speaks particularly of Messrs. Oakshott & Millard using the same American illustration of Charles Downing Potato which appeared in our catalogue for 1888, to advertise apparently the same potato as their "Satisfaction."

We have before us a copy of this firm's catalogue for the current year, and note on page 14 that they have appropriated our copyrighted illustration of Laxton's Evolution Pea, which appeared in our catalogue for 1886, to advertise their "Specialite Pea."

On page 20 they have appropriated the original illustration of our Cardinal Tomato to illustrate their "First Little Beauty," while on page 18 they prominently announce "Oakshott & Millard's Mammoth Silver King Onion," claiming as their own a variety which was first named and introduced by us in 1884. While we have piracy in America, it is seldom that we meet with quite such bold piracy as in this catalogue from Reading.

Last year Mr. R. H. Vertegans also boldly transferred a number of our American illustrations of vegetables, evidently procuring seed from America and introducing them as new and distinct novelties into England.

The re-naming of novelties in vegetables and flowers in America is now taken in hand by several of our leading journals, assisted by the State Experimental Stations, and it is likely that this deceptive practice will be largely curtailed. We are glad to see that your journal is so fair and impartial as to take the same stand in England.—*W. Allee Burpee & Co., Philadelphia, in Gardening World, March 23.*

"MUMS."

I have yet to dispose of 5-4 plants of MRS. ANDREW CARNEGIE, at \$2.00 each, or six for \$10.00.

Also the following sterling kinds by the HUNDRED: Grandiflorum, Boyer, Triomphante, Cullingfordii, Moonlight, Langtry, John Thorpe, Gloriosum, Christmas Eve, at \$3.00 per hundred.

40 of the Finest Varieties for all purposes, including the best of New Ones of last year, at \$8.00 per hundred.

REMEMBER, these are what I say, the finest varieties.

STOCK IN THE FINEST POSSIBLE CONDITION.

JOHN THORPE,
ROCKLAND CO. PEARL RIVER, N. Y.

PLANTS AND ROSES.

H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
Moss Roses, 1 year, open ground, \$12.00 per 100.
Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
Hydrangeas Hortensis, Otaksa, T. Hogg, 4-in., 5-in., 7-in., \$10.00, \$12.00 and \$15.00.
Carnations, newest and best varieties, from 3c. to 6c.
Ivy, English, 20 inches long, \$3.00 per 100.
Amaryllis Formosissima \$8.00 per 100.
Cannas, \$2.50 per 100.
Chrysanthemums, best sorts, \$3.00 per 100.
Grape Myrtle, \$5.00 per 100.
Palms, 18 var. Dracenas, Pandanus, 4 varieties.
A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

E. HIPPARD,
YOUNGSTOWN, OHIO.

BOUVARDIA PLANTS

For Spring setting. Davisoni, white; Elegans, salmon pink; Pres. Garfield, double pink; Alfred Neuner, double white; strong, healthy plants from 2-in. pots, ready May 1st, at \$4 per 100. Cash with order.

SAM'L NICHOLS,
COHASSET, MASS.

CATALOGUE FREE
DANVERS ONION
CORRESPONDENCE SOLICITED

FAXON'S SEED SPECIALTIES
Asters, Fancies, Sweet Peas, Nasturtiums, and Danvers Onion. ESSAYS:—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both and Catalogue, 10 cents, if you mention this paper.

M. B. FAXON, 21 SOUTH MARKET ST. BOSTON, MASS.

WHITE WATER LILY ROOTS (N. Odorata)

\$5.00 per 100, by express. Not less than 50 at hundred rate. By mail, 25 cents each; 3 for 50 cents; 12 for \$1.50. Cash with order. No Catalogue.

Wm. F. Halsey,
WATER MILL, N. Y.

PANSIES.

Outdoor grown plants from best imported German Imperial Prize Seed, \$1.25 per 100; \$10.00 per 1000, delivered at express office on receipt of price. Also home-grown seed first year from above stock, by mail, 25c for 25c. Please write address very plainly.

C. F. OSBORNE & BRO.,
FREDONIA, Chautauque Co., N. Y.

BOUVARDIAS.

Double White and Double Pink, mixed. Rooted Root Cuttings, nice clean stock, at \$1.50 per hundred; \$12.00 per thousand. Or will exchange some for other stock I want.

JOHN SCHAFFER,
BALLSTON SPA, N. Y.

NOVELTIES IN FLOWER SEEDS

FOR 1889.

Offered by **John Gardiner & Co.,** 21 N. 13th St., PHILADELPHIA, PA.

SHIRLEY POPPIES The most chaste and beautiful of all single Poppies. The colors are very waxy and graceful in the sun, and run through all shades of bluish and white to rose and crimson. Surpassingly lovely. Packet 25 cents. See *Gardiner's Chronicle* for March 9th, '89, for full history of this.

CUP AND SAUCER CANTERBURY BELL An odd and remarkable strain of this favorite old-fashioned flower, comprising great variety in color and much diversity in form and habit. Packet 15 cents.

AUBRETIA LEICHTLEINI A very fine variety with flowers of a brilliant carmine-rose; much larger and finer than any other *Aubretia*, and a welcome addition to our list of dwarf, early, spring-flowering perennials for rock work, etc. Pkt. 25c.

KALANCHOE CARNEA This promises to be one of the most valuable additions to our list of winter-flowering plants. Flowers in mid-winter, like the *Froesia*, and bears large umbels of delightfully fragrant pink flowers. Being long-stemmed and free flowering, it will make a good subject for cutting, etc. Packet 25 cents.

NEW MINIATURE SUNFLOWER This very charming sunflower was in great demand last season for cut flowers. The blooms are small, single, bright golden yellow, with dark centre. The plant covers, literally itself with flowers from July to October. Perfection for cutting. Packet 10 cents.

SEND FOR OUR LIST OF NOVELTIES AND SPECIALTIES FOR THE TRADE.

Address all orders and communications to **JOHN GARDINER & CO.,** 21 North 13th Street, Philadelphia, Pa.

HUGHES' SOLUBLE FIR TREE OIL.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants, such as ferns, etc., if used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

E. GRIFFITH HUGHES,
Operative Chemist,

MANCHESTER, ENGLAND.

PRICE: { Put up in 1 gallon tins, \$3.25 } in New York
{ Put up in 1 quart tins, \$1.00 }

TO SECURE THE GENUINE ARTICLE, see that each tin shows a white label with red trade mark, full directions how to use, and the name of

AUGUST RÖLKER & SONS,
Sole Agents for America.

New York Depot 44 DEY STREET.
Mention American Florist.

PAPER SEED BAGS.

Samples sent to Florists, Nurserymen and Seedsmen. ADDRESS

CLARK BROTHERS, Manufacturers, 61 Ann St., N. Y.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

ROFFEA (for tying).

Direct Importation. First Class Stock.

15 cents per pound in small lots.
\$12.00 per hundred pounds.

SALTER BROS., FLORISTS,
ROCHESTER, N. Y.

FORCING BULBS

FOR

Fall Delivery.

NARCISSUS

AND OTHER

POPULAR BULBS

FOR SPRING FORCING.

Special Prices upon Application.

- Narcissus Albicans*, large creamy white trumpets, one of the best.
- Narcissus Bicolor Empress*, the Queen of the bicolors, immense trumpets, a great favorite.
- Narcissus Bicolor Grandis*, similar in color to *Horsfieldii*; but with stouter flowers and much later.
- Narcissus Bicolor Horsfieldii*, a great beauty and fine for cutting.
- Narcissus Bulbocodium*, "Yellow Hoop Petticoat," fine strong bulbs for forcing.
- Narcissus Bulbocodium Citrinus*, pale sulphur flowers, and very early.
- Narcissus Emperor*, the largest; immense stout flowers of a rich yellow.
- Narcissus Golden Spur*, immense deep golden yellow flowers, and wonderfully early.
- Narcissus Henry Irving*, rich yellow, large hold trumpets.
- Narcissus Incomparabilis Cynosure*, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white.
- Narcissus Incomparabilis Stella*, large single white variety, very early, fine for cutting.
- Narcissus Major*, true, one of the best forcing sorts, large yellow trumpets, similar to *maximus*.
- Narcissus Nobilis*, a first class variety for florists, free and early.
- Narcissus Obvallaris*, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.
- Narcissus Odorus Campenelle*, the well known Campenelle Jouquil, very strong bulbs.
- Narcissus Orange Phœnix*, large double white flowers with orange center, good for cutting.
- Narcissus Pallidus Præcox*, the earliest of all forces very freely, single, sulphur colored trumpets.
- Narcissus Rugilobus*, true, large yellow trumpet, very free and very early.
- Narcissus Scoticus*, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.
- Narcissus Von Sion*, true, the double deep yellow daffodil.
- Freesia Refracta Alba*, large bulbs for forcing.
- Freesia Leichtlini*, a nice contrast to preceding and forces well.
- Gladiolus The Bride*, flower pure white, fine for forcing.
- Helleborus* or *Xmas Roses* in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

THOS. S. WARE,

HALE FARM NURSERIES,

Tottenham, London, England.

R. S. BROWN & SON

PLANTS TO THE TRADE.

We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

- Abutilons of sorts \$4, \$6 and \$8 00
- " Eclipse, new, var. foliage 8 00
- Ageratum, W. Cap, Cope's Gem, \$3, 4 00
- Anthericum Vittatum 8 00
- " Picturatum 12 00
- Achyranthes, 2 kinds 3 00
- Alyssum of sorts 4 00
- Asclepia, white flowers 6 00
- Alternanthera Spectabilis, new var. 6 00
- " Aurea Nana 3 00
- " Paronychioides 3 00
- " Versicolor & Tricolor 3 00
- Begonia, Flowering Rubra, Weltoniensis Rubra, Alba, Zebrina, Robusta Alba Picta G. Scandens, Bruntia, Metallica, etc. \$4, \$6 and 8 00
- Balm, variegated 4 00
- Calla, Richarda Maculata 6 00
- Cobea Scandens 8 00
- Chrysanthemums in variety 3 00
- Coronilla Glauca Variegata 8 00
- Caladiums, fancy leaf of sorts 16 00
- Coleus of sorts, best new and old 3 00
- " Verschaffeltii, Golden Bedder 3 00
- " Rag Carpet, Louise Beck and Mrs. Hunt 4 00
- Cannas of sorts 5 00
- Cuphea (cigar plant) 3 00
- Centaurea Gymnocarpa \$4 and 6 00
- Ciueraria Maritima 4 00
- Cyperus Alternifolius 8 00
- Daisies, white and pink 4 00
- Dew Plant 4 00
- " variegated foliage 6 00
- Echeveria Glauca 5 00
- Euphorbia Splendens \$4, \$6 and 8 00
- Ferns of sorts named \$8 and 12 00
- Fuchsias, best dbl. & sgle. \$3, \$4 and 6 00
- " new of sorts 10 00
- Geraniums of sorts dbl & sgle \$3, \$4, 6 00
- " of sorts scented \$3, \$4, 6 00
- Heliotrope, \$3, 4, \$6 White 6 00
- Hollyhock double, nice plants 8 00
- Hibiscus of sorts \$4, \$6 and 8 00
- Isolepis Glauca and Gracilis 6 00
- Ipomœa Learii, Blue Moon Flower 6 00
- " Palmata, Mexican " 12 00
- Impatiens Lucy and Sultana 6 00
- Lycopodiums of sorts 8 00
- Lantanas of sorts \$6 and 8 00
- Lobelias for Baskets \$3 and 4 00
- " Ribbon lines or Beds, \$3 and 4 00
- Money Wort 4 00
- Moon Flower, true 5 00
- Oxalis double yellow \$4, \$6 and 8 00
- " single yellow \$4, \$6 and 8 00
- " pink and white 4 00
- Passiflora Incarnata, hardy true 4 00
- Petunias, best double of sorts, \$6 and 8 00
- Pansies, large flowering 3 00
- Perennial Phlox of sorts 6 00
- Pothus Variegata, fine for vases 8 00
- Pilea Arborea or Artillery plant, \$4, 6 00
- Rosemary 8 00
- Roses Everblooming of sorts 4 00
- Salvias of sorts 6 00
- Stenotaphrum 6 00
- Strawberry Geraniums 5 00
- Smilax 3 00
- Thyme Golden 4 00
- Vincas, shrubby for bedding 6 00
- " trailing for baskets, 2 kinds 6 00
- Verbenas of sorts 3 00

ADDRESS

R. S. BROWN & SON,
Box 99. KANSAS CITY, MO.

Chicago.

Schiller & Mailander are building six large houses at Niles Center. Each of the houses are 125 x 20 feet, all heated by hot water, all to be used for roses and violets.

April 22 has been designated as Arbor Day for Illinois by the Governor.

Geo. Miller, the wholesale florist of Lake View, is very ill with typhoid fever.

Phil J. Hauswirth, the popular financial secretary of the Florist Club, who has been confined to the house for some time by sickness is about again.

W. J. Stewart, of Boston, was in the city the 5th and 6th insts.

SPRING BULBS.

MY CATALOGUE OF SPRING BULBS, SEEDS AND FLORISTS' SUPPLIES,

is now ready, and will be mailed free to anyone showing evidence of being IN THE TRADE.

SPECIAL OFFERS.

- Lilium Auratum, in fine condition, 7 to 9 in. circ. cases of 100 bulbs, \$7 00, per doz., \$1.00. Price on Lots on application.
- Clematis (Dutch) Strong dormant roots, 2 year, in fine sorts including white, per 100, \$35 00; per doz., \$5 00; each, 50 cts.
- Clematis (Native) Cocinea, scarlet, per 100, \$6 00; per doz., \$1 00
- Clematis (Native) Crispa, lilac, per 100, \$7 00; per doz., \$1 25.
- Gladiolus, Gandavensis seedlings, large selected bulbs. Per 1000 17 00
- Brencheijensis, dazzling scarlet. \$ 8 00 \$ 1 00
- Various shades of scarlet and crimson. 9 00 1 25
- " " pink and variegated. 15 00 2 00
- " " white and light. 23 50 2 50
- " " yellow and yellow and red. 23 50 2 50
- Best mixed, all colors. 12 00 1 50
- " " dark colors. 15 00 2 00
- " " light colors. 17 50 2 25
- Colville Alba, "The Bride," for forcing 3 00
- Lemoine's Seedlings, fine mixed. 4 00
- Hyacinthus Candicans, large bulbs. 20 00
- Tuberose, Pearl, 1st size northern grown 3 to 4 inch, very fine. 12 00 1 25
- Per doz. 7 00
- Cannas, in the named sorts, my selection. 1 30 7 00
- " " Bhemanni and Noutonii. 2 00 15 00
- Madeira Vine, per barrel, \$5.00. 30 2 00
- Calladium Esculentum, assorted sizes. 1 25 8 00
- " " Fancy. 2 00
- Nymphaea Odorata. 75 5 00
- Dahlias, assorted colors, double or single, large, undivided roots. 1 50 10 00
- Cacti, for bedding, in 10 or more good sorts, my selection. 1 25 9 00
- Sheep Manure, (pulverized) per 100 lb. bag, \$2 75; per ton, \$40 00.
- " " compressed per 100 lb. bag, \$2.50; per ton, \$35 00.
- Bone Meal, pure, per 200 lb. bag, \$1.50; per ton, \$40 00.

TERMS, NET CASH.

ADDRESS **J. A. DE VEER,**
183 Water St., NEW YORK.

NOTICE.

LAKE VIEW, CHICAGO, April 5, 1889.
Owing to a change in the Postoffice, our address is now

1748 N. HALSTED ST., LAKE VIEW, CHICAGO, ILLINOIS.

Please remember to direct all communications to the above No., thus avoiding delays and mistakes. Yours truly,

GEO. W. MILLER, Wholesale Florist.

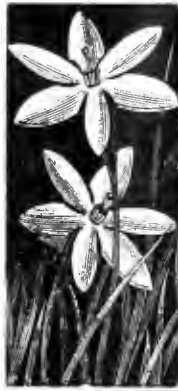
Cape Cod Pink Pond Lily

For price list, Plants and Cut Flowers, address the original cultivators.

CHIPMAN BROS.,
SANDWICH, (Cape Cod,) MASS.

JAPAN MAPLES, HARDY RHODODENDRONS, AZALEAS, ROSES, BEGONIAS, &c Special blocks of the hardy Shrubs, Ornamental and Street Trees; best quality at lowest rates.
PURPLE BERBERRY, PRIVET, VIBURNUM PULCATUM, WEIGELAS, GOLDEN ELDERS, fine.

FRED. W. KELSEY, 208 Broadway, NEW YORK.



- Cinnamon Vine, strong roots \$ 3 50 per 100
- Moon Vine, strong plants 4 00 "
- Ipomæa Palmata, strong garden roots 15 00 "
- " " pot plants 8 00 "
- Milla Biflora \$25 00 per 1000 3 00 "
- Amaryllis Formosissima 6 00 "
- Ampelopsis Veitchii \$4 00 and 6 00 "
- Asparagus Tenuissimus, strong 4 00 "
- Echeveria Secunda, from boxes 2 50 "
- " " extra fine, 3 inch pots 5 00 "
- Clerodendron Balfourii, strong 5 00 "
- Dracæna Indivisa, 3-inch pots 10 00 "
- Euphorbia Splendens, 3 inch pots 6 00 "
- Cape Jasmine 3 inch pots 10 00 "

Geraniums, Fuchsias, Verbenas, Carnations, Begonias, Callas, Roses, Coleus, Tritoma, and a general collection of bedding plants at low prices.

MICHEL PLANT AND SEED CO.,
1010 Olive St., ST. LOUIS, MO.

HOLLAND FORCING BULBS

And Flower Roots of all kinds. FIRST CLASS Goods.

Great Reduction in Prices. Send for our Price List.

ORDER EARLY.

C. H. C. MACHEN & SONS,

WHOLESALE BULB GROWERS,

WHOLESALE ONLY.

WARMOND, (NEAR HAARLEM), HOLLAND.

SMILAX.

Fine stocky once reset ready for immediate delivery. These are a bargain, and I would respectfully solicit a trial. Price per 1000, \$6 00; per 100, 85c.

PANSIES.

I attend personally to the selecting and improving of my strain by the continual addition of the best only from noted European and American growers, and can guarantee that they will continue to give the satisfaction they have heretofore.

Cold Frame plants, \$15.00 per thousand. Spring grown, transplanted, \$6.00 per thousand, 75 cts. per hundred.

☞ CARNATION CUTTINGS are not all sold. Speak quickly if wanted.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

R. VAN DER SCHOOT & SON,

HILLEGOM, HOLLAND.

LARGEST GROWERS OF

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

Headquarters for Forcing Bulbs. Wholesale Importers should write us for prices.

BULBS.

Per 100 Per 1000
TUBEROSE, large double 3 to 5-in. \$1 00 \$5.00
" " 4 to 6½-in. 1 50 10.00
(Special prices on large lots.)
Sets clean. 50

Will exchange Tuberoze Sets for Roses.
CANNAS AND GLADIOLI, mixed colors, \$2.00 per hundred.

H. M. HOFFMAN, Leavenworth, Kas.

TUBEROSES.

Some well ripened Bulbs, first class, warranted true to name:

DOUBLE ITALIAN, DWARF PEARL, DIAMOND PEARL, AND EARLY SINGLE FLOWERED,
at \$2 00 per 100; \$10 00 per 1000. Special rates on lots of over 5000. Second size bulbs at half the above rates. Offsets of all the above suitable for growing large bulbs first season, at 50c. per 100; \$2 00 per 1000. In lots of over 5000, at \$1.50 per 1000. Smaller sizes, 25c. per 100; \$1 00 per 1000.
Variiegated Foliage, beautifully striped green and white, single and early flowering, \$3.00 per 100; \$20 00 per 1000. Offsets \$1.50 per 100; \$5.00 per 1000.
JOSEPH W. VESTAL, Lillie Rock, Arkansas.

BOTTOM KNOCKED OUT

on price of our transplanted Cabbage, Tomato and Cauliflower Plants at \$4.00 per 1000. Egg plant and Cauliflower \$1.50 per 100. Not transplanted Cabbage, Tomato, Celery and Sweet Potato \$2.00 per 1000. Send for Wholesale and Retail Price List of bedding plants. Seed Catalogue free. 1000 2½-inch Smilax at \$3 00 per hundred.

ROOP & ZILE,

Seed and Plant Growers, Westminster, Md.

BENJAMIN RIMBAUD,

HORTICULTEUR,
QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD, TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

PAPER WHITE NARCISSUS,
DOUBLE ROMAN NARCISSUS,
LILIAM CANDIDUM,
ALLIUM NEAPOLITANUM,
FREESIA REFRACTA ALBA ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

Mention American Florist.

AUGUST RÖLKER & SONS,
 44 Dey St., NEW YORK,
 Supply the Trade with
SEEDS, BULBS,
 And all kinds of
FLORISTS' SUPPLIES.
 Price List Free on application with
 business card.

DAHLIAS.

50 choice named varieties (dry roots),
 \$1 25 per doz., \$10 per 100, \$50 per 1000
 Mixed varieties, (dry roots), \$1.00 per doz.,
 \$6.00 per 100, \$50 00 per 1000.
 Pot Plants, (ready April 1st), \$1.00 per
 doz., \$6 00 per 100, \$50 00 per 1000.

MICHEL PLANT AND SEED CO.,
 718 Olive Street,
 ST. LOUIS, MO.

**"A GREAT HELP
 IN CUT FLOWER WORK, AND
 HAS BEEN GREATLY NEEDED"**

So say many of FLORAL DESIGNS, concern-
 ing which more can be learned by
 addressing

J. HORACE McFARLAND, Harrisburg, Pa.

M. M. BAYERSDÖRFER & CO.
 56 N. 4th St., Philadelphia, Pa.,
 Manufacturers and Importers of

BASKETS AND FLORISTS' SUPPLIES.
 FULL LINE OF METAL WREATHS.

LIVE FLORISTS

Need good Catalogues, well illustrated, cor-
 rect, stylish. No one does them better than
 the Florist Printer below named, to whom
 you can write for samples.

J. HORACE McFARLAND,
 Harrisburg, Pa.

SPECIAL NOTICE.

On and after April 1st, 1889, my business, now
 carried on at Jamesport, Long Island, will be
Removed to Floral Park, N. Y.

(EAST HINSDALE STATION.)

My customers will please note change of address
 in order to avoid delay in the filling of orders.

Very respectfully,
 C. H. ALLEN,
 Jamesport, N. Y., March 14, 1889.



A. BLANC,
 Horticultural Engraver,
 PHILADELPHIA.

5000 ELECTROTYPES
 for ILLUSTRATING
 FLORISTS, SEEDSMEN, &
 NURSERYMEN Catalogues
 Cheap.

A FULL SET OF CATA-
 LOGUES ILLUSTRATING
 ALL CUTS SENT ON RE-
 CEIPT OF 50c., WHICH
 DEDUCT FROM FIRST
 ORDER.

Electro of this Cut 50c.
 A larger one \$1.50.

IMPORT AND EXPORT NURSERY.

F. A. RIECHERS & SOHNE, A. G.

HAMBURG, GERMANY.

Immense stock of Azalea Indica, Camellias, Lily of
 the Valley, Palms and Dwarf Roses.

PRICE LIST ON APPLICATION.

We are Now Ready to Deliver
TUBEROSE BULBS

At the following rates f.o.b. New York. Special prices on large lots:

	Per 100	Per 1000
Excelsior Pearls.....	\$2.00	\$15.00
Dwarf Pearls, fine stock.....	1.75	11.00

NO. 2 AND NO. 3 AT VERY LOW RATES.

GLADIOLI FOR FORCING.

Now is the time to buy CHRYSANTHEMUMS for stock, when they are in
 bloom. We have over 400 varieties, all the finer new sorts included.

Ampelopsis Veitchii, \$8.00 per 100.
 FINEST PRIMULA AND PANSY SEED.

Apple Geranium Seed, \$3.50 per thousand, Fresh.

V. H. HALLOCK & SON,
 QUEENS, N. Y.

G. V. VAN ZANTEN & CO., Bulb Growers, HILLEGOM, Haarlem, HOLLAND.

G. V. VAN ZANTEN & CO.,
 HILLEGOM, HAARLEM, HOLLAND.
 ESTABLISHED 1862.

Wholesale Growers of Dutch Bulbs.

LARGE STOCKS. CHEAP PRICES.

Price list now published and may be had free upon application.



A GOOD STOCK OF 1st QUALITY
 PEARL TUBEROSE BULBS, at \$16
 per thousand.

Choice LILIUM AURATUM and RUBRUM,
 GLADIOLUS, CANNAS, CALADIUMS, Etc.

Special lists of BULBS, BASKETS, Etc., on ap-
 plication. LYCOPODIUM, \$5 00 per 100 pounds.
 WREATHING, \$5 00 per 100 yards.

JAMES KING, SEEDSMAN,
 170 Lake St., CHICAGO, ILL.

FALL BULBS FOR FORCING, &C.

Orders for DUTCH BULBS, ROMAN HYACINTHS, PAPER
 WHITE NARCISSUS, LILIUM CANDIDUM, FREESIA, LILIUM
 HARRISII, LILY OF THE VALLEY (true Berlin var.), etc., now booked.
 Catalogues and estimates furnished on application.

Just received, a fine lot of Palm Seeds, Cycas Stumps, New Cape Flowers and Immor-
 telles. Write for prices. ADDRESS

J. A. DE VEER, 183 Water Street. NEW YORK.
 AGENT FOR

FOREIGN BULB AND SEED GROWERS, NURSERYMEN, ETC. SEE AD. ON PAGE 426

F. E. McALLISTER,

— WHOLESALE DEALER IN —

Seeds For the Florist Market, Garden-er and Farmer. Requisites Such as Baskets, Im-mortalles, Grasses, Mosses, Boquet Pa-pers, Palmes, etc. Bulbs For the Green-house or Gar-den.

22 Dey Street, - - - NEW YORK.

**HIGLEY'S TRADE LIST OF
 SEEDS, PLANTS, BULBS
 AND FLORISTS' REQUISITES**

Now out. If you do not receive one, send
 for it. Address

HENRY G. HIGLEY,
 CEDAR RAPIDS, IA.

FLOWERING SHRUBS, BULBS, &c
 F. A. BAUER, Bloomington Ill. Doz. 100
 H. P. and Moss Roses, strong 2 yr. dormant, \$1.50 \$10
 H. P. and Monthly Roses, in pots to bloom, 1.50 10
 " " young plants 1.50 3
 Dahlias, whole roots, choice named, 1.00 10
 " " unnamed, 1.00 5
 Ampelopsis Veitchii, Boston Ivy, fine plants 1.00 5
 Downing's Gooseberry, hardy, prolific, reliable 50 3
 Paeonies, choice assortment, named kinds 1.50 5
 Grapevines, 10 choice, Niagara, &c, 2 yr. \$2; 1 yr. \$4
 price. Clematis, Greenhouse and Vegetable Plants.

Freight Rates Reduced.

On January 10 the western classification was changed so that flower pots were classed with crockery as second class freight, thus nearly doubling the freight on them west of Chicago and St. Louis. This classification has now been amended to take effect April 1, placing flower pots with earthen ware back in 4th class freight, so that they now arc charged only the same rate of freight as in 1888.

I think this will be very pleasant news to all florists in the territory west of Chicago. East of Chicago the rate is 4th class, and in the south the rates are mostly 5th class on flower pots.

Syracuse, N. Y. J. N. PERKINS.

CHOICE STRAINS OF FLORIST'S FLOWERS

AND

SPECIALTIES FOR CUTTING,

Offered by **John Gardiner & Co.,** 21 N. 13th St., Philadelphia, Pa.

Aster, Prince of Wales, dark crimson,	15	\$3.50
Aster, Zingibell's Improved, double white,	15	6.00
Abutilon Patrimonia fl. pl., double white,	10	1.00
Balsam, Covent Garden, double white,	10	1.50
" " " scarlet,	10	1.50
Bellis Perennis (Double English Daisy) white,	15	5.00
" " " mixed colors,	15	5.00
Candytuft, Zingibell's Giant White Rocket,	10	2.00
Centaura Sauzeolens,	5	5.00
Cobaea Scandens, blue,	10	1.00
" " white,	10	1.00
Mignonette, Elmwood Giant,	5	5.00
Stock, Double Florist's White,	10	5.00
Leposyne Maritima (the New Coreopsis),	10	1.00
Sweet Pea, "Gardiner's Fairy," extra, Oz. 10c. lb. 1.00		

SEND FOR TRADE LIST OF NOVELTIES AND SPECIALTIES.

JOHN GARDINER & CO., 21 North Thirteenth St., Philadelphia, Pa.

NOTICE.

Colens Golden Bedder, Verschaffellii, John Goode, Firebrand, 2 1/2-inch pots,	Per 100	\$ 2.50
Double Ivy Geranium, 4 best kinds, 2 1/2-inch pots,		5.00
Fuchsia Double White, 2 1/2-inch pots,		5.00
Inglott's Sultan, 3-inch pot,		5.00
Begonia Metallica, 3-inch pots,		5.00
" " Rubra, 3-inch pots,		5.00
" " Foliosa,		3.00
Pelargoniums, in 6 best market var., 4-in. pots,		10.00
Carnations transplanted, Root, Craig, Grace Wilder, Sunrise, Century, Chester Pride	2	5.00
Hinze's White, Phila. Red, Lady Emma,	2	2.00
Rooted Cuttings, Fuchsias, 7 vars.,	2	2.00
" " Heliotrope, 2 vars.,	1	1.50
Ampelopsis Veitchii, 2 1/2-inch pots,	3	3.00
Alternanthera Amura, Spectabilis, Aurea Nana, Versicolor, 2 1/2-inch pots,	3	6.00
Chrysanthemums, 20 vars., 2 1/2-inch pots,	2	4.00
Verbenas, 2 1/2-inch pots,	2	5.00

W. J. CHINNICK, TRENTON, N. J.

STOCK FOR FLORISTS.

Alyssum, double,	Per 100	\$2 50
Ageratum, four sorts,		3.00
Alternantheras, two sorts,		6.00
Begonia rubra, strong, 2 1/2-inch flowering sorts,	2 1/2-inch	5.00
Colens, 24 standard sorts,	2 1/2-inch	2.50
" " 10 new sorts,	2 1/2-inch	6.00
Chrysanthemums, 40 sorts,	3 1/2-inch	3.00
Fuchsias, double and single, strong,	4 1/2-inch	4.00
Geraniums, double and single, strong,	2 1/2-inch	3.00
Heliotropes, four varieties, 2 1/2-inch,	2 1/2-inch	3.00
Lantanas, six varieties, strong, 2 1/2-inch,	2 1/2-inch	4.00
Smilax, strong, 2 1/2-inch,	2 1/2-inch	3.00
Salvias, six sorts, 2 1/2-inch,	2 1/2-inch	3.00

Healthy stock; best sorts; good packing. Address **HANS NIELSON, St. Joseph, Mo.**



SOLD

BY

Seedsman

1,500 Caladium Esculentum, 3-inch,	Per 100	\$5 00	Per 100	\$40 00
" " " 2-inch,		4 00		30 00
2,500 Canna Roots, assorted,		4 00		30 00
Geraniums, assorted var., 4-inch pots,		5 00		
Amaryllis Johnsonii, first class,		10 00		

W. P. Brinton, CHRISTIANA, Lancaster Co., Pa.



PRIMULA OBCONICA

Fine 2 inch pot plants \$10 per 100, \$70 per 1000, 250 at thousand rates.

Colens, 2-inch pots, in variety,	Per 100	\$ 2 50	Per 1000	\$20 00
Rooted Cuttings,		1 00		8 00
Geraniums, 2 inch, in variety		3 00		25 00
" " Mme. Sallerot,		3 00		
Alyssum,		2 50		
Chrysanthemums in variety		3 00		30 00
Fuchsias in variety		3 00		
" " Storm King,		5 00		
" " Phenomenal,		8 00		
Pelargoniums,		8 00		
Canna French Hybrids, named,		15 00		

I. N. KRAMER & SON, MARION, IOWA.

NEW AND CHOICE CARNATIONS.

SILVER SPRAY, STARLIGHT, L. L. LAMBORN, WM. SWAYNE, FLORENCE, EMPEROR OF MOROCCO, and 40 other new and standard varieties. For prices see AM. FLORIST page 288, or write to **GEO. HANCOCK, Grand Haven, Mich.**

SURPLUS

Stock of Rooted Cuttings of Carnations of **PORTIA, JEANETTE, CENTURY, EDWARDSII, FRES. DE GRAW, KING OF CRIMSONS, ALEGRIEHE, CHESTER PRIDE, ETC.** All healthy and well rooted. Address

JOS. RENARD, Chester Co., UNIONVILLE, Pa. Also 1000 Smilax in 3-inch pots at \$2.50 per 100.

CARNATIONS.

A fine stock of all the leading varieties propagated early. Write and let us price your order.

McCREA & COLE, BATTLE CREEK, MICH.

ROOTED CUTTINGS OF CARNATIONS,

Grown in large quantities for the trade, of the Wm. Swayne and L. L. Lamborn, having the largest quantity, outside of the originator, for sale at the following prices: \$5.00 per 100 Buttercup, \$3.00 per 100, \$25.00 per 1000. Grace Wilder, Grace Fardon, Sunrise, Springfield, Century, at \$2.00 per 100, \$15.00 per 1000. Hinze's White, Peter Henderson, Snowdon, Lady Emma, Phila. Red, Scarlet Queen, Portia, Seawan, Chester Pride, Petunia, Hinsdale, Duke of Orange, Quaker City, \$1.50 per 100, \$12.50 per 1000. Miss Jolliffe, Scarlet Gem, De Graw, Edwardsii, White LaParite, \$1.25 per 100, \$11.00 per 1000.

Plants now ready. Also forests of the above varieties at \$1.50 per 100. Cash must accompany all orders. Orders booked now for Spring delivery.

ISAAC LARKIN, Toughkenamon, Chester Co. Pa.

FOR SALE.

Swanley White Violets in bloom, \$2.00 per 100, \$18.00 per 1000. Czar, single blue, \$2.00 per 100, \$18.00 per 1000. Pansies, finest strains, transplanted, \$2.00 per 100. Seedlings, \$1.00 per 100. Tuberoses, large bulbs, \$2.00 per 100, \$18.00 per 1000. Tuberoses Sets \$1.25 per bushel. Echeverias, \$3.00 per 100. Coleus, old and new varieties, in 2 and 2 1/2-inch pots, \$2.50 per 100. Also a large stock of other leading plants. Will exchange Swanley White Violets for Cyclamen or Perle des Jardins Roses. Cash with orders from unknown parties. **M. TRITSCHLER & SON, Nashville, Tenn.**

FLOWERING PLANTS Expressly for Spring Sales, in 4 and 5-inch pots. Geraniums, double and single, \$1.25 per 100. Begonias, assort, \$1.50 per 100. Roses, my selection, Monthly, \$1.50 per 100. Callas, 5 and 6 inch, \$3.00 per 100. Carnations, coming in flower, \$1.50 per 100. Heliotrope, 3 kinds, \$2.00 per 100. Fuchsias, double and single, \$1.25 per 100. Pelargoniums, 4 and 5 inch, \$2.00 per 100. Bellis, Snowball from seed, new, \$1.75 per 100. Send for Trade List. **A. GIDDINGS, Danville, Ill.**

NEW BLACK ALTERNANTHERA

A sport from Paronychoides Major, raised at Newport, Rhode Island. The color, when at its best, is similar to a newly polished stove, of a shining black color. For carpet and ribbon bedding it certainly takes a place unfilled by any other plant. Habit and growth of plant similar to its parent. \$1.25 per dozen, \$8.00 per 100.

Address **HANS NIELSON, St. Joseph, Mo.**

NEW CARNATIONS

WM. SWAYNE AND L. L. LAMBORN. Plants from rose pots, \$10.00 per 100. Send for Price List of other sorts.

WM. SWAYNE, P. O. Box 226, KENNETT SQUARE, PA. Mention American Florist.

New Perpetual Yellow Carnation J. B. TACQUIER.

Here we have at last a good bright pure Yellow Carnation for florists' use; more than commonly free, long stems, not bursting, of dwarf, strong and healthy habit.

Plants at \$1.00 each, six for \$5.00, mailed free. (Owing to late importation, stock very limited.) Also plants of **ORIENT, FLORENCE and SILVER LAKE**, at \$5.00 per 100.

DENYS ZIRNGIEBEL, NEEDHAM, MASS.

Orders Now Booked for White Carnations for Easter Trade.

HAVE A FINE LOT OF

Hinze's White.

Address **T. N. PARKER, 1122 Farnam St., OMAHA, NEB.**

ROOTED CUTTINGS.

Storm King Fuchsias,	Per 100	\$ 2 50
Phenomenal,		5 00
Prize Chrysanthemums,		1 00
Mrs. Geo. Bullock, 14 Adorable and M. Le-moine white, pink and yellow,		3 00
Hinze's White Carnation,		1 00
White Swan Geranium,		3 00

F. E. FASSETT & BRO., Ashtabula, O.

CARNATIONS, strong pot grown, November and December struck. Portia, Garfield, De Graw, Hinze's White, Harrison, etc., \$1.75 per 100, \$5.00 per 300, \$15.00 per 1000.

VERBENAS, named, strong pot grown, in colors, white, pink, scarlet, purple and intermediate shades, \$1.75 per 100, \$5.00 per 300, \$15.00 per 1000. **AMPELOPSIS VERITABLE**, seedlings transplanted on benches, \$2.00 per 100, \$15.00 per 1000. **E. FRVER, Delaware, Ohio.**

WANTED.

Rooted Cuttings of Hinze's White, Portia, Grace Wilder or Peerless Carnations, in exchange for Double Italian Tuberoses Bulbs. All blooming roots, \$5.00 per 1000. Address

E. B. JENNINGS, Southport, Conn.

PLANTS AND ROSES TO THE TRADE.

Table listing various plants and roses with prices per 100. Includes items like Marechal Niel, Perle des Jardins, and various Begonia and Rhododendron species.

SIDNEY TUTTLE & CO., Bloomington Nursery, BLOOMINGTON, ILL.

B. B. NOURSE & CO., WESTBORO, MASS., MANUFACTURERS OF GARDEN TRELLISES, PLANT STAKES AND WOOD LABELS.

PRIMULA OBCONICA. The best "ALL THE YEAR ROUND" crozier plant in cultivation. Specially adapted for florists. Trade price, 3-ounce 20 shillings; 1/2-ounce 75 shillings; ounce 130 shillings.

OBCONICA. At same rates as per adv. in FLORIST of March 15th, (page 375). FISHER BROS., & CO., MONTVALE MASS.

CHEAP LIST. Geraniums, fine stock, Primroses, in bud and bloom, Coleus, strong stock plants, young plants, 2-inch, Ampelopsis Vetchii, fine, Verbenas, healthy plants, Begonia Rulira Alba, Fuchsia, single var., 2 1/2-inch pots, Asparagus Tenuissimus, Hibiscus, strong, 2-inch, Alyssum, double white, Alternanthera, Aurea Nana, Cannas Adolph Weick, Violet Marie Louise, 2 1/2-inch.

TREES, SEEDS, PLANTS, FAVOR US WITH YOUR NAME AND ADDRESS. We shall send to you our Illustrated Catalogue with prices attached, of our own grown stock of Trees, Seeds and Plants. We propagate extensive stock of Fruit, Shade and Ornamental Trees, Grapevines, Berry Plants, Asparagus Roots, Roses, and all kinds of soft wooded greenhouse and bedding plants. Also, Seeds, Vegetable, Flower and Field, Garden and Farm Tools of all descriptions.

C. RIBSAM & SONS, TRENTON, N. J.

ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country - straight 2 1/2 inch plants, propagated from thoroughly matured field grown stock, and grown in ordinary soil without manure or any other stimulating material whatever. Our Roses resist disease, start quickly, grow rapidly, and always give best results.

ALL THE FINEST NEW AND SCARCE ROSES. Mrs. John Lang, Dinsmore, Marshall P. Wilder, Merveille de Lyon, Baroness Rothschild, Mad. Gabriel Loret, Mad. Masson, Meteor, Princess de Sagan, Mad. Hoste, Comtesse Anna Thun, Vicomtesse Folkstone, Primrose Dame, Annie Cook, and ALL THE CHOICEST NEW POLYANTHS AND HYBRID TEAS. ALL THE BEST STANDARD SORTS IN LARGE SUPPLY AT REASONABLE PRICES.

HYDRANGEA GRANDIFLORA a specialty, large stock, strong open ground plants, all sizes at reasonable prices.

A L THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS. New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Viburnum Platanus, Barbs Variegated, Aethea, New Debutant, New Wiegandus, etc. - Honeysuckles, Wistarias, Clematis, Akshias, and all best hardy climbing vines, VERY LOW.

Chrysanthemum, no selected finest sorts, Moon Flower, extra strong, propagated from blooming plants - Fines Summer Flosser, Fairy, Galadivus, Jubilee, and Japan Lily.

FLOWER SEEDS FOR FLORISTS. Including the Celebrated IMPERIAL GERMIN FANSIA, etc. separate shades, and all choicest strains of Flower Seeds for florists use - satisfaction always guaranteed. WHOLESALE Price Lists Free on application to Florists, Market Gardeners and Dealers only - Address:

THE DINGEE & CONARD CO., Rose Growers and Seedsmen, WEST GROVE, PA.

B. A. ELLIOTT CO., No. 54 Sixth Street, PITTSBURGH, PA.

HARDY PLANTS, ROSES, CARNATIONS, MUSA ENSETE, ETC. WHOLESALE LIST MAILED FREE ON APPLICATION.

100,000 VERBENAS. THE CHOICEST OLD AND NEW VARIETIES. FINE POT PLANTS, \$2.50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000. NO RUST OR MILDEW. Packed light, and satisfaction guaranteed. Send for Circular. CARNATIONS. Having increased our facilities for propagating, we hope to be able to fill all orders for plants or rooted cuttings. Our list comprises only the best Winter Blooming varieties.

VERBENAS. VERBENAS A SPECIALTY. OUR VERBENAS ARE PERFECTLY HEALTHY. Stock Plants XX Mammoth Set, General Collection, Rooted Cuttings, XX Mammoth Set.

COLEUS - Rooted Cuttings. Best Fancy and Bedding varieties, including Ver-chaudhri & Golden Bedder. COLEUS. BEST STANDARD SORTS. Stock Plants, Transplanted on benches, EXTRA, Rooted Cuttings.

ROSES. Per 100. Mermets, Cook, Adam, Sarrano, Souv. d'An Ami, Brides Perles, Niphotos, Papa Gontier and La France, from 2-in. pots, strong plants. AMPELOPSIS Vetchii and Quinquefolia, pit-grown - first size \$5.00, second size \$6.00 per 100. GERANIUMS, best varieties \$1 per 100, \$5 per 1000. Heliotrope, Rooted Cuttings, \$1.50 per 100. Vinca Variegata, large plants, \$10.00 per 100. Cobea Scandens, 2-in. pots, \$10.00. Lemon Verbenas, strong 1 yr plants \$1.00.

Trade List of florist stock on application. E. C. WOOD & BRO., Fishkill, N. Y.

NEW SWEET SCENTED CHRYSANTHEMUM "Nymphaea." A double variety. Form and fragrance of Pond Lily. Fine for florists' use. Also the creme de la creme of older varieties. Send stamp for plate of "Nymphaea" and Catalogue. H. W. HALES, Ridgewood, N. Y.

VERBENAS A SPECIALTY. Perfectly clean and free from all disease. Can have as many Standard Colors as you desire in your order. Goods packed light. Will guarantee safe arrival of plants. VERBENAS. Per 100 Per 1000. Stock Plants, \$2.50 \$20.00. Transplanted on benches, EXTRA, 1.00 10.00. Rooted Cuttings, 1.00 8.00. COLEUS. BEST STANDARD SORTS. Stock Plants, 2.50 20.00. Rooted Cuttings, 1.00 10.00. IWM. DESMOND, KEWANEE, Henry Co., ILL. Mention American Florist.

CARNATIONS AND VERBENAS. Stock plants 2 1/2 inch pots \$2.50 per 100 \$20.00 per 1000. Carnations, rooted cuttings in 20 fine sorts \$2.00 per 100 \$15.00 per 1000. My stock is strong and healthy, and cannot fail to please. Correspondence solicited. Address: J. G. BURROW, FISHKILL, N. Y.

American Exhibitions.

In his report of the recent orchid show at New York the New York correspondent of the English Gardeners' Chronicle says: "Being the first horticultural show that I had ever witnessed in the United States of America, I was somewhat desirous of observing in what points it would vary from one in the Old Country. It was astonishing to note so great a difference in the methods and manner of exhibiting the plants, there being none of that stiff formality so characteristic of the English flower show; but all was grace and elegance, even to the tables, which were not overcrowded, or in straight lines, showing off the exhibits to advantage."

In the same issue of the Chronicle appears as a supplement an ink photo of a view in the grounds of H. H. Munnewell, Wellesley, Mass.



Meehan's Nurseries

GERMANTOWN, PHILADELPHIA. Liberal discounts to florists taking orders for our specialties.

Weeping Dogwood, Red Flowering Dogwood, Japan Snowball (see cut), Weeping Wild Cherry, Wiegela floribunda Blood-leaved Japan Maple, Cercidiphyllum, Japan Judas Tree, are some florists could deal in to advantage.

A LIMITED STOCK OF THE NEW HARDY EVER-BLOOMING ROSE MME. GEORGES BRUANT, \$1 each. Illustrated Catalogue with retail prices 6 cts.

THOMAS MEEHAN & SON.

Landscape Gardening

in its whole circumference. PLANS, SPECIFICATIONS AND SURVEYING GRATIS ON RECEIPT OF CONTRACT.

J. B. HEISS,

Garden Architect, DAYTON, O.

COLD FRAME CABBAGE PLANTS 500,000

Now ready for planting. Send for prices. Address

JOHN S. BARNHART,

Denton, Md.

CHEAP FOR QUICK SALES.

Carnations Hinz's White C. King, etc. 2-in. \$2 00 Begonia Metallica, 2-in. \$1. 3-in. \$5. 4-in. 8 00 Geraniums, in assortment, 3-in. 6 00 1 1/2, 1 1/2, 3-in. 8 1/2, 4-in. 12 00 Hydrangea, Rosa and Hortensia, 2-in. \$4 4-in. 12 00 Petunias, double mixed, 3-in. 5 1/2, 4-in. 8 00 Roses, Comtesse, Dijon, Safrano, Hermosa, Jacq., etc., 3-in. 6 00 Forget-me-nots, Bellis, Swanley White Violets, large clumps from frame, \$2.00 to 3.00

GEO. F. McFARLAND, Harrisburg, Pa.

500,000

Strong Runners of VIOLETS In perfect health of

MARIE LOUISE, NEAPOLITAN and SWANLEY WHITE at \$10 00 per thousand.

For larger quantity, price on application.

JOS. RENARD,

Chester Co., UNIONVILLE, PA.

ROSES, Teas, Per 100 \$3.00 to \$5.00 H. P. 4.00 to 6.00 PANSIES, transplanted, 1.00 to 2.00 CENTAUREA Candicissima, 4.00 to 6.00 Gymnocarpa, 3.00 to 4.00 DRACENA, 3 1/2 to 4-inch pots, 12.00 to 16.00 ROOTED CUTTINGS, Chrysanthemums, Begonia Metallica, Geraniums, Coleus, etc. 2 00 Will exchange for Verbena Cuttings.

W. W. GREEN, SON & SAYLES, Watertown, N.Y.

WE HAVE GOOD HEALTHY PLANTS.

Per 100 Sunlux, strong plants, 2 1/2-inch pots, \$2 50 Cinerarias, different colors, 2 1/2-inch pots, 3 25 Feverfew White Gem, 2 1/2-inch pots, 2 00 Ageratum White Cap, 2 1/2-inch pots, 2 50 Cope's Gem, best blue, 2 1/2-inch pots, 2 50 Pansies all different colors, 2-inch pots, 2 40 Mme. Sillera Geraniums, 2-inch pots, 2 60 Golden Feverfew, 2-inch pots, 2 50

FABER BROS., Kankakee, Ill.

PALMS, ORCHIDS and DECORATIVE PLANTS.

Immense Stock, at Low Prices to the Trade.

Siebrecht & Wadley,

ROSE HILL NURSERIES, New Rochelle N. Y.

409 FIFTH AVENUE, NEW YORK.

ORCHIDS. ORCHIDS.

F. SANDER & CO.

IMPORTERS AND GROWERS,

Are constantly receiving large importations from the East and West Indies, etc., and are now offering them at very reasonable figures. If you have not received one of their special offers apply to

SUMMIT, N. J.

ORCHIDS! ORCHIDS!

Many additions of Choice New varieties this season.

Send for New Catalogue.

WM. MATHEWS, UTICA, N. Y.

CUT BLOOMS AT ALL SEASONS.

FIBROUS PEAT.

CLEAN, FREE FROM DUST.

The very best thing for Orchid culture.

BY BARREL OR CAR LOAD.

WM. MATHEWS, "WEST VIEW," UTICA, N. Y.

FERNS! FERNS!

FERNS

NICE, FRESH, NEW CROP

DAGGER AND FANCY FERNS,

Ready April 20th, or Sooner.

PTERIS AQUILINA (Bracken), LASTREA FELIX-MAS, beautiful deciduous Ferns, fine for Bouquet work, ready now.

LASTREA MONTANA four feet long, fine for Church Decoration.

Will be delivered to the undermentioned firms, April 17th. Book all orders with:

A. S. KIMBALL, 170 Lake Street, Chicago, Ill.

W. J. STEWART, 67 Bromfield St., Boston, Mass.

WISCONSIN FLOWER EXCHANGE, 33 Mason St., Milwaukee, Wis.

MICHEL PLANT AND SEED CO., 1010 Olive Street, St. Louis, Mo.

Southern trade supplied direct. Write for catalogue.

GEO. W. CALDWELL,

FLORISTS' SYLVAN SUPPLIES,

EVERGREEN, ALA.



Little Fern Dishes

filled with CACTI, not only will attract attention in your Store Window, but sell on sight at high prices. We supply some fine Cacti for the purpose at \$5 to \$8 per 100. Wholesale price list free. 72 page illustrated Catalogue 10 cts.

A. BLANC & CO.

PHILADELPHIA.

10 Cacti, each distinct, by mail for \$1 00.

150 Am. Johnsoni; 100 Am. Halli; (2) 10,000 Atamscu; 300 Am. Regina; 125 Caladium esculentum; 800 Am. Sarrtensis; 5,000 Eulalias Jap. and Var.; 5,000 3 to 4-inch Excelior Pearl Tuberoses. Will exchange for Gladiolus bulbs.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

ORCHIDS

Cheap as Good Roses.

Send 8 two cent stamps for Catalogue and Plate.

BRACKENRIDGE & CO., Govanstown, Md.

THE BEST THING TO GROW

ORCHIDS

IN IS FERN ROOT.

SOUD BY BBL. OR CAR LOAD.

WM. MATHEWS, WEST VIEW, UTICA N. Y.

HARDY AND RARE JAPANESE PLANTS FOR THE EAST.

15 FINEST VARIETIES OF MAPLES, 1-4 ft. STYRAX JAPONICA, STYRAX OBASSIA. (Read article in this year's London Garden.) SYRINGA JAPONICA, HARDY MAGNOLIAS. THE GRAND CONIFER SCIADOPITYS V.

"UMBRELLA PINE,"

in sizes 1-6 ft. (Has been shipped safely by frt. to Boston.)

RARE VARIETIES RETINOSPORAS.

50 VARIETIES TREE PÆONIAS. NEW HERBA-CEOUS PÆONIAS.

NEW HYDRANGEAS, CHRYSANTHEMUMS, CLEM-ATIS, IRIS, HARDY AZALEAS, RHODODENDRONS.

FOR THE GREENHOUSE.

RHAPIS AND CYCAS PALMS, BAMBUSA NANA, AR-AUCARIAS, TREE FERNS FROM AUSTRALIA.

32 VARIETIES OF JAPANESE LILY BULBS.

LARGE ASSORTMENT OF SEEDS FROM JAPAN AND CALIFORNIA.

Send for our Catalogue. Now is the best time to order for Spring delivery East. We have many valuable novelties never before introduced. Send for estimates.

H. H. BERGER & CO.,

315 & 317 Washington St., SAN FRANCISCO, CAL.

P. O. Box 1501. (ESTABLISHED 1878.)

Mention American Florist.

OWEN'S IMPERIAL BEGONIAS

NEW AND DISTINCT STRAIN.

The result of many years' careful selection and hybridizing. Habit dwarf, erect and vigorous; blooms of great size and substance. Awarded many prizes and certificates.

10 First Prizes by One Exhibitor, 1888.

TESTIMONIALS.

Cambridge, July, 1888.—"I am pleased with the Begonias you sent me. The habit of the plants is very dwarf, flower stems erect, the flowers looking one in the face as if not ashamed to be seen. HENRY RIDGEWELL."

Mr. E. MOLYNEUX Swanmore Gardens, writes: "I consider the Tuberous Begonias raised from your seeds are splendid in habit of growth. The blooms are large of perfect form, and borne on stout, erect stalks, just the thing for either pot culture or bedding."

Mr. J. P. KENDAL, Templeton Gardens, Rock-hampton, writes: "The Tuberous Begonia seed I had from you last season produced the finest flowers I ever saw, and of every color and shade imaginable. Seed sown in March and August produced enormous flowers of great substance; they were the admiration of all who saw them."

Price of seed in Trade Packets, 10s. 6d. and 21s. each; Tubers, 31s. 6d. per 100; 42s. per 100; 63s. per 100. R. OWEN, F. N. C. S., Floral Nursery, Maidenhead, England.

THE AMERICAN SEEDLING RED ROSE SOUVENIR DE WOOTTON

BON SILENE X LOUIS VAN HOUTTE.

IT WINS THE RACE!

FIRST CLASS CERTIFICATE OF MERIT, MASSACHUSETTS HORTICULTURAL SOCIETY, MARCH 29, 1889.

FIRST PRIZE FOR NEW ROSE, PENNSYLVANIA HORTICULTURAL SOCIETY, APRIL 2, 3 AND 4, 1889.

We can still Ship you Plants in May and June.

BROTHER FLORISTS:

You have wanted for years a continuous blooming red rose, for culture under glass.

First, Came ANDRE SCHWARTZ, the red SAFRANO, which has proved utterly unfitted to our climate.

Second, WILLIAM FRANCIS BENNETT, the superb red bud, which at times is unexcelled. Its faults, however, we all know by this time. No one can prevent its habit of resting or its tendency to black spot. Very few can grow it with sufficient stem. Its fugitive color will always be a great drawback, and its serious lack of lasting qualities, cannot be denied successfully.

Third, Came AMERICAN BEAUTY (synonym, MADAME FERDINAND JAMAIN). That majestic flower, superb in color, in perfume, in growth, but not so free flowering, and occasionally producing defective blooms. We could not get along without it. It has had no equal among the hybrid teas for large work.

Fourth, Came PAPA GONTIER, with good shape, good color, and good foliage, but liable to crop, and with a tendency to drop its leaves, caused probably by its Bourbon parentage. This rose is an excellent shipper and keeper, but alas it has no perfume.

Fifth, Comes our WOOTTON, a genuine American Seedling, with the following good qualities:

First, Color, velvety red, equal to Jacqueminot.

Second, Perfume which cannot be excelled.

Third, Continuous flowering qualities. It has no resting period—blooms and new growth existing at the same time.

Fourth, The most prolific bloomer in existence, every shoot containing a flower bud.

Fifth, Habit, exceedingly vigorous and in foliage quite equal to the American Beauty.

Sixth, It never makes imperfect buds and dark weather but deepens the color, giving it a richer shade of crimson.

Seventh, It retains its color for a long period; flowers having been kept by us in good condition for two weeks after being cut.

Eighth, It is a full double rose, and is good in bud, half open, or fully expanded. Full open flowers frequently are six inches in diameter.

Ninth, The color is even more intense and brilliant at night than in the day.

Tenth, It is free from black spot, the great enemy of the Bennett.

Eleventh, Its shipping qualities are perfect.

Below we give you the daily record of the number of perfect flowers cut from five hundred bushes, during the month of December, 1888:

Dec. 1	148
Dec. 2	132
Dec. 3	52
Dec. 4	82
Dec. 5	153
Dec. 6	105
Dec. 7	91
Dec. 8	204
Dec. 9	36
Dec. 10	69
Dec. 11	159
Dec. 12	94
Dec. 13	113
Dec. 14	82
Dec. 15	96
Dec. 16	112
Dec. 17	156
Dec. 18	83
Dec. 19	55
Dec. 20	63
Dec. 21	20
Dec. 22	43
Dec. 23	45
Dec. 24	83
Dec. 25	90
Dec. 26	96
Dec. 27	81
Dec. 28	49
Dec. 29	46
Dec. 30	33
Dec. 31	93

Total 2731

Or on an average of 88 per day. A large portion of these blooms brought 40c. each at wholesale.

Remember, No Imperfect Flowers like the American Beauty produces.

60,000 YOUNG PLANTS FOR THE TRADE AT REASONABLE PRICES, AS FOLLOWS:

\$180 per thousand.	\$25 per hundred.
\$100 per five hundred.	50 cents each in quantity less than 100.

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PAPA GONTIER.	MADAME CUISIN.	THE BRIDE.	LA FRANCE.	PERLE.

Their PURITAN and LA FRANCE have been pronounced the finest in the United States. A complete renewal of stock every two years seems to be essential to continued success in rose culture under glass.

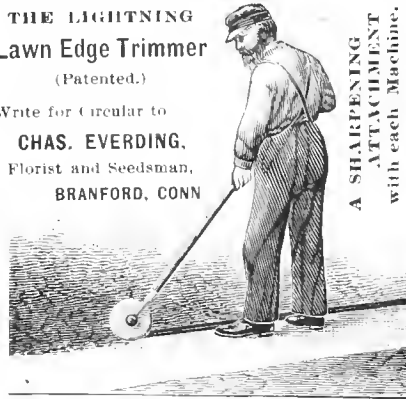
Would Have the Horseshoe.

"We have many strange customers," declared an uptown florist the other day. "Our greatest difficulty is with people who want wedding or funeral designs, and don't know what they really do want. They will select the most inappropriate pieces, and for our own sake we frequently have to interfere. Not long ago an Irish woman came here and wanted a funeral piece. I showed her a lot of designs, but her eye caught a 'horse shoe' frame, and she thought she would like that. Of course that wouldn't do for a funeral, so I tried to scare her off by a big price. She didn't scare worth a cent, though she looked poor enough. Eventually I had to explain, so I said: 'Madam, this horse-shoe is hardly appropriate for a funeral. It means good luck, you know, and, of course, you can't wish the dead good luck. Some persons might be heartless enough to suppose that you wished the family of the dead good luck on account of the death.'

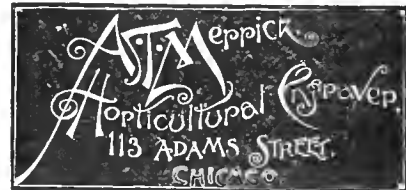
"'Niver ye moird,' she answered, 'O'll take it. It's for me brother Terry, bad 'cess to him, an' a bad one he was in his loife. He'll need plenty o' good look if he wants to git out o' Purgatory afore Rizzurrection Day,' and she took it." — *New York Tribune.*

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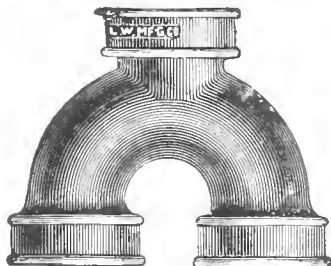
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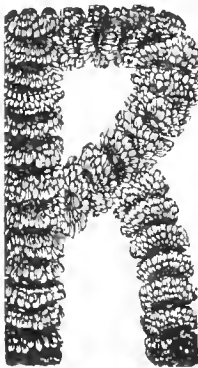


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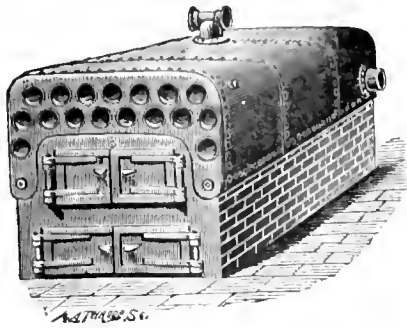
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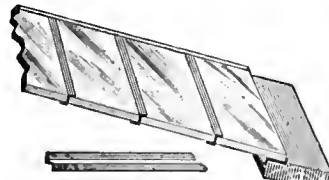
Size.	Price of 1000.	No. in Crate.	Credit Crate.	Cash Crate.	Size.	Price of 1000.	No. in Crate.	Credit Crate.	Cash Crate.
1 3/4 -in.	\$2 80	4000	\$11 25	\$11 00	3 -in.	\$ 5 25	1400	\$7 35	\$7 00
2 "	3 20	3168	10 25	10 00	3 1/2 "	7 25	770	5 60	5 40
2 1/4 "	3 60	2400	8 75	8 50	4 "	9 00	570	5 20	5 00
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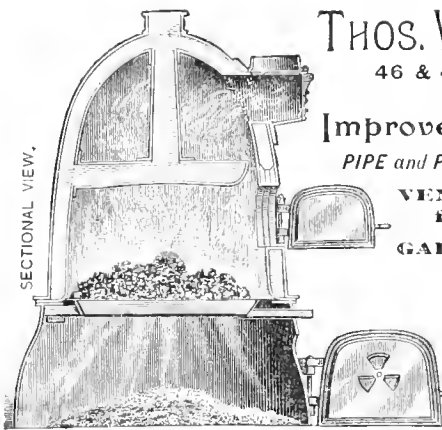
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A New Inscription.

A Bowery florist received an order from a fire engine company for a floral tribute, "something extra," to be sent to the funeral of a deceased member. He decided that the usual mottoes would not be "something extra," and after considerable reflection prepared a large pillow of white pinks, on which appeared the letters "S. Y. L." in violets. At the funeral he asked one of the committee how he liked the floral tribute. "The flowers look all right," was the response, "but what in thunder does 'S. Y. L.' stand for?" "Why, cant you get on to that?" inquired the florist. "None of us have yet been able to." "You said you wanted something extra, and I thought I would not use the old expressions of 'Gone Before,' or 'Our Brother,' but something new." "Well, but what does this yer 'S. Y. L.' stand for?" "Why, for 'See You Later.'"—*New York Star.*

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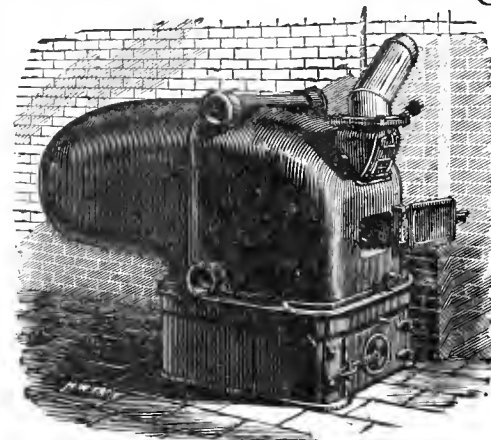
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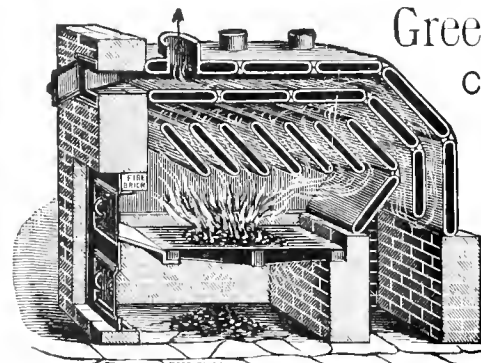
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THE AMERICAN FLORIST



America is "the Prow of the Vessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, MAY 1, 1889.

No. 90.

THE AMERICAN FLORIST

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Entered as Second-Class Mail matter.
Published on the 1st and 15th of each month by
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GENERAL OFFICES, 71 La Salle Street, Chicago
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All communications should be addressed to the
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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TWENTY-EIGHT PAGES this issue.

THE ILLUSTRATIONS in this number please us, and we believe they will please you.

ADVERTISERS.—The latest date at which advertisements should reach this office to ensure insertion in the following issue, is noted in each issue at top of left hand column on the page with cut flower quotations. Please consult it when sending advs. and mail accordingly.

THE EASTER TRADE.—All reports received indicate that the Easter trade for 1889 has been very satisfactory, some reporting sales larger than ever before and none complaining. There was a good supply of nearly all flowers which were disposed of at paying prices. Loose flowers still constitute the bulk of the sales, and the demand for good blooming plants is still on the increase.

New York Notes and Comments.

Easter stuff this season seems, if anything, of a higher average grade than last year; it is usually extremely good. One of the most noteworthy lots to be seen anywhere was at Mr. James Dean's, Bay Ridge. Mr. Dean is well known as a grower of Easter stuff—this is his speciality; consequently the stuff is always just ready on time. This year the most remarkable feature was the display of *Hydrangea Otaksa*. A house 150 x 22 feet was filled entirely with these plants, one mass of bloom. Most of the plants were large, from three to five feet across, and the trusses of bloom were very fine, many being 18 inches in diameter. The mass filling this house consisted of but 230 plants, but being so large they took up a good deal of space. There is positively no doubt that Mr. Dean's hydrangeas are the finest batch ever seen in the trade; this is frankly admitted by all who have seen them. The flowers were remarkably fine in size and color, apart from the magnitude of the trusses. It is a pity that no illustration could show the full glory of that house; the writer finds it impossible to describe the beauty of these plants, without using up all the adjectives in Webster's unabridged in the attempt to do the subject justice. If there is anything finer to be seen in the way of hydrangeas we should like to hear of it. More of the *Otaksa* is to be seen generally than Thomas Hogg, though one would imagine that the white would be even more acceptable now than pink or blue. However, the colors of *Otaksa* are usually delicate, and its flowers are always large.

Mr. Dean's azaleas are of course good, and he had a very large Easter batch, chiefly standard old sorts, which are often of greater use than some of the newer fancy varieties. Some tremendous plants of the old *Phoenicia*, generally used as a stock for grafting, were completely covered with their purplish magenta blooms—very handsome. This is a variety which can only be combined with white to be effective, but it is beautiful when rightly used, though now rather out of favor. Good plants of *Punctulata* were interesting for their peculiarities in sporting; clear solid red bloom occupying one part of the plant, while the rest would show every variation of red and white. The finest white azalea to be seen was certainly *Reine des Blanches*; the flowers are not only large, but borne in such a way that each bloom is fully displayed. Shapely and prolific, essentially a good trade azalea. Bernard Andreas, both red and white, still holds good rank. One of the best striped varieties, red and white, was *Baronne de Vriere*. Madame de Grieve was an admirable pink and white, good color and shapely flowers.

Lilies were plentiful of course; Mr. Dean says he finds very little, if any difference, in substance, between *Harrisii* and *longiflorum*. Naturally *Harrisii* is apt to be rather flimsy when forced to the utmost in a high temperature for early flowering. But when flowered under exactly the same conditions there's little difference between the two flowers, except in shape and habit.

A big batch of *calceolarias* seen at this place were the dwarf *Shower of Gold*. This is an excellent market plant, selling well; the color is an exceptionally clear gold, and it flowers profusely. The dwarf varieties are always preferable for market.

The *genistas*, seen here in quantity, were all plants left to their natural growth instead of being stopped back after the European principle. The long natural shoots are much more effective in decoration than the close-clipped plants, though the latter are more suitable for sale as pot plants.

In addition to Easter New York florists are expecting quite a harvest at the Inaugural Centennial. Some of the floral arrangements are to be very elaborate. Coming a week after Easter, this gives an opportunity for using stuff which come in a little late. Klunder has charge of the decorations for this occasion. Among the arrangements will be a tremendous bank of scarlet geraniums, consisting of a large number of plants.

Mr. Keller, of Bay Ridge, who, like Mr. Dean, goes in largely for Easter stuff, considers his shipments fully equal to last year, and trade prospects good. He grows the same line of stuff as Mr. Dean. Among his hydrangeas a good many were noted as being a remarkable blue, very much deeper than the average. Azaleas and *genistas* are extensively grown here, many of the latter being the imported stopped-back plants. There is no doubt whatever that while the demand for Easter flowers increases, it is essentially a demand for good flowers—in New York, at least. People who buy flowers know the class they want, and demand them.

Our friend Mr. Peter Henderson has acquired another novelty—a political boom. Some of the New Jersey papers are suggesting him as a nominee for Governor of that state. They say he would carry every agricultural county with large majorities, and point out the fact that his ability and integrity make him a candidate likely to receive enthusiastic support from all. Well, they couldn't find a better candidate, but political honors are hardly likely to appeal very strongly to Mr. Henderson's ambition. EMILY LOUISE TAPLIN.

New Orleans.

The third annual exhibition of the New Orleans Hort. Society has just closed

after having been open four days. Odd Fellows Hall was transformed into a very handsome parterre, and as one entered the sight was really beautiful. There was a very fine general collection of plants and the prizes were quite equally divided among the exhibitors.

The finest exhibits were certainly those of Dr. T. G. Richardson with his fine collection of stove house plants, and Mr. Ben. Onorato with a fine collection of orchids in bloom and other plants. The principal attraction was in the display of cut flowers and floral work; the florists this season displayed a fine taste in the arrangement of their flowers. The prizes were about equally divided between Messrs. Eble, Menand and Eichling.

The show was very poorly attended this season and the society is very much out of pocket. The people seem to have had enough of shows of this kind for the present.

H. A. DESPOMMIER.

April 13.

Montreal.

The Montreal Florists' and Gardeners' Club had its first flower show March 26 and 27, and it was a decided success in every respect. The event was looked forward to by the members of the club with no small degree of interest, as those were not wanting who looked upon the undertaking with disfavor and prophesied a failure; the committee who had charge of the affair paid no heed, but worked quietly on with the firm determination of making it a success. The weather on the morning of the 26th made it a little difficult to transport plants, there being a few degrees of frost, but they got there.

The room chosen for the exhibition was the hall of the Frazier Institute which is about 80 x 50 feet, and on the ground floor; it was found very suitable in every respect except in size, it being found too small at the last moment for the quantity of stuff to be displayed. The arrangement consisted of a range of tables around three sides of the room about three feet wide, the other end being occupied by a raised dais, at each side of which was a space of about twelve feet which was occupied by the two collections of orchids of Messrs. W. Wilshire and J. Bell. The body of the room was occupied by a number of tables 6 x 6 feet, upon which were arranged groups of stove and greenhouse plants, some of the groups having a few beautiful orchids among them. Upon the dais were arranged some large palms, cycads, dracaenas and *Harrisii* lilies; upon the wall over the dais was a large trophy with the letters "F. and G. Club" wrought with red carnations on a white ground, draped on each side by the flags of Canada and the United States, with a bank of *genista*, *Harrisii* lilies and *spiraea* in front of it.

Upon the side tables were arranged the exhibits of cut roses, carnations, hyacinths, tulips, narcissus, etc. in glasses, also the exhibits of hydrangeas, *spiraea*s, lilies, hyacinths, tulips, narcissus, etc. in pots and pans; also on the steps of the dais were boxes of hyacinths, lily of the valley, etc. The six iron pillars were tastefully wound with green and dotted with *Niel* roses, and garlands of green hung from pillar to pillar and across the room diagonally, dotted with *Niel* roses about six inches apart. A large quantity of bunting was also displayed around the walls, giving the place a very rich and cheerful appearance.

Among the exhibitors of tables of plants were John Walsh, gardener to W. W. Ogilvie, Esq.; W. Wilshire, gardener to ex-Mayor Abbott; J. Bell, gardener to

Robt. McKay, Esq.; J. Kirkwood, gardener to R. B. Angus, Esq.; J. Bland, gardener to James Barnett, Esq.; John Dunbar, gardener to Montague Allan, Esq.; John Doyle, gardener to Mr. Elmenhorst; John Eddy, gardener to Mrs. Redpath; J. Horsman, gardener to A. Robertson, Esq.

In roses, Colin Campbell showed a large collection; his *Mermets*, *Cooks* and *Goutiers* were first class in form, size and color; he also had a vase of nice *Puritans*. Jos. Bennett, manager of the Montreal Floral Nurseries, made a fine display of roses, his *Cooks*, *Brides*, *Niphotos* and *Mermets* were remarkably fine. Mr. Doyle made a good display, conspicuous among which were some splendid *La France*. P. McKenna & Son also had a good display, among which were a bunch of gigantic *Am. Beauties* of a splendid color. Mr. Betrix showed some remarkably fine blooms of *rhododendrons* which were much admired.

In bulbs, Mr. Bennett had a very large exhibit both cut and growing, his boxes of hyacinths, narcissus, lily of the valley, tulips, etc. were extra fine and were much admired. Mr. Campbell also made a very large display of bulbs both cut and growing, his pans of hyacinths, tulips and narcissus were really fine, he also showed some *eucharis* in fine bloom. Wilshire Bros., of Park Avenue Nurseries, showed some hyacinths in pots which were unsurpassed, their exhibit of *Lilium Harrisii*, *Primula obconica* and *cyclamens* was very creditable. P. McKenna & Son showed some fine *Hydrangea Thomas Hogg* and *hortensis*, also some good *Harrisii* lilies, *cinerarias* and *spiraea*s. James Nairn made a fine display of *Deutzia gracilis* and *callas*.

In orchids, W. Wilshire had a very fine display, among which were *Palaenopsis Schilleriana*, *Dendrobium nobilis*, *D. crassinode*, *D. Wardianum*, *Lycaste Skinnerii*, *Saccolabium giganteum*, *Ada aurantiaca*, *Odontoglossum Alexandriae*, *Cattleya Trianae*, *Trichopilia fragrans*, *Cypripedium venusta*, *C. villosum*, *C. Boxallii* etc. Mr. Bell also had a large collection, among which were some splendid *dendrobiums*, *cattleyas*, *coelogynes* and *cypripediums*. Mr. Walsh had a few very fine orchids among his collection of stove and greenhouse plants, noticeable was one piece of *Oncidium sarcodes* with a spike over six feet long.

The display of *Harrisii* lilies was a great feature of the show; they were there in all sizes from the perfect specimen thirty inches high with six expanded blooms, to the giants six feet nine inches high with nine blooms—the latter were growing in 6-inch pots without stakes or support of any kind. W.

Boston.

Easter Sunday, with its anxieties and worry, its hard labor and sleepless nights has come and gone once more, leaving behind it the usual legacy of tired feet, red eye lids and lame fingers. The greenhouses that a few days ago were resplendent with snowy lilies, bristling *spiraea*s and dazzling tulips are shorn of their beauty and nothing is left of their former glory except ugly stumps and unsightly rubbish heaps. And now the growers and the dealers are sitting down and counting the cost and estimating the profits which, when computed, will serve as the true test of the Easter luck for the year 1889, and the wholesalers with trembling fingers and anxious faces are opening the letters from their customers which tell of the safe and satisfactory ar-

rival of their shipments, or the other story of the ruin wrought by the warm weather, the melted lilies and tulips, the dismantled roses and shrivelled carnations, which bring upon his shoulders imprecations both loud and vigorous and cause him to wonder at times what he is permitted to encumber the earth for anyway. It was a hot Easter in Boston. On Saturday the thermometer registered 85° in the shade, and how the roses and lilies did come in!

But a few days before everybody was predicting a famine. The avalanche did not arrive till Saturday, too late for the wholesalers to take advantage of it, and too much of it for the local trade to handle.

Enormous quantities of flowers were disposed of, however, the fine weather bringing out all the customers. The stores never did such a business for Easter before. Many of them had to turn customers away from inability to wait upon them.

Designs were but few. Cut flowers, particularly long stemmed roses and lilies constituted the greater part of the trade. These orders were mostly for Easter greetings among friends and for corsage wear. In the churches comparatively few cut flowers were used. Altars and chancels were banked with flowering plants, such as azaleas, lilies, astilbes, etc., an occasional rich cross of white flowers being about the only floral decorations seen.

For Sunday School children small flowering plants in pots were very generally substituted for the small bouquets formerly provided for this purpose, a sensible innovation, and one which the florists will not be likely to mourn over, as the profits on those small bouquets are but small compared with the labor involved.

Smilax was quite scarce and good carnations were far from plentiful. There were plenty of *Harrisii* and longiflorum lilies of finest quality, also astilbe and double white stocks.

There were but few candidum lilies in market as compared with former years, but the demand for these has fallen off to such an extent that there were enough for all requests. The market was deluged with roses on Saturday, and all were of finest quality.

Easter coming so late and the season being so unusually forward was most favorable for the plant trade. The flower stores were gorgeous in the extreme with great banks and masses of hydrangeas, azaleas and *cytisuses*, and it is safe to say that no church decoration in the city was or could be more attractive than the display in several of the leading stores.

Superintendent Doogue gave the public a great treat and an Easter show that is rarely seen in this latitude. He had the public garden in perfect order, the beds filled with thousands upon thousands of hyacinths and daffodils, with hosts of pansies and daisies. These hyacinths were all started in frames and were bedded out during the week preceding Easter, thus securing a uniformity of height and color which could not be obtained by fall planting.

Some florist has again been at the stale old business of stuffing the reporters. The Boston *Herald* is the victim this time. Here are a couple of choice extracts.

"Of course many ladies will wear at church on Easter day the corsage bouquets of roses and other flowers. These form a valuable addition in the way of adorning the new spring costumes. The work of making up these bouquets commenced early in the week, the flowers being kept in cool rooms where they are well supplied with water, until the time for their delivery



A BIRTHDAY GIFT

arrives on Saturday. A handsome corsage bouquet can be bought of any of the florists for \$10. Pretty boutonnières for gentlemen's wear are selling for \$1 each.

One Tremont street florist informed a *Herald* reporter that his contract to decorate a Back Bay church would call for the use of \$100 worth of materials. Besides this sum \$100 would probably be expended for labor in arranging the flowers.

The originator of the above doubtless wants to see a few more flower stores going, so he tells the public there is lots of money in it. Generous soul!

W. J. S.

A Birthday Gift.

Our illustration is from a photograph of a basket arranged for a birthday gift by Mr. H. H. Battles, of Evans & Battles, Philadelphia.

The excellence of the engraving makes it possible for readers to name each of the flowers used and renders unnecessary any notes as to the varieties.

The arrangement we consider most excellent and worthy of a careful study by all. Note that each individual flower is so placed as to fully display all of its own grace and beauty, the combination of the dark and light colored roses, the dark orchidiums or odontoglossums against the white encharis blooms, the careless grace in which the carnations and their foliage are used on the handle and in the basket below, the natural manner in which the spray of *Coleogyne cristata* falls from the adiantum ferns above and the entire absence of formality in the whole arrangement.

We are glad to be able to place before our readers such an excellent engraving of such a beautiful and instructive subject, and trust that it will result in converting to more natural methods some of that altogether too numerous class who turn out those stiff, formal arrangements in which the grace and loveliness of each

flower is annihilated by crowding together as compactly and evenly as the blades of grass in a smoothly shaven lawn.

In the "elevation of our profession" the retail florist has a grand opportunity here to do his share. The better class of flower buyers—people of wealth and refined tastes, and who are large buyers—are quick to appreciate a really artistic arrangement and will pay well, not only for fine flowers, but for the taste and skill displayed in the arrangement.

Baltimore.

To read of such exhibitions as the one held in Philadelphia recently is almost enough to make us of Baltimore clothe ourselves in sack cloth and ashes, in view of our own unappreciated efforts to get up a really successful exhibition. The March show of the Maryland Hort. Society was, to put it tenderly, a failure,

notwithstanding the fact that the officers of the society and the few exhibitors who put in an appearance, did all in their power to make the affair a success. Jno. Cook had, as usual, an attractive display of roses and other cut flowers; Halliday enhanced his exhibit by a fine display of seeds, implements, etc.; there were also some unusually fine plants shown, but five or six exhibitors—or five hundred exhibitors for that matter—can't make an exhibition a financial success any more than one swallow makes a summer. The citizens of Baltimore are easily excited; they will grow wildly enthusiastic over anything from a base ball match to the Washington Centennial, unless the something be a flower show, and then Baltimoreans don't enthuse worth a cent. And yet our citizens are passionately fond of plants and flowers; this taste is increasing rapidly, trade on the whole is improving every year, so that it is somewhat incomprehensible why our exhibitions generally lack public support.

Arbor Day—April 10—was pretty generally observed here, and a vast number of trees were planted in the public parks and elsewhere. For two weeks previous the country was completely overrun with tree peddlers who invariably proved equal to the occasion. One of these tourists returning from a trip through the rural districts, sold the residue of his stock—a pair of silver maples—for "the real genuine article" to a verdant customer near Ellicott City, who wanted Copper Beech. The v. c. has since learned of the deceit practiced upon him and now his only ambition in life is to be alone with that tree-man for five minutes in some secluded spot, far from the haunts of men.

I had an interesting talk on orchids recently with Mr. McRoberts, of the Rosebank Nurseries. Mr. M. is positive that the "orchid craze," so far from being on the decline, is only in its infancy. Commercial growers begin to realize "that there is money in orchids." *Laelias*, *lycastes*, *oncidiums* and a good many *cattleyas* can be grown easily and bloomed surely. Moreover most of them may be grown successfully in pans or baskets and hung up about the house, thus utilizing space generally unoccupied. And as Mr. McRoberts puts it: "Materially increasing returns from the same amount of glass." He considers the great durability of orchid flowers an important point in their favor that cut flower men should not overlook. As conclusive evidence of the increasing popularity of orchids, Mr. M. stated that trade during 1888 had been fully double that of '87. A. W. M.

April 17.

Chicago.

M. B. Farrell, an old time florist, dropped dead on his place at 4019 Ellis avenue April 18. Heart disease was given as the cause of his death. He was at one time a practicing physician and afterward an operator on the Board of Trade.

On North Clark street H. Boettner has removed from No. 215 to No. 645, and Mme. D. Foertsch from No. 590 to No. 618. H. Wittbold has taken the adjoining store and combined it with the one he already occupied, giving him some forty feet of show windows.

At the last meeting of the Florist Club blooms of thirty-one varieties of narcissus, each one labeled, were on exhibition and were examined with interest by the members.

The Easter trade was very satisfactory.

There was an abundance of nearly all flowers, the main shortage being on candidum lilies. The weather was very favorable. Prices were a trifle lower than last year, but there was more stuff to sell and the result was satisfactory to both the grower and retailer. A falling off was noted by several dealers in the call for callas, the lilies most in demand being candidums and *Harrisii*. The lessened call for callas is attributed by some to the fact that so many "salted" calla blooms which soon "melted down" after being taken from the ice box or cellar where they had been held, have been sold at former Easter times that buyers are beginning to look with suspicion upon them, and ask for other lilies. There was as usual an increased sale for blooming plants.

Tulips are not in as brisk demand as formerly. Several large growers state that there has been no money in them to the grower this season.



Orchids Suitable for Florists to Grow.

BY L. FORSTERMANN.

There are comparatively few orchids suitable for the cut bloom trade if we consider that of the almost 4,000 species known only forty-four varieties are suitable for the trade. These are divided into the following genera which I will enumerate according to their value and usefulness: *cattleyas*, 7; *cyripediums*, 7; *dendrobiums*, 5; *kelias*, 5; *oncidiums*, 7; *phalaenopsis*, 3; *calanthes*, 3; *coelogynes* 2.

All these require a good drainage when potted, as they grow mostly on the bark of trees or on the surface of rocks with the roots exposed to the air. Pots and wooden baskets are better for orchids than blocks; as a rule plants with strong bulbs which can support themselves upright are best placed in pots, they will then get more moisture and consequently make stronger bulbs. Plants with bulbs hanging down or such with drooping spikes should be placed in baskets.

The *cattleyas* are undoubtedly if not the most graceful, the most gorgeous and profitable orchid for a florist to grow, and the best varieties for said purpose are *C. Trianae*, *C. Percivaliana*, *C. Lawrenceana*, *C. Bowringiana*, *C. Gaskelliana*, *C. Mossiae* and *C. Mendelli*.

Cattleya Trianae if grown from imported plants should be potted in April and May in fibrous peat or fern roots intermixed with a little sphagnum. It is advisable to pot the plants high so that they can be watered with impunity with the hose which saves labor, plants potted low will not dry out as quick and watering with the hose would undoubtedly prove too much for them. During summer the plants require plenty of air and moisture until the bulb is fully made, after the new bulbs are formed less water should be given. The plants thus treated will begin to flower in the latter part of December and flowers can be had until the middle of April, providing a sufficient number of plants are grown.

Cattleya Percivaliana requires the same

treatment as *C. Trianae* and can be had in flower from November to March; so does *C. Lawrenceana* which flowers from February until the latter part of April.

Cattleya Bowringiana is a very easy growing and free flowering orchid which has not as large flowers as most of the other *cattleyas*, but carries from 10 to 14 flowers on a spike. It requires plenty of moisture, but care should be taken in watering while the new growths are small as the water collects in the heart and they damp off. The growing season is from April to October or November when it begins to flower. This *cattleya* flowering as it does before the new bulb is fully made up should be grown for four weeks after flowering until the new bulb is full grown, afterwards it should be kept cooler and less water should be given.

Cattleya Gaskelliana flowers from the latter part of May until July and should—as it flowers before the bulb is well ripened—be grown on after it flowers. From September on it should have less water and also be kept cooler, otherwise the plant will begin to grow again. *C. Gaskelliana* may be forced and brought into flower undoubtedly by Easter, but the plant would make in summer a second growth which would weaken and eventually kill the plant.

Cattleya Mossiae flowers in the latter part of April and in May and as the plants stand in flower sheath from November until May, care must be taken that they are not kept too dry in winter. The resting of this plant should consist in keeping it cool and giving it very little water. The same treatment is required by *Cattleya Mendelli*, which flowers in May and may be kept until June. Both *cattleyas* begin to grow after flowering and should then be treated like *C. Trianae*.

Cyripediums are in some points such as durability and variety just as useful as *cattleyas* and will come more into favor as soon as the more showy varieties can be purchased at a lower figure. I could enumerate very many useful varieties for cut bloom, but the pocket of the grower would not permit him to purchase them in quantity. *Cyripediums* do not want any rest, although it is advisable not to grow them too quick. The following species are at present the cheapest and easiest to grow: *C. Spicerianum*, *C. insigne*, *C. Harrisianum*, *C. Lawrenceanum*, *C. villosum*, *C. Boxallii*, *C. argus*. The above named species are best potted in a mixture of peat and fern roots and sphagnum, although I have seen some of the best grown *cyripedes* in sphagnum only.

Cyripedium Spicerianum requires plenty of heat and moisture during the growing season, which is from April until October or November, when it begins to flower and may be kept cooler after flowering. *C. insigne*—one of the easiest orchids to grow—does well if put outside in a half shady place in summer and can be brought on in flower from November until the middle of April. To have it in flower late it should be kept in a very cool house after taking it in from outside.

Cyripedium Harrisianum can be had in flower from November to March and grows very easy, as do *C. villosum* and *Boxallii*, which flower from January to April. The three last named species require heat and moisture up to the flowering time, and if a cooler place can be given them for two months after flowering they will profit by it.

To *C. Lawrenceanum* only of late more attention has been paid and it looks as if it will prove very profitable on account of



VIEW IN THE CATTLEYA HOUSE AT MR. ERASTUS CORNING'S ALBANY, N. Y.

flowering twice a year, once in the fall and again in April. The plants seem not to suffer through over flowering and look just as healthy as those that have been allowed to flower only once a year. To succeed in flowering the plants twice a year they ought to be grown very warm and a good supply of water should be given.

Dendrobiums come very useful for cut bloom as they flower at a time when flowers are scarce and especially as they may be brought by proper management into flower about Christmas. The most suitable species for florists are: *D. Wardianum*, *D. nobile*, *D. Dearei* and *D. Jamesianum*.

The three first named species require an abundance of heat, moisture and air in the growing season, which begins in March and April and lasts until the bulbs are fully made up. They should afterwards be kept cool and dry to give them a rest before flowering and to prevent them from starting into growth again, which would interfere with their flowering. If the plants are forced into flower for Christmas care must be taken that they do not grow too far and they should if possible be treated cool again until March. The bulbs made by sunheat will

be far stronger than those made by plants that are started early in January or February by fireheat, therefore it can easily be seen that this dendrobe can be grown with very little expense of fuel.

The next best species is *D. Dearei*, which has beautiful pure white flowers and can be had in flower from November until March in succession. *D. Dearei* requires much heat and moisture while growing, and can be well grown together with the phalaenopsis. It flowers with the young bulb and should be kept a little cooler and drier after the young bulbs are formed, which is about a month after the plants flower, but it does not require rest and cool treatment to such an extent as *D. Wardianum* and *D. nobile*.

D. Jamesianum is a cool house dendrobe and flowers from March to May, it can be grown in the cool house and outside during summer if a suitable half shady place can be given. The plants should be kept dry for a time after they have flowered to enable them to form good strong eyes. All the dendrobes mentioned grow better in a mixture of peat and sphagnum only.

Laelias require similar treatment to cattleyas, the greater part of them make their growth during summer and flower

soon after and like therefore plenty of heat and moisture with abundance of air during the growing season. The material for potting should be the same as that used for cattleyas. Of the many species this genus contains *L. purpurata*, *L. Perrinii*, *L. anceps*, *L. autumnalis* and *L. albida* are the most useful for cut bloom.

Laelia purpurata is one of the finest orchids and can be brought into flower from March to May, its flowers are larger than any of the cattleyas mentioned, it makes bulbs and flower sheaths in the fall, therefore should, like all cattleyas that remain a long time in sheath, be kept moderately moist in winter and grown on again soon after flowering. *L. Perrinii* is very useful for cut bloom, as it flowers from October to December, when few orchid flowers can be had. It makes its bulbs late in the fall and flowers before they are fully made and should therefore be grown on for about a month after it has flowered, and then be kept cooler and less water be given to prevent it from starting to grow again. *Laelia anceps*, *L. autumnalis* and *L. albida* make their growth in summer and flower with the young bulbs from November to January; they start to grow in April and

May and should be placed in an airy house with much heat and moisture; after flowering they are best kept moderately dry and cool.

Odontoglossums have been very little tried in this country for commercial purposes, the best results in growing the cool species have been attained in private collections and in nearly every instance by growing them in north houses. The only fault to find with these houses is that the bulbs of the plants can not get well ripened therein and will produce only a small percentage of bloom. I have occasionally seen in private places that the north house was kept considerably warmer during the time the bulbs were forming and a good supply of flowers was the result. A cheaper way is to keep the plants in a half shady place outside in the summer and bring them in the fall inside again in a temperature of 55°. The following are the best varieties suitable for the trade: *Odontoglossum crispum*, *O. Pescatorei*, *O. citrosimum*, *O. grande* and *O. Rossii majus*.

O. crispum (more generally known under the name of *O. Alexandræ*), and *O. Pescatorei* can be had in flower from December to May; they are both of very easy culture, the only difficulty is to keep them cool enough from June to September, which can be overcome by putting them outside during these months. No orchids will repay better the trouble than these two species when successfully grown. In both of them endless and valuable varieties are found; they take little room, require little fire heat and are not frequently attacked by insects. They have we may say their rest in summer and begin to grow in August and September when they should be potted, but care must be taken that the new roots are not disturbed. They are best potted in a mixture of fine peat, sphagnum and half rotten leaves. If the bulbs remain soft and do not ripen they will not flower well, so attention should be paid to that, and if we can not give them enough light to accomplish the purpose they ought to get a little fire heat during the time the bulbs are forming. They also require a very liberal supply of water and air.

O. citrosimum requires more fire heat than the two above named species and will flower from January to May; it likes plenty of air, moisture and light in its growing season during the summer, it must be kept perfectly dry in winter until it shows flowers which appear with the young growths and must be grown on after flowering.

O. grande is the largest variety of the genus and flowers from September to November, it should be grown with an abundance of air in the summer and be kept cool and dry when the blooms are over. *O. Rossii majus* can be grown well outside in summer, it flowers with the young growths from October to January and remains in perfection until March; it requires to be kept dry in the fall before the new growths which bear the flowers are forming. *O. Rossii majus* and *O. citrosimum* do well placed in baskets while the others are best potted.

Oncidiums are very free flowering orchids, and it is astonishing to see small plants on blocks or in baskets bear enormous spikes of flowers, it is therefore good to cut out part of the spikes or flowers so as to ensure a good crop of bloom the following year again. *Oncidium varicosum*, *O. tigrinum*, *O. Jonesianum*, *O. sarcodes*, *O. Forbesii*, *O. Marshallianum* and *O. Cavendishianum* are perhaps the most profitable ones to

grow; nearly all the oncidiums grow best in baskets, some do well on blocks; they like plenty of water, air and light when growing, and when at rest must be cool and dry. Oncidiums should if possible not be started before May, otherwise they will flower too soon. They need a good supply of water and air during growth, will grow well outside in summer and flower in November and December. *Oncidium Forbesii* requires the same treatment and flowers about the same time. *O. Marshallianum* and *O. sarcodes* flower from February to May and should be kept cooler in winter, otherwise treated the same as the former species. *O. tigrinum* and *Cavendishianum* do well grown in pots, the former flowers from October to December and requires like nearly all the Mexican orchids, an abundance of air, light and water during its growing season, which is between May and October; the bulbs must be well ripened to ensure free flowering; *O. Cavendishianum* flowers from January to April and should never be kept very moist when not growing. *Oncidium Jonesianum* will with proper management flower in November and December; to attain this it should be started before June, it grows best on blocks and enjoys abundance of heat and moisture during the time of its growth, but should be watered so that it can easily dry off again; after flowering it ought to be kept cool and dry.

I should have enumerated *phalaenopsis* before if it was not for the difficulty attendant upon their growing; the species best suited to grow are *P. amabilis*, *P. Schilleriana* and *Stuartiana*. They all require great heat and attention, in most instances they flower themselves to death, the flowers should not be left too long on the plants. They thrive best in an even temperature, varying from 65° to 70°, and they like perfect shade in their growing season in summer and more light in the fall before they begin to bloom. Peat, sphagnum and half rotten leaves is a good mixture to pot them in, baskets and glazed pans are preferable for trade purposes to the growing of them in high cylinders; all the species require the same treatment.

Calanthes are very easily grown and flower very freely during the months of December, January, February and March. They like a mixture of rough sod and cow manure with heat and moisture while growing and perfect rest after they have flowered; they may be started into growth in March or April. The best varieties to grow are *C. Veitchii*, *C. vestita* and *C. vestita ocellata gigantea*.

There are very few of the genus *Coelogyne* suitable for commercial use, the best now for that purpose are *C. cristata* and *C. ocellata*. Both species like a good supply of water during the growing season, which is from April to September. *Coelogyne cristata* flowers after the new bulb is formed, while *C. ocellata* flowers with the young growth from February to April. The former should have a rest after it has flowered, while the latter must be grown right along after flowering [Read before the New York Florist Club April 10.]

An Arrangement of Orchids.

The simple but elegant combination of orchids shown was arranged by Mr. H. H. Battles, Philadelphia, to whom we are indebted for the photograph from which the illustration was made.

While it would probably be difficult for a florist in a small town to obtain an adequate price for such an arrangement,

except possibly on some extraordinary occasion, the retailer in the larger cities who caters to the tastes of people of wealth would we think find that he would meet with little trouble in obtaining a price which would pay a profit, and in addition bring him trade which he might not otherwise obtain.

The lasting quality of orchid blooms is a strong point in their favor and greatly lessens the chance of their spoiling before a customer is found. This also increases their value to the purchaser, who may enjoy their beauty for a length of time in which numerous lots of other flowers would have faded away.

While the daily press has done much to excite popular interest in orchids, it has done an injury by ridiculous exaggerations as to the prices paid for plants, and many people have come to look upon all orchids as very costly. The trade should endeavor to disabuse the mind of the public of this idea. While numerous sales have been made at extravagant figures, varieties which can be obtained at a very moderate price are frequently far more beautiful than those for which wealthy collectors pay large sums.

Long Island Notes.

BY WM. FALCONER.

ON MY WAY to New York if I can spare an hour or so I stop over a train at East Hinsdale to visit my neighbors. This is both pleasant and instructive.

CHILD'S PLACE comes first as it is right at the station. He would like me better if I didn't tell you anything about his new plants. But there are few places around New York where one can find more odd or uncommon plants in stock or on trial than here.

SOUR GRAPES is what he shall probably now call *Euphorbia heterophylla*. Last summer I proposed for it the name of "Summer-blooming Poinsettia," but friend Goodell, of Dwight, Mass., didn't think this name pretty enough, so has sent it out this season under the name of "Fire on-the-Mountain." But the people of the south where it grows wild call it the "Ilypocrite Plant"; now, while we shall gladly accept their plant, we must reject their name for it.

HARDY CARNATIONS.—Mr. Miller finds a good deal of difficulty in striking some of our hardy summer-blooming carnations from cuttings. This reminds me that a few years ago I saw a fine "strike" of them with John Thorpe. He put them in in late summer in box-flats which he kept out of doors against a north wall and gave them lots of water.

GAZANIA SPLENDENS is in bloom in the greenhouse. "Miller, what's this, and where did we get it, and can we get up stock enough of it to catalogue it?" are questions that rush from Mr. Childs as he beholds the handsome little composite. Years ago it was abundant enough, but nowadays it seems to have dropped out of general cultivation, and like many other old-time plants can rarely be seen away from places that still cling to miscellaneous assortments of plants.

SOMETHING NEW—*Jonopsidium acaule*.—Some pretty little cushions were in bloom. It is a dense, little annual, of the most copious nature, a native of Portugal and Morocco. New! It was a common annual in my father's garden before I was born.

CEREUS PALMERI.—I used to think that the little beauty I had at Cambridge was unique in cultivation, and many a loving look and kindly word did the late



AMERICAN FLORIST CO.

AN ARRANGEMENT OF ORCHIDS

Dr. Engleman, of St. Louis, bestow upon my pet. But now think of my chagrin as I behold a stack of plants of it, plump, fresh and spotless, dry as a chip, piled up on a bench in Childs' packing room, newly in from their native wilds.

AND *CEREUS GIGANTEUS* too! Although this cactus becomes a timber tree in Arizona to Sonora, and may be well remembered by those who saw the fine specimens sent to the Centennial exhibition at Philadelphia, we can only expect to grow it successfully by beginning with small plants, say about 12 inches or less in height. Large specimens may keep plump and green after being brought here for a year, or rarely two, but I do not know of an instance where they have

become established, fresh, full rooted plants.

ACHILLEA PTARMICA fl. pl.—One would think that ere now the people would have got surfeited with this plant, but no, they haven't. Mr. Miller tells me that they have already this season sold 10,000 plants of it.

FIGS.—He had a lot of them raised for him in Florida. The stems had been brought down flat to the ground and were rooting all along, but the stock was far too large for mailing. Noticing this when he got them last fall, he cut up the naked rooty stem into one-eye pieces and laid these thickly in flats filled with earth in the greenhouse. Every eye has started into growth. He will plant them

out over summer and lift them next fall.

A YELLOW IPOMEA in Yucatan. Mr. Miller tells me that Mr. Hogg (of Japanese fame) was telling him of a handsome yellow ipomoea he saw growing plentifully in Yucatan. Years ago he sent home some plants which he gave to Isaac Buchanan, but, so far, he has not heard of their blooming in cultivation.

MESEMBRYANTHEMUMS.—Mr. Miller asks: Where can we get a set of these? A few species, notably *M. spectabile*, are common in cultivation, but I do not know where a large assortment can be had. I advised them to visit Louis Menand, Menand Station, Albany.

L. MENAND is a grand old Frenchman, now about 80 years of age, and who has been settled for nearly half a century as a florist and nurseryman near Albany. Cactuses and succulent plants generally are his dearest pets and he loves them with a grandfather's fondness. His greenhouses are also a storehouse filled with many New Holland and East Indian shrubby plants and other decorative subjects not infrequent in gardens thirty to fifty years ago, but now almost unknown among us. But although he clings so tenderly to his old loves he is as progressive as the youngest among us, and a specialist in orchids, and has a good collection of all manner of fine greenhouse plants.

C. H. ALLEN & Co. have removed from Jamesport to their new bulb farm at East Hinsdale, and are busy getting in their stock. Paeonias, irises, some lilies and other hardy stock are planted, and now they are sowing gladioluses. *Valotas* are being set out in frames. And they are about to put up some greenhouses for the cultivation of hybrids and species of amaryllises and other bulbous plants and for propagating purposes.

AND OUR MUCH respected and scientific friend Mr. C. L. Allen (father of the above C. H. Allen, and also of W. S. Allen, the cut flower commission agent, New York), in order to be beside his children and grandchildren has given up his place at Garden City and also removed to East Hinsdale, near by his son's bulb farm.

GLADIOLUSES.—Louis Siebrecht was busy planting out gladioluses in the open field in rows 2½ feet apart. He had got most all of his bulblets planted, but would not yet plant out all of his mature bulbs, because in addition to increase of stock a succession of cut flowers is a consideration with him, and for this purpose he will plant in succession till July.

LILIUM HARRISII—He grows them in pots for cut flowers. All those that have been cut from were turned out of their pots and planted out in rows in the open field recently, and the earth plowed up pretty well on to the stems.

BONE FLOUR AND BONE MEAL AS FERTILIZERS.—He manures his land broadcast with barnyard manure and plows it in, then in the furrows opened for his bulbs he gives a liberal dose of bone flour. For pot plants he likes bone meal best, but for field crops he much prefers the flour.

HALLOCK'S WHITE GLADIOLUS.—"Ah, but that's the gladiolus if one could only get hold of it," remarked Mr. S. "A year or two ago I tried my best to get some bulbs of it, agreed not to let a bulb of it out of my hands, in fact, offered to grow it for them, but no, nothing would induce them to let it out of their hands." Mr. C. H. Allen also tells me that as a white gladiolus of the *Gandavensis* race,

it stands supreme. The Hallocks, a few years ago, bought the stock of it from a Boston grower.

TALKING ABOUT gladioluses I may say that for cut flower purposes there is a brilliant future for the Saundersii and purpureo auratus types, hybrids and varieties, and the hardness of the former is a marked point in its favor. Indeed, for cut flowers, Mr. C. H. Allen assures me they will yet supersede all of the Gandavensis race.

TULIPS.—Lots of them are in bloom in a greenhouse, and a multitude in boxes out in an open sided wagon shed are being retarded for Easter, while for a succession to these he has just set a light board frame around and sashes over some closely packed outdoor beds. Ja Reine, white, Rose Gris de lin and Yellow Prince are especially fine with him.

CANDIDUM LILIES are very fine. He finds there are two forms common in cultivation; one has solid, somewhat pointed darkish tipped bulbs and bears poor thin flowers; the other and best one has flatter and looser bulbs, white throughout, and bears blossoms of waxy whiteness and substance.

AMARYLLISES.—Some Defiance amaryllises were in bloom in a corner. "Two years ago I paid \$24 for a dozen bulbs, now I have about a hundred and I will plant these out in summer and hope to increase them to five hundred before next winter, then I'll have a nice little stock and go in for flowering them," he told me. There is no doubt of it, amaryllises are bound to soon become a popular cut flower. There is now no demand because there is no supply. They live forever, multiply two to five fold a year, and are easily grown, easily kept, and with reasonable intelligent care bloom of a certainty. John Thorpe believes in them and has a large young stock of some sorts, notably Empress of India. Siebrecht & Wadley are quietly getting up a stock of them in the West Indies, and Mr. Wm. Hamilton, superintendent of the Allegheny City parks, writes me that he now has 1,000 plants in bloom.

SMILAX.—He doesn't keep over any of his old plants. He raises fresh plants from seed every year and treats the crops more as if it were an annual than a perennial.

NARCISSUS POETICUS is in tolerable abundance, but it isn't so desirable or profitable as the earlier form, namely, N. ornatus. But as ornatus is expensive he saves every bulb for future use. Every bulb of ornatus will bloom and he nearly always gets two scapes from a bulb.

KEEPING "JACK" ROSES IN THE SHED.—"Ah, this is the way to keep them fresh—with a wet blanket over them," said he, as he showed me a large flat filled with roses in his cool, dark, bulb storage house, and with a wet cloth over them.

MARECHAL NIEL ROSE is in bloom. Mr. S. finds that it does not do so well upon its own roots as it does when worked upon some other rose; besides, blossoms produced on own-root plants have not the substance or lasting qualities that those from "worked" plants have.

CHRYSANTHEMUM PELICAN.—He has gotten up a nice stock of this variety, not for fall but for spring blooming! that is if everything turns out satisfactorily. His neighbor, Julius Scharff, took in four blooms of it last week to W. S. Allen, the commission agent in New York, and got \$2 for them. "Ah, but they were beauties."

CHRYSANTHEMUM MRS. N. HALLOCK.—He also has great faith in this variety as a late white, and so have I. Together with Ethel I regard them as never-fail late whites.

MILLA BIFLORA BULBS—He keeps them in baskets dry and in a frost proof shed. He used to keep them in flat boxes as he did his gladioluses, but lots of them damped off, in baskets, however, they keep very well. He plants them out in rows in the open fields in summer and cuts and sells the flowers from them. Increase of stock is obtained from seed. These home-grown bulbs are as big as Gladiolus Colvillei bulbs, and much bigger than those imported from Mexico.

CARNATION MAY QUEEN.—No wonder Mr. Chitty, page 356, has such a good word for this lovely pink variety. Mr. S. has a long span-roofed house filled with it; it has been in bloom since last fall, and now its cleanness, vigor and luxuriance of flower stems remind one of a field of rye. Mr. S. now gets \$2 a hundred for the blooms and he claims that the flowers will keep longer in good condition after being cut than most any other variety.

HE WON'T GIVE UP Hidze's White in favor of Silver Spray yet awhile, till the latter shows a better disposition in the propagating stage. How does it behave in its youth with other florists?

WHILE ANNA WEBB is a splendid carnation for earlier work, he does not find it so good as late as April. Black Knight looks good, but its blossoms burst badly.

IN FRAMES OUTSIDE he has a large lot of carnations. He prefers Portia for this work, as he finds it is one of the hardiest of the monthly varieties. He plants them thickly in the frame in fall and merely covers the frame with sashes over winter. These carnations keep perfectly clean and bloom full in summer.

LILIUM BATEMANÆ FROM SEED.—I sowed a lot of seed of it January 10th last in shallow boxes filled with light earth and chopped sphagnum moss and surfaced with sphagnum, and at once put them out into a cold frame where they have been ever since. In the second week of February the earth froze solid in the boxes. But now, the middle of April, the young lilies are coming up beautifully. Indeed, L. Thunbergianum in most of its forms displays the same ease of germination.

PERENNIAL PHLOXES sown last fall in boxes wintered in cold frames are now coming up nicely, and that too with barely any trouble. Had I sown them in the greenhouse in spring what a lot of room they would require, also attention in the way of shading, watering, hardening off and the like. As they are now they can stay in the boxes till the first of May when they will be a couple of inches high and in fit condition to transplant into rows in nursery beds.

The Rainbow Plant.

I am surprised that such a close observer as Mr. Falconer did not know that *Alternanthera paronychioides* major had been known around New York for the past six or seven years as the Rainbow Plant. In 1882 or 1883 a New York florist sold twenty thousand plants of this *alternanthera* to the late Miss Catherine Wolff for her place in Newport. This immense quantity was planted I believe in one bed, and framed in the emerald green of the Newport lawn, was the attraction of the season. Some one in looking at it remarked that it should be called

the Rainbow Plant, from its variable tints, and the name from that time stuck to it, and this name was so used by Peter Henderson & Co. in their catalogue for 1885. Surely if Mr. Falconer had kept his ears open, he might have heard the trumpet tones of Wm. Elliott descending on the merits of this Rainbow Plant at his auction sales for the past five years.

OBSERVER.

Geranium Brunanti as a Bedder.

Mr. Hill first called my attention to the value of this geranium as a bedder some two years ago.

The foliage and habit is shapely and extremely good, flowering qualities extremely profuse, trusses large and nearly always finely formed, thrown well above the foliage and uniformly poised with great beauty and regularity making a well balanced plant in nearly every case. The great value is in the floret. It is a happy medium between the semi-doubles which mould in damp weather, and the singles which drop. The petals are very large, free and effective, but not laid together so close as to cause them to mould which I have never seen it do. At the same time the large outer petals are united at the base by the inner ones so they do not drop, thereby giving the florets all the advantages of the semi-double and single form. It cannot be classed as a semi-double.

E. V. HALLOCK.

Mr. Dreer's Rose.

In the April 1 issue of the FLORIST, page 388, Mr. Dreer's rose is incidentally mentioned in the report on "A Propagating Feat and a Banquet." A charge is made that a comparison is intended between the rose in question and Mrs. John Laing, to the detriment of the former. Nothing was further from the writer's intention, and this statement is cheerfully made to counteract any erroneous impression that may still exist in some reader's minds. The rose referred to is not yet in commerce. It is undergoing a thorough trial, and it is confidently predicted by men whose judgment is accepted as of the first order, that further trial will prove that it will eventually supersede all light colored hybrids for very early forcing.

Philadelphia. EDWIN LONSDALE.

A Correction.

In my paper on violets on page 328 of the March 1 issue of the FLORIST, instead of "Mr. Cook was the originator of that charming variety Marie Louise" it should have read: Mr. Cook was the first to introduce that variety in this country.

M. A. HUNT.

A Seedling Amaryllis—Something New.

Under date of April 16th last, Mr. Hamilton, of Allegheny, writes me:

"I have a seedling amaryllis in flower that does not belong botanically to the natural order of amaryllidaceæ. In the amaryllis family we have: Perianth regular or nearly so, six parted; stamens, six distinct, with introrse anthers; stigma, undivided or three-lobed; fruit, a three-celled capsule. Now, I have a plant grown from a seed of a South African fragrant species, crossed with *A. Psittacinus* major. The bulb is larger and the stalk stouter than any of my other seedling amaryllises of the same age, and it has borne two flowers each of the following description: Perianth, regular or nearly so, eight-parted; stamens, eight,

distinct, with introrse anthers; stigma, four-lobed; fruit, a four-celled capsule. Size of flowers seven inches across; petals broad and of fine form; color, white ground with many narrow stripes of crimson lake, fragrant. All of the parts are perfectly normal." W. F.

Greenhouse Construction.

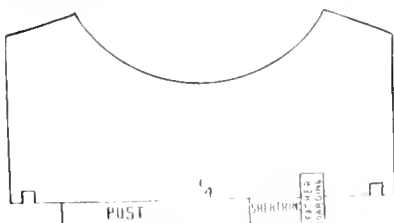
BY JOHN S. MAY.

17.

[Continued from page 391.]

Having decided upon the width and length of house to build, set the first post in front corner, square from that for the back corner post—18 feet 6 inches from outside to outside—then square from these for the whole stretch both back and front. If the house is to be 100 feet long, set the other two corner posts at exactly 100 feet from the first two posts. These four posts, also the posts which support the door jambs, should be dressed square on the two sides forming the corners. The front post should stand 4 feet 1 or 2 inches above the ground level of the house and the back post 8 feet 1 or 2 inches. When the four corner posts are all set commence at one end and set each row of posts at 3 feet 11 inch centers as described at page 391. Have each post perfectly plumb to outer lines and as near upright as possible. The corner post being set plumb both ways two lines can be stretched from these, one at top and the other near the bottom, this will keep the whole row to face true, but they should be as near true as possible both ways.

The post holes should be deep enough to make the post stand perfectly solid when well rammed up, and should be also quite solid at the bottom of the hole to prevent sinking; where the ground is of a soft nature below the bottom of the post a good flat stone placed under each post will be a great help to prevent them sinking when the weight gets on them; each hole should be not less than 3 feet deep below ground line. When the front and rear posts are all set get the correct height of each row from a level point of ground line, stretch a line tight from end to end at 4 feet for the front row from ground line, and 8 feet for rear row, sight it through to be sure it is true, mark each post by the line and saw them all of level. But if it is desired to save the water from the roof, then allow half an inch drop in the line from each end to the center—this will be a great help to the gutter in carrying the water quickly to the leader in center—but if the saving of the water is not desired then cut the posts all off level from end to end at the heights given above.



This done prepare the gutter plates—see Fig. 2. These should be made from good sound sticks, 4x8 inches, 20 or 24 feet long, and are dug out with an axe—starting at the end at nothing and sink them one-eighth of an inch to every four feet, this will give a fall of one and one-half inches in five feet and with a half

inch fall on the post make two inches or a fall for each 50 feet of gutter. This gutter will of course need planing out and dressing off smooth so as to allow the water clear running surface; in addition to this it should be plowed on the under side to receive the top edge of weather boarding and small plowings near each side to prevent the water from running down its sides and following in on to tops of posts, etc., and causing rot. When the gutters are all ready start at one end and place so the inside edge of plowing is set just far enough from face

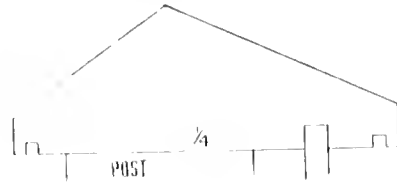


Fig. 3.

of post to allow for the thickness of the sheathing which is to be nailed to post, saw the ends of gutters off plumb, cut directly over the center of post where joints come, butt them together, then nail with heavy spikes down through the plates into the tops of posts. But where it is not desired to save the water a plate like Fig. 3 can be used and it is much less trouble to make; it should be placed on the post in the same way as described for the other.

When the gutters or plates are all securely fastened commence to put on the sheathing—see Fig. 4. Start at the top next the plate, cut the top tongue or notch off and plane the top edge off so that it fits up close to the plate and nail securely to post, then follow with the next course, wedging each course up tight to the one above so that all the joints are close. This kind of sheathing—as can readily be seen—will turn all water off on the inside so that there is no chance for any to collect, even in the joints, as it can be made with a slight bevel. Over this tack a good rosin sized sheathing paper (do not use tar paper unless you want to run a great risk of killing the plants you may put in the house after it is built). After the paper put on novelty siding weather boards, running the top edge of same tight up into the plowed grooves of the plate as shown in Fig. 4, nail top edge only till the next course is fitted in closely, and so continue till the whole side is completed.

Where it can be procured the inside sheathing boards should be made of hemlock, as it lasts longer than pine; it should be mill dressed on sides going next to posts. For the outer boarding good white pine is probably the best if kept well painted. For posts locust is the best, next red cedar, then comes a variety of woods which can be used, but almost any of them soon perish with the heat and moisture of a greenhouse except the two named.

Hail Notes.

Mr. Charles E. Baker, of Liberty, Mo., insured his glass on the 20th of March, 1889. On the 8th of April he was visited by a hail storm which luckily did no damage. Mr. Baker writes: "It makes one feel good to know he is insured."

Eight hail storms have passed over different sections since the last meeting of the Society of American Florists. New

York, New Jersey, Illinois, Michigan, North Carolina and Missouri were the states visited. The "hail felt" seems to extend over a wide range of country.

To those florists who insure against fire and not against hail we would propound the following question. Have you been burned out in the past twenty years as often as you have been hit by hail?

Those desiring to insure their glass against hail may secure any information desired by addressing Jno. G. Esler, secretary of the Florists' Hail Association, Saddle River, N. J.

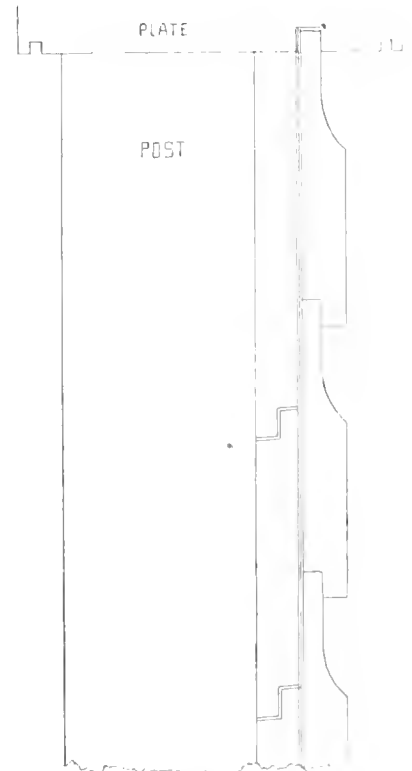
Henry A. Dreer, of Philadelphia, is one of the recent members of the Florists' Hail Association. Mr. Dreer insures 30,000 square feet of glass.

It is not necessary to be a member of the Society of American Florists to become a member of the "Florists' Hail Association." We are frequently asked this question, and therefore give this general reply. The "Florists' Hail Association" is incorporated under the laws of New Jersey without restrictions and is therefore open to all

1,020,000 square feet now insured.

Losses From Fire.

The large number of losses from fire in greenhouses reported for the past winter season—almost invariably starting in the boiler pits and around the furnaces—leads us to ask if florists exercise as great care in protecting from fire as they should



The actual loss on buildings destroyed is invariably very small as compared with the resulting injury to plants from smoke, frost, or both, which injury but few companies insure against, as it is considered an extra hazardous risk.

It certainly seems as though florists in general were not sufficiently careful in protecting themselves from the possibility of such losses. Where all the boilers are

located together the precaution taken by Messrs. C. B. Whitnall & Co. of Milwaukee, in having a solid brick wall with an iron door separating the greenhouses from the boiler room, is a comparatively inexpensive one when the greatly increased security is considered, for with the wall protecting your greenhouses the boiler house may be entirely destroyed without doing any serious damage to the greenhouses.

In making alterations and repairs the coming summer don't forget this point. Such a wall is well worth the expense of building it.

Standard Pots.

Below we give the names of those who have up to date placed themselves on record as agreeing to buy "Standard" pots only in future.

Ackley, B, Oneonta, N Y
Aitchison, W C, Oil City, Pa
Allen, C I, Garden City, N Y
Allen, James K, New York City
Anderson, Geo
Asmus, Ernst, West Hoboken, N J
Asmus, Rudolph, New Durham, N J
Auger, B L, Ft Wayne, Ind
Austin, J H
Ball, Chas D, Holmesburg, Pa
Ballantine, J D
Banyard, E & Son, Philadelphia
Barkham, W B, Saddle River, N J
Bauer, P J, Cleveland, O
Bearn, D, Philadelphia
Bennett, W, Flatbush, N Y
Berger, T V W, Bay Ridge, N Y
Bertermann Bros, Indianapolis, Ind
Bishop, W R
Black, J E, Grove City, Pa
Bock, Wm A, North Cambridge, Mass
Boke, Francis S, Metuchen, N J
Brown Robt S & Son, Kansas City, Mo
Burton, Jno, Chestnut Hill, Pa
Bussard, Henri, Yonkers, N Y
Butz, Paul & Sons, New Castle, Pa
Campbell, C G, Baltimore
Campbell, J H, Philadelphia
Carmody, J D, Evansville, Ind
Carruthers, W S, Galveston, Texas
Cartledge, Thos, Philadelphia
Casper, L A, Council Bluffs, Iowa
Chaapel, Harry, Williamsport, Pa
Chilson, A A, Vinton, Iowa
Clark, C E
Clark, Wm, Colorado Springs, Colo
Cliffe, David, Philadelphia
Cole, C C, Des Moines, Iowa
College City Greenhouse, Galesburg, Ill
Comes, W W, Pearl River, N Y
Congdon, A R, Oberlin, O
Cook, John, Baltimore, Md
Copper, Jno C, Newtown, Pa
Corp, Z R, Providence, R I
Craig & Bro, Philadelphia
Creighton, Wm, Poughkeepsie, N Y
Critchell, B P & Co, Cincinnati, O
Dailledouze Bros, Flatbush, N Y
Danenhower, D V, Philadelphia, Pa
Davis, R & Son, Morrison, Ill
Dean, James, Bay Ridge, N Y
Deans, D, Long Island City, N Y
De Pew, Peter, Nyack, N Y
Dole, Chas L, Lockport, N Y
Donaghue, A, Omaha, Neb
Donn, Jno, Baltimore, Md
Dorner, Fred, La Fayette, Ind
Doswell, Geo W, Ft Wayne, Ind
Dreer, Henry A, Philadelphia
Driscoll, James, Passaic, N J
Drumm & Baker Bros, Ft Worth, Texas
Edwards S & Son, Bridgeton, N J
Eger, W C, Schenectady, N Y
Eisele, C, Philadelphia
Elliott, B L, Pittsburg
Ellis Bros, Keene, N H
Emmerich, Aug, Bethlehem, Pa

Esler, Jno G, Saddle River, N J
Evans, Chas F, Philadelphia
Farson, D D L, Philadelphia
Feast, Wm, Baltimore, Md
Field, S B, Roselle, N J
Field, Geo & Bro, Washington, D C
Finn, Jno, New York
Forbes, H E, Ridgewood, N J
Foules, David
Fries, Jacob A, Bethlehem, Pa
Frost, Adolph, Cortland, N Y
Gale, W F, Springfield, Mass
Gardner, T A, Wakefield, R I
Geduling, G, Norwich, Conn
Giddings, A, Danville, Ill
Goldring, Samuel, Albany, N Y
Graham, A, East Cleveland, O
Graham, John, Ottawa, Ont
Grant, Geo, Mamaroneck, N Y
Hagert, Chas H, Summit, N J
Hale, Chas F, Washington, D C
Halliday, Robt J, Baltimore, Md
Hammond, W S & Co, Carthage, N Y
Harris, W K, Philadelphia
Harries, E C, Bedford Station, N Y
Hart, H A, West Cleveland, O
Harvey, J Harry, Richmond, Va
Henderson, Peter, Jersey City Heights, N J
Herr, A M, Lancaster, Pa
Hess, C, Baltimore, Md
Hill, E G, Richmond, Ind
Hillebrand, Chas W
Hogan, John, Pawtucket, R I
Hornebrooke, E G, Berwyn, Pa
Hunter, F D, New York
Jackson, W T, Larned, Kans
Jordan, J M, St Louis, Mo
Joy & Son, Nashville, Tenn
Kemle Floral and Seed Co, Oskaloosa, Ia
Kift, Joseph, Philadelphia
King, Fred J, Ottawa, Ill
Kinsling, G
Knott, Wm A, Cape May, N J
Kohler, Julius, Philadelphia
Krombach, Chas, Brooklyn, N Y
Lamb, James M, Fayetteville, N C
Lane, Jno, Chicago
Lee, Daniel, Madison, O
Leomiuster, J F, Fitchburg, Mass
Long, D B, Buffalo
Lonsdale, Edwin, Chestnut Hill, Pa
Lucas, Geo B, Lansingburgh, N Y
Lunn, James, Bellevue, O
Lupton, J H, Woodbury, N J
Lutz, August, Philadelphia
Mann, Mrs A R, Tacoma, W T
Manning, Jacob W, Reading, Mass
Mansfield, Thos
Matheson, Donald, Tremont, N Y
May, John, Summit, N J
McLean, Chas A, Sunbury, Conn
McVey, John, Rondout, N Y
Michel Plant & Seed Co, St Louis, Mo
Moss, Isaac H, Govanstown, Md
Nixon, E S, Chattanooga, Tenn
Otter, Harold
Palmer, W J, Buffalo, N Y
Parsons, E W, West Chester, N Y
Patterson, Alma, Ft Scott, Kan
Patterson, Robt C, Pittsburg
Pentland, Jas, Baltimore
Pickelman, S W
Pifer, Henry, Washington, D C
Phillips, J V, Brooklyn, N Y
Pierce, A H, Raynham, Mass
Quinlan, P R, Syracuse N Y
Ramsden, C, Morton, Pa
Randolph, P S, Pittsburg, Pa
Raynolds, James D, Riverside, Ill
Reasoner Bros, Manatee, Fla
Reeves, Geo F
Reineman, A R & Bro, Pittsburg, Pa
Reist, Nathan E
Richardson, O M & Co, Canton, Me
Robertson, Jno, Alexandria, Va
Rohrer, A D & Bro, Lancaster, Pa
Saling, Wm, Rahway, N J
Salzer, John A, La Crosse, Wis
Sauls, S J, Columbus, Ga

Schmalz, Louis, Flatbush, N Y
Schultz, Alex, Phillipsburg, N J
Scott, Wm, Buffalo, N Y
Seaboard Floral Gardens, Portsmouth Va
Siebert, Chas T, Pittsburg, Pa
Siebrecht, Louis, East Hinsdale, N Y
Siebrecht & Wacley, New York
Simmons, J M, Vestal, N Y
Shaw, E D
Shelby, Jno P, Tuckahoe, N Y
Shelmire, W R, Avondale, Pa
Slaughter, T J, Madison, N J
Small, J H & Sons, Washington, D C
Smith, Wm G, Yonkers, N Y
Smith, Nathan & Son, Adrian, Mich
Smith, W R, Washington, D C
Smith, Frank B, Danville, Ill
Spaulding, T H, Orange, N J
Stephenson, Ellis, Eurnside, Ky
St John, Benj, Darien, Conn
Strickler, T S
Swanson, Aug S, St Paul, Minn
Taggart & Wilbur, Norfolk, Va
Terwilliger, S F, Saratoga Springs, N Y
Thomas, Mrs A, Kalamazoo, Mich
Thorpe, Jno, Pearl River, N Y
Towell, Joseph, Paterson, N J
Turnley, C W, Camden, N J
Vaughan, J C, Chicago
Von Bernauer, D Julius, Lemont, Ill
Walsh, Jno, Melrose Highlands, Mass
Wood, L E, Fishkill, N Y
Wiedy, Jno, Mt Washington, Md
Westcott, Jno, Philadelphia
Westcott, W H, Philadelphia
Whitnall, C B & Co, Milwaukee, Wis
Whittle, A E, Albany, N Y
Wolff, Julius, Jr
Young, C & Sons, St Louis, Mo.
Zeller, Emil, Flatbush, N Y

Table Decoration.

A short time since we supplied a table decoration which was very favorably commented upon.

The center piece was of callas with their own foliage and a few fine ferns and asparagus, the ferns extending out over the white cloth at irregular distances. It was a ladies' lunch with covers for twelve and at each plate was a bouquet consisting of a calla and delicate flowers. Each bouquet was different; in one the small flowers were lily of the valley; in another yellow acacia; the third, freesias; others were small narcissus, pansies, cyclamens etc. I send a sketch of one of the bouquets.

C. B. WHITNALL.

What to Buy for Shrubs.

At the meeting of the Massachusetts Horticultural Society February 16, Jackson Dawson, gardener at the Arnold Arboretum, read a paper on "Shrubs that are Perfectly Hardy." The first question, Mr. Dawson said, is, What shrubs can be called perfectly hardy in our rigorous New England climate? To this he answered: Such shrubs as would live and grow and flower in any ordinary well prepared soil without any protection whatever, either by covering or by being planted in a sheltered position, and that when once properly established, would, with ordinary attention, give satisfaction to the planter. There are many of our finest shrubs that do well if care is exercised in the selection of situation and soil, or if they are protected for a few years until well established, that would not do well otherwise, but these could not be termed perfectly hardy, neither would they give satisfaction to the general planter who, as a rule, knows nothing of the care required to bring such plants to perfection, and thinks when he has set his shrubs in the ground that all has been done that is required for a suc-

cessful plantation, but is much surprised the next spring to find so many half-dead plants, and often blames the nurseryman for selling him dead plants, when, in reality, the trouble is due to his own ignorance of what is hardy or tender. Many in planting new places procure catalogues and make out their lists from them, selecting all that is represented as most rare and showy, or they may have made their list from plants that they have seen in some exhibition, never thinking that they require any extraordinary care in situation or culture to produce such specimens as they have seen at the exhibitions. Now this is all a mistake, for many catalogues are deceptive, and the sooner nurserymen and others learn to send out correct catalogues the better it will be for all. Many planters, after buying these plants, which are not hardy under ordinary circumstances, become disgusted to see them growing less and less every year, and come to the conclusion that it is throwing away money to try to cultivate them, and that the general run of plantmen are dishonest, when such is not the case. The public want trustworthy information, and the catalogues of nurserymen and seedsmen are good places to give honest descriptions of plants, and if they have any weak points, to point them out, stating whether they need protection or a special situation, and in what way. This would not lessen the sale of this class of plants, and people would plant intelligently, knowing the places or positions where they would succeed. Most of those who have had anything to do with planting know that many of our choicest shrubs need special care and protection in this climate, and the essayist did not wish it to be thought that he did not advocate the planting of the class which are not perfectly hardy, for he did in their proper place. Many of them are so beautiful that they will well repay us for all the care and labor required to grow them successfully. But the object of this paper is to give the names of such as under ordinary conditions have stood the test of cold and heat, or as many of the best of them as there may be room for, and these will be ample to select from. Many of them are natives of our own woods and fields and compare well with their allies from other climes, whence we import them at so much cost. For many large as well as small places they can be used to great advantage, giving a finer general effect throughout the year than many of the exotics.

Before passing to the general list the essayist glanced over the field to see what we have in our own country. What he asked, can be more beautiful than the *kalmia* (mountain laurel) clothing our hills from Maine to Georgia? or our swamps of *Rhododendron maximum*, or our mountains covered with *R. Catawbiense*? or our native azaleas, such as *calendulacea*, with flowers varying from yellow to flame color; *arborescens*, with its snowy white and pink flowers and scarlet stems; *viscosa*, which fills our swamps with its white fragrant flowers, or *nudiflora*, that grows so luxuriantly on some of our dry hillsides. Equally beautiful are our fields of *rhodora*, with its purple bloom; our *viburnums*, with their corymbs of pure white flowers in summer, followed in autumn by their many-colored fruits, from scarlet to purple, which in some species last well into winter, enlivening the season when nearly everything else is past.

Then there are our *cornuses*, with good flowers and blue and white berries and

many-colored woods, cheering even in winter; the wild roses that bloom from June to August; the sumacs, with their fine tropical foliage and brilliant colored seedheads; the wild plums, especially *maritima* and *pumila*; the many species of thorns which are beautiful both in flower and fruit; our *spiræas*, white and purple; the white fringe; the *clethra*, with its fragrant white flowers from July to September; the holly and the black alder, which are most beautiful, if fruiting specimens are selected, the fruit holding on well into the winter. Even now a specimen in the Arboretum is as brilliant with its scarlet fruit as in October. The ink berry is a fine evergreen shrub. Especially ornamental as under shrubs are the *halesia* (silver bell or snowdrop tree).



FAJOR CONSISTING OF A CALLA AND LILY OF THE VALLEY.

The *andromedas* and the huckleberries and blueberries are all useful, and nothing can excel their rich autumn coloring. The *shad* bush is almost the first shrub to blossom in our woods, and the *barberry*, with its fragrant yellow flowers and scarlet fruit, is very ornamental; and so are the wild honeysuckles, with scarlet and orange flowers. Other beautiful native shrubs are the various species of *philadelphus*, *potentilla*, *hypericum*, *rose acacia*, *elderberry*, *indigo shrubs*, *ampelopsis*, *bitter-sweet* and many others.

Mr. Dawson next gave a general list of hardy shrubs, beginning with the *clematis*, of which he named the following species: *Virginiana*, white, a climber; *Pitcheri*, dark purple, flowering all summer; *crispa*, pale blue, fragrant; *Verticillaris*, with large, pale purple flowers; *Vitalba*, the traveler's joy of the English, white; *graveolens*, yellow flowers in late autumn, the seed pods very showy; *Davidiana*, fine porcelain blue, fragrant flowers, resembling miniature hyacinths; *robusta*, white, one of the finest of the late blooming species. The varieties of *Jackmanni* and other garden varieties are too well known to need more than mention. *Nanthorhiza apifolia* is a beautiful low shrub, with chocolate colored flowers and fine autumn foliage. Most of the varieties of *Pæonia Moutan* are hardy, with fine, showy flowers. The

Calycanthus floridus and *levigatus* (all-spice bush) are desirable for their fragrance. *Schizandra Chinensis* is a fine climber, with fragrant flowers and scarlet fruit. Of the moonseed we have three species, *Menispermum Canadense*, *Dauricum* and *Japonicum*, they are good plants for covering posts or small arbors, the foliage being of a rich green. The *Akebia quinata* is also a fine vine for rockwork or trellises. Of the genus *Berberis*, the best are *B. Canadensis*, a native species; *B. vulgaris* and its varieties, with yellow, red, purple and white fruit; and the variety with purple foliage. *B. Thunbergii*, a fine, low growing species from Japan, is one of the best of all, being brilliant all winter. *B. Sieboldii*, known in gardens as *B. Hakolaka*, is also a good one. *Iberis coriacea* and *Alyssum Cneorum* are dwarf shrubs, with white and yellow flowers. *Hudsonia tomentosa* and *H. ericoides*, two native shrubs, when once established will grow in the most exposed places. *Hypericum kalmianum* and *H. prolificum*, from Lake Superior, and *H. aureum*, from Tennessee, are the best of the genus and bloom well during the latter part of the summer. *Actinidia polygama*, a strong rampant growing vine from Japan, has white flowers and light, green edible fruit about the size of a large grape. *Zanthoxylum Americanum* (the toothache tree), and *Ptelea trifoliata* have inconspicuous flowers, but grand foliage, and the fruit is somewhat ornamental.

Of the holly family, which are hardy, we have *Prinos verticillata* (black alder), with both red and yellow fruit, *Ilex laevigata* and *I. glabra* (ink berry), with black fruit and evergreen leaves; also *Nemopantes Canadensis*, with rosy purple fruit. The species of *enonymus* are all ornamental in fruit, but their flowers are inconspicuous. *E. atropurpureus* is an American species, with rich scarlet fruit. *E. Americanus*, var. *obovatus*, is a low growing species, good for covering embankments or any other purpose where a low growing species is required. Of *E. Europæus* there are many varieties, with white, yellow, purple and scarlet fruits, all of which are highly ornamental in the fall. *E. verrucosus* is a small shrub with warty branches. *E. nanus* is an excellent plant, where a dwarf one is required; the autumn and winter foliage is of a rich brown, which makes it very effective for winter work. *E. alatus* is a fine variety from Japan, with winged bark. *E. radicans* and its variety are excellent for covering rocks or fences, clinging almost as well as ivy. Of the bitter-sweets, *Celastrus scandens*, our native species, and *C. punctatus* and *C. paniculatus*, from Japan, are all rapid growing climbers, well suited to cover screens or unsightly buildings, and their orange and scarlet fruit is very ornamental in autumn.

Of the buckthorns, *Rhamnus alpinus* has the best foliage; *R. cathartica* is useful as a hedge plant, and *R. Frangula* is ornamental on account of its continuous blooming, which gives the plant a peculiar character, it being covered with flowers, green, red and black fruit during the summer. *Ceanothus ovalis*, from Vermont, is a neat low shrub, with white flowers in June, *C. Americanus* blooms a month later; both are valuable in dry soils.

The different species of wild grapes are of great value in covering up unsightly buildings or walls; *Vitis Labrusca*, *vestivalis*, *cordifolia* and *riparia* are the most hardy. In the *ampelopsis* section we have *A. quinquefolia* and its varieties, one of which *A. Engelmanni*, has suck-

ing tendrils like *A. Veitchii*; *A. heterophylla* and its varieties, *aconitifolia* and *sejancifolia* have blue berries.

Ficus macrostachya is a fine late flowering shrub, with spikes of white flowers. *Nanthocharis sorbifolia* is very curious in bloom, but short lived. All the species of this are fine for large clumps or embankments, and when cut within an inch or two of the ground every year make a very tropical appearance. *R. glabra*, var *laciniata*, has fine fern-like foliage. *R. copallina* is one of the finest for autumn coloring. *R. venenata* and *R. Toxicodendron* are well known as the poison sumach and poison ivy. *R. aromatica* is one of the finest coverings for banks; when once established it will grow in the poorest of soils. *R. Cotinus*, the smoke tree, is a well known shrub with mist-like flowers. *R. senialata Osbeckii* is a fine large growing shrub from China, with large heads of white flowers in late summer.

Of *Cytisus* we have *capitatus*, with round heads of yellow bloom, and *C. nigricans*, with long loose spikes of light lemon colored blossoms, which appear about the first of July. *C. elongatus biflorus* has round heads of flowers during the early summer. Of *amorpha* we have *frutescens* and its many varieties, all of which are coarse flowering shrubs with bluish purple flowers.

A. canescens, the lead plant, seldom exceeds two feet in height; it has spikes of very blue flowers and pretty foliage. The *wistarias* are all fine climbing plants, well adapted to all purposes that climbers are used for. Of these we have *Chinensis* and the variety *alba* and *flore pleno*, *brachybotrys* and *mulijuga*. In *robinias* we have *R. viscosa*, the clammy locust, with pinkish white flowers in June, and *R. hispida*, the rose acacia, with long clusters of pink blossoms, which flower at intervals all summer. There are several varieties of this old-fashioned shrub, the difference being chiefly in the size of the flowers.

The *colutea* or bladder senna, is very ornamental, and if well pruned will continue in bloom most of the season; the seed pods are also very interesting. *C. arborescens* has dark brown and yellow flowers, and there are several varieties whose flowers vary from orange to pale lemon color. *Halimodendron argentea* is a neat shrub from Asiatic Russia, with clusters of purple flowers in June; it forms a handsome plant when grafted on *Caragana arborescens*. The *caraganas* are a very ornamental class of shrubs from China, Siberia and Dalmatia—all perfectly hardy and free flowering. The species are *arborescens* and its variety *pendula* and *arenaria*; all the varieties of *arborescens* attain a good size. *C. frutescens* and its variety *grandiflora* are medium sized shrubs, with bright yellow flowers. The low species are *C. Altagana*, *Chamlagu*, *pygmaea* and *spinosa*. The last is well adapted for small hedges on account of its long, thorny branches. The dwarf and trailing species make nice heads when grafted high on *C. arborescens*.

In the plum family we have a large variety to choose from, all more or less beautiful, and many exceedingly handsome. The Kansas sand plum, said to be a variety of *Prunus angustifolia*, is a neat low shrub from two to four feet high, and is densely covered with white flowers in early spring, which are followed by yellow, red and nearly purple fruit in abundance. This species should attract the attention of our fruit growers, as it begins to bear when less than eighteen inches high. *P. emarginata* from California, is

very similar to our wild red cherry, *P. Pennsylvanica*, *P. Virginiana* and a variety with semi-double flowers are worth a place in the garden.

[CONTINUED IN NEXT ISSUE.]

Catalogues Received.

F. J. Fachman, Kansas City, Mo., florists' wire work; R. W. Hargadine, Felton, Del., plants; W. & J. Birkenhead, Sale, Manchester, England, ferns and selaginellas; A. M. C. Jongkindt Coninck, Dedemsvaart, Netherlands, plants and nursery stock; Henry A. Dreer, Philadelphia, quarterly wholesale list for florists and market gardeners; G. V. Van Zanten & Co., Hillegom, Holland, Dutch bulbs; V. Fournier, Mexico City, Mexican plants, bulbs and seeds; Henry Bennett, Shepperton, England, new roses.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED.—By a florist who has had 10 years' experience. Age 27. References exchanged. J. E. K., care American Florist, Chicago.

SITUATION WANTED.—Gentleman competent in floral seed and nursery business (theoretically as well as practically), desires to enter an active engagement. He speaks several languages. Address GAETNER-ZEITUNG, Lemont, Cook Co., Ill.

WANTED.—600 or 700 feet of 4-inch cast iron pipe at once. Address H. W. BRIDE, 160 Kent St., St. Paul, Minn.

WANTED.—A gardener to take care of a private place. Apply for particulars to C. B. WELPDALE & CO., Milwaukee, Wis.

WANTED.—Good, active foreman for lively wholesale and retail place in Chicago; must understand business thoroughly. A. F., care Am. Florist.

FOR SALE.—A small good established greenhouse business in Nebraska; three houses and cottage all in good condition. This is a good chance for a young man with small capital. Address H. & T., care American Florist.

WANTED.—At once an experienced florist of good habits, who thoroughly understands propagating and all the details of a large commercial business. Give experience, references, wages expected etc. GEO. HANCOCK, Grand Haven, Mich.

FOR SALE.—An established florist business in a good location, convenient to railroad depots and street cars; greenhouse stock, etc.; 10 years' lease; cheap for cash, \$1,800; sale open for 30 days. JOHN MAGEE, 223 N. 16th St., Philadelphia, Pa.

FOR SALE or to LEASE.—Ten greenhouses containing 10,000 sq. ft. of glass, in the town of Gravesend, L. I., 30 minutes to Brooklyn via B. & B. R. Ry. Good summer trade at Coney Island, in 10 minutes from place. Everything convenient and in good order. Heated by hot water. 3 acres of valuable land, ½ acre fruit, large barn, stables and 12 ft. Corcoran wind mill; plenty of good water—storage capacity 8,000 gallons. First class mercantile place; convenient to dealers and New York market. Place ready for purchaser July 1st. Good reason for selling. For full particulars address C. R. STILLWELL, Kings Highway, Gravesend, L. I., N. Y.

Greenhouses for Sale.

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Eleven Greenhouses, with windmill, tank, etc., unending supply of water, well stocked and doing a thriving business. Nine acres of land with a neat comfortable cottage. The whole forming a most eligible plant for a florist.

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JOHN CURWEN, Jr.,

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GLOIRE DE MARGOTTIN. The last seedling of the celebrated French grower. All the foreign journals speak highly of this rose. In color it is a brilliant crimson, and it is thought to be one that will excel as a pot rose for market purposes.

Price, 50 cents each; \$5.00 per dozen.

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METEOR. 4-in. pots, \$3 per doz. **LA FRANCE.** 2½-in. \$5; 3-in. \$7; 4-in. \$15 per 100

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ROSE.

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All the best NEW and Standard Varieties of *Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,*

From two inch, three inch and four inch pots—Standard sizes.

By the Dozen, Hundred or Thousand.

Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding. At prices as low as strictly first-class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

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I would like to give my prices for the following varieties in 2½, 3, or 4-inch pots to any parties desiring the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI
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AMERICAN BEAUTY, PAPA GONTIER.

STANDARD ROSES,
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The largest collection in the United States.
All first class pot grown plants.

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A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

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— FROM —

DUNDEE LAKE ROSERIES.

Having finally decided not to build any new rose houses this year, I am now able to offer the 10,000 very choice young plants I had prepared for the contemplated new houses. Every cutting for this stock was made under the conviction that the resulting plant would be flowered on my own benches. Only carefully selected wood from healthy, vigorous plants has been used for cuttings.

To parties wanting any of the following kinds, I shall be pleased to quote prices, on either large or small orders:

<i>American Beauty,</i>	<i>La France,</i>	<i>Madame de Watteville,</i>
<i>Catherine Mermet,</i>	<i>Bon Silene,</i>	<i>Souvenir d'un Ami,</i>
<i>The Bride,</i>	<i>Perle des Jardins,</i>	<i>Papa Gontier.</i>

My place is near stations on THREE Railroads, viz: New York, Lake Erie & Western; Delaware, Lackawanna & Western, and New York, Susquehanna & Western, to either of which stock will be delivered, free on board cars. I shall be glad to have intending purchasers inspect my stock before placing orders. My nearest station is Clifton, on N. Y., L. E. & W. R. R.

S. C. NASH,

Clifton, Passaic Co., N. J.

NEW PEDIGREE ROSES FOR 1889.

CLEOPATRA, Tea; first class certificate Royal Horticultural Society.

DULCE BELLA, Tea. MAID OF THE MIST, Hybrid Tea; a white sport from Lady Mary Fitzwilliam.

MINUTIFOLIA ALBA, Polyantha; first class certificate Royal Horticultural Society; first class certificate Royal Botanic Society.

Grafted plants ready in May. Descriptive Price List will be mailed to all correspondents free on application.

H. BENNETT, Pedigree Rose Nursery,
SHEPPERTON, MIDDLESEX, ENGLAND.

ROSES. ROSES.

We have a very fine stock of Roses in four and five inch pots suitable for forcing, consisting of BON SILENE, BRIDE, LA FRANCE, MALMAISON, MERMET, NIPHETOS, PAPA GONTIER, PERLES, SAFRANO, SUNSET, and many other choice varieties. PRICE, \$10.00 to \$12.00 per hundred.

ELLWANGER & BARRY,
MOUNT HOPE NURSERIES. ROCHESTER, N. Y.

News Notes.

DENVER, COL.—Edward Coldrick has built three houses 6,4x12, heated by steam.

POTTSVILLE, PA.—Mr. Alexander Madison, of the firm of J. M. Madison & Co., florists here, was married April 20 to Miss Phoebe Stinton.

NEW YORK—Never was there more favorable weather nor a better display of first class stock than this Easter. Business was simply immense and the florists are all happy.

BURLINGTON, N. J.—Lewis R. Hancock has recently put in a 50 horse-power boiler for steam heating, throwing out several hot water boilers and several thousand feet of pipe.

SPRINGFIELD, O.—Mr. E. G. Gillett, secretary of the Springfield Seed Co., was recently married to Miss Ohmer, daughter of Mr. N. Ohmer, the well known nurseryman of Dayton, O.

SADDLE RIVER, N. J.—John G. Esler, secretary of the "Florists' Hail Association," has been elected president of the "Orvil Building and Loan Association" by his friends and neighbors.

BRISTOL, PA.—DeWitt Bros. forced a 20x100 foot house of Jacqs for Easter with very gratifying success. Harry Chambers is erecting a rose house 70x50, using the clear cypress stock now so popular.

WORCESTER, MASS.—A leading dry goods store on April 9 presented each lady customer with a rose as an Easter offering. Over 7,000 roses were given away. It was probably a very effective manner of advertising.

GERMANTOWN, PA.—At the last meeting of the Germantown Hort. Society it was announced that premiums aggregating \$300 will be offered at the chrysanthemum show to be held next November in St. Vincent's Hall.

MINNEAPOLIS—The Minneapolis Florist Club held its regular monthly meeting April 8. It was a well attended and interesting meeting. The membership is increasing and a very friendly feeling exists amongst the craft here.

WASHINGTON, D. C.—The congregation of one of the churches recently presented to their pastor on the twenty-fifth anniversary of his pastorate a bouquet of twenty-five lilies, each of which contained a five dollar gold piece.

DETROIT.—The total attendance at the recent flower show during the five days was about 34,500 and the total receipts at the door amounted to \$7,478.21. Mr. W. H. Brearley who so successfully managed the affair has in contemplation a combined flower show and musical festival for next year.

MILWAUKEE.—Clark Bros., florists, at corner of 15th avenue and Pierce street, suffered a loss of \$758 by fire and smoke the morning of April 3. The loss—which was almost entirely in injury to plants from smoke—was fully covered by insurance. The fire started in the furnace pit—presumably starting in some way from the fire under the boiler.

TRENTON, N. J.—C. Ribam & Sons will this season add four large houses to their already extensive plant. George Wainright, the originator of the Dinsmore rose, has several fine specimen plants of *Cornelia Cook* and *M. Niel*

roses. A *Cornelia Cook* "tree" about 8 years old has this season borne some of the finest specimen blooms ever seen here.

PITTSBURG.—Theodore Beckert, the florist, was married last week. L. Neff has opened a florist store on Butler street. Easter trade was immense. The stores and market stands could hardly handle the trade. Flowers were plentiful, especially *Lily Harrisii* and valley, and brought fair prices. The sales were principally of loose flowers for church decorations. Plants also sold well.

PORTLAND, OREGON.—A bill was passed at the last session of the legislature creating a state board of horticulture. It divided the state into five horticultural districts, and provided that the governor should appoint one suitable person from each district and one from the state at large. The governor made the appointments and April 9 the members met and effected an organization. The office and headquarters of the board were established at 171 Second street, this city.

READING, PA.—Hoskins & Giles have built a novel hot water heater. It is in the shape of a coil of 2-inch pipe surrounding the fire box. It is giving entire satisfaction. D. H. Strickler is constructing two rose houses 23x60, two carnation houses 18x60, and an office 12x15 with cellar for cut flowers. J. B. Moore has built two rose houses 106x20, three carnation houses 56x18, three general plant houses 56x11, and an office 44x18. The place is heated by two 20-horse power steam boilers.

KANSAS CITY.—Florist C. E. Hampton had a peculiar experience recently. His gardens at Heathwood were visited in his absence by a number of women who carried off some \$300 worth of plants and shrubs. It was given out by one of the women in the neighborhood, so the story goes, that the gardens were to be destroyed and the land graded down for buildings, and that every woman should help herself. Mr. Hampton went out to his gardens afterward accompanied by a policeman, and within an hour he had visited a number of houses and taken an inventory of the flowers and shrubbery that had been taken. In almost every case the women offered to pay their portion of the damage.

Notes From Mr. John Thorpe's Place, Pearl River, N. Y.

ALTHOUGH so busily occupied growing cut flowers for the New York market he can not let hybridizing alone, and I am glad of it. A lot of tiny pedigree roses in little pots are plunged in ashes in shallow boxes and held up to the light; carnations have got strings and labels tied around their stems, showing that they have been operated on; and the marks on a lot of *Primula obconica* in a corner indicate that they have been hybridized with pollen of *P. sineensis*.

CYCLAMENS receive marked attention. He grows a very select strain of the plain persicum and not the giganteum section. Plants raised from seed sown last February have realized him \$4 a dozen this winter, but of course they had to be good plants and with lots of blossoms.

GLADIOLUSES occupy every available nook and corner, and border the peach tree bed, also are interplanted among the carnations. Shakespeare, Eugene, Scribe and *Brenchleyensis* comprise the bulk of them.

A ROW OF lilacs out of doors has been very badly infested with scale insects. Last year he syringed some of them with crude oil with the result that the shrubs are yet alive and clean and the scales dead. I should have thought crude oil unadulterated would as soon kill the lilacs as the scale, but Mr. T. says no.

THE SNOWBALL shrub has been used in large quantity in 7-inch pots as a pot plant. The variety is the sterile form of *Viburnum opulus*, and with very little forcing came into capital bloom in February.

FOR propagating purposes Mr. Thorpe believes in bottom heat, and so do I, no matter be it for cuttings or seedlings.

IN THE case of cinerarias and in fact we might say of most plants Mr. T. thinks we hardly give weight enough to selection; if we were very painstaking in our selection, choosing the fine bright flower and the broad full head and compact leafy habit, we would not year after year be growing so many inferior varieties.

TOMATOES RUN up on strings occupy the dark corners in which sun-loving plants feel so uneasy, also the warm places near the boilers.

ALTHOUGH NOT attacked by the orchid fever, a good many orchids appear in some of the houses and several oncidiums are in bloom.

DOUBLE HARDY PRIMROSES—He has a fine set of these and is carrying them on as pot plants. They are exquisite little gems, somewhat hard to manage, but of tractable cultivation in a cold frame. Of course for his purpose—selling the plants in pots and in bloom—he has got to grow them in pots.

ONE LARGE house is devoted to peach trees. The varieties include Amsden, Hale's, Alexander, Rivers' and Crawford's Early. The trees are on peach roots and grown in 5 feet long boxes, which are about 9x10 inches, four trees in a row in each box. The fruit is now swelling and near the stoning period. "There is no trouble at all in setting the fruit," Mr. Thorpe says, "indeed so freely did they set that we have had to thin them out a good deal." W. F.

OBITUARY.

ROBERT HALLIDAY—father of R. J. Halliday—died at his home in Baltimore on Monday last, in the seventy-seventh year of his age. Mr. Halliday came to this country from Scotland when quite a young man. In 1837 he commenced business for himself as a florist, and continued to the last actively engaged in it. Thoroughly in love with his calling, his indomitable energy and perseverance enabled him to overcome every obstacle and to build up one of the most solid business concerns in the country, winning for himself at the same time a national reputation as an authority on horticultural matters. He was a man of splendid physique and possessing remarkable personal magnetism; those acquainted with him found him a pleasant companion, honest, straightforward and true as steel to the right. His friends were legion. The funeral took place to-day, April 17, and was largely attended by friends from near and far, who came to pay their last tribute of respect to one of Nature's noblemen. A. W. M.

MADAME SISLEY, wife of our friend and correspondent M. Jean Sisley, died at her home in Lyon, France, April 3, in the 79th year of her age. The many friends of M. Sisley in America will hear with sorrow of his affliction.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements 10 Cts a Line, Agate Inch, \$1.00 Column \$1.00. Cash with order.

No special Position Guaranteed.

Discounts 3 months 5 per cent, 6 months 10 per cent, 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for May 15 issue must REACH US by noon, May 9. Address

THE AMERICAN FLORIST CO., Chicago.

IF YOU WANT CHOICE, FRESH
CUT FLOWERS,
WELL PACKED AND SHIPPED
PROMPTLY, YOU SHOULD ORDER OF
CHAS. H. FISK,
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116 & 118 DEARBORN STREET,
CHICAGO.

AND RELY ON GETTING THE BEST
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Store Open Day and Night.

I keep a full stock of
WIRE DESIGNS

of superior workmanship and at lowest prices. Extra pieces of any description made to order on shortest notice. Send for Catalogue.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety.

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address

GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.

A. S. KIMBALL,
WHOLESALE CUT FLOWERS,
SHIPPING TRADE ESPECIALLY SOLICITED.
170 LAKE STREET, CHICAGO.

WELCH BROS.,
WHOLESALE FLORISTS.

165 Tremont Street BOSTON MASS. We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choice Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address

J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

BOSTON, April 25.

Roses, Tens	2.00
" Niphetos	1.00
" Gontiers	1.00
" Perles, Sunsets	6.00
" Brides, Mermets	3.00
Carnations, long	50 cts
Carnations, short	1.00
Violets	.50
Tulips	1.00
Daffodils	3.00
Valley	1.00
Stocks	2.00
Mag. onette	2.00
Pansies	.50
Callias	8.00
Harrisii	15.50
Smilax	20.00
Adiantums	1.50

NEW YORK, April 25.

Roses, Bon Silene	\$2.00	\$3.00
" Gontier	1.00	3.00
" Perles, Niphetos, Souys	3.00	4.00
" Mermets, Brides	4.00	6.00
" Champs	4.00	6.00
" La France	6.00	8.00
" Bennets	1.00	2.00
" An. Beauty, hybrds.	25.00	35.00
" Puritan	2.00	3.00
" Jaques	10.00	15.00
Carnations, fancy, long	1.00	2.00
Carnations, short	1.00	2.00
Tulips, narcissus	3.00	4.00
Lily of the valley	4.00	5.00
Violets	.50	1.00
Mignonette, small	2.00	3.00
Mignonette, extra large	8.00	12.00
Smilax	25.00	30.00
Adiantums	1.50	2.00

PHILADELPHIA, April 25.

Roses, Perles, Niphetos, Souys	8.00
" Bon Silene	4.00
" Bennets, Gontier	6.00
" Mermets, La France	8.00
" Puritan, Jaq.	10.00
" An. Beauties	25.00
" Brides, Cooks	10.00
Carnations, bonvardia	1.00
Valley	4.00
Dutch hyacinths	8.00
Harrisii lilies	10.00
Callias	8.00
Smilax	20.00
Double Violets	.50
Single Violets	.25

CHICAGO, April 27.

Roses, Bon Silene	\$2.00	\$3.00
" Perles, Niphetos	4.00	5.00
" La France, Mermets	5.00	6.00
" Brides	6.00	8.00
" Champs	10.00	12.50
" Jaques	5.00	6.00
" An. Beauties	12.00	15.00
Carnations, short	1.00	1.25
Carnations, long	1.25	3.00
Smilax	15.00	20.00
Dutch hyacinths	5.00	6.00
Callias	10.00	15.00
Violets	.50	.75
Candidums, short	5.00	4.00
Candidums, long	6.00	8.00
Valley Romans, narcissus	3.00	4.00
Tulips, daffodils	3.00	4.00
Glabolus	12.50	15.00
Adiantums	1.00	1.25
Pansies	.50	.75
Harrisii lilies	15.00	20.00
Lilac	2.00	5.00

WM. J. STEWART,
Cut Flowers & Florists' Supplies
WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS
and Jobbers in Florists' Supplies,
1 MUSIC HALL PLACE, BOSTON, MASS
Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.
Auction Sales of Plants Spring and Fall.

Attention American Florist.

W. F. SHERIDAX,
Wholesale and Commission Dealer in
CUT FLOWERS,
NO. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.

THOS. YOUNG, JR.,
WHOLESALE FLORIST
20 West 24th Street.
NEW YORK.

CUT FLOWERS.
We are on deck DAY and NIGHT to give your orders
CAREFUL ATTENTION,
PROMPT SERVICE,
GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEPT.,
Telegrams, 88 State, CHICAGO,
Letters, box 688.

W. S. ALLEN,
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36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

LaRoche & Stahl,
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CUT FLOWERS.
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Consignments Solicited. Special attention paid to shipping.
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C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,
Telephone 977. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermet,
And other Standard sorts.

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SPECIALTIES.
VIOLETS, ROSES IN VARIETY, SMILAX, FANCY
CARNATIONS, LILY OF THE VALLEY, TULIPS,
HYACINTHS, NARCISSUS, ETC.

CHAS. E. PENNOCK,
WHOLESALE FLORIST,
38 So. 16th Street, Phila'delphia, Pa

THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.
Beauty, Bride, La France, Perle,
Bennett, Niphetos, Mermet, Papa Gontier
CHAS. L. MITCHELL, MGR.,
P. O. Box 188, CINCINNATI, OHIO.
Also plants of above by doz., 100 or 1000. 2, 3 & 4-in.
Select Stock. Plants of quantity at discount.
27 W. 10th St. PHILA.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

EASTERN REPORTS on the seed trade say fair trade for March and April thus far, though not equal in all to last season to even date. A surplus on hand of some sorts of onions, peas and late sweet corn.

NEW YORK.—The Seedsman's League have commenced suit against the A. B. Cleveland Co. for \$14,000. James Howard, book-keeper for the A. B. Cleveland Co., has also brought suit against the same company for breach of contract—and against J. M. Hard, one of the largest stockholders, for libel and slander. Mr. Staples, of Merchants Hotel, Washington, D. C., is reported to have withdrawn from his directorship in the A. B. Cleveland Co. It is also reported that H. K. Thurber has withdrawn.

INDIANAPOLIS.—In the case of J. A. Everitt, April 1st, charged before U. S. Commissioner Van Buren with having violated the postal laws, the court found that the only cause of complaint that might arise against the defendant (and the law covering which is not clear) is in the use of federal mail sacks for transporting his mail to and from Brightwood. The charge that he used cancelled stamps was found to be without foundation. It would thus seem that the arrest of Mr. Everitt by the postal authorities might have been caused as he complains, by spite work on the part of the postoffice officials there who were given too much work by Mr. Everitt.

WASHINGTON.—By decision of the Supreme Court April 15, "The Court held that although beans are often planted as seeds, yet as a commodity in the market they are no more to be denominated as garden seeds than potatoes, which are also sometimes planted. The Court says the Circuit Court erred in not allowing the defendant to prove the common designation of beans as an article of food, and in charging the jury that the commercial designation of the article had nothing to do with the question. The commercial designation of the article it holds is the first and most important thing to be ascertained in settling the meaning of the tariff laws. The decision of the Circuit Court that beans should be admitted free of duty as seeds, is therefore reversed." It would thus seem that beans imported for that purpose should be assessed a duty of 10 per cent.

Failure of George S. Haskell & Co.

The associated press dispatches of April 16 contained the surprising and important news to the seed trade that George S. Haskell & Co., of Rockford, Ill., had failed for about \$100,000. Later particulars would indicate that the immediate cause was the A. B. Cleveland Co. trouble, but there was a second and greater reason in unsatisfactory investments by Mr. Haskell in the Hudson Mining and Milling Co., of Silver Cliff, Colorado.

The total assets are estimated at about \$50,000, being the business block in Rockford valued at \$20,000, stock of seeds on hand, \$22,000, and a large amount of stock in the mining company. The liabilities are estimated at about \$75,000 to \$80,000, consisting in part of \$6,600 due banks in Chicago and New York, \$7,000 due the North Western Insurance Co.,

Milwaukee, \$17,000 due local banks and friends at Rockford. This in addition to paper on which Mr. Haskell is liable as endorser held by the A. B. Cleveland Co. for unknown amounts. It seems the A. B. Cleveland Co. promised to take care of all paper endorsed by Mr. Haskell at New York, but failed to do so. This was the direct cause of closing his doors. Mr. Haskell's residence (a valuable one) was owned by money belonging to his wife and is not included in the business failure.

Mr. Haskell was deeply affected by his misfortunes and has much sympathy from all his friends at Rockford, as well as among the trade. The *Star* says:

"A man of scrupulous honesty, enterprising, generous to a fault, a good citizen and true friend, no man in Rockford will receive greater sympathy in his hard luck than Geo. S. Haskell. He is widely known throughout the state and land. For years associated with the state board of agriculture, he was recently elected president of the board. Prominent in Masonic and Elk circles, popular in politics and society, his financial difficulties will be widely regretted and some sort of compromise earnestly hoped for."

ROSES.

A splendid collection of imported Hybrids, worked low on Manetti Stock, well established in pots.

- Price, \$5.00 per dozen; \$20.00 per 100.
- A large stock of Beas, Hybrid Teas, and Polyanthus, prices sent on application.
- Good stock of Gen'l Jacqueminots in 2-inch, at \$6.00 per 100; 3-inch, \$10.00 per 100; 4 inch, \$15.00 per 100.
- Novelties in Geraniums, at \$10.00 per 100.
- General collection of Double and Single, at \$4.00 per 100; \$30.00 per 1000.
- Geranium Mme. Sullerot..... \$4.00
- Alf of Snow..... 4.00
- Coleus, good assortment..... 3.00
- Achyranthes, in six varieties..... 3.00
- Carnations, in variety..... 3.00
- Peperius Little Gem..... 4.00
- Fuchsias, assorted..... 4.00
- Heliotropes, six varieties..... 3.00
- Ipomoea Noctiflora, White..... 4.00
- Lantanas, in 12 varieties..... 4.00
- Pansies, good assortment..... 2.50
- Phlox, in variety..... 4.00
- Pilea, Arborea and Repens..... 4.00
- Vines, Major Var. and Harrisonii..... 4.00
- Violets, Marie Louise..... 4.00
- Eucharis Amazonica, 4-inch..... \$1.50 per dozen

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GEO. W. MILLER,
1748 N. Halsted St., Lake View, CHICAGO.
Mention American Florist.

WANTED, AT ONCE!
100,000 FAIRY FLOWERS, and 50,000 PAMPAS PLUMES. Address

ERNST KAUFMANN, Florist's Supplies,
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CATALOGUE FREE
DANVERS' OWN
SOLUBLE
FAXON'S SEED SPECIALTIES
Asters, Pansies, Sweet Peas, Nasturtiums, and Danvers Onion. ESSAYS:—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both, and Catalogue, 10 cents, if you mention this paper.
M. B. FAXON, 21 SOUTH MARKET ST. BOSTON, MASS.

PLANTS AND ROSES TO THE TRADE.

- ROSES—Marechal Niel, from 2 1/2-in. pots. . . . \$ 4.00
- Perle des Jardins, from 2 1/2-in. pots. . . . 5.00
- Bon Silene, from 2 1/2-in. pots. . . . 4.00
- Safrano, from 2 1/2-in. pots. . . . 4.00
- Niphotos, from 2-in. pots. . . . 5.00
- La France, from 2 1/2-in. pots. . . . 4.00
- Mme. Chas. Wood, from 2 1/2-in. pots. . . . 5.00
- Gen'l Jacqueminot, from 2 1/2-in. pots. . . . 5.00
- Mme. Masson, from 2 1/2-in. pots. . . . 5.00
- Solfaterre, from 2-in. pots. . . . 4.00
- Eva Corrine, white Climbing, 2 1/2-in. . . . 3.50
- Ampelopsis Veitchii, from 2-in. pots. . . . 3.00
- 15 x 24 inches " strong 2 yr. dormant, . . . 10.00
- Akebia Quinata, 2 yr. dormant. . . . 10.00
- ucuba Japonica Variegata, from 4-in. pots 15.00
- Paeonies, assorted. . . . 10.00
- Passiflora Constance Elliott, 2-in. pots. . . . 3.00
- Begonia Semp. Gigantea Rosea. . . . 6.00
- Rhododendrons, assorted. . . . \$1.00 each

SIDNEY TUTTLE & CO.,
Bloomington Nursery, BLOOMINGTON, ILL.

MAY OFFER.

- Per doz.
- Hydrangeas, new fringed white (S. fimbriata). \$1.25
- Geranium, Sir Robert Napier, the best Golden tricolor. . . . 1.50
- Geranium Blunch Perfecta. This variety received a certificate from the Royal Horticultural Society, London, as the best double white in commerce. . . . 1.25
- Geranium Evening Star (true), single white with pink eye. The model geranium.75
- Geraniums Longfellow and Sam Sloan, two best single scarlets.50
- Begonia Metallica.50
- " Sutton's White Perfection.50
- " " Pink Perfection.50
- " Gilsoni, double flowering.50
- Fuchsia Phenominal. . . . \$3.00 per 100 .50
- " Storm King. \$2.00 per 100 .50
- " Improved Venus Victrix. Very oddly colored.75
- " Ass't. good varieties. . . . \$3.00 per 100 .50
- Carnation Daisy, fine white. . . . \$3.00 per 100 .50
- " Century, dark pink. . . . \$3.00 per 100 .50
- Abutilon Golden Fleece.75
- Eucharis Amazonica, good medium bulbs. . . . 1.00
- smaller.60
- Verbenas, finest named sorts, thumb pots. price May only. . . . \$2.50 per 100
- Verbenas, 3 and 3 1/2-inch pots. . . . \$4.00 per 100 .50
- Holt's Mammoth Sage. We are headquarters for this fine Sage, being the original introducers. . . . \$3.50 per 100 .50
- Bouvardia President Cleveland. The finest variety in Commerce; immense trusses, large flowers; color crimson shaded scarlet. Fine young plants. . . . \$4.00 per 100 .60
- Bouvardia A. Neuner. . . . \$4.00 per 100 .60
- Violet Swanley White, pot plants. . . . \$2.50 per 100 .40
- " Marie Louise. . . . \$3.00 per 100 .50
- Pansy, Bugnot's Superb, one of the finest strains known. . . . \$4.00 per 100 .60
- Pansy, new Yellow Giant. . . . \$2.50 per 100
- Pansy Seed of above (Yellow Giant), which is the best yellow variety known. Price, trade packet of about 1000 seeds, \$1.00.

No order filled from above list (seeds excepted) for less than \$2.00. Add postage if ordered sent by mail. No trade list. Retail Catalogue with Trade Discount mailed upon application.

ELLIS BROS., Keene, N. H.

PLANTS AND ROSES.

- H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
- Moss Roses, 1 year, open ground, \$12.00 per 100.
- Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
- Hydrangeas Hortensis, Otaksa, T. Hogg, 4-in., 5-in., 6-in., \$10.00, \$12.00 and \$15.00.
- Carnations, newest and best varieties, from 5c. to 6c.
- Ivy, English, 20 inches long, \$3.00 per 100.
- Amaryllis Formosissima \$8.00 per 100.
- Cannas, \$2.50 per 100.
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- Crape Myrtle, \$3.00 per 100.
- Palms, 18 var., Dracenas, Pandanus, 4 varieties.

A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

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BOUVDARIAS.

Double White and Double Pink, mixed. Rooted Root Cuttings, nice clean stock, at \$1.50 per hundred; \$12.00 per thousand. Or will exchange some for other stock I want.

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For Spring setting. Davisoni, white; Elegans, salmon pink; Pres. Garfield, double pink; Alfred Neuner, double white; strong, healthy plants from 2-in. pots, ready May 1st, at \$4 per 100. Cash with order.

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Outdoor grown plants from best imported German Imperial Prize seed, \$1.25 per 100; \$10.00 per 1000, delivered at express office on receipt of price. Also home-grown seed first year from above stock, by mail, 25c for 25c. Please write address very plainly.

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SURPLUS STOCK to the TRADE
For May 1889.

	Per doz	Per 100
Ageratum Cope's Pet., strong	50	\$ 3.00
Achyranthes, 4 best sorts	50	3.00
Asparagus tenuissimus	60	4.00
Alchemilla, 3 best sorts	50	3.00
Caleas, 20 best bedding sorts	51	3.00
Chenatis, strong, 2 year old	2.50	20.00
Callus strong, 4 inch pots	1.25	8.00
Centaurium Gymnocarpum, 3 inch pots	70	3.00
Chrysanthemums, 20 sorts	50	3.00
Durantes, White, Red and Pink	10	2.50
Fuchsias, best double and single	50	3.00
" best dbl & sgle strong 4 in. pots	90	6.00
Feverfew, little Gem	60	4.00
Geranium, 12 best new sorts	60	4.00
" General collection	50	3.50
" Gent. col., strong, 4 inch pots	90	6.00
" Ivy Scented and Variegated	60	4.00
Gladolus best mixed	35	2.00
Heliotrope, 3 best sorts	70	4.00
Hibiscus, dbl. and sgle strong 4 inch	75	5.00
Hydrangeas, Otaksa etc	60	4.00
" ex strong, 4 in. pots	1.50	10.00
Iris, English, 2 to 3 feet long	75	5.00
Musk plants, strong, 3 inch	75	5.00
Nirenbergia Graulis	50	3.50
Pansies, best German strains	40	2.50
Passiflora, C. Elliott etc	61	4.00
Pelargoniums, 10 best sorts, 3 inch	1.00	8.00
Poinsettia, strong, 4 and 5 years old	4.00	
Roses, Mermet, Perle, Bride, etc strong	75	5.00
" extra strong, 4 inch pots	1.50	10.00
Saxifras, 3 best sorts, 3 inch	75	5.00
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Tuberose Pearl, extra strong	50	3.00
Verbenas, Mammoth strain, \$22 per 1000		2.50

Not less than 25 sold at 100 rates, or 6 at dozen rates.
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SOLUBLE FIR TREE OIL.
 FLORISTS AND NURSEYMEN SHOULD
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Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants—such as ferns, etc.—if used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

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Operative Chemist,

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NARCISSUS

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Special Prices upon Application.

- Narcissus Albicans**, large creamy white trumpets, one of the best.
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- Narcissus Bicolor Horsfieldi**, a great beauty and fine for cutting.
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- Narcissus Golden Spur**, immense deep golden yellow flowers, and wonderfully early
- Narcissus Henry Irving**, rich yellow, large bold trumpets.
- Narcissus Incomparabilis Cynosure**, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white
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- Narcissus Obvallaris**, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.
- Narcissus Odonor Campanelle**, the well known Campanelle Jonquil, very strong bulbs.
- Narcissus Orange Phoenix**, large double white flowers with orange center, good for cutting.
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- Narcissus Scoticus**, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.
- Narcissus Von Sion**, true, the double deep yellow daffodil.
- Freesia Refracta Alba**, large bulbs for forcing
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- Gladolus The Bride**, flower pure white, fine for forcing.
- Helleborus** or Xmas Roses in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

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 Tottenham, London, England.

R. S. BROWN & SON

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We have many varieties of plants not named here. Plants quoted at 6c. and upward are nice plants ready for immediate sales. If you want Bedding Plants by the 1000 write for prices. Not less than \$3.00 sold from this list, or in less amounts than five plants of a kind.

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|--|---------------------|
| Abutilons of sorts | \$4, \$6 and \$8.00 |
| " Ellipse, new, var. foliage | 8.00 |
| Ageratum, W. Cap, Cope's Gem, \$3 | 1.00 |
| Athericum Vittatum | 8.00 |
| " Picturatum | 12.00 |
| Achyranthes, 2 kinds | 3.00 |
| Alyssum of sorts | 1.00 |
| Asclepia, white flowers | 6.00 |
| Alternanthera Spectabilis, new var. | 6.00 |
| " Aurea Nana | 3.00 |
| " Paronychoides | 3.00 |
| " Versicolor & Tricolor | 3.00 |
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| Calla, Richarda Maculata | 6.00 |
| Cobaea Scandens | 8.00 |
| Chrysanthemums in variety | 3.00 |
| Coronilla Glauca Variegata | 8.00 |
| Caladiuus, fancy leaf of sorts | 16.00 |
| Coleus of sorts, best new and old | 3.00 |
| " Verschaffeltii, Golden Bedder | 3.00 |
| " Rag Carpet, Louise Beck and Mrs. Hunt | 4.00 |
| Cannas of sorts | 5.00 |
| Cnpeha (cigar plant) | 3.00 |
| Centaurea Gymnocarpa | \$4 and 6.00 |
| Cineraria Maritima | 4.00 |
| Cyperus Alternifolius | 8.00 |
| Pais es, white and pink | 4.00 |
| Dew Plant | 4.00 |
| " variegated foliage | 6.00 |
| Echeveria Glauca | 5.00 |
| Euphorbia Splendens | \$4, \$6 and 8.00 |
| Ferns of sorts named | \$8 and 12.00 |
| Fuchsias, best: dbl. & sgle \$3, \$4 and new of sorts | 6.00, 10.00 |
| Geraniums of sorts dbl & sgle \$3, \$4, of sorts scented | \$3, \$4, 6.00 |
| Heliotrope, \$3, 4, \$6 White | 6.00 |
| Holly hock double, nice plants | 8.00 |
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| " Palmata, Mexican | 12.00 |
| Impatiens Lucy and Sultana | 6.00 |
| Lycopodiums of sorts | 8.00 |
| Lantanas of sorts | \$6 and 8.00 |
| Lobelias for Baskets | \$3 and 4.00 |
| " Ribbon lines or Beds, \$3 and | 4.00 |
| Money Wort | 4.00 |
| Moon Flower, true | 5.00 |
| Oxalis double yellow | \$4, \$6 and 8.00 |
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| " pink and white | 4.00 |
| Passiflora Incarnata, hardy true | 4.00 |
| Petunias, best double of sorts, \$6 and | 8.00 |
| Pansies, large flowering | 3.00 |
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| Pothus Variegata, fine for vases | 8.00 |
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| Roses Everblooming of sorts | 4.00 |
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| Strawberry Geraniums | 5.00 |
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| Vincas, shrubby for bedding | 6.00 |
| " trailing for baskets, 2 kinds | 6.00 |
| Verbenas of sorts | 3.00 |

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 Box 99, KANSAS CITY, MO.

Marechal Niel Budded on Gen. Jacqueminot.

Several years ago I budded the Niel on a pot grown Jacq and so long as the plant was kept in a pot its progress was very slow, but when planted in a permanent bed in the greenhouse it soon began to grow and made a straight shoot of thirty feet inside of eight weeks. At that time it showed no signs of any laterals, but when cut back to about twenty feet it branched. It is in an azalea house and is consequently kept very cool during the winter months and would perhaps do better in a warmer situation. I have cut from this plant fifty-five flowers since Christmas and at the present time there are seventy-five buds and more coming.

Pittsburg.

GEO. DOERR

Forcing Bulbs for Fall Delivery

If you will make up a list of your wants and send us now, we will book same at importation rates. We are now making up our regular commissions to our growers in France, Germany and Holland, and will take your orders—large or small—at a slight percentage over cost if you will club with us to save freight, etc. **REMIEMBER**, we handle no second grade bulbs. Our experience of many years in importing bulbs, enabling us to procure the very best quality at the lowest prices. If you intend to avail yourself of this opportunity, write us at once, giving varieties and quantities and we will furnish an estimate by return mail. We handle the following varieties in quantity—all splendid forcers:

- Lilium Harrisii, first class 5 to 7-inch.
 - " " extra 7 to 9 inch
 - " " Candidum, best North of France grown
 - " " Longilobum, Bermuda grown, 5 to 7-in.
 - Roman Hyacinths, White, extra, 11 to 15 centimetres
 - Roman Hyacinths, Pink, extra, 11 to 15 cent.
 - Paper White Narcissus, extra
 - Double Yellow Narcissus, Von Zion.
 - Trumpet Major Narcissus, true.
 - Freesia Refracta Alba, first size.
 - " " extra large.
 - Tulips, La Reine, white.
 - " " Belle Alliance, scarlet.
 - " " Yellow Prince, yellow.
 - " " Kaiser Kroon, crimson, yellow edge.
 - " " Cottage Maid, pink and white
 - " " Van Thol, scarlet
 - " " Double Duke of York, rose and white
 - " " Princess Alexandra, red and yellow.
 - " " Emperor Rubrorum, scar.
- [The three last named are splendid forcing vars.]
Lily of the Valley, best Hamburg pips.
Spirea Japonica, fine clumps.

JOHN GARDINER & CO. Philadelphia

**"A GREAT HELP
IN CUT FLOWER WORK, AND
HAS BEEN GREATLY NEEDED"**

So say many of FLORAL DESIGNERS, concerning which more can be learned by addressing

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BASKETS AND FLORISTS' SUPPLIES.

FULL LINE OF METAL WREATHS.

**NEW C SWEET SCENTED
CHRYSANTHEMUM**
"Nymphaea." A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. A set of the cream to the cream of older varieties. Send stamp for plate of "Nymphaea" and Catalogue.
H. W. HALES, Ridgewood, N. J.

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F. A. RIECHERS & SOHNE, A. G.

HAMBURG, GERMANY.

Immense stock of Azalea Indica, Camellias, Lily of the Valley, Palms and Dwarf Roses.

PRICE LIST ON APPLICATION.

CHINESE PRIMROSE SEED.

of the finest Primroses grown. Plants vigorous; flowers large; all fringed, with yellow center; thrown well above the foliage. Packet containing 400 seeds OF 15 DISTINCT SORTS, specially put up for florists. Price, per packet, \$1.00. Address orders to

HENRY S. RUPP & SONS, Shiremanstown, Pa.

ASPARAGUS ROOTS

BY THE MILLION.

Good, 2 years old, \$1.00 per 100; \$3.00 per 500

" " 5.00 per 1000; 40.00 per 10,000

Package free. Cash with order.

A limited quantity of 1 year old roots at half above rates.

E. M. Mitchell,

PORT HOPE, ONTARIO, CANADA.

THE BEST ARE THE CHEAPEST IN THE END.

Dutch Bulbs.

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BULB GROWER,
HAARLEM, HOLLAND.

H. A. DAACKE,
AGENT FOR U.S. and CANADA,
22 DEY ST., NEW YORK.

Special Price List of Forcing Bulbs upon Application.

We offer 7000 Bulbs for \$200, all first quality as follows, f o. b. cars New York. One-third cash with order.

- 1000 Hyacinths named, in 30 single and 10 double sorts.
 - 1000 Hyacinths, early forcing, red, white and blue, colors separate, single or double.
 - 1000 Hyacinths, bedding, red white and blue, colors separate, single or double.
 - 1000 Tulips, in 30 single and 10 double sorts, with names and colors.
 - 1000 Tulips, mixed. 1000 Crocuses, in 10 sorts, with names and colors.
 - 1000 Crocuses, mixed, white, blue, striped and yellow, colors separate.
- Half the quantity, or 3,500 Bulbs for \$105.

R. VAN DER SCHOOT & SON,

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LARGEST GROWERS OF

**HYACINTHS, TULIPS, NAR-
CISSUS, SPIRÆA, LILIES
OF THE VALLEY, ETC.**

Headquarters for Forcing Bulbs, Wholesale Importers should write us for prices.

Mention American Florist

BULBS.

Per 100 Per 1000
TUBEROSE, large double 3 to 5-in. \$1.00 \$5.00
" " " 4 to 6-in. 1.50 10.00
(Special prices on large lots.)
" " Sets clean..... .50

Will exchange Tuberoze Sets for Roses
CANNAS AND GLADIOLI, mixed colors, \$2.00 per hundred.

H. M. HOFFMAN, Leavenworth, Kas.

NOTICE.

LAKE VIEW, CHICAGO, April 5, 1889.
Owing to a change in the Postoffice, our address is now

**1748 N. HALSTED ST., LAKE VIEW,
CHICAGO, ILLINOIS.**

Please remember to direct all communications to the above No., thus avoiding delays and mistakes. Yours truly,

GEO. W. MILLER, Wholesale Florist.

TUBEROSES.

Some well ripened Bulbs, first class, warranted true to name:

**DOUBLE ITALIAN, DWARF PEARL,
DIAMOND PEARL, AND EARLY
SINGLE FLOWERED.**

at \$2.00 per 100; \$10.00 per 1000. Special rates on lots of over 5000. Second size bulbs at half the above rates. Offsets of all the above suitable for growing large bulbs first season, at 50c per 100; \$2.00 per 1000. In lots of over 5000, at \$1.50 per 1000. Smaller sizes, 25c. per 100; \$1.00 per 1000.

Variiegated Foliage, beautifully striped green and white, single and early flowering, \$3.00 per 100; \$20.00 per 1000. Offsets \$1.00 per 100; \$5.00 per 1000.

JOSEPH W. VESTAL, Little Rock, Arkansas.

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HORTICULTEUR,

QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD, TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

PAPER WHITE NARCISSUS,

DOUBLE ROMAN NARCISSUS,

LILIUM CANDIDUM,

ALLIUM NEAPOLITANUM,

FREESIA REFRACTA ALBA
ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

Mention American Florist.

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Samples sent to Florists, Nurserymen and Seedsmen. ADDRESS
CLARK BROTHERS, Manufacturers. 61 Ann St., N. Y.

SPRING BULBS, Etc.

SPECIAL OFFERS.

Lilium Auratum, in fine condition, 7 to 9 in. circ. cases of 100 bulbs, \$7.00, per doz, \$1.00. Price on Lots on application.

Clematis (Native) **Coccinea**, scarlet, per 100, \$5.00; per doz., \$1.00.

Clematis (Native) **Crispa**, lilac, per 100, \$7.00; per doz., \$1.25.

Gladiolus, **Gandavensis** seedlings, large selected bulbs. Per 100, \$4.00.

Bronchayensis, dazzling scarlet, 8.00; \$1.00.

Various shades of scarlet and crimson, 9.00; 1.25.

" " pink and variegated, 15.00; 2.00.

" " white and light, 22.50; 2.50.

" " yellow and yel. grds., 22.50; 2.50.

Best mixed, all colors, 12.00; 1.50.

" " dark colors, 15.00; 2.00.

" " light colors, 17.50; 2.25.

Colvilli Alba, "The Bride," for forcing, 3.00.

Lemoine's seedlings, fine mixed, 4.00.

Hyacinthus Candicans, large bulbs, 30.00; 2.50.

Tuberose, Pearl, 1st size northern grown 3 to 4 inch, very fine, 12.00; 1.50.

" " Southern, 8.00; 1.00.

" " Tall Italian, extra size, 18.00; 2.00.

Cannas, in fine named sorts, my selec., 1.20; 7.00.

" " **Ehemanni** and **Noutomi**, 2.00; 15.00.

Caladium Esculentum, assorted sizes, 1.25; 8.00.

Nymphaea Odorata, 75; 5.00.

Paeonias Sinensis, in separate colors, 2.00; 15.00.

Caehl, for bedding, in 10 or more good sorts, my selection, 1.25; 9.00.

Latania Borbonica, fresh, per lb., 56; per 100 lbs., \$60.00.

Pandanus L tilis, fresh, per 100 seeds, \$1.00; per 1000, \$8.00.

Oreodoxa Regia (royal palm) per lb., \$2.00.

Cycas Revoluta, stamps from 2 to 12 inches at 30c, 50c, \$1.00, \$1.50, \$3.00 each, or about 25c per inch, in splendid condition.

Orders for **FALL BULBS** now booked. Catalogues free on application.

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Agent for FOREIGN BULB AND SEED GROWERS AND NURSERYMEN, ETC.

AUGUST RÖLKER & SONS,
44 Dey St., NEW YORK,
Supply the Trade with
SEEDS, BULBS,
And all kinds of
FLORISTS' SUPPLIES.
Price List Free on application with business card.

BERMUDA LILIES,
LILIUM HARRISII
(Warranted TRUE.)
Send for Trade Price List.
SIEBRECHT & WADLEY,
409 5th Ave., NEW YORK.

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Now out. If you do not receive one, send for it. Address
HENRY G. HIGLEY,
CEDAR RAPIDS, IA.

Delegates to the next convention will travel via the **Pullman Car Line** TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address
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"C. H. JOOSTEN is entitled to **FIRST PLACE** on First Quality Hyacinths and Tulips."

Signed: **WM. G. BERTERMANN,**
ERNST ASMUS,
ALEX. DALLAS, } Committee

Report of the Committee on Exhibits at the Exhibition of Bulbs and Plants at Nilson Hall, New York City, August 21-23, 1888, under the Auspices of Society of American Florists. See printed Report, page 164.

For Catalogues, address

C. H. JOOSTEN,
Importer of Bulbs and Plants,
3 COENTIES SLIP, NEW YORK.

G. V. VAN ZANTEN & CO.,
HILLEGOM, HAARLEM, HOLLAND.
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Wholesale Growers of Dutch Bulbs.
LARGE STOCKS. CHEAP PRICES.

Price list now published and may be had free upon application direct to us, or to S. ASCHER, 16 and 18 Exchange Place, NEW YORK.



A GOOD STOCK OF 1st QUALITY PEARL TUBEROSE BULBS, at \$16 per thousand.

Choice **LILIUM AURATUM** and **RUBRUM**, **GLADIOLUS**, **CANNAS**, **CALADIUMS**, Etc.
Special lists of **BULBS**, **BASKETS**, Etc., on application. **LYCOPODIUM**, \$5.00 per 100 pounds. **WREATHING**, \$5.00 per 100 yards.

JAMES KING, SEEDSMAN,
170 Lake St., CHICAGO, ILL.

HOLLAND FORCING BULBS

And Flower Roots of all kinds. **FIRST CLASS** Goods.

Great Reduction in Prices. Send for our Price List.

ORDER EARLY. **C. H. C. MACHEN & SONS,**
WHOLESALE BLUE GROWERS.
WHOLESALE ONLY. **WARMOND,** (NEAR HAARLEM), HOLLAND.

F. E. McALLISTER,

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Gardener and Farmer. **Requisites** Such as Baskets, Impatiens, Mosses, Bouquet Papers, Pampas, Plumes, etc. **Bulbs** For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

The Tulip Trade.

There has undoubtedly been a heavy falling off in the demand for cut tulips the past season. Last year, and more especially the year before last, this flower was extremely popular for dinner decorations, but this season that demand has been greatly reduced.

Reports from New York, Philadelphia and other large centers indicate a similar experience there, and it begins to look as if this useful flower was for some reason losing its popularity.

In view of this tendency it is rather interesting to notice that the price lists received from Holland indicate a considerable advance in quotations on this class of bulbs there. The cause of this advance I know not, but if, as is possible, the bulb growers are basing their calculations on the heretofore large consumption in this country, they may find themselves mistaken. An increased price on tulip bulbs will be apt to still further reduce their consumption as the margin of profit on them for the flower grower is even at the old prices infinitesimal.

I think it would be of interest to the trade in general to hear from other quarters on this subject.

Boston. WM. J. STEWART.

MAY PRICES TO THE TRADE.

	Per 100
Roses The Bride and C. Mermet, 1 1/2-in. pots.	3 00
Rose Geranium and Lemon Scented, 2-in.	3 00
Adonis and Lantana in variety, 2-in.	3 00
Hibiscus and Alternanthera in var., 2-in.	3 00
Bonvardia Bockii and Pres. Cleveland, 2-in.	5 00
" Leiantha, Vreelandii & Flavescens, 2-in. pots.	3 00
Jasminum Revolutum and Multiflorum, 2-in.	4 00
Albion and Hendersonii and Nertolli, 2-in.	7 00
Cissus Discolor and Ruscus, 2-in.	3 00
Erythrina Hendersonii, 2-in.	3 00
Rhynchospermum Jasminoides, 2-in.	3 00
Lobelia and Anthericum, 2-in.	3 00
Vineas, blooming varieties, 2-in.	3 00
Begonia Weltoniensis and Sandersonii, 2-in.	3 00
Passiflora Constance Elliott, 2-in.	3 00
Honey suckle in variety, 2-in.	3 00
Pansies and Golden Feverfew, 2-in.	2 50
Lemon Verbenas and Stevia, 2-in.	3 00
Hydrangeas Thos. Hoag and Otaka, 2-in.	4 00
Hydrangea Paniculata Grandiflora, 2-in.	4 00

Address **GEO. THOMPSON & SONS,** LOUISVILLE, KY.

NOTICE.

	Per 100
Coleus Golden Bedder, Verschaffeltii, John Goode, Firebrand, 2 1/2-in. pots.	2 50
Double Ivy Geranium, 4 best kinds, 2 1/2-in. pots.	3 00
Fuchsia Double White, 2 1/2-in. pots.	3 00
Impatiens Nana, Phila. Seed, Lady Emma.	3 00
Begonia Metallica, 3 inch pots.	5 00
" Rubra, 3-inch pots.	5 00
" Foliosa.	3 00
Pelargoniums, in 6 best market var., 4-in. pots.	10 00
Carnations transplanted, Robt. Craig Grace Wilder, Sunrise, Century, Chester Pride.	2 50
Hinze's White, Phila. Seed, Lady Emma.	2 00
Routed Cuttings, Fuchsias 7 vars.	2 10
" Heliotrope, 2 vars.	1 50
Ampelopsis Veitchii, 2 1/2-inch pots.	3 00
Alternanthera Amara, Spectabilis, Aurea Nana, Versicolor, 2 1/2-inch pots.	3 00
Chrysanthemums, 20 vars., 2 1/2-inch pots.	3 00
Verbenas, 2 1/2-inch pots.	2 50

W. J. CHINNICK, TRENTON, N. J.

SURPLUS

Stock of Routed Cuttings of Carnations of PORTIA, JEANETTE, CENTURY, EDWARDSII, PRES. DE GRAW, KING OF CRIMSONS, ALEGRIERE, CHESTER PRIDE, ETC. All healthy and well rooted. Address.

JOS. RENARD, CHESTER CO., UNIONVILLE, PA. Also 1000 Smilax in 3-inch pots at \$2.50 per 100.

CARNATIONS, strong pot grown, November and December struck. Portia, Garfield, De Graw, Hinze's White, Harrison, etc., \$1.75 per 100, \$5.00 per 300, \$15.00 per 1000.

VERBENAS, named, strong pot grown, in colors, white, pink, scarlet, purple and intermediate shades, \$1.75 per 100, \$5.00 per 300, \$15.00 per 1000.

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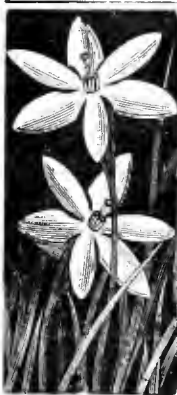


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Fine 2 inch pot plants \$10 per 100, \$70 per 1000, 250 at thousand rates.

	Per doz. noc.	Per 100	Per 1000
Primula Floribunda	1 00	10 00	100 00
Coleus, 2-inch pots, in variety	2 50	25 00	250 00
Routed Cuttings	1 00	10 00	100 00
Geraniums, 2-inch, in variety	3 00	30 00	300 00
" Mme. Salleron	3 00	30 00	300 00
Alyssum	2 50	25 00	250 00
Chrysanthemums in variety	3 00	30 00	300 00
Fuchsias in variety	3 00	30 00	300 00
" Stern King	5 00	50 00	500 00
" Phenomenal	8 00	80 00	800 00
Pelargoniums	8 00	80 00	800 00
Canna French Hybrids, named	15 00	150 00	1500 00

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Cinnamon Vine, strong roots	\$ 3 50 per 100
Moon Vine, strong plants	4 00 "
Ipomea Palmata, strong garden roots	15 00 "
" " pot plants	8 00 "
Milla Biflora	\$25 00 per 1000
Amaryllis Formosissima	6 00 "
Ampelopsis Veitchii	\$4 00 and 6 00 "
Asparagus Tenuissimus, strong	4 00 "
Echeveria Secunda, from boxes	2 50 "
" " extra fine, 3 inch pots	5 00 "
Clerodendron Balfourii, strong	5 00 "
Dracena Indivisa, 3-inch pots	10 00 "
Euphorbia Splendens, 3 inch pots	6 00 "
Cape Jasmine 3 inch pots	10 00 "

Geraniums, Fuchsias, Verbenas, Carnations, Begonias, Callas, Roses, Coleus, Tritoma, and a general collection of bedding plants at low prices.

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Sport from Grace Wilder; flowers identical with the parent as regards form and size; more vigorous in growth. It is the earliest, most perpetual and fragrant Carnation in cultivation. It originated with me four years since.

PLANTS READY MAY 1st, at the following prices:

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WM. SWAYNE AND **L. L. LAMBORN.**

Plants from rose pots, \$10.00 per 100. Send for Price List of other sorts.

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Grown in large quantities for the trade, of the Wm. Swayne and L. L. Lamborn. Having the largest quantity, outside of the originator, for sale at the following prices: \$5 00 per 100. Buttercup, \$5 00 per 100, \$25.00 per 1000. Grace Wilder, Grace Fardon, Sunrise, Springfield, Century, at \$2 00 per 100, \$15 00 per 1000. Hinze's White, Peter Henderson, Snowdon, Lady Emma, Phila. Red, Scarlet Queen, Portia, Seawan, Chester Pride, Petunia, Hinsdale, Duke of Orange, Quaker City, \$1 50 per 100, \$12.50 per 1000. Miss Johite, Scarlet Gem, De Graw, Edwardsii, White LaParite, \$1.25 per 100, \$11.00 per 1000.

Plants now ready. Also forests of the above varieties at \$1.50 per 100. Cash must accompany all orders. Orders booked now for Spring delivery.

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GERANIUMS—Cygnet, single white; Olive Carr, single pink; Double General Grant, bright scarlet; Emile Lemoine, splendid dark scarlet; J. Y. Murckland, pink and white; Maggie Hallock, salmon pink, 5-inch pots, 15c. each, \$1.50 per doz. 4-inch 10c each, \$1.00 per doz.; 3 inch 5c. each, 50c. per doz.

COLEUS—Gem, Golden Bedder and Purple Prince. Splendid for ribbon lines or massing. Garland, Garfield and Mrs. Geddes, can't be beat as individual specimens. Strong, beautifully colored, from 3-inch pots, 5c. each, \$4.00 per 100, 25 at 100 rates.

VINES—Cissus discolor, Double Sweet Alyssum (large flowering), German Ivy, Nasturtium (3 varieties), crimson, scarlet and buff, beautifully shaded with red, from cuttings; Panicum Variegatum, Tradescantia Vittata and Multicolor, finely colored, Torenia Asiatica, Vinca Major Variegata and Elegantissima, extra fine, from 3-inch pots, 10c. each. Set of 12, \$1.00. Special offer equal quantities of each, \$5.00 per 100.

Ipomoea grandiflora (Moon Flower), TRUE, 2 inch pots, \$4.00 per 100; 3 inch, extra strong, \$6.00 per 100. 25 at 100 rates. You can make 200 per cent. on this in 30 days.

Ampelopsis Veitchii, 2-inch, strong. \$5.00 per 100. 25 at 100 rate.

Also on hand in splendid condition, a full collection of desirable Florists' Stock at low rates.

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FLORISTS,
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Every Wednesday and Saturday,

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Ship goods by freight and notify us. Rates of Commission, 12½ per cent. for selling; 3 per cent. for advertising.

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Verbenas, healthy plants,	2.50
Begonia Rubra Alba,	2.50
Fuchsias, single var., 2½-inch pots,	2.50
Asparagus Pennsylvanicus,	3.00
Hibiscus, strong, 2-inch,	4.00
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Canna Adolph Weick,	15.00
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12 Catalogues Free.

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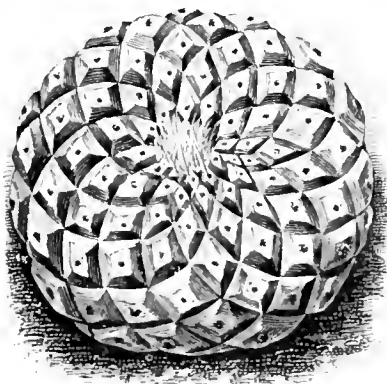
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Mention American Florist.

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Will exchange for Snailax plants.	

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Carnations, rooted cuttings in 20 fine sorts \$2.00 per 100, \$15 00 per 1000. My stock is strong and healthy, and cannot fail to please. Correspondence solicited. Address

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TOMATO PLANTS,**

Now Ready, \$1.50 per 1000.

SWEET POTATO and CELERY PLANTS ready May 15 \$2 00 per 1000, including Self Blanching and new Kalamazoo. Also all leading varieties, strong, healthy plants. EGGS and PEPPER PLANTS, \$1.00 per 100. Cash with order.

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Chrysanthemums, 100 selected finest sorts. Moon Flowers, extra strong, propagated from blooming plants. Finest Summer Flowering Bulbs, Gladiolus, Tuberose and Japan Lilies.

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LA FAVORITE, The best of all Double Whites, without question \$2.50 per doz.

CHRYSANthemUMS, TRUE TO NAME, and in the greatest and best variety—New and Old.

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MUSA ENSETE, ETC.

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100,000 VERBENAS.

THE CHOICEST OLD AND NEW VARIETIES.

FINE POT PLANTS, \$2 50 per 100, \$20.00 per 1000. ROOTED CUTTINGS, \$1.00 per 100, \$8.00 per 1000.

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**THE EVER-BLOOMING PRIMROSE
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BY MAIL, POSTAGE PAID.
Strong Plants *per hundred, \$ 5.00*
 " " *per thousand, 50.00*

BY EXPRESS, IN LIGHT CASES.
Larger Size *per hundred, \$7.00*
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The above illustration is from a photograph of one of our houses of *Primula Obconica*, taken before Easter, (1889).

Orders filled strictly in rotation, as long as stock lasts. Checks, Money Orders, &c., should be sent on Boston. Remittances can also be sent by Registered Letters or Express Money Orders.

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A Florist Recovers Damages.

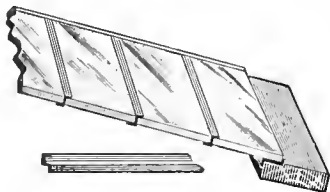
Judge Montgomery closed his labors yesterday afternoon in the criminal court, which has recently been engaged in the trial of civil business, and for three days past in the trial of the case of Edward McQueeney against James Donald Cameron and others. The plaintiff lived and conducted business as a florist on Boundary street, opposite the head of Eighteenth street, and claims that the defendants in grading property north of plaintiff's did it in such a manner as to cause the water, which it is claimed formerly flowed into a ravine, to be diverted on his premises, extinguishing the fires by which the greenhouses were heated, and causing a destruction of his property, for which he claimed \$7,500 damages.

The defendants claimed that they were not responsible, but that the diversion of the flow of water was caused by a bank of earth thrown up from the Champlain avenue shaft, and that the sewer constructed by the government not having been of sufficient capacity, the overflow was caused by that fact.

The court briefly instructed the jury as to the law in the case, and they retired about 4 o'clock. A verdict for \$2,000 for the plaintiff was found—*Washington Press, April 7.*

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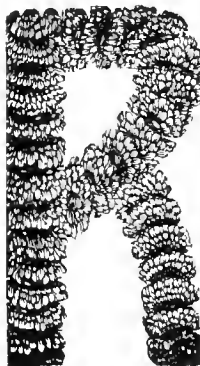
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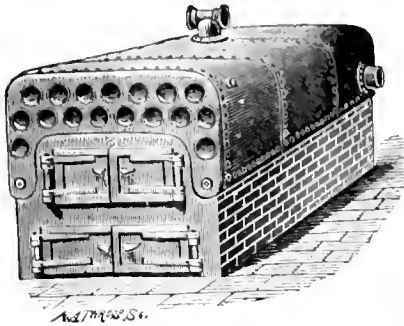
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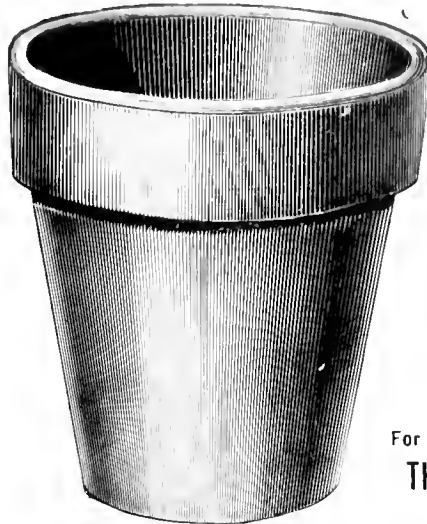
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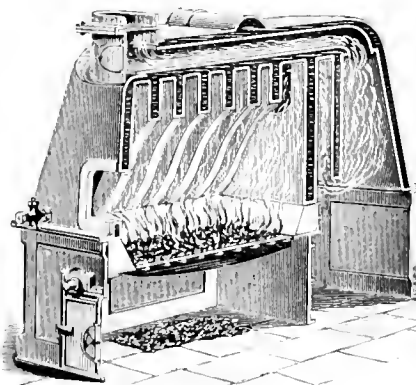
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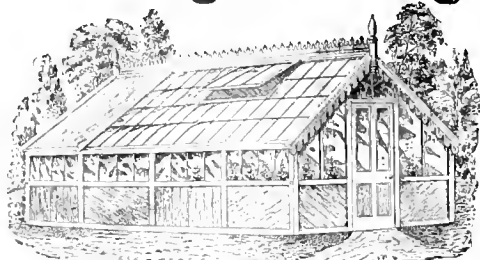
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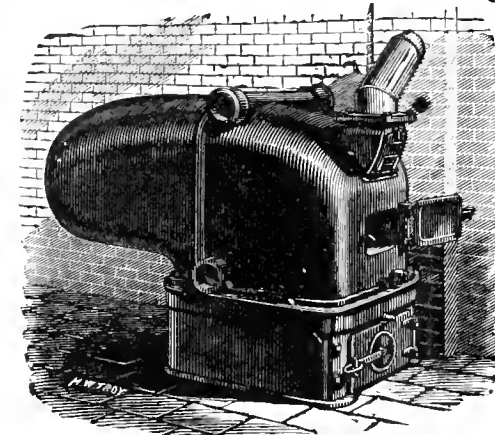
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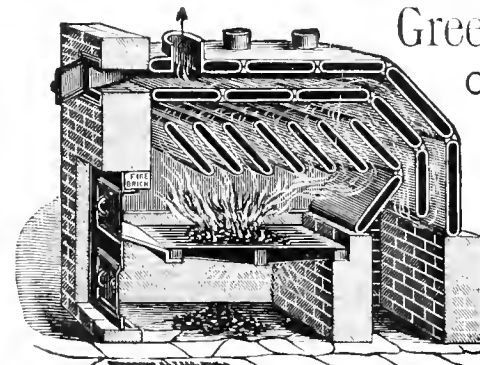
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THE AMERICAN FLORIST



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Vol. IV.

CHICAGO AND NEW YORK, MAY 15, 1889.

No. 91.

THE AMERICAN FLORIST

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GENERAL OFFICES, 51 La Salle Street, Chicago.

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All communications should be addressed to the
general office at Chicago.

SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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THE S. A. F. COMMITTEE ON NOMENCLATURE meets at New York on the 15th inst.

THE EASTER TRADE.—Later reports confirm the earlier ones noted in last issue, and show that the Easter trade of 1889 has at nearly all points been much larger than ever before. While prices were a trifle lower than last year at many points, the supply was large and total receipts considerably in excess. And this is certainly a very satisfactory state of affairs. A good supply, all sold at fair prices is much better for all concerned than a smaller supply sold at higher prices. The weather undoubtedly had much to do with the large supply, but growers are also making progress in the manipulation of their plants to bring their crops in at the desired time.

NOW COMES THE RUSH of spring plant trade. Are you prepared for it? Are your plants equal in quality to the best in the market? If they are you won't have much trouble in selling them at fair prices, but if they are poor in quality you may have to work hard to dispose of them at remunerative figures, and if there have been more plants grown than required to supply the demand the ones left over will not be those of good quality, but the poorest. And now comes the time for you to show your business ability. After the plants are well grown they must be well sold. If the former is well done the latter is easier, but even with the best stock much depends on the manner in which it is placed on the market. Now is the time your show house should present its most attractive appearance. Customers will leave an order far more quickly if your stock and houses present an attractive appearance than if all cluttered up and disagreeable to get around. Keep your stock looking its best. Fill up the holes in the benches as fast as possible. Concentrate small lots of every kind of plant you sell into one house, so that customers may select if desired without trotting all over the place. Such a house is also of great value in selling small lots from. It saves much time in running around when every moment is valuable to you. And above all keep your walks clear of empty pots, boxes and similar truck, and cleanly swept every day. Don't neglect these little points now.

New York Notes and Comments.

The past Easter may be considered thoroughly satisfactory by the florists, for although prices were lower than previous years the demand was large, and the quantity of flowers handled very much greater than former years. The glorious weather naturally added to the demand, for the general public does not buy flowers in stormy weather, and certainly the use of Easter flowers, both in churches and in the home, increases every year. The lateness of the season caused the crop to be very large—many of the commission men thought they would be swamped, but a comparatively small percentage remained unsold. Lilies were plentiful, but sold well; the demand for them in pots was very large. Tulips and other small bulbs, barring lily of the valley, were scarcer than they had been. Among roses, the finest in the market were Paul Neyron—Wiegand, of Union Hill, is sending in remarkably fine ones. They were usually bringing 40 cents, but Wiegand's extras brought 60 cents.

No noticeable increase in the demand for any one flower was seen, but it is a conspicuous fact that loose flowers were way ahead of baskets for gifts. The demand for loose flowers, in place of any

design or basket, seems to increase all the time, and it is especially noted at any holiday season.

A great many pot plants were sold—to rich and poor alike; this is another largely increasing branch of trade. Lilies certainly led as pot plants, but a great quantity of azaleas, hydrangeas, rhododendrons and genistas were sold, as well as humbler bedding plants. The hydrangeas were, as a rule, remarkably fine and sold well. The quantity of Otaksa in the market was very largely in advance of Thomas Hogg; comparatively little of the latter variety being forced. The chief reason for this, no doubt, is that the blooms and trusses are rarely so large in Hogg as Otaksa, rather than through any other cause. White flowers are usually most in demand at this season, but the delicate tints of the last named hydrangea seem to rank equally with the white of Hogg.

The church decorations consisted more of plants than flowers, and while there was no startling novelty in this line the decorations were usually very elaborate. They consisted almost entirely of flowering plants, azaleas, hydrangeas, genista and lilies backed with palms. A great quantity of the large genista plants were used. An increase in decoration was noted among the churches which usually avoid any great display; instead of being confined to the Episcopal and Roman Catholic churches, as formerly, every denomination now makes some display in Easter decoration. Good flowers were imperatively demanded; but the market for flowers is certainly increasing, or the commission men would not have sold the immense stock thrown on their hands Easter week.

If the Easter trade was brisk, Centennial week was certainly the opposite. During that week New York didn't seem to care whether school kept or not, and the bottom fell out of the flower market. The immense crowd of strangers were not flower-buying people, and the native population was too much demoralized to care for such things, so most of the florists say they might have just as well shut up shop during the festivities. The great ball and banquet called forth some fine decoration by Klunder; for the first it consisted almost entirely of flowering plants, backed by palms. The decorations for the banquet consisted chiefly of baskets of flowers.

The flower trade was represented in the grand civic parade at Centennial by Siebrecht & Wadley, who had a beautifully decorated vehicle, representing Flora's Car. It was a very large truck drawn by four white horses. Each horse was attended by a man on foot leading it with a rope of roses. The harness was trimmed with smilax, and each horse wore a green saddle cloth trimmed with flowers. In the front of the vehicle was

the Goddess Flora, her arm resting on a huge cornucopia filled with choice roses. Behind her was a superb specimen thrinax, and on either side of this a huge tree fern. Wires extending from one tree to another were hung with orchids. In the center was a formal little bed of cacti; on either side were banks of palms and flowering plants. A Japanese stood in the rear grafting a camellia; an Indian was standing on the other side holding an orchid. Two girls in fancy costume sat in the wagon holding huge bouquets and baskets of loose flowers, which they threw out into the crowd. The vehicle was escorted by marching spearmen and outriders. When it reached the Presidential stand the Japanese nimbly descended and presented Flora's cornucopia to the Chief Magistrate. This arrangement was one of the most beautiful and artistic displays in the procession and received much admiration, which it thoroughly deserved. However, these Centennial festivities crippled business for the florists and for many others, so that a good many are glad to see them over.

Trade generally is good so far and promises well, though the flower trade will soon settle down considerably.

EMILY LOUISE TAPLIN.

New York.

The floral decorations at the Metropolitan Opera House for the Centennial ball and banquet were on a scale of magnificence to accord with the occasion.

The lobby walls were all clothed with Irish juniper, arbor vitæ and other evergreen trees; these formed a fine background of irregular outlines for immense groups of hydrangeas, *Lilium Harrisii* and azaleas, the margin of each group being *Astilbe* (*Spiræa*) *Japonica*. Some of these groups were eight feet high and broad in proportion.

The walls of the corridor leading to the main floor were completely hidden with laurel branches. The face of the wall above and immediately before the entrance to the main floor, on a background of laurel 25x15 feet, had to the left figures 20 inches deep of immortelles "1789" and to the right "1889." Between these a large cornucopia of *Mermet* roses showered down its contents. A large globe of *Mermets* was also suspended from the ceiling, supported on four sides with wreaths of laurel.

On the first floor leading to the boxes the stairways were walled with laurel and on the landing were groups of white azaleas and hydrangeas.

The ladies' reception rooms on this occasion were made the entrance to the supper rooms and were beautifully decorated. Here again junipers, arbor vitæ and laurels formed the background for the plants. There were two groups of palms, two groups each of hydrangeas, lilies and azaleas, three groups the center of each being three very large old box trees around which were broad bands of *Astilbe* (*Spiræa*) *Japonica* margined with broad bands of scarlet geraniums. The balustrades above the entrances were crowned with a dozen fine palms, in the passageway leading to the supper room were beds of *Mme. Plantier* roses and red and blue cinerarias.

The decorations of the supper tables were entirely of plants arranged in circular baskets one foot in diameter, the baskets were of gilt wicker work, the plants being dwarf hydrangeas, *astilbe*, azaleas, geraniums, *mignonette*, *heliotrope* and ferns.

The main floor for the ball had eight

immense groups arranged, two on the front of the proscenium being *genistas* ten feet high, two on the back of the proscenium of hydrangeas; at the extreme back of the stage was built nine boxes, the front representing the White House, the President occupying the central box. To the right and left of the stage and flanking the walls were two separated groups on each side of red azaleas and hydrangeas, one group being surmounted with a fine plant of *Rhapis flabelliformis*. The whole of the house was most effectively draped with flags and bunting in addition to the plants.

For the banquet all of the plants on the main floor were removed, to make room for the tables, the decorations of which were simple and beautiful; 200 baskets one foot in diameter were filled with the same kind of plants as for the supper table, in addition to these were 150 plaques of cut flowers of roses, gladioli, forget-me-not and carnations; large heads of hydrangeas were laid on the cloth, in these were placed red roses, 500 heads of hydrangea being used; *Souy*, *Niphotos* and *Bon Silene* roses were laid in and out among the glasses on the table, so as to represent a continuous chain; here and there were large groups of lilies and hydrangeas in pots. On the President's table were two large plaques of *Mabel Morrison* and *Puritan* roses, the center of the table being a mirror oval in outline, around the margin of which was a band of blue forget-me not, violets, scarlet geraniums, lily of the valley and narcissus.

To crown all a flock of one hundred white pigeons were suspended as if in flight from the White House at the back of the stage, the leader with a laurel wreath being immediately over the President's table as if to alight on his head. From the wreath were two streamers of red, white and blue ribbon looped back to two of the pigeons at the broadest point of the flock; this was a beautiful conception and ably carried out.

The decorations were of Klunder's best.

JOHN THORPE.

Boston.

The very early season has had somewhat of a depressing effect on prices of cut flowers and on trade in general. The shipping trade has slackened up earlier than usual, and there is a full stock of almost everything needed for the local market. Roses especially are abundant. Tulips are in full bloom outside, and lily of the valley will also be in bloom in a few days. The indications now are that the outdoor flowers we have been accustomed to depend upon for Decoration Day will be all past at that time. Whether there will be a good supply of other things to take their place is somewhat doubtful.

The street peddlers have been in trouble again, a large number of them having been arrested and fined for violation of a city ordinance which prohibits standing in one place for more than twenty minutes at a time. Certain retail florists are said to be at the bottom of the demonstration.

The Public Garden is glorious with tulips, pansies and daisies. Supt. Doogue is making preparations for a fine display this summer. The city greenhouses at the South End are now running smoothly and furnish facilities never before enjoyed by the department, for propagating and caring for the necessary plants. There are ten large houses. These are full to overflowing, however, and ten more houses could be utilized to advantage.

There have been large importations of rhododendrons, bays, hollies, acubas, retinosporas and other hardy and half hardy decorative shrubs this season, and their use will add much to the general effect of the planting on the public garden.

W. J. S.

Chicago.

R. W. Cogan, with Kennicott Bros., was married recently.

Many thousand tulips are now in bloom in the public parks and crowds are attracted thither by the gay display.

Geo. Wittbold is building two new houses at his place in Lake View. They will be used for the increase in his stock of ferns and palms.

Anton F. Grabow, formerly of Appleton, Wis., has started up at 63d and Wallace streets, Englewood, where he has built several small houses.

August weather has prevailed for the past week, the thermometer ranging from 75° to 90° during the daytime. Most remarkable weather for this time of the year.

Lake Forest was cut to pieces by hail the night of the 9th inst. F. Calvert & Son, the McCormick rose houses, F. Anderson and Thos. Appleton lost at least half of their glass. The storm was terrific, almost a cyclone, the hail came in sheets, many of the stones over an inch in diameter and the noise of the crashing glass could be heard for a considerable distance. No insurance.

Chas. Reissig decorated the club house of the Chicago Club very handsomely for the reception to Robert T. Lincoln before his departure for England as United States Minister to that country. The fireplaces were hidden by banks of tulips, *Harrisii* lilies and roses, the remaining decorations consisting almost entirely of handsome vases of various flowers placed on mantels, tables, etc. A draping of *Asparagus tenuissimus* and *stephanotis* over a large oaken mantel was very graceful and effective. The only design was that of an eagle, filled with snowballs. Small groups of decorative plants were freely placed at effective points throughout the building.

Kennicott Bros. report receipts of outdoor lilac simultaneously from Peotone, Ill., 125 miles south of Chicago, and Lake City, Minn., 225 miles north, a difference of 350 miles in latitude. The time of blooming at these two points is usually three weeks apart, and it goes to show that the very unusual spell of hot weather at this season has been very widespread, north as well as south. It is feared that the result of the present weather which is bringing out such a glut of flowers will put stock in such shape that there will be a shortage for Decoration Day. The hot wind which has prevailed has spoiled flowers very fast. Everywhere are to be heard complaints of melted flowers.

Baltimore.

Easter trade in this city has quite realized all expectations, although business was so very satisfactory all through the usually dull Lenten season, that the Easter boom did not seem so pronounced.

There was probably an increase in the matter of church decoration. We had an opportunity Saturday night and Sunday of seeing about all the churches in Baltimore that it paid to see, and in many of them the decorations were much more elaborate than last year, and certainly more churches were decorated, but while



all of them were more or less beautiful, there was no special decorative feature in any of the churches visited sufficient to make a detailed description interesting to general readers. In this connection, however, I may mention a very pretty feature of the Sunday School exercises at St. Paul's P. E. Church. Each pupil—there were between 400 and 500—was presented with a potted geranium in full bloom.

Everything in the way of Easter stock was abundant enough to meet the demand and was of uniform good quality. The sale for plants was better than last year, and while there was no special dearth of cut flowers there was enough trade to use up all serviceable stock; boxes of choice roses and other flowers were in good demand, and several florists report an unusually brisk trade in cemetery work.

As to prices, some florists believe that they were lower than last year, while some others think—late season and every thing considered—that prices were quite up to last Easter; it is probable, however, that prices averaged a little lower than last year. Perles sold at \$1.50 per dozen; La France, \$3; Mermets, \$1.50 to \$2.50; Luizet sold readily at \$4; Jacqs, \$3; tulips, \$1.25 to \$1.50; violets, 50¢ per 100; callas, \$3 per dozen; *L. longiflorum*, \$4 per dozen and so on. Callas, *L. longiflorum* and *L. Harrisii* sold in pots at from 50¢ to \$1.50 to \$2. To put the Easter trade for '89 in few words it was generally, quite as good as last year, and in several respects a more desirable trade.

April 24. A. W. M.

Pyrethrum Uliginosum.

This is one of the grandest hardy herbaceous perennials ever introduced to cultivation, and it blooms in the fall—August, through September and into October—at a time when such flowers are very welcome both in private and commercial gardens. It is not only one of the most profuse and showy of all plants when in bloom, but the individual blossoms are large (some 2 $\frac{1}{2}$ to 2 $\frac{3}{4}$ inches across) full, pure white with yellow disc, and they last well as cut flowers. The flowers should be cut for use soon after they open, as the centers darken with age. It is of the easiest possible cultivation, all it needs is rich soil.

The accompanying illustration is from a photograph by Sandman, Glen Cove, taken Sept. 22 last, of a plant grown in our grounds. When photographed this specimen was six feet one inch high, 17 feet in circumference four feet from the ground, and had thousands of open blossoms upon it; besides, before then we had cut hundreds upon hundreds of flowers from it. And this plant is only two years old. Where the season is long enough, as with us here, it ripens seeds abundantly and it can be increased in this way, but usually our method of propagation is by division as we would a phlox, a helianthus or veronica. It blossoms the first year from seed or division.

Mr. William Robinson, editor of the *London Garden*, in his invaluable book "The English Flower Garden" says of this handsome plant: "*P. uliginosum* is one of the noblest of all tall-growing herbaceous plants, forming dense tufts five

to seven feet in height, terminated by lax clusters of pure white flowers, each about twice the size of the Ox-eye Daisy. It is a stately plant for a moist, rich border, and is robust enough for naturalizing in damp places. It is excellent for cutting purposes; its value is increased by the blossoms being produced late in autumn before the chrysanthemums come in. It thrives best in a deep, moist, loamy soil, and may be readily propagated by division." It is a native of eastern and south-eastern Europe.

Now, why is this plant so scarce in cultivation? It isn't a new plant by any means; I have grown it for twenty-five or more years; in fact it is one of the first garden plants I ever knew. All the care it needs is a bit of good ground kept clean. If your object is cut flowers you can get ten thousand marketable blossoms a year from a dozen or score of established plants; if your object is plants for sale you can get up an immense stock in a very short time.

John Saul tells me he has received some good round abuse about this plant from customers, they declaring it was nothing other than a white weed. This showed their deplorable ignorance. The habits of the plants—stems, foliage and style of growth are totally different, this pyrethrum never blossoms in summer, the white weed never (except now and then a stray individual) blooms in September. Any one seeing a specimen of this pyrethrum in full bloom, or even looking at the accompanying illustration, will at once observe the absolute fallacy of the white weed idea. True, there is a resemblance in the appearance of the flowers, but not more so than there is to those of single China aster, Pyrethrum roseum, or Paris daisies, and those of this pyrethrum are larger than any of the others. And this pyrethrum never becomes a weed either by spreading at the root or from seed.

When I was at John Thorpe's place a few weeks ago I noticed a lot of familiar looking plants most a yard high in pots. "What have you got here, John?" "Pyrethrum uliginosum, my boy. You don't know what a grand thing that is for forcing for Easter. It may seem odd that a fall blooming plant should be useful for this purpose, but it requires a certain treatment just as does *Hydrangea paniculata*, and then the thing is easy enough." It isn't early starting so much as early maturing that counts with these out-of-season plants.

WM. FALCONER,

Glen Cove, N. Y.

The Moon Flower.

I have delayed replying to your request concerning "Moon flowers" hoping that I might give some "authority" as to true botanical name of the white seeded variety which my friend Mrs. Thompson, it seems to me, is too willing to dub "Giant Moon flower" or "Ipomoea Childsii." To have this question settled I last year sent seed to Prof. L. H. Bailey, but as they failed to bloom I have lately shipped him at Cornell University four varieties of plants which I am satisfied will bloom and which I hope will settle the matter. I am satisfied in my own mind that the white seeded moon flower is the true "Bona Nox," in which Jas. Vick and many others agree. All that Mrs. Thompson says in her communication as to the "Black Seeded" and "White Seeded" I can endorse. By black seeded she means *Ipomoea noctileneae*, first brought to notice by Messrs. Henderson & Co.

Messrs. Henderson & Co. sent me

three years since some of their plants to grow seed from for them. I placed these plants of theirs beside seedlings of the white seeded and theirs being from cuttings of course were the first to bloom. But not one bloom of *I. noctileuca* made a seed pod until after the white seeded bloomed and fertilized the black. The seed thus secured were small, generally one, sometimes two and occasionally three seeds to a seed capsule. I planted these seeds, securing flowers some five inches in diameter, which were perfect blooms, not requiring fertilization by the white to mature seed. These I again planted with white seeded and last year secured what I call "the cross" or hybrid. These seeds are all colors, black, brown, some spotted black or brown and white, some white with a black eye, indeed all shades. Those plants produced blooms averaging nearly as large as the white seeded—about six inches in diameter. This cross or hybrid, not only was as vigorous a grower as *I. noctileuca*, but I think more so. It produced double and treble the blooms of the white seeded and what was most desirable, it proved much the earliest, for I gathered ripened seed from them early in July whilst the white seeded was not in full bloom until September, although I had given the white seeded best attention and planted seed earlier in hotbeds. These cross seedlings were planted side by side, full two months earlier in blooming than the white seeded. I believe I have a larger practical working experience in moon flowers than any one in the United States, as I plant not by hundreds, but by thousands and acres.

I am glad I delayed writing as it gives me an opportunity of correcting your Florida correspondent on two points. First, the wild moon flowers he speaks of, seed of which I have and plants of which I have bloomed here and seen growing in Florida is not *I. Bona Nox*, nor is it *I. noctileuca*, nor is it comparable in foliage to either the white seeded or *I. noctileuca*. In bloom it is somewhat larger than the last named, but not so large as the white seeded or "the cross." As to this white seeded I have known of it for thirty years and grown it off and on for seventeen years, offering it in 1886 (I think) for sale to Messrs. Jas. Vick and Henderson & Co. Vick at once pronounced the seed sent "*Ipomæa Bona Nox*." If I could have the naming of the white seeded I should name it "*Ipomæa grandiflora alba*," which would indicate not only its white bloom, but white seed and it certainly is so far "grandiflora," as the magnolia of our forest is "grandiflora." If any of our friends wish to study the moon flowers in all their varying forms and will visit me in September I will—if no severe storm prevents—show them the grandest sight of blooms they ever beheld; 100,000 blooms per night will be a low estimate, and among them I hope to have some pink and white. The second point on which I wished to correct your correspondent was in the statement that the "white seeded would not root." The cuttings of vines of the white seeded will root, for I have vines growing from cuttings now.

I enclose some of the "cross seed." If I had not already trespassed too far I would add some peculiarities of the various vines. Until the S. A. F. meets in Buffalo let us keep the white seeded as it may now be and then, for one, shall urge "*Ipomæa grandiflora alba*," i. e. "Bona Nox," whilst the society may give "the cross" or "hybrid" I offer, what

name they deem worthy. It will be there with the white seeded to speak, each for itself. A. W. SMITH.

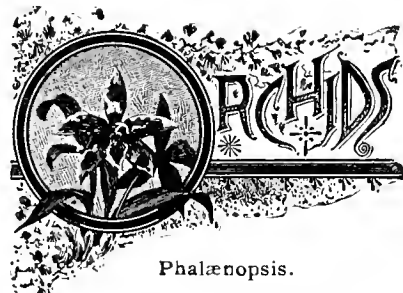
Americus, Ga.

[The seed sent exhibited a variety of shades from black to white.—ED.]

The First Mention of Moonflower.

James McPherson, Trenton, N. J., writes: "If Mr. Falconer will look over the index of the 1881 volume of the *Gardeners' Monthly* for *Ipomæa grandiflora*, he will, I think, find under that heading the first mention of the moonflower in this country."

Mr. Falconer writes: "The article referred to by Mr. McPherson appeared in the *Gardeners' Monthly*, page 312, October, 1881. He says there '*Ipomæa grandiflora* * * is popularly called the 'moonflower' by the Hindoos, and the 'night lily' by the Europeans.' In Peter Henderson's *Handbook of Plants*, page 135, we find: 'Moon Flower. A popular name of *Ipomæa Bona-nox*.' And this book bears the date of March 1, 1881, and I received my copy of it April 7, 1881. And Mr. Henderson informs me that he had used the name Moonflower in his business years before 1881."



Phalenopsis.

This handsome genus comprises about sixty species and varieties which, with few exceptions, are natives of the Philippine Islands, where they are found growing on trees, rocks and very rarely on the ground, enjoying a maximum of heat and moisture and shaded from the direct rays of the sun.

In cultivation the requirements of these plants are generally not well understood and well grown collections are the exception. A good deal of skill and care is required to keep these plants in good health for many consecutive years, fortunately they are very tenacious of life and one season is sufficient to make quite a nice plant from what would appear to be but a dead stump. One of the greatest dangers to avoid is that of overflowering, strong healthy plants may easily be ruined in one season from this cause. The safest plan is to cut the spike immediately the leaves show the least sign of softening. It is usual with us to cut the first spike of *P. amabilis* as soon as the flowers are matured. In a short time another raceme will appear and often a branch from the cut stem. This method gives us two crops of bloom and does not injure the plant so much as leaving the first flowers till they fade.

We grow our plants in baskets and cylinders using a good many large crocks and filling up with lumps of peat and moss. Keep them very wet during the growing season, at no time allowing them to become dry and only shade sufficient to prevent burning. The winter temperature ranges from 60° to 80° and that of summer from 75° to 110°.

The collection here contains fifty-five kinds, including some very beautiful

hybrids and about a half dozen unique species. From among these not more than five would be of any use to a florist for cutting purposes, or that could be procured for anything like a reasonable sum. The best of these is *Schilleriana*, a very robust kind with large mottled leaves and producing panicles of rosy colored flowers from 20 to 100 in number, according to the size and vigor of the plant. *Stuartiana* is a grand free growing species and for general purposes may be described as a white and much speckled form of the preceding, but will give a far greater proportion of flowers than it for the size of plant. *Amabilis* is a large white flowered kind bearing racemes of about a dozen flowers, three to four inches across; the racemes of this as well as the two following will continue to grow from the point and produce flowers for a long time. *Sanderiana*, a rose colored form of the preceding this may be called (though there is a great variation in the leaves, some even approaching the mottled leaves of *Schilleriana*). This is one of the handsomest species in the genus and will become very popular. The Java variety of *grandiflora* is strong and very free growing producing larger flowers and altogether is more robust than the Bornean type. This species varies very little from *amabilis*, but comes into bloom somewhat later, and for this reason a few plants should be grown. F. GOLDRING.

Kenwood, N. Y.

[The illustration is of a phalenopsis house under Mr. Goldring's charge.]

Planting Lilies in the Open Ground.

We are often advised, especially in the case of Californian and superbum lilies, to plant the bulbs very deep, say 12 to 16 inches under the surface of the ground, because they are found growing wild at that depth. The bulbs go down so far to get away from the parching heat or drought of summer, and for this reason we too should bury them as deep when we plant them in our gardens.

Well, this seems reasonable enough. But my advice to you is—don't you do it. When you get your lily bulbs plant them out as soon as practicable in deeply worked land, but only three or four inches below the surface of the ground, then mulch over them with some short loose material, through which the lily stems may come up with perfect ease, and as growth and summer heat advance you can add to the mulching, taking care not to allow the mulch to pack up against the lily stems. And, if need be, support your larger lilies by light stakes, for, unless so supported, when they are in bloom and a rain and wind storm comes they are apt to be shaken about and injured, and the wrenching at the neck hurts the bulbs.

Staking lilies requires much pains. If the stake is put down alongside the stem, probably the bulb may be injured by the stake, perhaps severed from the old clump, always put in the stake four to six inches ahead of the stem so as to be sure to get beyond the bulbs. One of the chief advantages of lilies among shrubs is the use of the shrubs in place of stakes to support the lilies.

In a year or two, if your lilies have thriven well and the bulbs are in good condition and show a tendency to rise up to the surface rather than go down into the ground, lift them about the end of September and replant at once, say six inches deep, according to kind and con-



VIEW IN THE PHALÆNOPSIS HOUSE AT MR. ERASTUS CORNING'S, ALBANY, N. Y.

dition of bulbs. After having grown most every species of hardy lily in cultivation, and many varieties, and having had my full share of the ups and downs in lily cultivation, I would not now plant any lily I know of deeper than six inches below the surface of the ground. Any protection it should want in summer from heat or drought, or in winter from cold, I can supply from the surface of the ground. And if the lilies are inclined to bury their bulbs any deeper they will find the deeply unfastened soil of the garden as easy to work down into as they would the earth in their native swamp or mountain home.

As regards soil, all lilies will grow in loamy soil as well as in peat or swamp muck, and a swamp is not necessary for the cultivation of any lily, not even for *L. superbum*. In high dry land in our garden our superbums, scores and scores of them, have from 15 to 35 blossoms to a stem, and some of the stems run nine feet high, while in rich swamps in the neighborhood, where *superbum* abounds wild I have not yet found 30 blossoms to a stem.

W. F.

Ivy-Leaved Pelargoniums.

What an improvement has been made in the size, color and variety, of these beautiful plants during the last ten years. Formerly they were only considered worth growing extensively for bedding purposes; now they are grown in large

quantities for supplying cut flowers. In pots of various sizes for associating with other plants for house and conservatory decoration, in baskets for suspending from the roofs of houses, or when grown into large pyramidal-shaped plants they are most useful. Having at the time some large and well flowered specimens which command more than passing notice, I hope these few cultural notes will be the means of inducing other readers of the *Journal* to try a few plants in the same way, feeling sure they will be amply satisfied with the results.

About this time last year we placed a few strong plants singly into 13-inch pots, using a compost of three parts loam, one of horse droppings, and a little lime rubble; the loam was used in a rough state, the manure was passed through the half-inch sieve, and the lime rubble through one a little smaller. A stout stake was driven into the center of the pot, two pieces of lath an inch wide, half an inch thick and 2½ feet long were nailed together in the center and placed on the rim of the pot, so that each end projected an equal distance beyond the rim, under which a stout wire was placed, and the cross pieces of lath fastened securely with smaller wire to the ring under the rim of the pot. Another ring of stout wire was next made an inch less in diameter, and bound to the cross pieces of lath with wire; two other rings

of stout wire were then made, one of them being one third less in diameter than the bottom ring, and the other a little larger than the top of the stake. Six stout pieces of wire were cut into equal lengths, the points turned in the form of a hook, one end of each being fastened to the small ring which was placed on the top of the stake; these lengths of wire were then fastened equidistant around the medium-sized ring, placed about midway between the top of the stake and the bottom ring; this done, the wires that formed an oblique line were tightened and fastened to the bottom ring, taking care to have them at equal distances, so as to leave the trellis an evenly shaped pyramid. If the oblique wires are found too far apart for training the young growths it is an easy matter to run up smaller wires between them when the outline is once made with stout wires.

When each trellis was completed we trained the young shoots so as to cover as much of the framework as they would. The plants were then kept in a vinery for a few weeks, afterwards transferred to a greenhouse, and in June placed in a sunny position in the open air, the flowers being kept picked off throughout the summer, and the young growths regularly trained in. When the shoots were likely to become crowded before other parts of the trellis was covered they

were occasionally thinned. In September the plants were placed in a coolinery, where they were kept till the house was started, by which time the trellis was evenly covered. The flowers, which had up to this date been regularly picked off, were then allowed to develop. Just before they began to unfold the shoots were all stopped and tied-in here and there as required, and the plants placed in a light position in the conservatory, where they received plenty of water at the roots, and a weekly sprinkling of Beeson's manure, and in return for the labor bestowed upon them are daily unfolding fine trusses of their charming flowers.

It may occur to careful readers that the time taken to cover the trellises above described was rather long for these go-ahead days. True, we might have covered them with growth in little more than half the time, but our object was to secure very short-jointed growth, which would yield a mass of flowers at a given time.

The following varieties are all good and reliable: Furstin J. von Hohenzollern, Abel Carriere, Jeanne d'Arc, Comte Horace de Choiseul, Isadore Feral, Comtesse Horace de Choiseul, A. F. Baron and Sarah Bernhardt.—*H. Dunkin*, in *Journal of Horticulture*.

A Queer Freak of the Geranium.

By this mail I send you some Queen of the West geranium leaves. Mr. Bettman, a florist of New Albany, Ind., has about 200 plants of this geranium in 4-inch pots, and on every plant where the flower stem is thrown up it forms a round leaf such as I send you, instead of flowers. Can you tell what causes this or have you heard of any such case before?

These geraniums are vigorous, healthy young plants and have the full sun, and the plants from which they were propagated are blooming all right, as are also other varieties standing next to this lot.

Louisville, Ky. FRANCIS MORAT.

[The leaves sent were funnel-form. A most interesting case. Leaf monstrosities of this sort are not rare among young seedlings of wide-leaved, soft-wooded plants, and we have before now seen them in "geraniums," but we do not now remember of any other case than this in which the malformation has been secured and perpetuated in plants propagated from cuttings. Last summer we observed quite a number of the first true leaves of *calceolaria* seedlings malformed in this way but none of the later leaves showed any inclination to the freak.]

Carnation Silver Spray.

This variety has not yet superseded Hünze's with me, but it has done so well that there is a probability of it taking the place of all other white carnations; not, however, before I give it a thorough trial next season. We are often too hasty in discarding older sorts and replacing them with novelties of good promise, but which develop later on some very bad traits.

I have not found any trouble in propagating them as Mr. Siebrecht relates, fully 90 per cent having rooted all the season excepting the first lot put in early, of which about 10 per cent rooted. The young plants hold their own with any of the older sorts in vigor and growth. I will plant next season equal proportions of Hünze's White and Silver Spray and a goodly portion of L. L. Lamborn, which has given me an abundance of very large handsome pure white flowers. The text-

ure of the Lamborn flowers is very light; has any one had experience in shipping them?

A. M. HERR.

Lancaster, Pa.



Seasonable Notes.

Continue to pay attention to the stopping and training of specimen plants, beginning to bend the young shoots into position; as soon as they are two inches long some care is required to prevent the slipping off of some kinds at the junction with the main shoots, all such kinds I tie first loosely to the main shoots and then strain from the tie instead of the junction.

Plants that are for cut flowers must be kept tied as they grow and most of the side shoots rubbed off; as they break naturally with three lead shoots select the strongest to continue and rub off the other two. Watch for the strongest, as sometimes the leader is crippled or weak. Remember to water every plant thoroughly when dry, if once is not enough go over it again and again. Plants that are newly repotted will require careful watching for a few days so as not to become water logged; this applies particularly when rain storms of two or three days occur and the atmosphere is at almost saturation point, these conditions frequently happen about the middle to the end of this month.

The first batch of cuttings I put in for commercial cut flowers will be planted out on a bench in two inches of soil and as far apart, instead of potting into 2-inch pots; these will again be transplanted four inches apart before finally planting them where they are to flower, which will be the end of June. A batch of cuttings will be put in about the 15th of this month in a frame on a slight hotbed made of half leaves and grass, when these are rooted they will be treated as stated above and finally transferred into 8-inch pots and kept stopped until the 1st of August.

I require 200 tall grandiflorums for the back wall in one of my greenhouses and am treating them as follows: They are about eight inches high and have not been potted; I had a furrow made with the plough, in this I dropped a six inch fence board, the soil was then filled in and the plants placed nine inches apart along the furrow. I find that grandiflorum is the very worst of all to suffer from mangled roots or starvation.

My stock plants for next season's cuttings will be planted in the open field on rather poor soil and left to grow without let or hindrance of any kind; this will be found a good plan to keep stock in a healthy condition.

The demand will be for good flowers this season and poor chrysanthemums will not pay to cut off the plants.

Pearl River, N. Y. JOHN THORPE.

Chinese Yam.

As I have unintentionally given offense by placing the value of "Cinnamon Vine" roots at \$1.50 per bushel, it is in order to explain that when some 30 years younger than now I read of the wonderful merits of this plant (*Dioscorea Bata-*

tas) as a vegetable product surpassing in value and weight of crop per acre our common sweet potato. The late Mr. Prince, of Long Island, was the introducer, and his claims for the then new vegetable clearly demonstrated that it could be grown profitably for even less than the price above quoted. Still he—and the writer—may have been mistaken, although we are told now that the tubers grow so large that it "is hard work to dig them!" see page 418. To a person familiar with the particulars of its early introduction, however, it looks unbusinesslike to have the old thing rechristened without at least retaining the original in brackets. Your Long Island correspondent must admit that the name he defends (Cinnamon Vine) is totally misleading, hence his endorsement of the "Rainbow Plant," "Vegetable Peach," etc. lose the weight that his signature should carry with it.

NOMENCLATURE.

[We fail to see anything in Mr. Falconer's notes which can in any light be considered an "indorsement" of the plants named. He merely takes the position that catchy popular names are not only admissible, but desirable when used in conjunction with the botanical title, and in this we certainly agree with him.—ED.]

Narcissi.

Our page illustration shows a number of varieties of narcissus which were among the lot recently bloomed from bulbs sent us by Mr. Thomas S. Ware, Tottenham, London, England, last fall.

Golden Spur was one of the largest and handsomest of the lot, a rich golden yellow. Maximus was also a grand flower of a similar shade. Obvallaris, while smaller, is of a distinct and pleasing form, of a rich yellow, and outlasted all the others when cut, a most desirable feature in a cut flower; it is largely used for forcing in England, and is commonly called the "Tenby Daffodil." Bicolor Horsfieldi with white perianth and rich yellow trumpet is a very handsome flower and at once attracts attention. Sir Watkin is a charming variety with yellow cup and lighter colored perianth. Incomparabilis Princess Mary is a striking flower with a rich yellow cup and white perianth. The smaller unnamed flowers are forms of the triandrous section. The well known Paper White needs no description. Poeticus ornatus makes an excellent cut flower, much superior to the well known poeticus; we published an illustration of this variety some time since. Irish King or Yellow King, an excellent yellow trumpet daffodil was also illustrated by us last year.

There were over sixty varieties in all, of which many others were worthy of note and all beautiful and interesting in a collection, though quite a number were so nearly alike that close observation was necessary to detect the difference between them. Some of the small flowered forms are charming and the contrast in size between the large flowers of such varieties as Henry Irving or the Emperor and the small nanus is almost ludicrous.

The very accurate engravings are reproduced from the "Little Book of Daffodils," issued by Wm. Baylor Hartland, Cork, Ireland.

Stock Plants.

Select your stock plants now. You want the first pick of your stock for that purpose. Label them stock and instruct



Trumpet Maximus



Incomparabilis Princess Mary



Golden Spur



Sir Watkin



Obvallaris.



Bicolor Horsfieldi



Paper White

NARCISSI

all your employes so that they may not be sold through error. Don't do as too many small florists do, sell out all the best and use the leavings for stock. You need the very best on your place for this purpose. Then give them a good position. Don't set them under the benches or in some other place where their growth may be injured. If you want the best results your stock plants must be grown on continuously and perfect health maintained. A check will induce disease and weakness of constitution, which will surely be transmitted to the plants propagated from them.



Notes on New Tea Roses.

The notes that have recently appeared in the columns of the *Garden* about the new tea-scented rose Mme. Hoste (Guillot, 1887) all tend to confirm the good opinions formed of it during the past season, although Mr. Benjamin Cant rightly enough demurs to its description as a rival to Marechal Niel. Nevertheless, that so good a judge as Mr. Cant should express his unqualified approval of Mme. Hoste, as recorded on pages 65-6, will dispose many rosarians to make trial of Guillot's seedling. The blooms of it exhibited by Mr. William Paul, when a first class certificate was awarded to it by the Royal Horticultural Society, were of great beauty, and the vigorous growth of the plants on which they were produced was also noted with satisfaction. Out of doors during the past season, in spite of the wet, some good blooms were produced on the young plants, especially late in the year, when several very beautiful examples managed to develop between the showers. That the variety has achieved a success in America is also satisfactory, as there the propagation of a promising rose takes place on a scale sufficiently extensive quickly to find out the weak points in the character of a flower. The tendency of American growers seems to be not to grow a great number of varieties, but to grow an immense number of plants of a few good sorts, so that if a rose is found to be worth propagating on a large scale over there, it must at any rate be a good forcing or pot rose. The flower is well described on page 66 by Mr. Benjamin Cant, except that he does not draw attention to two important qualities, viz: the great size and depth of the individual petals and the close pointed center of the flower. The sustained beauty, however, of the lemon-tinted blossoms from the bud state until fully developed has not been overlooked either by growers in this country or in America.

Another of the half dozen most conspicuous teas of the past season is the last contribution of Lacharme, Henriette de Beauvau. This rose is a climber, and therefore not likely to be valuable to cultivators "on the other side," where most of the rose growing seems to be done under glass; consequently reports about it from America will probably not be forthcoming. But favorable opinions have already been expressed by good growers in this country, Mr. Cant among

them, not only on its character as a vigorous climber, which is obvious, but also as to the quality of its flowers, which seem quite likely to prove useful for exhibition. Their color is almost that of Perle des Jardins, while the habit and entire appearance of the plant strongly recall Mme. Eugene Verdier (Levet, 1882), though, unlike that very distinct variety, which is liable to be very considerably injured by frost, Henriette de Beauvau appears quite hardy, the plants having withstood the recent cold unharmed, while the shoots of Mme. Eugene Verdier were, as usual, killed back for a considerable distance from the tips. There is need of a good yellow climbing rose that shall be hardy. Marechal Niel is too susceptible of chills; most of the Dijon teas are too tawny in color to be described as yellow; while Cloth of Gold, in spite of "C. J. G.'s" note on page 66 as to its beauty in Ceylon, may for all practical purposes be ignored as a climber out of doors in this country. Of course there is Mme. Barthelemy Levet, very beautiful in color, but very small and by no means free; and there is also Belle Lyonnaise, but the color is very pale, the flower often quartered or malformed, while the plant is tender and generally loses its foliage early in autumn. So that if only Henriette de Beauvau's flowers are as freely and continuously produced as they are well formed and clear in color, the last seedling that Lacharme sent out will like so many of its predecessors, supply a long-felt want.

Another tea whose handsome flowers have already won golden opinions is Lady Castlereagh (Alex Dickson, 1888). Here there is no question about the quality of the blooms, which are large, well formed and of great substance, and which open freely. In color they are of a soft yellow at the base, suffused externally with a rosy shade. Probably many rosarians, even if they have not yet grown the plant, have seen the flowers exhibited at various shows, at which they have already been awarded three first class certificates; but it may be of interest to add further that the plant proves to be a good sturdy grower, with exceptionally handsome foliage, which is very persistent, and the wood does not appear in the least damaged by the frost.

Some pretty flowers were developed in the autumn of Mme. Philemon Cochet (S. Cochet, 1887), which was figured in December in perhaps the best colored plate ever published in the *Journal des Roses*. The flowers are of a delicate pale rose tint, full and freely produced, though possibly with hardly sufficient depth to take first rank; but their stems being stiff and erect, they are displayed on the plant to the best advantage. The same good habit characterizes Princesse de Sagan (Dubreuil, 1887), which produces in the utmost abundance flowers of the brightest velvety crimson color. If these can only be obtained as good in size and fullness as they are in form, the raiser of Marquise de Vivens will have made a most striking addition to the teas. Of the freedom and brilliancy of the novelty there is no doubt, every little plant blooming directly; but the flowers, partly perhaps owing to their immediate production on diminutive plants, have been small, though well shaped. In color, however, at any rate Princesse de Sagan is not one of the conventional (and generally deservedly despised) red teas, but is a genuine brilliant crimson.

The sixth of the new teas which has attracted immediate attention is Nabouhand's climbing *Ideal* (1887), which has

been recommended as a bud rose. The raiser, attempting to describe its shades of color, declares them indefinissables, and he is not far wrong. It has been called an autumnal Fortune's Yellow, a climbing Ma Capucine, and sundry other things, to evade the description of tints of rose and yellow so blended and commingled as to render their analysis a seemingly hopeless task. The raiser's attempt reads: "Yellow with shades of metallic rose, lighted with touches of bright gold," and, in spite of the allowance that it has sometimes been supposed to be necessary to make in converting the flowery language of the south into our colder northern modes of expression, this can not be held to be exaggerated — T. W. Girdlestone, in *London Garden*, February 9.

Two Sports from the Perle.

Nanz & Neuner, Louisville, Ky., send us blooms of two sports from Perle des Jardins. One is white in color, and named "White Perle des Jardins," the other is pink and named "Pink Perle des Jardins." The blooms received were about the size and shape of a small Perle, but as they were presumably from very young plants it may not be just to condemn them on account of small size. Both were fragrant and the foliage of each had the characteristics of the yellow Perle. Of course time only will demonstrate whether they will be of value to the florist, but sports from the Perle are certainly worthy of a thorough trial and we shall be glad to hear the result of such trial.

In view of the fact that a sport from the Perle, which originated in England, has been named "White Perle" it might be well to change that of this American sport.

ROSE MADAME LAMBARD.—Has any one tried this as a forcing rose for winter flowers? We should like to know how it behaves in the forcing house.

Hail Insurance.

Mr. W. T. Jackson, Larned, Kansas, who lost some glass by hail recently writes us expressing his pleasure at the promptness with which his loss was made good by the Florists' Hail Association in which he held a policy. He expresses the belief that at the very low rates made by the association no florist can afford to carry his own risk, and hopes that the day will soon arrive when the required 5,000,000 feet of glass is insured, and the association can add insurance on plants as well.

Thanatophore.

This apparatus for destroying insects in greenhouses, which has recently been constructed in Paris by Mr. Bleu, and which is claimed to be already extensively used; seems to me ought to be tried in this country, or if it has been tried, some report regarding its usefulness should be secured. The invention is designed to use the vapor or steam from tobacco juice, instead of the smoke as generally used. It is claimed it kills the insects more surely than smoke and is in no way damaging to plants or flowers.

The cut represents a thanatophore heated by coal. A smaller size is also made, heated by a lamp. The cut is from a Swedish publication.

If this steam fumigation is really good, it seems to me that a much easier method could be used where the houses are heat-

ed by steam. If a tank filled with tobacco stems was connected by a pipe through the bottom from the boiler, and another pipe from the top run into the greenhouse and branched off to the different sections as would be needed, a permanent fumigator would be obtained with very little cost.

As to the real value of this I would like to see it discussed through the FLORIST.
G. MORT.

Long Island Plant Notes.

BY WM. FAICONER.

THIS SPRING has been the best, most open and even of any that I remember. We have had very little wet or slushy or extra warm weather.

OUTDOOR VEGETATION is seven or eight days ahead of what it was this time last year. At the same time the nights are so cool that tender plants can not be left unprotected with safety.

FIVE YEARS AGO I had 72 distinct kinds of sempervivums, but nobody cared for them, and I neglected them. But now a little breeze to boom them is gathering in the east, so I have cleaned and replanted mine and find that I have lost 16 species. Carelessness does not pay.

HOW COULD YOU lose them? some may ask. By allowing other plants to spread over them in summer; this will kill most anything.

GROWING MAYFLOWERS in frames as a substitute for violets doesn't pay.

PLANT OUT some glxinias in a cold frame and shade the glass well.

WE HAVE a 10-year old established specimen of *Pyrus Parkmannii* in bloom and it is the prettiest shrub of any kind now (May 6) in blossom in our collection. Only a crab apple, but, oh, so lovely!

MAGNOLIA SOULANGEANA (May 6) and *gracilis* are the showiest among their race; the *Yulan* and *stellata* are past, *Kobus* is pretty and delightfully fragrant, but not free enough; *parviflora* nor any of the large leaved tree or evergreen magnolias have burst a bud yet. The evergreen (*M. grandiflora*) is hardy in well sheltered nooks here; it becomes perfectly deciduous in winter and blossoms beautifully in June.

PEONIA TENUTEFOLIA—You can not glut the market with either the single or double flowered forms; and its good looks when in or out of bloom will always sell it.

ALYSSUM SAXATILE VAR. COMPACTUM is the brightest and best of all yellow flowering hardy perennials we now have in bloom. It enjoys an open sunny exposure and dryish soil, and is now a cushion of bright golden yellow very fragrant blossoms. Easily raised from seed and will bloom the second year. Perfectly hardy.

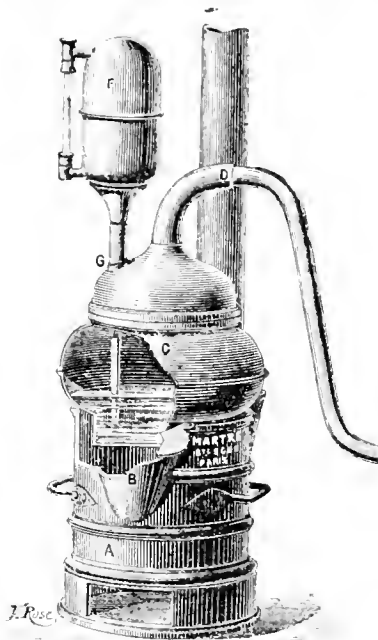
ARABIS ALBIDA began to bloom about the middle of April and was at its best about the 25th to the 30th. It is a dense spreading evergreen little plant with pretty white flowers, which in spring are produced in such profusion as to completely hide the foliage. A hardy perennial of the easiest possible cultivation, and readily raised from seeds or division. There are some very poor forms of it afloat. Get the good ones.

I HAVE GROWN a lot of *Trillium erectum*, *T. e. album* and *T. grandiflorum* in pots for three successive years, and they are finer this—the third year—than they were the first year.

PRIMROSE DAY is taking hold among

us. Make a note of it. *Primula vulgaris*, the common wild yellow primrose of the European woods, is the primrose meant, and not any of the other colored or garden forms of it or any other species. You can get up a stock of it from seed and seedlings raised now will make blooming plants next April. But the germination is very unequal.

THE WHITE FLOWERING form of *Cosmos bipinnatus* (Peter Henderson's Pearl) is in fine bloom with me in 6 inch pots. The plants are three months old from seed, bushy by pinching and attractive with many blossoms. Should I plant them out they would soon stop blooming and set to growing, but by restraining



THE NATOPHORE.

them in pots they will keep in bloom all summer long.

THE FINEST "red" pansy I had this year was from Turner's seed, the biggest pansy from Zirngibel's, the clearest white from Veitch's, and the prettiest dark one from Burpee. Burpee's New German isn't a very large pansy, but its dark velvety form is very captivating. I am unable to distinguish between a good many giant strains.

PANSIES DON'T SEED very well with me before May, so now I am rooting out every inferior variety and leaving only the choicest; these will ripen a good deal of seed that I won't gather and many self-sown seedlings will appear about the old plants next July. And they should be pretty good stock too.

ONE WOULD hardly think that from the little dry bits of chips-like roots of anemones I planted last fall in a frame, I would get such double and glowing blossoms. Try some next fall, plant them in September or early October in a cold frame and treat them as you would pansies, only give them more head room.

IRIS RETICULATA is one of our earliest and sweetest spring flowers, perfectly hardy and easily forced. But for florists' use for cut flowers the bulbs are too expensive and the blossoms are not big enough.

MINA LOBATA is flowering very freely with me as a pot plant. It does love warm sunshine, plenty of root-room and head-room and good living, such as it may have when planted out in the garden in summer, and then it will grow apace. But if it is flowers you are after, curtail the root-room and stint the supplies.

WHEN I LOOK upon the exuberance of "*Chenopodium Atriplicis Victoria*," I feel grateful for something—pig feed will be plenty.

MYOSOTIS ALPESTRIS VICTORIA hardly compacts itself as closely as its picture would signify, and it is better for us that it does not, for then it would be too short for cutting, now it is lovely. Sown at the same time as and grown along with *dissitiflora* it forms a good succession to it.

MY BIGGEST and best candytuft is *Iberis Gibraltarica var. hybrida*. Of annual or biennial duration, not hardy but of easy cultivation in a cold frame, and readily propagated from seeds or cuttings.

THE PROFITABLE narcissuses are the hardy, free blooming, live-anyhow sorts. *Incomparabilis*, trumpet major and poet's narcissus are such with me.

AQUILEGIA SIBIRICA is our finest early columbine, earlier than any other species or variety that I have got, and it is a vigorous but compact grower, copious and showy, and without any of the lankiness peculiar to many columbines. Its flowers are large, bluish purple and with yellow tipped petals.

WHENCE ORIGINATED THE NAME MOON FLOWER here as applied to *Ipomæas*? Its origin was suggested by the abundant use of these *ipomæas* as decorative plants in a lager beer garden in Washington, D. C., and the sensation they caused there when they were in bloom. My informant writes me: "A lager beer garden man planted his arbors with it in the suburbs of Washington and it created such a sensation in moonlight nights among his patrons that he made a little fortune by it."

CLEMATIS DAVIDIANA.—I have grown this plant for twelve years and the longer I handle it the better I like it. It is quite a favorite around Boston, where it is pretty generally distributed, but little known away from there. It is a hardy herbaceous perennial (not a vine), a native of northern China and Mongolia; and although a vigorous grower and profuse bloomer the individual flowers are not showy. The plants grow three to four feet high and are bushy and need support; the flowers are blue, bell shaped like those of a single hyacinth, deliciously fragrant, and produced in great profusion in axillary bunches for two feet along the ends of the branches and laterals. The species is a capital grower and long-lived, not bright enough for florists' cut flowers, but a most desirable amateurs' plant. It blooms from the end of July to the first of September. It is propagated by means of division and root cuttings in early spring; one old plant will yield a multitude of young ones. It has never ripened good seed with me.

CLEMATIS TUBULOSA is another hardy herbaceous species from China, of the same style but not so good as *Davidiana*, and it comes into bloom a fortnight later. Its flowers are blue, in axillary clusters and somewhat panicked at the ends of the branches and laterals, but not so numerous, showy or fragrant as are those of *C. Davidiana*. It forms a thick bushy growth, three feet high if supported, but if allowed to grow naturally its branches rest upon the ground, but so orderly as to

suggest itself to landscape gardeners as a good plant for the front of shrubberies. It is easily propagated by division or root cuttings in early spring; indeed, in March the thick roots are dotted with myriads of white wood buds as we find them in the roots of *Anemone Japonica*. And it ripens seed with us and the self-sown seedlings come up plentifully all around the old plants.

WILD VIOLETS are mighty pretty things and come in after our regular garden violets are past. Hereabout the variegated flowered forms of *V. cucullata* are abundant wild, and on being transferred to the garden grow with a vigor and bloom in a profusion unknown in a wild state; and they luxuriate in common dry soil. Three years ago Mr. Manda sent me the white blooming form, and now it has naturalized itself from seed about the frame ground and part of the herbaceous grounds with the greatest freedom, and now that it is in bloom it is a generous and pretty flower. The common *V. palmata* and the much divided leaved *V. pedatifida* have run wild in our borders, and pretty plants they are too. Nowhere in America is *V. pedata* so abundant as on the Hempstead Plains near here. Its variety *bicolor* is the most desirable. Nicholas Hallock sent me a white one last year. Among white species *Canadensis*, *blanda* and *lanceolata* abound in a wild state wherever the conditions are suitable. *V. pubescens* in several forms is plentiful in rich woods and is the only yellow violet around here. But *V. rotundifolia* makes a prettier garden plant. A dozen years ago I gathered a number of plants of it in the woods at Lewiston, Maine, brought them home and grew them in the garden where they thrive and bloomed well and became well established perennials and becoming associates of such other gems as fringed *polygala*, *dalibarda*, *linnaea*, dwarf cornel, star flowers and rue anemones.

What to Buy for Shrubs.

[CONCLUDED FROM LAST ISSUE.]

The Siberian apricot, *P. Siberica*, stands well here, and is a fine, sturdy plant, very striking even when out of leaf, on account of its curious colored bark. The varieties of *P. Persica* are short lived when budded on the peach, but are very handsome. They make neat plants and live much longer when worked on the plum. *P. Pissardi* is a good addition to our gardens when purple foliage is required. *P. Simoni* is a fastigiate tree, with light rose-colored flowers and large purple fruits like an apricot. *P. Davidiana* is a species with rose-colored flowers, from China. *P. Americana* and its varieties are beautiful in early spring; they are adapted to large shrubberies, but by judicious pruning can be kept at any desired height. Of *P. pumila* we have two forms, one from the Great Lakes, with willow-like foliage, growing five or six feet high, covered in spring with small white flowers, and in summer with black, cherry-like fruit. Our common variety of *P. pumila* seldom exceeds three feet in height; besides its flowering quality it is one of the finest plants for autumn coloring; it might also be improved as a fruit. *P. spinosa* and its variety *flora pleno*, and *P. Myrobalana* and its varieties, are all hardy. *P. tomentosa* is a fine rose and white flowered species, from the mountains near Peking. *P. triloba* is known by all, but its single variety has not been in this country until a few years ago; by

the lovers of single flowers it will be considered a great acquisition. The double-flowering almonds, *P. Japonica alba*, *rosea* and *multiplex* are all good shrubs, hardy, but short lived, *P. pendula*, when well grown, makes a handsome plant for the lawn. *P. chamæcerasus* is grafted either on standards or low on the ground; usually the former, but when grafted low it forms a much more effective plant. *P. semperflorens* continues in bloom more or less all summer. The double flowering cherries, of different varieties, are well worthy of a place in the garden.

In the section of spiræas we have good material to choose from. *S. salicifolia* is the parent of many garden varieties, such as *Billardieri*, *Leneana*, *latifolia*, *rosea*, *Bethlehemensis*, and others. These, if pruned well back every spring will throw flower spikes twice the size of those not pruned. *S. Douglassii* is a beautiful species from the Northwest; this also has a number of very showy varieties. *S. chamædrifolia* and its variety are good flowering kinds. *S. millifolium*, a curious rare species from Nevada, and *S. predia* and its varieties are the earliest species, except *Thunbergii*, which is no doubt one of the finest plants for foliage or flowers.

S. hypericifolia and *S. canna* are early bloomers. *S. trilobata* and *S. Van Houttei* are two of the best late flowering species. *S. Japonica* has long been known as *callosa* and *Fortunei*. They are all late bloomers, and if the old flower heads are cut off as soon as out of bloom, they will on good ground bloom well the second time. *S. sorbifolia* and *S. Tobolski* are good showy plants, with large spikes of pure white flowers in June.

A sub-section of the spiræas are the neillias. The species *opulifolia* and its variety *aurea*, are coarse growing shrubs with white flowers. *N. Amurensis* is a fine, bold growing species from Northern Asia.

Exochorda grandiflora is one of the most magnificent of our hardy shrubs. *Rhodotypos Kerrioides*, with white flowers and chocolate-colored seed, is a good old-fashioned shrub. Of the rubus there are several species worthy of a place in the garden; there are *Rubus odoratus*, the red flowering raspberry, and *R. deliciosus*, the Rocky Mountain raspberry; the flowers of the latter are pure white, two inches across. This has never been plentiful, as it is difficult to propagate. *R. villosus flora pleno* is rather coarse, but the flowers are quite showy. *R. hispidus* and *R. Canadensis* are useful to cover the ground in places where few other plants will grow. *Neviusa Alabamensis* is a rare shrub, with white flowers in June. *Potentilla tridentata* is a neat, low growing species with white flowers. *P. fruticosa* has yellow flowers in abundance most of the summer.

In *rosa*, of the natural species there are many which are beautiful in their place, and the essayist thought it would become fashionable to have a garden of single wild roses when the ground can be spared. They are seldom much troubled with insects, and one or two syringings will keep them clean for the season, and what with the flowers in summer and the fruits in autumn and winter they will repay by their cheerfulness all trouble. Some of the best native species are *blanda*, *Arkansana*, *acicularis*, *Nutkana*, *Californica*, *Fendleri*, *lucida*, *Caroliniana*, *nitida*, *foliosa* and *setigera*. Of the American varieties, *lucida* and *nitida* are the two best for covering banks or planting as undergrowth for larger plants. *R. foliosa* is nearly yellow and very late. *R. seti-*

gera is the wild Michigan rose, one of the finest of all the single American roses, flowering profusely after all the others are done. This is the parent of the Queen of the Prairies. Of the foreign single roses the best is *R. repens*, a climbing species growing eight or ten feet high. *R. glauca* is a fine species with pink flowers and showy fruit. *R. Alpina* is the earliest wild rose. *R. acicularis*, *cinnamomea*, *dumetorum*, *canina*, *Belgradensis*, *rubigenosa* and *tomentosa* are all good species. *R. rubrifolia* has purple foliage, which stands well all summer. *R. arvensis* and its varieties are all desirable. In the Scotch roses we have many fine varieties of all colors; they have neat foliage and dwarf habit. A few of the best are *fulgens*, *pencillata*, *venulosa*, *pimpinellifolia* and *vestiflora*. *R. alba* is a fine species, with good foliage and flowers; it is the parent of several of our good garden roses. *R. pumila*, from the Minden Alps, is a dwarf species with fine large flowers. *R. rugosa* and its varieties, such as pink, crimson and white, are worth a place in any garden. *R. Kamtschatica* resembles it, but is even coarser in its habit. The fruit of this and *rugosa* are very ornamental. *R. multiflora Japonica* is very desirable, both in flower and fruit.

Of *pyrus* the varieties of *arbutifolia* are very ornamental; *pubens*, *serotina*, *grandiflora*, *melanocarpa* and *erythrocarpa* are all worthy of cultivation. The fruit is brown or black, and ripens during the latter part of the summer, excepting that of *erythrocarpa*, which is brilliant red, does not ripen until the autumn, and hangs on to the plant well into winter. *P. spectabilis*, *prunifolia*, *baccata*, *Parkmanni*, *Ringo*, *floribunda* and *malus flora pleno* are all showy plants. *P. Japonica* has been improved so that many varieties can now be had—single red, white, carmine, rose and other shades, besides several semi-double varieties. One of the finest dwarfs of late introduction is *P. Japonica Maulei*, which seldom exceeds two feet in height, and is more floriferous than any of the other varieties.

Cotoneaster vulgaris, *C. acutifolia* and *C. tomentosa* might be termed perfectly hardy. The flowers of this genus are not as showy as those of some others, but the fruits are very ornamental and last almost all the season. All the shad bushes are hardy, and they are the earliest of spring flowering shrubs. They vary in size from about a foot to twenty or thirty feet high. The flowers are white and the fruit is edible. The species are *Asiatica alnifolia*, *alpina*, *vulgaris* and *Canadensis*. In the *Canadensis* section there are a number of well marked varieties. The variety *oblongifolia*, from the White Mountains, is the earliest of all, and has edible fruit. Variety *rotundifolia* has round leaves, and in the species *Canadensis* the leaves are of a red color when they begin to open.

Among the hydrangeas there are some species that might be termed perfectly hardy; these are *radiata*, *arborescens*, *paniculata* and its variety *grandiflora* and *vestita* and *vestita pubescens*. *Vestita* and its variety are the earliest to bloom; and are followed by *radiata*, *arborescens*, *paniculata* and *paniculata grandiflora*, so that we can have them in bloom from June until September. *H. scandens*, the climbing hydrangea, is a good addition to our hardy shrubs.

Of the *deutzias* we have *gracilis* and *parviflora*, the latter a new species from Japan, with white flowers a few days earlier than *gracilis*.

Among the mock oranges there are

many good hardy flowers. Some of them are *Philadelphus latifolius magnificus*, a fine variety, with large white flowers; *nivalis*, pearly white; *grandiflorus*, a fine large late variety; *Zeyheri*, with flowers not much larger than *dentatas*; *Gordonianus*, a fine late American species; *microphylus*, a miniature species from Colorado; *speciosus*, a fine variety; *nivalis*, a very pure white; *Columbianus*, a fine intermediate flowered species, and *coronarius* and its varieties. The *grandiflorus* section is the latest.

Mr. Jackson went on to speak of many more hardy shrubs, and we regret that we cannot give the substance at least of the whole of his interesting and valuable paper, but space will not permit.

Western Notes on Heating Green-houses.

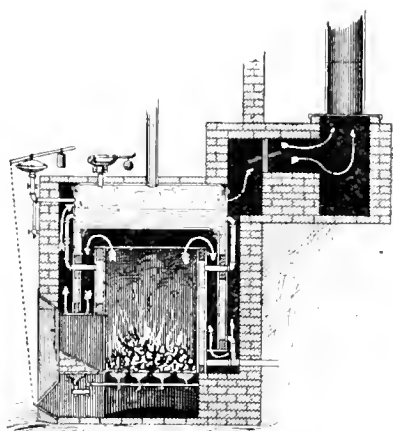
The intrinsic value of a given quantity of fuel is in exact proportion to the amount of latent heat that is stored within it, and all things being equal the relative value of the different kinds in use is about the same; that is to say, taking this point as a criterion, during the months of August and September here the current price of hard coal is \$8.50 per ton, soft coal, mined forty to sixty miles from this city, \$3 per ton, and seasoned hard wood \$1.50 per cord; at these prices their value is about equal, the difference being in the cost of labor required in their consumption.

That process or system which in the disintegration of this fuel by combustion generates the greatest amount of heat, elaborates it to the furthest extremities, placing it under perfect control, so that the heat may be utilized when and where it may be required, must be conceded to be the most economical and the most desirable, and while there are constantly new theories advanced and numerous plans and devices recommended for the efficient heating of greenhouses, unfortunately this information is largely drawn from a theoretical standpoint, without practical experience, the result is, when these plans and theories are put to a practical test they fail to accomplish the object intended. But I would not be understood as ignoring theoretical problems, yet I have found from experience that combined with a knowledge of the philosophy of heat and an acquaintance with the laws relating to hydrostatics and steam, a close practical observation is required to fully understand their practical working, and I further assert, that the intelligent florist who has given the subject his study, is better qualified to arrange his plant and will derive more satisfactory results than if he had placed it in the hands of a professional engineer.

The first step to be taken is the selection of a suitable furnace and boiler. Upon this point it is almost universally admitted that all complex arrangements should be studiously avoided; experience teaches that the simplest form in which a boiler can be constructed, provided that as nearly as possible it absorbs all the heat which is generated, is by far the most economical and the least liable to get out of order. In houses covering an area of 10,000 feet, or less, two medium-sized upright cylinder boilers, of the style shown in the annexed cut, will be found to be both economical and efficient in steam heating, this boiler can be made either with or without a magazine or self feeder. In larger establishments and where a regular fireman is employed two horizontal tubular boilers, with the flues not less than 2½ inches in diameter,

would be preferable—of course, in either case these boilers should be connected, using them jointly or singly as required. In the above arrangement it will be found that one boiler will supply all the heat necessary during a greater part of the firing season, holding the other in reserve for extreme weather, or in case of an accident, matters of no small importance, which more than one florist has learned to his sorrow. The placing of two boilers may cause a greater outlay in the start, but the saving of fuel alone will make up the difference of the cost in a season or two.

For hot water, I am inclined to think the most efficient form in which a boiler could be constructed is what I would call a double saddle-back (similar to the one described on page 333 current volume of the *FLORIST*). Some years ago I used a boiler of this description for steam, but it was a failure, the circulation between the lower and upper shells was so rapid that a portion of the water was carried



along with the steam up into the pipes, producing a conflict which seriously interfered with the perfect circulation of the steam. If fierce agitation of the water is a means of absorbing heat (which it certainly is), then this plan for a hot water boiler must be a success.

Next to the furnace and boiler and of equal importance is the arrangement of the flue. From some cause unexplained writers have been comparatively silent upon this subject, and yet I believe that failure can be traced to the want of proper draught almost as frequently as from any other cause. In a properly arranged furnace and flue there should be a steady draught, without a consequent loss from heat escaping, or "a stream of hot gas rushing up the chimney into space," a problem which a writer in the January 1 number says the professional engineer has not yet solved. In the general arrangement a horizontal flue should be carried from the top of the boiler, connecting with a pit placed outside the building if possible and directly under the smoke stack, this pit besides being a receptacle for the soot dropping out of the chimney, is of far greater importance as an expansion chamber. In the accompanying sketch a side view is given of the inside of a boiler, with the course of the flue into the smoke stack. While this arrangement is by no means new, yet the advantages derived from it appear to have been entirely overlooked, aside from the greater immunity from fire. The direct draught from the boiler into

the smoke stack is intercepted and retarded (not obstructed and checked), the result being that combustion is exhausted, the gases consumed and the heat absorbed within the boiler, a very small percentage escaping with the smoke.

If there are those who are skeptical as to this assertion, I would invite them to visit me during a prolonged period of zero weather and I will convince them that they can lay their hand upon the smoke stack (and hold it there) without discomfort.

Presuming that the means for generating the heat are as near perfect as possible, the next step is as to the best mode of conveying that heat into the houses, for it must be remembered, that both steam and hot water are nothing more than vehicles employed to transfer the heat from the storehouse i. e. the boiler, into and distribute it through the houses. As to which of the two systems is the best, there is a difference of opinion, while some advocate hot water, others with equal vehemence favor steam, and while there is no doubt that both are good, each having its advantages and disadvantages and while I am favorably disposed towards steam, believing all things considered that it is the most economical and the easiest controlled, yet the florist (unless for causes other than want of efficiency) who would tear out his hot water plant to put in steam, I would consider a fit subject for some lunatic asylum, and at the same time the one who would do away with steam to put in hot water should have quarters in the same building, but in a new place, where the decision must be made as to which system shall be employed, it will be proved that steam without doubt has the advantage over hot water in the cost of construction. In point of utility they are pretty equally balanced, with this difference, that steam might be compared to an express and hot water to a freight train. If the construction is all right, they'll both get there.

Again the laws relating to steam and hot water being similar, the general arrangement should be the same, that is carrying the supply pipe perpendicularly above the boiler to the highest point overhead and an uniform and decided descent in the pipes the whole length of the houses, both from and back to the boiler. In hot water the expansion being greatest as the water flows out of the boiler, its specific gravity is consequently the least and the water being almost volatile is easily and quickly carried to the highest point and when this is once reached, with the expansion tank connected with the return near the boiler, the circulation through the pipes must be rapid, for, while it is not my intention to enter a discussion of the laws of gravitation, to use a schoolboy phrase, water will run down easier than up hill, whether hot or cold.

As to steam heating, and the beneficial effects of overhead radiation, I have already given my views upon these subjects in the columns of the *FLORIST*, but I see there is a tendency to run to the other extreme, by placing all the pipes above the benches. Now, while I am fully convinced that the solar rays passing through this upper radiation are intensified, yet they have not the penetrating influence of the direct rays of the sun and with all the heating surface above the plants, there is danger that while making a vigorous top, there is not a corresponding root growth.

D. M. REICHARD.
St. Joseph, Mo.

Overhead Heating.

Most of us are satisfied with the fact that the sun's heat gets here in some way, and the question of how is not of general interest, but as your Milwaukee correspondent raises the question it may be well to state the case correctly. The sun's heat is generated in the body of the sun itself and is radiated in all directions into space. As far as we can see most of that radiated heat is lost. The earth receives a small portion of it which is absorbed to some extent by objects exposed to its influence; these objects become warm and radiate back into space any heat in excess of the temperature of the surrounding air. If an object is held near a hot stove the same process takes place. No one would care to assert that the heat did not come from the stove or that it was generated in the exposed object. The statement made at the convention was "The heat does not come from overhead, but is generated wherever the sun's rays strike inside the greenhouse."

We build greenhouses and heat them in order to make the most of the short winter days, when Dame Nature is certainly very "stingy" in her supply of heat and we are obliged to help her out. It seems but natural that this auxiliary heat should come from the same direction as the main supply. What we want is a short but perfect summer day. At night all is different and any imitation of a summer night is and always will be impossible so long as our houses are surrounded by what is practically a thin sheet of ice whenever the temperature drops below freezing. We must adjust our conditions to the daytime and the night must accept them.

If the overhead system had nothing behind it but a theory or an opinion, it would not be worth so much consideration, but practical experience seems to show that it possesses great advantages over other methods. Those advantages have already been described in these columns.

During the past winter the overhead system has been tried on a large scale at South Sudbury, Mass., by Mr. F. C. Fisher. He built two houses about 40x300 feet each, very flat and the glass all sloping to the south; one house is planted to carnations, the other to lettuce. The plants are all in the ground, no benches and no excavated paths. Steam heat is used and the pipes are, of course, all overhead. The whole arrangement is a new departure in greenhouse work and has attracted much attention. The crops were first class; the lettuce took a premium from the Massachusetts Hort. Society and the carnations were unusually healthy and vigorous, though rather small, owing to late planting.

It would be going too far to attribute this success to overhead heating, and it might be difficult to show that it had anything to do with it; but the experiment certainly demonstrates that unusually good results are possible under that system. An interesting experiment in heating greenhouses has been conducted during the past winter at the Hatch experiment station, of the Massachusetts Agricultural College, under the direction of Prof. S. T. Maynard, of the division of horticulture.

"Two houses were constructed during the summer of 1888, 75x18 feet, as nearly alike as possible in every particular. Two boilers of the same pattern and make were put in, one fitted for steam and one for hot water; the steam for heating the east house and hot water for the west

and most exposed one. * * * The two boilers and fittings were put in so as to cost the same sum and were warranted to heat the rooms satisfactorily in the coldest weather." The temperature of the two houses was taken five times a day and the coal was carefully weighed. The experiment was continued during January and February. The record is tabulated in bulletin No. 4. The result shows a saving of nearly 20 per cent of coal to the credit of the hot water boiler, with an average temperature 1.7° higher than given by the steam boiler. "The temperature was more even where heated by hot water, and consequently there was less danger from sudden cold weather. This was strikingly shown on the night of February 22nd. The average outside temperature for the day was 34°. At 9 p. m. it was above 32° and proper precautions not having been taken for so sudden a change as followed, at 6 o'clock on the morning of the 23d the temperature of the room heated by steam was 29°, while in that heated by hot water it was 35°."

"Conclusion: While this test is conclusive for the two boilers employed in these two houses as constructed and for this unusual winter, in a larger house and in a winter where the temperature runs lower and with greater extremes, different results might possibly be obtained, but this can only be settled by carefully made and accurately recorded tests which we hope another year to make. We would suggest that if those who have kept accurate records of the temperature of their greenhouses, together with the amount of coal consumed, will send us the figures, giving size of house and kind of heating apparatus, we shall be glad to put them on record in our bulletins for the benefit of those who are thinking of building new houses or refitting old ones."

While future experiments may modify the above result, it is not probable that they will reverse it.

In regard to the piping of these houses Prof. Maynard writes that the flow pipes are overhead, well towards the ridge, two of the six return pipes are in the angle formed by the glass and the top of the benches, and the other four returns are below the benches at side of paths. He says: "We feel sure that we obtain better results than when they are all located on the sides."

The water is under pressure in 2 inch pipes.
L. WIGHT.
Framingham, Mass.

MR. ROBERT GEORGE, of Storrs & Harrison Co., Painesville, O., Mr. E. G. Hill, of Richmond, Ind., and Mr. Anthony Wiegand, of Indianapolis, expect to sail for Europe on the Cunard steamer Etruria, leaving New York June 5. They will return in time for the Buffalo convention.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore,	Philadelphia.
Robt. J. Halliday.	Edwin Lonsdale.
Boston,	Evans & Battles
Wm. J. Stewart.	New York, W. S. Allen,
Cincinnati,	Ang. Rolker & Sons.
Harry Sunderbruch.	C. H. Joosten.
Cleveland, O.,	Siebrecht & Wadley.
E. G. Campbell.	Pittsburgh.
Detroit,	J. R. & A. Murdock.
J. Breitmeyer & Sons.	St. Louis, Michel Plant
Hamilton, Ont.,	& Seed Co.
Webster Bros.	San Francisco,
Harrisburg, Pa.,	Thos. A. Cox & Co.
J. Horace McFarland.	Toronto, Ont.
Louisville, Ky.,	J. A. Simmers.
George Thompson &	Washington, D. C.,
Sons.	L. Schmid & Sons.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By an experienced florist who has had charge of both private and commercial greenhouses in eastern cities.
K. care Vaughan's Seed Store, Chicago.

SITUATION WANTED—As propagator of roses, S grapevines, shrubs, evergreens, etc. 22 years in all branches of the business; upwards of 8 years in present situation. Address
R. COLE, box 150, Fonthill, Ontario, Canada.

SITUATION WANTED—By a practical gardener S and florist to take charge of private or commercial place in the vicinity of New York. 16 years' experience in all its varied branches; a good propagator and grower of general greenhouse stock, roses and carnations a specialty, can furnish good references. Address giving particulars
GARDENER, Basement 23 Old Slip, New York.

SITUATION WANTED—As head gardener or S orchid grower by an Englishman of large experience in some of the leading establishments in England, well experienced in all branches of the profession, 15 years' experience; capable of taking charge of any good establishment, aged 34, well recommended, single. Address JOHN ARMSBY, care F. T. McFadden, Station K, Cincinnati, O.

SITUATION WANTED—As manager by exper- S ienced cut flower and plant grower and designer dry or fresh work, also experience in cemetery work in one of the largest in Philadelphia, Pa., latter preferred with greenhouses, new or old establishment, or can build if necessary, no objections. Life time experience, German descent, 27 years old, married, no children. Good references as to character and ability from present employer. Address FLORIST, Southern Illinois Hospital for Insane Anna, Ill.

WANTED—A first class man (none other need apply) for the propagation and care of outside roses, shrubs, etc.
R. J. MENDENHALL,
Minneapolis, Minn.

WANTED TO RENT—A greenhouse business. Particulars, with number of greenhouses and price to be sent to
L. G. HIGON,
62 Madugal Street, New York City.

WANTED—A young German florist who understands his business and can take charge while proprietor is absent. Address
M. A. WILHEMY, Cleveland, O.

WANTED—Two first class gardeners would like to rent small place with two or three greenhouses and some land. Western New York or Pennsylvania preferred. Address: stating location, terms, etc.,
H. Lock Box 88, Dunkirk, N. Y.

FOR SALE—About 2000 feet 4-inch greenhouse pipe with valves and fittings. Address
PAUL F. LAU, Turner Park, Ill.

FOR SALE—An established florist business centrally located in a live town with every facility for shipping stock to good markets. Cheap for cash. Address
FLORIST, care H. E. Vick, Alliance, O.

TO RENT—OR FOR SALE—Well stocked greenhouse, about 2500 square feet of glass, at South Orange, N. J., less than one hour from New York City, five minutes walk from depot. Buildings in first class condition. Model houses built on the most approved plans, such as recommended by John May. Will rent for a term of years, (only responsible parties need apply. Address
J. BROS., P. O. Box 212,
South Orange, N. J.

WANTED.

Delivered prices on 1200 roses, following varieties: Am. Beauty, Bride, Bennett, Gontier, Perle, Mermet, Niphotos and La France, also 1200 carnations of the standard sorts. Address
G. BOUYE & BRO., Kalamazoo, Mich.

WANTED.

A man in a commercial nursery who understands the growing and propagation of hardy Trees, Vines, Shrubs, etc. in all its branches. To the right man a good chance will be given. Only a man who understands his business need apply. Address
J. A. DE MAR, Brighton Nursery, Boston, Mass.

FOR SALE.

One very large LATANIA BORBONICA; one very large SEAFORTHIA ELEGANS. Also several very large FICUS ELASTICA. For particulars, address
P. O. Box K, Glenville, Ohio.

FOR SALE.

Established floral business, with dwelling, store and greenhouses connected, in city of Buffalo. Good place for parties intending to buy.

S. Pickemann,

304 High St., BUFFALO, N. Y.

FOR SALE—CHEAP.

Owing to poor health I will sell my Greenhouse, with business and cottage of five rooms, situated in a live suburban town of 1000 inhabitants, 12 miles from Chicago, 10 trains daily, 7,000 square feet of glass, heated by hot water, supplied by water from waterworks. Good local trade. A great bargain to right party. For price and terms address the owner.
J. S. FORSTER, 738 Oak Ave., Evanston, Cook Co., Ill.

FOR SALE or to LEASE.
Ten Greenhouses containing 10,000 sq. ft. of glass, in the town of Gravesend, L. I., 30 minutes to Brooklyn via B. & B. R. Ry. Good summer train at Coney Island, in 10 minutes from place. Everything convenient and in good order. Heated by hot water. 3 acres of valuable land, 1/2 acre fruit, large barn, stables and 12 ft. Corcoran wind mill; plenty of good water—storage capacity 8,000 gallons. First class mercantile place; convenient to dealers and New York market. Place ready for purchaser July 1st. Good reason for selling. For full particulars address C. R. STILLWELL, Kings Highway, Gravesend, L. I., N. Y.

WANTED.

CATALOGUES AND PRICES

FLORISTS' STOCK AND ROSES.

EMIL GLAUBER,
MONTCLAIR, COLO.

ROSES.

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand. Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding. At prices as low as strictly first-class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,
SUMMIT, NEW JERSEY.

10,000 FINE YOUNG ROSES

— AT —
LOWEST WHOLESALE PRICES.

La France, Perles,
Mermets, Niphetos,
Papa Gontier, and Jacqs.

JORDAN FLORAL CO.,
706 Olive St., ST LOUIS, MO.

A. C. TUCKER,
ROSE GROWER,

P. O. BOX 190. NYACK, N. Y.

I would like to give my prices for the following varieties in 2 1/2, 3, or 4-inch pots to any parties desiring the same, for Spring delivery:

PERLE DES JARDIN, SOUV. D'UN AMI
LA FRANCE, NIPHETOS,
MERMET, BRIDE,
AMERICAN BEAUTY, PAPA GONTIER.
Mention American Florist.

STANDARD ROSES,
4 to 5 feet high.

The largest collection in the United States. All first class pot grown plants.

Gabriel Marc,
WOODSIDE, L. I., N. Y.

IMPORTED H. P. ROSES.

Worked low on the Manetti stock, best kinds for forcing. Orders received now for delivery in November. Address
WILLIAM H. SPOONER, Jamaica Plain, Mass.

New Pure White Tea Rose The "QUEEN."

This splendid new Rose originated with us two years ago, and having proved valuable, is now placed on sale. It is

A PURE WHITE, SPORT FROM SOUVENIR D'UN AMI.

A vigorous, healthy grower and continuous bloomer, producing a great abundance of Buds and Flowers all through the season. Flowers are PURE WHITE, showing no trace of Pink, makes good finely formed Buds and is moderately full. Petals are thick and of good substance, opens well, is a good keeper and very sweet. We believe it will prove especially VALUABLE FOR EARLY WINTER FORCING AS WELL AS FOR OPEN GROUND PLANTING, and recommend it for extended trial with the belief that it will be found a valuable acquisition to our list of Pure White Tea Roses.

PRICE: Strong well matured plants from 2 1/2-inch pots, \$3.50 per doz.; \$25.00 per hundred. Two year plants from 5-inch pots, \$9.00 per dozen.

ADDRESS:

THE DINGEE & CONARD CO.,

ROSE GROWERS,

WEST GROVE, PA.

ROSE, CLIMBING NIPHETOS.

CLIMBING
NIPHETOS
ROSE.

The Most Valuable Introduction Since Marechal Niel. A small plant in a pot exhibited before the Royal Horticultural Society in London bore forty-eight splendid blooms, and was awarded a First Class Certificate. It Flowers Very Freely, differing from those of old Niphetos (from which it is a sport) only in that they are of a purer white, not showing the pink tinge, and that they seem more delicately scented. SHOOTS HAVE RUN UPWARDS OF TWENTY FEET IN ONE SEASON. This variety blooms only from the lateral shoots while the main stem grows on with a most decidedly climbing habit. A valuable help to those who supply CUT FLOWERS FOR MARKET. To be distributed in the United States in May, 1889, by JAMES VICK, SEEDSMAN. Send for particulars to KEYNES, WILLIAMS & CO., Salisbury, England, or

JAMES VICK, SEEDSMAN, ROCHESTER, N. Y.

NEW PEDIGREE ROSES FOR 1889.

CLEOPATRA, Tea; first class certificate Royal Horticultural Society.
DULCE BELLA, Tea. MAID OF THE MIST, Hybrid Tea; a white sport from Lady Mary Fitzwilliam.
MINUTIFOLIA ALBA, Polyantha; first class certificate Royal Horticultural Society; first class certificate Royal Botanic Society.

Grafted plants ready in May. Descriptive Price List will be mailed to all correspondents free on application.

H. BENNETT, Pedigree Rose Nursery,
SHEPPERTON, MIDDLESEX, ENGLAND

Roses for Forcing.

We have a splendid stock of strong plants of BON SILENE, BRIDE, GONTIERS, MERMET, NIPHETOS, PERLES, SAFRANOS, and other leading varieties, which we will sell cheap to make room.

ELLWANGER & BARRY,
MOUNT HOPE NURSERIES. ROCHESTER, N. Y.

JOHN H. TAYLOR,
ROSE GROWER,
BAYSIDE, L. I., N. Y.

Offers to the Trade the Great TEA ROSE
MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

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MME. DE WATTEVILLE, CATHERINE MERMET,
PAPA GONTIER, BRIDES, and
PERLE DES JARDINS, NIPHETOS.

Write for particulars.

JOHN CURWEN, Jr.,
GENERAL
GREENHOUSE STOCK AND ROSES.
Villa Nova P. O., Delaware Co. Pa.
Money Order Office: Bryn Mawr, Pa.

ROSES.

35,000 of the leading Forcing and Bedding varieties: TEAS, HYBRID TEAS, and HYBRID PERPETUALS. Teas, \$5.00 per 1000; Hybrids, \$45.00 per 1000. My selection of varieties. Also the leading Prize winning varieties of CHRYSANTHEMUMS, CARNATIONS, and general Greenhouse stock. Trade List mailed on application.

JACOB SCHULZ,
LOUISVILLE, KY.

OIL CITY ROSES.

We have for sale a few thousand fine, healthy Rose plants from 2 1/2-in. pots, of the following varieties: Per 100
AMERICAN BEAUTY, \$10.00
BRIDE, MERMET and LA FRANCE, 5.00

OAKWOOD ROSE GARDENS,
Oil City, Pa.

ROSES.

Perles, Niphetos and Brides, in 2 1/2-in. pots ... 5.00
" " and La France, in 3-in. pots, ... 5.00
Souv. d'un Ami and Gontier, in 3-in. pots, ... 7.00
Also La France and Perles in 4-in. pots; prices on application.

All plants come from healthy stock, and are in fine condition. Liberal discount on large orders.
GERMOND & COSGROVE,
SPARKILL, Rockland Co., N. Y.

News Notes.

LARNED, KAN.—W. T. Jackson was hit by hail April 16. Loss slight, fully covered by insurance in the Florists' Hail Association.

SAN DIEGO, CAL.—The annual floral festival occurred April 23 to 27. It was as usual a grand success, netting a good sum for the charities of the city.

NEWARK, N. J.—Michael Duffy, the nurseryman of Kearney, who was accused by his wife of having tried to poison her died May 1 in the Hudson county jail.

CHARLESTON, S. C.—The Floral Fair, April 23-25, was the most attractive one held in this city for many years. The exhibits of cut roses were especially good.

OAKLAND, CAL.—Mr. Jas. Hutchison and wife and Mr. and Mrs. D Flint leave for a tour of England, Scotland and France on May 9, sailing from New York May 25.

SAVANNAH, GA.—There was a very creditable exhibition on the occasion of the Floral and Art Exhibition April 23-25. The cut roses were the feature of the exhibition.

OREGON CITY, OREGON.—Mr. Sdney Clack, formerly of Chicago, has located here. He has purchased five acres of land and will begin at once to build two greenhouses 18x100 each.

WILMINGTON, DEL.—Jas. Lewis & Co. have built four new houses, two 85 x 18, one 45 x 18 and one 70 x 6. The wife of L. E. Baylis died recently after a lingering illness of several years.

BROOKFIELD, MO.—The Missouri State Horticultural Society will meet here June 4-6. Rates will be given on the railroads. Premiums will be awarded for exhibits of flowers and berries.

WASHINGTON, D. C.—The newly organized local Florist Club is considering a plan for holding a chrysanthemum show next November, also the feasibility of establishing a flower market.

PITTSBURGH.—Flowers were plentiful and good at Easter. Prices lower than last year but aggregate sales were greater, made up largely of orders for loose cut flowers. Lilies were in abundant supply.

MINNEAPOLIS.—Wm. Desmond of Kewanee, Ill., has arranged to move his greenhouse establishment to this place, where he will build seven houses. The style of the firm will be Wm Desmond & Co.

CINCINNATI.—The wife of B. P. Critchell, the well known florist of this city, died suddenly April 29 of heart disease at the age of 44. She leaves with her husband seven children, two boys and five girls, the eldest 20 and the youngest 4 years of age.

INDIANAPOLIS.—An advance sheet of the premium list for the third annual chrysanthemum show of the Society of Indiana Florists, to be held in this city November 5-9 next, has been issued. Copies may be obtained from Wm. G. Bertermann, secretary, this city.

BROOKLYN, N. Y.—Fire destroyed the residence of Florist Bates at Laurel Hill April 24. The building was a Revolutionary landmark, and was filled with relics of that epoch. The house stood near the Long Island Railroad, and Mr. Bates claims that it was set on fire by one of the company's locomotives. The loss

on building and contents is \$6,000. Mr. Bates suffered additional loss by damage to his greenhouses.

COLUMBUS, O.—W. S. Devol has resigned his position as secretary of the Columbus Hort. Society to accept a place in the state university of Nevada, at Reno, as agriculturist of the state experiment station. A. D. Selby was elected to succeed him at the last meeting of the society. At the same meeting it was decided to issue the journal of the society as a quarterly hereafter instead of a monthly as formerly.

PHILADELPHIA.—The Easter trade was larger than ever before. There was a good supply of flowers and all were sold at good prices. Church decorations were larger than last year and the use of flowers was more general. Basket trade has fallen off, but there was a largely increased demand for lilies and loose flowers. Blooming plants were in brisk demand. Fifty of the florists of this city are already booked for the Buffalo convention.

TOLEDO, O.—A Broadway family who had a magnificent hydrangea in full bloom on their lawn found one morning to their sorrow that all the blossoms had been stolen. Having some paper flowers, excellent counterfeits of the real ones, they filled them with a fine chemical dust which causes uncomfortable itching, and fastened them upon the plant from which the blossoms had been taken. They promptly disappeared the following night, and their owners had the satisfaction of knowing that whoever took them had the itch for several days.

SAN FRANCISCO, CAL.—The exhibits at the third annual flower show of the Woman's Exchange were of unusual excellence. Prominent features were a choice collection of decorative plants and cut flowers from the public parks; cut blooms of 150 varieties of roses, each one labeled, from E. Gill, Oakland; a bank of wild flowers, from the Hotel del Monte, Monterey; Japanese, Australian and other plants, from H. H. Berger & Co., and numerous exhibits of cut roses. The State Floral Society will give an exhibition this month, probably about the 15th inst.

NEWBURGH, N. Y.—E. M. Peattie & Bro. intend to enlarge one of their violet and rose houses the coming summer. They are also building a stone wall—200 feet on North Miller street, 150 feet on Farrington street—on top of which will be placed a fancy wire fence. It will add much to the attractiveness of their place. Wm. H. Cornish & Co., seedsmen, have removed from Water street to Broadway near the Academy of Music where they have built three greenhouses 50 x 20 in the rear of their new store. They will grow cut flowers for retail trade in addition to their seed business.

MONTREAL.—The Easter trade, in the opinion of all the leading florists, has never been equaled in any previous year, there being good demand for everything in the way of flowers and plants. The quantity of lilies and spiræas sold on Easter Saturday was enormous. The supply of good roses, though large, was not at all equal to the demand. White flowers were in best demand; very little made up work was called for, the trade was almost entirely for loose flowers and plants, the great bulk of which was used for church decorations. Tuesday, the 23d, was a big day for roses (St. George's

day), red roses particularly, Gontiers and Bennetts being worth more than Brides. The action of one of the leading daily newspapers in giving away seven or eight thousand roses to the public was quite a God-send to some of the florists who had piles of Bon Silenes left over from Easter, there being little demand for that class on Saturday.

Holiday Prices.

Maine is a long way from any flower center and I do not often see contributions from our state in the columns of your paper. However, we sell a few flowers here and our patrons are as sensitive to the changes in prices during holiday week as others.

I have been much perplexed for several years to know what course to pursue. I grow most of the flowers we sell, but at Christmas time am obliged to buy. For two years we have retailed at Boston wholesale prices, explaining when we could, that the increased demand obliged us to buy a part of our holiday stock and that we were charging only wholesale prices, but notwithstanding our explanations we have to meet much dissatisfaction, nor does it end there. Many silent buyers who do not know why prices are all at once so high, and perhaps too modest to ask, go away with the impression that flowers are too costly for them to buy and we see them no more. The report is handed from one to another and who can judge of the amount of mischief wrought to the trade by this unhealthy custom of doubling prices during the holidays.

As the custom now is, the grower sensibly plans to bring in as many flowers as he can at this time at something of a sacrifice of a uniform supply from week to week. Does the gain more than counterbalance the loss? I think not and I look forward to the time when all the growers and florists shall rise as one man and do away with the evil.

An important feature in trade is to give satisfaction to the buyer and any method or practice which tends otherwise is an unquestionable injury. That the present manner of conducting our holiday trade does this I think no observant florist can deny.

F. H. M.

Bucksport, Me.

[Why not simply refrain from buying at holiday time, selling your own supply at what figure you please and allowing the surplus demand to remain unsatisfied? This would bring about the same condition of things that would follow if growers kept the supply uniform and made no extra effort to supply the increased demand at that time.—ED.]

WHOLESALE CUT FLOWERS.

Narcissus Poeticus, Tulips, Lilac, Valley, Peonies, Pond Lilies, Etc.

THE WISCONSIN FLOWER EXCHANGE,
133 Mason Street, MILWAUKEE, WIS.

FERNS.

CAREFULLY SELECTED

DAGGERS AND FANCIES.

Per 1,000, \$2.25; 2,000, \$1.00;
5,000, \$8.00; 10,000, \$13.00;

Delivered to any part of the United States, or \$1.25 per 1,000, Net.

CAPE JESSAMINES, \$1.50 per 100, Net.

Terms, Cash with Order.

REFERENCE: Michel Plant and Seed Co., 1010 Olive Street, St. Louis, Mo.

GEO. W. CALDWELL,

FLORISTS' SYLVAN SUPPLIES,

EVERGREEN, ALA.

Mention American Florist.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.00; Column, \$14.00. Cash with Order.

No Special Position Guaranteed, Discounts, 3 months, 5 per cent, 6 months, 10 per cent, 12 months, 20 per cent. No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted. Advertisements for June 1 issue must REACH US by noon, May 25. Address: THE AMERICAN FLORIST CO., Chicago.

IF YOU WANT CHOICE, FRESH CUT FLOWERS, WELL PACKED AND SHIPPED PROMPTLY, YOU SHOULD ORDER OF

CHAS. H. FISK,
Wholesale Florist

116 & 118 DEARBORN STREET, CHICAGO,

AND RELY ON GETTING THE BEST STOCK IN THE MARKET.

Store Open Day and Night.

I keep a full stock of WIRE DESIGNS

of superior workmanship and at lowest prices. Extra pieces of any description made to order on short-notice. Send for Catalogue.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.
ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.
TELEPHONE NO. 466.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety.

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address

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A. S. KIMBALL,
WHOLESALE CUT FLOWERS,
SHIPPING TRADE ESPECIALLY SOLICITED.

170 LAKE STREET, CHICAGO.

WELCH BROS.,
WHOLESALE FLORISTS,
165 Tremont Street, BOSTON, MASS.

We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

Wholesale Markets.

Cut Flowers.

BOSTON, May 9.

Roses, Teas.....	\$ 1.00 @ \$2.00
" Perles, Sunsets.....	4.00 @ 5.00
" Niphetos, Gontiers.....	3.00 @ 4.00
" Brides, Mermets.....	5.00 @ 7.00
" Jacqs, Beauties.....	10.00 @ 15.00
Carnations, short.....	.50 @ 1.00
Carnations, long.....	1.00 @ 1.25
Valley.....	2.00 @ 4.00
Tulips.....	2.00 @ 4.00
Daffodils.....	2.00 @ 4.00
Harrisii, Culas.....	5.00 @ 10.00
Spiraea, Stocks.....	1.50 @ 2.00
Smilax.....	20.00 @ 25.00
Adiantums.....	1.00 @ 1.50
Mignonette.....	1.00 @ 2.00

NEW YORK, May 9.

Roses, Bon Silene.....	\$2.00 @ \$3.00
" Gontier.....	3.00
" Perles, Niphetos, Soavs.....	3.00 @ 4.00
" Mermets, Brides.....	6.00
" Cousins.....	4.00 @ 5.00
" La France.....	5.00 @ 15.00
" Bennetts.....	5.00 @ 6.00
" Am. Beauty, hybrids.....	25.00 @ 35.00
" Puritans.....	20.00
" Jacqs.....	10.00 @ 15.00
Carnations, fancy, long.....	2.00
Carnations, short.....	1.00
Tulips, narcissus.....	3.00
Lily of the valley.....	4.00
Violets.....	.50
Mignonette, small.....	2.00
Mignonette, extra large.....	8.00 @ 12.00
Smilax.....	25.00 @ 35.00
Adiantums.....	1.50

PHILADELPHIA, May 9.

Roses, Perle, Niphetos.....	\$3.00 @ \$4.00
" Bon Silene.....	5.00 @ 6.00
" Mermets, La France.....	5.00 @ 8.00
" Brides.....	4.00 @ 5.00
" Bennetts, Gontier.....	8.00 @ 10.00
" Jacqs.....	12.00 @ 15.00
" Luizets, Nerons.....	10.00 @ 15.00
" Am. Beauties.....	10.00 @ 15.00
" Puritans.....	10.00
" Nels.....	.50 @ 1.00
Carnations.....	4.00
Dutch hyacinths.....	8.00
Harrisii lilies.....	5.00 @ 10.00
Culas.....	8.00
Smilax.....	20.00
White lilacs.....	3.00 @ 4.00
Violets.....	.50
Adiantums.....	1.00

CHICAGO, May 11.

Roses, Bon Silene.....	\$2.00 @ \$3.00
" Perles, Niphetos.....	4.00 @ 5.00
" Am. Beauties.....	12.00 @ 15.00
" Jacqs.....	8.00 @ 12.50
" Brides.....	5.00 @ 8.00
" La France, Mermets.....	5.00 @ 6.00
" Bennetts, Dukes.....	5.00 @ 6.00
Carnations, short.....	1.00 @ 1.25
Carnations, long.....	1.25 @ 3.00
Smilax.....	18.00 @ 20.00
Callas.....	8.00 @ 12.50
Adiantums short.....	5.00 @ 4.00
Candicans long.....	8.00 @ 8.00
Harrisii lilies.....	12.00 @ 18.00
Gladiolus.....	12.50 @ 15.00
Lilac.....	2.00 @ 5.00
Paeonies.....	5.00 @ 10.00
Dutch hyacinths.....	5.00 @ 6.00
Tulips, Valley.....	2.00 @ 4.00
Romans.....	3.00 @ 4.00
Narcissus.....	1.00 @ 4.00
Violets.....	.50
Mignonette.....	.50
Adiantums.....	1.00 @ 1.25

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Cut Flowers AND Florists' Supplies
WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS
and Jobbers in Florists' Supplies,
1 MUSIC HALL PLACE, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.
Auction Sales of Plants Spring and Fall.
Mention American Florist.

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Wholesale and Commission Dealer in
CUT FLOWERS,
NO. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.

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WHOLESALE FLORIST
20 West 24th Street,
NEW YORK.

CUT FLOWERS.
We are on deck DAY and NIGHT to give your orders CAREFUL ATTENTION, PROMPT SERVICE, GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEPT.,
Telegrams, 88 State, CHICAGO.
Letters, box 688.

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WHOLESALE DEALER IN CUT FLOWERS,
36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price list sent upon application.

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OF
CUT FLOWERS,
1237 Chestnut Street, PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,
Telephone 977. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Wootton. The Gem. Puritan.
Annie Beauty. Annie Cook. Mad. Cusin.
Papa Gontier. The Bride. La France.
Bennett. Perle. Mermel.
And other Standard sorts.

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WHOLESALE FLORIST,
36 WEST 29TH STREET,
The Bride, Mermel, and Am. Beauties, SPECIALTIES. NEW YORK.

HAMMOND & HUNTER,
Wholesale dealers in
Cut Flowers and Florists' Supplies
61 West 30th Street, NEW YORK.

GEO. MULLEN,
WHOLESALE FLORIST
17 CHAPMAN PLACE, 17 (near Parker House.)
SPECIALTIES.
VIOLETS, ROSES IN VARIETY, SMILAX, FANCY CARNATIONS, LILY OF THE VALLEY, TULIPS, HYACINTHS, NARCISSUS, ETC.

CHAS. E. PENNOCK,
WHOLESALE * FLORIST,
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THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.
Beauty, Bride, La France, Perle, Bennett, Niphetos, Mermel, Papa Gontier
CHAS. L. MITCHELL, MGR.,
P. O. Box 188, CINCINNATI, OHIO.
Also plants of above by doz., 100 or 1000. 2, 3 & 4-in. Select Stock. Plants in quantity at discount.
WRITE FOR PRICES.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

The Seedsmen's Convention at Washington.

Secretary McCullough writes May 1, as follows:

"I have just completed arrangements with the Central Traffic and Trunk Line associations for special or reduced rates to our annual convention at Washington, to be held next month, and within a very few days will issue circulars to the association members notifying them of same, which with the reduced rates we have secured at the Arlington Hotel will enable the members and their friends to obtain first class accommodations all the way through at reasonable rates. As the stay at Washington will probably be for the entire week think it would be very desirable for all members to take their families and friends with them, particularly as they will be enabled to secure special rates both at the hotel and railroad for them."

Alleged Seed Frauds.

A suit has been instituted for \$13,731.30 against the A. B. Cleveland Company, the big seed growing concern, by Peter Henderson & Co., the Cortlandt street seed dealers. The Cleveland Company is the one which suffered such a severe shock about two months ago through the eccentricities of its president and Ko Ko in general, Mr. A. B. Cleveland, now a sojourner in Canada. Since his departure the company has been reorganized, but it will apparently take considerable time for the finger marks of the ex-president's handiwork to wear off. This suit for \$13,731.30 is likely to be followed by others that will aggregate a very neat sum of six figures, probably in the vicinity of \$150,000.

The particular transaction on which this suit is based, and which, it is claimed, is identical with many others, occurred in 1887. In February of that year Henderson & Co. placed in the hands of C. P. Avery, a seed grower of Traverse City, Mich., to be planted on his Michigan farm, the following seeds: 200 bushels of Extra Early peas, 156 bushels of American Wonder peas, 10 bushels of Everbearing peas, and 20 bushels of Yorkshire Hero peas. The crop was to be delivered in fall of 1887, picked and in otherwise proper condition. In the fall the product, about 2,000 bushels of seed peas, was delivered. They appeared to be all right, and there was every reason to suppose that the seed had been shipped direct from Avery's farms. Henderson & Co. sold the seed to their customers and everything ran smoothly until the harvest time of the following year, 1888, when complaints began to come to Henderson & Co. by the score from farmers who had bought the seed peas saying that from expensive seed, such as the "Extra Early," there came only a crop of cheap, coarse Canadian peas. These complaints were often accompanied by threats of suit, so Henderson & Co. stopped the sale of all seed they had secured from Avery and started detectives out to investigate. The result of this investigation they claim proved conclusively that Avery had been acting as agent for the Cleveland Company, and that every bushel of seed which Avery raised for them under contract he shipped

to Cape Vincent, N. Y., where it was run through the Cleveland Company's mills and mixed with inferior. It is for damage done in this way that Henderson & Co. claim the \$13,731.30.—*New York Times*, May 5th.

NEW YORK.—The A. B. Cleveland Company, limited, dealers in seeds at No 47 Cortlandt street, whose president, Artie B. Cleveland, fled the city last January, is arranging with the creditors to take care of the indebtedness by the issue of bonds to run three years, to the amount of \$425,000. In accordance with this plan a chattel mortgage to secure the bonds has been filed, the trustees being Conrad N. Jordan, Horace K. Thurber and Peter W. Gallaudet. Two chattel mortgages for \$30,000 each have also been filed in Jersey City, to secure the First National Bank of Jersey City and another out-of-town bank. Where Mr. Cleveland is still a mystery and it is said nothing has been heard of him since he left town. His deficiency with the company is said to have been \$50,000. About two thirds of the creditors in amount have accepted the bonds.—*New York Tribune*, April 27.

KANSAS CITY, MO., April 28—Suits were brought yesterday against W. W. Harnden & Co., seed dealers, on notes issued by Archie B. Cleveland of New York, a partner in the firm, who did business in New York and who raised \$50,000 last month on the firm's name and skipped to Canada.—*Chicago Tribune*, April 29.

Floral Surprises.

Floral surprises are a new idea to compliment young women crossing the Atlantic, especially after they have recovered from the unpleasant feelings incident to the first and second days. Fill a tin box with rose buds, lilies of the valley, violets or other flowers, with stems that will absorb moisture. Pack them in wet moss. Wrap the tin box in rubber cloth and a stout paper wrapper. Direct the package to the person intended to be surprised. Deliver the box to the steward of the steamship to put in his ice house or cold room, with instructions to deliver in three or four days, staking him at the same time. When the box is delivered the flowers will be fresh and, of course, a pleasant surprise. A young woman so complimented was a passenger on the last trip of the Umbria, who wrote her friend from Queenstown on Friday evening, when six days out from New York, saying: "I am wearing fresh roses and lilies of the valley this evening and have some left to wear when we land in Liverpool to-morrow." Here is an idea for florists and the young men of New York.—*New York World*.

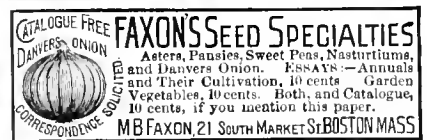
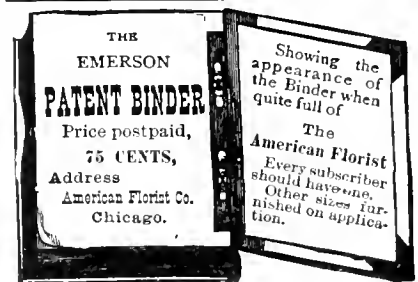
MONTREAL.—At the last meeting of the Florists' and Gardeners' Club the thanks of the club were tendered to H. A. Siebrecht, New York, for the special premiums, consisting of a full set of the Dictionary of Gardening, copy of the Orchid Growers' Manual and \$25 in cash, offered at the March exhibition; also to Peter Henderson, New York, for a complete set of his publications.

BEGONIA SCHARFFII.—A correspondent of the *Gardeners' Chronicle* describes this begonia as the most magnificent of the genus and predicts that it will be generally cultivated when better known. He adds: "To those who are

unacquainted with it we might contrast it with *B. metallica*, though it is in every way superior to that species. It bears enormous fine heads of flowers, which last a long time in perfection, and has a strong constitution. Cuttings should be inserted when the growth is somewhat firm, and taken off about four or five inches in length."

The Nurserymen's Convention.

The fourteenth annual meeting of the American Association of Nurserymen will begin at Chicago, Ill., June 5, 1889. Railroad tickets for the round trip, from any part of the United States and Canada, may be secured by any person, whether a nurseryman or not, at a rate of one-third fare for the return trip. For circular giving full particulars about securing reduced railroad fare, etc., apply to Chas. A. Green, Sec'y., Rochester, N. Y.



PANSIES.

Outdoor grown plants from best imported German Imperial Prize seed, \$1.25 per 100; \$1.00 per 1000, delivered at express office on receipt of price. Also home-grown seed first year from above stock, by mail, 25¢ for 25c. Please write address very plainly.

C. F. OSBORNE & BRO.,
FREDONIA, Chautauque Co., N. Y.

Cannas, mixed varieties, strong roots . . .	Per 100
Caladium Esculentum, 1 to 2-in. bulbs . . .	\$ 2.00
" " 2 to 3-in. bulbs . . .	1.50
Amaryllis Formosissimum (bloomers) . . .	2.00
" Johnsonii (bloomers), 1, 2, 3 & 4 . . .	5.00
Assorted Geraniums, dbl. & spl. 4 in. pots. . .	5.00

W. P. BRINTON, Christiana, Pa.

THE HORTICULTURAL TIMES

AND

COVENT GARDEN GAZETTE.

THE BEST POPULAR GARDENING PAPER IN ENGLAND.

ANNUAL SUBSCRIPTION \$1.75, POST-FREE.

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GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.

TO THE TRADE.

	Per 100
ROSES Marechal Niel, from 1 in. pots	\$ 4.00
" " " from 2 in. pots	3.50
" Perle des Jardins, from 2 1/2 in. pots	5.00
" Bon Silene, from 2 1/2 in. pots	4.00
" Niphetos, from 2 in. pots	4.00
" Solfaterre, from 2 in. pots	3.50
" Isabella Sprunt, 2 in. pots	3.50
" Mme. Chas. Wood from 2 1/2 in. pots	5.00
" Mme. Masson, from 2 1/2 in. pots	5.00
" La France, from 2 1/2 in. pots	4.00
" La Reine, from 2 1/2 in. pots	4.00
Ampelopsis Veitchii, from 2 in. pots	3.00
Ipomoea grandiflora (Moon Flower), 2 1/2 in.	4.00
Aucuba Japonica Variegata, from 4 in. pots	12.00
Ficus Elastica, 4 in. pots	\$3.00 per doz in.

Also a large assortment of Clematis and Roses from 4 and 6 inch pots. Prices on application

SIDNEY TUTTLE & CO.

Bloomington Nursery, BLOOMINGTON, ILL.

CALLAS.

	Per 100
Good plants, 3 inch	\$ 5.00
" " 5-inch	12.00
SMILAX, 2 inch	3.00
ANTHERICUM, in 2 inch pots	3.00

JOHN BREITMEYER & SONS,
Detroit, Mich.

1000 HYDRANGEA OTAKSA.
Rooted Cuttings, from sand bench at
\$1.00 per hundred, and

10,000 RUNNERS
of the Double HARDY VIOLET, at
\$2.50 per Mille.

HORTICULTURAL ESTABLISHMENT.
GEO. CLASSMAN, Sing Sing, N. Y.

RETAIL FLORISTS

Secure a quantity of the handsome supplements mailed with December 15 issue and present them to buyers of flowers. No better advertisement of your business could be devised than the numerous handsome illustrations it contains. We have printed several thousand extra copies with blank spaces on the title page where you may print or stamp your business card, and will supply them at the following rates, cash with order:

25 Copies for	\$ 3.00
50 " "	5.00
100 " "	9.00
200 " "	16.00
300 " "	20.00
400 " "	23.00
500 " "	25.00

AMERICAN FLORIST CO.

54 La Salle Street, CHICAGO.

SURPLUS STOCK FOR SALE.

	Per 100
500 Echeverias, 8, 6, 2 and 2 1/2 in. pots	3.00
Violets Swanley White, large clumps	2.50
" " " runners	1.00
" " " " runners	2.50
" " Marie Louise, double purple clumps	2.50
" " " runners	1.25
Roses Catherine Mernet and Bougere Tea, 2 1/2 in. pots	4.00
Roses 2 year old unnamed vars, all monthlies	10.00
Sweet Alyssum, double and single	2.50
Geraniums best sorts, unnamed, 2 and 2 1/2 in.	4.00
Double Petunias best sorts, unnamed, 3 in.	6.00
Verbenas best sorts, unnamed, 2 in. pots	2.50
Fevertew, 2 in. pots	2.50
Eucharis Amazonica	\$1.50 per doz.
Fuchsias, best sorts, unnamed, 2 & 2 1/2 in. pots	2.50

Cash must accompany orders from unknown parties.
M. TRITSCHLER & SONS,
HYDES FERRY GARDENS, NASHVILLE, TENN.

PLANTS AND ROSES.

H. P. Roses, 1 year, open ground, \$9.00 per 100. Our Selection.
Moss Roses, 1 year, open ground, \$12.00 per 100.
Tea, Moss, H. P. and other varieties at \$4.00 to \$8.00 per 100.
Hydrangeas Hortensis, Otaksa, T. Hogg, 4 in., 5 in., 6 in., \$10.00, \$12.00 and \$15.00
Carnations, newest and best varieties, from 3c. to 6c.
Ivy, English, 20 inches long, \$3.00 per 100.
Amaryllis Formosissima \$8.00 per 100.
Canna, \$2.50 per 100.
Chrysanthemums, best sorts, \$3.00 per 100.
Crape Myrtle, \$5.00 per 100.
Palms, 18 var. Dracenas, Pandanus, 4 varieties.
A very large stock of everything at lowest prices. Send for my catalogues.

Send for circular of the VENTILATING MACHINE that received the best mention by the Florists' Committee at New York, August, 1888.

E. HIPPARD, YOUNGSTOWN, OHIO.

Surplus Stock at \$2 per 100.

Campanulas pyramidalis and garganica; Asclepias tuberosa Centaureas candidissima, Clementis and gymnocarpa; Chrysanthemums Golden Feather, inodorum plenissimum and Eclipse; Myosotis Victoria (true) and palustris; Alyssum saxatile—yellow perennial sweet alyssum; Lobelia Emperor William; Gypsophila muralis; Delphiniums, mixed double hybrids; Vincas alba, rosea and pura; Wahlbergia grandiflora; Pansies from the very best strains.

At \$1.00 per 100: Tomato plants, Mikado optimum and 6 other best varieties; Peppers all the leading varieties.

At 50 cents per 100: Transplanted plants of early cabbage and celery.

At 25 cents per 100: Late cabbage plants from seed bed.

CHARLES LONG,
Box 417, ALMA, MICH.

We can now furnish in any quantity desired Debit and Credit Tickets of which we give below samples reduced one-half in size.

DEBIT.		Date	
		July 10 1889	
		John Smith	
100	Verbenas	3	-
50	Geranium	4	-
		7	-

CREDIT.		Date	
		July 10 1889	
		Richard Roe	
500	4 inch pots	5	-
17 1/2	2 1/2 " "	3	-
		10	-

The debits are printed in black and the credits in red, so they can be readily distinguished. They are put up in blocks of 100; 50 of each, placed back to back; thus but one block will have to be carried. By means of these tickets an entry of a sale or receipt of goods can be made anywhere—in the house or in the field and afterwards filed. Tickets for each transaction in your business will make data from which a book-keeper can readily work. With this simple and easy means of keeping a record of your business can you afford to neglect so important a matter?

Price of Tickets, postpaid, 100, 20c.; 200, 35c.; 300, 50c.; 500, 75c.; 1000, \$1.40.

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

SNOWBALL.

The Celebrated Late White

CHRYSANTHEMUM.

Without question the best for December cutting. (See AMERICAN FLORIST for December 15, 1888, page 204).

\$1.50 per dozen; \$10.00 per 100.

M. A. HUNT,

Gilbert P. O. TERRE HAUTE, IND.

HUGHES'

SOLUBLE FIR TREE OIL.

FLORISTS AND NURSERYMEN SHOULD NOT BE WITHOUT IT.

Unsurpassed as an insecticide, it kills effectually all parasites and insects which infest plants whether at the roots or on the foliage, without injury to tender plants, such as ferns, etc., if used as directed. Used as a WASH it imparts the gloss and lustre to the foliage which is so desirable on exhibition specimens.

It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

E. GRIFFITH HUGHES,

Operative Chemist,

MANCHESTER, ENGLAND.

PRICE: (Put up in 1 gallon tins, \$3.25) in New York
(Put up in 1 quart tins, \$1.00)

TO SECURE THE GENUINE ARTICLE, see that each tin shows a white label with red trade mark, full directions how to use, and the name of

AUGUST RÖLKER & SONS,

Sole Agents for America.

New York Depot 41 DEY STREET.
Mention American Florist.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

An Order.

We have published several ludicrous orders received by florists, but one sent us by Messrs. A. M. & J. B. Murdoch, Pittsburg, rather takes the lead of any yet noted. For the amusement of our readers we give it below:

I am going to send for some of your beautiful flowers I have no money but will have soon I saw that you sent them on Application I saw this in the

Presbyterian baner I want the red double velvet fuchsias and the large single red want flowers that

Will bloom all the year I want silver white leaves double geranium flowers I want both kinds single flowers to geraniums and some pretty vines for the parlor Just a few flowers of Geraniums Any Honey Suckle vine English Ivy leaf geranium

My address Blankville Madison County Pa Send my flowers to Long view is the nearest Depo to me adrees

I want my flowers growing in pot Blooming when you send them to me want aught blooming Crocus have you any night blooming Moon flowers Amooose rose

Send my lowers to Long view Depo one dollars one dollars Worth Freight Please send my Flowers by

Any hajcynth flowers Smith I want Ice plan: Jenne Smith

Forcing Bulbs for Fall Delivery

If you will make up a list of your wants and send now, we will book same at importation rates. We are now making up our regular commissions to our growers in France, Germany and Holland, and will take your orders—large or small—at a slight percentage over cost if you will club with us to save freight, etc. REMEMBER, we handle no second grade bulbs. Our experience of many years in importing bulbs, enabling us to procure the very best quality at the lowest prices. If you intend to avail yourself of this opportunity, write us at once, giving varieties and quantities and we will furnish an estimate by return mail. We handle the following varieties in quantity—all splendid forcers:

- Lilium Harrisii, first class 5 to 7-inch. " extra 7 to 9-inch. " Candidum, best North of France grown and Longiflorum, Bermuda grown, 5 to 7 1/2 in. Roman Hyacinths, White, extra, 11 to 15 centimetres. Roman Hyacinths, Pink, extra, 11 to 15 centi. Paper White Narcissus, extra. Double Yellow Narcissus, Von Zion. Trumpet Major Narcissus, true. Freesia Refracta Alba, first size. " extra large. Tulips, La Reine, white. " Belle Alliance, scarlet. " Yellow Prince, yellow. " Kaiser Kroon, crimson, yellow edge. " Cottage Maid, pink and white. " Van Thal, scarlet. " Double Duke of York, rose and white. " Princess Alexandra, red and yellow. " Imperator Rubrum, scar. [The three last named are splendid forcing vars.] Lily of the Valley, best Hamburg pips. Spiraea Japonica, fine clumps.

JOHN GARDINER & CO. Philadelphia

R. VAN DER SCHOOT & SON, HILLEGOM, HOLLAND.

LARGEST GROWERS OF HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

Headquarters for Forcing Bulbs. Wholesale Importers should write us for prices.

Mention American Florist

TUBEROSES.

Some well ripened Bulbs, first class, warranted true to name:

DOUBLE ITALIAN, DWARF PEARL, DIAMOND PEARL, AND EARLY SINGLE FLOWERED.

at \$2.00 per 100; \$10.00 per 1000. Special rates on lots of over 5000. Second size bulbs at half the above rates. Offsets of all the above suitable for growing large bulbs first season, at 50c. per 100; \$2.00 per 1000. In lots of over 5000, at \$1.50 per 100. Smaller sizes, 25c. per 100; \$1.00 per 1000.

Variiegated Foliage, beautifully striped green and white, single and early flowering, \$3.00 per 100; \$20.00 per 1000. Offsets \$1.50 per 100; \$5.00 per 1000.

JOSEPH W. VESTAL. Little Rock, Arkansas.

FORCING BULBS FOR FALL DELIVERY.

NARCISSUS

and Other Popular Bulbs for Spring Forcing

SPECIAL PRICES UPON APPLICATION.

- Narcissus Albicans, large creamy white trumpets; one of the best. Narcissus Bicolor Empress, the Queen of the bicolors, immense trumpets, a great favorite. Narcissus Bicolor Grandis, similar in color to Horsfieldi; but with stouter flowers and much later. Narcissus Bicolor Horsfieldi, a great beauty and fine for cutting. Narcissus Bulbocodium, "Yellow Hoop Petticoat," fine strong bulbs for forcing. Narcissus Bulbocodium Citrinus, pale sulphur flowers, and very early. Narcissus Emperor, the largest; immense stout flowers of a rich yellow. Narcissus Golden Spur, immense deep golden yellow flowers, and wonderfully early. Narcissus Henry Irving, rich yellow, large bold trumpets. Narcissus Incomparabilis Cynosure, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white. Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting. Narcissus Major, true, one of the best forcing sorts, large yellow trumpets, similar to maximum. Narcissus Nobilis, a first class variety for florists, free and early. Narcissus Obvallaris, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance. Narcissus Odorus Campernelle, the well known Campernelle Jonquil, very strong bulbs. Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting. Narcissus Pallidus Præcox, the earliest of all, forces very freely, single, sulphur colored trumpets. Narcissus Rugilobus, true, large yellow trumpet, very free and very early. Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing. Narcissus Von Sion, true, the double deep yellow daffodil. Freesia Refracta Alba, large bulbs for forcing. Freesia Leichtlini, a nice contrast to preceding and forces well. Gladiolus The Bride, flower pure white, fine for forcing. Helleborus or Xmas Roses in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

THOS. S. WARE, HALE FARM NURSERIES. TOTTENHAM, LONDON, ENGLAND.

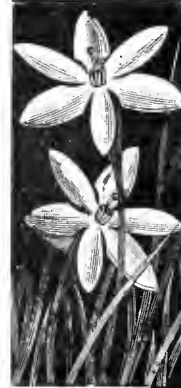
THE BEST ARE THE CHEAPEST IN THE END. Dutch Bulbs.

B. J. LOMANS, BULB GROWER, HAARLEM, HOLLAND.

H. A. DAACKE, AGENT FOR U.S. and CANADA, 22 DEY ST., NEW YORK.

Special Price List of Forcing Bulbs upon Application.

- We offer 7000 Bulbs for \$200, all first quality as follows, f. o. b. cars New York. One-third cash with order. 1000 Hyacinths named, in 30 single and 10 double sorts. 1000 Hyacinths, early forcing, red, white and blue, colors separate, single or double. 1000 Hyacinths, bedding, red, white and blue, colors separate, single or double. 1000 Tulips, in 30 single and 10 double sorts, with names and colors. 1000 Tulips, mixed. 1000 Crocuses, in 10 sorts, with names and colors. 1000 Crocuses, mixed, white, blue, striped and yellow, colors separate. Half the quantity, or 3,500 Bulbs for \$105.



- Asparagus Tenuissimus, 2 1/2-inch pots, \$4.00 per 100. " 3-inch pots, extra, 6.00 " Cinnamon Vine, strong roots, 3.50 " Ipomea Palmata, strong garden roots, 15.00 " Milla Biflora, \$25.00 per 1000, 3.00 " Ampelopsis Veitchii, 4.00 " Echeveria Secunda, 5.00 " Clerodendron Balfourii, strong, 5.00 " Dracena Indivisa, 3-inch pots, strong, 10.00 " Euphorbia Splendens, 3-inch pots, 6.00 " Cape Jasmine, 3-inch pots, 10.00 " Gardenia Radicans Variegata, 3-inch pots, strong, 10.00 " " 4-inch pots, 12.50 " Hydrangea Thomas Hogg and Hortensis, 2 1/2-inch pots, 5.00 " Adiantum Capillus Veneris, 2 1/2-inch pots, strong, 4.00 " Begonia Metallica, 4-inch pots, 12.50 " Russelia Juncea, 2 to 3 feet, 15.00 " Dahlia Roots, 50 sorts, 8.00 " " pot plants, 5.00 " Amaryllis Formosissima, 6.00 "

MICHEL PLANT AND SEED CO., 718 Olive St., ST. LOUIS, MO.

Glass, Putty, Pumps, Hose, Syringes, Flower Pots, Labels, Galvanized Hinges with Brass Pins, Thermometers, Lawn Mowers, Pruning Shears, Hooks and Knives, Watering Pots, Bellows, Screw Eyes, Lawn Rollers, Garden Seats, Lawn Sprinklers, Wheelbarrows, Tarred Paper, Glass Cutters, Tools, Etc. Etc.

ERNEST A. GIBBONS, P. O. BOX 3623, NEW YORK CITY.

BENJAMIN RIMBAUD,
HORTICULTEUR,
QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD. TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

- PAPER WHITE NARCISSUS,
- DOUBLE ROMAN NARCISSUS,
- LILIUM CANDIDUM,
- ALLIUM NEAPOLITANUM,
- FREESIA REFRACTA ALBA ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

Mention American Florist.

AUGUST RÖLKER & SONS,
44 Dey St., NEW YORK,

Supply the Trade with

SEEDS, BULBS,

And all kinds of

FLORISTS' SUPPLIES.

Price List Free on application with business card.

BERMUDA LILIES.
LILIUM HARRISII

(Warranted TRUE.)

Send for Trade Price List.

SIEBRECHT & WADLEY,

409 5th Ave., NEW YORK.

Caladium Esculentum SPECIAL

Bulbs 1 1/2 to 2 inches, per 100, \$2.50
2 1/2 to 3 inches, " 5 00

J. C. VAUGHAN,
146 & 148 W. Washington St., CHICAGO.

Delegates to the next convention will travel via the **Pullman Car Line**

TO AND FROM Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address **E. O. McCormick, Gen. Passenger Agent, Chicago.**

BULBS.

"**C. H. JOOSTEN** is entitled to **FIRST PLACE** on First Quality Hyacinths and Tulips."

Signed: **WM. G. BERTERMANN,**
ERNST ASMUS,
ALEX. DALLAS, } Committee

Report of the Committee on Exhibits at the Exhibition of Bulbs and Plants at Nilson Hall, New York City, August 21-23, 1888, under the Auspices of Society of American Florists. See printed Report, page 164.

[**BULBS GROWN AND IMPORTED BY P. VAN WAVEREN JZ. & CO., HILLEGOM, HOLLAND.**]

For Catalogues, address

C. H. JOOSTEN,

Importer of Bulbs and Plants.

3 COENTIES SLIP, NEW YORK.

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G. V. VAN ZANTEN & CO.,
HILLEGOM, HAARLEM, HOLLAND.

ESTABLISHED 1862.

Wholesale Growers of Dutch Bulbs.

LARGE STOCKS. CHEAP PRICES.

Price list now published and may be had free upon application direct to us, or to S. ASCHER, 16 and 18 Exchange Place, NEW YORK.



A GOOD STOCK OF 1st QUALITY PEARL TUBEROSE BULBS, at \$16 per thousand.

Choice LILIUM AURATUM and RUBRUM, GLADIOLUS, CANNAS, CALADIUMS, Etc.

Special lists of BULBS, BASKETS, Etc., on application. LYCOPODIUM, \$5 00 per 100 pounds. WREATHING, \$5 00 per 100 yards.

JAMES KING, SEEDSMAN,
170 Lake St., CHICAGO, ILL.

E. KRUYFF, BULB GROWER, (ESTABLISHED 1810.)
SASSENHEIM, near HAARLEM, HOLLAND.

Wholesale Catalogue now ready. Estimates given. Special rates to large buyers. TULIPS, HYACINTHS, ETC., furnished last season have given splendid satisfaction to everyone.

The newly introduced **SMALL DUTCH HYACINTHS** for CUT FLOWER TRADE in place of **ROMANS** proved among prominent florists in this country very satisfactory last year, and has already created quite a demand this year. Therefore early orders for these Bulbs are solicited. Price List mailed to all applicants. Numerous testimonials about the Small Dutch Hyacinths have been collected, and are at hand for investigation by

E. WILTERDINK, Sole Agent for the U. S. and Canada.
116 Pearl Street, NEW YORK.

F. E. McALLISTER,

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Garden and Farmer. **Requisites** Such as Baskets Immortelles, Grasses, Mosses, Boquet Papers, Pampas, Plumes, etc. **Bulbs** For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

Heating.

In the issue of April 15 Enquirer asks: "How many feet of 1½ or 1¼ inch pipe is necessary for each 100 cubic feet of air space to maintain temperature of 60° with the thermometer 20° below zero outside."

In reply, we have a house 100 x 26 feet three quarter span, 10 feet high at highest point, which with average height at 8 feet gives 20,800 cubic feet air space. We heat said house readily all ordinary winter nights by steam with the following arrangement of pipes: Rising from the boiler with a 3-inch pipe to within two feet of the under side of the ridge, then running same size (3 inch) suspended from under side of ridge to farthest end of the house, then drop on each side by 2-inch pipe to branch T's fitted with valves from which four lengths of 1¼-inch pipe on each side of the house (front and back) and one end, receive the live steam and return the condensed water back to the boiler. The cold water ahead of the steam all the time.

The system, in short, carries the steam at once to the highest point, thence to the farthest point and then returns through the two runs of four 1¼-inch pipes to the boiler, 108 feet 3-inch pipe, 900 feet 1¼-inch pipe. To maintain temperature asked for (60° with temperature 20° below zero outside) would have one line of pipe additional on each side, say 200 feet. Our valves are so arranged that we can use one pipe on each side or the entire number, as may be needed.

Danvers, Mass. E. & C. WOODMAN.

"A GREAT HELP IN CUT FLOWER WORK, AND HAS BEEN GREATLY NEEDED."

So say many of FLORAL DESIGNS, concerning which more can be learned by addressing

J. HORACE McFARLAND, Harrisburg, Pa.

M. M. BAYERSDORFER & CO.

56 N. 4th St., Philadelphia, Pa.,

Manufacturers and Importers of

BASKETS AND FLORISTS' SUPPLIES.

FULL LINE OF METAL WREATHS.

NEW SWEET SCENTED CHRYSANTHEMUM

"Nymphaea." A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. As so the *creme de la creme* of older varieties. Send stamp for plate of "Nymphaea" and Catalogue.

H. W. HALES, Ridgewood, N. J.

IMPORT AND EXPORT NURSERIES.

F. A. RIECHERS & SOHNE, A. G.

HAMBURG, GERMANY.

Immense stock of Azalea India, Camellias, Lily of the Valley, Palms and Dwarf Roses.

PRICE LIST ON APPLICATION.

SURPLUS

Stock of Rooted Cuttings of Carnations of PORTIA, JEANETTE, CENTURY, EDWARDSII, PRES. OE GRAW, KING OF CRIMSONS, ALEGATIERE, CHESTER PRIDE, ETC. All healthy and well rooted. Address

JOS. RENARD,

Chester Co., UNIONVILLE, PA.

Also 1000 Smilax in 3-inch pots at \$2.50 per 100.

NOTICE.

Owing to a change in the postoffice, my address is now

CHARLES HARTWIG,

417 Woodside Ave., Lake View, CHICAGO, ILL.
Please address mail accordingly.



PRIMULA OBCONICA

Fine 2 inch pot plants \$10 per 100, \$70 per 1000. 250 at thousand rates.

	Per 100	Per 1000
Primula Floribunda . . . per doz. 60c.	\$ 4 00	
Coleus, 2-inch pots, in variety	2 50	\$20 00
" Rooted Cuttings	1 00	8 00
Geraniums, 2-inch in variety	3 00	25 00
" Mme. Salleron	3 00	
Alyssum	2 50	
Chrysanthemums in variety	3 00	30 00
Fuchsias in variety	3 00	
" Storm King	5 00	
" Phenomenal	8 00	
Pelargoniums	8 00	
Canna French Hybrids, named	15 00	

I. N. KRAMER & SON,
MARION, IOWA.

"MUMS."

I have yet to dispose of 54 plants of MRS. ANDREW CARNEGIE, at \$2 00 each, or six for \$10 00.

Also the following sterling kinds by the HUNDRED: Grandiflorum, Boyer, Triumphant, Cullingfordii, Moonlight, Langtry, John Thorpe, Gloriosum, Christmas Eve, at \$3 00 per hundred.

40 of the Finest Varieties for all purposes, including the best of New Ones of last year, at \$8 00 per hundred.

REMEMBER, these are what I say, the finest varieties.

STOCK IN THE FINEST POSSIBLE CONDITION.

JOHN THORPE,

ROCKLAND CO.

PEARL RIVER, N. Y.

SMILAX.

Fine stocky plants, once reset, ready for immediate delivery. These are a bargain, and I would respectfully solicit a trial. Price per 1000, \$6 00; per 100, 85c.

PANSIES.

I attend personally to the selecting and improving of my strain by the continual addition of the best only from noted European and American growers, and can guarantee that they will give satisfaction.

Plants in bud and bloom, \$12.00 per 1000. Smaller size, some in flower, \$6.00 per 1000.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

THE

GEM OF THE SEASON NEW WHITE CARNATION THE BRIDE,

Sport from Grace Wilder; flowers identical with the parent as regards form and size; more vigorous in growth. It is the earliest, most perpetual and fragrant Carnation in cultivation. It originated with me four years since.

PLANTS READY MAY 1st, at the following prices:

50 cents each; 3 Plants for \$1.00.
\$3.00 per doz.; \$15.00 per 100.

J. TAILBY & SON, WELLESLEY MASS.

Mention American Florist.

HIGLEY'S TRADE LIST OF SEEDS, PLANTS, BULBS AND FLORISTS' REQUISITES

Now out. If you do not receive one, send for it. Address

HENRY G. HIGLEY,
CEDAR RAPIDS, IA.

THE NAME OF

THE BAY VIEW NURSERIES

HAS BEEN CHANGED TO THAT OF

SEVEN OAKS,

And with largely increased facilities for growing all kinds of decorative plants, we hope this spring to be able to add the names of many new customers to our list.

Write for special prices on AGAVES, CACTI and YUCCAS suitable for summer decoration of grounds.

R. D. HOYT,

BAY VIEW, FLORIDA.

ROOTED CUTTINGS OF CARNATIONS,

Grown in large quantities for the trade, of the Wm. Swayne and L. L. Lamborn. Having the largest quantity, outside of the originator, for sale at the following prices: \$5 00 per 100 Buttercup, \$3 00 per 100, \$25 00 per 1000 Grace Wilder, Grace Fardon, Sunrise, Springfield, Century, at \$2 00 per 100, \$15 00 per 1000 Pinze's White, Peter Henderson, Snowdon, Lady Emma, Phila. Red, Scarlet Queen, Portia, Seawan, Chester Pride, Petunia, Hinsdale, Duke of Orange, Quaker City, \$1 50 per 100, \$12 50 per 1000, Miss Jolliffe, Scarlet Gem, De Graw, Edwardsii, White La Purite, \$1 25 per 100, \$11 00 per 1000.

Plants now ready. Also florets of the above varieties at \$1 50 per 100.

Cash must accompany all orders. Orders booked now for Spring delivery.

ISAAC LARKIN, Toughkenamon, Chester Co. Pa.

HEADQUARTERS

for the Jersey Yellow Nansemond Sweet Potato Plants, \$1 50 per 1000 in May, \$1 00 in June.

FREEMAN HURFF, Swedesboro, N. J.
Mention American Florist.

SOUVENIR DE WOOTTON

WE SHALL KEEP OUR ORDER BOOK
OPEN FOR JUNE AND JULY.

Don't miss getting a hundred plants or more. We shall advertise the Cut Roses of WOOTTON, commencing in November, in all the leading newspapers, etc. in the United States. The demand for the flowers will be large. It has already been favorably noticed at the White House, and in Washington society circles. Philadelphia rallies at the cry of Wootton; and Mrs. Childs' rose will be the fashion for the winter of 1889-90. Large growers make a mistake in not growing a house of it.

Prices as before advertised. Plants in good condition delivered in June and July,

By **C. STRAUSS & CO.** P. O. Box 422 WASHINGTON, D. C.

Also for Sale by

JOHN COOK, 318 N. CHARLES STREET, BALTIMORE, MD.

MESSRS. STRAUSS & CO., still have for sale a good stock of young plants of all the leading Roses for commercial growers.

LOOK THIS OVER.

We offer the best 13 CHRYSANTHEMUMS ever offered in a lot. The best 6 Market GERANIUMS. The best 6 COLEUS, And the best 12 VINES suitable for Baskets, Vases, Window Boxes, Etc., Etc.

CHRYSANTHEMUMS—Belle Paulle; Gloriosum, L. Canning, La Purite, Lady Shade, Lady Selborne, Mons. C. Hubbert, Madame Cruzette, Madame C. Andignier, Moonlight, Peter the Great, Rosinante (pompon), Source d'Or, strong plants, from 3-inch pots. Set of 13 for \$1.00.

GERANIUMS—Cygnet, single white; Olive Carr, single pink; Double General Grant, bright scarlet; Emile Lemoine, splendid dark scarlet; J. Y. Murckland, pink and white; Maggie Hallock, salmon pink, 5-inch pots, 15c. each, \$1.50 per doz. 4-inch 10c. each, \$1.00 per doz.; 3 inch 5c. each, 50c. per doz.

COLEUS—Gem, Golden Bedder and Purple Prince. Splendid for ribbon lines or massing. Garland, Garfield and Mrs. Geddes, can't be beat as individual specimens. Strong, beautifully colored, from 3-inch pots, 5c. each, \$4.00 per 100 25 at 100 rates.

VINES—Cissus discolor, Double Sweet Alyssum (large flowering), German Ivy, Nasturtium (3 varieties), crimson, scarlet and buff, beautifully shaded with red, from cuttings. Panicum Variegatum, Tradescantia Vitata and Multicolor, finely colored, Torenia Asiatica, Vinca Major Variegata and Elegantiissima, extra fine, from 3-inch pots, 10c. each. Set of 12, \$1.00. Special offer equal quantities of each, \$5.00 per 100.

Ipomoea grandiflora (Moon Flower), TRUE, 2 inch pots, \$4.00 per 100; 3 inch, extra strong, \$6.00 per 100. 25 at 100 rates. You can make 200 per cent. on this in 30 days.

Ampelopsis Veitchii, 2-inch, strong, \$5.00 per 100. 25 at 100 rate.

Also on hand in splendid condition, a full collection of desirable Florists' Stock at low rates.

CLARK BROS.,
FLORISTS,
WASHINGTON, D. C.
Mention American Florist

N. F. MCCARTHY & CO.,

Horticultural Auctioneers.

SALES

Every Wednesday and Saturday,

10 A. M. from APRIL 27 to JUNE 19.

Ship goods by freight and notify us. Rates of Commission, 12½ per cent. for selling; 3 per cent. for advertising.

AUCTION ROOMS, Pearl and High Sts.

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SAMUEL HATCH & CO.

Real Estate and Gen'l Auctioneers,

Office, 9 Congress St., BOSTON, MASS.

Will hold their Spring sales of Plants, Shrubs, etc., at the spacious salesroom, No. 75 FEDERAL STREET, every

Wednesday and Saturday,

at 10 a. m., from May 1st till June 15th.

ALWAYS A GOOD ASSORTMENT FROM THE LEADING FLORISTS.

FLOWERING SHRUBS, BULBS, &c.
F. V. BULLER, Bloomington Ill. Doz. 100
H. P. and Moss Roses, strong 2 yr. dormant, \$1.50 \$10
H. P. and Monthly Roses, in pots to bloom, 1.50 10
" " young plants 50 3
Bulbus, whole roots, choice named, 1.50 10
" unnamed, 1.00 6
Ampelopsis Veitchii, Boston Ivy, fine plants 1.00 6
Downing's Gooseberry, hardy, prolific, reliable 30 3
Peonies, choice assortment, named kinds 1.50 8
Grapes, 10 choice, Niagara, &c. 2 yr. \$2. 1 yr. 1/2
price. Clematis, Greenhouse and Vegetable Plants

BOSTON CUTTING DOUBLE ASTERS

New Seed of this very fine strain for florists; PURE WHITE, CLEAR PINK, BLUE; each, separate; per cz. \$1.50; ¼ cz. 40c., ½ oz. 25c., postage paid.

NOW IS THE TIME TO SOW.

R. & J. FARQUHAR & CO.,

16 and 19 South Market St.,

BOSTON, MASS.

CEREUS GIGANTEUS

We have a large stock of this magnificent Cactus. Planted in tubs they make fine ornaments for the porch as well as the lawn. All sizes can be furnished—from finches to eight feet. Larger plants shipped direct from our Cactus Ranch, thereby saving freight.

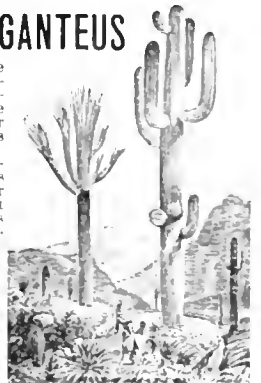
700 OTHER CACTI
Sample Box of 10, \$1

Wholesale list free

Illustr. Catalogue 10c

A. BLANC & CO.,

PHILADELPHIA



Hydrangea Otaksa.

Good, strong, stocky plants, 3-inch pots, by 100 and 1000.

Gabriel Marc,

WOODSIDE, L. I., N. Y.

Are They All Good Mousers?

"Too many cats that catch no mice," remarked a florist friend who accompanied the writer through the greenhouses of another florist who had amongst his plants much unsalable and useless stuff. And how many places have much space occupied by plants of this description! How many there are in the trade who err in this respect! Have you any of these "cats that catch no mice"? If so you can do no better work than to cart them to the rubbish heap at once.

But how many more there are who have the correct kinds but feed and care for them so poorly that they have but little value as "mousers"! Is every one of your cats catching its full quota of mice? If not, your methods are wrong, and they should be righted at once if you expect to keep up with the procession. If you want to lag behind, be always in debt and never amount to anything, all you have to do is to sit down and declare that the only reason your competitor has better stuff is because his houses are more advantageously situated, etc., etc.

Quality is going to win and poor quality is going to lose in the game we are now playing. If you have an idea that "it don't pay to grow extra good plants on account of the additional labor necessary," then the sooner you quit the better for there is positively no money in growing poor stock.

**NEW DWARF POMPON DAHLIA
PRESIDENT HARRISON.**

This Dahlia is a clear yellow, very large flowers, and a free bloomer.

Prepared to take all orders now. Plants ready to ship May 15, at 50 cents each, \$3.00 per dozen. All orders must be cash.

Two of the NEWEST and FINEST COLEUS, 10 cents each.

**EDWARD MORAT,
719 4th Ave., Louisville, Ky.**

500,000

Strong Runners of VIOLETS in perfect health of

MARIE LOUISE, NEAPOLITAN and SWANLEY WHITE at \$10.00 per thousand.

For larger quantity, price on application.

JOS. RENARD,

Chester Co., UNIONVILLE, PA.

ROSES, Texas, Per 100 \$3.00 to \$5.00
H. P. " " 4.00 to 6.00
PANSIES, transplanted, 1.00 to 2.00
CENTAUREA Candidissima, 4.00 to 6.00
" Gymnocarpa, 3.00 to 4.00
DRACENA, 3 1/2 to 4-inch pots, 12.00 to 15.00
ROOTED CUTTINGS, Chrysanthemums, Begonia Metallica, Geraniums, Coleus, etc. 2.00
Will exchange for Verbena Cuttings.

W. W. GREEN, SON & SAYLES, Waterdown, N.Y.

CANNAS.

We offer fine bulbs, named sorts, as follows
ATROPURPUREA, DISCOLOR, INDICA,
LE CLERE, MARSHAL, VALLIANT,
LEONARD, LILLE, POLEN, NE
PLUS ULTRA, at \$1.00 per hundred;
\$30.00 per thousand. ADDRESS

J. W. VESTAL, Litt'e Rock, Arkansas.

CHINESE PRIMROSE SEED

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An eastern potter favors us with his views as to the comparative value of hand and machine made pots. He says:

"The process of manufacturing pots by hand is by far the best, as a hand-made pot is always porous and is the best for a plant to grow in, and is the strongest that can be made, and the pores are not closed as in a machine made pot. The hand made pot is constructed of pure clay and water; and the clay has to be worked thoroughly before it is formed into pots, by a skillful potter. The machine made pot is made by a machine that has a revolving mould under a heavy pressure, which closes the pores of the clay. The clay is ground in a strong clay mill and comes out in small balls at the bottom of the mill. The ball is just the size required for the pot. The ball is then placed in oil, and then put into the pot machine, and a heavy lever is brought down, and the pot is formed. A good machine will make from 5,000 to 10,000 pots in a day, requiring one man and a boy to operate it; while a good turner, on hand made pots, will not exceed 1,000 per day; yet, he gets more pay for the 1,000 than the man and boy do for the 10,000. If any florist wants a porous pot he will have to buy those made by hand. It is the only pot that is porous. A machine pot has a tight body, and the oil that is used in the manufacture, forms a glassy surface and is like a piece of glazed stone ware. The way to tell a porous pot is by testing. Take three pots of each kind, hand and machine made, seal the hole in the bottom and fill with water, and see for yourself which will absorb the water the quickest. All manufacturers of flower pots would be willing to adopt the 'Standard' sizes, but not the ones with the heavy rims, as they cannot be made by hand, with profit."

The ideas above expressed are probably still held by some florists as well as potters. But in view of the fact that a majority of our best growers use the machine made pot, and that their plants are never excelled by any advocate of pots made by hand, the claim of superiority for the latter certainly can not be maintained. And the machine made pots are the cheapest.

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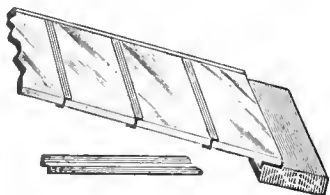
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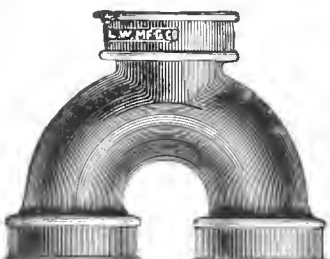
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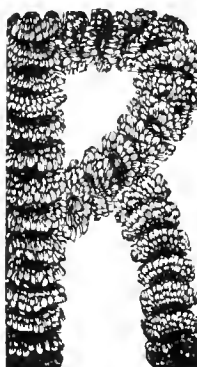
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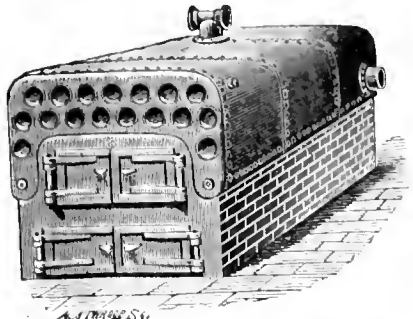
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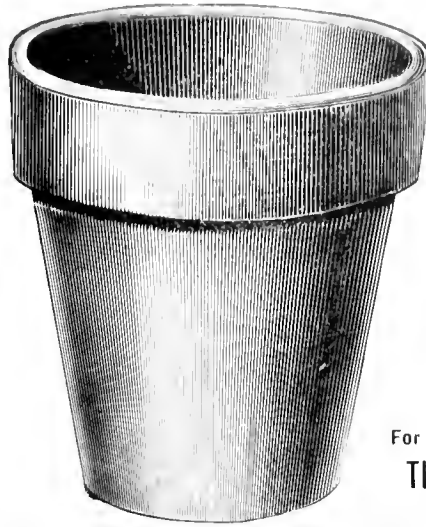
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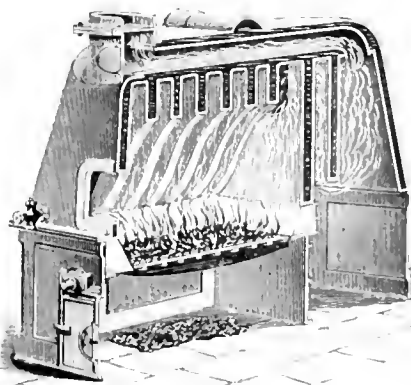
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Tuberose Bulbs.

In a lot of tuberose bulbs received from an advertiser of "1st quality" bulbs, very few were more than 4 inches in circumference, probably one half were not over 3 1/2, and they averaged but 2 1/2 inches in length. Now, I would not call a tuberose bulb first quality if not 4 inches in circumference and a nice long tapering bulb from 3 to 4 inches long. Should we not establish a standard of some kind? A. C.



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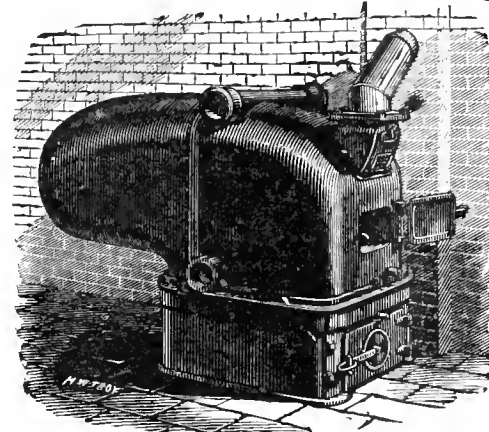
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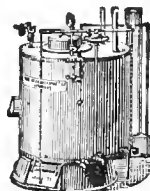
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THE AMERICAN FLORIST



America is "the Prow of the Lessel; there may be more comfort Amidships, but we are the first to touch Unknown Seas."

Vol. IV.

CHICAGO AND NEW YORK, JUNE 1, 1889.

No. 92.

THE AMERICAN FLORIST

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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Now is the time if you have not already done so, to do some fine bedding for the good of the trade. Some well designed, well kept beds in handsome yards centrally located in your city will be such an advertisement as you can almost afford to make free of charge, though that would not be necessary. Have you not surplus stock which can as well be used for such purpose as wasted? Put in a few such beds even at cost and see to it that they are well kept. It is bread cast upon the waters that shall return.

ENGLISH growers report the daffodils and other bulbs blooming very poorly this spring and attribute it to the cool spring and cold wet summer of 1888. Also that Holland hyacinths and tulips forced the past winter did poorly while bulbs from the same stock bedded out have done well.

Society of American Florists.

One of the most important undertakings of the Society of American Florists, and possibly the most far-reaching and beneficent movement in the interest of horticulture in America up to the present time, is the work entrusted to the committee on "Nomenclature," which was appointed at the New York meeting of the society.

It will not be necessary to repeat at this time the objects whose accomplishment is sought by the formation of this committee, nor the details of the work it is expected to do, as the matter has been frequently alluded to in the various horticultural journals and much has already been written regarding it, so that the trade in general is well informed as to the state of affairs which has made the undertaking necessary, and the special reforms which it is expected will be brought about. But it will interest the trade and more especially the members of the society and the friends of horticulture everywhere to know that the committee has got down to work and has already mapped out the plan of campaign.

A full meeting of the committee was held in New York city on Wednesday, May 15th. The meeting lasted all day and a large amount of work was accomplished. From the nature of the case much of the investigation and labor of the committee must be done privately. This fact is pretty generally known and it is a pleasure to announce that in the opinion of those members who have been most watchful there never was less fraudulent substitution and misnaming of varieties than at the present time, so that it would appear that the knowledge of the existence of such a committee has had a salutary effect. That the work may be thoroughly and systematically done sub-committees have been appointed whose duty it will be to collect data and receive correspondence relative to the special section of plants to which they have been assigned. These sub-committees are instructed to report to the full committee at Buffalo in August next. It will facilitate their work much if all plantmen and others knowing of instances where varieties are being sold under wrong names, or where any misunderstanding or misrepresentation in regard to species or varieties is known to exist will address the chairman or any member of the following sub-committees:

On roses—Robt. Craig, Philadelphia, Pa., Edwin Lonsdale, Chestnut Hill, Philadelphia, Pa., Ernst Asmus, West Hoboken, N. J.

On carnations—A. E. Whittle, Albany, N. Y., John Thorpe, Pearl River, N. Y., Wm. Falconer, Glen Cove, N. Y.

On chrysanthemums—John Thorpe, Pearl River, N. Y., Wm. Falconer, Glen Cove, N. Y., J. M. Keller, Bay Ridge N. Y.

On bedding plants—G. J. Grant, 54 La Salle street, Chicago, Ill., Robt. Craig, Philadelphia, Pa., J. M. Keller, Bay Ridge, N. Y., A. E. Whittle, Albany, N. Y.

On orchids—David Allan, Mt. Auburn, Mass., Benj. Grey, Malden, Mass., Wm. Falconer, Glen Cove, N. Y.

On palms, ferns and like delorative plants—C. D. Ball, Holmesburg, Pa., John Burton, Chestnut Hill, Philadelphia, Pa., W. R. Smith, Washington, D. C.

It will not be out of place to mention here that from present indications the convention at Buffalo in August next will be the best the society has ever held.

The number of members attending should be large as Buffalo is very central, and we are assured of very low rates of fare on all the railroads. The full programme of the meeting will be published not later than July 1. Members are reminded that the dues this year are advanced to \$3, which amount may be forwarded to the secretary at any time.

The secretary's address at convention time will be Tift House, Buffalo, N. Y.

WM. J. STEWART, Sec'y, S. A. F.

New York Notes and Comments.

A new florists' store on a prominent New York thoroughfare has a neat sign in the window bearing this legend: "12 Roses for 50 cents. You can pay \$1 for the same, but the quality will be none better." There is a slight flavor of the dry goods trade about this sort of placard; of course it is perfectly legitimate, but still it is a thing we should hardly care to see carried out very much, or viewed with much favor. If it ever becomes popular, we may next expect to see among the florists' signs reading thus: "Extraordinary bargains in hyacinths," "Bankrupt stock of Easter lilies to be sold below cost," or "Great values in Mermets—must be sold." This would be likely to live up trade wonderfully. But it is noticeable that few of the leading retail florists try to do much advertising, trusting to gain new patrons through their regular customers. Even the sending out of a monthly circular is viewed with disfavor by many, especially during the dull season, when prices quoted must necessarily be low.

The annual influx of spring outdoor stuff is affecting prices as usual; it seems to be so largely used now. Weigelia, mock orange, outdoor lilac and peonies are much liked; they can all be used in decoration with much better effect than finer flowers. The large pink peonies are specially to be admired, but of course they are cheap and lessen the demand for finer stuff. A few flowers of the tulip tree (Liriodendron) are to be seen on the street, also Magnolia glauca, but the favorite wild flowers seem to be the marsh buttercups, which are always sold by the bushel, and the pink azaleas, usually sold

under the name of honeysuckle. These wild flowers are to be seen in some of the florists' stores, but a good many do not care to handle them.

Will there be so many bulbs grown next winter as before? Certainly during the past season the returns were not such as would create many millionaires among bulb growers, and they all gave the impression that they were forcing bulbs simply for love of humanity and the commission men, without any thought of filthy lucre. The preceding year returns were so poor that most of the growers talked of withdrawing. They did not, however; it looks as if each and every man planted an extra batch, under the impression that the other men wouldn't attempt it at all; consequently the crop was large, the demand small, and the profits might be represented by a minus sign. Lilies will always be in vogue, and there must always be a demand for Roman hyacinths, but tulips have seen their best days, and Dutch hyacinths are not wanted at any price. The blue Romans seem to be but little grown now, but Mr. Klunder says he regards them as very useful; they give a tint very difficult to obtain in cut flowers, and possess the gracefulness so conspicuously lacking in Dutch hyacinths.

The need for a standard of size in tuberoses bulbs is mentioned by "A. C." in the last issue. A similar reform seems needed in Dutch bulbs; many were the complaints last winter of their decreasing size, especially in the case of Romans, as the price of the bulbs was advanced, while the price of the flowers was lessened it seemed rather rough on the growers to be compelled to take smaller and weaker bulbs, which as a rule, only produced one good spike. Some of the growers complain that while the demand for Dutch bulbs has increased, the quality has decreased. The only remedy is an organized effort to fix a certain standard of size and consequent rating, and the growers are certainly strong enough to do this.

The Rock rose (*Cistus*) is an English favorite which is now being tried here; some plants were noted at Henderson's. A pretty thing too; is it going to be a success in our climate? So many of the European favorites fail in our hot dry summers.

Among Mr. May's roses was a climbing Bride, it seemed to be reaching along like a Marechal Niel, and made a very pretty graceful plant. Presumably such a variation would be permanent, and it would make a handsome plant where space was no object.

Prospects are very good for Decoration Day, although a good many misguided people go in for abominations in colored immortelles, indications point to a very large trade in pot plants. The increasing demand for pot plants, as well as loose flowers, is noted at every holiday.

What has become of the grand strains of verbenas we had a few years ago? It is a fact that we rarely now see such fine plants as formerly—it may be the result of constant rust. Properly grown, pinched off or pegged down to form a regular mat of bloom, the verbenas are one of our showiest bedding plants. But is not so well grown as it used to be.

EMILY LOUISE TAPLIN.

Boston Notes.

The May Exhibition of the Massachusetts Hort. Society was, as usual, very attractive. The display of pansies was excellent, particularly those shown by D. Zirngibel. Kennett Findlayson showed nine calceolarias that would be hard to

beat. Some good calceolarias also came from Wm. Martin. Mr. Martin also had a fine specimen plant of azalea, Glory of Sandrigham. J. H. White's exhibit included some good gloxinias, and a fine plant of rhododendron, Duchess of Cambridge.

The only orchids shown were from C. M. Atkinson, but these were all good. A pretty cypas shown by Mrs. A. D. Wood, said to have come from Damarara, was noticeable for its beautiful foliage and from the fact that nobody could be found to name it.

The collections of native flowers from Mrs. P. D. Richards and E. H. Hitchings were very complete, and seemed to attract as much attention as the cultivated varieties. First and second prizes for baskets of flowers were awarded to Mrs. A. D. Wood and Mrs. E. M. Gill, respectively.

The azaleas at the Hunnewell place are in their prime, and are well worth a trip to see. The rhododendrons will be in bloom about ten days later. Mr. Harris has been very successful with his orchids this season and now has a large number of fine varieties in bloom. The conservatory is a perfect blaze of calceolarias, roses, pelargoniums, standard wisterias, fuchsias and genistas.

Ned Hatch, the auctioneer, had a picnic recently at his summer cottage at Scituate. A number of congenial spirits among the florists were invited, and, judging from the fabulous tales they tell, they must have been royally entertained.

At the May meeting of the Gardeners' and Florists' Club, the secretary, J. J. Cunningham, gave an interesting account of the construction and decorative features of the new Back Bay Park. The annual excursion is one of the subjects assigned for discussion at the June meeting.

Sam'l Hatch & Co. and N. F. McCarthy are running the plant auctions with great vigor. These sales are held Wednesdays and Saturdays, and the number of plants thus disposed of is almost beyond belief. The prices obtained are in the main good.

W. E. Doyle has been making great improvements on the old Hovey establishment. New houses are taking the place of the old wrecks, and they are filled with a choice and rapidly growing collection of decorative plants.

Temple & Beard, Shady Hill Nurseries, report an enormous trade this season—much larger than ever before. There is plenty of room for such a nursery business as they seek to establish, for New England trade, the field being a good one, and entirely unoccupied as yet.

The market continues somewhat depressed, owing to the overstock of cut flowers.

When June comes in the florists will find enough to do, between the June weddings and school graduations, but just now there is a lull, so that they find time to go once in a while to the base ball game, and to the auction sales, to visit their neighbors, and buy an occasional Louisiana lottery ticket. Some of them seem to have phenomenal luck in the lottery line.

Norton Bros. have sold the mammoth *Dendrobium nobile* to F. Sander & Co., and it has gone to grace Mr. Fosterman's new houses at Summit, N. J.

Jackson Dawson has been divested of his whiskers. He looks twenty-five years younger, and is entirely too handsome to be allowed to go out alone.

Wm. Hamilton, superintendent of the Allegheny Parks, has been visiting the Hub for a few days. W. J. S.

Long Island Plant Notes.

BY WM. FALCONER.

MAY 15TH.—Trees, shrubs and hardy herbaceous plants are now in the same condition, so far as time of blooming and advancement of growth are concerned, as they were on the 27th of May last year.

THE FLOWERING DOGWOOD in the woods was never finer than it is this year.

PLANT GLOXINIAS in a cold frame as you would violets or pansies and keep them shaded from sunshine.

TREE PEONIAS are now in full bloom, and how magnificent! They "live forever," are hardy and at home in any garden.

DAVID ALLAN tells me he had a large lot of peonias and he lifted and forced them and had them in at Easter. Nothing forces better. But for this purpose use the herbaceous and not the tree peonias, the latter are too high priced.

KALANCHOE CARNEA has come up well from seed and I am favorably impressed with it.

SOLANUM JASMINOIDES GRANDIFLORUM is something you should have. And plant it out in summer in a warm sunny place and feed it well and grow it well; if young plants fail to bloom freely the first year, cut them back and lift and pot them next fall, winter them in a cool house and plant them out again next summer. Old roots always bloom better than young ones.

OSTROWSKIA MAGNIFICA sown in February hasn't come up yet.

BEGONIA SCHARFFII, page 478.—I bought a packet of seed and sowed it—well, I shook the paper over the soil in the seed pan, for I didn't see the seed; this was three months ago, but nothing is in sight yet.

CANNA EHEMANNII.—Notwithstanding the vast quantity of it grown during the last few years it is still very scarce.

COBEA SCANDENS ALBA.—I didn't know I had in this plant such a wonderful novelty till I read about it in the European papers the other day.

WHEN THE Japanese hop vine (*Humulus Japonicus*) came out some years ago every seed I sowed grew; last year I bought and sowed some more of it, and only part of the seed grew; this year I bought a few more seed of it and sowed them, but not one has germinated. Guess the original stock of seed will soon be exhausted and then we may get some fresh seed that will grow. But it doesn't matter much, it is little better than a weed of a vine anyway.

ARUNDO DONAX.—Winter before last a good deal of it got winter-killed, but what remained grew bravely during summer; last winter, however, didn't hurt it a bit, and it—both plain green and variegated kinds—is coming up very vigorously. It grows 18 feet high with us.

A HANDSOME GRASS BED.—We have a bed of hardy grasses and which looks very well in summer and fall. At back is *Arundo Donax*, next the zebra-leaved eulalia, then the plain green leaved eulalia, and the variegated-leaved eulalia with *Briza maxima* and feather grass in front. The variegated arundo, gymnothrix, erianthus and some other large grasses are used on the flanks, and I raise a lot of *Pennisetum longistylum* from seed every year to fill about the front.

ANEMONE SYLVESTRIS is blooming freely with me both in the open border and a half-shady place bordering a white funkia bed. Its flowers are white, fra-



SAXIFRAGA CAMPOSI (SYN. WALLACEI)

grant and nearly as large and showy as those of the Japanese anemone, but not produced nearly in such abundance. A native of Siberia and Central Europe, perfectly hardy and a neat and good perennial. Two years ago I raised about a hundred plants from a six cent packet of seed.

HYDRANGEA PANICULATA GRANDIFLORA.—If you want large clusters of flowers next fall your plants should be headed hard back, and even then the young shoots thinned out. And remember that now is the proper time to propagate this hydrangea from cuttings of the young wood.

LILY-OF-THE-VALLEY is now in prime condition with me out of doors. I grow it behind our azalea bed, a belt of it about 150 feet long by 6 feet wide, and on good land that is moderately high and dry, open but sheltered and sunny, and every fall I topdress it with a one to two inch coating of fine, rich manure and let it stay there next year. Here I get all my supply for forcing, and better I know I can not import. In September I get a lot of boxes, 5 to 6 inches deep, together and take them to the lily patch and fill them. I dig up clumps of the stoutest crowns, shake the loose dirt away from them and then and there plant them closely into the boxes. The boxes are then brought back to the frame ground, watered and set closely together till December and they have had a fair freezing when I begin introducing them for forcing. The trouble with this lily patch is that it often gets too dense, and to avoid this the heavy annual cuttings for forcing purposes do it good.

AZALEA AMENA.—Never in indoor cultivation have I known this little evergreen to flower as freely as it does when grown as an outdoor hardy shrub. It

was in its finest estate with us about May 13th. Hardy around New York and southward. We have in one row 125 plants and although on high, dry land but sheltered by neighboring trees, they seem to be perfectly hardy here.

AZALEA OBTUSA is of the style of growth of *A. amena* and in bloom at the same time. It thrives well and blossoms in the greatest profusion with us as a hardy shrub and is the brightest colored of all our azaleas. Parsons says "bright scarlet," well, I'll stop at bright crimson. But it isn't reliably hardy as far north as New York. Mr. Trumpey, under date of the 15th inst (May), writes me. "It (*A. obtusa*) is hardy in sheltered places, but not so hardy as *A. amena*. We have it in flower now, but often it gets killed down to the snow line."

THE GIANT AZALEAS although hardy enough, love shelter from biting winds in winter; our plantation of 2,500 plants shows this very plainly. The northwest corner is exposed to the sweeping winds in winter, and as a consequence the plants are less thrifty than they are at the other end which, although as high, dry and open, is protected against cold winds by contiguous evergreens.

AZALEA MOLLIS has the largest and showiest blossoms, but unfortunately it isn't very hardy. An excellent shrub for pot culture and forcing. Although yellow is the prevailing color, we now have got some handsome shades of orange and flame colors.

ABOUT FORCING azaleas I must be candid: Giant and mollis azaleas can be forced with the greatest ease, particularly for late winter work, but they are expensive to begin with and I do not think as permanent and serviceable for cut flower florists' business as the popular varieties of *A. Indica* are.

HYBRID AZALEAS.—Of recent years some propagators have crossed the mollis and Indian azaleas and raised a handsome race of plants which, although not as hardy as the mollis proper, are excellent for pot culture and forcing and present a large variety of showy shades of yellow and red. There is a flowing freedom about these mollis hybrids that we seldom find in evergreen forms and which is very pleasant and the smallest plants blossom.

RAISING SEEDLING AZALEAS.—Give a florist a coleus, a pelargonium, a rose or a chrysanthemum that he can grow and propagate at lightning speed and he is happy, but the idea of raising azaleas from seed and growing the young plants along for three years before they are saleable is most enough to frighten the stoutest of us. At the same time it will pay a painstaking man interested in this line, but never a dash-along careless man.

THE ADVANTAGE of seedling azaleas over grafted plants is their more vigorous constitution, and this is especially true of the whole rhododendron race. They root better, grow better and are hardier.

Saxifraga Camposi.

This is also known in gardens as *S. Wallacei*, and is certainly by far the most beautiful of the mossy section, not even excepting *S. decipiens* and its near ally, *cuspitosa*. As an edging it is simply faultless, growing closely, and producing its large white flowers in the greatest profusion. As a pot plant liberally treated, I have rarely seen its equal. I find it extremely useful for cold houses, corridors, or windows. Of course, like most of this section, the leaves become brown and dried up as the stem lengthens, but the shoots are as readily rooted as those of a geranium or calceolaria, and do not want even the protection of a handlight, but may be pricked out in a shady place in the open air and watered! occasionally until rooted. By the latter end of autumn they will have made nice plants, and may be potted up for blooming in pots or planted out where required. It is perfectly hardy, and the engraving here given shows what a useful subject it is for the rockery. A native of Greece. —D. K., in *London Garden*.

Arboretum Notes.

The first great burst of spring bloom at the Arnold Arboretum has already passed. Forsythias, Magnolias, Prunus in its many showy varieties, flowering currants and most of the Pyruses are already denuded of their flowers. Among the most effective and popular of the spring flowering shrubs are the lilacs. There are about fifty species and garden varieties in this collection and a large proportion of them are now in bloom. *Syringa Chinensis* is one of the most beautiful and is seen in many shades of color, var. *alba* white with a pale violet eye showing trusses from ten to fifteen inches long. *S. Persica pteridifolia* called the fern leaved variety has handsome finely cut foliage. *S. pubescens* is deliciously sweet, resembling in fragrance the *Daphne*.

One *Prunus*, *P. Cerasus rannunculiflora* is still in bloom, being a very late variety and specially valuable for this reason as well as from its very large and double pure white flowers.

A fine specimen of *Exochorda grandiflora*, one of *Cornus alba*, also a large *Halesia* (Silver Bell), all loaded with white flowers form a beautiful picture.

Many of the *Loniceras*, or honey-suckles are now in full flower. Among the prettiest are *L. nigra*, *L. Tartarica*, in many forms, and *L. Morrowii*, a rare Japanese species with white flowers and exceedingly handsome.

The *Viburnums* are just coming into bloom. One of the best, *V. plicatum rotundifolia*, is highly recommended by Mr. Dawson for forcing. The flower heads are not so large as in some other kinds, but are produced in great quantities. This variety is not quite hardy here.

There are in the Arboretum about forty varieties of *Spiræa*. *S. cana*, a very pretty species, is now in bloom and many others will soon follow. The evergreen *Daphnes*, including the popular *Cneorum*, *Genkwa*, a lavender colored species from Japan, and *alpina*, lemon white from the Swiss Alps and the *Ledum latifolium*, or Labrador Tea, which is also an evergreen, are all in full bloom.

Of the *Berberis* there are about forty varieties in the beds, some of them quite rare. Among the prettiest are *B. Sieboldii* and *B. Thunbergii*, the latter blooming while last year's red fruit still hangs on the branches.

The *Staphylea colchica* ought to make a desirable forcing shrub. The blooms are white, of good size, in large racemes and would be useful as cut flowers in winter.

The *Caraganas* are all ornamental, both in their flowers and in their fine acacia-like foliage. Those flowering now are *C. Chamlagu* with odd pale yellow colored blossoms, and *C. frutescens* whose flowers are of brightest yellow.

Cytisus purpureus is a low growing shrub bearing handsome, rosy lilac flowers and is admirably adapted for rock work. One of the most effective shrubs now in bloom is *Rubus deliciosus*, a variety from the Rocky Mountains having pure white flowers, three inches across and resembling in form the Cherokee rose. Another good white flower is the *Rhodotypos Kerrioides*, a native of Japan. One of the most beautiful spring blooming shrubs recently discovered is *Rhododendron Vasseyii*. The bright rosy flowers are very effective. The first wild roses are just beginning to expand (May 17). W. J. S.

THE PRIZE OF \$100 for the best herbarium of native plants collected from August, 1888 to August, 1889, offered by Peter Henderson at the New York convention, should not be overlooked. At this time a large number of plants may be collected to advantage. It is to be hoped that the competition will be sharp, and that the study of botany by those in the trade will receive a strong impetus therefrom. Competent judges will make the award at Buffalo, in August.

SUBSCRIPTIONS for the AMERICAN FLORIST may be left with any of the following:

Baltimore,	Philadelphia,
Robt. J. Halliday.	Edwin Lonsdale.
Boston,	Evans & Battles.
Wm. J. Stewart.	New York, W. S. Allen,
Cincinnati,	Aug. Rolker & Sons.
Harry Sunderbruch.	C. H. Joosten.
Cleveland, O.,	Siebrecht & Wadley.
E. G. Campbell.	Pittsburgh,
Detroit,	J. R. & A. Murdoch.
J. Breitmeyer & Sons.	St. Louis, Michel Plant
Hamilton, Ont.,	& Seed Co.
Webster Bros.	San Francisco,
Harrisburg, Pa.,	Thos. A. Cox & Co.
J. Horace McFarland.	Toronto, Ont.
Louisville, Ky.,	J. A. Simmers.
George Thompson &	Washington, D. C.,
Sons.	L. Schmid & Sons.

Leaves of Advice From a Limb of the Law.

(For Young Florists.)

v.

Something to show me, have you? Very well, lead the way.

What it looks like? Why, it looks to me very much like the remains of a once thrifty rubber tree. Right am I?

Property of the old spinster Rachel Schuckers is it, and she sent it to you to have it kept under glass for a month or so until it had recovered its health and got rid of its decidedly bilious complexion. And now the old lady threatens suit for twenty-five dollars because it has died on your hands.

I wish you joy. They say that no one comes into contact with Miss Rachel Schuckers without longing for the asbestos overcoats worn by Messrs. Mesbach, Shadrack and Abednego. Excuse me, I didn't mean to gloat over the misfortunes of a fellow man.

Like to hear something about the law of the matter. Good. That's spoken like a sensible man.

Make this a rule of conduct: Never "law away" a single dollar simply because your opponent is surly, ill-mannered and bad tempered.

Now as I understand you, this shrub was delivered to you as a man skilled in the care of plants, thoroughly instructed in the art of developing and encouraging such plant life as is used for decorating and beautifying the interiors and exteriors of human dwelling places. You accepted this "trust," for such it was, and whether you so stated or not you guaranteed to Miss Rachel Schuckers that you would by the use of your glass house in connection with a higher and moister atmosphere do all that man could do to revive and strengthen her rubber tree. Even more than this, your implied contract called for the most skillful watering, spraying and general care.

This is what the law calls a "contract of bailment."

Not use words you don't understand? Don't be too sensitive. I'll make myself clear, and in order to do so I'll now proceed to quote a few words from the writings of my learned ancestor, Sir William Blackstone.

Says Sir William: "A bailment is a delivery of goods in trust upon a contract that the trust shall be faithfully executed."

Now, there are several kinds of bailment contracts, to which I propose if you will kindly stop rattling those pruning scissors, to call your attention in order that you may be the better able to understand the particular kind of contract which you have made with Miss Rachel Schuckers.

The very simplest kind of bailment and one occurring every day of our lives is "deposit," as when you entrust a chattel to some one's care with his consent, for keeping which he is to make no charge.

I need scarcely say that in such cases all the law requires is that the "bailee" or person undertaking the charge should take as good care of the deposited chattel as he does of his own. No more, no less.

Another kind is this: You say to me, "You are going to Squire Blinks, please hand this box of roses to Mrs. Blinks." I accept, but Mrs. Blinks happens to be out and I deliver the box to a servant who, although warned by me to put the box in a cool place, lays it down near the kitchen fire and the roses are ruined. Here you would have no redress against

me. I executed the contract reasonably well. You should have sent your boy with orders to deliver to Mrs. Blinks or bring them back.

Still another kind of contract: You loan me your horse to take a drive. At the end of my journey I give him water when he is overheated and founder him. The law holds me responsible. It was a "gratuitous loan" and I was called upon to use the horse with extraordinary care. It will not help me out to assert that I had often done the same thing with my own horse.

You will notice that thus far I have only mentioned contracts which call for no hire or reward. The very instant the element of pay enters into a contract all is changed.

Take for instance the contract under which I deliver a piece of cloth to a tailor for him to "make up" for me. The implied contract in this case calls not only for requisite skill on his part in cutting, fitting, etc., but also for extraordinary care in the preservation of the cloth from injury, fire or theft. Nothing will excuse him except so-called "acts of God" or public enemies—that is earthquakes, cloudbursts or in case the town was destroyed in time of war.

A person entering into any such "contract for hire," such as those made by a skilled artisan, a common carrier, etc., must be responsible within the scope of his employment. He can't plead the "baby act." What I mean by that? Why, hang out a sign: "All Goods Left at the Owner's Risk."

Yes, you are right. There are some exceptions. For instance, the law now excuses a hotel keeper from this old common law responsibility, provided he puts a safe in his office and gives notice to his guests to deposit their valuables. But a man can't "deposit" his trousers in this iron chest and when this useful garment is found missing in the morning the hotel man must pay up and look as pleasant as possible.

Now, we are in a position to take up your particular case—your contract with Miss Rachel Schuckers. The only question for us to determine is: Have you faithfully performed your trust? If this matter is carried into court and Miss Rachel Schuckers shall be able to show that you accepted this trust without having had any experience in the care of such shrubs, that you watered it too much, gave it too much sunlight or treated it in such an unskillful manner as to kill it, why there will be nothing left for you to do but try and get the money back by a more stringent economy in your household expenses for a few months.

Adam, the first of all gardeners, could have done no more you say?

Good. I believe you. I feel quite certain that you will be able to show that Miss Schucker's rubber tree was "hurt past cure" when it came into your hands.

But one word before I go. In making contracts of any kind, especially when there is the slightest chance for complications or misunderstanding, see that you have a witness to the conversation. Call attention to the condition of the plants and specifically undertake to do no more than you are sure you can perform.

The law holds a man down to his declarations. Therefore be careful. If you have any cause to be suspicious specify in your receipt for the goods what you undertake to do.

The law is foud of emblems. They are very useful too. Take for instance the seal. No deed or mortgage of real estate



VIEW IN THE CONSERVATORY AT FOREST HILL CEMETERY, UTICA, N. Y.

is valid unless the parties executing it set their "hands and seals" to it. This is an important matter; possibly not just at present, but in years to come when you become rich and hold a great deal of real estate it will be well for you to recall this conversation.

Accept no deed or mortgage not executed under the hand and seal of the grantor, which seal should be a round or diamond shaped piece of paper fastened to the instrument by gum or wafer or else a genuine seal, that is, an impression of a carved seal stamped on soft wax. Of course the law varies. In some states only a "scrawl" is called for. A "scrawl" is made by writing the word "seal" and enclosing it within a square or diamond.

You say: How about a corporation? Good. I'm glad you reminded me of corporate seals. Very few people have an idea how a corporate deed differs from a private one. First, the corporate seal should be impressed, not merely fastened by gum or wax, upon the paper of the instrument; and next, the certificate of the notary should not only set forth that the officer executing was personally known to the notary and known by him to be the officer of the corporation, but also that he (the notary) duly examined such officer who stated that the seal was the corporate seal and was affixed by order of the corporation. You see how particular the law is.

When a man can't write his name the cross must be set as an emblem thus: William (his X mark) Stubbs, and Stubbs must lay his finger on the end of the pen while you make this mark of the cross. Such a signature must always be witnessed.

Now, there is another important "emblem" to which I desire to call your attention. The emblem of cancellation. Usually this emblem consists of two or more lines drawn by a pen and ink through the word or words to be cancelled. In deeds, mortgages, bonds, etc. all cancellations must be noted by the notary as having been made "before execution." Always insist upon this. The law pays no heed to cancellations made in pencil unless of course the instrument itself be wholly written in pencil. When you take up any note, bond, mortgage, etc. don't content yourself with merely drawing your pen through your signature. Destroy the signature utterly.

You ask me what the letters *ss* stand for in affidavits and acknowledgements. They stand for the Latin words *scire licet*, "it is lawful for you to know." It's a bit of the old Law Latin and I don't think the omission of these letters would do any harm to a legal instrument.

You must understand that in the administration of the law nowadays judges strive to do substantial justice and refuse to give weight to technical objections unless absolutely necessary. This is most praiseworthy. To make a man begin all over again simply because the notary neglects to date his certificate when a plaintiff swears to a pleading, is not justice. It is the travesty of justice. However, always be on the alert. It is better to be overcareful than to go into court and ask to be excused for making a little slip.

An omitted dollar mark would not invalidate an instrument. It would be within the power of the court to allow

you to prove by outside evidence that "600" meant \$600. The law strives to get at the intent of the parties. So, too, in books of account when put in evidence, the mere misplacement of a debtor or creditor mark ought not to be allowed to work injury to anybody. Nevertheless be exact in small things. It pays to keep your wits about you.

Postmarks often become very valuable pieces of evidence, especially when you are called upon to show when a notice of protest, notice of meeting of creditors or any notice of a thing or things to be done, was mailed. Therefore never destroy an envelope. File it with the letter.

For instance, suppose you receive a check from Doe, Roe or Hoe in payment of a bill of merchandise. You pass it through your bank and it comes back stamped "no funds." When brought to his attention Doe, Roe or Hoe takes the position that he had a balance, but that you carried the check in your pocket for several days and hence must suffer the loss of your own negligence. Now you see how important a point it becomes to show on what day you received the check, for possibly there was no letter of advice covering it, or merely a "mem" without date.

In making up accounts be careful how you make use of the ditto mark. Be explicit. Make yourself plain even at the risk of taking the polish off your style.

The law dislikes abbreviations. Spell words out. Don't put *1 M* for *1000*. In your business especially there should be no contractions in your invoices and statements. You may know that "1 d. chrys." stands for "one dozen chrysan-

themums," and "1 d. jacs" for "one dozen Jacqueminots," but you don't make out bills for yourself. You make them out for strangers and the older you get the more you'll understand that when men pay out money they want to know what it is for. The days have gone by when men were so honest that no "scraps of paper" were necessary to be exchanged. But really it is not a question of honesty. UNCLE BLACKSTONE.

First Mention of Moon Flower.

I think Mr. Henderson must be mistaken when he says he has used the name Moon Flower in his business years before 1881. I have referred back to his catalogues to 1859 and find no reference to the plant under that name. His first mention of the plant is in his seed catalogue 1872, under the name "Ipomæa Bona-nox, violet, West Indies." In 1875 and after, it has the prefix "Evening Glory." In 1860 B. K. Bliss just catalogued it under Bona-nox, white, and *I. grandiflora*, large white. Washburn & Co. in 1866, and onwards; and Hovey & Co. of 1868 in their seed catalogues of the times give the English name "Good Night." C. L. Allen, 1869, has *Nil. grandiflora* and Bona-nox, both credited as West India productions. Hovey & Co. of 1870 gives "Grandiflora, fragrant, white, six inches in diameter." All of which tends to show that as you remark in the last number, catchy, popular names with printer's ink is the thing. For here we have seedsmen cataloguing for years a plant, or plants, attracting no attention, but when it comes out with a flourish in seed catalogues as "Bona-nox," or "Evening Glory," or "Good Night"; in plant catalogues as "Noctipbiton," "Evening Glory," or "Moon Flower," for years, until this year of grace it settles down placidly in both seed and plant catalogues as *Ipomæa grandiflora* as the "Moon Flower," "Evening Glory," or "Good Night" in English. Why, the name's the thing; and if people will not buy without, they must be tickled until they do, even if the plants are naughtily mixed up in names. EDGAR SANDERS.

Storing Pots.

How the empty pots do accumulate now during the bedding season! And alas how many of them are broken at this time by being carelessly piled! While you may be unable at this season to secure additional competent help to assist in bedding you can easily secure the services of a boy or boys to gather up, sort over and store away the pots as they accumulate, thus saving a great deal in breakage as well as getting them out of the way of your men.

Undoubtedly the best method of storing empty pots is that practiced by Peter Henderson & Co. They are packed into soap boxes, a strip being tacked on each end so that the boxes do not set tight together, and the boxes piled, all containing one size of pot together. In this way the boxes and not the pots bear the weight, and the pots themselves are not handled again until used, as they can be carried right in the box where desired. By this method much rehandling—entailing labor and breakage—is avoided, and the expense is slight.

We believe that the universal adoption of this method of storing pots would save thousands of dollars to the trade annually, and any method which will aid in reducing expense of production is certainly worthy of consideration in these days of sharp competition in plant growing.

Hydrangeas for Easter Plants.

The popularity of the hydrangea as an Easter pot plant continues unabated and in fact may be considered on the increase, and a few cultural notes obtained from Mr. W. K. Harris, the well known and very successful Philadelphia grower, will undoubtedly be welcomed by many.

To secure a plant in an 8-inch pot for next Easter the young plants should have been propagated in February. Plants propagated in June will make good plants in 4 and 5-inch pots for next spring's flowering, but it would be a little difficult to get them in for Easter, as that holiday comes about a month earlier next year than it did this. And with plants propagated so late it is difficult to get the wood sufficiently ripened to flower at Easter. These late propagated plants should be grown on under glass all summer in order to get sufficient growth on them.

Plants propagated in February are grown on under glass until May 1, or a little later, when they are plunged outside in frames in spent manure or hops, and kept well watered. They need but little care except watering until the early frosts in the fall. When frost comes cover the frames with sash, ventilating freely and entirely removing the sash from the frames during the day when weather permits. The object is to thoroughly ripen the wood which must be done to ensure flowers. Plants that may be apparently very well grown, but which have not had the wood sufficiently ripened, will not set flower buds.

Before severe cold weather sets in remove the plants to a cold house. The plants will by this time have cast their leaves. They should be watered sparingly, taking care not to overwater, but at the same time not allowing them to become quite dry. This is the critical period, as upon careful treatment at this time depends the flowering of the plants. Previous to being shifted into 6 inch pots the plants should be topped to make them bushy. The plants should never be crowded at any period of their growth, as if once drawn they will never make shapely plants.

The plants should be placed in a warm greenhouse about ten weeks before the date at which you want them in bloom. For the first two weeks the temperature should be about 50° to 55° at night, increase to 60° to 65° for the next four weeks, and to 65° to 70° for the remaining four weeks. When in heat hydrangeas are very subject to red spider and should in consequence have frequent and hard syringings during that time, especially when in the higher temperatures. The plants should begin to show flower buds prominently in four to five weeks before the date they are wanted, and as buds begin to show the growths should be staked into the shape you wish the plant to be when flowered.

Hydrangeas require plenty of room in order to make a shapely plant, and they should never be crowded. When in an 8 inch pot each plant should have a space of about fifteen inches square, in fact they should be given this space as soon as staked. As this room is occupied at a season when it is not required for bedding plants it can the more easily be afforded.

The secret of success in securing a large crop of plants in the same state of development at a given date, such as Easter, lies very largely in carefully and frequently sorting the plants, bringing into

more heat any which are lagging, and placing back into a cooler temperature any which are coming too fast. In fact from the time the plants are placed in heat they are moved continually. Too much care and attention can not be paid to this matter as upon it depends whether your crop shall be fit to place on the market at a time when you can easily sell all at good prices or at a time when there shall be but a limited demand at lower prices.

At the Easter season but a short time past, well bloomed hydrangeas sold in Philadelphia at wholesale in 8-inch pots at \$12 per dozen, in 6-inch pots at \$6 per dozen. Such a crop brought in at the right time is a very profitable one, especially as the houses are cleared out at such an early date, that the space can be utilized for bedding plants, thus securing a double crop from the same space.

Hydrangea Otaksa is the kind most largely grown for the purpose.

Plant Notes.

ROSE MADAME LAMBARD.—Dudley & Sons, of Parkersburg, W. Va., complain that the buds "rot off without opening during cloudy weather." Think it best for outdoor bedding.

CHRYSANTHEMUMS.—I would like to ask chrysanthemum growers which three varieties they would select if confined to three kinds, one white, one pink and one yellow? L. LINEGAR.

Cairo, Ill.

ABUTILON GOLDEN FLEECE.—This is probably the best yellow abutilon for a market plant. It makes an exceedingly compact well shaped pot plant, the yellow blooms are of good size and very freely produced. It is also excellent in the fall and winter.

GERANIUM WHITE VESUVIUS.—I would like very much to know the origin of the geranium White Vesuvius. Is it a sport? I have one that has one branch bearing bright orange scarlet florets and pure white ones both in the same truss; also some florets part white and part red.

A. S. PARSON.

OLD YELLOW PINE FLOORING which can frequently be obtained where buildings are being torn down makes one of the best materials for the bottoms of greenhouse benches, and at slight cost. Being old and thoroughly seasoned, with an occasional coat of whitewash it will outlast almost any other lumber.

NARCISSUS POETICUS DOUBLE.—Replying to our correspondent Aug. S. S., we would say that the true form of *Narcissus poeticus* double is no longer in the trade. The variety *Alba Plena odorata* is sometimes called Double Poeticus, but it is not and has not the markings of that sort.—ED.

SOIL.—Too many florists make no provision for protecting their soil pits from the weather. A cheap roof over them costs but little and is more than a convenience. The soil is then in condition for use in all sorts of weather, and there need be no delays in filling benches owing to the soil being too wet to handle conveniently. It is attention to such details that reduces the running expenses of greenhouses and that assist materially in increasing the profits.



CŒLOGYNE CRISTATA

Cœlogyne Cristata.

The engraving is from a photograph of a grand specimen plant of this very useful orchid in the collection of Mr. Erasmus Corning, Albany, N. Y., which at the time it was photographed had open 608 flowers on 112 spikes.

The value of this orchid to florists for the production of cut flowers has been frequently noted in these columns, and it would seem that nothing could be more convincing of its free blooming qualities than our illustration. But of course it should not be overlooked that the plant is a large specimen, bloomed under the most favorable conditions and that the care and skill of one of our ablest orchid growers have been lavished upon it.

We are indebted to Mr. F. Goldring—under whose care the plant is—for the photograph from which the illustration is engraved.

White-Flowered Cinerarias.

Those who grow extensively for sale are well aware that there is by far the greatest demand for white flowers, and at no time more so than at Easter. There are also a considerable number of private gardens where there is a great need for white-flowering plants. In either case any addition to the number of species or

varieties of white-flowered plants is heartily welcomed, and for this reason I venture to call attention to the merits of white-flowered cinerarias. As yet English raisers do not appear to have been successful in raising and fixing the strain of a really good white variety, or it may be they have not attempted to do so, and it has been left to a Paris firm of seedsmen, Messrs. Vilmorin-Andrieux & Co., to take the lead in this respect. Judging from what I have seen of their strain of white cineraria, it is a thoroughly good one and likely to become very popular. The plants are of good branching habit, the flowers medium-sized, well formed, the florets being pure white and the disc of a bluish tint. So much do I value the strain that I intend to grow it extensively for next winter and spring decoration, a band of it fringing a mass of mixed colors being certain to attract admiration. Good white cinerarias are to be met with among English strains, but they are comparatively scarce and are apt to become finely edged with color, all those we possess having quite recently changed in this manner. I am only too well acquainted with the fact that single cinerarias are not serviceable in a cut state, but I have noticed that the white forms when used in wreaths last quite long enough, and

are very "taking" in appearance. In this district pot plants of a white or nearly white variety sell readily at Easter for church decoration, and are appreciated at any time. Double cinerarias, though less beautiful, are more durable in a cut state, and I have good reasons for asserting that the time is not far distant when a good double white variety will be available for general cultivation, perhaps raised from seed, and most certainly by the method of propagation by suckers.—*W. Iggleden, London Garden.*

Market Geraniums.

A large Philadelphia grower of market plants finds that the following kinds of geraniums are the most valuable for that purpose.

White Swan, double white; Fairy Queen, double pink; Queen Olga, single pink; La Pilote, double scarlet; Bruanti, semi-double bright red; Mrs. Hays, double delicate pink; Baron Duranteau, double rich velvety crimson; S. A. Nutt, double dark crimson; Cygnet, single white; Alphonse Daudet, single salmon pink.

BEGONIA AMELIE BRUANT will probably be of considerable value as a market plant. It is in the way of Sandersonii but better as a market plant.

News Notes.

FRANKLIN, PA.—Jos. Molck & Co. have started in business and built a house 100 x 30.

SPRINGFIELD, MASS.—Miller Bros. have left the employ of N. J. Herrick and opened a flower store.

MARION, IOWA.—I. N. Kramer & Son lost 6,000 feet of glass by hail on the morning of May 16. No insurance.

ABILENE, KAN.—Mrs. S. H. Bagley's place was struck by hail May 16; 1,300 feet of glass and many plants were destroyed. No insurance.

BONNER SPRINGS, KAN.—A severe hail storm struck H. H. Kerns' place on May 23. Almost his entire stock of plants and a large amount of glass was destroyed.

NEW YORK, MAY 18.—The market is loaded with flowers. Roses sold to-day at from \$2 to \$4 a hundred, and in large lots as low as \$5 per thousand. The weather is that of August rather than May and many people have left town for summer resorts earlier than usual in consequence.

FLOWER FESTIVALS were held at the following points: Atlanta, Ga., May 14, San Jose, Cal., May 8, San Francisco, Cal., May 15 to 17, Little Rock, Ark., May 17, Erie, Pa., May 22, New Britain, Conn., May 21. The San Francisco Show was an excellent one. The display of rare palms and ferns being one of the finest ever seen on the coast.

THE Connecticut Valley Florists' Club, with headquarters at Springfield, Mass., was organized April 17 with C. E. Clarke president; Adolphus Mieliez, vice-president, and W. F. Gale, secretary and treasurer. All florists and gardeners in the valley are invited to join. Meetings are held on the first and third Monday evenings of each month, at 8 o'clock.

MILWAUKEE, May 24, 1889.—A hail storm visited Oconomowoc, Wis., two days since and smashed the greenhouse and plants of Mr. Sylvester. He has sent for the blanks of the Hail Insurance Association. J. T. Bartlett, who has his glass insured escaped. Moral, insure your glass against hail.

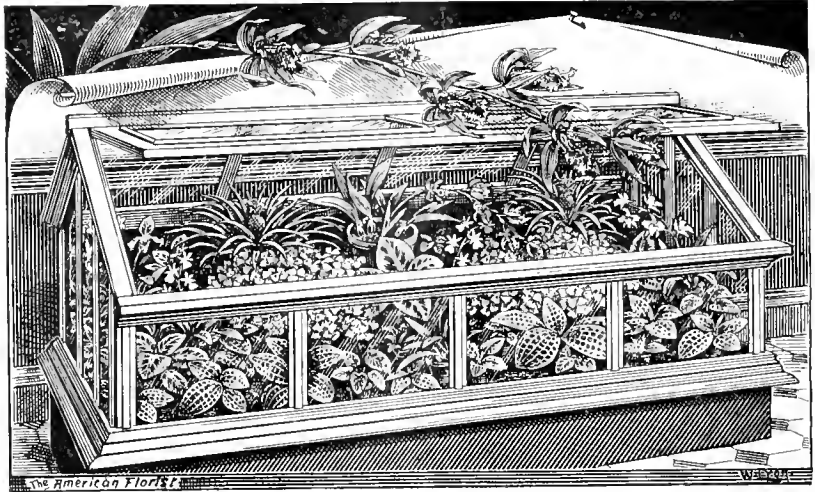
C. B. WHITNALL.

PHILADELPHIA.—A recent wind storm did some damage to florists here; at Mr. Edwin Lonsdale's place at Chestnut Hill the windmill was blown over on to a greenhouse and damage was done at other places. Mr. D. D. L. Farsou, secretary of the Pennsylvania Hort. Society, has been appointed superintendent of Horticultural Hall also. Mrs. Robert Craig is quite ill. Spring plant trade opened with a rush and bids fair to exceed that of previous seasons. Cut flowers are very plentiful and prices consequently low.

Hail Notes.

Secretary Esler writes as follows: "The greenhouses of the Oak Grove Cemetery Company at La Crosse were hit by hail on May 17th. Loss slight. Insured in the Florists' Hail Association. Hail insurance is getting a boom. Applications are coming in faster now than at any time since our organization, which, by the way, is now two years old on June 1st."

By the way, how is it that some of the prominent members of the S. A. F.



WARDIAN CASE IN THE FORM OF A MINIATURE GREENHOUSE

living at Lake Forest, who have attended most of the Annual Conventions and have often been offered Hail Insurance, are now keeping so still since the heavy hail storm at that point a short time since?

Chicago.

J. A. Schindler has built an office and show house 20x60 feet in front of his Marion Place greenhouse. F. Kirchoff will also build an office at his North avenue stand.

Mr. Alfred Edler has opened a retail florist store at 208 North State street.

Mr. J. A. Pettigrew, superintendent of Lincoln Park, has just completed a large house for aquatics, of which a large collection including the *Victoria regia* has been arranged for. The late improvements in this park would surprise the members of the S. A. F. who were so delighted with it two years ago.

Wardian Case in the Form of a Miniature Greenhouse.

The case shown in the illustration was used by Siebrecht & Wadley, New York, at their last orchid show for the exhibition of tender stove plants which are ordinarily injured by the exposure incidental to an exhibition.

A Wardian case of this kind is very convenient for a florist who keeps but a few stove plants, and there is an occasional demand for them from amateurs. The cost of cases of the style shown is from \$10 to \$25 according to size and finish, and should bring from \$25 to \$100 when filled with plants.

Dendrobium Wardianum.

A beautiful group of this charming dendrobe was recently observed in the rich and well known collection of W. S. Kimball, Esq., Rochester, N. Y. It was surprising to see even the smallest plants crowded with its noble and showy flowers, which clearly indicated its floriferousness when properly managed. Among this display a magnificent specimen was very conspicuous, carrying on long pendulous bulbs no fewer than 170 well developed blossoms; rarely is such an example with this number of flowers met

with, and Mr. Geo. Savage, the gardener, deserves great credit for the successful way he has managed this plant, which alone was well worth journeying to see.

Dendrobium Wardianum is one of the finest Burmese dendrobes and has been introduced some thirty years, but from that time until recently was only obtainable at a very high figure; latterly, however, large importations have been made and the price so reduced that it may be purchased by the humblest cultivator. Its blossoms make their appearance as early as November and December and where a number of plants are grown, flowers can be had right along until May or June. For cutting purposes it has already proved a valuable orchid and is rapidly gaining great favor with florists. The individual flower often measures four inches across and is of good substance, having broad white sepals and petals tipped with rich amethyst purple, the lip also is large and open, bright golden yellow, with two dark purple blotches at the base. They are borne in clusters, three and sometimes four together, on almost the entire length of the bulbs and remain four and five weeks in good condition on the plant provided a cooler temperature is given while in bloom. No one possessing a greenhouse having a temperature ranging from 60° to 65° at night with a day temperature of 70° to 75° should be without this orchid.

Its growing period is during the summer months, therefore the temperature named can be obtained with little difficulty. They succeed best in baskets or pans suspended from the roof of the house, in equal proportions of peat and sphagnum and good drainage. While growing they delight in light syringing overhead on bright days, which strengthens the growths and prevents thrips and other insects from making their appearance; after growth is fully completed it will then be necessary to remove them to a much cooler and drier atmosphere to thoroughly ripen them before flowering. The best season for potting is immediately after the blooming season is over, before new roots present themselves, otherwise with the greatest care they may be injured and consequently check the plant for a considerable time.

Summit, N. J.

A. DIMMOCK.

Daffodil Notes.

I suppose we owe a good deal of the revived interest of this old and common spring flower to the "aesthetic craze," another proof that although many things are carried to absurd lengths, yet their advocacy leads to some benefit, and leaves a residuum behind which somewhat atones for the extravagance of its advocates. The sunflowers we did not thank them much for bringing to the front, but the favor bestowed on the daffodil has done good service, although it does seem a strange thing that flowers so easily cultivated and with so many beautiful varieties should have been so neglected. Amongst those who have ministered to the increased taste for the daffodil has been Mr. James Walker of Whitton, and the fine collections which he has exhibited at the Royal Horticultural Society's shows have shown to how large an extent they have been cultivated by him. In visiting Whitton I was first shown into the sheds where large quantities of the golden flowers were being got ready for the morning market; they were being neatly tied up in bunches, and would come under the hammer of the auctioneer at an early hour the next day. Along with them were considerable numbers of the bright scarlet flowers of *anemone fulgens*, but the great mass of flowers was furnished by the daffodil, and owing to the different times of flowering the season is considerably prolonged. Thus at the time of my visit some of the earlier flowering varieties, Emperor, Empress, Sir Watkin, were nearly over, but other beautiful varieties were in flower, or coming into full beauty. The collection at Whitton is grown on raised beds about 4 feet wide, and side by side may be seen all the principal sorts in cultivation, and comparisons can be made between sorts said to be identical. The soil is a rich loam, and probably would be too wet were it not for the system of raised beds, for I believe it is very generally admitted that the daffodil likes a dry soil—i. e., a thoroughly well-drained one. If this be the case it does not mind a good rich loam. The foliage was very fine, and with that peculiar glaucous tinge which gives a large quantity of them such a pleasing appearance as the wind sweeps over them.

I learned here that the earliest of all the large flowered daffodils was Ard-Righ, but it was over of course, as was that splendidly colored flower Golden Spur. Princeps is another early variety which had passed. Grandis is another fine flower, later in bloom than Empress, which it much resembles; the lip of the cup is much recurved and is very striking. Michael Foster is another of the fine bi-color daffodils, with very large yellow trumpet and sulphur perianth.

While many of the Trumpet daffodils were over, those of the Leeds and Barri Incomparabilis sections were in full flower, and although not quite so showy as the trumpet flowers, yet for elegance of form and brilliancy of color they are not to be surpassed. Thus in the incomparabilis section such grand flowers as Mary Anderson and Princess Mary of Cambridge were in full flower, the former—which also goes in some catalogues as Single Orange Phoenix—the divisions were pure white, and the cup a bright scarlet, a beautiful contrast of color. Princess Mary is a large white flower with a very large expanded orange cup, very distinct from any other narcissus and most durable for cutting. Then there were Albert Victor and Sir Watkin,

which is without doubt the largest of the incomparabilis group, but there were but few flowers of it left, as it is rather an early variety of the Barri group. Conspicuous is the most striking, the divisions sulphur white with orange cup richly stained with rich orange-scarlet, a most remarkable variety. Maurice Vilmorin and John Stevenson were also very pretty. Stella is also a grand flower of the incomparabilis section, which must not be overlooked, although it had passed at the time of my visit. The Leeds section was in full force. This is a very pretty group, although perhaps not so showy as some of the others. Ianthe is one of the latest daffodils to flower, and is very beautiful. Katherine Spurrell has very broad and overlapping segments, white with bright yellow cup; and Gera, a model flower, divisions white, cup white changing to primrose. The Nelson group is not only pretty in itself but valuable on account of the lateness of its flowering. Aurantius is a lovely variety, the divisions white, with a broad straight cup of bright yellow margined with orange scarlet, but it is scarce at present. —*D.* in *Journal of Horticulture*.



PYRUS BACCATA.

Forcing Hardy Shrubs.

In these days of glut and low prices many of our rose growers are looking about for something which they can get a reasonably sure crop from, with a fair profit on their investment.

There is no doubt that hardy shrubs properly handled can be grown for the market profitably, as pot plants as well as for cut flowers, and the flowers of many varieties are so beautiful, fragrant and keep so well that their introduction to the flower buying public must be a simple matter. The accompanying cut is drawn from a photograph of a grafted plant of *Pyrus baccata*, var. *floribunda*, shown by Jackson Dawson at the February meeting of the Gardeners' and Florists' Club of Boston. The scions were cut out of doors on January 7 and grafted on the same day by the method known as side grafting. On February 17 they

were in bloom. The specimen represented in the cut was in a four inch pot and about eighteen inches high.

WM. J. STEWART.

THE COMMITTEE ON NOMENCLATURE did well in dividing the work before it and placing each division in the hands of a sub-committee. The ground to be covered is so extended that it is doubtful if effective work could be done otherwise. But even with this division the best results can not be obtained without the assistance of all interested in the work of the committee—and who in the trade is not? Therefore every one should consider it his duty as well as privilege to send to the chairman of the committee or the chairman of the sub-committees any information he may have bearing on their work. If you know of any plant which is known in your locality by two or more names do not fail to place the matter before the committee. It will cost you only a postal card and a moment's time. Don't wait! Do it now! If more convenient to mail it to this office, do so and we will see that it reaches its proper destination.

GRAND HAVEN, MICH., May 27, 1889 — I send you a few sample blooms of Germania and Sensation, two varieties of carnations which, though late, are doing splendidly with us, and as yet we consider them the best of their colors. The clear color and fine form of Germania will be hard to surpass, though we have several new yellows for trial during the coming winter.

GEO. HANCOCK & SON.

The blooms were very fine. Michigan is making a great record in carnation growing, and Detroit must look to her laurels or Grand Haven will take a front place.—ED.

S. F. M. Walker, of Maysville, Ky., sends us some good blooms of seedling semidouble geraniums from seed of his own growing. The colors are quite distinct, but the trusses are not heavy. We should call them worthy a careful comparison bedded out with well known sorts.—ED.

CEDAR RAPIDS, IOWA. — Higley's greenhouses suffered a loss of 1,000 feet of glass by hail May 17.

Saved the Flower Market.

The peace of the flower market at Canal and West streets was distributed last April by a park policeman's order that the flower dealers should abandon their time-honored place of barter. No argument had any effect upon him, and a delegation was immediately made up to see the mayor about it. John Morris, the oratorical florist of Jefferson Market, was selected to do the talking, and on reaching the mayor's office he made so plain and strong a case for the flower dealers that Mayor Grant said: "If the park commissioners don't do what is right in this matter come back to me and I will see about it." The park commissioners promptly said that the sparrow policeman had made a mistake, and business at the flower market boomed as usual. Saturday's interruption to business was for the purpose of presenting a testimonial to Mr. Morris for his services. It took the form of a handsome gold-headed ebony cane, inscribed: "Presented to Mr. John Morris by the florists of the plant market May 25, 1889."—*N. Y. Sun*.

The Seed Trade.

SEED TRADE ASSOCIATION.—Geo. S. Haskell, Rockford, Ill., president; Albert M. McCullough, Cincinnati, secretary.

American Seed Trade Association Meet June 11 at Washington.

Secretary McCullough writes: Arrangements have been made to hold our meetings at "The Arlington," where special accommodations have been secured for the members and their friends, \$3 per day (regular rates \$5). We have also secured reduced railroad rates with the Trunk Line and Central Traffic Associations (the former operating east of Buffalo and Pittsburg, the latter east of the Mississippi River and south of the lake line) of one and one-third fares for round trip, on the certificate plan. It will be necessary for all parties living out of the territory of these two associations to purchase tickets to first point within their jurisdiction, then purchase through ticket to Washington, taking receipt from the agent, which will secure them rebate on return ticket on endorsement by the secretary.

It is earnestly desired by the officers that a large attendance be had at this time. Besides the many attractions of the National Capital, which of itself will be quite an inducement to many of the members, matters of special interest to the entire trade will be brought before the meeting for action. There are also amendments to the constitution to be acted on, and interesting addresses will be made which will be followed by general discussion, so that this meeting, it is believed, will be of more vital interest to the association than any we have had heretofore. If it is not possible for you to be present you should at least be represented by proxy.

Reduced Express Rates on Seeds and Bulbs.

TO THE AM. FLORIST:—It may interest the readers of the FLORIST to know that the committee appointed by the American Seed Trade Association have, after considerable drumming, secured low rates on prepaid express packages from all the leading express companies in the United States (sixteen in number), and while the price is only a trifle less than by mail, still there is so much more safety and security in sending by express and getting a receipt for the goods that most of the seed dealers will take advantage of it wherever possible. The new rate takes effect June 1, and is as follows:

Prepaid packages of seeds and bulbs may be carried at 10 cents for each package containing 1½ lbs. (24 oz.) or less. When package exceeds 1½ lbs. in weight the charge is one cent additional for each two ounces, unless graduated rate is less. If the through rate exceeds \$8.50 per 100 lbs., no package weighing over four lbs. will be carried at these rates. When passing over the lines of more than one company the charge is not less than 10 cents for each company.

Now let the Society of American Florists appoint their committees and work hard for reduction of the present rate on plants and cut flowers by express which is exorbitant and unreasonable from every point of view. The rate now is one and one-half times the regular merchandise rates. I am certain this lower rate can be secured by a decided stand

and united action on the part of the American florists. CHAS. N. PAGE, Chairman of Seed Trade Committee.

DETECTIVES DETECTED.—The members of the Seedsmen's League are having a quiet little laugh among themselves at the expense of two detectives which the League employed some time since to gather evidence in the conspiracy case in which A. B. Cleveland is alleged to be principal. The two men visited Cape Vincent in disguise, but returned without having accomplished anything. It now appears that Mr. Cleveland had likewise employed detectives to protect his establishment against any prying, and his men not only detected the League's emissaries, but secured photographs of them as well. The laugh is general at the expense of the sleuths employed by the League.

SOME INTEREST is awakened in the trade as to the result of rather poor business generally this season. The financial sky is slightly overcast. The troubles of the A. B. Cleveland Co., Harnden, Haskell, and others, have raised the question as to where is the beginning of the end. Who next when the ides of June arrive? Have the public tired of being humbugged? Are there too many seedsmen or are these hard times? We hope some solution, satisfactory or otherwise, will be found at the Washington meeting and trust many will be there to tell what a rousing business has been done and put down those who are burdened with gloomy views.

J. E. NORTHRUP of Northrup, Braslan, Goodwin Co. passed through Chicago, May 14, for New York, whence he sails for Europe on the steamer City of New York, May 29. W. Atlee Burpee of Philadelphia, sailed for Europe, May 18.

STILLWATER, MINN.—The citizens are considering the feasibility of donating ten acres of land to Vick & Co., of Rochester, N. Y., for a floral garden.

ASSIGNED.—H. G. Higley, seedsman and florist of Cedar Rapids, Iowa, made an assignment May 27. The event was not unexpected, trade having been very light with many seedsmen in the catalogue trade this year.

Catalogues Received.

United States Nurseries, Short Hills, N. J., orchids; Fratelli Ingegnaoli, Milan, Italy, seeds; A. R. Reineman & Bro., Pittsburg, plants; R. Van der Schoot & Son, Hillegom, Holland, bulbs and roots; A. Van Velsen & Co., Haarlem, Holland, bulbs and roots; Alex Dickson & Sons, New Townards, Ireland, new pedigree seedling roses; John Laing & Sons, Forest Hill, London, England, plants; same, chrysanthemums; H. H. Berger & Co., San Francisco, Cal., bulbs and seeds; Jas. King, Chicago, baskets.

LIVE FLORISTS

Need good Catalogues, well illustrated, correct, stylish. No one does them better than the Florist Printer below named, to whom you can write for samples.

J. HORACE McFARLAND,
Harrisburg, Pa.

Smilax Seed.

First quality. Every seed will grow. \$1.25 per ounce; \$16.00 per pound.
W. D. BLEN, 101 STATE ST. CHICAGO

PAPER SEED BAGS.

Samples sent to Florists, Nurserymen and Seedsmen. ADDRESS
CLARK BROTHERS, Manufacturers. 61 Ann St., N. Y.

HEADQUARTERS

for the Jersey Yellow Nunsemond Sweet Potato Plants. \$1.50 per 1000 in May, \$1.00 in June.

FREEMAN HURFF, Swedesboro, N. J.

CHINESE PRIMROSE SEED

of the finest Primroses grown. Plants vigorous; flowers large; all fringed, with yellow center; thrown well above the foliage. Packet containing 400 seeds

OF 15 DISTINCT SORTS,

specially put up for florists. Price, per packet, \$1.00. Circulars showing how to grow Primroses, with prices, free to any address.

HENRY S. RUPP & SONS,

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Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER,
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DANVERS, ONION
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FAXON'S SEED SPECIALTIES
Asters, Fancies, Sweet Peas, Nasturtiums, and Danvers Onion. ESSAYS—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both, and Catalogue, 10 cents, if you mention this paper.
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A. BLANC,

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Electro of this Cut 75c. A larger one \$1.50.

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THE HORTICULTURAL TIMES

AND

COVENT GARDEN GAZETTE.

THE BEST POPULAR GARDENING PAPER IN ENGLAND.

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LONDON, ENGLAND.

Culture of Victoria Regia and Its Associates.

The tank and paths must be constructed of a suitable form; hence, the tank—a sunken one—should occupy the centre of the house, and be surrounded by a path 3 or 4 feet wide. The tank may be dug out either before or after the house is erected, and to a depth of 3 feet. A waste water drain should be laid from the most convenient part, and be fitted with a wooden plug, for the purpose of emptying the tank, and a supply pipe provided with a tap put in at the proper level. The bottom of the tank may be laid with fire-bricks bedded in cement to the full extent of the excavated site, which should be 1 foot larger than the size of the tank when finished, and afterwards walls should be erected around within the area of the cemented bottom. This space will afford ample room for a 9-inch wall made with good bricks bedded in cement, and which should be made to carry the flag-stones intended for the pathways. It will be an advantage to set the walk some 3 or 4 inches lower than the level of the tank, and an ornamental or rounded kerbing be fixed round its edges. By having the tank always brimful, the effect will be pleasing, whilst even the slight lowering of the pathway appears to bring the beholder nearer to the surface of the water than the slight difference of level in reality does. To prevent any one falling into the water, iron standards movable at will may be let into the flag stones near the margin, and artistically-formed strong iron railings fixed thereto; such railing, it is important to observe, being made strong enough to be leaned upon.

Owing to the fact that the structure is to be put to two purposes, the Victoria regia must be subjected to special culture—*i. e.*, must be treated and grown as an annual; hence, in the matter of space for the roots and the amount of soil required to grow it in, much less than are customary will be required, with the advantage that fresh soil may be readily supplied annually. The one thing needful is a circular space for the soil, which may be 4 to 5 feet in diameter, and near the centre of the tank. This is done by simply building a wall with ordinary bricks in pigeon-hole fashion, the bricks being laid lengthwise; and the height of such wall may be 2 feet. It may be well to observe that the brick work is only intended to maintain the soil in position, and avoiding the use of a large quantity in a spreading heap, that is liable to get distributed, and foul the water at such times as it is necessary to enter the tank for any purpose, &c. It may be well to add a suggestion in this place, that probably sheets or wire made of iron may be made to hold the heaps of soil together, by which means the work will be lighter.

The requisite heat for such a structure need not exceed a flow and return 4 inch pipe, which should be placed near the side of the tank, and below the water-line, the same arrangement of pipes being placed around the sides of the walks furthest from the tank. Where economy in construction is of importance a single 4 inch pipe may be made to do within the tank, provided that the boiler is efficient. As a matter of fact, this need of hot-water pipes within the tank will necessitate a deeply placed boiler, which fact must be taken into consideration when the estimates are prepared. It may be well to add that a single water jet should be attached to the water pipe, for occasional use in washing the surface of the leaves, and to give motion to the water in

the tank. Beyond this it is well to take a water-supply pipe to some central spot under the roof and above the tank to which a tap should be affixed, and under which a tin scoop attached to a rod of iron or wood should be made to swing, and into which the water from the tap could be run in any quantity that may be deemed requisite, and each time this scoop fills the water is ejected into the tank below, by which means the stagnation of the water in the tank will be prevented.

The proper time to prepare the tank for planting is between the second week in the month of February and the end of March, though good results are obtainable from planting in April. Such as I grew were planted in rough loamy soil from the margin of a pond. The plants were set out in February in a large tub filled with soft water, and which was maintained at a moderate warmth by occasionally removing a gallon or two of water therefrom and replacing it with warm water, the tub being placed in full sunshine in the stove; but where the tub can be placed over hot-water pipes there is less trouble. These young seedlings, having but four or five small leaves, grew freely for a few weeks in their 48 sized pots, when, the tank being ready to receive them, they were turned out of the pots into the mound of soil and made firm about the balls. The plants grew rapidly until the month of July, and the grand leaves all but filled the tank, one measuring 7 feet in diameter, and the beautiful flowers appeared. Full exposure to sunshine was always constantly the rule, whilst the warmth of the stove was from 80°–90°, the temperature of the water being the same, or perhaps a little higher, owing to the proximity of some hot water pipes.

The Nymphaeas best adapted for such tank culture are the Egyptian *N. coerulea*, *N. Devonensis* X (deep rose), *N. rubra*, *N. cyanea*, *N. dentata* (a white species, very distinct from the British or Canadian *N. alba*).

The best way to clean the tank is to sweep the bottom with a whalebone broom, scrub the sides, and let off about one-third of the water whilst it is in a state of motion, by which means much of the slime will flow away. Meantime fresh water should be run into the tank, and a strong heat maintained in the hot-water pipes to raise the temperature of the fresh body of water. Care should then be taken to remove dirt and moss from the crowns of the plants and the long leaf-stalks; albeit the leaves are well protected by the turning-up rim, they are liable to be infested with masses of moss-like growths upon the lower surfaces, especially upon the ribs, which project from the leaf surface into the water. To remove these growths, I have found it the best way to turn each leaf completely over on the water. The best way to do this is to lay the arm upon one side of the leaf near its edge, and gradually force that part under water, when with the other hand the other side may be brought over. By this means the leaves are in no wise strained or injured, and I have reason to believe this through immersion of the leaves for a short time under water results in greatly increased growth; even as the foliage of our native species grows more vigorously following high winds, which drive the leaves down beneath the surface, or drive the water over them. Having cleaned the under-surface of each leaf, it should be syringed and carefully returned, each to its natural position. For a few hours following these periodical

cleanings, permit the water to remain quite still, by which means it will become clear and the plants greatly benefited.

As autumn approaches, and the production of flower ceases and the leaves lose their freshness, the water should be let out of the tank, and the Victoria plant, together with the soil, removed. The Nymphaeas can be preserved through the winter by being potted up, and each pot placed into deep pans of water, in the stove; or they may be plunged in a tank, but they must get as much light as possible.

When the tank has been emptied, scrubbed out, etc., about the first week in October, or somewhat earlier, it may be filled with any kind of plants requiring protection from cold, and even somewhat tender subjects may be stored therein, as the hot-water pipes both within and without the tank will afford heat sufficient against frost.—*William Farley, in Gardener's Chronicle.*

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED.—By a first class rose grower and plantsman, 15 years' experience, unmarried, sober and energetic, good references. Address: GROWER, care American Florist, Chicago.

SITUATION WANTED.—By gardener and florist, 10 long experience in ornamental gardening, grower of roses, cut flowers and general plants; references. Address: A. M. gardener, Montreal, Canada.

SITUATION WANTED.—By a good gardener and florist; good rose grower and propagator. Sober and industrious. Good recommendations. Address: B. J. care W. J. Stewart, 67 Bromfield St., Boston, Mass.

SITUATION WANTED.—By practical rose grower and florist, fully competent in all branches and care of commercial or gentleman's place; age 34, best of references. Address: G. W. Box 32, Sangerties, N. Y.

SITUATION WANTED.—As propagator of roses, N. grapevines, shrubs, evergreens, etc. 22 years in all branches of the business; upwards of 5 years in present situation. Address: R. COLE, 234 Chester St., Buffalo, N. Y.

SITUATION WANTED.—By a first class gardener, private or commercial. Single. Can furnish first class references. Desires to enter active engagement. Speaks German and English. Address: C. LANG, care American Florist, Chicago.

SITUATION WANTED.—A young man, age 21, English, wants a place where the business can be learned thoroughly, his last slight experience, salary not so much an object as a chance to learn the business. Address: G. care American Florist.

WANTED.—2, 3 or 4-inch hot water pipe. Address: JOS. LINCOLN, College Hill, Cincinnati, O.

WANTED.—BOILER—Second-hand, upright steam boiler. Name size and price, and length of usage. Address: JOHN A. SAUER, La Crosse, Wis.

WANTED.—A first class single man to take charge of one stove and orchid house, must have good knowledge of orchid growing. Address: ORCHIDS, care American Florist, Chicago.

WANTED.—A man who is practical and not afraid of work, who also thoroughly understands grafting, budding and the propagation of hardy roses, shrubs, etc. None but a reliable and thoroughly practical man need apply. No man drinker. Address: R. J. MENDENHALL, Minneapolis, Minn.

WANTED.—A competent florist, must know how to propagate, understand how to make floral designs and landscape gardening. None but first class men need apply. Wages \$20 a month, board and lodging included; situation permanent to the right man; may become more profitable in time. Best references required. Address: S. WACHENHEIM, Vicksburg, Miss.

FOR SALE.—A 14 section Cremory boiler, heating at present 2,800 feet 4-inch pipe, in good order, for \$300. Address: JOS. F. KEMMER, Altonheim, Cook Co., Ill.

FOR SALE.—A beautiful place in the fruit belt of Northern Texas, 11 acres with 200 bearing grapes and orchard full of fruit now, the residence only 6 squares from Court House, a mild healthy climate. For particulars address: C. L. Box 20, Denton, Tex.

FOR SALE.—Greenhouses in good condition, containing about 15,000 feet of glass. With or without stock, 3 miles from New York or Brooklyn, 10 miles from Calvary cemetery. Good trade established. Cottage containing 3 rooms, barn and 2 acres of land. For full particulars, call or address: GEORGE A. BAUER, S. Newtown, Long Island, N. Y.

American Association of Nurserymen.

The fourteenth annual meeting to take place at the Grand Pacific Hotel, Chicago, beginning June 5th, promises to be one of the most successful ever held. The new secretary, Mr. Chas. A. Green, has beaten the record in the way of attractive programmes. The one just issued by him is in every respect most excellent. A full outline programme is given; very full instructions for securing reduced railroad rates and many notes of interest. Hotel, hall and exhibits will all be under one roof. A big time is expected.

WANTED—Competent florist, single, steady, capable of taking charge, with thorough knowledge of growing roses and general stock; good pay and permanent place to party of approved ability and habits. Address, stating terms
J. T. WILLIAMSON, Memphis, Tenn.

TO RENT—OR FOR SALE—Well stocked green-houses, about 25,000 square feet of glass, at South Orange, N. J., less than one hour from New York City, five minutes walk from depot. Buildings in first class condition. Model houses built on the most approved plans, such as recommended by John May. Will rent for a term of years. Only responsible parties need apply. Address
J. BROS., P. O. Box 212, South Orange, N. J.

FOR SALE.

Established floral business, with dwelling, store and greenhouses connected; in city of Buffalo. Good place for parties intending to buy.
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304 High St., BUFFALO, N. Y.

WHOLESALE CUT FLOWERS.

Narcissus Poeticus, Tulips, Lilac, Valley, Peonies, Pond Lilies, Etc.
THE WISCONSIN FLOWER EXCHANGE,
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N. F. MCCARTHY & CO.,

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Every Wednesday and Saturday,
10 A. M. from APRIL 27 to JUNE 19.

Ship goods by freight and notify us. Rates of Commission, 12½ per cent. for selling; 3 per cent. for advertising.

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STORE, 1 Music Hall Place, BOSTON.

CALLAS.

Per 100
CALLAS, 5-inch pots. \$12.00
SMILAX, 2 inch 3.00
ANTHERICUM, in 2-inch pots 3.00

JOHN BREITMEYER & SONS,
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Special List.

Per 100
Colens Verschafeltin and Golden Bedder. \$ 2 00
" Assorted, 20 kinds. 2 00
Alternanthera, 3 kinds. 2 00
" Multicolor, new, fine. 10 00
Bouvardia Leintha. 4 00
Geraniums, 3-inch pots, double and single. 7 00
" 4-inch. 9 00
Ageratum Blue Dwarf, 3-inch. 5 00
Climbing Roses, Balt. and Tenn. Belle. 3 00
Other plants, see trade list.

A. GIDDINGS, DANVILLE, ILL.

ROEMER'S SUPERB PRIZE PANSIES.

The Finest Strain of Pansies in the World.
Introducer and Grower of all the leading Novelties.

Catalogue free on application.
FRED. ROEMER, SEED GROWER.
QUEDLINBURG, GERMANY.

Pansies and Coleus.

Per 100
PANSIES IN BUD AND BLOOM,
TRIMARDEAU, SNOW QUEEN & O'DIER, \$2.00
COLEUS, from pots. 3.00

IWM. DESMOND,
KEWANEE, Henry Co., ILL.

LOOK THIS OVER.

We offer the best 13 **CHRYSANTHEMUMS** ever offered in a lot. The best 6 **Market GERANIUMS.** The best 6 **COLEUS.** And the best 12 **VINES** suitable for Baskets, Vases, Window Boxes, Etc., Etc.

CHRYSANTHEMUMS—Belle Panle; Gloriosum, L. Canning, La Purite, Lady Slade, Lady Selborne, Mons. C. Hubbert, Madame Cruzette, Madame C. Andiguier, Moonlight, Peter the Great, Rosinante (pomponne), Source d'Or, strong plants, from 3-inch pots. Set of 13 for \$1.00.

GERANIUMS—Cygnet, single white; Olive Carr, single pink; Double General Grant, bright scarlet; Emile Lemoine, splendid dark scarlet; J. Y. Murekland, pink and white; Maggie Hallowell, salmon pink, 5-inch pots, 15c, each, \$1.50 per doz. 4-inch 10c each, \$1.00 per doz.; 3 inch 5c. each, 50c. per doz.

COLEUS—Gem, Golden Bedder and Purple Prince. Splendid for ribbon lines or massing. Garland, Garfield and Mrs. Geddes, can't be beat as individual specimens. Strong, beautifully colored, from 3-inch pots, 5c. each, \$4.00 per 100. 25 at 100 rates.

VINES—Cissus discolor, Double Sweet Alyssum (large flowering), German Ivy, Nasturtium (3 varieties), crimson, scarlet and buff, beautifully shaded with red, from cuttings; Panicum Variegatum, Tradescantia Vittata and Multicolor, finely colored, Torenia Asiatica, Vinca Major Variegata and Elegantissima, extra fine, from 3-inch pots, 10c. each. Set of 12, \$1.00. Special offer equal quantities of each, \$5.00 per 100.

Ipomoea grandiflora (Moon Flower), TRUE, 2-inch pots, \$4.00 per 100; 3 inch, extra strong, \$6.00 per 100. 25 at 100 rates. You can make 200 per cent. on this in 30 days.

Ampelopsis Veitchii, 2-inch, strong, \$5.00 per 100. 25 at 100 rate.

Also on hand in splendid condition, a full Collection of desirable Florists' Stock at low rates.

CLARK BROS.,

FLORISTS,
WASHINGTON, D. C.
Mention American Florist.

ROSES.

Per 100
Perles, Niphotos and Brides, in 2½-in. pots. \$ 5 00
" and La France in 3-in. pots. 8 00
Souv. d'un Ami and Gontier, in 3 in. pots. 7 00
Also La France and Perles in 4-inch pots; prices on application.
All plants come from healthy stock, and are in fine condition. Liberal discount on large orders.

GERMOND & COSGROVE,

SPARKILL, Rockland Co., N. Y.

TO THE TRADE.

Per 100
ROSES—Marechal Niel, from 2½-in. pots. \$ 4 00
" " " " from 2 in. pots. 3 50
" Perle des Jardins, from 2½-in. pots. 4 50
" Niphotos, from 2-in. pots. 4 00
" Solfaterre, from 2-in. pots. 3 50
" La France, from 2½ in. pots. 4 00
" Safrano, from 2½ in. pots. 3 50
" La Reine, from 2½ in. pots. 4 00
" Isabella Sprunt, 2½ in. pots. 3 50
" Eva Corinne, from 2½ in. pots. 3 00
Ipomoea grandiflora (Moon Flower), 2½-in. 3 00
Ficus Elastica, from 4-in pots. \$2 50 per dozen.
Also a large assortment of Plants, Roses and Clematis. Prices on application.

BLOOMINGTON PHOENIX NURSERY,
SIDNEY TUTTLE & CO.,

Established 1852. BLOOMINGTON, ILL.
Mention American Florist.

ROSES.

Mermets, Cooks, Adams, Safrano, Brides, Souv. d'un Ami, Perles, Niphotos, Sunset, Bon Silene, Papa Gontier and La France, from 2-inch pots, \$5.10 per 100; \$45.00 per 1000.
Everblooming, general collection; our selection of varieties, \$1.00 per 100.
Per 100
Alternanthera Anrea Nana. \$ 3 10
Ageratum, white and blue. 3 00
Begonia Metallica. \$8 00 to 12 00
Cobea scandiolora. 8 10
Coleus, general collection, 2 and 3-in. \$5.00 to 5 00
\$25.00 per 1000.
CHRYSANTHEMUMS, the collection. 4 00
\$35.00 per 1000.
Fuchsias in variety. 4 10
Everfew The Gem, 2½ & 3½-in. pots. \$4.00 & 6 00
GERANIUMS, rose scented, 2½ & 3½-in. \$5 00 & 8 00
Salvia Splendens, 2½ & 3½-in. pots. \$4 00 & 6 10
Verbenas, in bud and bloom. 3 10
Vase Plants, in variety. 4 00
Cabbage and Tomato Plants, \$5 per 1000. 6 00

I. C. WOOD & BRO., Fishkill, N. Y.

Mention American Florist.

PANSIES.

Outdoor grown plants from best imported German Imperial Prize Seed, \$1.25 per 100; \$10.00 per 1000. Also strong plants of same stock not quite as large for \$5.00 per 1000, delivered at express office on receipt of price. Please write address very plainly.

C. F. OSBORNE & BRO.,
FREDONIA, Chautauqua Co., N. Y.

"A GREAT HELP IN CUT FLOWER WORK, AND HAS BEEN GREATLY NEEDED"

So say many of FLORAL DESIGNS, concerning which more can be learned by addressing

J. HORACE McFARLAND, Harrisburg, Pa.

BULBS FOR FLORISTS.

Lilium Harrisii,
Roman Hyacinths,
Dutch Hyacinths,

Forcing and Show Tulips, Paper White Narcissus,

FREESIAS,

GLADIOLUS "THE BRIDE," and LILY OF THE VALLEY PIPS.

For Special Prices, address

J. M. THORBURN & CO.

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Subscription \$1.00 a year. To Europe, \$1.50.

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No Special Position Guaranteed. Discounts, 3 months, 5 per cent, 6 months, 10 per cent, 12 months, 20 per cent

No reduction made for large space

The Advertising Department of the AMERICAN FLORIST is for Florists' Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it

Orders for less than one-half inch space not accepted.

Advertisements for June 15 issue must REACH US by noon, June 9. Address THE AMERICAN FLORIST CO., Chicago.

CUT FLOWERS.—Indications now point to a trade for Decoration Day nearly, if not quite, equal to the Easter sales.

**KENNICOTT BROS.,
WHOLESALE FLORISTS,**

TO THE TRADE ONLY.
ALL CUT FLOWERS IN SEASON.

Write for price list. Consignments solicited.

WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO
TELEPHONE NO. 486.

IF YOU WANT CHOICE, FRESH

CUT FLOWERS,
WELL PACKED AND SHIPPED PROMPTLY. YOU SHOULD ORDER OF

**CHAS. H. FISK,
Wholesale Florist**

116 & 118 DEARBORN STREET,
CHICAGO,

AND RELY ON GETTING THE BEST STOCK IN THE MARKET.

Store Open Day and Night.

**I keep a full stock of
WIRE DESIGNS**

of superior workmanship and at lowest prices. Extra pieces of any description made to order on short-est notice. Send for Catalogue.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address

GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.

**A. S. KIMBALL,
WHOLESALE CUT FLOWERS,
SHIPPING TRADE ESPECIALLY SOLICITED.**

170 LAKE STREET, CHICAGO.

**W. F. SHERIDAN,
Wholesale and Commission Dealer in
CUT FLOWERS,
NO. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.**

Wholesale Markets.

Cut Flowers.

Table with columns for flower types (Roses, Smilax, Carnations, etc.) and prices for Boston, May 25.

Table with columns for flower types (Roses, Carnations, etc.) and prices for New York, May 25.

Table with columns for flower types (Roses, Carnations, etc.) and prices for Philadelphia, May 25.

Table with columns for flower types (Roses, Carnations, etc.) and prices for Chicago, May 27.

These are prices for Decoration Day trade. The rose supply will not be half equal to the demand, caused by the recent cold wet weather after extreme heat.

**WM. J. STEWART,
Cut Flowers and Florists' Supplies**

WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

**N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS**

and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS.

Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

Auction Sales of Plants Spring and Fall.

**WELCH BROS.,
WHOLESALE FLORISTS.**

165 Tremont Street, BOSTON, MASS. We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegram. For prices, etc. Address,

J. L. DILLON, BLOOMSBURG, PA.

**THOS. YOUNG, JR.,
WHOLESALE FLORIST
20 West 24th Street,
NEW YORK.**

CUT FLOWERS.

We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,

PROMPT SERVICE,

GOOD STOCK.

And our record shows that we "get there" a little oftener than some others

**VAUGHAN'S FLOWER DEP'T,
Telegrams, 88 State,
Letters, box 688, CHICAGO**

**W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS,**

36 EAST 23rd STREET, NEW YORK.

ESTABLISHED 1877.

Price List sent upon application.

**LaRoche & Stahl,
Florists & Commission Merchants**

—OF—

CUT FLOWERS,
1237 Chestnut Street, PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

**C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,**

Telephone 977. WASHINGTON, D. C.

Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Fusin
Papa Gontier, The Bride, La France
Bennett, Perle, Mermet.

And other Standard sorts.

**EDWARD C. HORAX,
WHOLESALE FLORIST,**

36 WEST 29TH STREET,

The Bride, Mermet,
and Am. Beauties,
SPECIALTIES. NEW YORK.

HAMMOND & HUNTER,

Wholesale dealers in

Cut Flowers and Florists' Supplies
51 West 30th Street, NEW YORK.

**GEO. MULLEN,
WHOLESALE FLORIST**

17 CHAPMAN PLACE, 17 (near Parker House.)

SPECIALTIES.

VIOLETS, ROSES IN VARIETY, SMILAX, FANCY
CARNATIONS, LILY OF THE VALLEY, TULIPS,
HYACINTHS, NARCISSUS, ETC.

**CHAS. E. PENNOCK,
WHOLESALE * FLORIST,**

38 So. 16th Street, Philadelphia, Pa

**THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.**

Beauty, Bride, La France, Perle,
Bennett, Niphetos, Mermet, Papa Gontier
CHAS. L. MITCHELL, MGR.,

P. O. Box 188, CINCINNATI, OHIO.

Also plants of above by doz., 100 or 1000. 2, 3 & 4-in.
Select Stock. Plants in quantity at discount.
WRITE FOR PRICES



Why Dutch Bulb Prices Fluctuate.

HAARLEM, HOLLAND, May 15, 1889.
 In your last number W. J. S. complains of the considerable advance in quotations of tulips in price lists received by him to that date from Holland, and declares his ignorance of the cause, as he thinks the profits of American growers infinitesimal even at the old prices.

There is, however, very good reason for this and it is only the fault of U. S. growers themselves; some years ago respectable firms here did not publish their price lists until May 15, but in recent years some large dealers in America desire quotations in January and earlier, although at that time it is impossible to form a single idea of next season's crop. Many it not the greater part of the Dutch growers through fear of losing trade, indulged in this way of quoting prices (which cannot be called fair trade). Having done this they must buy largely to insure a supply for their orders, not to disappoint their customers. This is the first reason for unusual advance in prices. The next one lies in the fact that if some article sells well in the U. S. one season, nearly every grower or dealer in your country seems to fear the Dutch supply will not be sufficient the coming year and writes to all the leading houses for prices, thus creating a belief here in unusual demand and an advance in price accordingly. This was the case with daffodils, afterwards with tulips. What the next bubble will be we are anxious to learn.

The remedy is for every reputable house in your country to accept no bulb offer made before May 15. The entire business would profit by this system—the only true one. U. S. seedsmen have the renown of being very sharp in business, but in this case they may be perhaps too sharp.

J. J. VAN LOGHEM.
 [It seems to us that the desire of our American dealers to have early prices to meet competition is not more to be condemned than the cupidity of the Dutch growers, who issue such prices before they can safely do so. The sharpness of the American and the Dutch greed for gold seem kindred. Was not a part of our country settled by the Dutch anyway?—ED.]

JOHN LAING & SONS

Cordially invite all their American patrons and friends visiting London during the summer months to come and see their grand collection of Single and Double

BEGONIAS,

which for quality and quantity are unapproached by any other collection. Our fields and houses during the summer and autumn months will be a sight never to be forgotten. DO NOT FAIL TO CALL.

AWARDED FOUR GOLD MEDALS.

Best route to reach our Nurseries is from Charing Cross, Cannon Street, or London Bridge (30 minutes ride) to Catford Bridge Station, thence a walk of five minutes.

Descriptive Plant Catalogues Post Free.

Seed, Plant and Bulb Merchants,
FOREST HILL, LONDON, ENGLAND.

Mention American Florist.

30,000 Dioscoren batata, 1 year tubers, \$3.50 per 100, \$20.00 per 1000. 50,000 Am. Treena and Atamasco—11 20,000 are taken at \$5.00 per 100—\$5.00 cash, balance on time. 200 lbs. Moon Flower seed \$5.00 per lb., fall 1889.

MRS. J. S. R. THOMPSON, Spartanburg, S. C.
 Mention American Florist.

**R. VAN DER SCHOOT & SON,
 HILLEGOM, HOLLAND.**

LARGEST GROWERS OF

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

Headquarters for Forcing Bulbs. Wholesale Importers should write us for prices

**AZALEA INDICA,
 AZALEA MOLLIS,
 AZALEA PONTICA,
 CAMELLIAS,
 RHODODENDRONS,
 PALMS, ORCHIDS, ETC.
 TO THE TRADE ONLY.**

**ADOLPHE D' MAENE,
 GHENT, BELGIUM.**

Catalogues free upon application. Address
**WM. A. AVIS & CO.,
 91 FRONT STREET, NEW YORK.**

**NEW DWARF POMPON DAHLIA
 PRESIDENT HARRISON.**

This Dahlia is a clear yellow, very large flowers, and a free bloomer.

Prepared to take all orders now. Plants ready to ship May 15, at 30 cents each; \$3.00 per dozen. All orders must be cash.

Two of the NEWEST and FINEST COLEUS, 20 cents each.

**EDWARD MORAT,
 719 4th Ave., Louisville, Ky.
 Mention American Florist.**

**500 CANNA NOUTONI
 FOR SALE,**

\$10.00 per hundred. Fine, strong roots.

**SIEBRECHT & WADLEY,
 409 Fifth Ave., NEW YORK.**

**走 BULBS.
 Early Delivery Fall 1889**

Lilium Auratum, 6 to 7-inch circum.	8 4 00	Per 100	Per 1000
" " 7 to 9 " "	5 00	45 00	
" " 9 to 10 " "	6 00	55 00	
" " Monstro, 4-in. diam.	8 00	70 00	
" " Album (Speciosum) 7 to 8-in. cir.	9 00	80 00	
" " extra fine, 10-in. circum.	10 00	90 00	
" " Rubrum, 7 to 9-in. circum.	6 00	50 00	
" " Monstro.	7 00	60 00	
" " Longiflorum Ext., 4 to 5-in. cir.	3 50	30 00	
" " 3 to 6-in. "	4 50	40 00	
" " extra fine, 7 to 8-in. cir.	6 00	50 00	
" " Krameri, ex. choice, large bulbs	7 00	60 00	
" " Batemanni.	6 00	50 00	

We repack Bulbs on arrival from Japan from heavy clay into sawdust, reducing weight more than half, pick out and replace all decayed ones, pay 20 per cent. duty and deliver f. o. b. at above figures. Do not fail to send for our full list of

RARE LILIES, SEEDS, PALMS, ETC. NOW READY.

**H. H. BERGER & CO.,
 SAN FRANCISCO, CAL.**

POLMAN MOOY,



**HAARLEM,
 HOLLAND.**

TRADE MARK.

NO AGENTS.

FORCING BULBS

VALUABLE NOVELTIES
 IN TULIPS.

BEST FORCING DAFFODILS.
 Write for new list, now ready.

**MULSEBOSCH BROS.,
 OVERVEEN, near HAARLEM, HOLLAND.**

Growers and Wholesale Dealers in all kinds of
 Bulbs, Roses, Indian Azaleas, Rhododendrons,
 Dahlias, Palms, Orchids, Lily of the
 Valley Pips, Etc., Etc.

Address **A. HULSEBOSCH,
 P. O. Box 318, NEW YORK CITY.**

THE GENERAL BULB CO.,

Successors to BARNAART & CO.

VOGELENZANG, NEAR HAARLEM, HOLLAND,

Offer to the Trade Only, finest and largest stock of

**HYACINTHS, ANEMONES,
 TULIPS, RANUNCULUS,
 NARCISSI, LILIUM,
 CROCUS, SPIRÆA,
 GLADIOLI, LILY OF THE VALLEY, ETC.**

Our Mr. P. W. BARNAART will be in the U. S. until July 6th, and can be addressed care of

**WM. A. AVIS & CO.,
 91 Front Street, NEW YORK.**

Special prices to Importers of large quantities.

Catalogues free upon application.

NO AGENTS. BUSINESS DONE DIRECT.

VAUGHAN'S FORCING BULB OFFER.

WHEN THEY ARRIVE.

JUNE. FREESIAS.
JULY. LILIUM HARRISII, for first planting
AUGUST 10 To 15. ROMAN HYACINTHS.
AUGUST 25. PAPER WHITE NARCISSUS.
SEPT. 1.—LILIUM CANDIDUM
SEPT. 15. HYACINTHS TULIPS and other Dutch Bulbs
OCT. 1.—Full Supply of LILIES.
OCT. 20.—ENGLISH IRIS and GLADIOLUS.
NOV. 10.—SPIRÆA and LILY OF THE VALLEY.
 {New Crop TIBEROSES.

Can the American Wholesale Bulb Houses Supply the American Florists to Advantage?

In answer to the above question we say yes. We claim that the florist using an average quantity of forcing bulbs, say from \$100 to \$500 worth in a season, can better afford to place his order with any reliable Wholesale American House, than to import the same direct for himself.

WHY? Because: First—the supply named in calendar above must come from at least six different European sources. Secondly—they must all be shipped at different times. Third—if bought by the Florist direct from one point in Europe, he must pay the dealer there who supplies him, an extra profit on at least four or five classes of bulbs which that dealer purchases at second hand. In this he has no advantage over the American Importer, who buys all of them at first hands.

Again, should the American grower attempt to purchase direct six or eight lots from as many different sources, the extra proportion of expense for limited quantities would make the cost of such lots exceed the price for which they could be bought of the American Importer, not to say anything of the extra annoyance and trouble of sending references, and opening accounts, together with risk of delay from lack of proper shipping instructions, Consular Invoices and Custom House delays. We claim that at the opportunities for making money out of all this stock come only to those who plant at the proper time and in proper conditions to meet the demands of the Cut Flower market, and the florist who does not plant to advantage, who misses a day or a week in starting his bulbs, may also miss his profits and incur a loss through consequent failure to put his flowers on the market at the right time.

All the above we think true in a general way. Now, as regards our own facilities for serving you, we believe that we have arranged for all of the stocks referred to above to arrive at the earliest possible moment. For instance, our Freesias will be mature and ready June 15, our Roman Hyacinths coming from the south of France by rail and fast French steamers have been in this market the first of any for several years. Liliun Harrisii, from Bermuda, reach us about July 15, though we know of several florists who have imported these from Holland, certainly at a loss in price as well as in low quality of bulbs. Liliun Candidum we shall receive August 25 and ship at once. We claim many florists lose their profits on this stock by delaying planting until they receive Dutch Bulbs a month later. We could continue comparisons of our list until December, but think the above statements prove the point we wish to make; that provided our import prices are reasonable, the extra advantages we offer in time and prompt delivery as well as an opportunity for inspecting samples if required before delivery, really make it to the advantage of any general buyer to secure stock of us.

If the prices named on this page are not satisfactory, we respectfully ask a list of what you need that we may make an estimate of a fixed sum for your entire supply, the same if desired to include prepayment of Freight or Express charges on all, to your address. We think ten years' experience in importation of these forcing bulbs places us in position to furnish your entire supply to the best advantage and if not, we want to know why.



ROMAN HYACINTHS.		
	Per 100	1000
Roman Hyacinths, white,		
1st quality 11 to 13 cm.	\$3.50	\$35.00
select 11 to 12 cm.	4.00	35.00
No. 13 to 15 cm.	4.75	42.00
3000 lots and upwards, 5 per cent less.		
— single rosy	2.50	25.00
— single blue	2.75	25.00
— double rosy	2.75	25.00
LILIUM CANDIDUM.		
First quality, fine forcing.	4.00	35.00
Extra quality.	5.00	40.00
LILIUM HARRISII.		
First quality, 4 to 5 in. cir.	6.50	50.00
Extra, 5 to 7 in. cir.	8.00	70.00
No. 7 to 9 in. cir.	11.00	105.00
NARCISSUS.		
Paper White, first class.	1.50	15.00
" select.	2.00	17.00
" Grandiflora.	2.00	18.00
" Double Roman, yellow.	2.00	17.50
Von Sion, yellow.	2.25	18.50
Incomparable, yellow, dbl.	1.40	10.50
Alba Tenia Odorata.	1.75	15.00
Orange Phoenix.	3.00	25.00
Pseudo Fl. Pl., silver and gold double double flowers		
Silver white and rich golden yellow, splendid to force.	1.00	8.50
Poetibus.	1.00	7.00
Poetibus Ornatus.	2.25	19.00
Bicolor Horsefield, pure white perianth with golden yellow trumpet.	doz \$5.50	24.00
Obyvallaris, Tenby (double) large, splendid forcing.	3.00	25.00
Incomparabilis, Stella, early dwarf forcing white with light primrose yellow eye.	2.40	20.00
Trumpet Major Spiritus rich yellow flower with distinct large golden yellow trumpet, early.	3.00	25.00
Bulbocodium (loop Petticoat) dwarf growing sort, bright golden yellow flower, excellent for pot culture.	1.80	15.00
Principis, splendid forcing sort, the trumpet is very large, of a deep yellow color with pale divisions.	1.50	30.00
The Chinese Narcissus or Oriental Lily, excellent for the retail trade; 100, \$11.00.		
FREESIA REFRACTA ALBA.		
First quality, fine.	2.25	18.50
LILY OF THE VALLEY PIPS.		
Best Hamburg Pips.		10.00
In lots of 2500, \$9.50; 5000, \$9.25; 10,000, \$9.00, per 1000.		
Lily of the Valley Clumps		
extra strong.		22.00
SPIRÆA JAPONICA.		
Strong Clumps, ready in November.		6.00
TIBEROSE BULBS (in Dec.)		
Double Tall, 1st class strong bulbs.	1.40	10.00
Pearl, first class bulbs.	1.50	11.00
FORCING GLADIOLUS.		
These are now much grown for the London Market, they differ from the ordinary sorts of Gladiolus, only in size (being about 1/2 smaller) with a splendid variety of color from deep scarlet to pure white and of convenient size for cut flower work.		
Colvilli Alba, the Bride.	2.00	14.00
Duke of Albany, rich crimson, flakes white, shading to magenta, extra.	4.00	35.00
Insignis, large crimson flowers, flaked with purple, good forcer.	2.50	20.00
Rosy Gem, delicate rosy pink, splendid cut flower.	2.75	18.00
TULIPS.		
For Forcing and Open Ground. Not less than 250 of a variety at the 1000 rate, or less than 25 at the 100 rate.		
SINGLE EARLY.		
Artus, scarlet.	1.25	10.50
Belle Alliance, scarlet.	1.90	16.50
Canary Bird, yellow.	3.00	27.00
Chrysolora, yellow.	2.75	25.00
Cottage Maid, extra.	3.25	27.50
Coalcut Potencia, rosy.	1.25	10.00
Crimson King, fine.	1.25	9.25
Duchess of Parma, brown and yellow.	1.00	13.75
Duc Van Thol, gold striped.	2.10	17.00
" " " rose.	2.00	21.00
" " " scarlet.	1.25	9.75
" " " red and yellow.	1.25	10.00
" " " crimson.	1.00	7.75
" " " white, true yellow.	1.25	38.00
Duc de Berlin, red and yellow, very early.	1.80	15.50
Keizerskroon, red and gold.	3.00	26.50
Commanche, white.	2.80	24.00
Pottsbaker, white, fine.	3.25	27.00
" scarlet.	2.40	20.00
" yellow.	2.25	25.00
Proserpine, carmine rose.	1.50	18.00
Purple Crown, dark purple.	1.25	10.75
Queen Victoria, (la Reine).	2.00	17.75
Rembrandt, scarlet.	2.50	25.00
Rosa Mundi, rosy white.	2.40	21.50
Rose De Lin, blue rose.	2.00	35.25
Rose Luisante, large rose.	3.25	35.00
Silver Standard, pink, white.	2.25	18.50
Thomas Moore, orange.	1.00	8.00
Van Vandel, red and white.	2.00	16.50
Vermillion Brilliant, cur-line.		
Yellow Prince.	2.00	26.50
" " " scarlet.	2.75	24.50
Fine Mixed, for bedding.	1.00	9.00
Extra Fine Mixed.	1.25	10.50
EARLY DOUBLE TULIPS.		
Admiral Kingsbergen, red and yellow.		
Crown of Roses, bright.	3.70	25.00
Duc Van Thol, red, yellow.	1.00	7.50
" " " scarlet.	1.30	10.00
Gloria Solis, brown, yellow.	1.40	15.50
Imp Rubrum, scarlet.	2.85	25.00
La Candeur, double white.	1.25	9.00
Lady Grandison, scarlet.	2.25	18.50
La Confette, red, yellow.	3.25	27.00
Le Blusson, white.	2.40	17.00
Muril's, light rose, early.	1.80	15.00
Purper Koon, purple.	1.80	15.00
Peony Gold, red and gold.	1.80	15.00
Rev Rubrum, scarlet.	3.25	19.00
Rosine, white and rose.	2.25	18.50
Sylvester Rosa, deep rose.	2.50	22.00
Tournefort, red, yellow No. 1.	2.50	20.00
" " " yellow.	2.50	20.00
Yellow Rose, gold yellow.	1.25	10.25
Fine Mixed, early.	1.00	9.00
Extra Fine Mixed, early.	1.20	10.40
Late Fine Mixed.	1.00	8.50
" " " extra fine.	1.25	10.00
MIXED HYACINTHS.		
Single, colors separate.	1.00	7.50
Double, colors separate.	3.25	27.50

J. C. VAUGHAN, 146 & 148 W. WASHINGTON STREET, CHICAGO.

Blooming of Lilacs Simultaneously at Different Latitudes.

Referring to item on this subject on page 464 of the last issue, it is a popular delusion that parallels of heat or cold correspond with parallels of latitude; such is not the case—*isothermal lines*—that is, lines of similar degrees of heat—differ from parallels of latitude from many causes, such as variation in altitude, prevailing drouth or rainfall, contiguous large bodies of water, etc. The government *isothermal maps* will show that Peotone, Ill., forty miles south of Chicago and Lake City, Minnesota, are subject to about the same degrees of heat, and lilacs should bloom at the same time, though separated as to latitude by about 200 miles. It would be however a genuine curiosity to find similar flowers in bloom out of doors at Grand Haven, Mich., and La Crosse, Wis., at the same date, which places although situated in about the same latitude will show a difference of at least 150 miles when considering the question of similar temperature; that is to say, to find temperature similar to La Crosse, Wis., directly south of Grand Haven, Mich., you would have to go 150 miles further south.

J. C. VAUGHAN.

Forcing Bulbs for Fall Delivery

If you will make up a list of your wants and send us now, we will book same at importation rates. We are now making up our regular commissions to our growers in France, Germany and Holland, and will take your orders—large or small—at a slight percentage over cost if you will chub with us to save freight, etc. **REMEMBER**, we handle no second grade bulbs. Our experience of many years in importing bulbs, enabling us to procure the very best quality at the lowest prices. If you intend to avail yourself of this opportunity, write us at once, giving varieties and quantities and we will furnish a estimate by return mail. We handle the following varieties in quantity—all splendid forcers:

- Lilium Harrisii, first class 5 to 7-inch, extra 7 to 9-inch
- " Candidum, best North of France grown
- " Longiflorum, Bermuda grown, 5 to 7-in.
- Roman Hyacinths, White, extra, 11 to 15 centimetres
- Roman Hyacinths, Pink, extra, 11 to 15 cent.
- Paper White Narcissus, extra.
- Double Yellow Narcissus, Von Zion.
- Trumpet Major Narcissus, true.
- Freesia Refracta Alba, first size, extra large.
- " " "
- Tulips, La Reine, white
- " Belle Alliance, scarlet.
- " Yellow Prince, yellow.
- " Kaiser Kroon, crimson, yellow edge.
- " Cottage Maid, pink and white.
- " Van Thol, scarlet
- " Double Duke of York, rose and white
- " Princess Alexandra, red and yellow. [let
- " " " " Imperator Rubrorum, scar.
- [The three last named are splendid forcing vars.]
- Lily of the Valley, best Hamburg pips.
- Spiraea Japonica, fine clumps.

JOHN GARDINER & CO. Philadelphia

FORCING BULBS FOR FALL DELIVERY.

NARCISSUS

and Other Popular Bulbs for Spring Forcing

SPECIAL PRICES UPON APPLICATION.

- Narcissus Albicans, large creamy white trumpets; one of the best.
- Narcissus Bicolor Empress, the Queen of the bicolors, immense trumpets, a great favorite.
- Narcissus Bicolor Grandis, similar in color to Horsfieldi, but with stouter flowers and much later.
- Narcissus Bicolor Horsfieldi, a great beauty and fine for cutting.
- Narcissus Bulbocodium, "Yellow Hoop Petticoat," fine strong bulbs for forcing.
- Narcissus Bulbocodium Citrinus, pale sulphur flowers, and very early.
- Narcissus Emperor, the largest; immense stout flowers of a rich yellow.
- Narcissus Golden Spur, immense deep golden yellow flowers, and wonderfully early.
- Narcissus Henry Irving, rich yellow, large bold trumpets.
- Narcissus Incomparabilis Cynosure, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white.
- Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.
- Narcissus Major, true, one of the best forcing sorts, large yellow trumpets, similar to maximums.
- Narcissus Nobilis, a first class variety for florists, free and early.
- Narcissus Obvallaris, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.
- Narcissus Odorus Campenelle, the well known Campenelle Jonquil, very strong bulbs.
- Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.
- Narcissus Pallidus Præcox, the earliest of all, forces very freely, single, sulphur colored trumpets.
- Narcissus Rugilobus, true, large yellow trumpet, very free and very early.
- Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.
- Narcissus Von Sion, true, the double deep yellow daffodil.
- Freesia Refracta Alba, large bulbs for forcing.
- Freesia Leichtlini, a nice contrast to preceding and forces well.
- Gladiolus The Bride, flower pure white, fine for forcing.
- Helleborus or Xmas Roses in great variety, and extra fine flowering clumps for forcing, can be supplied early in fall.

And many other first class sorts. List of varieties and price I should be happy to furnish upon application.

THOS. S. WARE,

HALE FARM NURSERIES.

TOTTENHAM, LONDON, ENGLAND.

THE BEST ARE THE CHEAPEST IN THE END.

Dutch Bulbs.

B. J. LOMANS,
BULB GROWER,
HAARLEM, HOLLAND.

H. A. DAACKE,
AGENT FOR U.S. and CANADA,
22 DEY ST., NEW YORK.

Special Price List of Forcing Bulbs upon Application.

We offer 7000 Bulbs for \$200, all first quality as follows, f. o. b. cars New York. One-third cash with order.

- 1000 Hyacinths named, in 30 single and 10 double sorts.
- 1000 Hyacinths, early forcing, red, white and blue, colors separate, single or double.
- 1000 Hyaciuths, bedding, red, white and blue, colors separate, single or double.
- 1000 Tulips, in 30 single and 10 double sorts, with names and colors.
- 1000 Tulips, mixed. 1000 Crocuses, in 10 sorts, with names and colors.
- 1000 Crocuses, mixed, white, blue, striped and yellow, colors separate.

Half the quantity, or 3,500 Bulbs for \$105.

SEGERS BROTHERS,

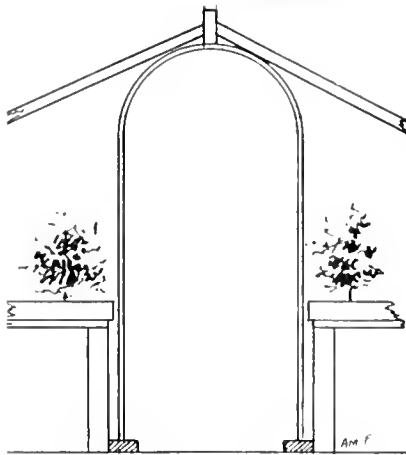
Wholesale Growers of

HOLLAND FORCING BULBS

HYACINTHS, TULIPS, NARCISSUS, LILY OF THE VALLEY, ETC., ETC.

Orders dispatched later than the **First Week in June** cannot be guaranteed to be delivered.

LISSE, NEAR HAARLEM, HOLLAND.



Support for Weak Ridge in 11-Foot House.

The ridge of an 11 foot house which was beginning to sink in was strengthened as shown in the accompanying sketch by Mr. D. B. Fuller a Chicago florist.

The 1 1/2-inch iron pipes were readily bent at the top, all the tools necessary being a common vise. This forms a secure support for the ridge without necessitating a post in the walk, and may be used with good effect in the annual overhauling of old 10 or 11-foot houses.

BENJAMIN RIMBAUD,
HORTICULTEUR,
QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD, TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

- PAPER WHITE NARCISSUS,
- DOUBLE ROMAN NARCISSUS,
- LILIUM CANDIDUM,
- ALLIUM NEAPOLITANUM,
- FREESIA REFRACTA ALBA ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

Mention American Florist.

Delegates to the next convention will travel via the **Pullman Car Line** TO AND FROM

MONON ROUTE Louisville, Indianapolis, Cincinnati and the winter resorts of Florida and the South. For full information address **E. O. McCormick, Gen. Passenger Ag't, Chicago.**

BULBS.

"C. H. JOOSTEN is entitled to **FIRST PLACE** on First Quality Hyacinths and Tulips."

Signed: **WM. G. BERTERMANN,**
ERNST ASMUS,
ALEX. DALLAS, } Committee

Report of the Committee on Exhibits at the Exhibition of Bulbs and Plants at Nilson Hall, New York City, August 21-23, 1888, under the Auspices of Society of American Florists. See printed Report, page 164.

[BULBS GROWN AND IMPORTED BY P. VAN WAVEREN JZ. & CO., HILLEGOM, HOLLAND.]

For Catalogues, address

C. H. JOOSTEN,

Importer of Bulbs and Plants.

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G. V. VAN ZANTEN & CO.,
HILLEGOM, HAARLEM, HOLLAND.

ESTABLISHED 1862.

Wholesale Growers of Dutch Bulbs.

LARGE STOCKS. CHEAP PRICES.

Price list now published and may be had free upon application direct to us, or to S. ASCHER, 16 and 18 Exchange Place, NEW YORK.



A GOOD STOCK OF 1st QUALITY PEARL TUBEROSE BULBS, at \$16 per thousand.

Choice LILIUM AURATUM and RUBRUM, GLADIOLUS, CANNAS, CALADIUMS, Etc.

Special lists of BULBS, BASKETS, Etc., on application. LYCOPODIUM, \$5 00 per 100 pounds. WREATHING, \$5 00 per 100 yards.

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170 Lake St., CHICAGO, ILL.

GLASS. Galvanized Wrought Iron Sash Hinges with Brass Pins, "Will Never Rust," Galvanized Sash Lifts, Wire, Screw Eyes, Etc., Greenhouse, Garden & Nursery Tools and Supplies. **I PAY FREIGHT.** **GLASS.**

ERNEST A. GIBBONS, P. O. BOX 3623, NEW YORK CITY.

F. E. McALLISTER,

—WHOLESALE DEALER IN—

Seeds For the Florist Market, Gardener and Farmer. **Requisites** Such as Baskets, Immortelles, Grasses, Mosses, Boquet Papers, Pampus Plumes, etc. **Bulbs** For the Greenhouse or Garden.

22 Dey Street, - - - NEW YORK.

Every Florist! Every Nurseryman! Every Seedsmen!

SHOULD HAVE OUR TRADE **DIRECTORY.**

Address **AMERICAN FLORIST CO.,** 54 La Salle St., CHICAGO.

AZALEAS.—If you have any azaleas to carry over, they should now be plunged out of doors in a convenient frame. Spent manure is a good material to plunge them in. Some believe in shading them during the summer, and the plants do look better in the fall if slightly shaded, but some of the most successful growers do not shade them, finding that they set their buds better if exposed to the full sun during the summer. Spent hops should never be used to plunge azaleas in, as they are apt to injure the plants. Several Philadelphia growers have found this out to their cost.

A PROFITABLE ORCHID.—Mr. Chas. D. Ball, Holmesburg, Philadelphia, has eight large plants of cypripedium insigne from which in the last five years he has sold flowers averaging \$1.50 per year from each plant. He is well satisfied with his returns from these plants, and they are certainly large when the small space the plants occupy is considered. He believes that failure to secure flowers in profitable quantities from this cypripedium is most frequently due to overpotting and over-feeding.

Bride, Bon Silene, Mermet, Sunset,

Superb Plants from 4-inch pots,
\$10.00 per 100.

WM. J. STEWART,
67 Bromfield Street,
Boston, Mass.
Mention American Florist

SURPLUS STOCK.

- 5000 Alternanthera in 5 good varieties, \$3.00 per 100; \$25.00 per 1000.
- 40 Moon Vines, 10 cents each.
- 25 Yucca Aloifolia, 4 years old, 50 cents each.
- 2 Hot Water Boilers—One capable of heating 1000 feet 1-inch pipe; one capable of heating 1200 feet 1-inch pipe; in first class condition. Apply for price.

JOS. SHAW, AUSTIN, ILL.

NEW SWEET SCENTED CHRYSANTHEMUM

"**Nymphaea.**" A decided novelty. Form and fragrance of Pond Lily. Fine for florists' use. As so the *creme de la creme* of older varieties. Send stamp for plate of "Nymphaea," and Catalogue.
H. W. HALES, Ridgewood, N. J.

EVERBLOOMING SEEDLING CHRYSANTHEMUM

The young plants are 4 inches high, full of buds ready to bloom. Will take orders for this New and fine Yellow Japanese shaped Chrysanthemum. It will pay every florist to have it for cut flowers.
Price, 60 cts. each; \$45 per 100.
ED. MORAT, Louisville, Ky.
Mention American Florist.

GREENHOUSE HEATING.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.
It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.
Sent on receipt of price. Address,
AMERICAN FLORIST,
CHICAGO.



PRIMULA OBCONICA

Fine 2 inch pot plants \$10 per 100, \$70 per 1000. 250 at thousand rates.
Per 100 Per 1000
Primula Floribunda . . . per doz. 60c., \$ 4 00
Coleus, 2-inch pots, in variety . . . 2 50 \$20 00
" Rooted Cuttings . . . 1 00 8 00
Geraniums, 2-inch, in variety . . . 3 00 25 00
" Mme. Salleroi . . . 3 00
Alyssum . . . 2 50
Chrysanthemum in variety . . . 3 00 30 00
Fuchsias in variety . . . 3 00
" Storm King . . . 5 00
" Phenominal . . . 8 00
Pelargoniums . . . 8 00
Canna French Hybrids, named . . . 15 00

I. N. KRAMER & SON,
MARION, IOWA.

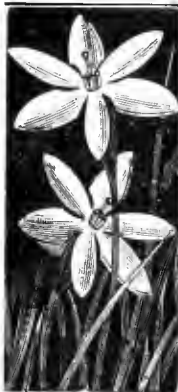
SMILAX.

First Quality pot plants at \$2 00 per 100, \$18.00 per 1000. A few thousand of these at \$6 00 per 1000 left. Speak quickly if wanted. Samples of either size mailed on receipt of 10 cts. Your trade solicited. Satisfaction assured.

PANSIES.

OVER 100,000 SOLD from August 1st, 1888 to May 1st, 1890, without a single complaint, an item worth your attention if you buy plants. Another item is the price, \$5 00 per 1000 for good, stocky plants, ready August 15th to November 1st. Write for particulars.
TERMS CASH WITH ORDER.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.



- Asparagus Tenuissimus, 2 1/2-inch pots . . . \$4 00 per 100
- " " 3-inch pots, extra . . . 6 00 "
- Cinnamon Vine, strong roots . . . 3 50 "
- Ipomoea Palmata, strong garden roots . . . 15 00 "
- Milla Biflora . . . \$25 00 per 1000, 3 00 "
- Ampelopsis Veitchii . . . 4 00 "
- Echeveria Secunda . . . 5 00 "
- Clerodendron Balfourii, strong . . . 5 00 "
- Dracena Indivisa, 3-inch pots, strong . . . 10 00 "
- Euphorbia Splendens, 3-inch pots . . . 6 00 "
- Cape Jasmine, 3-inch pots . . . 10 00 "
- Gardenia Radicans Variegata, 3-inch pots, strong . . . 10 00 "
- " " 4-inch pots . . . 12 50 "
- Hydrangea Thomas Hogg and Hortensis, 2 1/2-inch pots . . . 5 00 "
- Adiantum Capillus Veneris, 2 1/2 inch pots, strong . . . 4 00 "
- Begonia Metallica, 4-inch pots . . . 12 50 "
- Russelia Juncea, 2 to 3 feet . . . 15 00 "
- Dahlia Roots, 50 sorts . . . 8 00 "
- " pot plants . . . 5 00 "
- Amaryllis Formosissima . . . 6 00 "

MICHEL PLANT AND SEED CO.,
718 Olive St., ST. LOUIS, MO.

LARGE ROSES.

4 1/2 and 5 inch pots plants 15 to 24 inches high. 500 Catherine Mermets and a large assortment of other Tea Roses. Price, \$15 00 per 100. our selection, \$120 00 per 1000. Terms Cash with order.

EXTRA STRONG SMILAX PLANTS, 3 1/2-inch pots, \$5 per 100. DAHLIA ROOTS, assorted varieties, \$5 per 100. TIBERONE BULBS, \$1.50 per 100. DOUBLE SWEET ALYSSUM PLANTS, \$3 per 100. HYDRANGEAS THOS. HOGG and OTAKSA, large plants, \$3 00 per dozen.

F. WALKER & CO., 644 FOURTH AVE., LOUISVILLE, KY.

SURPLUS STOCK.

- 500 TEA ROSES, 2 1/2-inch pots . . . \$3 00
- 500 H. P. ROSES, 2 1/2-inch pots . . . 4 00
- 1000 COLEUS, 2 1/2-inch pots . . . 2 50
- 500 CENTAUREA CANDI, 2 1/2-inch pots . . . 3 00
- 500 " GYM., 2 1/2-inch pots . . . 2 00
- 500 DRACENAS, 3 1/2 and 4-inch pots . . . \$12.00 to 16 00
- 1000 PANSIES . . . 2 00

W. W. GREEN, SON & SAYLES, Watertown, N. Y.

SURPLUS

Stock of Rooted Cuttings of Carnations of PORTIA, JEANETTE, CENTURY, EDWARDSII, PRES. DE GRAW, KING OF CRIMSONS, ALEGATIERE, CHESTER PRIDE, ETC. All healthy and well rooted. Address

JOS. RENARD,

Chester Co., UNIONVILLE, PA.
Also 1000 Smilax in 3-inch pots at \$2.50 per 100.

PLANTS FOR THE TRADE.

- ROSES—The Bride and C. Mermet . . . Per 100 \$3 00
 - Bouvardia Pres. Cleveland . . . 5 00
 - " A. Nenner, Flavescens & Leiantha . . . 3 00
 - Smilax . . . 2 50
- We still have first class stock of Geraniums, Scented Geraniums, Ivy Geraniums, Begonias, and other greenhouse stock that will close out at very low figures. Address
GEO. THOMPSON & SONS, Louisville, Ky.

CARNATIONS at a SACRIFICE.

Owing to change in planting houses we have a surplus of strong, well rooted Carnations, which we offer at \$12 00 per 1000.

HENDERSON, CHESTER PRIDE, KING OF CRIMSONS, SCARLET GEM, PORTIA, BLACK KNIGHT, HINZE'S WHITE.

Also **YOUNG ROSES** at prices which it will be to your interest to write for.

SOUVENIR D'UN AMI, PERLE NIPHETOS, MERMET, BRIDE. Address

THE FLORAL EXCHANGE.

614 Chestnut St., PHILADELPHIA.

CHEAP LIST.

- CANNA, Erin . . . Per 100 \$ 3 00
- Geraniums, 2-inch . . . 2 50
- Ampelopsis Veitchii, strong, 2-inch . . . 2 50
- Hibiscus, six varieties . . . 4 00
- Alternanthera Aurea Nana . . . 2 50
- Pansies, nice young plants . . . 1 50
- " stronger ones, in bud and bloom . . . 2 00
- Begonia Rubra Alba . . . 2 50

TEA ROSES

In 20 choice varieties, my own selection, nice plants from 2 1/2-inch pots, clean and vigorous. 4.00

Address **N. S. GRIFFITH,**

JACKSON CO. INDEPENDENCE, MO.

(Independence is well located for shipping, being 8 miles east of Kansas City.)

THREE HUNDRED DOLLAR PRIZE. SOUVENIR DE WOOTTON

THE OFFER:

WASHINGTON, D. C., May 29, 1889.

My Dear Mr. Craig:

I have about concluded to offer a prize of \$300 for the best twelve cut blooms of SOUVENIR DE WOOTTON rose, to be exhibited at the Pennsylvania Horticultural Society's meeting in January or February next (1890), open to all comers except myself. If this meets your approval and you will send me a letter as soon as convenient to that effect, naming three judges to serve on the occasion and designating the exact day on which the meeting will be held, I will make the matter public through the columns of the AMERICAN FLORIST in the next issue.

Very sincerely yours, C. STRAUSS & CO.

To MR. ROBERT CRAIG, Pres. Penn. Hort. Society.

THE ACCEPTANCE.

From the Philadelphia Public Ledger, May 22, 1889.

THE SOUVENIR DE WOOTTON ROSE.

At the meeting of the Pennsylvania Horticultural Society, last night, Mr. Robert Craig announced that Strauss & Co., of Washington, D. C., offer a premium of \$300 for the twelve best blooms exhibited at the fall show of the society, of Strauss & Co.'s rose, 'Souvenir de Wootton.' The offer was accepted. The "Souvenir de Wootton" is a hybrid of rich color and very fragrant. It was named in honor of the visit of delegates to the American Florists' Convention, held several years ago, to Mr. Geo. W. Childs's summer residence at Wootton, where they were pleasantly entertained. Mr. Craig stated that the offer would undoubtedly stimulate growers all over the country to compete.

NOTICE. THE WOOTTON IS A HYBRID TEA, OF A RICH RED COLOR, AND WE CLAIM THAT IT IS THE FREEST CONTINUOUS WINTER BLOOMING ROSE UNDER GLASS FOR CUT FLOWER PURPOSES THAT HAS EVER BEEN ORIGINATED.

Orders for the Wootton will be filled promptly during June, July and August at \$25 per hundred; \$100 per five hundred; \$180 per thousand. In less quantity than one hundred, at 50 cents each.

By **C. STRAUSS & CO.** P. O. Box 422 WASHINGTON, D. C.
ALSO FOR SALE BY **JOHN COOK**, 318 N. CHARLES STREET, BALTIMORE, MD.

JOHN H. TAYLOR,
ROSE GROWER,
BAYSIDE, L. I., N. Y.

Offers to the Trade the Great TEA ROSE

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

— ALSO —

MME. DE WATTEVILLE, CATHERINE MERMET,
PAPA GONTIER, BRIDES, and
PERLE DES JARDINS, NIPHETOS.

Write for particulars.

ROSES.

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand. Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first-class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,
SUMMIT, NEW JERSEY.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, best kinds for forcing. Orders received now for delivery in November. Address

WILLIAM H. SPOONER, Jamaica Plain, Mass.

ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. straight 2 1/2-inch plants, propagated from thoroughly matured field grown stock, and grown in ordinary soil without manure or any other stimulating material whatever. Our Roses resist disease, start quickly, grow rapidly, and always give best results.

ALL THE FINEST NEW AND SCARCE ROSES.—Mrs. John Laing, Dinsmore, Marshall P. Wilder, Merveille de Lyon, Baroness Rothschild, Mad. Gabriel Luize, Mad. Masson, Meteor, Princess de Sagan, Mad. Hoste, Comtesse Anna Thun, Vicountess Folkstone, Primrose Dame, Annie Cook, and ALL THE CHOICEST NEW POLYANTHES AND HYBRID TEAS.—**ALL THE BEST STANDARD SORTS IN LARGE SUPPLY AT REASONABLE PRICES.**—The Portland, Sunset, Papa Gontier, American Beauty, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Gen'l Jacqueminot, Perle des Jardins, Niphotos, C. Mermet, M. Robert, Luciole, Mad. Wélehe, Pierre Guillot, Souv. d'un Ami, Mad. Cusin, C. Cook, Marie Guillot, Mad. Honore Defresne, and hundreds of others at lowest living prices.

HYDRANGEA GRANDIFLORA a specialty, large stock, strong open ground plants, all sizes at reasonable prices.

ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS.—New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Viburnum Plicatum, Bush's Variegated Althea, New Deutzia, New Weigelia, &c. Honeysuckles, Wistarias, Clomatis, Akebias, and all best hardy climbing vines. **VERY LOW.**

Chrysanthemums, 100 selected finest sorts. *Moon Flowers*, extra strong, propagated from blooming plants. *Finest Summer Flowering Bulbs, Gladiolus, Tuberoses and Japan Lilies.*

FLOWER SEEDS FOR FLORISTS, including the Celebrated **IMPERIAL GERMAN PANSIES** in 35 separate shades, and all choicest strains of Flower Seeds for florists use. Satisfaction always guaranteed. **WHOLESALE Price Lists** Free on application to Florists, Market Gardeners and Dealers only. Address

THE DINGEE & CONARD CO.,

Rose Growers and Seedsmen, WEST GROVE, PA.

Roses for Forcing.

We have a splendid stock of strong plants of BON SILENE, BRIDE, GONTIERS, MERMET, NIPHETOS, PERLES, SAFRANOS, and other leading varieties, which we will sell cheap to make room.

ELLWANGER & BARRY,

MOUNT HOPE NURSERIES. ROCHESTER, N. Y.

OIL CITY ROSES.

We have for sale a few thousand fine, healthy Rose plants from 2 1/2-in. pots, of the following varieties. Per 100
AMERICAN BEAUTY..... \$10 00
BRIDE, MERMET and LA FRANCE..... 5 00

OAKWOOD ROSE GARDENS,
Oil City, Pa.

ROSES.

35,000 of the leading Forcing and Bedding varieties TEAS, HYBRID TEAS, and HYBRID PERPETUALS. Teas, \$5.00 per 100; Hybrids, \$4.00 per 100. My selection of varieties. Also the leading Prize winning varieties of CHRYSANTHEMUMS, CARNATIONS, and general Greenhouse stock. Trade List mailed on application.

JACOB SCHULZ,
LOUISVILLE, KY.

Measuring Palms.

There seems to be a diversity of opinion as to how the height of a palm should be determined. Some contend that it should be measured from the top of the earth in the pot to the tip of the leaf which stands the highest, and others that it should be from the bottom of the pot averaging the height of the leaves.

There should be more uniformity in this matter and some one method adopted which shall convey a fair idea to the mind of the buyer. Certainly catalogue men who give measurements should state their method. With present methods there is very apt to be misunderstandings between buyers and those who sell by catalogue.

We would recommend that the method of measuring from the bottom of the pot (that is, from the floor or bench on which the plant is standing) to a point averaging the height of the leaves, be universally adopted, as it possesses some advantages over the other. Also that in compiling a trade list of palms, the average number of perfect leaves on the size quoted, be stated.

Of course this is still far from an accurate description but it will be a step in the right direction.

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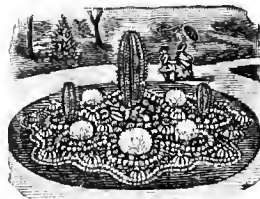
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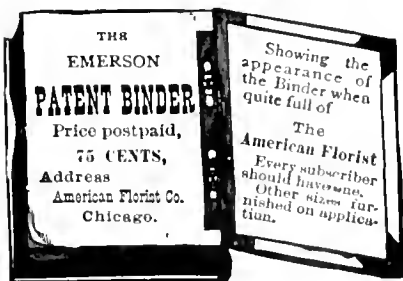
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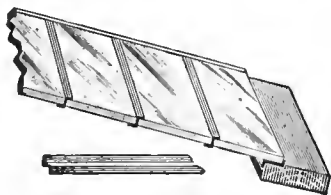
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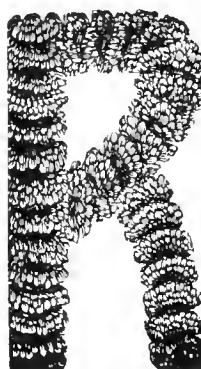
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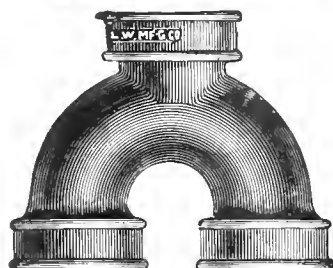
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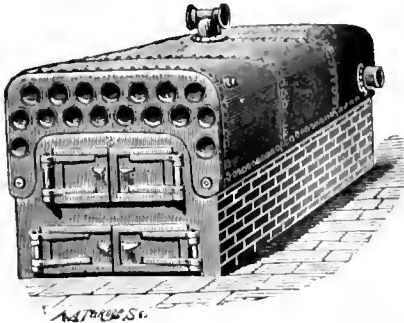
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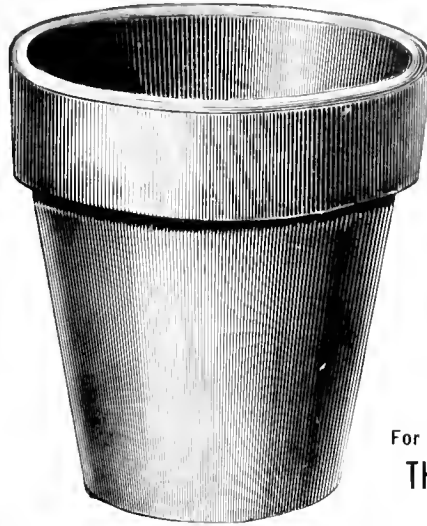
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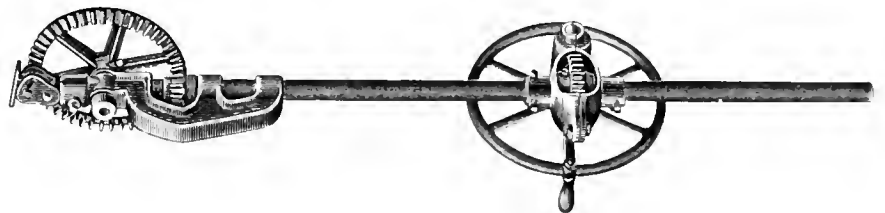
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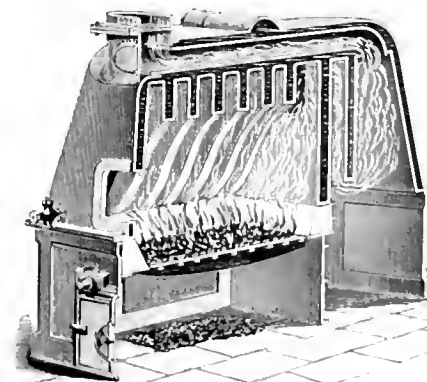
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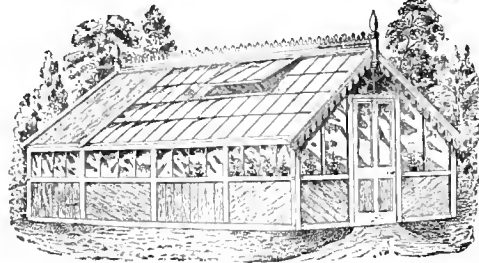
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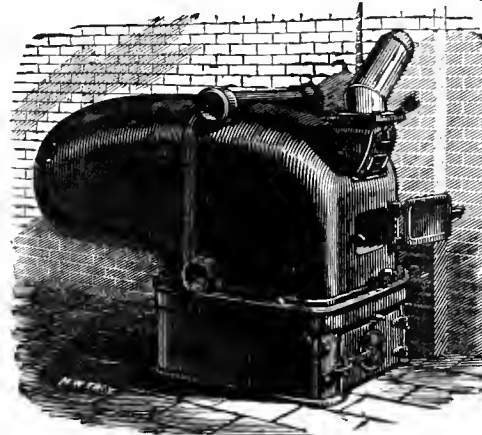
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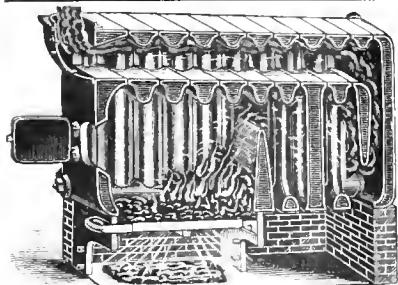
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THE COLD and rainy weather of the past ten days is in marked contrast with that of the June-like days of previous week, and has delayed the planting of much tender stuff. The season at June 1 will show little if any advance over the average year. Frosts are reported at several points the past week and summer weather will not be unwelcome now, set in as soon as it may.

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[How is this? What have the boys in the wild and woolly west been doing? Ed.]



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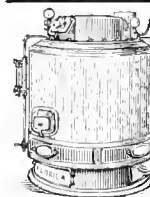
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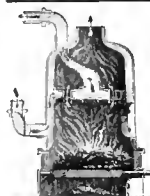
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ARRANGE YOUR BUSINESS now in such a way that you may surely be able to attend the Buffalo convention of the national society. Many of the little objectionable features noted at conventions held in the larger cities have been avoided in the arrangements for the meeting at Buffalo; the convention hall is of just the right size, neither too large nor too small, and with excellent acoustic properties, and it faces on a quiet street. The speakers should be heard with ease.

The Nurserymen's Convention.

At the fourteenth annual meeting of the American Association of Nurserymen held at Chicago, June 5 and 6, about 250 nurserymen were present and an excellent programme was discussed, certainly an advance over those of the last two conventions. The meeting place was in the lady's ordinary at the Grand Pacific Hotel, a room just large enough to seat the members present comfortably, and there were but few of the speakers who could not be heard with ease and comfort. As a consequence the discussions on the various essays were freer and more enjoyable, and many valuable points were brought out which have at other times been lost through the inability of all present to follow the various speakers.

Among the essays read "Suggestions for the Improvement of the Nursery Business" by the Hon. S. M. Emery, of Minnesota, was of much interest, and will be found in full in another column of this issue.

S. D. Willard of New York, gave his experience with new varieties of plums, and noted those which had done well with him. Quite a discussion followed upon the suitability of certain varieties for certain localities, and Mr. Patten of Iowa, very properly declared that salesmen should be allowed to sell in certain sections only varieties which had been found to do well in that locality. He believed that by enforcing this rule immense benefit would result to the whole trade.

In treating on the subject of "New Small Fruits," Theo. F. Longuecker of Ohio, believed that nurserymen should not distribute new berries until they had received a more thorough trial at the various experiment stations located at widely different points, thus showing their adaptability to different soils and conditions, and that nurserymen should not send out any plants of a new berry which were not propagated by themselves from plants known to be true, as it had often happened that stock secured from the originator of a new berry had proved to be mixed and the trade had thereby received condemnation for the errors of others. Prof. Budd, of the Agricultural College at Ames, Iowa, said that Downer's Prolific was undoubtedly still the best strawberry for home use. He believed that in the planting of strawberry plantations not enough plants bearing perfect flowers were used and recommended that pistillate and perfect flowering plants should be planted in alternate rows in order to have pollen enough to fertilize all the flowers.

A paper by Thos. Meehan of Pennsylvania, on the use of commercial fertilizers in the nursery was read by his son Thos. B. Meehan. Prof. Meehan believed that where common barnyard manure could not be secured except at a considerable out-

lay the commercial fertilizers could be used to great advantage. In the discussion which followed the manufacturers of fertilizers were given a decided overhaul, several speakers maintaining that most of them were practically worthless, and the sense of the discussion was that while some fertilizers were valuable that the majority should be viewed with suspicion until their value had been proved by a practical test. A number of members recommended the plowing under of rye when it began to head as a valuable and practical method of enriching land.

N. H. Albaugh of Ohio, told what had been learned about packing and shipping stock. In the discussion Mr. Augustine of Illinois, recommended sending a tracer about two days after each shipment. He found that if this was done delays at transfer points were not so apt to occur. The committee on transportation was instructed to attempt to devise some plan by which present delays in transit may be avoided. Speaking of the practice of puddling the roots of trees before shipping Prof. Budd said that where a clay puddle was used the mud should be carefully washed off before planting the trees, as when it dried on the roots it formed a hard covering which the young rootlets could not pierce and frequently caused the death of the tree. This was endorsed by other speakers. Mr. Douglas of Illinois, believed that more trees are killed by being packed too wet than there are by being packed too dry. That while the roots should not be allowed to dry out, a surplus of moisture was still more fatal.

Frank H. Wild of Missouri, considered the storage cellar no longer an experiment but an assured success. He had stock on exhibition in the hotel which had been carried over from last fall.

C. J. Carpenter of Nebraska, said that the demand for forest tree seedlings was almost unlimited. He had found planting a mixture of kinds together an advantage. He read some statistics showing that three European countries, including Great Britain and France had planted a total of 23 million forest trees in one year and laughed at the statement accompanying it that it exceeded the number planted in America. His firm alone had sold in one year 25 millions for planting, and three counties in Nebraska had produced and sold in one year 100 millions of forest tree seedlings, over four times the number said to have been planted in the three European countries. In the discussion the speakers were practically unanimous that the planting of cottonwood trees should be discouraged. It should in no event be planted among other trees as it robs everything near it.

Mr. Morey of New York, made no attempt to settle the question as to which tree digger was the best. He laughingly stated that on the circulars of each man-

ufacturer appeared the statement that his digger was the best on earth, and that as nurserymen were never known to tell an untruth he should not attempt to discriminate between the modest claims of such evidently truthful men. As to the value of some kind of a digger he believed that there could be no doubt. Mr. Douglas said that the nurserymen in the "rowdy west" would have all been in the poor house if it had not been for the tree digger, and sincerely pitied the nurseryman who had as yet failed to make use of them. He called the attention of those present to the fact that the original inventor of the tree digger was a Mr. Harkness of Illinois, and that those now in existence had but few if any improvements over the original.

N. H. Albaugh, of Ohio, thought that the machines for spraying insecticides over trees were a grand help to the nurseryman, and that the arsenical compounds when sprayed on the trees in this way will kill any insect that eats the foliage.

The Hon. H. E. Van Deman, U. S. Pomologist, of Washington, spoke on the nomenclature of fruits. He told of the reform started by the American Pomological Society and urged upon nurserymen the adoption of and use in their catalogues of the nomenclature prescribed by the Pomological Society. He mentioned some of the numerous synonyms of apples and other fruits in various parts of the country and expressed the belief that only through the nurserymen's catalogues could this much needed reform be practically brought about.

T. S. Hubbard, of New York, spoke on best methods of wintering grape vines. He packed them in bundles in cellar without anything around them; the cellar must be well ventilated if damp as otherwise the dampness may start them. In a dry cellar the roots should have some covering. Mould or mildew will not affect the roots unless they have been injured either by being bruised, dried or frozen.

In regard to best method of growing vines and stocks the Hon. Silas Wilson, of Iowa, said that grape cuttings should be from seven to ten inches long and that bundles of cuttings should be tied with willow or some similar tying material. Wire should never be used for this purpose, as the wire rusts and serious injury to the cutting results. The cutting should be set deep enough in the ground to leave only one bud exposed. He thought that many cuttings were seriously injured by carelessness in allowing them to lay around until they dried out. Mr. Hubbard stated that freezing did not injure the grape, but that a sudden thawing out was what did the damage. Prof. Budd said in regard to ventilating storage cellars that it should be done when the air outside is cooler than that inside—at night or in early morning, and that little ventilation should be given in damp weather, as the moisture would come in and condense inside, thus wetting the stock and inducing it to start. The value of the practice of dipping the roots of frosted plants in water to take the frost out before planting was enlarged upon by several members.

A paper from Peter Henderson, of New York, treated on preserving wood in greenhouses and the value of iron in greenhouse construction, but as we shall have an article from Mr. Henderson on this same subject in an early issue we forbear making any notes at this time.

As to the wisdom of nurserymen pursuing specialties Mr. Augustine, of Illinois, thought that if it meant confining

themselves to those things which they can grow most successfully he heartily approved of specialties. He believed that many nurserymen were trying to do what their soil and other conditions would not allow them to profitably accomplish, and that much of the profit realized from the stock which they were successful with went to help out on losses from attempts to grow other kinds.

Mr. Bragg, of Michigan, thought that Bogg's marker and a new adjustable nursery plow were valuable new implements for the nurseryman. Speaking of the various tree diggers (being himself a manufacturer of one), he recommended that nurserymen buy one of each of the four kinds on the market, retain the one that suited them best and loan the others to their neighbors.

The transportation committee was requested to make an effort to secure lower express rates, and the secretary was instructed to assess each member \$2 to obtain a fund to pay the expenses of the committee.

In response to a question, Prof. Budd said that his experience had been that grafts on crown roots made fewer fibrous roots but larger and stronger ones than grafts on lower sections of roots. That he used nearly the whole of the root—usually two thirds or more, and taking every thing into consideration he believed that method to be the best.

Fully one half of the programme was omitted owing to the absence of those to whom subjects had been assigned, but curtailed as it was all present were well pleased with the programme as rendered.

New York city was selected for the next annual meeting, and officers were re-elected as follows: President, Geo. A. Sweet, Dansville, N. Y.; First Vice-President, G. J. Carpenter, Fairbury, Neb.; Secretary, Chas. A. Green, Rochester, N. Y.; Treasurer, A. R. Whitney, Franklin Grove, Ill.; Executive Committee, Leo Weltz, Wilmington, O., S. D. Willard, Geneva, N. Y., S. M. Emery, Lake City, Minn. It was decided to make the New York convention a ten day session, in order to secure a longer limit on their railroad tickets.

Mr. Willard thought that the extra seven days would be an excellent thing for members who come from prohibition states, as it would give them time to straighten up and go home in good shape. Robt. Douglas incidentally mentioned the practice of substitution and dryly expressed the belief that some nurserymen drew the line at sending Norway spruces for Ben Davis apples. There was found to be a comfortable balance in the treasury, and the secretary's salary was increased to \$150 per annum. The exhibits were not as numerous as at previous conventions. A handsome collection of orchid blooms was shown by Pitcher & Manda, Short Hills, N. J. Parker Earle, president of the American Horticultural society was present one day.

Suggestions for the Improvement of the Nursery Business.

[Read before the American Association of Nurserymen at Chicago, June 5, 1889.]

At a memorable wedding feast that occurred forty centuries after the adoption of the apple as the original nurserymen's specialty, the rule was propounded, that good wine was put on tap at the close of the festivities; this is the only needed explanation, for this article appearing as an early selection.

"By the bitter irony of fate" an easy comfortable topic has been assigned: "The improvement of the nursery busi-

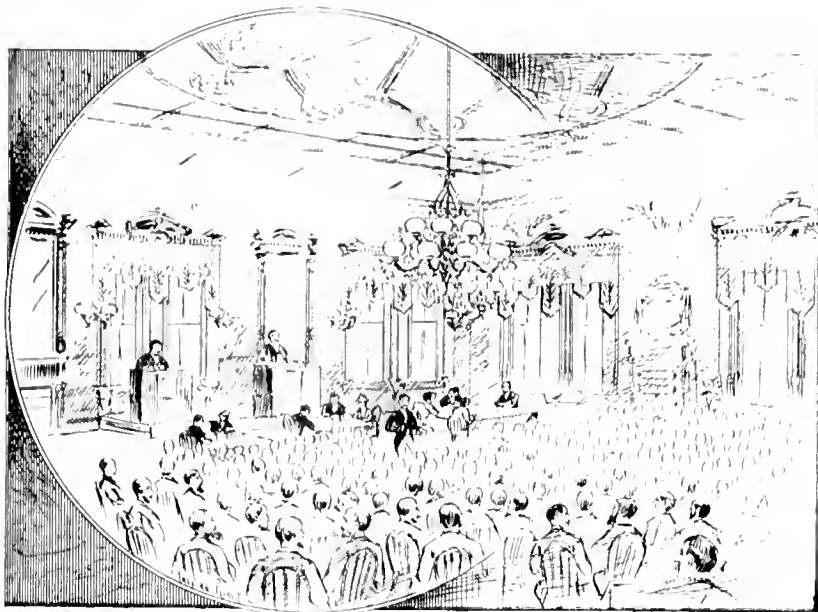
ness." Did you ever notice a street gamin arrayed in the cast off habiliments of his paternal progenitor, boots a dozen sizes too large, and the balance of the outfit, concealed from view by the coat that enveloped body, soul and breeches, a mile too large? Such I feel to be my condition, assigned to the pleasant task of instructing gentlemen, some of whom enjoyed a flourishing successful trade before my advent. These must not feel called upon to adopt any suggestions herein offered, prompted more perhaps from a burning zeal to obey orders than with any overpowering impression that the business, as a profession, will go to the dogs unless radical changes be made.

In suggesting improvements to increase production the maxim of the senior Weller who, when asked for his advice as to marrying a widow, invariably summed it up in the one word "Don't," might not be amiss in the apparent overdone state of stock. Note a blind man in strange quarters dependant wholly upon his staff and sense of hearing, feeling his way step at a time, such is not an incorrect simile of the history of each nurseryman or firm, considered from the beginning; many without the least idea of the future of their business. Experience, the inexorable tutor, that alone has won success; is it any wonder that many mistakes and errors of management have crept in, in working to such misfit patterns?

Some years ago roller coasters were popular in certain localities; large structures were provided with slides irregular in their course; the start was a steep descent, and from the momentum thus obtained the vehicle was swiftly borne downward and up over descents and ascents. The variation in prices of staple nursery stock in the past eight years reminds one of the roller coasting. In that time first class double X, inch and a quarter, dyed in the wool pears have wholesaled at 42c, likewise at 11c. Prime, light edge, number one sweet or sour cherry have gone like hot cakes at 35c, the supply nowhere equal to the demand; and the identical grade of cherries named have gone to the brush pile inside of sixty days, because they were not in demand at 4c. Apples, strong two year stock, Kansas grown, none better, budded or grafted 6 to 7 feet, straight as candles, thrifty and vigorous, have been sought eagerly at 15c, and as good trees have been freely offered this spring at 2c.

My friends, this was the experience of the western wheat grower, who was ruined by receiving \$2 50 per bushel for wheat, as was the case in 1868; ruined because, like the nurseryman getting 42c. for pear and 35c. for cherry, he imagined he had a cinch on all creation, and that he had the world by the nape of the neck and the slack of the trousers; habits of extravagance were contracted, the old southern idea obtained, to raise more cotton, to buy more negroes, to open up more land, to raise more cotton, etc. When the yield of wheat was cut in two and the monotony of half crops was broken by total failures, and the price, controlled by the production of wheat by the ryot of India, dropped to 60c, the bottom fell out, the bubble was pricked and the deluded granger was left to the study and practice of new schemes or starvation.

That these things are true every nurseryman knows to be a fact. What are the causes? How can they be overcome? The blind man needs light. Is it over-production? perhaps. Has the ruin of the nurseryman afforded any permanent gain to the world at large? If so there



THE NURSERYMEN'S CONVENTION AT CHICAGO JUNE 5 AND 6

may be some compensation, and yet we all know this is not the case. The orchard planter has paid \$5 per dozen for choice apples, \$15 per dozen for the luscious pear, and he has been convinced that life, liberty and the pursuit of happiness depended solely upon the all wool and a yard wide cherries at \$10 per dozen. If retail prices have held up why should the man who has borne the heat and burden of the day, be swollen and shrunken all out of financial shape by prices that have varied more than 50 per cent.

Now, friends, can't we trace this matter back to a logical head and detect the error responsible for these unjust variations. Some will blame the removal of the tariff upon imported goods for the shrinkage, and yet French apple seed costs double the price of the native seed, and very few, if any, apple seedlings are imported. The naturalist is sometimes confronted with disagreeable duties, securing casts of venomous reptiles, and yet science prevails, first procuring the snake they feed it Mrs. Winslow's syrup or some other harmless soporific, until insensibility ensues, a mold is taken in plaster, the sleeping beauty turned out none the worse for wear, and the cast is filled with tinted plaster of paris, the old mould is then delicately chiselled away until the tinted filling is reached, and the result is a fac-simile resemblance of a dangerous creature. "Comparisons are odious," none are intended, beyond an honest attempt to attach responsibility for the disorganized state of nursery prices, when it belongs to the nurseryman.

Upon whom does the nurseryman depend largely for the sale of his products? That bright and entertaining gentleman who, with his elegant outfit of painted fruit and other aids, wends his way from house to house and persuades the owners to exchange wealth of the realm for nursery goods, so far so good; this is an eminently proper procedure. The agent is usually on the war path during the months of May, June and July, from 42 to 16 weeks, winding up his canvass in August and

resting from his arduous labors until the time for delivery arrives. The goods are packed and delivered inside of fifteen days as a rule, and he returns to headquarters to divide(?) with the man who has spent from two to four years in producing the goods sold, and who in doing so has experienced more risks than the children of Israel in their 40 years outing. The division is figured by the rule of 4, that is to say the nurseryman gets 1 part and the solicitor 3; the apple tree retailed for 42c, is settled for at from 6 to 10c, the nurseryman receiving from 14 to 25 per cent as his pro rata, while the salesman or the middle man has to reimburse him for labor, expense and profit, from 75 to 86 per cent. His stock in trade is his outfit and cash expenses for 100 days, his acquirements or knowledge of the delicate processes of propagation are actually "nil," and his best stock in trade is cheek illimitable and push; and the worst is not told, because in some instances they expect canvassing outfits to be supplied free and to draw from the nurseryman upon their orders, when received, a sum of money oftentimes greater than the wholesale curb price of the goods supplied. In other words for the sake of doing business a cash capital is required outside of the cost of production, fully equal to the value of the goods sold. If I am drawing a long bow please call me down.

Some years ago while on a business trip to the Buckeye State, that noble commonwealth that supplies our association with so many bright and active members, that would as gladly supply all federal officeholders, all tree men and prime nursery stock needed to supply their orders, I visited a beautiful little city in the Miami Valley. My guide, philosopher and friend, was one of the ubiquitous and versatile tree dealers with whom the town seems so well supplied. We drove through the residence portion of the city and my attention was called to the elegant residence of Mr. A, a tree dealer; Mr. B occupied also a charming cottage, his business was the dissemination of new and valued varieties of fruits, etc.; on the opposite side Mr. C, another exam-

ple of Johnny Appleseed, had recently finished a superb mansion from last season's profits, and so on, up one street and down the next, until to my fevered imagination that little city seemed to be peopled with flourishing tree men who could at least in a measure meet the ancient description of the lily of the field, that neither toiled nor spun. Our drive presently brought us toward the nurseries located in the outer suburbs, and in place of the suburban villas, that should furnish shelter to the man that made it possible by the expenditure of his labor and capital, for so many to thrive; very modest edifices seemed to satisfy their desires.

The comparative prosperity seemed to have been divided, as did the establishment of the Irish couple who, when they agreed to disagree, divided their shanty by the woman taking the inside and the man the outside. Or like the tramp bound to New York city from Buffalo, who tackled the captain of the canal boat for transportation, a bargain was struck whereby his fare was to be given him in return for services on the trip. The labor assigned to him was driving the mules on the tow-path; after doing this for three days, he decided that except for the name of traveling by boat, his trip was a failure. And so with the nurseryman who seems to be enjoying the privilege of working for nothing and boarding himself.

Now friends, I have no quarrel with the dealer or the middle man; two are always needed in constructing bargains, and you are the other party to the contract. It is simply a case of where in place of laying away his gall with the balance of his outfit used when through canvassing the bucolic denizen, he has brought it in with him, turned it loose upon you, and has made you believe your business would go to the demition how wows unless you gave him your good trees at his poor prices.

Nurserymen all over the country have increased their plantings, stimulated by the good prices of former years, with no controllable outlet to move off their stock at maturity. Catalogues are going forth with the legend emblazoned thereon "No agents employed," which is a direct bid to dealers to represent them, and they can't be blamed for this, because it relieves the office of a world of bother and trouble to dispose of the stock, and such a business is a pleasure to transact, always provided it can be kept in bounds. These agents whose only interest in your business is the margin between wholesale and retail prices, have not always talked things just as they are; customers have become suspicious, sales have fallen off, expenses increased, until to-day the man that can retail \$10,000 worth of trees can earn a better salary than a member of Congress. A wild chase has been entered into between producers, the object of which apparently is to see who can sell the most and the cheapest. Cannot this be obviated? Other goods find their way to market short of such enormous tolls; dry goods are sold away past consumption at an average of less than 1 per cent. commission from the wholesaler to the retailer. As between 100 per cent. of labor, land and expense, invested to net say \$1000 there certainly ought to be a larger profit to the man that saves 25 per cent. of land, labor and expense to gain the same \$1000.

The cure for this? that you must work out. The hair of the dog is good for the bite; reckless, indiscriminate plantings must be avoided, cost must be considered (how many of us can tell the cost, when

ready for market of our wares?), and by judicious, careful manipulation prices brought up to the standard that the grower should receive a fair return for his labor and capital. This is clearly to the interest of all parties concerned; the dealer is foolish to kill the goose that lays the golden egg, foolish because while he may think "well, I will make my pile and quit," he will never reform in the world. Once a tree man always a tree man until death do part the tie between time and eternity.

Do not understand me to desire to convey the impression that every nurseryman is on the verge of ruin and that all have to do business as has been faintly outlined; nothing of the kind. There are scores of nurserymen to whom your financial faith can be pinned with every assurance of safety; but all the same they feel the demoralizing effects of this wholesale cutting, and would doubtless gladly join hands in any honorable endeavor to control existing abuses.

Auction Sales of Plants.

The auction sales of plants which occur each spring at New York and Boston meet with almost universal condemnation by those in the trade, and there can be no doubt that these sales have a tendency to injure the market for all alike.

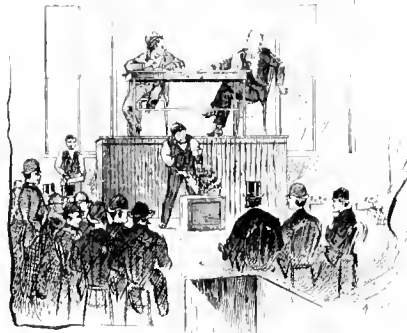
At the New York auction sales this spring prices have averaged lower than in former years, and it would seem that the "auction disease" may soon find its own remedy in forcing prices down to such a point that those who send plants there will not obtain enough for them to pay for packing and transportation. Certainly much of the bedding stuff sent there is worth but little more than the boxes which hold it, though considerable quantities of plants of very fair quality are sold at ridiculously low prices.

We give below the prices per 100 which plants brought at the sale at Young & Elliott's, New York, May 28:

Coleus Verschaffeltii from 2 inch pots, fair plants from two to three inches high, \$1 to \$2; *Coleus Golden Bedder* from 2-inch pots, about two inches high, \$1 to \$1.50; other sorts at latter rate, except mixed lots which sold almost uniformly at \$1; *Alternantheras*, 2-inch in variety including *paronychioides major* and *aurea nana*, \$1 to \$1.25; *Achyranthes*, 2-inch, \$1; *Heliotropes*, 3 inch, good plants, \$4 to \$4.50; Mt of *Snow geraniums*, 3-inch, \$3 to \$3.50; same, 2-inch, \$1 to \$2; *Gen. Grant geraniums*, 1-inch, \$3.50 to \$5; same 3 inch, \$2.50 to \$5; *Fuchsias*, 1 inch, good plants, \$3 to \$5, averaging about \$5; *Rex begonias*, 3 inch, \$3 to \$4.50; same, 2 inch, \$3.50; assorted *begonias*, 3 inch, \$4; same, 2 1/2-inch, \$3; *feverfew*, 3-inch, \$2; *Smilax*, 2 1/2-inch, good plants, \$3 to \$4; *German ivy*, 2-inch, \$2; *dahlia*, 2-inch, \$1; *Salvia splendens*, 2 inch, \$3.50 to \$6, seemed to be a good demand for this *salvia*; *Marie Louise violets*, very fair clumps, \$1 to \$3; *Ampelopsis Veitchii*, 3 inch, \$6; *Ampelopsis quinquefolia*, 3 inch, \$5; *gloxinias*, 4 inch, \$6 to \$11; *Hydrangea otaksa*, 5 inch, in fair bloom, \$8 to \$12; *Caladium esculentum*, 3 inch, \$5; *cannas*, 4-inch, \$3 to \$4; *Centaurea candidissima*, 3 inch, \$3; *chrysanthemums*, 2 1/2-inch, \$3; assorted *geraniums*, 1 inch, \$3.50; *echeverias*, 3 inch, \$3; *Adiantum cuneatum*, 2 inch, \$3; same, 1 inch, \$1.2; *Pteris tremula*, 3 inch, \$3 to \$6; same, 1 inch, \$7; *Pteris serrulata*, 2 1/2-inch, \$2.50 to \$3; *Pteris cretica albo-lineata*, 2 1/2 inch, \$3; *Pteris argyrea*, 3-inch, \$10; *rose Ball of Suow*, 5 inch, \$11; *American Beauty*, 5 inch, \$30;

Magna Charta, 5 inch, \$10; *Perle des Jardins*, 5-inch, \$12; assorted hybrids, 5-inch, \$15 to \$20; assorted teas, 4 inch, \$2 to \$3; *Pyrethrum aureum*, 5oc. to \$1.

It is doubtful if any of these plants could be produced for the amounts for which they sold, except possibly the *coleus*. *Coleus* grow so quickly and small plants can be propagated so rapidly that it is possible that there may have been a profit even at these prices on the quality of plants sold, for the bulk of them were but little more than rooted cuttings. But most of the other plants were kinds which can not be produced over night, and it would seem that if prices continue as at present but few will care to grow plants for auction sale in future.



"SOLD A \$100 A HUNDRED WHO WANTS THE NEXT LOT AT SAME PRICE."

One dealer who was in former years a large buyer at the auction sales is now rarely seen there. His explanation is that when he used the plants obtained there to fill orders, so many died and had to be replaced that it paid him better to go elsewhere and pay more for stuff which had more life in it. And it is a notable fact that there were but few florists and plant dealers in the crowd of buyers, the majority being private parties who bought for their own use.

The accompanying sketch shows a portion of the auction room at Young & Elliott's, with Auctioneer Elliott seated on his throne governing with autocratic rule the buyers below. Woe to the buyer who meets with his displeasure for the victim will be treated to a fire of sarcastic remarks at his expense which it would be dangerous for any one but an auctioneer to indulge in. But auctioneers probably realize that men who spend their time watching for a chance to buy something for less than the cost of production are not apt to be over sensitive.

Lycastes.

Lycaste now includes *Colax* and *Paphia* and comprises about thirty species generally distributed through Central America and Mexico, and found growing on trees or in the ground. Many of these are of little value except for botanical purposes, and the *Colax* and *Paphia* section require too much care to keep them in good health to be of any value to a florist.

I have selected a few species which will be found useful for cutting purposes, all of these flower freely and are easily grown in the houses usually at the disposal of a florist. Rich open soil should be used in well drained pots and abundance of water is necessary both overhead and at root during the growing season,

only sufficient shade should be given to ensure the leaves from being burned and give all the air possible during the warm months. With few exceptions these species can be procured in large quantities and cheaply, and especially is this so of *Skinnerii*, the best known and most popular of the genus.

An article detailing the culture of this species appeared on page 110 of present volume, and the direction there given is applicable to all the following species, excepting that *aromatica* and *cruenta* should be kept quite dry as soon as the leaves are off. These are golden yellow kinds, the latter being ornamented with a large crimson blotch on lip; both produce a profusion of flowers on a bulb and may be had in flower from March to June. *Depei* is a pretty free blooming species, they are produced on stalks about eight inches long, greenish yellow sepals dotted with purple, the petals are white, the lip being prettily speckled with crimson; this species generally retains its foliage till the new growths appear. *Lanipes* is an evergreen large growing plant producing a great many large flowers, which are creamy white with a beautifully fringed lip. This is a grand midwinter species and will be found very useful for cutting. *Plana* is similar in growth to the foregoing, having fine large flowers with reddish sepals and small white petals ornamented with a crimson blotch—a handsome species. *Gigantea*, though not a showy kind, is conspicuous for its immense flowers of greenish yellow, the ciliated lip having a large maroon blotch on the front, the scapes are two feet long; this is a very strong growing plant, requiring the most liberal treatment. F. GOLDRING.

Notes From Glen Cove, N. Y.

BY A. E. WHITTLE.

How often is it the case that objects worthy of admiration are all around us and yet are passed by unnoticed, because our attention has not been specially directed to them.

No more striking illustration of this fact can be found than a late experience of the writer. For some time he has remarked with interest the many descriptive and cultural notes of various plants from the pen of Mr. Wm. Falconer, which have appeared in the *FLORIST* and other papers, but having no personal knowledge of this gentleman he felt some curiosity as to the opportunities afforded for the accumulation of so much knowledge.

In order that this curiosity might be gratified, and also for the purpose of acquiring some needed information, a day was devoted in the middle of the month of May to a visit to Glen Cove.

There are several trains to this Long Island village, leaving at different hours during the day from the Thirty-fourth street ferry, New York, but for any one desirous of seeing all that Mr. Falconer has to show, it is advisable to leave New York by the earliest train possible. A ride of about 90 minutes from the ferry brings one to the village, but as the gardens of which Mr. Falconer has charge lie some three miles from the station, it is necessary that some conveyance be used by the visitor in order to reach them, but if notice is sent in time to Mr. Falconer he kindly provides all needed accommodation of this kind for his guests. Mr. Dana, widely known as the editor of the New York *Sun* newspaper, is the owner of these gardens which are situated upon a small island of forty-five



GROUP OF LYCASTE SKINNERII, OWNED BY MR. ERASTUS CORNING ALBANY, N. Y.

acres, in close proximity to the main land, and the whole of which is devoted to the making of as handsome an estate as can be found in this part of America.

One of the leading features is the infinite variety of trees and shrubs. The object appears to be to possess one perfect specimen of every species in cultivation hardy on Long Island, for if inquiry is made as to whether any designated tree or shrub is growing on the place, the answer is invariably, "Oh, yes! we have it." Every specimen shows the care that has been spent upon it, for all are shapely and symmetrical, and this is due particularly to the method of pruning pursued, the purpose being to use the knife as little as possible. From the conifers the superfluous shoots, when young, are removed by the thumb and finger. No grass is allowed to grow near any specimen, but the soil is first forked and then covered by a light mulch of salt hay to prevent evaporation.

During the month of May the visitor will be most especially impressed with the very handsome wistaria that are planted through the grounds and many of which are grown as standards. One, in particular, is alone worth a visit, and could a photograph be taken from it when in full flower, many now ignorant of the possibilities of this plant would be surprised at its rich appearance. As this specimen was not measured the accurate size can not be given but some idea may

be had when it is stated that it was covered by hundreds of clusters of flowers, in such profusion that but few of the leaves could be seen.

Splendid collections of oaks, maples, beeches, chestnuts, etc., are to be seen, each specimen standing apart from any other, thus giving every individual tree the chance to attain perfection. A broad leaved form of the English beech and a weeping elm are two trees desirable for their beauty. Evidently the laburnum is at home in this section, a well grown specimen being in flower. The double thorns also in like condition. The conifers are noticeable for the variety and quality. Not a poor tree to be seen on the ground, many quite large and furnished with branches to the ground. A Japanese hemlock is handsome and as it is said to be hardy, growing anywhere, its ornamental appearance makes it more desirable than the form commonly seen. Specimens of the Lebanon and Deodara cedars can also be seen, and though the top of the latter suffers every winter, yet it still retains its place in the collection.

Among the many flowering shrubs to be seen all around two were mentioned by Mr. Falconer as likely to be of use to florists for forcing purposes, no difficulty being experienced in having them in for Easter: *Exochorda grandiflora* and *Staphylea colchica*. Of the spiræas the one seemingly most desirable for florists is *trilobata* Van Houttei. A good collec-

tion of viburnums—*Viburnum plicatum* being used for forcing. Quite nice plants are obtained by layering branches, which when rooted are cut off and placed in pots of suitable size. An easy and successful way of providing stock.

Besides the many trees and shrubs planted in a large bed by themselves is a number of hardy and Ghent azaleas surrounded by a belt of *Azalea arborescens*. These, at the time of the visit, were all in full flower, and a more beautiful sight it would be hard to find. It is strange that these azaleas are not more generally used for ornamental gardening, since by their luxuriant appearance in this place they prove how readily they can be wintered with safety in the latitude of New York. Also some very fine clumps of *thoidendrons*, but these were not then in flower.

Growing in the borders are many hardy herbaceous plants. These combined with annuals and perennials offer a constant succession during the spring, summer and fall months of flowering plants. Conspicuous at this time as likely to be of value to the florist, were two candytufts, *Iberis sempervirens* and *Iberis gibraltaria*. These have large and fine flowers and if grown in quantity could not fail of proving at this season of the year most useful for florists' work.

Planted with the shrubs were many clumps of lily of the valley, and the flowers which these were producing were certainly the finest the writer has ever

seen, flower stalk strong, erect and covered with large bells. Mr. Falconer stated that he does not depend upon imported pips for forcing, but uses his own clumps which give him far finer flowers than any he can gather from foreign stock. He lifts the clumps and plants them in flats in the fall, taking them into the houses as he needs them for succession during the winter. Those that are forced one winter are planted in the borders next spring, and are allowed to remain there undisturbed for the two summers and winter following. The secret of their vigorous flowers and leaves is the abundant use of manure in the ground. Why should florists depend upon Europe for lily of the valley when such first class results can be obtained from home grown stock? Besides, Mr. Falconer states that he cuts his first flowers of valley in January, quite as early as any that can be gathered from imported pips.

That part of the estate which is devoted to the growing of vegetables and fruit is a model of cleanliness and system. Not a weed to be seen. Not a tree or bush but what is of handsome shape and wherever needed receiving the proper support. A large vineyard and rose arbor all add to the attraction.

Mushrooms are apparently grown to perfection. A cellar excavated for this purpose, lined and arched with brick, two or three openings being left at the top for ventilation. Artificial heat, of course, is provided in the winter. There is not a large range of glass. The plants, however, that were inside bore witness to the skill of the cultivator. Gloxinias and calceolarias were noticeable for good growth and handsome flowers.

Such is a brief description of a well ordered place. A garden in which every lover of horticulture will most assuredly delight. To find so much variety and all the work well done shows the comprehensive and thoroughly trained mind of the one who cares for this establishment. Flattery is always to be avoided, but well merited praise should ever be freely given. Mr. Falconer is an enthusiast, caring nothing for labor so that his eyes and heart may be gladdened by the vigor and beauty of the plants he delights in. His knowledge is gained by the most careful and thorough study. For fifteen years it has been his habit to collate all the facts that can possibly be known concerning the innumerable plants of which he has had charge. Note books are filled with items relating to the time of flowering, duration of bloom, etc. of every flower that opens in these gardens. So thorough a system is a lesson to us all. To trust too much to the memory is a fault in which many of us indulge, but as we grow older experience teaches us that memory is exceedingly treacherous. A constant carrying of the note book and the instant writing in it of whatever may impress the mind concerning the work in hand is the true way.

It is pleasant to me to be able to direct attention through the pages of the FLORIST to a comparatively little known place. The ability of the superintendent is only exceeded by his hospitality, and any one of our number who sincerely admires plants, should he visit Glen Cove may be assured of a hearty welcome, provided he gives Mr. Falconer due notice.

Albany, N. Y., June 3.

NEW FRENCH PEONIAS.—J. T. Temple, of Davenport, Iowa, sends us a basket of cut blooms of these which are very

fine. Some very deep crimson and white with crimson being especially noticeable. The range of colors shown is also very complete.



The Mme. Lambard as a Forcing Rose.

A short time ago I saw in the FLORIST an inquiry from some one asking how the Mme. Lambard rose behaves as a winter bloomer.

I have had them on the bench on two or more occasions, and found them as far as mere blooming quality is concerned, quite as free as Mermet, if not more so. It is a more vigorous rose than Mermet, consequently more easily managed. Buds come singly on strong shoots with rich dark foliage.

The buds are shorter than those of the Mermet and not so delicate or finely recurved at the point, for which reason if it be a choice between the two kinds. The Mermet is decidedly to be given preference as a winter bloomer.

ERNEST WALKER.

New Albany, Ind.

Roses for Market Plants.

Mr. W. K. Harris, a large Philadelphia grower of pot roses for market, confines himself mainly to a half dozen varieties. Jacqueminots, Magna Chartas and Hermosas constitute the bulk of his spring market roses in pots, while Nerons, Malmaisons and La France are grown in smaller quantities. A few other varieties are grown for the purpose, but those above named constitute four fifths of his stock.

Mr. Wm. Colflesh, a neighboring grower, finds Hermosa, Queen's Scarlet, Jacqueminot, La France and Magna Charta the best for market plants, the bulk of his pot roses this spring being of the three varieties first named.

New Rose Climbing Perle des Jardins.

This is a sport of the well known Perle des Jardins which has originated with Mr. Charles Anderson, Flushing, N. Y.

The flowers are almost identical with the Perle. In habit it is a vigorous climber, and it will undoubtedly prove a valuable rose for the south.

The illustration shows a cluster of blooms cut from the original plant. A photograph of the plant, which accompanied that of the flowers, shows a very vigorous growth, well covered with bloom.

The "Wootton" Rose.

This rose has been advertised and sent out as perfectly free from "spot." That is not correct, for I sent to Mr. J. Cook for 100 plants of it and when they arrived the majority of them were badly affected with "spot," and at present the leaves are showing the disease as fast as they appear, in fact it appears to take "spot" quite as easily as the Bennett. I would be glad to hear if "spot" has appeared on any other stock of this rose, or is mine the only case. JOS. BENNETT.

Montreal.

MR. CARMAN writes to us about his hybrid roses: "Another of our hybrid roses has bloomed. The mother is Rosa rugosa, the father Harrison's Yellow. The hybrid, so far as the bud and flower are concerned, is a perfect Gen. Jacqu. The same odor, color, size, number of petals, etc. The plant is a Rosa rugosa with the wrinkles and leatheriness of the leaflets modified. The leaflets are much larger than those of rugosa. Now, this plant is a perpetual bloomer—just the same as R. rugosa. It is as hardy as any rose I have ever grown. The plant is four feet high and bears to-day (June 1) 165 buds."

THE ROSE GARDEN, BY WM. PAUL.—A copy of the ninth edition of this well known work is at hand. Mr. Paul's book has long been a standard work on the rose, and to those familiar with it but little need be said except that the new edition contains several new features and the lists of varieties are corrected up to date of publication. It is certainly indispensable to the library of any one interested in roses, and the twenty excellent colored plates which it contains makes it a very attractive book for the amateur. While the text is written from an English standpoint, and many of the cultural directions should of necessity be varied by American growers to suit the difference in climate, the book is otherwise of equal value to all alike, and the chapters upon cross-breeding and hybridization can not fail to be of interest to all rosarians. Published by Kent & Co., London.

Arboretum Notes.

Among the brightest flowers to be seen now are the genistas. A very pretty little thing is the Genista Germanica. It is but a foot in height and the pendant branches are covered with dainty little yellow flowers. The Cytisus scoparius or English Broom is simply loaded with great masses of brightest yellow bloom. It makes a glorious display. Why would not this old plant make a good subject for forcing? Yellow is in demand for many occasions in the winter, and here is to be found pure color, and an abundance of it. Cytisus albus, the White Broom, is just past its prime.

Two varieties of Robinia hispida now in bloom are strongly recommended by Mr. Dawson for forcing. They are both bright rose colored, the light shaded one being one week earlier than the darker one.

Of course the well known favorites Deutzia gracilis, the White Fringe (Chionanthus virginica), the Snow Ball (Viburnum opulis sterilis) are now at their best. There are very fine specimen plants of all these in the grounds.

The Philadelphus group is now beginning to look quite gay. P. coronarius var. Schrenkii is one of the earliest, being about ten days in advance of the others. P. speciosus has magnificent blossoms of purest white, measuring 2½ inches across.

In spiræas the Japonica varieties are just coming into bud. There are still left of the early flowering section Spiræa trilobata and S. Cantoniensis. The latter comes in both single and double forms and was formerly known as S. Reevesii and S. Reevesii fl. pl.

There are in the Arboretum about forty varieties of weigelia, many of them new. Among the best are candida and alba nivea, both white, Lowii dark red and Van Houtteii rosy pink.

Lonicera caprifolium, the old favorite



NEA R. CLIMBING PEUPLE DES JARDINS.

honeysuckle, is to be seen in bloom now in many varieties. Among the shrubby loniceras one of the prettiest is *L. Albertii*. This has fine foliage and delicate pink flowers borne on graceful drooping stems. It is deliciously fragrant. *Lonicera ciliata* which bloomed in April is now covered with bright scarlet fruit, which is even prettier than the flowers.

While searching distant parts of the earth for new and beautiful shrubs we have in some cases overlooked valuable things right at our own doors. There are few prettier white flowering shrubs than the *Vaccinium staminum*, found about Amherst, Mass., and more commonly known as the Deer Berry. It is worthy a place in every choice collection and would be a valuable addition to our forcing shrubs.

The Killarney Heaths (*Daboecia polifolia*) are now in bloom and will flower all summer. They are graceful little plants, about one foot high with flowers either white or purple. The only andromeda in flower at present is *A. Mariana*. It is one of the best, with very large white bells. The kalmias are just beginning to open their buds.

The rhododendrons are now in their glory. The hardy azaleas, which by the way are all rhododendrons now, are to be seen in all shades of color. Some seedling Ghents raised by Mr. Dawson are equal to the finest named varieties, and a number of seedlings of *R. calendulacea*

raised from seed gathered in the mountains of North Carolina do not suffer in the least by a comparison with the best imported Ghents.

We seldom get anything which is hardy in Massachusetts from New Mexico, but we have one very good shrub from that locality which is perfectly hardy, the *Lycium pallidum*. The foliage is of a glaucous green, and the pale solanum-like flowers hang in pretty bells from the under side of the twigs.

Among the newer and rarer things now in bloom are *Jamsia Americana*, a Rocky Mountain plant with flowers resembling *Deutzia gracilis*, *Photima villosa*, a Hawthorn-like shrub from Japan, and *Syringa villosa* from the mountains of Pekin. The latter is valuable as being a late flowering variety, blooming after all the other lilacs are gone.

There are quite a number of roses now in bloom. The finest of these by far is Mr. Dawson's dark red variety of *R. rugosa*. The flowers are almost as dark in color as a Jacqueminot. Among the prettiest single roses are the many varieties of the Scotch rose (*Rosa spinosissima*)

WM. J. STEWART.

Boston, June 1, 1889.

ARECA SANDERIANA is a palm but little known in this country, but its good qualities will undoubtedly bring it into prominence as an excellent palm for trade purposes. It has richly colored leaf stems and veined leaves. It has

impressed growers so favorably that stocks are being worked up in anticipation of a demand.

Long Island Notes.

BY WM. FALCONER

THE FLOWERS of *Magnolia parviflora* are the most fragrant blossoms of any kind whatever now in our place, and they are lovely. But oh, how the rose bugs love it!

MAGNOLIA HYPOLEUCA is now in bloom and for the first time with us. It is a rare Japanese species, not unlike our *M. Umbrella*. The flowers are large, creamy white and deliciously scented; at the same time I like *M. parviflora* better.

OUR BEST white lilac is *Marie Legraye*. Not only are the panicles of immense size, but they are produced in extravagant abundance, and the plant is a capital grower.

AMONG DOUBLE FLOWERED LILACS *Lemoinei* fl. pl. is one of the freest blooming and most distinct. Its color is bluish lavender. But I prefer single flowered varieties.

WHILE THE white fleecy lilacs as *Syringa Japonica* and *S. Amurensis* are desirable garden shrubs, I don't think it would pay to grow them for forcing.

SYRINGA VILLOSA will, I think, when it gets plentiful enough, commend itself for forcing purposes. We do not know enough about *S. pubescens*, and the *S. Pekinensis* we see so much about has not yet, so far as I can find out, blossomed in this country.

SNOWBALL SHRUBS.—All things considered I look upon *Viburnum plicatum* as the best of all the snowballs, at the same time I must admit that *V. rotundifolium* is earlier, as prolific and if anything, has larger heads of flowers. Both can be forced with the greatest ease and had in bloom at any time after New Years you wish. Don't throw them away after they are forced, but plant them out and give them a two year's rest, then force them again. I raise our plants by layering. Take good sized branches and elbow them into the ground; they root well inside of a year. Then separate, plant out and grow on for a year and one will have nice flowering stock.

ORIENTAL POPPIES are now in bloom, and what splendid glowing flowers they are. If you cut the flowers before they are fully open and especially before the anthers burst and spread the pollen, these fiery blossoms will last in good condition for two or three days. Even if you don't use them in cut flower work, aren't they worth growing for decorating your window? They are long-lived perennials and will grow and thrive in dry land or sandy land, but of course good soil and an open position suits them best.

IRIS PALLIDA is also in bloom. One of the boldest and noblest of irises. The blue form is the best. Perfectly hardy and a rank and rapid grower. Capital for cutting with long stems and using for large decorations, hall vases or the like.

OF IRIS SIBIRICA we have many varieties more or less meritorious, and all of them seed around, grow up and blossom with the freedom of weeds. The variety called *sanguinea* is the best and as free a weed as any.

THE GERMAN IRISES are now in their heyday and a gay lot of hardy flowers they are too; at the same time there is a good deal of commonness and lack of brightness among them. But they are hardy, easy to grow and sure to bloom,

KEMPFER'S IRISES won't be in bloom for a few weeks to come—generally about the last of June.

HALLOCK'S TREE PEONIAS are the grandest things in the way of flowers I have seen for many a day. Most of them are single. They run in color from white and pink to deep crimson, and are of enormous size. He imported them directly from Japan. We have ordered every variety, and this is the best recommendation that I can give them.

PYRETHRUM ULIGINOSUM.—Those of your readers who have got a stock of it should advertise it. Most every day I have applications for it. The people want it and don't know where to get it.

THE GLADIOLUS-FLOWERED CANNAS.—You ought to grow a lot of them. They are dwarf, very showy and free flowering, and not only fitted for planting out doors in summer, but they make handsome indoor blooming plants in early spring. Don't store them dry over winter as you would a common *Canna Indica*, but keep them growing a little as you do *C. Ehemanni*.

THINKING OURSELVES smart we ordered a full set of the finest and newest of these cannas last fall in London, and to be forwarded here in October or November. I thought if we got them then I could grow them on all winter and before planting out time next May, have a nice little stock of each variety. But Johnnie Bull was cute enough, and it was the 23d day of May before we got our cannas. Each plant was a single shoot 8 to 14 inches long and in a 4 inch pot, but all arrived in superb condition.

ONLY A MULLEIN (*Verbascum Olympicum*), but, oh, so grand! Five to eight feet high, branched from the bottom to the top, and a golden yellow candelabrum from May into June. It is a triennial, not extra hardy, and its large, broad whitish woolly leaves form a rosulate mass five to seven feet across. It seeds freely and the seeds grow readily. A splendid plant for bold effects in parks.

SALVIA NUTANS, although an old plant, is very scarce in cultivation. It is a hardy perennial, three feet high, very floriferous, and its flowers are bluish-purple, in racemes terminating the long branched spikes. Showy as a border flower and now in its heyday. Propagated by seed or division.

THE GOLDEN COREOPSIS (*C. lanceolata*) is now in bloom and will last in all its golden glory throughout June, then sparingly for a little while till it recovers from its first great splurge when it will again bloom considerably throughout late summer and fall. Now, note this point: Established plants bloom full in June; plants that have been transplanted in April or about the first of May bloom full in July, so too will old established plants cut back early in May. Every florist should grow this plant. It is a hardy, herbaceous perennial, easy to grow, copious to bloom and the finest yellow flower of its season. With me it seeds abundantly, but this free seeding is not general. Mr. Nicholas Hallock at Creedmoor tells me it doesn't seed at all with him. And I know the seed is scarce in Europe, for some big European houses had to buy their seed last season in this country.

IN THE FLORIST, page 494, July 15, 1887. I wrote regarding this coreopsis: "North of New York it will not likely bloom the first year from seed." Apropos of this, William Stone wrote in the next number of the FLORIST, page 518, August

1. "I have it now budded from seed planted this spring, and my experience with it is that it will bloom as early as annuals generally." The annual coreopsis such as *C. Drummondii*, *C. coronata* and *C. tinctoria*, if sown out of doors in April come into bloom from June into July, but this *C. lanceolata* has never done with me; indeed, I have no reason whatever to modify what I then wrote. But as I have plenty seed of 1888 gathering, also young plants and open blossoms of the finest form of *C. lanceolata*, if Mr. Stone sends me his address I will gladly let him have seeds and plants gratis and flowers for comparison.

DOUBLE PYRETHRUMS.—These are among the choicest of hardy perennials; there is nothing trashy about them; you can use them in any decoration you please and associate them with maiden-hair fern or plumosa asparagus. They are more refined than the best double China asters, and they are in season from the end of May and throughout June, at a time when you can not have asters without a good deal of trouble. But with these pyrethrums we have scarcely any trouble; they are perfectly hardy and only require good ground, good drainage, shelter from wind and to be lifted, divided and replanted every second year. But florists in their rapacity for increase of stock will be apt to divide them every year. The flowers are full double and in color run from pure white through blush, pink, rose and to deep crimson, and, curious enough, the pure white ones are among the toughest and best growers.

DOUBLE PYRETHRUMS FROM SEED.—Get a good strain, that is, from a reliable source. The seeds germinate readily and the young plants grow quickly and most of them will bloom the first year; you will only have a few fair doubles, a few semi-doubles and a good many singles, but altogether a pleasant combination. Although from seed is an easy way to get up a big stock of plants I do not think it will pay the cut flower florist; he had better have the finest full doubles to begin with and increase these and stick to them.

SINGLE PYRETHRUMS.—These are beautiful. In England they make a specialty of single pyrethrums, and the seeds of the choicer strains cost just as much as do those of the doubles. From a packet of "finest single varieties" we get many handsome flowers—white, rose, pink and crimson, with a preponderance of pinkish. The proper thing to do here is to select and keep the choicest and weed out and throw away the poorest. Although not as choice as the doubles they are well liked among cut flowers. The variety known as *atrosanguineum* is a beauty, a deep bright crimson red. As we have nothing else like it at this time of the year it is both striking and taking. The singles are a little rank in habit; the doubles are not. It is real nice to have a big lot of these pyrethrums come in at Decoration Day. And if we have them in beds so that in the event of the season being late we can quickly erect a temporary frame around them with sashes on, we can hasten or retard them to suit the season.

PYRETHRUM ULIGINOSUM.—This plant figured in the FLORIST, page 465, May 15, is also figured and written about in the *Gardeners' Chronicle* of May 25 last and just to hand. E. Jenkins who writes about it, is an enthusiast in floriculture and the owner of one of the finest gardens near Edinburgh. After extolling

its merits generally he tells us how he succeeds in dwarfing it from a 6 foot high to a 3 foot high specimen without impairing its usefulness as a decorative or flower yielding plant. "To reduce this plant" (to 3 feet), he says, "I simply cut it down to within 4 or 6 inches of the ground in the first week in June, at which time it will be 1½ to 2 feet high, allowing it to grow again at will. * * In this way I get a bed of white blooms 3 feet high with all its beauty revealed, and the number of flowers considerably increased by reason of several breaks resulting from the pruning process. * * Last season * * I only cut down the half of my stock. The difference in flowering, however, was but slight, those which were not pruned flowering just a week earlier."

PYRETHRUM ULIGINOSUM is the name used in the FLORIST, it is also what is used in Nicholson's Dictionary, but the *Gardeners' Chronicle* (most excellent botanical authority), gives it the name of *Chrysanthemum uliginosum*. When botanical authorities differ what are we poor florists to do? "Now that's a case for the Committee on Nomenclature" some may suggest. No. A committee of practical florists can not tackle hotanical questions, they've got work enough among florists' flowers.

ROSA RUGOSA.—We have a solid mass 25 feet square of this handsome rose. It is not handsome in the same way as a *Mermet* or *Jacq* is handsome, but as a shrub. Its foliage is the finest of any rose in cultivation; its habit dense but vigorous, and it is very hardy, early and free blooming and fragrant. This spring it began blooming May 13, and the first *Jacq* roses were not in bloom till May 29. Otherwise *Rosa alpina* var. *glandulosa* is our earliest rose; some years it is ahead, and at other times *rugosa* is ahead. As the rose bugs do not come around till about June 1, with *rugosa* we have at least ten days good bloom unmolested, but with the hybrid roses the bugs take them from their first appearance. Although *rugosa* bears an immense crop of flowers in early summer it also continues to bear a few all summer long. And in fall its large red heps which are borne in quantity add much to its attraction. The white flowering variety (*R. rugosa alba*) is in every respect as good, hardy and free blooming as is the typical red flowering form and is one of the loveliest shrubs in cultivation. There is an idea that it doesn't set heps here, but this is erroneous; our plants of *alba* always bear fruit, have lots of fruit as big as gooseberries now, and I have a lot of seedlings raised from our own saved seed. One great advantage of this rose is that it thrives and flowers splendidly in hot, dry, sandy ground, and as it forms such a solid bush it shades the ground for itself. It is a great favorite with landscape gardeners, and the supply of it does not equal the demand.

ROSA RUGOSA KEISERIN DES NORDENS is a double flowering form that we imported last year from Berlin, and we now have six good plants of it in bloom. It may be a form from *rugosa*, but it is not a true *rugosa* nor anything nearly as good. As a foliage plant it is vastly inferior to the common *rugosa*, in fact no better than, if as good, as *Zuccariana* and much poorer than *Kamschatica*. It is about as double flowering as *Jacq* and of the purplish crimson color of *Jacq* when a few days old.

HAIL INSURANCE.—Those desiring hail insurance should address John G. Esler,



PYRETHRUM (CHRYSANTHEMUM) ULIGINOSUM SEE OPPOSITE PAGE

[Reproduced from *Gardener's Chronicle*]

secretary, Saddle River, N. J., for full particulars, blank applications, etc.

New York Notes and Comments.

The dead season has certainly arrived as far as the flower trade is concerned. There is really nothing doing among the uptown florists, and the streets are stocked with the outdoor vendors. Baskets of magnolias are to be seen every where, and great bunches of kalmia, as well as outdoor roses and other garden flowers. Prices are of course very materially lowered; in fact they have averaged

lower all this season than the season previous.

Several new roses are promised us just now. One valuable trade acquisition is a sport from Anna Alexieff, originating with Julius Roehrs, of Rutherford, N. J. The color is almost identical with the parent, but the flower is very much larger, the petals thicker and firmer in texture, and without the crumpled tendency we often see in the Alexieff. An improvement in every way on the parent, and, sharing in its early blooming qualities, it is sure to be a big success.

Another new rose is the climbing

Perle des Jardins, belonging to the John Hendersou Co. It presents all the leading characteristics of the ordinary Perle; its climbing habit is the sole exception. It is evidently a very beautiful rose and will naturally excel the old favorite, Niel, in its constant blooming.

Yet another new rose is one of the singular hybrids raised by Mr. Carman, of the *Kural New Yorker*, cross between Rosa rugosa and Harrison's Yellow. This rose has a bright crimson flower, similar color to Jacq, double and very fragrant. Fragrance rather like a Jacq, but with a tinge of Rosa canina odor. The foliage

is very thick, strong and well marked, like rugosa. The rose is very hardy and blooms incessantly from late in May until frost kills the leaves. The leaves seem to be absolutely impervious to insects. There is no doubt that this will be an admirable outdoor rose, its vigor, hardiness and incessant blooming are the qualities that will make it popular. Offers have already been made for the stock, but Mr. Carman wishes to see how it will behave for another season. It is as yet unnamed. One of the most remarkable things about the rose is that such parentage should produce this vivid crimson. Another plant in the same strain had a single five-petaled flower. The base of the petals was pale yellow, forming a ring around the corolla; next to this was a band of pink, while the remainder of the petal was pure white, thus giving a distinct banded tricolored flower. This plant had eleven very small leaflets.

Railroad bedding seems to be on the increase, most of the suburban roads are making a good display this year. Much of the bedding was injured by the cold storms of the last week in May, the plants being in many cases much knocked about. A good deal of the bedding stuff was rather feeble to begin with, and it soon becomes the worse for wear in a gale of wind and rain.

Ipomœa Learii, now known by the popular name of Blue Dawn, is a very attractive member of its family—beats the ordinary blue morning glory completely. Its color is a very clear, lively blue and it seems to possess all the virtues we look for in the family.

Fine strains of poppies will be found very useful through the summer for cutting, as well as for making a handsome bed. Several of the improved strains are specially handsome, and they provide a mass of fine blooms all through midsummer. A good many of these familiar flowers are coming more into vogue; people think more of them than formerly.

Judging from the local flower market pansies take first rank as popular bedding plants in the spring; a little later the call begins for geraniums and coleus. *Calceolarias* would certainly sell better and more extensively if they were more plentiful and better grown; no one wants little dried up plants with a few tiny dull flowers. Symmetrical dwarf golden *calceolarias* always seem to take in the retail trade.

City florists are already complaining that everyone has left town; the season becomes shorter every year, and it very materially cuts off the florists' profits.

Decoration Day was tolerably profitable, perhaps more profitable in proportion to out-of-town florists, because New York was rather used up by its Centennial. This certainly affected the public celebrations, but naturally there was a good deal of private buying for decoration. Like every holiday Memorial Day brought on the increased demand for loose flowers and pot plants in preference to designs. A number of terrific designs in colored immortelles were seen, but they were the exception rather than the rule. Taste is improving greatly in this direction, to the very great benefit of the trade.

EMILY LOUISE TAPLIN.

The Moonshine Flower.

Precisely! *Ipomœa Bona-nox*, *noctiphon*, *noctileuca* or what not, is the "Moonshine Flower" that has drawn the

hawbees. The East Indian people have the priority however, having applied the term to *I. grandiflora* before Europe had a written language—or America. Mr. Veitch gave the differentiation years ago.

JAMES MCPHERSON.



The Best White, Best Pink and Best Yellow Chrysanthemum.

Mr. Linegar does not say for what purpose he requires the three chrysanthemums, or whether they are to be pompons, Japanese or Chinese.

Here are three to grow in pots for market: Mrs. L. Canning, white; Gorgeous, yellow; M. Boyer, pink. These have compact habits, healthy foliage, good flowers and decided colors, important properties to possess.

Three to grow as cut flowers for market: Mrs. L. Canning, white; Grandiflorum, yellow; M. Boyer, pink.

Three to grow as cut flowers for exhibition: The Bride, white; Mrs. W. K. Harris, yellow; Mrs. Fottler, pink.

Three to grow as specimens for exhibition: Mrs. L. Canning, white; Mrs. R. Elliott (or Gold), yellow; Mrs. Irving Clarke, pink. All the above are Japanese.

Three Chinese good for general purposes: Mrs. Heale, white; Pres. Hyde, yellow; Mrs. Weston pink.

Three pompons are: La Desiree, white, early; Mlle. Elize Dordau, pink; La Vogue, yellow.

JOHN THORPE.
Pearl River, N. Y.

In Memory of Mr. Court.

A committee has been formed to solicit contributions to a fund for the purpose of erecting a suitable monument over the grave of the late William Court. Any surplus over the amount needed for this purpose will be handed over to Mr. Court's family. Mr. Robt. Craig, 49th and Market streets, Philadelphia, is chairman, and Mr. A. D. Cowan, 114 Chambers street, New York, treasurer of the committee.

OBITUARY.

HEINRICH GUSTAV REICHENBACH died at Hamburg, Germany, May 6, at the age of 65. He was the recognized authority on orchid nomenclature and was widely known for his extensive knowledge and writings on orchids, to the study of which he had devoted a great portion of his life. *Reichenbachia*, the sumptuous periodical devoted to orchids, published by Sander & Co., was named for him and he was connected with it at the time of his death. Orchid lovers the world over will learn with deep regret of his death.

PHILADELPHIA, JUNE 9.—Flowers are at present retailing at following prices per dozen: Perles 75c. to \$1; Mermets, Brides, La France \$1 to \$1.50; Gontiers 50c. to 75c.; Bennetts 50c. to \$1; hybrids \$3; Jacqs. \$1 to \$2; carnations, long stems, 35c.; stephanotis 35c.; valley 75c.; water lilies 25c.; pansies, mignonette and cornflowers 25c. per bunch of 25 blooms.

Greenhouse Construction.

BY JOHN N. MAY.

III.

[Continued from page 413.]

As soon as the siding is completed take the end rafters, Fig. 5, cut the front or long one so that the glass line strikes even on the edge of gutter where it is dug out for water—see Fig. 2, page 443, or if plate like Fig. 3 is used the glass line should come even with top edge of same. Before cutting the rafter it helps matters considerably to have a piece of the plate plumbed on top end, then hold the back and front rafter in their proper position and match both at the gutters and at the ridge; this ensures getting the right bevels all around. When this is done cut the ends of each

Fig. 5.

true, fit it up to see if the joints are all right, then put up ridge plate—Fig. 6; level it from end to end, stay it also in as near a straight line as possible, having first made sure that the groove is plowed even from end to end. I prefer to have these plates in 20 foot lengths and they will need to be 22 feet long to allow for the joints, which should be halved together with a splice of 10 or 12 inches; they should not be less than 2x8 inches. The plow groove should be 3½ inches from top side, this allows for the bars to come even on both sides.

Next put up the purlin, Fig. 7, which can be made of 2x6 inch pine, same lengths as ridge plate, jointed etc. the same way. This purlin should be in the center of long rafter from the gutter to ridge plate. The front rafter or bar when cut ready to nail up should be as near as possible 16 feet on the glass line and the back one 6 feet, and when fastened up will form a roof similar to that shown in Fig. 8. Next make a pattern for each run of bars, one for the back or short ones and one for the long ones; cut several of each and commence next to the end first, plumb and square the end one to see that you start right, then take three gauge sticks one-twelfth of an inch longer than the width of the glass intended to be used (be sure they are all exactly the same length), place these in the groove or rebate where the glass is bedded, then bring the next bar up to same point on each nailing place; but before nailing

Fig. 6.

them the ends should be well leaded where the joint comes, also on the plates, this is a great protection against rotting.

Another great advantage I have found in building is to use the sunken groove on the rebate of the bars—see Fig. 9. This when the glass is bedded down close and secured with tacks completely wedges the putty in so that it remains there as long as the glass does; the bevel need not be more than one-sixteenth of an inch deeper on the inside to secure this.

Where continuous ventilation is to be used from end to end of the house it is not necessary to have every bar in the front run right to the ridge, but have each alternate one—16 feet long—to run

Fig. 7.

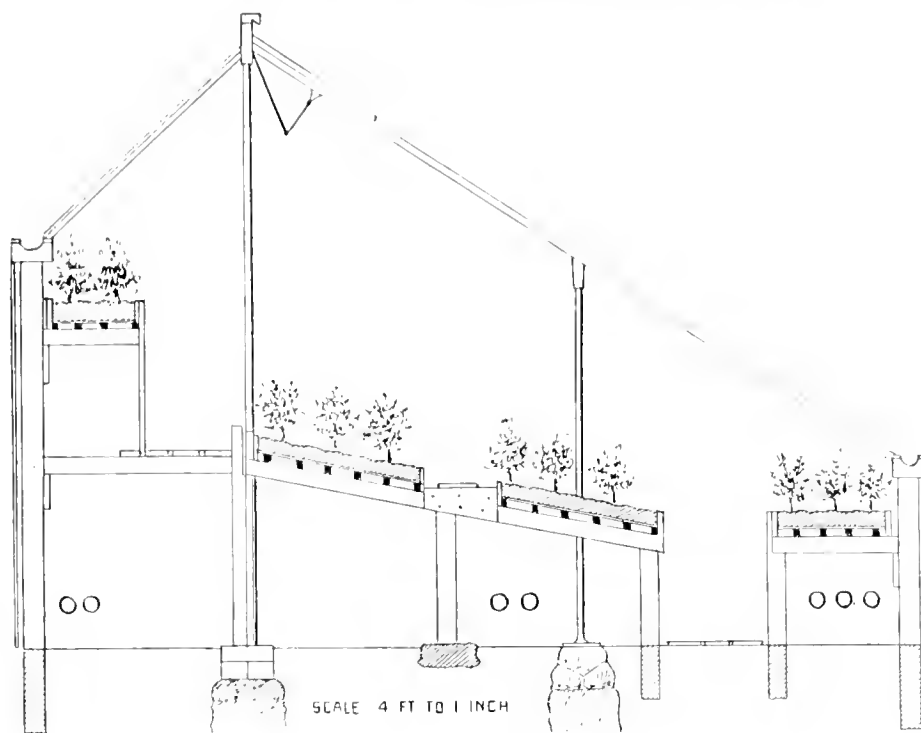


Fig. 9.

to ridge and every other one 13 feet long, and if secured at the purlin the top can be left loose till all the roof is up. Then take header—see Fig. 10—which has a groove for the top edge of the glass, cut these in to fit nicely between each two long bars, cut the short ones off all on a line so that they nail squarely on the Leaders, which should be placed to allow

fully one inch to be below the bottom of the sash when it is fitted up in its place. If the sash is 3 feet deep, which is about the right size, the header should be fitted for the bottom edge on glass line to be 3 feet from the ridge plate, this allows for bevelling of the sash on top to fit plate and

then set slightly more than one inch up on the header; this allows also for the hinges to screw tight down on to the same and on to bottom edge of sash; but to avoid making any mistake it is better to fit a sash up in its place and then mark the place for the header. In putting the sash on I very much prefer to hang them at the bottom and open at the top, it is also very important to use either brass butts or galvanized iron ones with brass pins; I prefer the latter and use altogether what is called a 2 1/2 x 1 1/4 wrought butt, galvanized as above noted. I use three of these to each of the sash, which are between 6 and 7 feet long, according to width of glass used.

If preferred an angle iron purlin can be used instead of wood, but it costs more. If such is to be used then a correct calculation must be made so that a hole for a screw can be made to fasten each bar in its place; this must be done at the factory else the expense would be very heavy, and if it is decided to use this kind of a purlin arrangements should be made whereby the column can be fas-

tened to it at intervals of from 8 to 10 feet apart, otherwise the roof will soon get out of shape on a length of 16 feet, particularly if a heavy fall of snow should get on the roof. In putting the columns under the purlin it adds very considerably to the strength of the roof to spring it up about half an inch above the straight line, this makes it slightly rounding from the gutter to the ridge plate.

Next get the ventilating sash all fitted and fastened on with butts as described above. The size of these should be made to suit and match whatever size glass is used in the house; if 12 inch glass then the four center spaces in the ventilator should be for 12 inch and the two outsides for 10 inch, this allows for the stiles. If the rebates are made true on 1 1/4 inch bars—see Fig. 9, the sash will be 6 feet 5 1/2 inches long by 3 feet deep and the head should be 3 inches wide, the bottom rail four inches wide; this allows 30 inches of glass, or two lights each 15 inches long. The length is suitable for any other width and the same calculation for 2-inch narrower glass at each end. When the sash are completed the cap strip, Fig. 11, should be put on, and if the plate has been kept at its proper height above the glass line on the long rafters, the sash will clear it

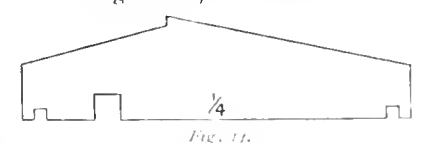


Fig. 11.

on opening about one-fourth of an inch. Next take the triangular strips, Fig. 12, which should be fitted to an even bevel with the glass line of bars, cut to fit snug between the same and nail in with small finishing nails. Then take the small square strip, Fig. 13, nail on outside edge of gutter; these two strips make the gutter deep enough to carry all water off in the heaviest storm. Now prepare and

put on post the end plate, Fig. 14; this is plowed for the siding dips, etc. just the same as the main plates. The siding both inside and out and paper sheathing should be arranged in same way, and putting these ends up the proper calculation should be made for doors.

I use altogether doors 3 feet wide by 7 feet high; the main or hanging jamb I put directly under the ridge plate, and make it of 3x1 inch stuff, rebated out 1 1/2 inches deep for the door to shut into, the other jamb is the same size and runs up to the end rafter; they are fastened to a hard wood sill let into the posts which are placed at a suitable distance to allow it. This braces the whole end, keeps everything in good shape and puts the door in the most convenient place for all purposes. The plates on the ends should be placed so that the glass line comes even and level with the glass line of the roof; the end bars are placed at suitable distance for glass same as on roof, and the top edge of end glass will fit up into groove of end rafter—see Fig. 5. Care should be taken to make the head over door wide enough to carry off drip.

Florists' Hail Association.

The Oak Grove Cemetery Association acknowledges the prompt payment of their loss by hail on the 16th of last month. The loss was fortunately slight, but it nearly equaled the membership fee and first assessment. The loss was promptly paid without undue fuss or trouble, and if there is a florist in America who is not protected, he is making a grave business mistake, and should at once place himself in communication with J. G. Esler, Secretary Florists' Hail Association, Saddle River, N. J. J. W. LOSEY, President Oak Grove Cemetery Association, La Crosse, Wis.

Chicago.

Mr. Joseph Curran, for many years with Chas. Reissig, and one of the most popular young men in the trade in this city, was married May 23 to Miss Jennie E. Wood, also well known to the trade here. The wedding was intended to be only a quiet affair, but Mr. Curran's florist friends turned out en masse. The presents were numerous, among them an elegant solid silver carving set from members of the Florist Club.

The Decoration Day trade was very satisfactory. There were not enough flowers—especially of roses—to supply the demand, but there was not so great a scarcity as was feared at one time.

The Florist Club at its last meeting made preliminary arrangements for transportation to the Buffalo convention.

TOWANDA, PA.—Geo. H. Cox has built three houses 40 x 20.

BUFFALO, N. Y.—Adams & Nolan have opened a florist store at 302 Main St.

PHILADELPHIA.—Chas. D. Ball is building several new houses at his place in Holmesburg. They will be used for growing young palms and ferns.

UTICA, N. Y.—New greenhouses have been built here as follows: Chas. F. Baker three, 20x80 each; E. T. McQuirey three, one 100x20 and two 100x11 each; Peter Crow six, two 60x20, two 60x17 and two 75x17; Frank Riley one, 80x20.

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PLANT DECORATIONS.

The call for palms and other decorative plants is decidedly on the increase, and they certainly are a most attractive feature in decorations supplied by the florist. A pair of handsome palms judiciously placed adds an effect which is always admired, and the use of these stately and graceful plants in conjunction with arrangements of flowers gives the florist a much wider field in which to display his skill.

A common error is to use them too freely. The parlor, church or banquet hall should not be turned into a conservatory. While a half dozen specimen plants placed at effective points around the room are admirable, to mass them thickly everywhere is not only a waste of plants but results in the creation of a heavy, somber effect which should be avoided. The too free use of flowers alone is equally objectionable; but when the more brilliant colors of the flowers are softened by contrast with the beautiful green of the palms, the effect upon the eye is pleasing without soon becoming tiresome as is apt to be the case where great masses of flowers alone are used.

The art of effectively arranging either plants or flowers lies in placing each individual plant or blossom where it will show all of its own grace and beauty, and at the same time assist in the general result without detracting from the effectiveness of any other individual plant or flower through the creation of inharmonious contrasts in either form or color.

In the arrangement of palms and like decorative plants harmonious contrast in form is the main requisite. But how often do we see really handsome specimens crowded together in such a way as to form merely an even hedge of foliage without contrast, the grace of each individual almost entirely lost to the observer through being buried among a lot of others. Use your plants of doubtful quality for a background but bring your specimens up where they may be seen and admired, and where they will form an harmonious contrast in form and foliage with others. By the exercise of taste and skill in arrangement a small number of plants can be made more effective and satisfactory to the customer than a larger number massed together without them, and this means good returns for a smaller cash outlay.

A mistake made by many florists is to rent out their decorative plants by the wagon-load. Palms and similar decorative plants should be rented by the pair or single specimen; and one-fifth of the value of the plants should be received for their use at a decoration; this ensures a fair profit after the cost of getting the plants into condition again is deducted. And the customer will not be so apt to find fault with the bill if it is made for the "rent

of — pairs specimen plants," rather than for "one wagon-load" or more. Of course for small flowering and foliage plants rental by the wagon-load may be advisable, but specimens should be rented by the pair or single specimen only.

THE NEW YORK CUT FLOWER MARKET.

The accuracy of our quotations on cut flowers in the New York market has frequently been called in question by readers and we admit that they hardly express the true condition of that market. Still they are probably as nearly correct as possible except through an hourly bulletin. The New Yorkers may be considered extremists in their faithful obedience to the law of supply and demand. The sensitiveness of the New York market is in fact most remarkable. Prices have been known to advance 100 per cent. upon receipt of intelligence that a florist from another city had arrived, presumably for the purpose of buying.

The prices which we quote are what flowers are billed at on orders to be shipped, but in times of surplus they are sold over the counter at much lower rates.

Those who order by letter or telegram are however rarely given the benefit of any fluctuation in their favor, hence the quotations are fairly accurate for buyers outside of New York and vicinity.

The policy of the main New York cut flower commission men has been such as to discourage orders from other cities. As one well known commission man remarked "when flowers are scarce we can sell them all here at good prices, and when there is a surplus, we get only small orders from outside and they are rarely worth bothering with."

At a recent date when there was a heavy surplus in the market the daily transactions at a leading cut flower commission dealer's were noted as follows: At 8 a. m. some flowers began to arrive and at 9 the place was filled with boxes of flowers and buyers. The buyers picked out what they wanted, placing in convenient piles, paying at the rate of from \$2 to \$4 per 100 for roses. At 10 this was over and the remainder was lumped off to two buyers at a uniform rate of \$5 per 1000 for roses regardless of variety. Among the "clean up" was a great deal of under quality stock but much of it was as good as the market afforded at the time. At 11 a. m. there was not a flower in the place, and of course it would have been impossible to fill any orders from outside had such been received.

Through this policy the New Yorkers have been drawing more and more within themselves and are obliged to rely almost wholly on home demand, with the result that when demand is light prices drop to ridiculously low figures, though at other times correspondingly high prices are obtained.

KENTIAS FOR DECORATING.

The kentia is undoubtedly one of the toughest of palms and is consequently very valuable for decorating. It can be kept in a parlor in fair condition for a period of three years, something which can be successfully done with few other palms.

The London growers of palms some time since attempted to form a combination, all to agree not to grow any more kentias, owing to the fact that they lasted so long even when placed in somewhat unfavorable situations, that they spoiled the market for the grower. But like all similar attempts at forming combinations it failed.

In this country, however, this objection (?) to this palm would not be insurmountable, as with careless wrapping of the plants when taking out during the winter season frost might take out of the market an occasional wagon-load or so, and thus keep up a healthy demand.

Certainly no better recommendation of the palm could be had than this testimonial as to its ability to hold on to life and look cheerful under trying circumstances. That is just the sort of plant we need to stand the hard usage incidental to decorating.

A lot of palms recently imported by a Philadelphia florist well illustrated the comparative toughness of several kinds. While the kentias and rhaps were in fine condition and apparently unharmed by their long confinement in transit; the seaforthias and ptychospermas were badly injured, showing many brown and withered leaves.

Kentia Belmoreana and K. Forsteriana are almost identical in habit and growth, the only difference being in the dark colored leaf-stems peculiar to the former. K. Australis is much like those above noted but with shorter leaf-stems. All are excellent for house decoration, the main purpose for which palms are used in the trade.

TOO MUCH VARIETY.

"Variety is the spice of life," but many florists growing market and bedding plants have too much of it for their own good.

The most successful growers of market plants, those who reap a plentiful harvest of dollars as a reward for their skill and labor, grow but a limited number of varieties of any one plant. The varieties grown are those which they have found by experience to make the most salable plants for the least outlay, and in most things their selection on this rigid test has narrowed the number of varieties down to a very few.

And if you are to keep your position in the ranks, with the present sharp competition, you must certainly do likewise. You will find that with but a few varieties you can produce better plants at less expense than you can with a great collection of varieties and but few of a kind.

With the object of assisting you in making a selection, we have obtained lists of the varieties grown by large growers of market plants in various cities and invite the sending of similar lists from growers in other cities. For it is certainly a fact that varieties which do well in one locality are not necessarily equally valuable in another. Still the presumption is that what does well in one place is well worthy of trial in another.

PLANT PORTRAITS.

The practice of using an engraving of one plant to illustrate another sort in catalogues has been noted and condemned in these columns. But what words may we use to express our indignation when the same practice is resorted to by the press, which claims to be a teacher of the people.

In the issue of the *Prairie Farmer* for April 6 appears a lot of ancient engravings illustrating an article upon trees and shrubs, and among them is an old cut of *Adiantum gracillimum* (a tender fern), labeled "Cut leaved Sumach." Surely practices of this kind when indulged in by the agricultural press can not but lower it in the estimation of all intelligent readers. What is reprehensi-

ble in catalogue men is doubly so in the press. If agricultural or horticultural papers can not afford to get up original engravings or to secure electrotypes of accurate ones they had better far use none at all.

Another reprehensible practice indulged in by many papers is the publication of engravings of novelties, said engravings being gotten up by the introducer of the novelty for catalogue use and frequently wonderfully exaggerated. The engraving is of course furnished to the paper free of cost and for the sake of saving a few dollars the publisher gives to its readers an illustration which in the majority of cases is misleading.

PAINESVILLE, O.—Mr. J. J. Harrison, of Storrs & Harrison Co., is confined to his house with rheumatism.

SAYRE, PA.—John McQueen has built two houses, one 120 x 21 and one 60 x 24. He will soon build another 120 x 65.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.
Write for price list. Consignments solicited.
WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.
TELEPHONE NO. 166.

IF YOU WANT CHOICE, FRESH
CUT FLOWERS,

WELL PACKED AND SHIPPED PROMPTLY, YOU SHOULD ORDER OF

CHAS. H. FISK,
Wholesale Florist

116 & 118 DEARBORN STREET,
CHICAGO,

AND RELY ON GETTING THE BEST STOCK IN THE MARKET.

Store Open Day and Night.

I keep a full stock of
WIRE DESIGNS

of superior workmanship and at lowest prices. Extra pieces of any description made to order on shortest notice. Send for Catalogue.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety.

We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address

GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.

W. F. SHERIDAN,
Wholesale and Commission Dealer in
CUT FLOWERS,

No. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.

CUT FLOWERS AT WHOLESALE.

Will have a fine lot of Camellia Lilies in about 10 days. Anyone having Sweet Peas this month, please write us; we want some.

THE WISCONSIN FLOWER EXCHANGE,
133 Mason Street, MILWAUKEE, WIS.

Wholesale Markets.

Cut Flowers.

BOSTON, June 9.

Roses, Bon Silene	\$1.50 @ 2.00
" Boucy	1.00 @ 1.50
" Jacques	4.00 @ 8.00
Valley	1.00
Stocks	2.00
Carnations, short	.50
Carnations, long	1.00
Mignonette	1.00
Smilax	15.00
Adiantum	1.00
Pink Pond Lilies	15.00

NEW YORK, June 9.

Roses, Bon Silene, Bennetts	\$1.00
" Gontier	1.50
" Perles, Niphetos	2.00 @ 3.00
" Souys	3.00
" Mermets, Brides	5.00 @ 6.00
" La France	4.00
" Am. Beauty	15.00 @ 30.00
" Jacques	.50 @ 2.00
" Hybrids	25.00
Mignonette	1.50
Smilax	15.00
Carnations	1.00
Lily of the Valley	5.00
Adiantum	1.50

PHILADELPHIA, June 9.

Roses, Perles	\$2.50
" Mermets, Brides, La France	5.00
" Bennetts, Gontier	3.00
" Luizets, Neros, Latings, etc.	10.00 @ 15.00
" Jacques	3.00 @ 4.00
Carnations, short stems	.50
Carnations, long stems	1.00
Stephanotis	1.00
Valley	3.00
Paronis	3.00 @ 4.00
Water lilies	.50 @ .75
Fansies, Mignonette, Cornflowers	.75
Smilax	20.00

CHICAGO, June 11.

Roses, Bon Silene	\$2.00 @ 3.00
" Perles, Niphetos	5.00 @ 6.00
" La France, Mermets	5.00 @ 7.00
" Jacques	10.00 @ 15.00
" Am. Beauties	12.00 @ 15.00
" Brides	7.00 @ 8.00
" Bennetts, Dukes	5.00 @ 6.00
Carnations, short	1.00 @ 1.25
Carnations, long	1.25 @ 1.50
Valley	1.50 @ 2.50
Smilax	20.00
Callas	12.50 @ 15.00
Harrisii lilies	18.00
Gladolus	10.00
Fronies	4.00 @ 6.00
Cape Jasmine	1.00 @ 2.00
Adiantum ferns	1.00 @ 1.25

WM. J. STEWART,
Cut Flowers & Florists' Supplies

WHOLESALE
67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS

and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

— Auction Sales of Plants Spring and Fall. —

WELCH BROS.,
WHOLESALE FLORISTS,

165 Tremont Street, BOSTON MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.

Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,

J. L. DILLON, BLOOMSBURG, PA.

A. S. KIMBALL,
WHOLESALE CUT FLOWERS,

SHIPPING TRADE ESPECIALLY SOLICITED.

170 LAKE STREET, CHICAGO.

THOS. YOUNG, JR.,
WHOLESALE FLORIST
20 West 24th Street,
NEW YORK.

CUT FLOWERS.

We are on deck DAY and NIGHT to give your orders

CAREFUL ATTENTION,
PROMPT SERVICE,
GOOD STOCK.

And our record shows that we "get there" a little oftener than some others.

VAUGHAN'S FLOWER DEP'T,
Telegrams, 88 State, CHICAGO.
Letters, box 688,

W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS,

36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

LaRoche & Stahl,
Florists & Commission Merchants

— OF —

CUT FLOWERS.
1237 Chestnut Street, PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & Co.,
WHOLESALE ROSE GROWERS,

Telephone 977. WASHINGTON, D. C.
Roses planted for Winter 1888-9
Souvenir de Wootton, The Gem, Puritan,
American Beauty, Annie Cook, Mad. Cusin,
Papa Gontier, The Bride, La France,
Bennett, Perle, Mermel,
And other Standard sorts.

EDWARD C. HORAN,
WHOLESALE FLORIST,

36 WEST 29TH STREET,

The Bride, Mermel, and Am. Beauties, SPECIALTIES. NEW YORK.

HAMMOND & HUNTER,
Wholesale dealers in

Cut Flowers and Florists' Supplies
61 West 30th Street, NEW YORK.

GEO. MULLEN,
WHOLESALE FLORIST
17 CHAPMAN PLACE, 17 (near Parker House.)

SPECIALTIES.
VIOLETS, ROSES IN VARIETY, SMILAX, FANCY CARNATIONS, LILY OF THE VALLEY, TULIPS, HYACINTHS, NARCISSUS, ETC.

CHAS. E. PENNOCK,
WHOLESALE FLORIST,

38 So. 16th Street, Philadelphia, Pa

THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.

Beauty, Bride, La France, Perle, Bennett, Niphetos, Mermel, Papa Gontier
CHAS. L. MITCHELL, MGR.
P. O. Box 18B, CINCINNATI, OHIO.

Also plants of above by doz., 100 or 1000, 2, 3 & 4-in., Select Stock. Plants in quantity at discount. WRITE FOR PRICES.

The Seed Trade.

WHEN THAT SEED TRUST is organized what a saving there will be in the matter of catalogues and advertising.

GREAT DAMAGE has been done to cabbage and vine crops by the cut worms; prices of vegetable plants have advanced in consequence.

MESSRS. Emerson, of Omaha, Salzer, of La Crosse, and Leonard and Vaughan, of Chicago, left Chicago on the 8th inst. for the seedsmen's convention via New York.

ROCKFORD, ILL.—Mr. Geo. S. Haskell left for California the past week. There are prospects of forming a stock company among those interested in the Haskell assets. The Rockford seedsmen are not over enthusiastic over the result of the season's business.

The Seedsmen's Convention.

The Seed Trade Association met in annual convention at Washington on the 11th and 12th insts. About 50 members were in attendance. Headquarters were at "The Arlington," where the sessions were held also.

Officers for the ensuing year were elected as follows: President, H. W. Johnson, Philadelphia; Vice-President, J. C. Vaughan, Chicago; Secretary and Treasurer, Albert M. McCullough, Cincinnati; Assistant Secretary, Frank T. Emerson, Omaha; Executive Committee: John Allan, Picton, Ont.; Wm. Meggat, Wethersfield, Conn.; John Fottler, Jr., Boston; S. F. Leonard, Chicago; H. W. Wood, Richmond, Va.

Boston.

Decoration Day, 1889, was an unusual one in Boston. The hot weather which prevailed during April and May not only forced outdoor flowers into bloom much earlier than usual, but it also nearly ruined everything indoors. This was especially true of the roses, which were completely fagged out. This state of affairs made it difficult for anybody, retailer or wholesaler, to figure ahead on either stock or prices, and there were some instances where thoughtless parties made some ludicrous blunders in calculation. In general, people were cautious in making promises, however.

The price of Bon Silenes, which a couple of days before was not over \$1 per hundred, suddenly jumped to four, five and six dollars per hundred, and fancy roses advanced in like ratio. But it was a question of supply rather than price, and had the price been four times higher it would not have made roses where there were none, consequently many a memorial bouquet had to be sent to its destination minus roses. The same story, in the main, would apply to carnations, which advanced from 50 cents per hundred to \$2, \$3 and even \$4 per hundred for choice lots. White stocks were quite abundant and helped to fill in the gap made by the scarcity of carnations. Rhododendrons, deutzia and hardy azaleas were welcome, although unusual additions to the Decoration Day stock. Wild flowers such as smilacina, cornus, lupins, etc., were also freely used, even wild blue iris finding a ready sale. So, if the florists could not boast of the quality of their stock, and although their actual cash receipts may have been smaller than in previous years, yet they had the satisfac-

tion of seeing their stock completely cleaned up and the assurance of clear profits consequent thereon.

The rhododendron show of the Massachusetts Hort. Society was held on June 1st. The principal exhibitors of rhododendrons were H. H. Hunnewell and



THE LONG AND THE SHORT OF IT IN THE MATTER OF CONTRASTS.

Mrs. F. B. Hayes, although there was quite a number of smaller exhibitors. The display of hardy azaleas was fair, of irises exceptionally good, and that of wild flowers very interesting and complete. The attendance was large.

W. J. S.

CONVENTION SUPPLEMENT.—With our issue of August 15 we shall publish our annual convention supplement, giving advertisers a splendid medium through which to reach members just before they start for the Buffalo convention. Extra copies of the same will be distributed at the convention. Rates for ads. same as for those in the body of the paper.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED—By a young man of 20, as under gardener in private gardens or nursery. Excellent references. Five years' experience. Address A. DAVIES, Box 35, Wixom, Mich.

SITUATION WANTED—On private or commercial place; 10 years' experience in some of the finest places in England. Best of references. H. STOCKING, 67 Lime St., Newburyport, Mass.

SITUATION WANTED—By a practical New York florist who has been in present position for five years. Age 37. Growing or selling roses preferred. Address K. Vaughan's seed store, Chicago.

SITUATION WANTED—By a good gardener and florist; good rose grower and propagator. Sober and industrious. Good recommendations. Address B. J. care W. J. Stewart, 67 Bromfield St., Boston, Mass.

SITUATION WANTED—As foreman in commercial place; first class propagator and grower of rare plants and orchids. Age 27; single. Wages expected \$0 per month. Address C. 27, care American Florist, Chicago.

SITUATION WANTED—By a first class gardener, private or commercial. Single. Can furnish first class references. Desires to enter active engagement. Speaks German and English. Address C. LANG, care American Florist, Chicago.

SITUATION WANTED—At once by a young single man, 4 years' experience at rose growing and propagating; forcing of bulbs, building greenhouses and general florist work. Best of references. Address C. 99 Argyle avenue, Baltimore, Md.

SITUATION WANTED—A practical florist of executive ability and experience in all departments of the business; propagating, rose growing, cut flowers, plants, etc.; private or commercial. First class references. Address PLANTSMAN, care American Florist, Chicago.

WANTED TO RENT—Within 15 miles of New York, a florist's place of about 10,000 square feet of glass. Must be in good order and near railroad station. Apply, stating terms, etc., to P. GONNER, care Oscar Verilhae, Arlington, N. J.

WANTED—A successful grower of open air roses and other plants. A small salary, with 2-room cottage, two-thirds share of all stock propagated and rich land sufficient to grow a large and varied stock of plants, bulbs and tubers. 1 to furnish stock. Mrs. J. S. R. THOMSON, Spartanburg, S. C.

WANTED—Florist to run small commercial place near Philadelphia; must be experienced in fancy bedding and growing roses, etc. References required for honesty and ability. Unmarried man; English preferred. \$7 per week without board, and interest in profits. FLORIST 254 N 10th St., Phila, Pa

WANTED—A practical florist to take charge and run my business on shares. Good trade in cut flower work; business growing; beautiful town, all surrounding county well settled. Good references as to ability and character required. For particulars address J. W. DAYHOFF, Florist, Hagerstown, Md.

FOR SALE—A small establishment in North Chicago, containing quite a varied stock of plants, lease of ground for 8 years. Will sell cheap. For particulars, address J. N. P. LARSON, 265 Washington Boulevard, Chicago.

FOR RENT—To a first class florist, 7 large greenhouses, heated with steam and hot water, in good condition; well stocked. Good opportunity for reliable man with references. Mrs. W. R. PERRY, Govanstown, Baltimore, Md.

FOR SALE—A beautiful place in the fruit belt of Northern Texas, 11 acres with 300 bearing grapes and orchard full of fruit now; fine residence only 6 squares from Court House, a mild healthy climate. For particulars address C. L. Box 293, Denton, Tex.

FOR SALE—Greenhouses and entire stock, doing good business, in New Jersey, five miles from Phila., in thriving town of 3,000 people. Houses nearly new, heated with hot water. Cheap, \$2,000, easy terms; must be sold; best reasons. Address FLORIST, 254 N. 10th St., Philadelphia, Pa.

TO RENT OR FOR SALE—Well stocked greenhouses, about 25,000 square feet of glass, at South Orange, N. J., less than one hour from New York City, five minutes walk from depot. Buildings in first class condition. Model houses built on the most approved plans, such as recommended by John May. Will rent for a term of years. Only responsible parties need apply. Address J. Bros., P. O. Box 212, South Orange, N. J.

FOR SALE OR EXCHANGE.

My Greenhouses with business, and cottage of five rooms, centrally located in a live suburban town of 10,000 inhabitants, 12 miles from Chicago; 80 trains daily. 1000 square ft. of glass, heated by hot water, supplied by water from Lake Michigan; good local trade. A fine opening for a man with limited means. A great bargain if taken prior to July 1. If not sold, will rent for a term of years to responsible party. For price and terms, address JOHN S. FORSTER, 738 Oak Ave., Evanston, Ill

For Sale.

Four thousand feet of 4-in. Greenhouse Pipe, five ft. lengths. One Hitches No. 17 Boiler that has only been used one season and is good as new. For prices, &c., apply to

A. SUNDERBRUCH & SON,
CINCINNATI, OHIO.



Curious Cacti

HEADQUARTERS,
A. BLANC & CO.,
PHILADELPHIA.
700 Varieties.
Wholesale list free.
Retail catalogue 10c.
There is a BOOM
in Cacti, don't you
know it?

Mention American Florist.

GREENHOUSE HEATING.

BY A. B. FOWLER.

Explains fully all the best systems of heating greenhouses by both hot water and low-pressure steam. Tells you the points to consider in selecting an apparatus. How to adjust same to various locations; gives the results of the latest scientific experiments. Shows how to compute the number of feet of pipe required for a given space; draft and other important matters.

It is highly commended by Mr. John Thorpe and others. Postpaid, 75c.

Sent on receipt of price. Address,
**AMERICAN FLORIST,
CHICAGO.**

**BEEEN KILLING BUGS 10 YEARS.
SOLD BY SEEDSMEN**

For pamphlet write to Fishkill-on-Hudson, N. Y.

SLUG SHOT.

THREE HUNDRED DOLLAR PRIZE. SOUVENIR DE WOOTTON

THE OFFER:

WASHINGTON, D. C., May 23, 1889

My Dear Mr. Craig:

I have about concluded to offer a prize of \$300 for the best twelve cut blooms of SOUVENIR DE WOOTTON rose, to be exhibited at the Pennsylvania Horticultural Society's meeting in January or February next (1890), open to all comers except myself. If this meets your approval and you will send me a letter as soon as convenient to that effect, naming three judges to serve on the occasion and designating the exact day on which the meeting will be held, I will make the matter public through the columns of the AMERICAN FLORIST in the next issue.

Very sincerely yours, C. STRAUSS & CO.

To MR. ROBERT CRAIG, Prest. Penn. Hort. Society.

THE ACCEPTANCE.

From the Philadelphia Public Ledger, May 22, 1889.

THE SOUVENIR DE WOOTTON ROSE.

At the meeting of the Pennsylvania Horticultural Society, last night, Mr. Robert Craig announced that Strauss & Co., of Washington, D. C., offer a premium of \$300 for the twelve best blooms exhibited at the fall show of the society, of Strauss & Co.'s rose, "Souvenir de Wootton." The offer was accepted. The "Souvenir de Wootton" is a hybrid of rich color and very fragrant. It was named in honor of the visit of delegates to the American Florists' Convention, held several years ago, to Mr. Geo. W. Childs's summer residence at Wootton, where they were pleasantly entertained. Mr. Craig stated that the offer would undoubtedly stimulate growers all over the country to compete.

NOTICE. THE WOOTTON IS A HYBRID TEA, OF A RICH RED COLOR, AND WE CLAIM THAT IT IS THE FREEST CONTINUOUS WINTER BLOOMING ROSE OF ANY KIND UNDER GLASS FOR CUT FLOWER PURPOSES THAT HAS EVER BEEN ORIGINATED. IN SIZE EQUAL TO AMERICAN BEAUTY, BUT MUCH BETTER IN COLOR.

Orders for the Wootton will be filled during June, July and August, FROM THREE INCH POTS, at \$25 per hundred; \$100 per five hundred; \$180 per thousand. In less quantity than 100, at 50 cents each.

By **C. STRAUSS & CO.** P. O. Box 422 WASHINGTON, D. C.

JOHN H. TAYLOR,
ROSE GROWER,
BAYSIDE, L. I., N. Y.

Offers to the Trade the Great TEA ROSE

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

— ALSO —

MME. DE WATTEVILLE, CATHERINE MERMET,
PAPA GONTIER, BRIDES, and
PERLE DES JARAINS, NIPHETOS.

Write for particulars.

ROSES.

All the best NEW and Standard Varieties of Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants,

From two inch, three inch and four inch pots Standard sizes.

By the Dozen, Hundred or Thousand. Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first-class stock can be produced for

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,
SUMMIT, NEW JERSEY.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, best kinds for forcing. Orders received now for delivery in November. Address

WILLIAM H. SPOONER, Jamaica Plain, Mass.

ROSES FOR FLORISTS.

We offer the largest and most complete stock of Roses in this country. — straight 2½-inch plants, propagated from thoroughly matured field grown stock, and grown in ordinary soil without manure or any other stimulating material whatever. Our Roses resist disease, start quickly, grow rapidly, and always give best results.

ALL THE FINEST NEW AND SCARCE ROSES. — Mrs. John Laing, Dinsmore, Marshall P. Wilder, Merveille de Lyon, Baroness Rothschild, Mad. Gabriel Luizet, Mad. Masson, Meteor, Princess de Sagan, Mad. Hoste, Comtesse Anna Thun, Vicountess Folkstone, Primrose Dame, Annie Cook, and **ALL THE CHOICEST NEW POLYANTHUS AND HYBRID TEAS.** ALL THE BEST STANDARD SORTS IN LARGE SUPPLY AT REASONABLE PRICES. — The Portland, Sunset, Papa Gontier, American Beauty, Golden Pearl, W. F. Bennett, The Bride, Her Majesty, La France, Genl. Jacqueminot, Perle des Jardins, Niphotos, C. Mermel, M. Robert, Luciole, Mad. Welch, Perle Gaillard, Songe d'un Ami, Mad. Cusin, C. Cook, Marie Guillot, Mad. Honore Dejeune, and hundreds of others at lowest living prices.

HYDRANGEA GRANDIFLORA a specially, large stock, strong open ground plants, all sizes at reasonable prices.

ALL THE NEWEST AND BEST HARDY ORNAMENTAL SHRUBS. — New Hardy Hybrid Hibiscus, New Hardy Gaillardia, Achillea, Alba, Viburnum Plicatum, Bush's Variegated Althea, New Deutscher, Neue Hingeluis, &c. — Honeysuckles, Wistarias, Clematis, Akebias, and all best hardy climbing vines. **VERY LOW.**

Chrysanthemums, too selected finest sorts. — Moon Flowers, extra strong, propagated from blooming plants. — **Finest Summer Flowering Bulbs** — Gladiolus, Tuberoses and Japan Lilies.

FLOWER SEEDS FOR FLORISTS, including the Celebrated **IMPERIAL GERMAN PANSIES** in 35 separate shades, and all choicest strains of Flower Seeds for florists use. Satisfaction always guaranteed. **WHOLESALE Price Lists** Free on application to Florists, Market Gardeners and Dealers only. Address

THE DINGEE & CONARD CO.,

Rose Growers and Seedsmen,

WEST GROVE, PA.

ROSES.

Perles, Niphotos and Brides, in 2½-in. pots..... 5 00
" " and La France in 3-in. pots..... 8 10
Souv. d'un Ami and Gontier, in 3 in. pots..... 7 00
Also La France and Perles in 4-inch pots; prices on application.

All plants come from healthy stock, and are in fine condition. Liberal discount on large orders.

GERMOND & COSGROVE,

SPARKILL, Rockland Co., N. Y.

ROSES.

35,000 of the leading Forcing and Bedding varieties. TEAS, HYBRID TEAS, and HYBRID PERPETUALS. Teas, \$35.00 per 100; Hybrids, \$45.00 per 100. My selection of varieties. Also the leading Prize winning varieties of CHRYSANTHEMUMS, CARNATIONS, and general Greenhouse stock. Trade List mailed on application.

JACOB SCHULZ,

LOUISVILLE, KY.

OIL CITY ROSES.

We have for sale a few thousand fine, healthy Rose plants from 2½-in. pots, of the following varieties:

Per 100
AMERICAN BEAUTY..... \$10 00
BRIDE, MERMET and LA FRANCE..... 5 00

OAKWOOD ROSE GARDENS,

Oil City, Pa.

"A GREAT HELP

IN CUT FLOWER WORK, AND HAS BEEN GREATLY NEEDED"

So say many of FLORAL DESIGNERS, concerning which more can be learned by addressing

J. HORACE McFARLAND, Harrisburg, Pa.

Hail Insurance.

Through the columns of the FLORIST I wish to thank the Hail Association for the prompt settlement of my claim for damage to glass by hail. I received remittance in less than two weeks after I sent in report. There has been no money spent more profitably by me than when I insured my glass in the Hail Association. Independence, Mo. N. S. GRIFFITH.

Machine Made Pots.

The potter whose letter you published recently made a strange slip when he said that the oil used in the manufacture of a machine pot forms a glassy surface like a piece of glazed stonework. Please ask him what becomes of that oil when the pots go through a kiln at a high degree of heat for 24 hours. J. N. P.

Forcing Bulbs for Fall Delivery

If you will make up a list of your wants and send us now, we will book same at importation rates. We are now making up our regular commissions to our growers in France, Germany and Holland, and will take your orders—large or small—at a slight percentage over cost if you will club with us to save freight, etc. REMEMBER, we handle no second grade bulbs. Our experience of many years in importing bulbs, enabling us to procure the very best quality at the lowest prices. If you intend to avail yourself of this opportunity, write us at once, giving varieties and quantities and we will furnish an estimate by return mail. We handle the following varieties in quantity—all splendid forcers:

- Lilium Harrisii, first class, 5 to 7-inch.
 - " " extra, 7 to 8-inch
 - " Candidum, best North of France grown
 - " Longiflorum, Bermuda grown, 5 to 7-in.
 - Roman Hyacinths, White, extra, 11 to 15 centimetres.
 - Roman Hyacinths, Pink, extra, 11 to 15 centi.
 - Paper White Narcissus, extra.
 - Double Yellow Narcissus, Von Zion.
 - Trumpet Major Narcissus, true.
 - Freesia Refracta Alba, first size.
 - " " extra large.
 - Tulips, La Reine, white.
 - " Belle Alliance, scarlet.
 - " Yellow Prince, yellow.
 - " Kaizer Kroon, crimson, yellow edge.
 - " Cottage Maid, pink and white.
 - " Van Thol, scarlet.
 - " Double Duke of York, rose and white
 - " " Princess Alexandra, red and yellow.
 - " " Imperator Rubrum, scar.
- [The three last named are splendid forcing vars.]
Lily of the Valley, best Hamburg pips.
Spiraea Japonica, fine clump.

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- Narcissus Bicolor Horsfieldi, a great beauty and fine for cutting.
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- Narcissus Bulbocodium Citrinus, pale sulphur flowers, and very early.
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- Narcissus Incomparabilis Cynosure, a beautiful single incomparabilis for cutting, yellow cup, divisions creamy white.
- Narcissus Incomparabilis Stella, large single white variety, very early, fine for cutting.
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- Narcissus Obvallaris, the true Tenby daffodil, one of the best varieties, forcing deep rich yellow flowers of great substance.
- Narcissus Odorus Campenelle, the well known Campenelle Jonquil, very strong bulbs.
- Narcissus Orange Phoenix, large double white flowers with orange center, good for cutting.
- Narcissus Pallidus Præcox, the earliest of all, forces very freely, single, sulphur colored trumpets.
- Narcissus Rugilobus, true, large yellow trumpet, very free and very early.
- Narcissus Scoticus, the Scotch Garland daffodil, a beautiful variety both for borders and for forcing.
- Narcissus Von Sion, true, the double deep yellow daffodil.
- Freesia Refracta Alba, large bulbs for forcing.
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- Gladiolus The Bride, flower pure white, fine for forcing.
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PAPER WHITE NARCISSUS,
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offers Finest Stock of DUTCH BULBS, ROMAN HYACINTHS, PAPER WHITE NARCISSUS, LILIUM CANDIDUM and HARRISII, LILY OF THE VALLEY, FREESIASES, CALLAS and other desirable
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Julius J. Jugl, formerly of Brooklyn, N. Y., who has been selling a patent wooden hose mender, has developed into a forger.

The First Mention of Moon Flower.

"And the white Moon Flower, as it shows On Serendibis high crags, to those Who near the Isle, at evening sail Scenting her clove trees in the gale."

Thus writes "Tom Moore" in the "Light of the Harcm," published in 1817; and let us rather look to him (if not still further back), than to the lager beer garden in Washington for its name.

GLECHOMA HEDERACEA is a plant which will be of great value as a basket and vase plant. It is a creeping vine with distinctly variegated leaves, is a quick grower, can be propagated rapidly and looks well through the season.

PANDANUS VEITCHII is an admirable house plant when properly treated. The most frequent cause of failure with it is over watering, and customers should be instructed to be careful in this respect.

CARNATION WM. E. ROWLAND is a new variety which Craig & Bro., Philadelphia, have on trial and which they will send out if it proves to be of value. The flower is in the way of Grace Wilder but of a more decided color.

MAKE USE OF YOUR BOOKS. I think the florists as a rule pay too little attention to the printed matter which comes to them in so many ways, the trade journals, society reports, catalogues, illustrations, etc., etc., can be utilized in many ways, not thrown aside, never read and lost.

FAXON'S SEED SPECIALTIES. Astra Pansies, Sweet Peas, Nasturtiums, and Danvers Onion. Essays—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both, and Catalogue, 10 cents, if you mention this paper.

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Table listing various plants and their prices. Includes Alyssum, Achyranthes, Alternanthera aurea nana, Ageratum, Begonias, Dusty Miller, Echeveria glauca, Cyperus alternifolius, Fuchsias, Coleus Golden Bedder, Geraniums, Spotted Calla, Tuberosa Bulbs, Lobelia, Sedum carueum var, Hollyhocks, Thyme Golden, Moon Flower, Nasturtium, Ferns, Stevia variegata, Cuphea or Firecracker Plant, Croton.

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Orders booked now for delivery July and August at the following special rates. TRIMARDEAU, choicest French mixed, unsurpassed in brilliancy of color and size of flowers.

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Comprising Cattleyas, Laelias, Odontoglossums, etc., which they offer in established plants by the dozen, hundred or thousand.

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These have long been a specialty, and our stock of Tree Ferns, Filmy Ferns, Gleichenias, Maidenhairs, and other popular kinds, is unsurpassed.

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The leading kinds in large quantities. Special stocks of Red and White Lapagerias; specimen Camellias in all sizes, including large plants of Double Whites; Imanthophyllums (Clivias), Eucharis, Azalea roseiflora and other fine varieties.

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For many years we have given special attention to gathering together an extensive collection of the most popular plants of Old English gardens; whilst our collectors and correspondents in the Alps, Pyrenees, Tyrol and other mountainous districts of Europe; as well as in Asia Minor, the Caucasus, Turkestan and Siberia, India, Japan, Australia and New Zealand, have enriched our stock.

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in the best and hardiest varieties are extensively cultivated, including North American, Japanese and other CONIFERAE which our soil and climate admirably suit.

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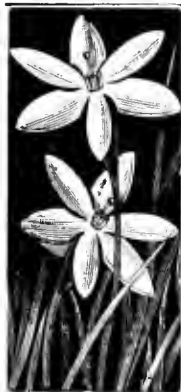
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Asparagus Tenissimus, 2 1/2 inch pots	\$4.00 per 100
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Cinnamon Vine, strong roots	3.50 "
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Clerodendron Balfourii, strong	5.00 "
Dracena Indivisa, 3-inch pots, strong	10.00 "
Euphorbia Splendens, 3-inch pots	6.00 "
Cape Jasmine, 3-inch pots	10.00 "
" " 4-inch pots	12.50 "
Gardenia Radicans Variegata, 3-inch pots, strong	10.00 "
" " 4-inch pots	12.50 "
Hydrangea Thomas Hogg and Hortensis, 2 1/2-inch pots	5.00 "
Adiantum Capillus Veneris, 2 1/2-inch pots, strong	4.00 "
Begonia Metallica, 4-inch pots	12.50 "
Russelia Juncea, 2 to 3 feet	15.00 "
Dahlia Roots, 50 sorts	8.00 "
" " pot plants	5.00 "
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Geraniums, 2-inch	2.50
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Hibiscus, six varieties	4.00
Alternanthera Aurea Nana	2.50
Pansies, nice young plants	1.50
" stronger ones, in bud and bloom	2.00
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In 20 choice varieties, my own selection, nice plants from 2 1/2-inch pots, clean and vigorous. 1.00

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100 PANSIES	2.00

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Geranium White Vesuvius.

White Vesuvius is a sport from the old Scarlet Vesuvius for many years the best scarlet bedding geranium in England. White Vesuvius sported at about the same time as that erratic and oftentimes disappointing "New Life," which is a Vesuvius sport, as is also Salmon Vesuvius. It is not common to see on "New Life" scarlet, white, salmon and striped flowers on the same truss, though I have frequently seen two or more of them. None of the Vesuvius are rapid growers with us.
J. THORPE.

In reply to Mr. A. S. Parsons (see page 496, June 1 issue), respecting the origin of the Zonal Pelargonium White Vesuvius: It originated as a sport, indirectly from Vesuvius, a scarlet which was one of the most popular bedding varieties of its color in England twenty years ago. It had been in cultivation some years before it asserted its sportive character. Its first "break" was the semi double variety "Wonderful." Then came "New Life," which made something of a sensation on account of its unique character, striped florets, scarlet, white and salmon. From the latter variety came "White Vesuvius" and "Salmon Vesuvius." Thus there were five distinct varieties originated from one seed.
E. L.

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The young plants are 4 inches high, full of buds ready to bloom. Will take orders for this New and fine Yellow Japanese shaped Chrysanthemum. It will pay every florist to have it for cut flowers.
Price, 60 cts. each; \$15 per 100.
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Many additions of Choice New varieties this season.

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CUT BLOOMS AT ALL SEASONS.

TO THE TRADE.

ROSES: Marechal Niel, from 2 1/2-in. pots. \$4.00
" " from 2 in. pots. 3.50
" Pele des Jardins, from 2 1/2-in. pots. 4.50
" Niphetos, from 2-in. pots. 4.00
" So Iberle, from 2 1/2-in. pots. 4.50
" La France, from 2 1/2-in. pots. 4.00
" Salano, from 2 1/2-in. pots. 3.50
" La Reine, from 2 1/2-in. pots. 4.00
" Esabella Sprunt, 2 1/2 in. pots. 4.00
" Eva Corinne, from 2 1/2 in. pots. 3.00
Ipomoea grandiflora (Moon Flower), 2 1/2-in. 3.00
Also a large assortment of Plants, Roses and Clematis. Prices on application.

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Mermets, Cooks, Adams, Safrano, Brides, Souv. d'un Ami, Perles, Niphetos, Sunset, Bon Salene, Papa Gontier and La France, from 2-inch pots, \$5.00 per 100; \$15.00 per 1000.
Per 100
Alternanthera Aurea Nana. 3.00
Ageratum, white and blue. 12.00
Begonia Metellia. 8.00
Cobea scandens. 8.00
Coleus, general collection, 2 and 3-in. \$3.00 to 5.00 \$25.00 per 1000.
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Feverfew, The Gem, 2 1/2 and 3 1/2-in. pots. \$4.00 & 6.00
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25 Cents per 100 Seeds.

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One large Latania Borbonica with 30 leaves, 50 feet in circumference, 17 feet high above tub.
One Scaforthia Elegans, stem 15 inches in diameter, 20 feet high above tub, well furnished with foliage.
6, each 15 ft. high, well furnished with foliage, in splendid condition.
Also several large Ficus Elastica 18 feet high, from 10 to 50 feet in circum., stem measures 8-in. through. These plants will yield thousands of cuttings for the commercial florist.
Several large double red Oleanders, well grown and now showing buds.
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1000 CALLAS. Per 100 \$5.00 to \$20.00
SMILAX, 2 1/2-inch pots. 3.00
Marie Louise and Queen Victoria Violets for Fall delivery. Prices upon application.

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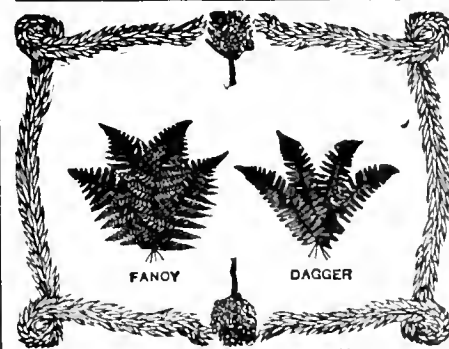
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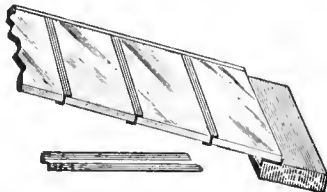
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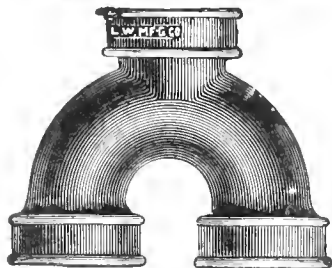
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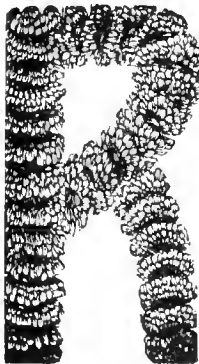


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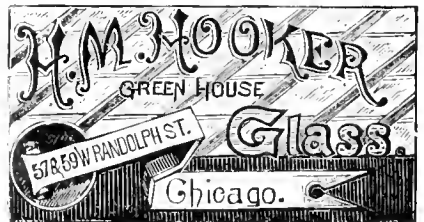
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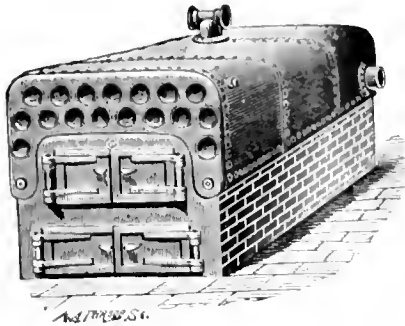
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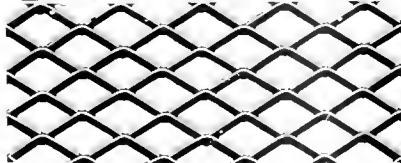
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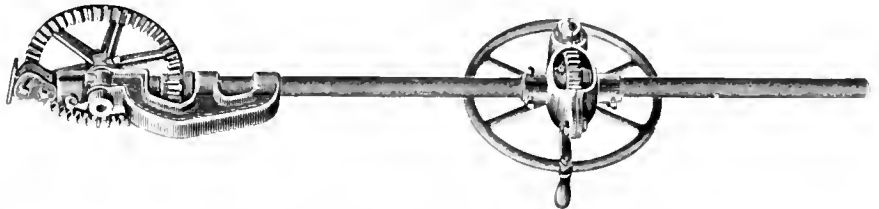
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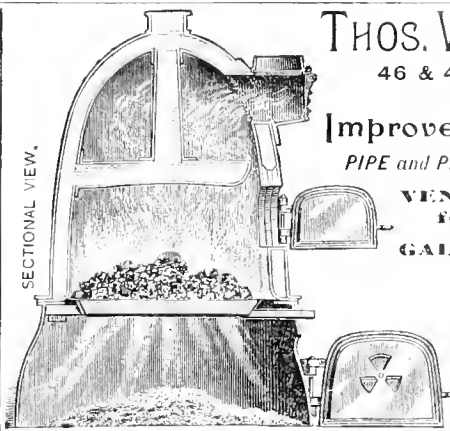
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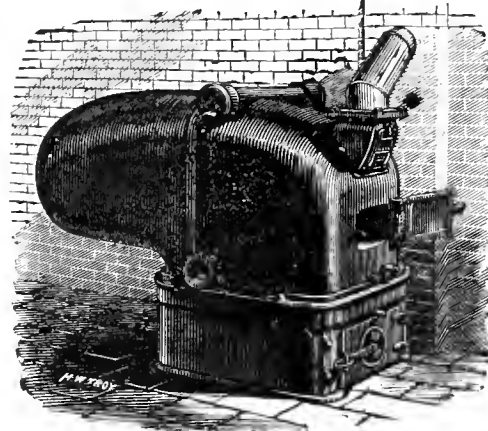
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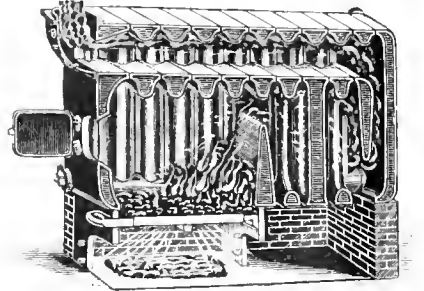
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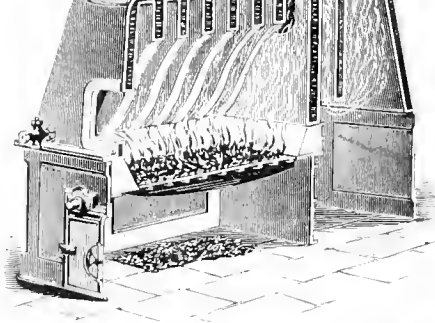
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THE AMERICAN FLORIST



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Vol. IV.

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SOCIETY OF AMERICAN FLORISTS.

JOHN N. MAY, Summit, N. J., president; W. J. PALMER, Buffalo, N. Y., vice-president; WM. J. STEWART, 67 Bromfield St., Boston, Mass., secretary; M. A. HUNT, Terre Haute, Ind., treasurer. The fifth annual meeting at Buffalo, N. Y., August 20, 21, 22, 1889.

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Coming Exhibitions.

August 20-22, Buffalo.—Exhibition at convention of Society of American Florists.

September 17-20, Boston.—Annual Exhibition Mass. Hort. Society.

November 5-8, Chicago.—Chrysanthemum Show Chicago Florist Club.

November 5-9, Indianapolis.—Chrysanthemum Show Society of Indiana Florists.

November 12-16, Philadelphia Chrysanthemum Show Pennsylvania Hort. Society.

November 12-14, Boston.—Chrysanthemum Show Mass. Hort. Society.

November 12-14, Orange, N. J.—Chrysanthemum Show New Jersey Floricultural Society.

November 12-16, Cincinnati.—Chrysanthemum Show Cincinnati Florist Club.

Massachusetts Hort. Society's Rose and Strawberry Exhibition at Boston.

The annual Rose and Strawberry Exhibition of this society is one of the most important shows of the year. About \$1,000 is offered in premiums and it is always looked forward to with much interest by the public.

According to the schedule the show was to be held June 25 and 26, but owing to the forward season it was found necessary to put the date one week earlier. Two weeks earlier would have been much better. The strawberries were all right, and the exhibition of this fruit was exceedingly fine, but the roses were in very bad shape.

It was certainly the poorest rose show we have seen here for many years. The weather was the only cause of the failure, however.

The principal prizes for hybrid perpetuals were awarded to J. B. Moore & Son, Mrs. F. B. Hayes, J. L. Gardiner, W. H. Spooner, W. C. Strong and Mrs. E. M. Gill. There was nothing specially new or noticeable in the varieties presented. In the moss and hybrid tea classes there were no entries. Martin Lally, gardener to C. W. Galloupe, made a remarkably fine display of teas and hybrid teas. These were equal in quality to the best winter grown buds and attracted much attention.

The display of orchids was better than usual, the principal exhibitors being John L. Gardner, E. W. Gilmore and Pitcher & Manda. The latter firm staged a very large and beautiful collection including several large specimen plants and some varieties that have never been shown here before. Among their cypripediums were *Javanico superbiens*, *ciliolare*, *barbatum nigrum*, *Euryale*, *Lawrenceanum*, a fine plant of *Veitchii*, one of *caudatum* bearing three flowers on one stem, and *bellatulum*, the latter a beautifully spotted little fellow now shown here for the first time. Other good plants in this collection were *Trichopilia crista*, *Cymbidium Lowii*, a grand variety of *Oncidium crispum* and *masdevallias* in best colors.

J. L. Gardner's display of orchids was also rich in specimen plants and fine varieties. There was a *Dendrobium Dearii* with unusually fine growths and bunches of flowers, a well bloomed plant of *Oncidium macranthum*, a beautiful specimen of *Dendrobium filiforme*, *Thunia alba*, *Masdevallia peristeria*, and a number of excellent plants of *Epidendrum vitellinum majus*.

Mr. Gilmore's *Odontoglossum pescatoreis* were remarkably good and reflected great credit on the gardener Mr. Greaves. He had also some fine *O. crispum*s, *Dendrobium Jamesianum* and an unusually good variety of *Cypripedium ciliolare*.

The first premium for foliage plants was awarded to Mr. Gardner's *Gymnogramma schizophyllum gloriosum*.

Mrs. E. M. Gill, Miss S. W. Story and Mrs. A. D. Wood were as usual, the only competitors in bouquets and were awarded 1st, 2nd and 3rd prizes respectively. Next to the roses and orchids the principal interest centered in the Sweet Williams. There were many competitors, all meritorious, but the collections shown by E. Sheppard & Sons and A. H. Fewkes were ahead of any Sweet Williams that have been seen here. The schedule is somewhat cloudy in regard to this flower, the prizes being offered for "trusses," but leaving it open to dispute as to how much or what part of a "spike" constitutes a "truss." This should be corrected another year. The displays of English iris by J. L. Gardner and A. W. Fewkes were very beautiful and attractive.

Sewall Fisher showed two seedling carnations, Mary Fisher, yellow and red, and Mrs. Fisher, white. The latter is a magnificent flower, and was well worthy of the first class certificate of merit which was awarded it.

O. B. Hadwen showed a good collection of peonias and there were some striking delphiniums from E. Sheppard & Sons, K. Findlayson and others. The newly renovated halls of the society were opened at this show for the first time to the public. The general effect is pleasing, but it is a pity that the large mirrors which formerly beautified the upper hall and reflected so prettily the bright colors of the flowers were not retained.

W. J. S.

Arboretum Notes.

III.

There are between eighty and ninety varieties of roses in the Arnold Arboretum. These have been collected from all countries and represent every type of natural rose from the diminutive *Rosa multiflora* up to the stately *rugosa*. The flowering time of these wild roses is more extended than one would suppose, many species having bloomed nearly a month ago while others are only beginning to show small buds. Many of them, "single flowered" though they be, are well worthy of a prominent place in the garden, making up in abundance of bloom, hardiness, and freedom from insects, for all they lose in comparison with their showy relations—the hybrid perpetuals. *Rosa* repens now in flower is a very beautiful species bearing an abundance of pure white blossoms with yellow eye, and stamens tipped with brightest brown. The old French Province rose (*Rosa provincialis*) is now in bloom. No rose ever had a sweeter fragrance and few can equal it. *Rosa stylosa*, var. *leucochroa*, is tall and showy with beautiful clusters of white, sweet-scented flowers. *Rosa gallica* is seen in many varieties, some of them brightest crimson in color. *Rosa arvensis*, var. *Ayreshirea*, is very pretty, semi-double, shaded pink and white.

Spiræa Japonica is just coming into bloom. Several beautiful varieties of this most valuable shrub are now at their best. *S. Japonica* var. *splendens*, is one of the earliest, color bright pink. *Sanguinea* is somewhat paler in color and later. *S. salicifolia*, and *acutifolia* are in full flower, although in an ordinary season they are not expected to bloom till July. *Salicifolia* var. *rosea*, is very graceful in habit.

Andromeda speciosa is now in bloom. This is certainly the grandest of all the andromedas. It could be readily forced and would not suffer in comparison with the choicest exotics. The flower bells are pure white, one-half an inch in diameter, resembling a mammoth lily of the valley, very fragrant and borne in great profusion. An illustration of this beautiful flower will appear in the next issue of the *FLORIST*. There is a variety known as *pulverulenta*, differing from the type only in having glaucous foliage.

Among the clematises now in bloom are *integrifolia*, bearing nodding, purple flowers, measuring three inches across when expanded. *Pallisii*, very fragrant white, and *angustifolia* also white and rather smaller than *Pallisii*. *C. fusca violacæa*, bearing dull violet colored bells, blooms all through the season. *C. Pitcherii*, pale blue on the outside of the petals, with lemon on the inside and edges, also flowers continuously.

One of the prettiest of the honeysuckles is *Lonicera Chinensis* var. *flexuosa*. The foliage is of a rich dark color and the flower buds before expanding are bright rose.

Among the hardier hydrangeas one of the showiest is *H. vestita*, var. *pubescens*. It is perfectly hardy and bears an abundance of very large trusses of white flowers.

Itea Virginica and *Ligustrum Ibotæ* are two very desirable shrubs for lawn decoration. They both bear white racemes of flowers in great profusion, and the bunches of fruit on the *ligustrum* in autumn are scarcely less showy than the flowers.

The most effective of all the shrubs now in flower, however, are the Mountain Laurel (*Kalmia latifolia*) and the white azalea from the mountains of North Carolina (*Rhododendron arborescens*). Wide expanses of hillside in the Arbutum grounds have been planted with young laurels, and although small as yet, they already make a beautiful show when in bloom, while their evergreen foliage makes them equally effective in winter. These plants as well as the large number of azaleas have all been raised from seed by Mr. Dawson and they show many variations in habit, and in size and color of bloom.

WM. J. STEWART.

Boston, June 20, 1889.

Long Island Notes.

BY WM. FALCONER.

THE FOUR-LEAVED MILKWEED.—“What’s this *asclepias*?” asked a florist the other day as he unrolled a blossom from a paper in his pocket. It is *Asclepias quadrifolia*, I remarked, and the finest species of the whole genus. Now you’ve got it, a gem of the first water and still only an American wild flower. If you get up a big stock of this plant and give it to the people you will do a public good and what no one has ever done before. Although of modest proportions and far from being as gay as the fiery *A. tuberosa*, its flowers are of a beautiful pale pink color and deliciously fragrant, and it is the earliest blooming of its race. But how it hates captivity!

HELENIUM BOLANDERI is a hardy perennial, indigenous to meadows and swamps near the sea, in Mendocino and Humboldt counties, California. Our plants are a year old from seed and now in bloom, and I am particularly well pleased with it. The flowers—disc and rays—are golden yellow, singly terminating the two foot high leafy stems, the disc is about an inch across and the rays $1\frac{1}{2}$ to 2 inches long, narrow and somewhat deflexed, in fact the flower looks like a wide open Japanese single chrysanthemum. Our best flowers are $5\frac{1}{8}$ inches across. It is distinct from every other flower on the place and very striking, at the same time I do not claim that it is a good cut flower for florists.

ORNITHOGALUM ARABICUM was imported and grown in large quantity by some New York florists two years ago. What the florists grew and treated properly flowered handsomely, but the florists who treated them as if they were common tulips were a little disappointed, and some of the importers who had a few thousands of bulbs left on their hands wished they hadn’t gone in so heavily. This rendered all parties a little cautious last year. And some of the florists who were so successful the year before kept over their old bulbs and forced them again, but with rather poor success, and they wished they had bought a fresh stock. One importer had a surplus left over, but he didn’t propose to give them away as he did the year before, and as the bulbs seemed plump he kept them over till April and then planted them out. They grew well and towards the end of May came into good bloom and look first rate. He won’t throw his surplus away again.

HARDY CARNATIONS are making quite a stir among the florists on Long Island, and the plant merchants are handling them in large numbers. But the flower growers have also got interested and some of them have come to the conclusion that a lot of these hardy carnations kept over winter in cold frames and brought indoors in batches in early spring would give them quite a lift. And why not? for some of the selfs are not only large and of good form, but very fragrant, and after a winter’s rest they are sensitive to warmth, force easily and blossom copiously. But a little too tender as open air garden plants. Mr. William Robinson, editor of the *London Garden*, writing to me a few weeks ago says: “It would be almost worth your while to sail the six days to see the place (his own private one) in rose and carnation time. I have 5,000 selfs in the open air on a hilly spot absolutely exposed.” This shows how the most eminent horticulturist in Europe appreciates hardy carnations.

AMONG DOUBLE PETUNIAS from seed this year about 10 per cent have come double and 1 per cent splendid. *Petunia grandiflora fimbriata* fl. pl. is the strain and I have not found any that is better.

IS THAT *Nertera depressa*? asked a florist the other day as he caught a glance of some plants of *Pratia angulata* (*Lobelia littoralis*) in pots. No wonder the question, for at the first glance there is considerable similarity between the two, but as the *pratia* ages the likeness lessens.

DON’T THE LEAVES of *Kalanchoe carnea* very much resemble those of *Bryophyllum calycinum*? asked the same florist as he looked upon the foliage of the Cape stranger. And so they do.

THE DOUBLE-FLOWERING *Geums* are

pretty garden plants, but of little use for cut flowers.

THE JAPANESE *STUARTIA* is blooming freely with us. It is a beautiful shrub, but although the large white blossoms are pretty enough, they are too fugacious to be of any service when cut.

THE AMERICAN *Stuartia* (*S. pentagyna*) is also coming into bloom. It doesn’t make as pretty a shrub as the Japanese, but its flowers are larger and stick to the branches for a few days, and in this way when cut in good sized sprays they are quite effective in decorations.

KÆMPFER’S IRISES.—How grand they are! They are earlier this year than they are usually. And on account of the very moist weather so far these irises have made an unusually fine growth and promise a splendid display. Don’t stick to the idea that these irises are aquatic; the finest plantations of them around New York are growing in the open field as if they were corn or any other crop.

LOOK AROUND and see the *Kæmpfer’s* irises and if you like them and conclude that they would be an advantage to your business get a stock. They are easily raised from division and seed and easier to grow than common German irises for they come up in tufts like a Siberian iris and have no surface root stocks to rot off with wet or covering.

DO YOU KEEP BEES?—No. Why not? Can’t be bothered. How’s your seed crop? Middling only. Now, take an old fellow’s advice. If you want a good seed crop or a good fruit crop keep bees. I know it, they destroy the heliotropes in the bright days of early spring, still the advantages we derive from them exceed the interests we sacrifice to them.

PHILADELPHUS CORONARIUS NANUS is a shrub that I have grown for many years, have large old plants of and know of many old plants elsewhere, but till this spring I never had seen it in bloom. One of our old plants bore a few flowers.

THE GOLDEN-LEAVED dwarf *Philadelphus* also bloomed with us this year.

CRATÆGUS LELANDII also bloomed nicely. But its chief attraction is its profusion of red fruit later on.

ANTHEMIS TINCTORIA is an old-fashioned European hardy perennial which in June bears an immense crop of golden daisies. It is very effective. And after this rush of bloom is past it will blossom a little all summer. Of the easiest possible propagation by division and seed, and wherever a branch touches the ground it roots and grows. There are white and pale yellow forms, but the bright yellow is by far the best.

SPIRÆA PALMATA is a hardy herbaceous perennial now in fine bloom, and which florists should become well acquainted with. Its flowers are bright crimson red and disposed densely in cymose panicles that stand up well above the leaves. It comes in after *Astilbe* (commonly called *spiræa*) *Japonica* and the double flowering *S. filipendula*, and at the same season as *S. Ulmaria* fl. pl. and *S. lobata*. It is quite hardy, at the same time well fitted for cultivation in pots; indeed, it is largely grown for forcing in England. But for forcing the plants should be strong, well established in their pots the previous year and ripened off early and rested.

MR. RATHBORN’S STORK-BILL.—“It is the *pelargonium* or stork-hill,” a “regal plant” whose “shades would defy the brush of genius to reproduce,” and “designs of which nature has the secret and

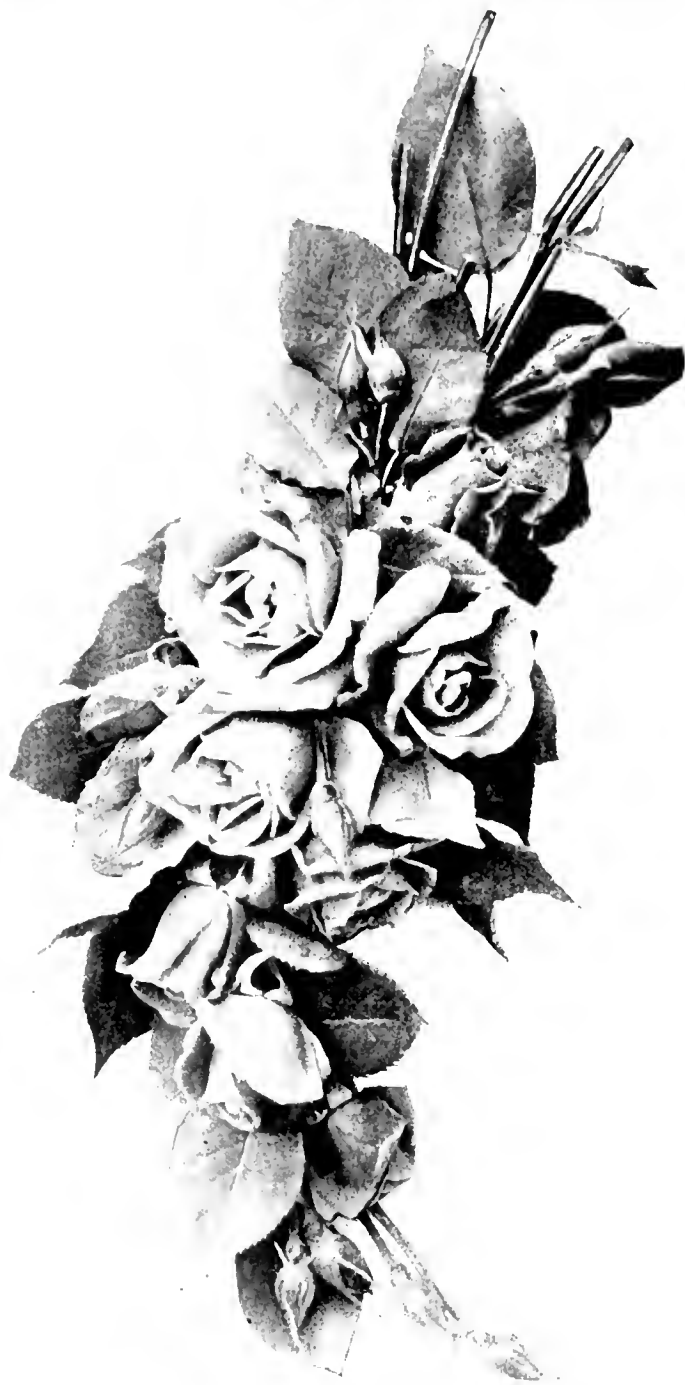


PLATE NO. 1 COR-AGE BOUQUET [See page 15.]

ONE WAY TO DO IT

In engraving the picture is reversed. The bouquet should curve in the opposite direction.

the copyright are marked on every bud and flower. I got a slip in England a year ago for \$15. * * Except one in Washington there is not another flower in America like this." Mr. Novelty, please secure this little treasure.

A VERY RARE lily would be a cross between an iris and a lily, but such a case was reported to me the other day. I shook my head.

PERENNIAL LARKSPURS are at their best. In Europe there are many named varieties; in this country we stick mostly to seedlings. From a real good strain as Lemoine's we should get a very fine race of flowers; but even in the best of strains we will find a good many not fine enough to keep.

IMPATIENS GLANDULIFERA is an annual freely catalogued in large seed lists. It is all right in its way, a free bloomer and rank grower, still it has a weedy appearance and is of no use to the florist.

LAVATERA ARBOREA FOL. VARIEGATA has its friends and its foes, but I'm a friend. It is of very strong growth and shows but little variegation while it is under two months old, the first leaves are most always rather plain green. But as the summer heat increases and its body growth advances the new leaves appear quite liberally splashed and marbled with whitish yellow. For a bold effect it is an excellent subject.

NASTURTIUMS in summer are nice things to have. I grow the Lobbianum

varieties because I want the flowers; if my object was seeds for pickles then I'd grow the common annual majus. Plant them out and let them spread as a flat mat over the ground. For late crop and greenhouse use strike some cuttings, they are rapid growers and soon become blooming plants.

FOXGLOVES.—There is nothing better in this line than *Digitalis purpurea* and its varieties. I like the pure white and the *gloxiniiflora* or white with spotted throat varieties; the purples should be selected so as to get a pretty rose, deep purple; large flowers and closely flowered spikes, short rather than long should be chosen. Here again the evil of depending upon self-sown seedlings, because they come up so abundantly, is likely to triumph; but if you will have quality be particular in saving seeds from the finest flowers, and raising seedlings in this way. It is more troublesome, but it pays. They make a capital display from late May all through June, and are best when treated as biennials.

WHITE PHLOXES.—I have now (middle of June) lots of a very nice white phlox of the *suffruticosa* section in bloom. About two feet high with fine long panicle heads and white, or rose-tinted white, fragrant flowers. This phlox was a seedling raised by John Thorpe some years ago. Florists should grow a lot of it. It is as hardy as a rock, healthy, free and copious, and a short row of it will yield a large lot of flowers. Flowers at this time of year perhaps have no great value, but it is handy to have them and it costs very little to raise them. Once you have got the plants and set them out about all the labor needed with them is to keep the ground about them clean, cut the flowers in summer and sell them; and what flowers you don't cut let go to seed, and save and sell the seed; and when the plants become too large lift, divide and replant what you wish and sell the balance.

POPPIES are in bloom. Orientals are past. On account of so much wet weather recently Alpine poppies have rotted off badly. Annual poppies sown last fall are in full bloom and fast failing; those sown this spring are just beginning to come in. The young poppies that were transplanted from pots come in a little earlier than those sown in the open ground, but they are not so thrifty or long lasting. The Shirley poppies are beautiful and display much variety in color, from the purest white to the most glowing crimson, with many intermediate shades of pink, rose and red, and shaded and margined; also with white, gray or black base blotches on the petals. The new *Papaver levigatum* has intensely brilliant crimson scarlet flowers and is a free grower and bloomer, at the same time although it may be a species, horticulturally it is of no more value than a variety for I have as intense colors among *P. Rheas* and *umbrosum*; indeed, poppies get so much mixed up when long cultivated as to lose their typical markings to take up a little of the markings of all other allied forms.

SPACIOUS DWELLINGS of Carolina florists.—"A two-roomed cottage," the sumptuous residence of "a successful grower of open air roses and other plants!" Poor sinner of a grower. Come now. A successful grower of roses, even if he be a hired man, is a human being and not a pig, then where or how under heaven is he to lodge his family in decency if restricted to a two-roomed cottage?

(OF THE DEVIL'S TREE (Arbor Diaboli)

a specimen was discovered last winter by J. H. Betterman, an American scientist, on an outlying spur of the Sierra Madre Mountains. He claims that this is the third tree of the kind ever found, and the only one in the New World; of the other two, one was discovered on a peak of the Himalayas, and the other in the Island of Sumatra. The Mexican plant was only "twenty feet high but covering a large area." Its branches were slimy and twined and twisted like snakes and covered with tentacle-like suckers. On the evening of its discovery it ate a large bird and the skin of the botanist's hand for supper, and next morning it devoured six chickens for breakfast. Illustrated and described in the *St. Louis Globe-Democrat*. This wonderful tree may be seen through the mists of Chihuahua pulque.

CANTERBURY BELLS—Again let me draw your attention to the magnificence of these old-fashioned flowers. They have got beyond the sameness, coarseness and commonness of former days, and in them we now have some of the loveliest and most desirable summer flowers in cultivation. They are in perfection from the 25th of May till the 10th of June, a good deal depending upon season and treatment. As cut flowers they are superb, they last well and look well and seem different from most every other flower we grow, besides, there is nothing stinted about them, they have a full and generous appearance. And now is the time to sow them for next year. If sown in spring they grow too big to winter over safely and in little space, that is, unless plants for forcing are needed, in which case early sowing is advisable. As regards varieties, get pure white and rose as singles, and the same as doubles, but the doubles are not always as pretty as the singles; and by all means get the cup-and-saucer or calycanthema forms. Of these pure white, Rose and Mauve Beauty are as good as any; indeed, the finest I think. Of course the prevailing colors among old time Canterbury bells were blue, violet and purple, but these are just the colors that yield the most washy tints and for which florists care least; in Mauve Beauty you will have all the blue you want. Of course Canterbury bells with a little mulching may live over winter all right, but the great secret in their cultivation is to winter them in a cold frame. Sow now, prick off and transplant as needed till October when transplant into a cold frame; exclude more than 10° of frost in winter and plant out next April. This is about all there is to their cultivation.

SWEET WILLIAMS are in their heyday in June and as they are so easily grown it is well to have a lot of them. They are most satisfactory when treated as biennials. I have been trying to get up an extra fine strain and am working on Bragg's finest strain. Still I have not been very successful, and it is rather tantalizing when I find in some of the common village gardens better Sweet Williams than I have got. But such is the case. It takes careful and long continued selection and isolation to get up a good stock of this or anything. Good white, deep crimson, clean decided markings, large flowers and large heads are what we are working for. A common source of poorness in Sweet Williams is perpetuating our stock from self-sown seedlings, these come up in legion around the old plants and it seems a pity to throw them away, but if we wish to secure the very finest stock we had better save our seed and in this way raise seedlings.



Forcing Hybrids.

BY JOHN N. MAY.

Hybrid Remontants at Christmas, how do you get them? is a question that I am often asked; and for the benefit of those and others who may be interested in the same subject I will give in detail the treatment which I have practiced for the past twenty years or more.

First I will give the treatment for pot grown plants as the most suitable for those who have only room to grow a limited number, or who may want only a small quantity of blooms at any one time.

Start by having good plants in pots now, and where they have been neglected in potting into a size large enough to bloom them in, lose no time now in putting them into the proper size, as every day that is delayed now lessens the chance of getting them to bloom early. For a young plant struck this spring, as a rule an 8 inch pot is large enough unless the plant has made extra strong growth, then it may be desirable to put it into a 9 inch pot. Before doing so let the pots be well drained with not less than two inches of broken pots, coarse at bottom with some finer pieces on top, over the whole place a piece of very thin sod to keep the soil from washing down into the crocking and filling it up; this is a very important part of the operation, as success depends entirely upon the condition of the soil during the time the plants are being forced into flower, for they require liberal waterings and the means for all surplus water to drain away freely. Next take a good quality of loam—old sod is much the best, if heavy add a liberal proportion of sand—and to every seven or eight loads of soil add one of well decomposed cow manure, broken up fine; thoroughly mix and if the soil is naturally very poor a little pure ground bone may be added at the same time. Then repot the plants into suitable sized pots, pressing the soil quite firm around the ball, but do not break the young roots.

When this is done the plants should be placed (at this season of the year) in the open air on a bed of coal ashes and plunged nearly to the rims either in coal ashes, sand or similar material. Water carefully and syringe frequently for the first week to prevent them flagging in the hot sun. As soon as the roots begin to get well hold of the new soil they will push out soft new growth, this must be watched carefully, as at this late date it would be fatal to success if the eyes at the base of the strong shoots should start into growth, and to avoid this it will be necessary to watch the watering very carefully so that they are not overwatered; the object being to get new roots without producing very much soft young wood; so long as the new growth is confined to the tops of the shoots already made no harm can come.

Let them continue in this way till about the middle of August, then commence to withhold the water from them, gradually of course at first, and continue to lessen the quantity every day till the wood becomes quite hard; but try to retain some leaves on them to keep the sap balanced

between root and branch. By the middle of September they ought to stand for a week at a time without any moisture at all other than the dews at night. Should wet weather occur during this period means must be provided to prevent it getting to the roots—laying the pots on their sides with pieces of boards laid over the pots is as good a means as any—for dry they must be kept or there will be no roses when wanted.

If they have been properly treated by the 1st of October the wood will be hard and solid without its being shrivelled, with the leaves turning a pale green. In this condition they are fit to prune; in doing so cut back to a good prominent eye on each shoot, clean off nicely, stand them in a cool frame if to be had, water moderately and syringe three or four times a day; shut up the frame on cool nights or during cold rains and in ten to fifteen days the eyes will have broken nicely. They should be then removed to a greenhouse where the temperature can be kept at 46° to 48° at night with plenty of air during fine days, and watered, syringed, etc. as required. About every ten to twelve days the temperature should be increased two or three degrees at night with less proportion of air during the day according to the weather. As soon as the buds are set they will be greatly benefitted by having a good watering of liquid manure twice a week, but they should never be saturated or given more water till the soil in the pot is in a healthy condition for the roots to absorb the water given. Plants treated this way will be in bloom in ten to twelve weeks from the time they are pruned.

The varieties most suitable for this purpose are: Gen. Jacqueminot, Magna Charta, Anna de Diesbach and Mrs. John Laing, though the latter is hardly as good for earliest pot work as the other three. For blooming in February or even end of January there are a great many good varieties, but for most people the following are perhaps—including those named above and Mme. Gabriel Luizet, one of the finest roses ever raised—the best: Ulrich Brunner, another grand rose, and the new variety Gloire de Margottin, one of the brightest colored roses known; Baroness Rothschild, Mabel Morrison and La Roserie. This gives all the most desirable shades of color and all are good roses.

For later blooming the varieties that can be had in perfection are almost legion; with of course less trouble as the plants can be allowed to grow on naturally till frost stops their growth, and then by placing them in a cool house or like place they can be pruned and brought into the greenhouse as required. One very important item in their cultivation during the time they are in the open air is that they should never be saturated with water for any length of time or the result will be fatal, as black spot will soon have supreme control.

Summit, N. J., June 10, 1889.

Some New Roses.

Mr. Benjamin Cant obligingly sends fine blooms of Ernest Metz, the new tea-scented rose that Guillot has sent out this season and which promises to be a valuable addition and likely to maintain its raiser's great reputation. The flowers are of good size and substance, well formed, with a high center and fine petal and the color is a very pleasing bright flesh-rose tint that does not quickly fade or become dull when the flowers are cut. The plant is likely to be especially valu-



PLANT NO. 2. CORAGE BOUQUET.

ANOTHER WAIT TO IT

able in the garden, as the blooms, although solitary, are carried erect upon stiff stems, and therefore displayed to the best advantage.

There is no question about the climbing character of the new sport Climbing Niphetos. Of a couple of spring grafted plants just received from the raisers, Messrs. Keynes, Williams & Co., of Salisbury, one has a shoot seven feet long, and "is still growing," and the other carries an even greater total length of growth, for though the main shoot has been accidentally stopped at a height of 4½ feet, four or five lateral branches have started and are already each from 1 foot to 1½ feet in length. The only difficulty will be to find situations that afford the plant sufficient room to develop to the best advantage.

Plants in pots of the new Polyantha rose, *Minutifolia alba*, received from Mr. Henry Bennett, the raiser, are most charming. The habit of the variety is very dwarf and compact, and the snowy white flowers are produced in the utmost profusion. Most of these miniature Polyantha roses make admirable pot plants, but none are more distinct and effective

than *Minutifolia alba* from its close bushy habit and the exactness of its pure white flowers, which, unlike those of most other varieties of the section, are delightfully fragrant.

Blanche Rebatel (Bernaix), and the new variety of the same class with crimson flowers, is the deepest colored Polyantha rose yet sent out, and, judging from a well bloomed plant received from Messrs. William Paul, is a very promising addition. From Waltham Cross comes also a plant in flower of *The Queen*, the new white sport from *Souvenir d'un Ami*. Of the flower's whiteness there is no question, and as thus bloomed under glass it might easily be mistaken at the first glance for *Niphetos*.

Mme. Georges Bruant (Bruant), the new hybrid *rugosa* raised from a cross between *Rosa rugosa* and the Bourbon *Tea Sombreuil*, is now flowering freely. The buds are fuller and better formed than those of last year, though still somewhat rough looking; but from their pure whiteness they are decidedly effective on the plant, which is exceedingly vigorous and free, and their fragrance is simply delicious.

White Perle, described as a sport from *Perle des Jardins*, was exhibited at the Temple show of the Royal Horticultural Society, and though there was hardly enough of it to form a very definite opinion, yet the novelty produced a favorable impression, and appears likely to prove an acquisition. The flowers, which are full and well formed, are of a very pleasing pale lemon yellow shade. *T. H. G., in London Garden.*

Niphetos in Dark Weather.

We have a letter from one who claims to grow *Niphetos* in large quantities, saying that the outside petals always turn pinkish in dark weather, and only in perfectly clear weather the blooms are pure white. We would like to know if that is correct. We have always considered it a pure white rose in all kinds of weather. Please answer through the *FLORIST*.

Upper Sandusky, O. S. O. STREBY.

[*Niphetos* does sometimes acquire a pinkish tinge on its outer petals during long continued dark weather in winter. —Ed.]

MME. LAMBARD.—Regarding this rose I tried it for forcing two seasons and found that it bloomed freely in early spring when there were loads of other roses in the market and when it would sell for a good *Bon Silene*, but found it of no value as a winter bloomer. The flowers do not keep well and are consequently poor shippers. J. F. KLIMMER.

Oak Park, Ill.

Floral Arrangement.

BY H. H. BATTLES.

I.

CORSAGE BOUQUETS.

When flowers are to be worn it is generally to the florist's advantage to suggest to his customer that they be sent loose in a box, as most ladies prefer to select not only the number but the colors they wish to wear with certain costumes. It is most natural that after spending so much time and money in selecting a dress they should be very critical about the finishing touches.

No matter how much judgment a florist may have it is hardly possible for him to determine what flowers should be worn, not knowing the color or cut of the dress. If your advice is asked it is most important that you know the color of the dress. Then your knowledge of harmony of color comes into play.

The ladies will often pardon you for a poorly arranged basket or design of flowers; but a corsage bouquet in which the flowers are poorly chosen, roses stripped of their foliage, stems cut off, wires substituted and tin foil added, they are not so apt to overlook, and in many cases are careful that the same florist does not get the second order. When they have this experience a number of times they condemn the whole trade and we hear it remarked that "flowers are not to be worn this winter," or "I do not wear flowers," etc. For these remarks the florists are generally to blame.

A gentleman goes into a florist's store to order a corsage bouquet; the florist anxious to make a good sale suggests eighteen "Jacqs" and twenty-four "Valley," or something equally absurd; the gentleman wanting to do the proper thing leaves the order and the florist congratulates himself on having made a good sale. In the evening when the

gentleman calls he is surprised that the lady does not wear the flowers, possibly not knowing that the color or cut of the dress will not permit. In this way a great many sales are lost and for these reasons it is generally better to advise loose flowers, giving the recipient an opportunity to select those that she wishes to wear, and the others will give her pleasure for a number of days.

When necessary to arrange the flowers it should be remembered that the most natural and careless arrangements give the greatest pleasure. Often ladies of refined taste prefer to gather up several roses, leaving all of the foliage on their stems, and pin them on carelessly.

For certain dresses long corsage bouquets are most graceful, as shown in engraving No. 1. The stems should be wired, not only that the bouquet can be shaped, but that the buds may not break off. The stems should be worn on the left shoulder, the buds hanging down and curving toward the center of the body.

In this as in all arrangements of flowers small buds and young foliage add to the grace; in corsage bouquets they can be used to advantage in concealing the wire or string with which the bouquet is fastened. The roses used in this case are Papa Goutiers.

The stems are cut different lengths, which should always be done, to give the bunch a natural careless appearance. The bouquet is so made that the lady can shape it into a perfect crescent if desired. You will notice that the size of the buds is considered, starting with very small ones and gradually increasing in size, and again diminishing, giving what we consider a graceful effect.

Corsage bouquet No. 2 is more often used. It consists of five Meteors and four Brides. This combination was used thinking to give clearness to the cut. In this case the young foliage and small buds add very much to the effect, the string is concealed and the stems cut at different lengths with several thorns on which add to the beauty, but it is generally better to remove them as they are apt to tear the dress.

The corsage bouquet shown in engraving No. 3 is a good example of how not to do it; we have all seen just such arrangements. We have used in this bouquet practically the same flowers as in number two—four Meteors and four Brides. The builder in constructing this style of bouquet carefully strips all the foliage off the stems, grasps the bud firmly in his left hand, giving it no possible chance to escape, and with his right hand stabs it, often through the petals, with a piece of No. 21 wire. I have seen him cut up one-half string of smilax, wire it and use it as a background; after arranging the flowers as compactly as possible cut the stems or wires off at an even length, wrap a big wad of tin foil around the handle and call it finished.

Parks.

The following statistics taken from a daily paper are of interest:

New York city has an acre of park for every 1,350 inhabitants; Brooklyn, 1,254; Philadelphia, 333; Boston, 130; Baltimore, 521; Chicago, 243; St. Louis, 188; Cincinnati, 812; Detroit, 286, and Washington, 203. Paris, with a population of 2,250,000, has an area of 172,000 acres of park, giving an acre to every thirteen inhabitants; London has one acre for every 205; Vienna, 100; Berlin, 235; Dublin, 183; Brussels, 350; Amsterdam, 437, and Tokio, 167.



The Lady-bird as an Insect Destroyer.

COLUMBUS, GA., June 12, 1889.

DEAR SIR:—Your kind favor at hand and also box with bugs and larvae of the lady-bird. The latter act like a charm; it is really surprising how quickly one of the small larvae can clear a plant almost covered with the small black aphid. I had noticed a few lady bugs on the plants, but thought they too were injurious and had been destroying them. I think on about 200 choice plants I will not have a black bug in a week. Please accept many thanks for your remedy. Very truly yours, R. W. SLADE.

I herewith send you a communication which I hope will be of some service to your readers. Mr. Slade wrote asking me how to rid his "mums" of the black aphid and I sent him a few lady birds and their larvae.

It seems strange that so few know what a friend the lady-bird and its larvae is to florists. It is not only the black aphid that they destroy, but thrip, greenfly and the eggs of many other insects injurious to plants. It is amusing to see the larvae clean out a colony of aphids. They pitch right in and seize each individual as a terrier does a rat, and it takes only a few minutes for them to kill hundreds for there is no escape.

The first lady-birds appeared here this year about June 2, about thirteen days earlier than last year. I have in previous years sent lady-birds to many growers to do police duty among their chrysanthemums. JOHN THORPE.

Pearl River, N. Y.

Seasonable Notes.

No matter for what purpose chrysanthemums are cultivated, this is perhaps the busiest time among growers during the whole year. What with potting, tying, watering and moving the plants from place to place, a chrysanthemum grower's time is thoroughly occupied. As is well known, this busy season comes when other matters press very heavily in the garden, as there is the bedding to be done, grape thinning, and many other duties to attend to, that I am afraid the non-success of many collections of plants can date from about this period. The plants do not get potted early enough, are not staked soon enough, or perhaps are allowed to become dry at the roots too often. Dryness at the root is the most likely cause of the frequent loss of the lower leaves, and not only disfigures the appearance of the plants, but also checks the free growth so desirable to ensure the best results. Pot on the plants as fast as needed. At least twice daily the plants should be examined thoroughly, soaking the soil of any that are found to be dry. Clean tepid water is the best. Syringe the foliage in the afternoon of fine days. Attend strictly to the removal of surplus side shoots, which are often allowed to grow much too long before they are cut off. It only wastes the energy of the plants to allow them to sustain a number of useless side shoots; besides they are so much more easily removed if taken in time, being easily pinched off; thus the whole vigor of the plant is concentrated in the three selected growths. The growths are

now soft, and as they gather strength are extra sappy and more liable to snap off if not securely fastened to the supports, one stake in each pot being sufficient to tie the three shoots to. Green-fly is rather troublesome to the points of the shoots, and if allowed to get a hold the leaves are sure to be crippled and disfigured. The most certain and safe way to get rid of green and black-fly which sometimes affect the plants is by dusting the parts with tobacco powder in the evening, and in the morning vigorously syringing the shoots. Plants for covering walls are now growing vigorously, and need frequent attention to keep the growths securely fastened to the wall, and at such a distance apart from each other that they will not become crowded and consequently weakly.—E. M., in London Garden.

Genistas for Easter.

As an Easter pot plant the genista is very popular and where Easter plants are grown this favorite should not be omitted.

To secure plants in bloom at Easter Mr. W. K. Harris of Philadelphia proceeds as follows: Plants should be propagated in December and grown on for 18 months. The rooted cuttings should be potted off into thumb-pots and shifted into 2½-inch as soon as pot filled with roots. If the plants are given proper care they will be in 4-inch pots by May. They should be grown rather cool—temperature 50° to 55° at night, Genistas should be watered sparingly at all times.

In May plunge the plants in the pots in the open ground covering the pot entirely over with the soil. About all the care they need in summer is an occasional pinching to keep the plants shapely, though some growers do not pinch them, allowing them to grow naturally. Just before frost in the fall lift and shift into a 5 or 6 inch pot according to the size of the plant, thoroughly watering when potted to settle the soil. Then place in a cold house, keeping as cold as possible without freezing. They can be got into bloom at any time after February 1 by placing in a temperature of 55° to 60° about three weeks before wanted.

Well grown plants sold at wholesale in Philadelphia last Easter, in 6-inch pots at \$6 a dozen and in 5-inch pots at \$3 to \$4 a dozen.

Lilium Hansonii.

Lilium Hansonii is one of the finest acquisitions in the way of lilies that has ever been introduced from Asia. We have it in splendid bloom now (middle of June), not one plant, but scores of them, and all growing out of doors in openings among the shrubs. It is perfectly hardy, and without any exception the most healthy and vigorous lily that we grow; in fact its luxuriance is surprising. Near by it anratums have died out by the hundred, the disease has struck superbum, Kramerii and longiflorum have disappeared, even testaceum has succumbed, but Hansonii becomes bolder and stronger every year, and multiplies largely.

It grows some three to five feet high, has wide apart whorls of leaves and terminal racemed heads containing seven to fifteen golden or orange-yellow nodding, reflexed flowers sprinkled with small brown spots; the blossoms are not large, but the petals are very thick. The buds before open are roundish and chubby. It is the earliest of all lilies to start to grow in spring.



PLATE NO. 3. CORSAGE BOUQUET

HOW NOT TO DO IT

[See page 517.]

Elwes tells us that it is indigenous to Siberia, Japan and Eastern Mouschuria. Hogg says it is a native of the northern part of the Japanese Archipelago. We would therefore expect it to be perfectly hardy. Elwes says it grows at once from seed. Of this I can say nothing for I have never seen the seed of it, and although I have grown it for thirteen consecutive years our plants have never attempted to bear seed and repudiated my assistance in fertilizing their flowers.

It bears transplanting with the greatest ease. And while like most other lilies it enjoys a mulching on the ground, we should be careful that the mulching is very thin in winter, as its thick fleshy stems appear before the frosty weather has passed, and if they get bleached at the beginning they become permanently weakened.

In time of blooming *Lilium tenuifolium*, *Davuricum*, *pulchellum*, *parvum*, *Martagou*, *Szovitsianum*, *croceum*, *umbellatum* and a few good forms of *elegans* come in ahead of *Hansonii*, and some of them last through the season of its blooming. Also along with it we

have *Washingtonianum*, *rubescens*, *e. atrosanguineum*, *incomparabile*, *parviflorum*, *Parryi*, *Grayi*, *Columbianum* and some others.

It forces without any trouble and opens all of its flowers in perfection. But its very high price completely removes it from our list of available plants for forcing for cut flowers. Even now it is quoted at a dollar a bulb retail.

Leaves of Advice From a Limb of the Law.

(For Young Florists.)

VI.

Gently, gently! Why, positively, if I didn't know you to be a member of the church I should say you were using profane language. Don't ruin that gravel walk, come to a halt.

Boiling over are you? Well, there's always a chance for the pot when it boils over. What, really! The old villain! Excuse me, I shouldn't speak ill of my neighbors.

Last spring you say you sold old Dr.

Rackem a lot of flowering shrubs for his lawn, bill amounted to \$10 and now old Rackem puts in a counterclaim.

Never consulted him? Take care now, think it over. Ah, met him in the street, did you, the day poor Pat McGinnis was hurt by a blast, and told him to hurry down and take a look at Pat. Now Rackem says he has a counterclaim to your demand. Ha! ha! ha! Excuse my mirth, but that sly old rascal—excuse me—one's neighbor you know.

Take care, take care! Let me talk to you a few moments about counterclaims. Beware of the man who always has a counterclaim. A counterclaim is what the law calls a "set off," that is, it admits the justice of your claim, but demands that the amount of the counterclaim shall be "set off" against it. Rackem's bill is five dollars, so that only leaves him five dollars to pay.

Yes, yes, I hear you, my hearing is excellent, you say you never hired him, that you only gave him information of the accident. Admit it; but Denkhart, the Dutch justice, is one of his patients, and my advice is, accept the five dollars in all humility. You have learned a valuable lesson.

There are different kinds of counterclaims. Some arise out of the same transaction, some do not. I'll give you an example of the former:

You build a new greenhouse and employ a man to do the glazing. He fails to complete the job on the day specified and it so happens that a lot of plants which you had, in dread of cooler weather hurried into the house were touched by the frost. In this case you would have a counterclaim, which the law calls "a recoupment," that is a claim for damages to set off his bill for services and materials. It might be a good one. Or it might fail, provided he could show that your men by hurrying the plants into the new house interfered with the work and caused the delay.

You see how necessary it is to look at a transaction on all sides before you make up your mind.

Of course, the law does not allow a man like Rackem or any other man to come into court with a counterclaim illegal on the face of it, merely to hamper and delay justice. For instance, you are a tenant of mine and are a quarter in arrears on your rent account, I ask the law to put me in possession of my house. It would never do in the world to allow you to make answer that I hadn't kept my word in regard to papering the dining room or parlor. When I bring suit for the amount of rent due me, then it will be time enough to allow you to set up such a counterclaim as that.

Or suppose, I hold your note of hand for \$100 and when it falls due I begin suit, the law would not permit you to come into court and say that you had a claim against me for committing a trespass on your land. That would be a "tort" or a wrong, and the law doesn't allow a man to set up a wrong against a plain money demand.

The action for the injury claimed by you must stand by itself, but in case I too, have a claim for a wrong or personal injury done me then I may set up my claim against yours, that is contract against contract and tort against tort.

Now, as you probably know, it is not at all necessary that you should have been the original owner of a counterclaim. You may have bought it. It may have been given to you. Therefore, if you want to get even with old Dr. Rackem for his meanness, look around

for some good and valid claim against him arising out of contract, and buy it. Under ordinary circumstances I wouldn't advise you to resort to such a measure, but this case I think justifies it.

Note well, that the law requires that a man should become the owner of such a counterclaim before the matter gets into court. You must be able to swear that you were "at and before the commencement of the action the good and valid owner of the claim etc." Yes, I know it, but never strain your conscience in that way by looking about for a counterclaim after a man has sued you.

Nor will the law allow you to mix actions, so to speak. For example, should any man acting as executor, receiver, etc. bring an action against you for any cause whatever you would not be permitted to set up a demand against the executor or receiver personally.

Ah, yes. I had intended to touch on that point. Naturally, when a man buys a claim he must expect to meet all lawful charges which may be made against it.

Suppose you bought a claim against Rackem and it should turn out that he had a good and valid claim against the man who sold it to you, you would be caught napping. It would be no counterclaim at all.

And coming back to Dr. Rackem I would suggest that as he makes it a custom to call upon everyone in town at least once a year, you would find it pretty hard to discover a claim against which he would have no counterclaim. Never lend yourself to the practice of "cooking up" counterclaims.

A good business name is worth far more than any satisfaction which revenge may bring to you; and no matter how gallant it may be to pay an unjust demand it often becomes advisable to do so.

UNCLE BLACKSTONE.

Greenhouse Construction.

BY JOHN N. MAY.

IV.

[Continued from page 525.]

Having completed the superstructure the next thing in order is painting and glazing. I have for several years given all the wood-work of my greenhouses a coat of crude petroleum allowing it to dry into the wood thoroughly, and find it a great protection against rotting. Where it can be done it is best to oil the plates, bars, sash, etc. in the dry before commencing to build; this allows it to get well dried in and also preserves the wood from the sun during building. If it can be done so I would advise it in every case, and then as soon as the iron columns are properly placed to support the roof give the whole a good coat of paint, using the best material to be had; I prefer to put a little Prince's metallic in the priming coat, just enough to make the paint a light pinkish shade, this will form a good body.

When this is done and dry commence glazing, using good quality double thick glass; I very much prefer the French glass. And if the object is to make a durable roof add about fifteen pounds of white lead to one hundred pounds of putty, mix well together, put enough on to bed the glass solid, fasten the glass with whatever kind of point, brad, double pointed carpet tack or other fastening may be preferred, giving each light of glass about one-fourth of an inch lap over the other; always bed the glass with the hollow downwards, this draws the water to the center and saves the drip

considerably. Clean all surplus putty off neatly and when all the glass is in give the whole roof inside and out a good coat of white paint, this leaves everything ready for the plants.

In building the benches—see Fig. 8—I prefer to set the posts in the ground enough to keep everything in shape. For the center I use posts four or five inches through, saw cut the tops deep enough to carry bearers and side board same as shown for front bench (the engraver has made a slight mistake in the front post of center). This done set the end ones the right height and position, then stretch a line from end to end and set each post by it—in doing so I place them at same distance as for main building, this allows for either 12 or 16

have 26 inches between the posts, let the notch in post to receive bearer be level with top edge of string piece on post. Next cut off the bearers—2x4 hemlock—the desired length, nail tight into post and tack to string piece; this keeps them in proper position. For the edge next to the front of house nail the edge board and first bottom board together—4 inch piece for the edge and 6 inch piece for the bottom, keep the edge board one inch clear of the width of gutter or plate—this prevents any drip from the same falling on the bench, for the balance of the bench keep the strips one inch apart the same as for center; this is important as it allows free drainage for water. For the back bench, after the back walk is laid—with a string piece on the back

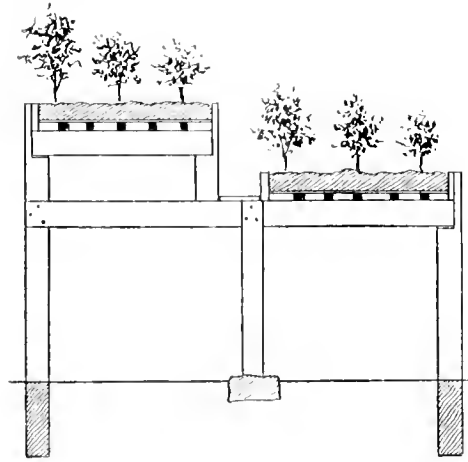


Fig. 15.

foot lumber to be used. For bearers I use 2x6 or 2x8 hemlock; if the posts are all set even the first should cut to fit and all the others cut to same pattern. When all in and well nailed to position take any short pieces of tree tops or like material, cut one to fit under each center placed on a brick or stone; this will prevent their sagging and keep the bed level. When all are supported take a strip 1x5 nail all round on outside down close to bearers on edge; this forms the outside and is supported by the pieces of post left standing above the bearers. Next take short pieces of board 15 inches long and nail on to carry middle walk, these should be nailed on so that they are level on top, on the ends of these pieces nail more five inch strips to form sides the same as the others. When this is completed take strips (hemlock is best for all this work) six inches wide, start at the bottom and leave a space of one inch between this and the edge board, cut the ends so as to joint in centers of bearers, run the next row of strips same way and continue till the bottom is covered, which when done will be similar to that shown in Fig. 8.

If a flat bench is preferred in the center then it can be built like Fig. 15. For the front bench measure down from the glass on plate 24 inches, stretch a straight line from end to end, put a hemlock board up to this mark for top edge and mark the post on under side of board, notch the post out about half an inch to receive the board which is to act as a stringer to carry bearers for bench, nail into this position and then set the front row of bench posts, leaving the walk whatever width is desired. I prefer to

post put on the same way as in the front—take strips 1x4, measure the height desired and a like piece for the bearer, place the bearer flat and the upright piece on edge, nail together allowing the bearer to rest on string piece for that purpose, place bottom and sides same way as for other. When completed give the whole a good coat of crude petroleum and in 24 hours the house is ready to receive the plants. It adds to the appearance of the house considerably as well as preserves the wood to give all the surfaces (the inside boarding, etc.) a good lime washing; good hot lime wash is best.

The Greenhouses of the Allegheny City Parks.

We give herewith an illustration of the greenhouses erected at a cost of \$35,000 and presented to the city of Allegheny, Pa., by Mr. Henry Phipps, Jr., a wealthy and public spirited citizen.

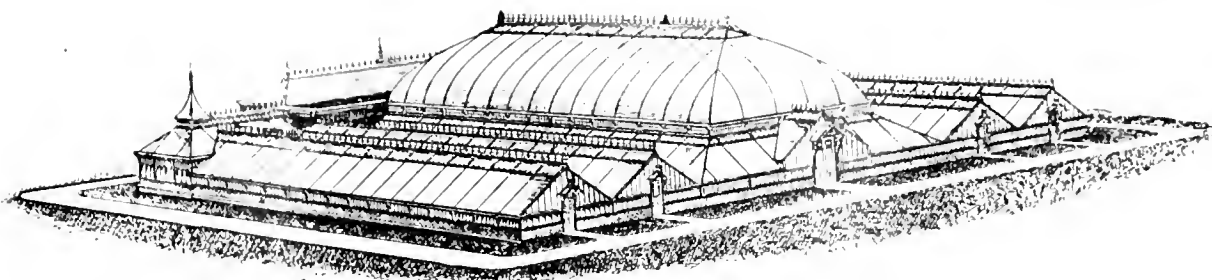
The palm house is 40 x 100 without interior supports, curvilinear in form and surrounded on three sides by lean-to plant houses and on the other by a glass corridor connecting all the houses. The height at ridge is about thirty feet; the heating is by means of steam coils at the side, leaving the entire area open for walks and plants. The walks are serpentine in form, most of the plants and trees being permanently planted in the soil. An elaborate rock-work and aquarium is an attractive feature. The construction of the house is chiefly of iron and glass, only sufficient wood being used to form a setting for the glass and protect the metal from the weather. The other

houses of the range provide for the orchids of which there is a large and valuable collection. Houses suitable for the display of chrysanthemums and other specialties, and four full span houses 20 x 120 each used for the park bedding stock. The houses were designed and built by Lord & Burnham, the horticultural architects, Irvington-on-Hudson, N. Y.

from overhead, but is generated wherever the sun's rays strike inside the greenhouse." So far as I am aware all scientific men of the present day accept the wave theory of light. The most generally accepted statement of which is, that the sun consisting of the chemical elements the same as those known to us on the earth, in a state of intense vibratory excitement or an extreme heat beyond

the plants to increased evaporation at a time when it is already suffering from too dry an atmosphere, in consequence of so much moisture being withdrawn by the frost on the glass.

In regard to the stove I would say, it is held that all objects at all temperatures give out invisible rays, which are waves in the ether of space, causing heat when they strike the hand or any object at the



THE GREENHOUSES OF THE ALLEGHENY CITY PARK.

The houses with their beautiful floral display attract large crowds of the citizens from week to week so that the object of Mr. Phipps' in making the gift to the city is fully attained. The park has been beautified, the citizens benefitted and Mr. Phipps has realized in early life some of the blessings which flow from his own gift. It is stated that he now contemplates building an addition to the present range at an expense of \$10,000, and presenting it also to the city, the addition to be used for aquatic plants. Mr. Wm. Hamilton, the able superintendent, is justly proud of the elegant establishment under his charge.

It is to be hoped that Mr. Phipps' generous example may be followed by wealthy gentlemen in other cities. Certainly those who aim to refine and elevate the people can find no better way of accomplishing it than to bring them into closer relations with the beauties of nature. If half the money which has been spent for paintings—the majority of them but weak representations of natural beauty—had been expended in the creation of beautiful gardens which can be enjoyed by every passer as well as the owner, how much more good it would have done!

Overhead Heating.

Is there any deduction to be drawn from nature's way of supplying the necessary warmth to the earth that would tend to show that placing pipes overhead is most in accordance with nature's methods for surrounding plants with the best conditions for plant life during the twenty-four hours of each day? For I think no one who has had the care of a greenhouse will accept the statement, "That we build our greenhouses and heat them mainly to supplement the deficient supply received from the sun during the short time that the sun remains above the horizon on a winter's day." If we would imitate nature's methods, we must first endeavor to understand them, and not to ridicule the statements of those who may have a better insight into the forces of nature.

Now, your correspondent says, "The statement made in the New York convention was, that the heat does not come

anything known on the earth, communicates to the ether of space waves of a corresponding length to their own dimensions. These waves traverse the ninety odd millions of miles of space and our own atmosphere, generating no heat until their further motion is stopped by striking some object on the surface of the earth. The theory is in accord with common observation. Take a piece of ice on a clear cold zero day and whittle it into the shape of a burning lens, hold it to the sun, then place in its focus a piece of paper, or as some of our sailors amuse themselves, by placing their tobacco in the focus and it is ignited, but the ice remains intensely cold, the very slight rise in temperature being readily accounted for by the ice, not being perfectly transparent. The heat was evidently generated when the wave motion was stopped by the tobacco, just as the cannon ball's temperature is raised to a red heat when it strikes the target.

But perhaps you may say: "No matter whether it is heat that comes from overhead or heat producing waves my pipes placed overhead radiate heat generating waves similar to the sun's, and being placed above the plants must occupy during the short hours of a winter day a more natural position than if placed below. How much is there in this? Try the following experiment on an average winter day (I say winter day because on the average days a very high temperature is not required in the pipes): Place a thermometer where it will give the temperature of the house, another, say six inches above the hot water pipe, another six inches below; the difference between the one placed below and the one that shows the temperature of the house will indicate the amount of heat radiated, deduct this difference from the one placed above and you will have about the difference between the amount of heat radiated and that imparted to the air by contact, and you will find that the amount of heat radiated downwards is insignificant, although during the long winter night the temperature of the pipes being higher, it may be sufficient to have some injurious effect in preventing the leaves of plants acquiring a lower temperature than that of the house, exciting

most distant end of the room, or if the stove were out of doors on a clear cloudless night those waves which are directed upwards will be lost to the earth.

The statement that objects warmed by the sun radiate back into space any heat in excess of the temperature of the surrounding air, is at least misleading, as the leaves of plants, for instance, continue this radiation until a temperature is acquired much below the air that surrounds them and sufficiently low to condense the invisible vapor into water or dew, thereby checking the evaporation of sap, resting the plant, which is doubtless gorged with sap after such nights. I think most observers must have noticed the extra vigor imparted to plants by a succession of dewy nights. But I am not writing against overhead heating, I have no doubt good results may be obtained by that method and that sometimes it may be the best method practicable. My objections are confined to the false theories used in support of it, and most of all, to the statement that the convention of florists in New York ridiculed a statement made by a member, which was strictly correct. I once had in my employ an excellent workman who ridiculed the idea that the earth revolved, one of many proofs assigned that it did not was that a pail of water left standing over night remained full the following morning, whereas, if the world turned around in the meantime it would have been emptied. It would have been a difficult matter to have convinced him that his reasoning was not conclusive, but his ignorance on this point did not interfere with the proper performance of his duties.

The acquisition of some knowledge of those forces—heat and light—which so completely control the growth of plants, is of more importance to us as plant growers than the revolution of the earth, and I am loth to believe that the statement of one of the first laws pertaining to radiant heat and light, viz: "that they consist of waves in the ether of space, which are converted into heat whenever their motion is stopped by material objects," was received with derision by a large body of my fellow florists.

FRANK WHITNALL.

News Notes.

AKRON, O.—Jos. Salmon has built two houses 60x11 each.

NORTH ADAMS, MASS.—Winslow Cady has opened a florist store on Eagle St.

NEW CASTLE, PA.—W. D. Fisher & Sons have built another rose house 100x24.

PHILADELPHIA.—Hugh Graham's Son has built three new houses, one 250x30 and two 250x14.

BALTIMORE.—Thomas Williams, a florist, for twenty-five years a resident of Hampden, died May 23.

SARATOGA SPRINGS, N. Y.—T. J. Totten has built four new houses, two 100x20, one 150x14 and one 80x11.

BALTIMORE.—Mr. Herrmann, the North Avenue florist, is on a two month's trip through France. Samuel Feast & Sons have built another rose house 250x30.

ROCHESTER, N. Y.—New houses have been built here as follows: Salter Bros. two, 100x20; W. H. King one, 80x10; F. Schlegel one, 60x10; James Vick two, 100x20.

ALLEGHENY CITY, PA.—It is reported that Mr. Henry Phipps, Jr., proposes to donate \$10,000 more for an addition to the park greenhouses. The addition will be used for aquatic plants.

CHAMPAIGN, ILL.—Prof. G. E. Morrow is to represent the Agricultural Department at the Jubilee Exhibition of the Royal Agricultural Society of England, to be held during the summer.

QUEBEC.—The Hon. Col. Rhodes has been appointed Commissioner of Agriculture for the Province of Quebec. Col. Rhodes is an enthusiastic horticulturist and it is believed that in his new position he will do good work.

ALLEGHENY CITY, PA.—Ludwig & Richter have removed to the corner of Isabell and Federal streets. David Cass has received \$1000 insurance, which partially covers the damage to his greenhouses by a recent fire.

SPRINGFIELD, MASS.—The annual June rose show of the Hampden County Hort. Society was given up because the roses got the start of the growers by three weeks' time owing to the unusual weather. All the energies of the society will now be concentrated on the chrysanthemum show to be held in the fall.

KANSAS CITY, MO.—May 23 R. S. Brown & Son lost 800 lights of 8x10 glass by hail. The loss was promptly paid by the Hail Association. It was the heaviest hail storm we have ever had here. The stones were as large as hen's eggs and in some places they broke the slates off of houses. Messrs. Brown & Son had all their greenhouse roofs protected by lath shades or they would have lost all their glass.

MONTREAL.—Hail smashed several thousand feet of glass at the Lachine greenhouses belonging to C. Campbell, of 78 Victoria Square. The stones were as large as marbles and did much damage to growing crops in the vicinity. H. J. Pinkerton has finished a house 76x12. Mr. Chas. Gibb, vice-president of the Horticultural Society, is on a ten month's trip to China, Japan, the East Indies and Australia. The Montreal Hort. Society for the Province of Quebec will give an exhibition next September. At the last meeting of the Florists' and Gardeners'

Club an interesting paper on Meteorology was read by Mr. John Perrin, and a paper on Fig Culture by Mr. Hockey, gardener to Mr. John Molson.

KALAMAZOO, MICH.—Joseph Dunkley is rebuilding his houses, putting in new glass and ventilating apparatus. Kirkham & Batson have built two new houses 50 x 18 for roses and carnations. Bochove Bros. are building two 80-foot houses. Mr. S. S. Cobb the superintendent and Mr. Paul the florist are making Mount Home Cemetery very attractive this year. The late frost killed all coleus plants which had been bedded. Snow fell here May 30.

NEW YORK.—The New York Florists' Club will hold its annual election of officers July 10. The treasurer of the Court memorial fund reports \$167 received to date. Mr. D. D. L. Farson, the witty secretary of the Philadelphia Florists' Club, spent the day here recently. Dan's repertoire has been well culled of chestnuts and we may expect a strong batch of brand new puns at Buffalo. Josephus Plenty, the horticultural architect, has removed from 144 Pearl street to 69-73 Broadway.

DETROIT.—Preparations are already being made for the floral and musical festival to be held April next. It has been decided that the booths to be erected by the various charities which will take part will be in imitation of the architecture of various nations and the ladies will dress in the costumes of the respective countries. Last April Dr. R. N. Reynolds with a single microscope exhibited the pollen from flowers. Next year a microscopical department, with about twenty microscopes, will exhibit various minute forms of floral organisms. Arrangements have been made for securing double the room occupied last April.

ST. LOUIS.—The case of the Plant Seed Company vs. the Michel Plant and Seed Company, which the Court of Appeals had under consideration, has been definitely settled by that court. The case was one kindred to trade mark cases. The Plant Seed Company sued Michel for using the words "plant and seed company," when changing the style of the firm. In the lower court there was a verdict in favor of the defendant, the court, however, compelling Michel to change the small "s" to a large "and" on their signs and papers. "The word 'Plant,'" says the court, "is one in very common use and may very properly be used to designate a business, and because the 'Plant family' were the founders of the Plant Seed Company's business, affords no reason why the defendant could not use the word to designate its business, provided it was done for an honest purpose, and with the same proviso the defendant had a right to adopt its present corporate name."

Boston.

J. G. Esler, secretary of the Florists' Hail Association was in town for a few days endeavoring to give hail insurance an impetus in this section. He met with much encouragement and took home with him the names of several of the largest growers as members.

One of the tony clubs at Harvard College gave the contract for class day floral decorations to a dealer in second-hand furniture. This is true art encouraged in high places.

The Boston members of the Court memorial committee report gratifying

progress and the Hub's contribution will not fall short.

Jackson Dawson says that grubs and insect pests of all kinds are more numerous this year than ever before in his experience. There are a number of new ones in the list.

M. B. Bunker, florist, is to occupy the store under the Tremont House, which has been conducted for some years by C. H. Hovey.

The Gardeners' and Florists' Club has voted to have the annual harbor excursion take place about middle of July. A committee has been given full power to arrange for the same.

Thos. Stock, of Dorchester, who sued the City of Boston for damages resulting from digging up the street in the winter season, and the consequent exposure and freezing of water pipes has secured a verdict in his favor for \$2,057, and the award has been reaffirmed in the Supreme Court.

A magnificent variety of *Cattleya gigas* flowered by Pitcher & Manda has, like many other good things, passed into the hands of Mr. F. L. Ames at about the price of a good house lot. There are two spikes bearing four and six flowers respectively, the blooms measuring eleven inches across. The color is deep lake, purple lip, with yellow eye radiating into throat and lip. The leaf is twelve inches long and five inches broad, truly a mammoth variety. W. J. S.

Fruit Nomenclature.

It has now been six years since our beloved and lamented Wilder delivered himself before the American Pomological Society of the reformatory ideas regarding the nomenclature of our fruits, which have been seconded and echoed by all sensible and progressive pomologists. Nearly all the rural papers have copied what he and others have said on the subject. The committees on nomenclature of the American Pomological and American Horticultural Societies have officially reported in favor of measures looking to the practical application of the new ideas, and so have some of the State Horticultural Societies, and the former society has prepared and adopted a revised list of the leading fruits of our country. This revision has been made with the most sacrificing care and by the best pomologists of the day. It has been the idea to shorten, simplify, eliminate and put into as plain English as possible the conglomeration of names that have been dug out of all the nations of the earth. The task has been far from a light one, and especially with the Russian list, and I am sorry to say it does seem in a great measure to have been a thankless one. I hope that the future will prove that this is a mistaken view, and that the day will soon come when the association which I have the honor and great pleasure to now address will be the active agent in carrying into effect what the other societies and private individuals have so well planned and begun.

The members of this association have it in their power above all men to carry out this needed reform. But have you done so? Have you ever made the attempt? Why has not the association taken official action to establish uniformity of names for our fruits? Certainly such a course would be most happy and profitable in its results. The nurseryman is the educator of the public as to the names applied to the fruits grown. Even the most ignorant tree peddler is taken every day by some one as authority

in this matter, and how important that the lists put into his hands should be both uniform and correct. But how few nurserymen have made practical application of the rules that as members of one or more of the pomological or horticultural societies they may have helped to make or endorse. A careful examination of the nursery catalogues shows an array of synonyms that is truly discouraging. We find the Ben Davis apple called New York Pippin in some of the eastern states, and Kentucky Red in the south; we have Gilpin called Carthouse; Romanite, Little Romanite and Little Red Romanite, according to previous knowledge, or, it may be, the fancy of the nurseryman. Some still hold to the old, useless and long ago discarded appendage "Pippin," which was first attached to Grimes Golden. The much simpler and equally intelligible name Westfield is often seen with the "Seek-no-further" attachment. Angouleme pear has its old prefix and suffix both carefully preserved, Cumberland strawberry has its "Triumph," and Woodruff and Wyoming grapes have their "Red" superfluities. The crop of swelling "Wonderfuls" and overloaded "Prolifics" seems to be still growing.

It is easy to see how all this confusion and useless bombast is originated and propagated. Some nurseryman originates or purchases the stock of some new thing, and not to be outdone in a name he goes in for all the thing is worth, and perhaps more too. Or he may, in his honest, ignorant simplicity, have found some old variety and renamed it.

Might not this association take some action that would in a few years induce the nurserymen to submit their catalogues to a committee on nomenclature or some other authority by which the names may be corrected, so that the same fruits may in time have the names in all places? Of course it will be impossible to change the local names, but the annoyance and inconvenience of teaching the people the correct names will be far less than to continue the present custom of every one using such names as may suit their fancy.

The rules of the American Pomological Society regarding the naming of new fruits are quite sufficient, but they lack practical application by the nurserymen of the country. If they were lived up to there would be great advancement in knowledge, and the confusion which now occurs would soon cease.

I would most sincerely and respectfully urge you as pomologists and as business men to not only take this matter into consideration, but to take steps to apply the ideas which, I presume, we all agree, are fraught with good.

[Read before the Nurserymen's Convention at Chicago by H. E. VanDeman.]

Pot Washing Machine.

The accompanying illustration shows a simple machine which Messrs. Alburger & Bro., Philadelphia, use to great advantage in cleaning pots. In every greenhouse establishment considerable quantities of pots are used several times and all know that such should be washed and cleaned before being used over again. Washing and cleaning by hand is the usual method, and a slow one it is, but by the use of this simple affair it can be done with great rapidity.

The brushes on the end of the shaft are made of a shape to fit the inside of the pot, and several sizes are used, though one brush does the work for a number of

sizes of pots. The shaft of the machine shown is revolved by steam power, but one can be easily arranged to be worked by hand power, and even in this way two boys—one to hold the pots and another to supply the power—can accomplish as much work as four or five working by hand.

Certainly such a machine will pay for itself in a very short time where a large quantity of pots are to be cleaned annually, as the expense of construction is comparatively slight. The wheel which

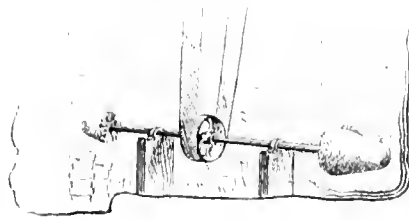


FIG. 1. W. H. ING. MACH'NE

supplies the power should of course be considerably larger than the one on the shaft, thus causing the shaft to revolve with sufficient rapidity to be effective and do quick work.

GERANIUM BRAUNTI.—I would like to ask the readers of the FLORIST who have purchased Geranium "Braunti" if they find any difference between it and Double Gen. Grant? I fail to see any myself.
Montreal. JAMES MCKENNA.

LOUISVILLE, KY.—Florist George T. Hodges recently left his place in charge of an employe named John R. Stoll for the day. When he returned Stoll was missing and it was discovered that he had broken into a desk and stolen \$54 before leaving. Stoll is but 18 years old, German by birth but speaks English very plainly, of medium height and rather heavy set. The fore finger of his left hand had been cut off to the first joint.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant ads. not admitted under this head.

SITUATION WANTED. By thoroughly experienced florist, private or comm. at S. BARSON, 25 N. Park St., Kalamazoo, Mich.

SITUATION WANTED. By young man to learn florist business with a good firm. Address at once. F. C. DOOR, 37 Poplar Ave., Columbus, O.

SITUATION WANTED. As superintendent of a cemetery. Good references, and 11 years' experience. Address STOUT, care American Florist.

SITUATION WANTED. By a young man, as under gardener; private place preferred; 2 years' experience in general greenhouse work, age 21; strictly temperate. Good references. Address WILLIAM STUART, Wincendon, Mass.

SITUATION WANTED. As head gardener on small private place, or as assistant; married, aged 29; understand propagating, greenhouse and general work on private place, sober, trustworthy, good recommendations. A. B. AM. Florist, Chicago.

SITUATION WANTED. In Oregon or N. California by German, age 26; 10 years' experience, especially rose growing for cut flowers. Also culture of general greenhouse stock. Best references. Address stating terms. B. B. D., Page St., Toledo, Ohio.

SITUATION WANTED. By a single man, thoroughly experienced rose grower and general greenhouse stock good propagator. Competent to take charge of commercial or private place. Good references. Address FROST, E. 14th St., N. Y.

SITUATION WANTED. As gardener, private place, understands thoroughly the care of greenhouses etc.; best of references, English and American experience; single, age 28. Address N. Y. care R. A. J. Farquhar, 198 Market St., Boston, Mass.

SITUATION WANTED. By a practical gardener, on private or commercial place with 40 years' experience in all the various branches of gardening, landscape or greenhouse building, etc.; growing or propagating; thorough practical man; ready soldier for hire. C. LOSE, 27 Jefferson Ave., Rochester, N. Y.

SITUATION WANTED. On private place, or on a small place. 12 years' experience in these places, have had charge of greenhouses, under shade, etc.; vine greenhouse and bedding plants, roses and cut flowers, making up designs and flower work. References on both character or ability. Address: E. 142 N. 10th St., Philadelphia, Pa.

WANTED. Small water boiler, state-kind, call on A. PRIOR, C. J. SANFORD, Elmwood, Conn.

WANTED. A pair of large tread-oil rock pulleys and description, stating price, etc. C. B. WHITSELL & CO., Milwaukee, Wis.

WANTED. For private or comm. in greenhouses immediately. Correspondence desired. Terms will be given by letter. E. M. H. EDWARDS, 772 & 774 Central Ave., Dunkirk, N. Y.

WANTED. Rose grower. A man who thoroughly understands the propagation and management of roses, and capable of taking charge of a rose establishment. First class, permanent position for a satisfactory man. Address, with references and salary expected, FROST, Metal, Pa.

WANTED. A first class gardener and florist to run a garden and greenhouse, must be 23 or 30 in cash. A good chance for a first class man. Must be a good thing, a 2-story house, good bath, wind pump, tanks, hydrant, greenhouse, etc., and manure for one year on the ground. Some but a man who can meet the requirements and come well recommended need apply. Address S. K. HAYES, Portland, Ind.

FOR SALE. An eleven section, armory improved boiler that has only been used one season. For price apply to JOHN LOOTH & SONS, Hamilton, Ont.

FOR SALE CHEAP. A small florist's place, in a thriving city of 10,000 inhabitants. Good trade already established. Good stock of plants. Will sell with or without the stock. Address: BECK & THOMPSON, Delaware, Ohio.

FOR SALE OR EXCHANGE. For a first class greenhouse property, a beautiful home, 2-story house and outbuildings, 8 acres under cultivation, orchard, small fruits, etc., good water, two square foot Court House, a healthy climate. For particulars address P. O. Box 25, Denton, Tex.

FOR RENT GREENHOUSES. The establishment of the late Geo. P. Lamb, S. A. F. well stocked with M. Xel roses, camellias and other plants. A single man can have rooms and board; or married man can have house with 7 rooms. Best location, two blocks from city hall. For terms apply to JAMES M. LAMB, Fayetteville, N. C., or on the premises, to Miles J. Lee, P. O. Box 105, N. 10th Street, Wilmington, N. C.

TO RENT OR FOR SALE. Well stocked greenhouse, about 2500 square feet of glass, at South Orange, N. J., less than one hour from New York City, five minutes walk from depot. Buildings in first class condition. Model houses built on the most approved plans, such as recommended by John May. Will rent for a term of years. Only responsible parties need apply. Address: J. BROS., P. O. Box 212, South Orange, N. J.

FOR SALE.

Established floral business, with dwelling store and greenhouses connected, in city of Buffalo. Good location. Stock and all included. Address:

S. PICKELMAN, JR., 352 William Street, BUFFALO, N. Y.

FOR SALE OR RENT.

Greenhouses and entire stock, connected with store down town, doing good business, about 100 square feet of glass, well located in central part of the city of Cleveland, with all modern improvements, adjoining the large Woodland Cemetery. All greenhouses and dwelling house heated by steam, and nearly new. A splendid chance for the right parties. For particulars address: F. W. ZIECHMANN, Quincey & Cemetery Sts., Cleveland, O.

FOR SALE.

The only greenhouse and stock in town of nearly 5000. Splendid chance for right party. TERMS EASY.

ADDRESS: ED. S. MCKEAN, ASHLAND, OHIO.

ROSES.

Mermets, Brides, Paper Gout, etc., at a low price. W. C. SHERB, Cook, Park, Night & Sun, 144 N. Y. St., Long Island City, N. Y.

SMILAX. Strong plants in bloom, for sale by the dozen, early spring and late fall. Address:

I. C. WOOD & BRO., Fishkill, N. Y. Mention American Florist.

THE AMERICAN FLORIST

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No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

☛ Advertisements for July 15 issue must REACH US by noon, July 9. Address

THE AMERICAN FLORIST CO., Chicago.

INCREASED EXPRESS RATES ON PLANTS

A new classification card arranged by the Express Companies' Traffic Committee went into effect June 15, in which paragraph No. 9 reads: "Flowering and Ornamental Plants not less than double merchandise rates," thus doubling the previous rate.

As "Flowering and ornamental plants" most effectually covers all plants shipped by the trade we called on the Traffic Manager of one of the companies for information. After some hesitation he interpreted the new rule as applying only to plants not entirely enclosed in boxes or stout crates, but admitted that agents generally might interpret it to cover all florists' plants however packed.

It seems that the rate was intended to reach those shipments of single specimen plants shipped without any crating and boxes containing plants setting upright without any cover over them. And it can not be denied that these are difficult freight to handle, and that they take up a great deal of room, owing to the fact that other freight can not be piled upon them.

At our request the Traffic Manager visited constructed a new order to read: "Plants entirely enclosed by a box or stout crate may be carried at a single rate." This will be submitted to the other members of the Traffic Committee, if accepted by them it will go into effect immediately thereafter and will make the matter clear to agents. In the mean time if any agent attempts to collect double merchandise rates on plants boxed or crated as above described object vigorously and pay that rate only under protest, keeping your receipt so that you may collect the overcharge back from the company through its claim agent.

RENAMING.

We have received communications from several subscribers stating that the geraniums Bruanti and Double Gen. Grant are identical, and in a response to a note Mr. John Thorpe sends us the following interesting information:

"Bruanti is not Double Gen. Grant, but Double Gen Grant is Heteranthe. It is one of these cases of suborning, and I think the change was made near New York. The first time I saw Double Gen. Grant I called attention to its being under a wrong name. The reply was that it sold better as Double Gen. Grant and it was not worth while to change it. Bruanti is one of the same type as Heteranthe and should be grown in its place as a bedder. These are some of the Inquinans section such as the Gloire de Nancy type but Mr. Bruant has refined their habits and they are more floriferous. Heteranthe is now about six years old—or it may be seven."

Will the party who did this bit of renaming please step forward and show why he should not be convicted of swindling. This matter of renaming must be dealt with in a summary manner. Quiet submission to the impositions of rascals who practice such frauds is not only disgraceful but may be considered to a certain extent as abetting their villainy. It is indeed surprising that men who would scorn to steal money directly out of your pocket find it compatible with their ideas of morality to steal it indirectly through selling plants for what they are not. A man who knowingly sells you \$10 worth of plants under a false name is just as much a thief as the pickpocket who surreptitiously relieves you of a like amount. And the result of the first thief's work is more far-reaching in its evil results as the first victim may innocently propagate and perpetuate the swindle.

The Committee on Nomenclature of the S. A. F. has been appointed to unravel the tangle caused by practices of this kind, but what shall be done in the future? Shall the committee be kept busy straightening out the rascally work of these swindlers as fast as done? Certainly this is asking too much. Some means must be provided for the prevention of the iniquity in the future, and the only effective remedy we can see lies in the law. Let us make common cause in this matter. Let us ferret out the men who rename and prosecute them and publish them to the world. Let us not stop when we find that some of them are men whom we would least suspect of such rascality, but let each one take the consequences whoever he may be. In this way and in this way only will effective work be done.

And let us not forget that he who knowingly perpetuates a swindle is equally as guilty as he who originates it.

FLORAL ARRANGEMENT.—In this issue appears the first of a series of articles on floral arrangement, which will we believe be of great assistance to a majority of our readers. In response to numerous requests for illustrations of simple, every day arrangements Mr. Battles has at our suggestion started with a simple corsage bouquet. This may appear to some to be rather too elementary, but we are persuaded that instruction even of so elementary a character will be appreciated by a large proportion of our readers. In future issues we shall illustrate baskets of the size and style most commonly called for, filled in a variety of ways, showing how the most effective arrangement may be made with a comparatively small quantity of material, and finally other simple and graceful arrangements. The proper contrasts of colors to produce the best effects will also be touched upon.

QUALITY.—Don't forget that quality is becoming annually more essential in bringing financial success in flower growing. Flower buyers are becoming more and more fastidious, and as flowers are now mainly sold by the dozen each individual must pass inspection. The day when the poorest could be used up in baskets and designs is practically past; it is no longer a cry for flowers of any kind so long as they are actually flowers, but for flowers of good quality only. With the largely increased production comes selection on the part of the buyer, and while at some seasons of the year first quality stock means merely a higher price, at others it means sales as against no returns whatever. In making arrange-

ments for next season provide for quality at the expense of quantity rather than for quantity at the expense of quality.

THE FUTURE of the shipping trade in cut flowers most certainly depends upon skillful packing, and too much care can not be expended upon this important detail by those who desire to increase their trade of this character. No matter how fine the flowers when shipped if they are damaged in transit their quality is lost to the consignee and he will not be apt to order from a distance again except as a last resort. Every shipment which is received in good condition builds up the shipping trade, but every one damaged in transit gives it a set-back.

PROFESSOR REICHENBACH'S WILL directs that his collection of dried orchid specimens and drawings shall be sealed up in cases and so retained for twenty-five years from the date of his death. The value of the collection to botanists is very great, and through the Professor's peculiar will is lost to the present generation. As most of the material comprising the collection was contributed the disposition of it is freely criticised by those interested in the scientific study of orchids.

THE FLORIST CLUBS can greatly assist the S. A. F. Committee on Nomenclature by taking up the matter at their meetings. Many synonyms could be brought to light by members and the material forwarded by the secretary to the S. A. F. committee to be acted upon by it. This is one way in which the Florist Clubs and the national society can work together to advantage.

A LARGE ROSE.—A bloom of Paul Neron measuring six inches across is sent us by the Mendenhall Greenhouse, Minneapolis, with a note saying: "This rose was grown in the open ground by Mr. Frank H. Holmes, 1222 Hennepin Ave., Minneapolis. The bush was set out three years ago. The rose measured 6 1/8 inches across when cut. Is it a Paul Neron?" It is undoubtedly a Neron.

DO YOU KNOW what your plants cost you to grow? Do you know when they net you a profit and when they make you a loss? Isn't it worth some trouble to find out? We think so. You may not agree with us now but you will later on when you find your balance on the wrong side of the sheet and can't tell exactly why.

HAIL INSURANCE has received a strong impetus from the recent hail storms and many florists are now taking advantage of the protection afforded by the Hail Association. Some would have been better off if they had got in earlier. Is your glass protected? If not, now is the accepted time to secure protection.

YOU WOULDN'T think much of a landscape or portrait painter that did not have a thorough knowledge of colors would you? Then how can you be a "Floral Artist" unless you have a fair knowledge of the same subject? You will have instruction in early numbers. Don't pass it by thoughtlessly.

LET US PRAY for the renamer and the substitutor, but let us give them a taste of the law too. That will quicken their consciences in a way that nothing else will.

THERE ARE tricks in all trades but none in ours. RENAMER.

IN ALL other trades there are tricks but none in ours. SUBSTITUTOR.

Catalogues Received.

J. M. Thorburn & Co., New York, forcing bulbs and seeds; United States Nurseries, Short Hills, N. J., orchids; Aug. Rolker & Sons, New York, flower seeds for summer sowing; C. G. Van Tubergen, Jr., Zwabenburg, Haarlem, Holland, Dutch bulbs; Wm. B. Hartland, Cork, Ireland, plants and bulbs; Hill & Co., Richmond, Ind., wholesale list plants; Geo. W. Miller, Lake View, Chicago, wholesale plants; A. M. Herr, Lancaster, Pa., pansies and smilax.

COLORS IN AZALEA MOLLIS. A reader asks: "Are there more colors than two in A. mollis? If so, is there any white?" We have about thirty distinct kinds and all differ a little in color from one another. The colors vary from whitish yellow to deep flame, but we have got no pure white flowered variety, nor do I know of any. But I find a colored figure of a white flowered one in the *London Garden*, page 428, May 26, 1877.

OUR LARGEST white flower in hardy azaleas is borne by *Azalea Indica alba*. This variety appears to be hardy enough here, still I would not recommend it for outdoor planting north of New York.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
TO THE TRADE ONLY.

ALL CUT FLOWERS IN SEASON.
Write for price list. Consignments solicited.
WIRE-WORK made to order, and in stock.

27 Washington Street, CHICAGO.
TELEPHONE NO. 466.
Mr. O. W. Frese, formerly with J. C. Vaughan, is now with us.

IF YOU WANT CHOICE, FRESH
CUT FLOWERS,
WELL PACKED AND SHIPPED PROMPTLY, YOU SHOULD ORDER OF

CHAS. H. FISK,
Wholesale Florist
116 & 118 DEARBORN STREET,
CHICAGO,

AND RELY ON GETTING THE BEST STOCK IN THE MARKET.
Store Open Day and Night.

I keep a full stock of **WIRE DESIGNS** of superior workmanship and at lowest prices. Extra pieces of any description made to order on shortest notice. Send for Catalogue.

CUT ROSES AT WHOLESALE.

The only establishment in the West where Roses are grown exclusively. Our Roses are all cut, packed and shipped the same day. They are handled only once, and then by an experienced person, thus enabling persons at a distance to get fresh cut Roses. We are shipping all over the United States with perfect safety. We have about Ten Thousand Small Rose Plants for sale for bedding out purposes of all the leading varieties.

For further particulars, address
GARFIELD PARK ROSE CO.
1688 W. Madison St., CHICAGO, ILL.
Mention American Florist.

CUT FLOWERS AT WHOLESALE.
Will have a fine lot of *Candidum* Lilies in about 10 days. Anyone having sweet Pans this month, please write us; we want some.
THE WISCONSIN FLOWER EXCHANGE,
133 Mason Street, MILWAUKEE, WIS.

Wholesale Markets.

Cut Flowers.

BOSTON, June 7.	
Roses, Teas	40 1/2 41.00
" Fancy	1.00 6.00
" Jacques	2.00 6.00
Carnations	60 1.00
Mignonette	40 1.00
Stocks	1.50 1.00
Valley	1.00 1.00
Sweet Pans	1.50 1.00
Candytuft	1.50 1.00
Smilax	1.50 1.00
Adiantums	1.00 1.00
Pink Pond Lilies	8.00 1.00

NEW YORK, June 5.	
Roses, Bon Silene, Bennetts	1.00 2.00
" Gontier	1.00 2.00
" Perles, Niphetos	1.00 2.00
" Scabs	1.00 2.00
" Mermets, Brides	1.00 2.00
" Cousins	1.00 2.00
" La France	1.00 2.00
" Am. Beauty	1.00 2.00
" Hybrids	1.00 2.00
Mignonette	1.00 2.00
Smilax	1.00 2.00
Carnations	1.00 2.00
Adiantums	1.00 2.00

PHILADELPHIA, June 25.	
Roses, Perles, Bennetts	1.00 2.00
" Mermets, Brides, La France	1.00 2.00
" Gontier	1.00 2.00
" Cousins	1.00 2.00
" Beauties, Barness Rothschilds	1.00 2.00
Carnations, long	1.00 2.00
Carnations, short	1.00 2.00
Bouvardia, long	1.00 2.00
Candidum lilies	2.00 6.00
Harris lilies	8.00 1.00
Stephanotis	5.00 1.00
Water lilies	1.00 2.00
Gardenias (from the south)	1.00 2.00
Smilax	20.00 1.00

CHICAGO, June 26.	
Roses, Perles	1.00 2.00
" Niphetos	3.00 4.00
" Bon Silenes	1.50 2.00
" Am. Beauties	10.00 12.50
" La France, Mermets	5.00 6.00
" Jacques	8.00 12.00
" Brides	6.00 1.00
" Bennetts, Dukes	5.00 1.00
Carnations, short	75.00 1.00
Carnations, long	1.00 1.00
Callas	12.50 1.00
Anrakon lilies	15.00 18.00
Smilax	1.00 1.25
Adiantums	1.00 1.50
Haisies, pansies	1.00 1.50
Peonies	1.00 5.00
Gladiolus	10.00 1.00

WM. J. STEWART,
Cut Flowers and Florists' Supplies
WHOLESALE

67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS
and Jobbers in Florists' Supplies,

1 MUSIC HALL PLACE, BOSTON, MASS.
Also entrance from Hamilton Place through Music Hall.
We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.
Auction Sales of Plants Spring and Fall.

WELCH BROS.,
WHOLESALE FLORISTS,

165 Tremont Street, BOSTON, MASS.
We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.
Return Telegram is sent immediately when it is impossible to fill your order.

CUT FLOWERS

The choicest Cut Flowers at lowest market rates shipped C. O. D. Telephone connection. Use A. F. Code when ordering by telegraph. For prices, etc., Address,
J. L. DILLON, BLOOMSBURG, PA.

W. F. SHERIDAN,
Wholesale and Commission Dealer in

CUT FLOWERS,
No. 50 W. 30TH ST., NEW YORK.
Orders to be shipped will receive prompt attention.

THOS. YOUNG, JR.,
WHOLESALE FLORIST
20 West 24th Street,
NEW YORK.

VAUGHAN'S
CUT FLOWER DEPT.
88 State St., - CHICAGO.

Receives Fresh Flowers morning and evening DAILY.
Send your orders to the above address, where they will be attended to properly.
REMEMBER. When any one in Chicago has flowers to sell, VAUGHAN has also.
WRITE FOR QUOTATIONS.

W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS,
36 EAST 23rd STREET, NEW YORK.
ESTABLISHED 1877.
Price List sent upon application.

LaRoche & Stahl,
Florists & Commission Merchants
OF—
CUT FLOWERS.
1237 Chestnut Street, - PHILADELPHIA.
Consignments Solicited. Special attention paid to shipping.
Mention AMERICAN FLORIST.

C. STRAUSS & CO.,
Telephone - WASHINGTON, D. C.
Roses planted for Winter 1889-90.
20,000 WOOTTON, 2,000 MME WATTEVILLE
15,000 PERLES, 2,000 MME CUSIN,
10,000 LA FRANCE, 1,000 LUCIOLE,
3,000 AM. BEAUTY, 6,000 BRIDES,
2,500 PURITAN, 2,000 MERMETS,
2,000 MME HOSTE, 2,500 GONTIERS.

EDWARD C. HORAX,
WHOLESALE FLORIST,
36 WEST 29TH STREET,
The Bride, Mermets, and Am. Beauties, SPECIALTIES. **NEW YORK.**

HAMMOND & HUNTER,
Wholesale dealers in
Cut Flowers and Florists' Supplies
51 West 30th Street, NEW YORK.

GEO. MULLEN,
WHOLESALE FLORIST,
Florists' Supplies Always in Stock.
17 CHAPMAN PLACE,
Old School St., near Parker House,
BOSTON, MASS.
Orders by Mail, Telegraph, Telegram or Express promptly filled.

CHAS. E. PENNOCK,
WHOLESALE FLORIST,
38 So. 16th Street, Philadelphia, Pa

THE OAKLEY ROSE HOUSES
ROSE BUDS WHOLESALE.
Beauty, Bride, La France, Perle, Bennett, Niphetos, Mermets, Papa Gontier
CHAS. L. MITCHELL, MGR.
P. O. Box 188, CINCINNATI, OHIO
Also plants of above by doz., 100 or 1000; 2, 3 & 4-in. Select Stock. Plants in bud. Catalogue sent FREE FOR COPIES.

The Seed Trade.

SEED TRADE ASSOCIATION.

H. W. JOHNSON, Philadelphia, president; J. C. VAUGHAN, Chicago, vice-president; ALBERT M. McCULLOUGH, Cincinnati, secretary and treasurer; FRANK T. EMERSON, Omaha, assistant secretary. The eighth annual meeting at Saratoga Springs, N. Y., June, 1890.

Meeting of the American Seed Trade Association at Washington.

The association assembled at the Arlington House, June 11, Vice President James H. Allan, Picton, Ont., in the chair. There were two sessions held daily on Tuesday and Wednesday and another Thursday morning when the convention adjourned, after naming Saratoga Springs, N. Y., as the next place of meeting. The election of officers resulted as stated in our last issue.

Among those present were the following:

Adams, E D of Comstock, Ferre & Co.
Adams, H A
Allan, J H and wife
Allen, C L
Barteldes, F W and wife
Bolgiano, J
Brown, A E of W Atlee Burpee & Co.
Burt, Mr. with S L Allen & Co.
Clark, A N and wife
Clark, E B and wife
Crossman, Geo
Don, A I
Dunlop, J H and wife
Ely, Z De Forest and wife
Emerson, Frank T
Fottler, John Jr and wife
Green, Geo A of Bushnell & Co.
Griswold Bros
Haines, S Y and wife
Hallock, E V
Henderson, Charles
Henderson, Peter
Johnson & Stokes
Laughbridge, W C and wife
Leonard, S F
Low, Aaron
McAllister, F E
McCullough, Albert and wife
McCullough, J Chas and wife
Maule, Wm H
Meggatt, Wm and wife
Nungesser, Henry
Parsons, E B
Price & Reed
Rice, R Niles of Jerome B Rice & Co.
Robinson, W T of Parker & Wood
Salzer, Henry A
Stecher, F A
Vaughan, J C
Wall, H M of Beatty & Co.
Wood, H W
Woodruff, S D

There were several applications for membership and five were elected as follows: Messrs. Chas. Henderson, S. D. Woodruff, J. H. Dunlop, B. P. Critchell, John Gardiner & Co.

Some twelve or fifteen ladies, wives of members were present. The meeting on the whole was considerable larger than had been anticipated. A uniform disclaimer of responsibility in selling seeds was adopted, and considerable other business of interest to the seed trade only.

BOSTON.—C. H. Thompson & Co. are selling their entire stock of seeds, implements, etc. at reduced prices preparatory to closing up their business August 1. Gilbride & Grey is the firm style of the new implement and seed concern who opened their store at 49 South Market St. in May. They are young men of push and have come to stay. Trade on the

whole in seeds and light implements has been very satisfactory. The season has been very unfavorable for some of the tender market garden crops, and consequently some complaint is heard, especially of beans, which are blighting badly. Mr. Robert Farquhar, of R & J. Farquhar & Co., is spending the summer in Europe with a view to both pleasure and profit. Mr. F. L. Temple, of Temple & Beard, Shady Hill Nurseries, Cambridge, sailed recently for Europe. He will attend the Paris Exposition and will look among the growers for valuable novelties, particularly in herbaceous shrubs and plants. Mr. Wm. T. Wood, of Parker & Wood, is in Rochester, N. Y., hoping that charge and rest will restore his failing health. Mr. Archibald Smith, formerly with C. H. Thompson & Co., is in charge of Jos. Breck & Son's seed department.

DES MOINES, IOWA.—The assignment of the Iowa Seed Company was filed yesterday by the firm, H. C. Winsor and M. L. Page, the assignee being S. L. Fuller. The liabilities are \$17,973.10, the heaviest creditors being S. Freeman Son's Manufacturing Company, \$6,969.20; Valley National Bank, \$2,500; A. E. Cross, \$1,000. The last two and others are secured. The assets are \$18,000 to \$20,000. The causes are their heavy loss by fire last year, about \$6,000; their loss by hail this year and last, and the frost; also losses by Eastern failure to the extent of \$4,000 or \$5,000. The company expects to revive and open again soon.—*Iowa State Register, June 16.*

Among the creditors are The A. B. Cleveland Co., about \$1,200, and Northrup, Braslan & Goodwin Co., about \$600. It is expected they will make a proposition to their creditors about June 25 looking towards a continuance of the business. Local Des Moines florists and Muscatine plant growers are also reported to have suffered by this failure.

ROCKFORD, ILL.—J. B. Root & Co. confessed judgment for \$1,350 in favor of Mrs. E. A. Root on June 13. Liabilities estimated at \$3,000. Assets from \$1,500 to \$2,000. Mr. C. R. Root who has had the active management states that during the past five years he has made money only the first two and has lost money each season the past three years. It seems that the judgment note was for balance of purchase money given by C. R. Root when he purchased the business from J. B. Root five years ago. The stock and fixtures were sold for \$700 on June 24 on the judgment claim of \$1,300. A compromise is talked of.

NEW YORK—Aug. Rolker & Sons have opened an auction house for plant sales at their warehouse, 42 and 44 Dey street. This is a project which Mr. August Rolker has had in view for over a year, he having inspected all the large European plant markets last summer with this project in mind.

ONE of the old stand-by seed and plant establishments in New York is said to be in the market for sale. When it is formally announced, it will be a big surprise to many people.—*Inter. Hort., May 15.* Who is it?

CROSSMAN BROS., Rochester, are reported to have suffered serious loss in growing crops of onion seed and tomato plants destroyed by hail about June 13.

REPORTS from Hamburg, Germany, May 31, indicate excellent prospects for a good crop of lily of the valley pips.

NO REPORT was made at the Washington meeting on the number of onion sets thrown away this season.

E. GERMAIN, of the Germain Seed Co. at Los Angeles, represents Southern California at the Paris Exposition.

PASSED THROUGH Chicago the past week: Wm. A. Cox, of T. A. Cox & Co., San Francisco, H. A. Salzer, W. B. Hayt.

MESSRS. Fottler and Robinson were the only Boston representatives present at the convention.

THE NEW WATERMELON Ruby and Gold is said to have been sold to John Lewis Childs.

WILL THERE be a general scramble to get the catalogues for 1890 on a "hard times" basis?

G. W. PLATT, a seed and implement dealer at Benton Harbor, Mich., has failed.

ONION SEED is expected to sell low in the wholesale market the coming season.

MR. BURT, with S. L. Allen & Co., will sail for Paris the last of June.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER, Philadelphia

CATALOGUE FREE **FAXON'S SEED SPECIALTIES**

DANVERS ONION **ESSEYS**—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both and Catalogue, 10 cents, if you mention this paper.

MB FAXON, 21 SOUTH MARKET ST. BOSTON, MASS.

	Per 100
ROSES—Bon Silene, from 2½-in. pots . . .	\$ 4 00
" Marchal Niel, from 3-in. pots . . .	5 00
" " " from 2½-in. pots . . .	4 00
" Safrano, from 3-in. pots . . .	4 00
" Perle des Jardins, from 2½-in. pots . . .	5 00
" Niphotos, from 2½-in. pots . . .	4 00
" Gen. Jacqueminot, from 2-in. pots . . .	4 00
" La France, from 2½-in. pots . . .	4 00
" " strong, 4 in. pots . . .	10 00
" Baron de Maynard, 2-in. pots . . .	4 00
" Coquette de Alps, 2-in. pots . . .	4 00
" La Reine, from 2-in. pots . . .	3 00
" Mme. Masson, from 2-in. pots . . .	4 00
" Mme. Chas. Wood, from 2-in. pots . . .	4 00
Ipomoea grandiflora (Moon Flower), 2½-in. . .	2 00
And a large assortment of Clematis, from 4, 5 and 6-in. pots; also Ampelopsis Veitchi and Rhododendrons. Write for prices.	

BLOOMINGTON, PHOENIX, NURSERY, SIDNEY TUTTLE & CO., BLOOMINGTON, ILL.

Mention American Florist

2000 La France, 3 inch pots.	4 cts.
1500 Niphotos, 3 inch pots.	5 cts.
1000 Gontier, 2 and 3-inch pots	4 cts.
3000 Smilax plants, 2½-inch pots. . . .	2 cts.

JORDAN FLORAL CO.,

706 Olive Street, ST. LOUIS, MO.

ROSES.

	Per 100
Niphotos, Brides and Sony, d'un Ami, 2½-in. . .	\$ 5 00
La France and Niphotos, in 3-in.	8 40
Sony, d'un Ami, 3 in.	7 00
We have an extra fine stock of Perles, La France, Niphotos and Gontier, in 4-inch pots at 12 00 Liberal discount on orders of 200 or over.	

GERMOND & COSGROVE,

Box 62, SPARKILL, Rockland Co., N. Y.

30,000 Dioscorea batata, 1 year tubers, \$3 50 per 100, \$20.00 per 1000. 50,000 Am. Treata and Atamasco—if 20,000 are taken at \$3.00 per 100—\$3.00 cash, balance on time. 200 lbs. Moon Flower seed, full 1889.

MRS. J. S. R. THOMSON, Spartanburg, S. C.

WOOTTON TESTIMONIALS.

We quote below a few of the many gratifying letters received from our patrons :

PETER HENDERSON, N. Y.

"I am happy to state that all of the plants received from you in the first shipment, probably 950, were planted out in the bench and are at the present time in as good condition as it is possible for plants of that size to be, not a speck of mildew or other disease, and altogether look very promising. There is no doubt in my opinion that it is going to be a particularly free blooming variety, every shoot that it makes has a bud. Altogether I am well pleased with the rose."

E. HIPPARD, Youngstown, Ohio.

"Did not lose one plant out of 202 received and never saw such vigorous growth. We have them in 1 inch pots at present (June 18th) and they have filled pots with roots almost ready for 1 inch pots. If the rose is as easily managed in winter there is no doubt it will supersede all other high colored roses. It is very free blooming."

C. M. FICK, Philadelphia, Pa.

"I have not lost any of the Woottons. The present condition is very encouraging. Have just repotted them in 1 inch pots and are looking fine (June 13th)."

T. J. TOTTEN, Saratoga Springs, N. Y.

"The plants seem to be coming on nicely. Young plants keep budding but we pinch them off."

"The Woottons arrived in good shape and are clean and well grown cuttings. The plants grow all along they show vigor and are as nice young stock as anybody need wish for. I have not lost one. I thought principally because a seedling from Bon Silene X Louis Van Houtte cannot be but good."

J. M. JORDAN, JORDAN FLORAL COMPANY, St. Louis, Mo.

"The Woottons were received; are all alive and growing, healthy and fine, having flower buds in profusion, am well pleased."

LEWIS & BROTHERS, Wilmington, Del.

"The plants (Woottons) are in fine condition as fine as any man can expect. They are making fine, stout plants and strong root. I think it is a fine rose, and we are perfectly satisfied with it. The Beauties are also doing fine."

C. E. COOR, Madison, N. J.

"I have never had young plants more vigorous. They are ahead of any plants I have of their age, and promise great strength. I have kept the buds pinched back, but judge they will bloom well from the show they make for buds."

BIDWELL BROTHERS, Jersey City, N. J.

"The Woottons received from you 18th of May last, are all doing well. They are growing vigorously and promise to be strong healthy plants without spot or blenheim. Buds are all coming and we would say they will produce as prolific in flower as the average of ours in growth."

J. Y. SMITH, Doylestown, Pa.

"The plants are doing well and I think it will be THE rose."

CHAS. F. EVANS, EVANS & BATTLES, Philadelphia, Pa.

"They are all alive and growing nicely."

J. D. KUMERLE & SON, Newark, N. J.

"The Woottons arrived this afternoon in good order. June 14th."

H. C. BUTTERWORTH, Toronto, Canada.

"My plants at the present time are very vigorous and the leaves are not spotted or any other disease. While all my roses were more or less covered with mildew on account of cold damp weather, yours were free and healthy. I think according to my experience with so young plants the prospects are good for vigorous and abundant bloom."

R. CALVERT, La Crosse, Wis.

"Have lost none. All in good condition."

JNO. G. HERRICK, Stoneham, Mass.

"Have lost none. The plants are vigorous."

J. W. NORTH, St. Louis, Mo.

"They are growing nicely. They show a bud on every young shoot."

BELA F. LINCOLN, West Hingham, Mass.

"The Woottons are doing nicely and are fine, healthy plants."

G. H. ROWDEN, Wallingford, Conn.

"Are growing nicely."

PROBST BROTHERS, Kansas City, Mo.

"The plants are growing and in good condition."

E. T. HARVEY, Bond Hill, Ohio.

"I have not lost any of the Wootton, and they are looking well."

B. ONORATO, New Orleans, La.

"The plants are doing well and making new growth."

Plants from 3-inch pots during July, August and September, \$180 per 1000; \$100 per 500; \$25 per 100; less number than 100 at 50c. each.

C. STRAUSS & COMPANY, WASHINGTON, D. C.

JOHN H. TAYLOR,

ROSE GROWER,

BAYSIDE, L. I., N. Y.

Offers to the Trade the Great **TEA ROSE**

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

— ALSO —

**MME. DE WATTEVILLE, CATHERINE MERMET,
PAPA GONTIER, BRIDES, and
PERLE DES JARDINS, NIPHETOS.**

Write for particulars.

ROSES.

All the best **NEW** and Standard Varieties of **Teas, Hybrid Teas and Hybrid Remontants, in extra fine plants.**

From two inch, three inch and four inch pots Standard Sizes.

By the Dozen, Hundred or Thousand.

Also all the best selected varieties of Everblooming and Hybrid Remontants for Bedding.

At prices as low as strictly first class stock can be produced for.

Price list now ready and will be mailed to all applicants in the trade.

JOHN N. MAY,

SUMMIT, NEW JERSEY.

IMPORTED H. P. ROSES.

Worked low on the Manetti Stock, best kinds for forcing. Orders received now for delivery in November. Address

WILLIAM H. SPOONER, Jamaica Plain, Mass.

NOW READY FOR DELIVERY!

— OUR —

Celebrated New Pedigree Seedling Roses

— FOR 1889. —

MRS. JAMES WILSON, (Tea). In this superb novelty we have the long looked for pure yellow "Catherine Mermet". The growth of the plant is very vigorous, the habit excellent, and the flowers, which are very large, are thrown up well above the foliage and are produced in extraordinary profusion. A magnificent form. **First Quality.**

Strong plants in 5-inch pots, \$2.00 each; 13 for \$21.00.

LADY ARTHUR HILL, (H. P.) This splendid new Rose, as a seedling from "Beauty of Waltham" color rosy lilac, quite a new shade, and a form and a profuse blooming variety. Very superior.

Strong plants in 5-inch pots, \$2.00 each; 13 for \$21.00.

MR. JAMES BROWLOW, (H. P.) A truly magnificent variety of very large and good form. The color is brilliant carnation, novel, and growth very robust. It is a marvelously free flowering variety on cuttings, and is especially adapted for forcing.

Strong plants in 5-inch pots, \$2.00 each; 13 for \$21.00.

FIRST CLASS CERTIFICATES HAVE BEEN AWARDED TO THESE ROSES.

Descriptive list will be mailed Free on application to the raisers.

ALEX. DICKSON & SONS,

Royal Nurseries, **NEWTOWNARDS, County Down, IRELAND.**

SLUG SHOT.

BEEN KILLING BUGS 10 YEARS

SOLD BY SEEDSMEN

For complete write to Fishkill-on-Hudson, N.Y.

OIL CITY ROSES.

We have for sale a few thousand fine, healthy Rose plants from 2 1/2 inch pots, of the following varieties:

AMERICAN BEAUTY, ... Per 100 \$10.00
BRIDE, MERMET and LA FRANCE 5.00

OAKWOOD ROSE GARDENS, Oil City, Pa.

ROSES.

35,000 of the leading European and British varieties. **FEAS HYBRID TEAS** and **HARKNESS PEACHES**. Teas, \$5.00 per 100. Hybrids, \$3.00 per 100.

My selection of varieties. Also the best Prize winning varieties of **CHEYSENEHUEMS GARNATIONS**, and general Greenhouse stock.

Trade List mailed on application.

JACOB SCHULZ, LOUISVILLE, KY.

GERANIUM MRS. PARKER.—A western wholesale florist advertises in his price list the "new" double-flowering silver-leaved geranium Mrs. Parker, and asks a good big price for it too. It wasn't advertised as "new" when I first received it some three years since. However, the gentleman evidently knows a good thing when he sees it, for Mrs. Parker is with us the best silver-leaved geranium both on the bench and out of doors that the writer has seen. If he can induce florists to grow it perhaps we can forgive his adjective.
W. N. RUDD,
Mount Greenwood, Ill.

Plants for Summer Decoration AND FLORISTS' STOCK.

Per doz. Per 100
Crotons, the best high colored sorts, 5-inch pots..... \$1 00 \$ 10 00
Pandanus, well grown in 7-inch pots, ready to shift up..... 2 00 15 00
Asparagus Tennisimus strong plants, 6-inch pots..... 2 50 18 00
Latania Borbonica, 3-in., strong plants, will make fine plants for fall..... 1 25 10 00
Chamærops, Coryphas, Cocus and a large variety of assorted kinds in 5-in. pots at low prices.
Large specimen plants of Crotons, and a variety of fine hot house plants. Prices on application.

Fine Florists' Seeds for Present Planting.
Primula, 10 papers, different sorts double and single, 50 seeds each for \$2 10.
Pansies, best German Prize Strains, 10 papers, 100 seeds each, the best in the market, \$1 50.
Cinerarias, double and single dwarf varieties, florist package 50c, each sort or mixed if wanted.
Calceolarias, best assorted kinds, florist package 50c.
Hollyhocks, 8 different colors, 50 seeds each, Berny's Prize Strain, for \$1 00.
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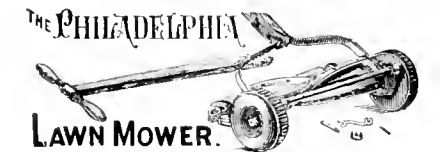
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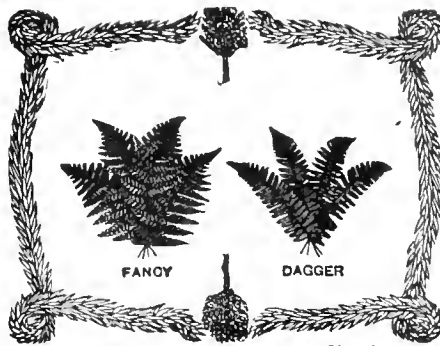
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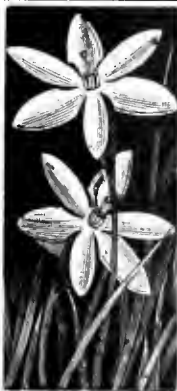
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Lincoln Park has a new attraction this summer in the shape of two adjoining ponds of aquatics; there are two specimens of Victoria regia in addition to a fine assortment of nymphæas and nelumbiums. The ponds have steam pipes running through them so they may be heated when necessary. The fancy bedding at this park is much the same as last year. Santolina, which is so useful in the east, will not stand through the summer here.

The spring plant trade has so far not equalled that of last year. During the early warm spell it started off with a rush but the later cold disagreeable weather cut it short and it didn't seem to fully recover when warm weather finally came again.

The late cold weather killed a lot of coleus which had been bedded at South Park, as well as doing damage to other stock. Bedding plants do not look nearly as well as usual at this time in consequence.

Walter Heffron of Washington Heights is laid up with a broken arm. He was thrown from a buggy while driving a fractions horse.

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Alternantheras, Paronychioides major, Aurca nana, Spathulata, Versicolor, \$1.00 per 100 \$30.00 per 1000; fine, strong plants from last fall propagation.

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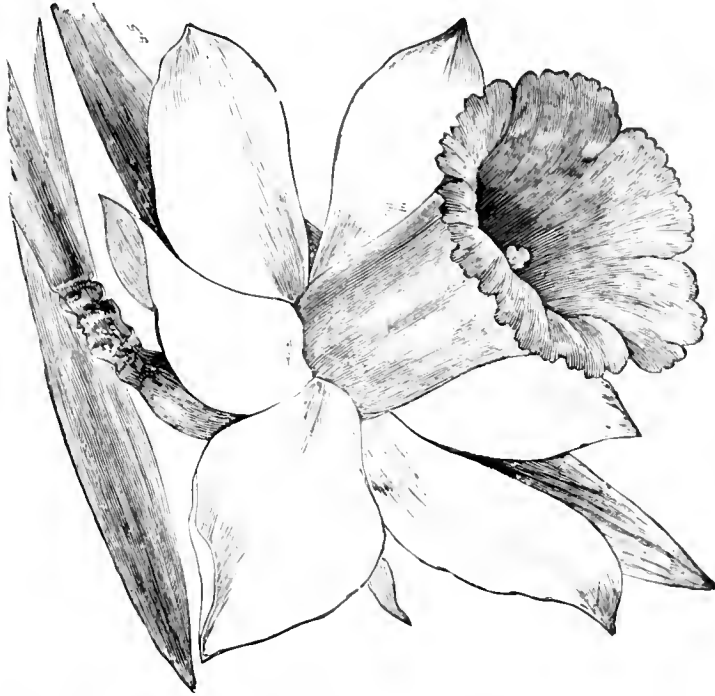
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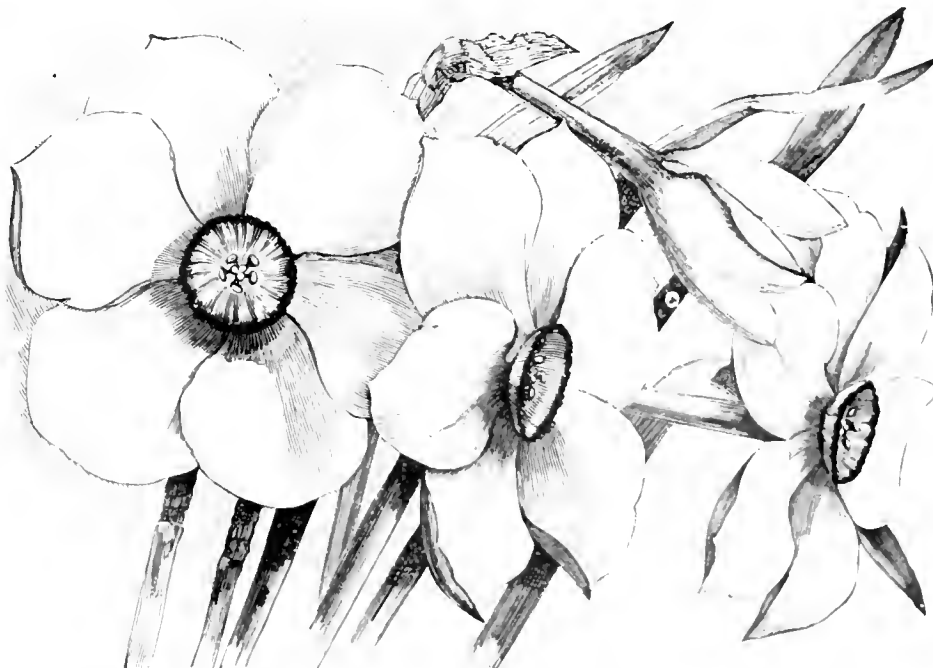


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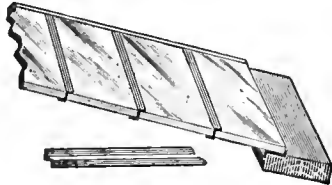
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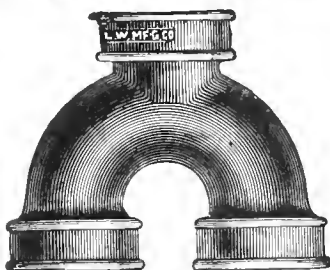
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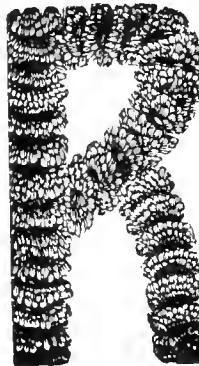
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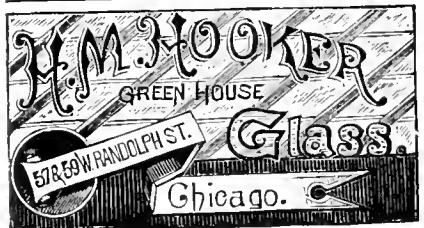
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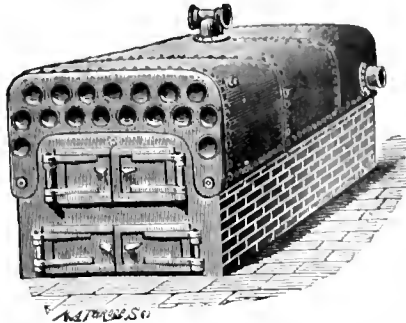
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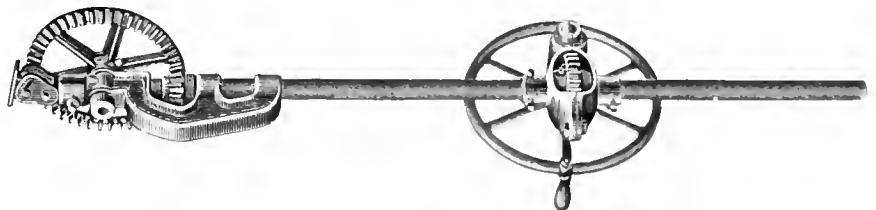
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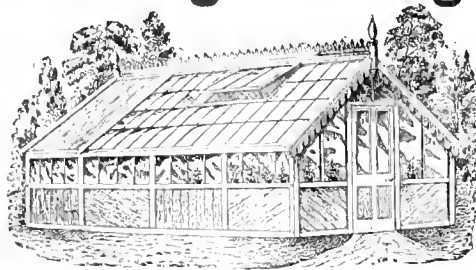
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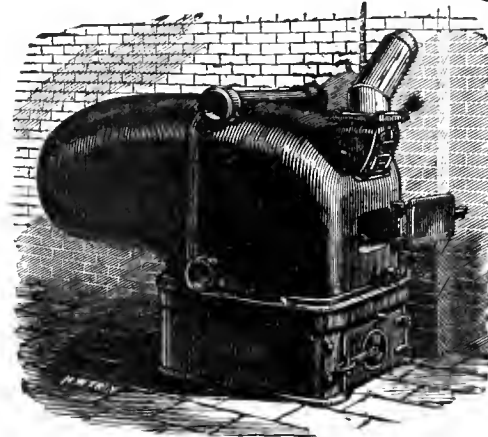


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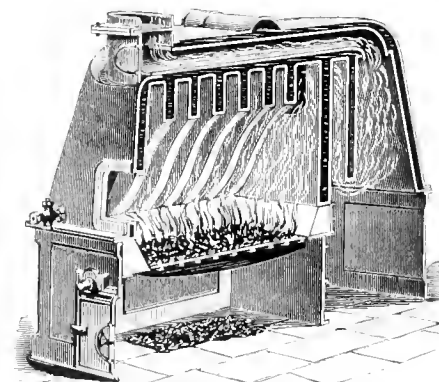


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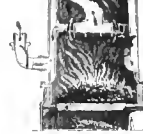


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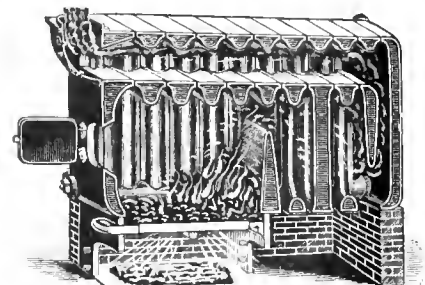


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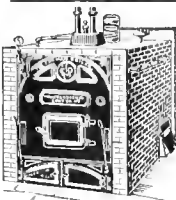
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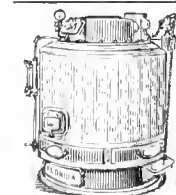
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RAILROAD RATES—The various traffic associations have granted a rate of a fare and a third for the round trip on the certificate plan, to the Buffalo convention. As most railroads sell excursion tickets to Niagara Falls at low rates, these may be used if better rates can be secured in that way as nearly all roads running to the Falls go through Buffalo.

THE AMERICAN FLORIST



America is "the prow of the vessel; there may be more comfort amidships, but we are the first to touch the ice."

Vol. IV.

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SOCIETY OF AMERICAN FLORISTS.

FIFTH ANNUAL MEETING

AT BUFFALO, N. Y.

August 20, 21, 22, 1889.

WM. J. STEWART, Secretary, 67 Bromfield St.,
Boston, Mass.; M. A. HUNT, Treasurer, Terre
Haute, Ind.

The annual dues of \$3. may be forwarded to either
the secretary or treasurer before the meeting who
will return a receipt and badge by mail. In this way
you can materially lighten their labors at the con-
vention and avoid delay in securing your badge on
the opening day.

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RAILROAD RATES.—To secure the rate made by the passenger associations when going to the Buffalo convention next month you will pay full fare going and when purchasing your ticket ask for a certificate of such purchase from the agent selling you the ticket. This when countersigned by the secretary at the convention will be an order to the Buffalo agent to sell you a return ticket at one third fare. Ticket agents are supplied with blank forms for the certificates.

THE SPRING PLANT TRADE.

LANCASTER, PA.—About 10 per cent greater than last year; no change in prices; collections somewhat better.

DORCHESTER, MASS.—A slight decrease; prices generally lower; 4-inch geraniums retailed at \$1.25 to \$1.50 per dozen.

LOCKPORT, N. Y.—About the same as last year; no change in prices; collections better; 4 inch geraniums retailed at \$1 a dozen.

STON CITY, IA.—About 20 per cent increase; no change in prices; collections good; 4 inch geraniums 25 cents each. \$2 to \$2.50 per dozen.

MINNEAPOLIS.—Considerably larger, prices not held very firm; collections rather slow, 4-inch geraniums retailed at \$1.50 to \$2 a dozen.

POUGHKEEPSIE, N. Y.—A decrease, prices lower; good pansies sold well, plant trade is overdone; cut prices prevailed, a large amount of stock left over.

HOLYOKE, MASS.—About 10 per cent larger; no change in prices; more demand for perennials; collections about as usual; 4 inch geraniums retailed at \$1.25 a dozen.

ATLANTA, GA.—Trade about the same as last year; prices also about the same, or possibly a little lower; 4-inch geraniums retailed at from \$1.25 to \$1.50 a dozen.

LAWRENCE, KAN.—About the same as last year, no change in prices; collections very prompt; no sale for chrysanthemums; 4-inch geraniums retailed at \$2 a dozen.

KEOKUK, IA.—Some increase over last year, possibly one-fourth, prices and collections about the same as last year; 4-inch geraniums retailed at 15 to 20 cents each.

AURORA, ILL.—A slight increase, prices about the same; collections rather slow, but perhaps not more so than usual; 4-inch geraniums retailed at from 15 to 20 cents each.

TERRE HAUTE, IND.—About one third less than last year, prices about the same, less call for verbenas; collections about as usual; 4 inch geraniums retailed at \$1.50 a dozen.

ELGIN, ILL.—About 12 per cent decrease; no change in prices, less call for fuchsias, collections about as usual; 4 inch geraniums retailed at 20 to 25 cents each, \$2 per dozen.

FT. WAYNE, IND.—Slight increase over last year; no change in prices or collections; increased demand for all bedding stuff, especially verbenas; 4-inch geraniums retailed at \$1.50 a dozen.

WORCESTER, MASS.—I think a little larger; prices about the same, increased call for geraniums and less demand for foliage plants; geraniums in 4-inch pots retailed at \$1.50 per dozen.

LOWELL, MASS.—Some increase over last year; no change in prices, an increased demand for hardy roses, collections about as usual, 4-inch geraniums retailed at \$1 to \$1.50 a dozen.

ADRIAN, MICH.—About 3 per cent larger than last year, prices ruled the same; increased call for coleus and geraniums; collections better, 4-inch geraniums retailed at \$1.50 per dozen.

DAYTON, O.—Spring trade about as usual, prices a little lower if anything, lessened demand for coleus and begonias, collections very slow; 4 inch geraniums retailed at \$1 a dozen and upward.

OSWEGO, N. Y.—About 25 per cent increase, prices somewhat lower, increased call for carnations for summer bloom, less call for Rex begonias; collections about as usual; 4 inch geraniums \$1.50 a dozen.

FT. SCOTT, KAN.—About 40 per cent increase over last year; prices about 10 per cent higher, more demand for verbenas, less for geraniums; collections slower; 4 inch geraniums retailed at \$1.25 a dozen.

MILWAUKEE, WIS.—About 10 per cent increase, no change in prices, increased demand for geraniums, alternantheras and tuberous begonias; collections about as usual; 4-inch geraniums retailed at 10 cents each.

NEWTOWN, PA.—About 10 per cent increase; no change in prices; increased demand for geraniums and Rex begonias, less for Begonia rubra; collections about as usual; 4 inch geraniums retailed at 75 cents a dozen.

CEDAR RAPIDS, IA.—Smaller than last year, 25 per cent decrease, perhaps more, no change in prices; less demand for all soft stuff that is easily propagated, collections slower; 4 inch geraniums retailed at \$2.25 per dozen.

HAMILTON, O.—About 9 per cent increase over last year; prices ruled the same, increased demand for H. P. roses, less for petunias and lobelias, collections good; first class geraniums in 4 inch pots retailed at \$1 a dozen.

MUSCATINE, IA.—About 20 per cent smaller than last year, prices about the same, increased call for roses and less for verbenas; collections better, 4 inch geraniums retailed at \$2 a dozen. Cut flower trade better than ever.

ANN ARBOR, MICH.—A slight increase, possibly 2 or 3 per cent, no change in prices, increased demand for coleus, less

for verbenas; collections about as usual; good bedding geraniums in 4-inch pots retailed at \$1.50 a dozen.

SALT LAKE CITY, UTAH.—Nearly double that of last year; prices lower on everything; collections slower; 4-inch geraniums retailed at \$1.50 a dozen. No call here for alternantheras, coleus, etc.—nights too cold for them.

TRENTON, N. J.—About same as last year; no change in prices; less demand for foliage plants; collections better; 4-inch geraniums retailed at 8 cents. We can not grow bedding plants alone at present prices to be profitable.

SPRINGFIELD, ILL.—About 25 per cent decrease; no change in prices; less call for verbenas, pansies and roses; collections about as usual; 4-inch geraniums retailed at \$1.50 a dozen; too many florists here to make the business profitable.

NEW HAVEN, CONN.—About the same as last year; prices a little lower; increased demand for scarlet geraniums, less call for coleus and chrysanthemums; collections slower; geraniums in 3-inch pots retailed at \$1.50 a dozen, 4-inch \$2.

SAVANNAH, GA.—Spring plant trade about 25 per cent larger than last year; no change in prices or collections; increased demand for bulbs and bulbous plants; 4-inch geraniums retailed at 25 cents each and \$2 to \$2.50 a dozen.

GERMANTOWN, PA.—About 20 per cent increase; no change in prices; geraniums sold better than last year, verbenas and other small plants not so well; collections rather slower; average retail price of 4-inch geraniums was \$1.25 per dozen.

DAVENPORT, IA.—About 10 per cent increase; prices lower owing to the sharp competition of one florist who wants the earth; more call for hardy herbaceous plants; collections slightly better; 4-inch geraniums retailed at \$1 to \$2 a dozen.

NASHUA, N. H.—An increase of about 10 per cent over last year; prices had a tendency to be lower; increased demand for hydrangeas and less call for coleus and Moon Flowers; collections slower; 4-inch geraniums retailed at \$1.50 a dozen.

GRAND RAPIDS, MICH.—Think total sales were larger than last year; no change in prices; increased demand for fine specimens of all sorts, particularly palms and dracaenas; less call for verbenas; 4-inch geraniums retailed at \$1 a dozen.

WATERLOO, N. Y.—About 15 per cent smaller than last year; prices about the same; increased demand for coleus, geraniums and heliotropes, less call for verbenas and pansies; collections slower; 4-inch geraniums retailed at from \$1.25 to \$1.75 a dozen.

PEORIA, ILL.—Some increase over last year; no change in prices; increased call for bedding plants for border; collections better (cash trade mostly); 4-inch geraniums retailed at \$1.50 to \$2 a dozen; trade shut down to nothing after May 30; cut flower trade very good.

RICHMOND, VA.—About the same as last year; no change in prices; increased demand for vines, less call for verbenas, ageratums and Mme. Salleri geraniums; collections about as usual—possibly a trifle better; 4-inch geraniums retailed at \$1 to \$2 a dozen, averaging \$1.50.

BOSTON.—About an even thing with last year; prices slightly lower if any change; 4-inch geraniums retailed at from

85 cents to \$1.50 per dozen. There were too many plants grown for the demand, result auction sales and auction prices, forcing sales at a sacrifice.

MEMPHIS, TENN.—Some increase over last year; prices a little lower; an increased call for roses, geraniums and verbenas, less demand for coleus and general foliage bedding plants; collections are better; 4-inch geraniums retailed at \$1.50 to \$2 per dozen.

SING SING, N. Y.—About 8 per cent increase; no change in prices; collections better; increased demand for roses, verbenas and fuchsias, less for hybrid roses and hardy plants; 4-inch bedding geraniums retailed at \$8 and \$10 a hundred; auction sales in New York hurt us.

NORWICH, CONN.—About the same as last year; no change in prices; increased call for Hydrangea hortensis; collections somewhat slower; 4-inch geraniums retailed at \$1.50 per dozen. We should force more white shrubs and white stuff to fill out gap when azaleas are gone.

BUFFALO, N. Y.—Somewhat larger; no change in prices; an increased demand for large palms, etc., for vases, less call for verbenas; 4-inch bedding geraniums retailed at 15 cents each, \$1.50 a dozen. Nearly one half the plants sold in this city are used in veranda boxes and vases.

ALBANY, N. Y.—About 25 per cent larger than last year; prices about the same; collections about as usual; 4-inch geraniums retailed at \$8 per 100. Large plants of geraniums and roses are more profitable to grow; they sold more readily and brought more remunerative prices.

NEW ORLEANS, LA.—About the same as last year; prices a shade lower; increased demand for palms and ferns, less call for small plants; collections about as usual; 4-inch geraniums retailed at \$1.50 to \$2.50 a dozen; no market for verbenas. Cut flower trade shows an increase over former years.

NORTH CAMBRIDGE, MASS.—About 15 per cent smaller than last year; prices lower; collections slower; geraniums in 4-inch pots averaged 8 cents each at retail. Plant peddlers have increased in number, also plants sold very low at auction in Boston, which helped to injure trade.

ZANESVILLE, O.—One-third larger than last year; no change in prices; lessened demand for verbenas; collections about as usual; 4-inch geraniums retailed at \$1 a dozen. The cut flower trade shows a healthy growth; two of our leading florists have opened cut flower stores in the heart of the city.

AUGUSTA, GA.—About 10 per cent larger than last year; no change in prices or collections; geraniums in 3-inch pots retailed at \$1 a dozen. We find the demand for the better class of plants increasing and a decided advance in knowledge of floriculture among our best classes of citizens.

LA FAYETTE, IND.—Spring plant trade somewhat smaller than last year, about 15 per cent decrease; prices about the same; an increased call for hardy plants and less demand for Moon Flowers; collections are very fair, as good as usual; 4-inch geraniums retailed at 15 cents each, \$1.50 per dozen.

WILLIAMSPORT, PA.—About 10 per cent greater than last year; prices obtained were slightly lower on the average, collections about as usual; 4-inch geraniums

retailed at 10 cents each, \$1 to \$1.25 per dozen; we tried to get \$1.50 a dozen but market stock stopped that and we were glad to get \$1 to \$1.25.

COUNCIL BLUFFS, IA.—One-third larger than last season; no change in prices; an increased demand for geraniums and small roses, less call for verbenas, heliotropes and hibiscus; collections about as usual; 4-inch geraniums retailed at 25 cents each, \$2.50 a dozen. Cut flower trade has been better than last year.

DENVER, COLO.—About the same as last year, perhaps a small percentage of increase; prices about the same; a little better demand for first quality stock; collections about the same; 4-inch geraniums retailed at from \$1.80 to \$2.40 a dozen. Coleus and alternantheras don't do very well here—nights too cold.

PORTSMOUTH, N. H.—About 20 per cent less than last year; prices a shade lower; collections about as usual; geraniums in 4-inch pots retailed at \$1.50 a dozen. There was a general peddling of plants from door to door by out of town people with little flue heated houses and frames. Cut flower trade better than ever.

PATERSON, N. J.—Probably 20 per cent increase; prices somewhat lower; increased demand for all foliage plants, less for verbenas; collections about the same, possibly a little slower; 4-inch bedding geraniums 75 cents to \$1 a dozen. Competition is so mild with us that cut rates and returns are less than usual.

EVANSVILLE, IND.—No increase, possibly a slight decrease; no change in prices; less demand for foliage bedding plants; collections about as usual; 4-inch geraniums retailed at \$1 to \$1.50 a dozen. The last winter was so mild with us that a great many people kept their plants over thus materially reducing the demand.

NEW BEDFORD, MASS.—A considerable increase; prices better; an increased demand for hardy roses, Ampelopsis Veitchii, less call for pansies, verbenas and tea roses; collections slower; 4-inch geraniums retailed at \$2 a dozen. Not as much call for baskets, vases and tubs as in years past, and more call for beds and shrubbery.

LOUISVILLE, KY.—About 10 per cent increase; no change in prices; increased demand for roses, geraniums and chrysanthemums, less call for coleus, centaureas, alternantheras and begonias; collections about as usual. 4-inch geraniums retailed at \$1 a dozen. The demand for fine fuchsias and roses was unusually good, also for plumbagos.

MT. VERNON, N. Y.—About 10 per cent increase; no change in prices; an increased demand for cobaeas and other vines, also for cannas and chrysanthemums, less call for geraniums and coleus; collections a little better; 4-inch geraniums retailed at \$1 a dozen. There was an increased demand for palms, window boxes and large showy plants.

DES MOINES, IA.—About 25 per cent less than last year; prices same as last year; better demand for pansies and less for scented geraniums; collections are very slow; 4-inch geraniums retailed at \$2 a dozen. We think that the mild winter here had something to do with the decrease in sales, also scarcity of cash among the merchants.

TORONTO, ONT.—About the same as last year; no change in prices except for good geraniums, which brought rather



KENTIA FLORIBERIANA.

better prices; *Anthemis coronaria* sold well, no demand for light coleus; collections about as usual; 4-inch geraniums retailed at 80 cents a dozen, 5-inch \$1, 5½-inch \$1.25 to \$1.50. Trade began much earlier than usual.

FAYETTEVILLE, N. C.—About 10 per cent decrease; no change in prices; increased demand for coleus and blooming hydrangeas, less for geraniums, owing to the fact that many people kept over their old plants because of mild winter; collections about as usual; 4-inch geraniums retailed at 20 cents each, 3-inch \$1 a dozen.

UTICA, N. Y.—About the same as last year; better prices for choice decorative plants; increased demand for palms and all kinds of decorative plants, less call for small stuff; collections much slower; 4-inch geraniums retailed at 10 cents to 15 cents each. Owing to the excessive rains and cold weather many beds were left unplanted.

PORTSMOUTH, VA.—About 25 per cent decrease from that of last year; lower prices on nearly all stuff; increased demand for geraniums and bedding plants, less call for roses and bulbs; collections slower; 3-inch geraniums retailed at \$1 a dozen. Cut flower trade has been extra good, but trade in both plants and flowers has been very dull since May 1.

HARTFORD, CONN.—About one-third larger than last year; prices about the

same; increased call for geraniums and less demand for coleus; collections about as usual; I sold 3-inch geraniums at \$1 a dozen, some sold in 4-inch pots at 50 cents a dozen. I have no trouble in selling good plants, and hope to get horsewhipped if I buy any more at auction.

DETROIT, MICH.—Probably an increase though much complaint on account of the cold, disagreeable weather, no change in prices; increased demand for palms, less call for verbenas and pansies; collections are good; 4-inch geraniums retailed at \$1 to \$1.25 a dozen, sales would have been much larger, but rain and cold in the very best part of the season did much harm.

KANSAS CITY, MO.—About 10 per cent increase; prices ruled about the same as last year; more call for bedding roses and carpet bedding plants; less demand for foliage plants; collections about as usual; 4-inch geraniums retailed at \$1.50 per dozen. Most of the geraniums are sold in 2½ and 3-inch pots at 50 to 75 cents a dozen, not many sold in 1-inch pots.

RAY CITY, MICH.—About 10 per cent increase over last year; no change in prices; increased demand for pansies, palms, geraniums, fuchsias and carpet bedding plants, less call for verbenas, collections somewhat slower, 4-inch geraniums retailed at 7 to 12½ cents. This

has been the most unfavorable season in 10 years. Most everything planted out before June was destroyed by cold.

ROCHESTER, N. Y.—About the same as last year, possibly averaged a small decrease; prices rather lower on some things; an increased demand for specimen hydrangeas and ornamental plants for piazzas; less call for pelargoniums, fuchsias and pansies; collections slower if any difference; 4-inch geraniums retailed at 10 to 12 cents, a few growers got 15 cents—\$1 a dozen.

MONTREAL, CAN.—About 15 per cent increase; little if any change in prices, the hydrangea is increasing in favor, but less demand for fuchsias, collections a little better than usual, 4-inch geraniums retailed at \$1.50 a dozen. Owing to the cool and dull weather this spring most of the florists have a large number of fuchsias left on hand, as they did not come into bloom in time for spring sales.

ST. PAUL.—Sales probably as large in quantity but prices were much lower, probably 25 to 30 per cent lower; an increased demand for perennials, less call for alternantheras and coleus; collections very slow—worse than usual, 4-inch geraniums \$1.50 to \$2 a dozen. Noticed a lessened demand for bedding and an increase for window boxes and vases and an improvement in plants used for same.

PROVIDENCE, R. I.—Decided increase; no change in prices; increased demand for good geraniums and annuals, less for foliage plants such as coleus, cannas etc.; collections about as usual; 4-inch geraniums retailed at \$1 to \$1.50 per dozen; *Gloire de France* is a very popular geranium, plants in 4-inch pots retailed readily at 50 cents each. We are short of wholesale rose growers and cut flowers generally in this state.

CINCINNATI.—Somewhat larger; bedding stuff sold at lower prices than last year, but good stuff brought better figures; an increased demand for roses and better class of plants, less call for coleus, geraniums, fuchsias, echeverias, etc.; collections very much slower; 4-inch geraniums retailed at from 60 cents to \$1 a dozen. The dry season in May with cold and bad weather in June had much to do with poor sales of bedding stuff.

BRIDGEPORT, CONN.—About 15 per cent increase, no change in prices; increased call for large palms, coleus, geraniums and hydrangeas, less demand for verbenas, centaureas, abutilons and pelargoniums; 4-inch geraniums retailed at \$1 a dozen, 10 cents each. There has been a good demand for large palms to set on lawns and piazzas, also good prices were obtained for large geraniums, fuchsias and other plants grown in large pots.

KALAMAZOO, MICH.—Sales about 25 per cent less than last year; prices a little lower on some plants; increased demand for verbenas, asters and geraniums, less call for coleus and alternantheras, collections about as usual; 4-inch geraniums retailed at \$1 to \$1.50 a dozen. There being more in the plant trade this spring we have not done as well individually, but I think there were more flower beds planted this year than ever before.

ST. JOSEPH, MO.—One florist reports plant sales as 10 per cent less and another as 20 per cent increase over last year, one reports prices about the same and another as lower; an increased demand for small bedding plants; one florist reports a lessened demand for geraniums, one

reports collections as about as usual and another as rather slower; geraniums in 4-inch pots retailed at \$1.50 a dozen. Owing to mild winter a great many plants were kept over by private parties which affected the trade at the start and some growers cut prices.

WATERTOWN, N. Y.—About 10 to 15 per cent decrease from last year; prices about the same with a downward tendency; less demand for verbenas; collections have been a little slow; 4-inch geraniums retailed at \$1.50 to \$2, good strong plants bringing the latter price. We think the price of plants will have to be lowered for another season. Our sales would have been as good as last year if we had had favorable weather. It was cold and very wet just at the time we usually do our planting.

BALTIMORE—The supply was in excess of the demand with the exception of good roses; about 10 per cent decrease with the exception of plants suitable for vases; prices had a downward tendency with few exceptions; roses and vase plants met with ready sale, but pelargoniums and the general run of bedding plants went slower than in former years; collections slower, parties who have heretofore paid cash want time this season; 4 inch geraniums retailed mostly at 10 cents each, \$1 a dozen. Auction sales were hurtful to all, especially to those that had them.

CLEVELAND.—Some florists report an increase and others a decrease, probably an average would show that total sales were only about equal to last year; no change in prices; there was a good demand for vincas and verbenas, while there was less call for coleus and pansies; collections about as usual; bedding geraniums in 4-inch pots retailed at \$1 a dozen, though a very few brought \$1.20. The demand for window boxes and vases was excellent and *Dracena indivisa* was especially called for in this work. Pink, salmon and crimson geraniums were in equal demand with scarlets for bedding.

SPRINGFIELD, MASS.—About the same as last year, possibly a slight increase on the average; prices generally were higher; there was an increased demand for palms and blooming hydrangeas, and a lessened demand for foliage plants such as coleus, centaureas, etc.; collections about as usual; 4 inch geraniums generally retailed at \$1.50 a dozen, though there were cases where they were sold as low as 75 cents a dozen. The florists demanded and obtained better prices for good stock; inferior stock sold low as usual. We find that well grown plants sell rather than poor at any price; the man who grows the best plants will get the trade.

NASHVILLE, TENN.—One florist reports an increase of 25 per cent and another a decrease of 20 per cent; one reports prices lower and another higher for roses and geraniums; one reports increased demand for roses and geraniums, and a decreased call for coleus, salvias, alternantheras and achyranthes; one reports collections as slower and the other as "better than usual to a remarkable degree;" one reports that 4-inch geraniums retailed at \$1.50 a dozen and the other \$2.50 a dozen; one adds: "During March and April our prospects were very encouraging for a good trade, but the drought set in here and lasted about six weeks which just killed trade for the season," while the other one says: "Plenty of rain, no overflow, heavy wind



ARECA LUTESCENS.

nor hail to do any damage this year up to the present time." Certainly these two gentlemen have looked upon the field through glasses of different color.

PHILADELPHIA—Some florists report a slight increase, others a decrease and still others as about equal to last year, probably the total sales are somewhat less than last year; prices averaged slightly lower on most bedding plants; there was notably a lessened demand for small carpet bedding plants; collections about as usual; 4-inch bedding geraniums retailed generally at 10 cents each, \$1 a dozen, though some were sold as low as \$6 a hundred, and others as high as \$1.25 a dozen. One florist reports that roses in pots sold as well as anything, and perhaps a little better than other stock. Some complain bitterly of unjust competition, stating that plants were advertised and sold at ruinously low prices.

CHICAGO.—There is much complaint in regard to the spring plant trade and it is probable that there was a decrease of about 25 per cent from that of last year, though some florists believe that their books will show a slight increase, giving as a reason that while there was not the usual rush, owing to the unfavorable weather, still sales were steadily made and the total sales will foot up all right; but the majority think that sales will fall nearly one-fourth short of last year. Prices generally were maintained at about

the same figures as last year; cuts were made in some cases, though these failed to move stock off any faster and might just as well have not been made. There was a comparative decrease in the call for coleus and similar foliage plants. Bedding geraniums, in 4 inch pots retailed at from \$1.50 to \$2.40 per dozen. The poor sales are almost universally ascribed to the cold, wet, unfavorable weather during the best part of the selling season.

YOUNGSTOWN, O.—Personally we cannot complain about our plant trade this spring. It has been good, but whether the plant trade generally in this section has been better than last year I very much doubt. For Decoration Day the demand for good plants at fair prices was excellent, but the demand for plants to set out at home is feeling the evil effects of florists raising a large number of small plants, and selling by auction and otherwise at ruinously low prices. In small cities it is being the means of making it impossible to get paying prices for anything like a good article. This method of disposing of what is called "surplus stock" has been practiced in the large eastern cities for years, and there its evil effects may not be so visible, although I believe even there the purchaser does not gain much, and I am sure the raiser loses. But in small places where everybody knows everybody it is doing considerable injury to the home retail plant trade.



LATANIA BORBONICA

Plants Best Adapted for Decorating.

Often the florist wishing to procure a moderate stock of decorative plants is at a loss to know just what will best suit his requirements; possibly this addition to his stock may be an experiment about being tried for the first time; his business may be growing, and with an increase of patronage he naturally wishes to bring it up to a higher standard by gradually incorporating into it all those different branches included in a first class retail establishment.

Even those who have had some experience in the plant decorating art often litter up their places with a lot of rubbish either through ignorance of what is best adapted for the purpose or through a false idea of economy. In my opinion it is not economy to buy plants that will not stand rough handling and are easily damaged or possibly killed by being used a few times; such I think will prove not cheap even at a low price.

In writing this short article I have thought to render some little assistance if possible, especially to any who may wish to add to their business (in a modest way perhaps) that very important and profitable branch, the decorating with plants of dwellings, public halls, etc. If he be of moderate means and is somewhat timid about making the venture I would say that a great deal can be done with a few good sized foliage plants, especially if some commoner stuff is used

to fill in with—small evergreen trees, laurel boughs, with some ordinary flowering plants will answer well.

To give the tropical effect so desirable in decorations, palms of course take the lead. No other class of plants can supply their place, and as there is a great difference in palms some being far superior to others for the purpose, only those best varieties most suitable are the ones to buy. Say a dozen palms are wanted, then I would recommend that the collection consist of just four varieties, viz.: 1 *Areca lutescens*, 2 *Kentias*—either *Belmoreana*, *Forsteriana* or *Australis* (they are very similar in every way); 2 *Phoenix reclinata* (cheaper than *rupicola* and quite as good for the purpose), and 1 *Latania borbonica*. Even if a larger number were required I would hardly feel inclined to recommend any addition to the assortment. These possess all the qualities needed—beauty, distinctiveness and hardiness, they are deservedly the most popular varieties, and as a consequence good plants can usually be procured at moderate prices and this is an important point to consider.

There are some other palms perhaps equally as good for the purpose, but are always scarce and consequently high in price. The varieties of *Rhapis flabelliformis* and *humilis* can not be excelled for decorative purposes, but unfortunately are always scarce. It is generally very hard to procure good specimens and I

think absolutely impossible to buy more than a very limited quantity at any time. A few years ago quite a large number of *Scaevola elegans* were used, now they are seldom asked for, the foliage is so easily injured that it can not be classed among the best palms for decorative purposes. For small work where plants one or two feet high can be used, *Cocos Weddelliana* has proven very valuable. None can surpass it in beauty, and if care is taken not to over water them, keeping them rather dry at the roots they will retain their health and beauty and stand considerable exposure.

In addition to the few varieties of palms I have named it will be well to have a small stock of other decorative foliage plants. *Ficus elastica* will give a good effect, and I think most florists are aware that it will stand as much abuse as almost any plant that grows. *Pandanus utilis* is another excellent plant and is always quite plentiful. *P. Veitchii* will make an elegant addition to the collection, but unfortunately is never plentiful, when it can be procured its beautiful variegated foliage gives a splendid effect. The *aspidistras* so well suited in every way are also somewhat scarce, they were never until recently appreciated as much as they should have been I think, or the stock would not have been allowed to get so low, however we all are trying hard to get up a stock and I hope in a short time a fair supply can be offered for sale. *Dracena fragrans* is another very good plant for the purpose where rather low growing plants can be used.

I do not think it is necessary to make any addition to the list of plants I have already named; nothing is gained by too great an assortment. The best effect in decorations is gained by grouping together such as are most distinctive and contrast well with each other, for instance *Chamerops excelsa* and *Latania borbonica* would not look well together, but substitute *Areca lutescens* for the *chamerops* and an excellent effect is produced. One of the former can be dispensed with and any person familiar with the qualities of the two will certainly pronounce the *latania* the much more valuable palm.

Often the desire to have variety induces the florist to buy what will soon prove of no use whatever to him. This mania for variety has already sunk thousands of dollars for us, has spoiled our catalogues, and is now about to give no end of work to the Committee on Nomenclature. Sometimes it seems to me the florist endeavors to turn his store or conservatory into a sort of botanical garden by littering it up with a lot of useless stuff merely for the sake of having a variety of kinds. Usually the conservatory so stocked soon gets the appearance of a home for incurables or a portion at least a cemetery; the pots and labels remain to mark the spot where once grew a handsome plant, but unfortunately the plant had not the constitution to stand what was required of it, yet the florist keeps the pot and label hoping the plant is not quite dead and with care may recover. There is little chance of such recovering their health, it would be far better to throw them on the rubbish heap and restock, using better judgment next time in making a selection. Nothing looks worse than a lot of sickly half dead plants standing around, your customers are sure to notice them and perhaps their mental opinion of your ability as a decorator may not be very flattering to you.

CHAS. D. BALL.

Holmesburg, Philadelphia, Pa.

Seedling Palms.

The greatly increased use of palms for house decoration and also for filling conservatories, is being met by a corresponding increase in the number of seedling palms raised from year to year in the establishments of many of the leading florists. That this branch of the business may be overdone in the near future is an opinion freely expressed by some florists, but as the public knowledge of the great utility of these plants becomes more general, it may reasonably be expected that the demand for well grown plants will quite equal the supply for some years to come.

It is not, however, to the commercial side of palm growing that I propose to call attention, but rather to give some general remarks in regard to their culture.

The first requisite to success in the raising of seedling palms is good, fresh seed, and this, in the case of some species, is difficult to procure, on account of the long ocean voyage, during which the seeds invariably lose much of their vitality unless very carefully packed. It will be found that some species suffer much more than others from this cause. *Kentia Belmoreana*, for example, apparently, decays much more rapidly than *Kentia Forsteriana* when packed in precisely the same manner and sent at the same time.

The seed of that most useful palm, *Areca lutescens*, though easy to germinate, does not keep well, and consequently it should be sown as soon as possible after its arrival, and if it is fresh it will germinate in three or four weeks, and may be potted off at the end of three months.

Among the palms in general use probably the easiest and quickest to germinate is *Livistonia Chinensis* (or, as more generally known, *Latania Borbonica*). Seeds of this species under favorable conditions germinate in about two weeks after planting and are ready to pot off in two month's time.

Cocos Weddelliana is one of the easiest of its family to raise from seed, though not always making so good progress after the first potting, owing to the fact that the long, stiff tap root, which is made during the first growth of the seedling, is very brittle, and is, in consequence, frequently broken or otherwise injured in potting. This gives the young plant a severe check; and if accompanied with a slight excess of water such an injury often causes the death of the seedling.

The kentias are rather slower in germinating and sometimes take from six to eight months for the operation, and besides this it is seldom that more than 50 per cent of the seeds prove good. This fact, coupled with that of the comparatively slow growth of the young plants, undoubtedly has much to do with the high prices at which good plants of this species are sold.

The soil for palm seeds should be rather lighter in composition than that in which established plants are grown, and may consist of equal portions of peat and light loam, with sand enough to make the mixture open and easy to drain, the latter point being worthy of attention, for when the soil is allowed to become too wet many of the seeds are sure to rot.

The seeds may be planted in either pots, pans or wooden boxes, an objection to the latter being their liability to breed fungus, the earthenware vessels being therefore found the most satisfactory, and for convenience four to six inch pots are preferable. As a steady bottom heat is essential for the rapid germination of



PHOENIX RECLINATA

palm seeds, the pots containing them should be placed in the propagating house or some similar structure and plunged in cocoa fibre or coal ashes, the cocoa fibre being the better conductor of heat of the two and also cleaner to handle.

Care should be given to watering, to keep the soil damp without making it sodden until the seedlings have developed their first leaves, after which water may be given much more freely without injury to the plants. As to the time for potting off, it will be found best with most species to wait until the second leaf begins to push up, but with some of the free growing sorts, such as *Areca lutescens* and *Livistonia Chinensis*, it is not necessary to prolong the time to this extent, and plants may be potted as soon as the first leaf is fully expanded; but they should in any case be kept in a warm house and shaded from the direct sunlight until they are well established. — *W. H. Taplin, in Garden and Forest.*

Basket and Vase Plants.

Trailing plants for vases and hanging baskets are indispensable to every florist, and whoever has a great many large vases and baskets to fill generally will find himself getting short after filling half or three quarters of them unless he grows very large quantities of such stuff.

I submit herewith a few suggestions and a list of the principal varieties I grow for my own trade, and these few hints may, I hope, help some one who may have found it rather difficult to grow enough good plants of this description in his limited space, and who if he ever had to buy such plants for immediate use found to his sorrow on their arrival that they were entirely too small to make any show at all.

Good plants of nearly all enumerated here can not be grown on benches set as close together as we would set any

upright growing plants, and therefore we reserve the front row next to the walks on every bench and bed in the greenhouses for them. There they have ample room for drooping down and will not get entangled as would be the case if set across a bench or bed in the ordinary style. Every plant has here a chance to spread, very few will get smothered by their neighbors and they are not much in the way. We endeavor to grow large plants rather than a multitude of small stuff and find it to give good satisfaction. Many a good florist may have a different opinion as to the holding over of some varieties for almost a year, but I am convinced that it pays better to plant six or eight good well grown vines into a vase, and thereby make it look full and finished, instead of using twice or three times that number of small young stuff and then after all not accomplish the same end. One or two good sized one year old plants make more show in a vase than a dozen small ones will ever do, even at the end of the season. No matter how well and artistically the main portion or center of a vase is filled and arranged, without a number of vines around the outer edge it looks unfinished and bare and therefore a variety of good sized trailing plants are indispensable; if we have none of suitable length and correspondingly branchy the result will be disappointment on both sides.

Vinca major var. heads the list with me; we only use one year old plants grown from cuttings the previous year and planted out in open ground, we consider the potting off of the cuttings waste of time and therefore leave them in the sand bed until planting time. In October all the soil is shaken from the plants and they are potted in 5-inch pots (the longest branches are either cut clean out or the ends cut off at a proper length) and wintered in a frame or in green-



POINCEANA

house, but by the first week in March should go in a moderate heat and be repotted in fresh soil and 6-inch pots and be placed along the edge of beds and benches in single rows.

Sencio heterophylla or German Ivy, as it is generally called, is a very rampant growing vine, always healthy looking and is indispensable for baskets or vases. About March 1 we cut up a lot of vines and insert two single eye cuttings in a 3 or 3½-inch pot filled with good soil, and repeat the same again in April with a second lot, the first being used for the larger vases and the second batch will be strong enough for hanging baskets and smaller urns. They will root in these pots just as well as in the propagating bench and we save the trouble of potting off.

Convolvulus mauritanicus is a very valuable plant for the purpose, but the cuttings should be made the year before, some time in early summer and potted off into 2½ or 3 inch pots in which they may remain until the following February or March, when they will require a 3½ or 4-inch pot; it is a charming sight when the plants are covered with the light blue saucer-shaped flowers in spring and early summer; the plant will stand our hot and dry weather admirably and still look luxuriant all the year round.

Sedum carneum is another good thing for dry situations and we grow it in quantity, planting and rooting in the pots like the German ivy to save labor; February or March is time enough for this. I do not know for certain that *S.*

carneum is the right name for this plant, but at any rate it is a green sport from the variegated variety originated with me some years ago, and it grows so much better and stronger, producing great clusters of yellow flowers in May, June and July, that I discarded the variegated form entirely. The plants will droop over the pots from 12 to 18 inches and correspondingly branchy, while the variegated kind is generally much shorter.

Lobelia I place next and we grow two sizes of them. Seeds sown in November give us plants for large vases and are in 4 and 5-inch pots covered with bloom by May 1. A second sowing in January, however, is the main stock and these may be grown on a bench set the whole width across, for they will not droop so much over or entangle like other things, but in order to get good plants should be allowed ample space as soon as they show signs of beginning to run.

Ficus repens is seldom grown for this purpose, but I have found one year old plants among the most useful; we grow a lot of cuttings in early summer and keep them in 2½-inch pots until February, when they are shifted to a 3½ or 4-inch. They make nice well furnished plants by a little pinching and ordinary care, fill out a big space in a vase and will stand rough winds and dry weather exceedingly well.

Ampelopsis Veitchii is another plant that not everybody would use in a vase, but in order to have good spreading plants we also have to grow them for about a year and then it is in proper con-

dition to use even in the largest size vases. The little plants after rooting may be planted out for a season and trimmed back short at potting time in the fall, or they may be grown in 6-inch pots until February or March when they require repotting and a good heat to start them into growth.

Mesembryanthemum mutabile and *M. blandum* both we find very desirable for urns, vases or baskets of every description, and they do well in the most exposed and driest situations, but do equally well in any place, charming as they are in bloom all summer. We root the cuttings for the larger plants in October or November and in February for the smaller sizes.

Alopecurus aureus marginatus is a good rampant growing grass-like plant, with rather broad and short blunt blades, producing long short-jointed drooping or running stems, thickly set at every joint with a whirl of beautifully variegated leaflets half inch wide and from two to five inches long. These stems often attain a length of three feet and over in a few months. Propagation is easy, for by cutting the stems into pieces every joint will make a plant in a few months. It will stand more rough winds and dry weather than any long drooping vine I know of and looks well at all seasons.

Glechoma hederacea var. is a first class creeping vine, grows as freely as the well known green variety, forming a compact sheet of white and green, so densely grow the stems and leaves interweaving each other into one mass, drooping over the edge of basket or vase and by its silvery variegation is seen from far off distinctly.

Tradescantia are not to be despised for partially or wholly shaded positions, while in the open sun they do not succeed very well. We only grow the variegated types and take particular pains to select the very best colored cuttings, rejecting all those that show too much green, as they are very apt to sport back to the original green parent.

Ampelopsis sempervirens is in many respects preferable to *A. Veitchii* as a basket or vase plant, as it makes stiffer growth and the dark, glossy foliage is retained all the year around, but it is rather scarce and not many florists would use it in vases on that account. The cuttings of this should also be rooted the summer before or else the plants would be too small.

Linaria cymbalaria (Kennilworth Ivy) we grow to some extent, but we must not set them too near together while growing fast, or else they will run into each other and get entangled. When once established in a pot it will take care of itself and grow in every direction creeping over everything and hanging over the rim so far that we frequently have to shorten them before using. In a vase it has such a graceful habit to form tracery with its hair-like branchlets set with roundish scalloped leaves over and among the coarser growing vines that I would hesitate to do without it, although we generally have to spend more care on this vine than any other if we want large sized plants, owing to their everlastingly running into each other.

Saxifraga sarmentosa we use frequently, but plants have to be large and show plenty of runners to look well, if divided in January or February good sized plants will be obtained in time for filling vases.

Mahernia odorata makes an excellent plant for the purpose if left to grow without tying, the finely cut foliage contrasts well with the more solid leaves of other

plants, and besides this the golden bell-shaped flowers are very fragrant and admired by everybody. These plants also should be about one year old before we use them.

Of *Othonna crassifolia* we grow two sizes in 3 and 3½-inch pots, the smaller ones for hanging baskets, the others for vases in rather exposed positions; the larger plants have also the habit of running into each other and we generally set them alternately with other plants like *ampelopsis* or grasses etc along the edge of benches.

Maurandia we use freely wherever we can. Make cuttings or sow seed in November and after potting off keep pinched in until about April 1 and the result is many streamers from a compact bushy base.

Ivy *Geraniums* of every description I should mention here; they are used largely by every one, and we do it too, but in reality they are not the right thing for the purpose and as long as we have enough of other vines we seldom plant any in vases, they are too liable to lose their foliage if left dry in hot weather, though their blooming quality should be considered in favor of them.

Besides these plants we grow a number of others, such as double and single *tropaeolums*, *alyssum*, *Isoplepis gracilis*, *Festuca glauca*, *Fragaria indica* and others, mostly in 3 inch pots to fill out a small gap in a vase and to make it look full when filled—for my customers at least want their vases to look well filled and do not want to wait for them to grow full. We can not do this with small plants as cheaply as when we have a few good large vines for every one, but after all some florists may think growing such stuff for almost a year would not pay, perhaps a trial with a limited quantity would convince them to the contrary.

Rochester, N. Y. JOHN B. KELLER.

Notes From Washington.

BY WM. FALCONER.

I GOT INTO Washington Saturday, June 29, and found the trees and shrubs and lawns and flowers as bright and gay as could be. The whole city is a vast garden, or rather a series of gardens.

THIS SEASON, so far, has been the wettest the gardeners remember, and on this account together with the very stiff clayey soil that prevails there, spring planting was much delayed.

THE PEOPLE of Washington are strict Sabbatharians; one needn't go there on Sunday except to church.

BUT I HAD the good fortune to first call upon my old time friend Mr. W. R. Smith, the curator of the Government Botanical Gardens and one of the Park-ing Commissioners of the city of Washington. His kindness, hospitality and attention to me were extreme, and to him I am indebted for my most enjoyable visit to the capital.

MR. SMITH has been in charge of the Botanical Gardens for the last thirty-six years. He is known to most every florist in the land, and his genial face must be familiar to every one who has visited the florists' conventions. He is regarded as having the best all-round knowledge of horticulture and plants of any man in the country. And he is an earnest student.

THE BOTANICAL GARDENS are alongside of the Capitol grounds and occupy the lowest ground in the city. The land is level and a square block. The soil is a stiff clay. There are extensive ranges of greenhouses, some very large and

roomy, and others of lesser altitude for small plants and propagating.

AT THE SAME time that the recent flood devastated the Conemaugh valley all this part of Washington was submerged, not so much by rain water as by damned back sewerage. The greenhouses stood three to four feet deep in this poisonous sea, and the pot plants upon the benches floated about in the flood. And on the ground floor of Mr. Smith's residence the water stood 29 inches deep. The results of this disastrous overtaking is now evident in death or serious injury among many of the plants and a sorrowful superintendent. Of agaves alone he has lost 18 species.

THE ROCKERIES.—Beside the office and greenhouses extensive rockeries have recently been built. These are not meant as an artistic feature but as a home for plants. A vast number of species of little plants find a place in a botanic garden that are not generally cultivated, and to afford to these the best cultural conditions, a position where they can be kept together dry at the top and thoroughly drained underneath, and where they are always under the eye of the gardener, is the purpose of the rockery. The stones are set deep in the ground with a liberal supply of rotted leaf soil under and about them so as to encourage the roots of the plants to creep around and under the rocks and in this way find food and moisture and keep cool in warm summer weather. Being elevated above the ground and so well drained there is far less danger in winter to plants

that are grown in rockeries than to those in the level open borders.

STEPPING-STONE PATHWAYS wind through the rockeries to admit of easily reaching any part of them, and they nestle among evergreen mats of alpine pinks, dwarf phloxes, ajuga, crimson-leaved oxalis, *Sibthorpia*, marsh pennywort, golden moneywort (*Lysimachia*), *colissenii* ivy (*Linaria*), creeping veronicas, different kinds of sedums as *S. acre*, *album*, *Hispanicum*, *Sieboldii*, and the like; variegated ground ivy (*Nepeta glechoma*), *Lespedeza striata* and similar little spreading plants. *Fragaria indica*, used in this way, was also very pretty, deceptive rather, for it is studded all over with tempting luscious like red strawberries, but, alas, they are not edible.

LITTLE PONDS of water in the rockeries serve as homes for the smaller aquatics. And there are certain rockeries devoted to certain botanical races of plants. Two very interesting patches are filled with sensitive and insectivorous plants. Among the sensitive plants were *Oxalis sensitiva*, *Mimosa sensitiva*, *M. pudica*, and the telegraph plant, *Desmodium gyrans*. The insect eating plants included our many species of northern and southern *sarracénias*, also *dionæas* and *pinguiculas*. And in a greenhouse alongside of these is a large collection of sundews (*Drosera*) which are also reckoned among insectivorous plants.

ARISTOLOCHIA ELEGANS is a beautiful tropical species brought into notice a few years ago by having grown and bloomed and seeded so freely in Dr. Richardson's



PANDANUS VITICULUS



PANDANUS UTILIS.

gardens in New Orleans. Mr. S. raised lots of it from seed and has it in quantity planted out about his rockwork and garden.

ARISTOLOCHIA CILIOSA is a small variegated-leaved species from Brazil. It filled some of the pockets in the rockery and was in bloom. Its flowers are purple yellow and deeply fringed.

A VERY distinctly white variegated rib grass (*Plantanus lanceolata*) was seen in a corner. But its mother is a bad weed.

CROZY'S GLADIOLUS FLOWERED CANNAS were in favor, and large clumps in brilliant bloom in the borders and flower beds.

BEGONIA EVANSIANA is perfectly hardy and comes up abundantly in the rockeries.

BAMBUSA FORTUNEI VARIEGATA is also hardy and a thrifty grower one to two feet high when it gets good, moist ground and a little shade. It is also hardy as far north as Boston.

OPUNTIA VULGARIS, Rafinesquii and its varieties, also Missouriensis and its forms enjoy themselves upon the rockeries. But I was surprised to find that *Opuntia arborescens* was also hardy here.

THE CORAL-TREE (*Erythrina cristagalli*) had been wintered within a cold frame and at the back. The sashes are now uncovered and the plants are huge bushes with long, massive, terminal racemes of deep red flowers.

THE WHITE BLADDER FLOWER (*Physianthus albens*) was grown in a greenhouse, but a hole was made in the glass

and the vine turned outside. It enjoys the open air in summer and is now a mass of white flowers.

STIGMAPHYLLUM CHLIATUM is a yellow-flowering Brazilian vine that has long been in cultivation. Mr. Smith has it planted out on a little fence, and he assures me it grows and blooms beautifully in this way in summer. At the White House I found it used as a greenhouse creeper.

THE FINEST collection of Pitcher plants in Washington is at the Botanical Gardens and they are splendidly pitchered and highly colored specimens. This is greatly due to Mr. Oliver, the gardener in charge who is passionately fond of this class of plants.

MR. SMITH insists that the current idea that the insects enter the pitchers and get drowned in the water is erroneous. They enter the pitchers and partake of the liquor generated in these vessels and thereby become stupefied or intoxicated and die; or, to use a vulgar phrase, they drink and die drunk. But as soon as this liquor becomes diluted with ordinary water its fatal purpose lessens, and he has found insects enter and again leave the pitchers with seeming impunity. In their natural state most all pitcher plants, whether *sarracenia*, *darlingtonia* or *nepenthes* have their pitcher mouths so guarded as to shed the water. There are a few exceptions to this rule, our common *Sarracenia purpurea* is one, rain water may enter it. Furthermore, he finds that certain species of pitcher plants are

attacked by insects peculiar to themselves.

MR. SMITH is opposed to side ventilation for tropical plants, indeed he does not like door draughts, even in summer. He cited his *nepenthes* house, which is a roomy curvilinear structure as an example. He used to have a door at either end of this greenhouse, also side ventilators for use when needed. But he assures me it was not till he shut up the side ventilators permanently and closed up both end doors and opened one in the front of the house instead, that he was enabled to get the wealth of magnificent pitchers that now so richly drape the soaking, mossy baskets that hang from the roof of the house. And I observe that the large rose growers in their new greenhouses make ample provision for top ventilation, but none whatever for ventilating from the sides.

OF PALMS, Mr. Smith is said to have the most complete collection in the country. Some of his specimens are immense, spreading from side to side of the big greenhouse and pushing their young leaves clear through the glass roof. He considers the following a good set for general cultivation: *Thrinax elegans*, *T. argentea*, *T. parviflora*, *Kentia australis*, *K. Belmoreana*, *K. Forsteriana*, *K. Canterburyana*, *Sabal umbraulifera* (the Blackburn fan palm), *Areca Bueri*, *A. sapida*, *A. lutescens*, *Phoenix reclinata*, *Cocos australis*, *C. Weddelliana* and *Lantania Borbonica*. He regards *Areca lutescens* as a feather palm an excellent companion to *Lantania Borbonica* as a fan palm, and both of these everybody's palms.

HYMENOCALLIS CALATHINUM was in good bloom out of doors. This is a Brazilian bulbous plant of the greatest merit; it has large, white, fragrant flowers. We lift the bulbs in fall, keep them dry and away from frost over winter and plant them out in early summer. I may here remark that any one having a lot of these bulbs that have been well ripened and rested can force them for Easter or any other occasion they please with very little trouble and a certainty of getting bloom inside of six weeks after introducing them to moderate warmth; and they can be hurried on in four weeks.

OF YUCCAS there was a fine display most everywhere. *Y. angustifolia*, the poorest one, was past; *Y. filamentosa* and its varieties were at their best or on the wane, and *Y. gloriosa* and its variety *recurvifolia* were in their prime. Now, all of these yuccas are good plants to handle. They germinate readily from seed, grow easily, last forever and bloom with precision every summer. The blossoms, although showy and produced in quantity, are of little use as cut flowers, but landscape gardeners use large numbers of the plants. *Y. gloriosa* is not hardy in New York, but the others are.

IN CACTISES and other succulents the Botanical Gardens are rich. The plants are grown in pots and plunged out of doors in summer. This is the best way to treat them. If the plants are weak or spotted or damaged plant them out rather than plunge them, but hit and pot them in August, so as to get them well rooted before winter sets in, and leave them conveniently at hand to cover over to ward off rain and mist, both of which are productive of spot.

FOR GENERAL cultivation to winter over in the house and plant out in summer Mr. S. recommends the following: *Opuntia nigricans*, *O. velutophylla*, *Cereus triangularis*, *Echinops*, *Diocleana*, *E. Eylesii*, *E. multiplex*, *E. lino-*

cactus visnaga, *E. pectiniferus*, *E. longihamata*, *Mammillaria pectinata*, *M. bicolor* and *M. floribunda*.

THE SOUTH-SIDE IVY is a new name Mr. Smith has given to *Ampelopsis tricuspidata* (Veitchii); and he has also applied the name of North-side Ivy to the European ivies (*Hedera*). This is because the *ampelopsis* flourishes so bravely on the south or sunny side of buildings; and the European ivies are only satisfactory when grown on the north or shady sides. By these simple names the people at once understand the proper place and use for each ivy.

AMPELOPSIS ROYLEI is after the same fashion as *A. tricuspidata*, but of bolder habit and has larger and more leathery leaves. Mr. S. has a very good word for it, so has John Saul, and both grow lots of it. It seeds freely and they raise it from seed as well as from cuttings.

HORSE-MINT (*Monarda*) in variety, some with bright red blooms and others with purple and white flowers formed the largest masses of color in the grounds. Pretty and good perennials but not adapted for florists' work.

TWO AGAVES were in bloom here and one at Arlington, but none of them were showy. And in passing through New York I found a larger species at Peter Henderson's door with a rising stem a dozen feet high.

Arlington, General Lee's Old Home.

Is situated on an eminence a few miles from Washington and commands a splendid view of the capital. It is now owned by the U. S. government and used as a military cemetery. The mansion house is preserved in its former beauty and completeness, but a great deal of alterations have been effected in the grounds to render them fitted for the use to which they are now devoted. The place is freely open to the public.

Mr. Rhodes, the superintending gardener, treated us with much courtesy.

A very large greenhouse with outside hot water heated frames was erected last year for the propagation and accommodation of bedding plants and the storing of palms, yuccas, agaves and other bulky subjects used out of doors in summer.

The old greenhouse has been removed and the ground there and beyond it for some distance graded and sodded and a new flower garden laid out and planted with bedding plants. In the beds a good deal of lettering with *echeverias* has been done.

Sibthorpia europæa is used here as elsewhere very freely as a green carpeting or groundwork in flower beds, and I am informed that when used in this way it is very satisfactory, growing and spreading well, forming a close carpet and not likely to rot off in summer. Who has now got the variegated variety of it? Some years ago it was common enough about Cincinnati, but in answer to recent enquiries I can find no trace of it there now.

Rockery-like beds in shady places and made up of a pile of old tree root stumps and furnished with palms, cycads, agaves and the like in pots and set among the stumps are very pleasingly arranged. The earth in the pots, together with the pots themselves, also the root stumps are covered over with thin sods of wood moss, which by being kept moist has assumed a perfectly natural appearance and looks as if it had been growing there for several years instead of a few weeks as is the case.

Saxifraga sarmentosa has naturalized itself about the base of these rooteries and is hardy.

The common Water Penny-Wort (*Hydrocotyle*) has also established itself in the moss around the rooteries and is spreading up among the moss about the pots. This is a particularly pleasing feature and gives the whole a very natural appearance.

Tecoma radicans abounds by the wayside, where it scrambles over bushes and banks and climbs up into the trees from whose branches its trumpet laden arms now depend in gay estate. Its variety *sanguinea* is trained against one of the Arlington out buildings, and an exceptionally fine form which Mr. Smith regards as a probable hybrid between *T. radicans* and *T. grandiflora* was conspicuous for its floral beauty.

The true *Tecoma grandiflora* of China and Japan was also in bloom against one of the walls of a building. What a



A. P. STEA.

splendid vine it is with its massive panicles of large and showy red flowers. But it is not reliably hardy much north of New York.

The English Ivy (*Hedera*), here, as elsewhere, was made good use of; it is employed to run over banks and stones and clothe the stems of trees. Mr. Rhodes remarked that after this rather than root out the stumps of broken trees he would head them off and cover them with ivy. Several old tree trunks are covered in this way. W. F.

George Washington's Old Home.

Mount Vernon, in Virginia, is situated on the right bank of the Potomac, sixteen miles south of the city of Washington. In Washington's time the estate comprised about 8,000 acres. The mansion house is a beautiful, spacious and homey two story building and about it are the many out-buildings and servants' quarters, just as they were in the time of the "Father of his Country." Here also is Washington's tomb.

On every side we find Washington's taste for landscape gardening and horticulture. Broad landscapes and long vistas occur here and there, and wide lawns are spread before the fronts of the mansion. Trees were selected and planted with a definite and well considered purpose, and there are many magnificent old specimens of oak, ash, linden, elm, tulip and other trees and the largest sassafras tree I have ever seen; indeed so fine was this specimen, that Mr. Smith, of Washington, who was with me, had it photographed at once.

The flower garden is preserved in its old style. It is an inclosed space, surrounded and intersected with gravel walks edged with box, and a scroll pattern of beds also edged or defined with box. But the box, although clipped a little every year, has in a hundred years attained quite massive proportions.

One of the sources of income for the maintenance of the place is derived from the sale of plants and flowers, and a professional florist is employed for this purpose. Little plants, hardy and tender, are gotten up in small pots and sold to visitors who buy them as a souvenir of their visit to Mount Vernon.

But what surprised me in this plant business was the scraps of coleus, geraniums and the like that were displayed for sale. The varieties now grown of these did not exist at all in Washington's lifetime. Visitors seeking souvenirs, no doubt would prefer something indigenous to the estate, for instance oaks, tulip trees, magnolias, maples, lindens, trumpet vine, or something in the way of a part of the plants that he had planted, for example young boxwood plants from the scroll edgings of the flower garden, something they could bring home with them and which would last a lifetime.

The Mary Washington Rose: According to the guide book this is a delicate tea-scented rose, a seedling raised by General Washington and named for his mother. "Large numbers of it are yearly raised and readily sold."

Many evidences around the old home show that General Washington was a devoted horticulturist and a tasteful landscape artist. And I find that his library contained Mawe's Gardener, Langley on Gardening, Miller's Gardener's Dictionary, Miller's Gardener's Calendar, Kennedy on Gardening, and the Hothouse Gardener, together with other works on rural adornment and many books on agriculture. W. F.

The Department of Public Parks.

The greenhouse establishment of the department of public parks and gardens is a village of glass not far from the Washington Monument. Mr. George Brown is the superintending gardener, not only of the greenhouses but also of the parks and squares.

As might be expected a large portion of these greenhouses are devoted to the propagating and raising of bedding plants, of which great quantities are used, and are now comparatively empty. Chrysanthemums by the thousand are now being potted; they are to take the place of the ordinary summer bedding plants when these are removed in fall, for the the chrysanthemums have ample time to bloom before the severity of winter cuts them off.

There are also extensive ranges of greenhouses for the cultivation of palms, dracænas, fescues, anthuriums, cycads, aralias, ferns and other decorative plants, not for use in outdoor garden display, but for decorating the White House and other state departments. Cut flowers in quantity are also grown for the same end.

Mr. Brown propagates all of his large dracænas *asfragens*, *ensifolia*, and *Goldiana* in small bottles of water plunged into a tan hotbed in a glass case in the propagating house. He claims that in this way they root very freely and in transferring them to pots of soil he has no trouble. And he can strike large pieces, and in this way get useful plants up quickly.

The common variegated-leaved *althæa* is much esteemed as a fine-foliage pot



N. W. FORT, H. CANNA

plant in winter. The shrubs are planted out in nursery rows in summer, and lifted and potted in fall early enough so as not to cause them to drop any of their leaves. Then keep them moist and cool, but do not allow frost to reach them else it will defoliate them.

The variegated-leaved *Dracena fragrans*, usually known as *D. Lindenii*, is greatly appreciated as a "furnishing" plant, as it remains in good condition for a long time when used for house decoration. But the plain green *D. fragrans* itself cannot be excelled in this way.

Dracena Kneckeii, also a bold green-leaved sort, is much grown for "furnishing" purposes, and the florists here speak of it with much favor, indeed, Mr. Brown regards it as being the best of all.

W. F.

New York Notes and Comments.

The "Devil's Tree" mentioned by Mr. Falconer on page 511 is very impressive, but it must take a back seat when compared with the *Crinoida Dajecana* or man-eating tree of Madagascar, which will casually devour a botanist or a crocodile with equal ease. The story of this tree appeared in the New York *World* a

great many years ago, it was reprinted in *Current Literature* of last July. The *Crinoida* may be considered a slight exaggeration of Mr. W. K. Smith's carnivorous nepenthes, which, already addicted to a diet of lull frogs, may in the future entertain sinister designs on the genial botanist himself.

Probably the most interesting feature now on view at Peter Henderson's nurseries is the collection of new French cannas. Previously almost the only canna we had worth growing for flowers as well as foliage was *Ehemannii*, but these new varieties supply our wants in this direction. They can only be compared with the gladiolus, and they have one advantage which all the gladioli lack, and that is handsome foliage. They are all dwarf in habit; from two feet to thirty inches would, I imagine, be a fair average. The greater proportion of the foliage is green, though there are some handsome bronzes among them. They were planted about the first of June, on the 5th of July they were freely in bloom and giving vigorous promise of a floriferous summer. There are about forty varieties to be seen, among them a number of handsome seedlings raised at

Henderson's, but the larger proportion was imported from France.

The flowers are, as a rule, iris-like in shape, large and borne in thick spikes. *Albinal Courbet* is clear golden yellow, thickly splashed with crimson. *C. Canton* shows similar colors, but larger shower flowers and broader petals, while the splashes are flame color rather than crimson. *Mme. Just* is orange shading into flame. *Cardoux* is rich vermilion with bronze foliage. *Madame de Laband* scarlet. *Edward Andre* bright crimson. *Ulrich Brunner* glowing vermilion, with broad petals and handsome spikes. If they were not all so beautiful one might be tempted to call this the finest of the lot. *Rival Mascot*, scarlet, with a bit of orange in the throat. *Antoine Crozy*, scarlet, petals very broad. The parti-colored varieties are very suggestive of an orchid; the flecks and spots are like those of an odontoglot. The value of these plants is apparent at first glance; they will form a very attractive feature in fine bedding out. Many of the red ones suggest *Ehemannii* in color and shape of bloom, but the spikes are always erect, not drooping.

At the same place a lot of very fine *Magna Chartas* were put outside in 10 inch pots, by using only these large well developed plants in perfect condition flowers of large size are expected. A lot of these roses were planted in boxes, about six in each, according to the system pursued by Julius Roehrs; they are far more easily handled than pots, and give increased economy in labor. Among other roses a house of *Beauties* was especially good, giving fine promise for next winter. A lot of *Souvenir de Wootton* showed that this newcomer is to be tried thoroughly next winter.

A handy way of growing chrysanthemums was noted, they were planted in boxes and stood outside. This entirely does away with the nuisance of digging up and replanting in the fall, the boxes are lifted in as needed. The varieties grown for cut flowers were simply red, yellow and white. None of the queer old shades are grown for this purpose, experience every where showing that flower buyers don't care for them. Mrs. Wheeler, Mrs. Jessie Barr and *Glorious* are three of the most popular, and consequently most salable. There is no doubt that Mrs. Fottler will be thoroughly salable as soon as it is grown in quantity, for its exquisite *La France* pink is just the color women want, and the flower is large and shapely too.

Each year experience proves that the regular staples for the bedding trade are roses, geraniums, coleus and the like, outside little known stuff is not cared for. Hardy herbaceous is hardly salable at all. The use of sub-tropical plants increases among those who have a house where stuff can be carried over for the winter, but the largest part of the nursery trade comes from people who can't do this.

Florists in New York complain that their bedding trade is dropping off because people now leave town so early in the season that it is not worth while to do anything in this line, so vases and window boxes are neglected.

Trade is at present very dull, fortunately there are few flowers in the market. There are literally no roses if a florist wants to fill a basket with anything good he has to use orchids. Some of the water lilies are in, among them the pink *Care Codliv*.

Jules Lachaume, of the *Hawa* garden of Acclimatization, is making his annual stay in N. Y. EMILY LOUISE TULLIS.

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THE SPRING PLANT TRADE.

The reports from all sections which appear in this issue are well worthy of a careful study by all in the trade.

For several years past our reports have shown a decided annual increase in the spring sales of plants, but this year's reports not only fail to show an increase but indicate a decrease in the total sales from those of last season.

For this a number of reasons may be advanced. The remarkably mild winter undoubtedly had its effect, not only in that many plants were successfully carried over which usually have to be replaced annually, but in that trade in general was curtailed and money was not as plentiful with those who constitute a large proportion of the buyers of ornamental plants. And finally the very unfavorable weather during the best part of the selling season discouraged from planting many who were not affected by the reasons previously named, for when the weather had at last become settled it was time for the annual flight to the summer resorts. Had it not been for the unfortunate weather during the selling season sales would in all probability have been equal to last season, but still have been short of the usual annual increase.

We are pleased to note that the latest reviews of trade by the Commercial Agencies report improved prospects for business and that an active fall season is anticipated. Crop prospects are good and other indications are at present favorable.

But it will undoubtedly be wise to be conservative in building this summer. Better put what you have into best condition rather than increase your glass surface. And certainly do not build unless you have the money in hand to pay cash as you go. Do not assume heavy obligations to be met only by the sale of the product of the new houses.

Another fact to be noted is the large number reporting a lessened demand for colens and similar foliage plants. Last year quite a number reported an increased call for plants of this kind and the present lessened demand would indicate that their popularity may be somewhat on the wane; though their failure to sell this spring may have been due to the cold weather which would naturally militate very strongly against the sale of such a tender plant as the colens.

COST OF PRODUCTION.

In *Garden and Forest* for June 26, appears an article entitled "Peter Henderson's Plant Factory," which contains the following paragraph:

"It looks like slaughter," said Mr. Henderson, "to sell plants at a dollar a hundred, but it is a fact that the actual cost to us of producing these plants is often no more than thirty cents a hundred. Here are the figures—Four men will take

off, make and put in the bench 10,000 cuttings a day; two men and a boy, or say three men, will pot the same when rooted in another day; three men in a day will knock the plants out of the pots and pack them in boxes. That is, ten days' work has been all that was needed to get 10,000 plants ready for market. If we call this labor worth \$15, we can add \$15 more as a good allowance to be charged against the plants for firing and delivery, so that \$30 is a liberal estimate for the cost of the 10,000 plants. The same could be proved of some plants raised from seed—such as asters, balsams, Drummond's phlox, etc., so that even with expensive structures, on land where every building lot of 100 x 25 feet is worth \$1,000, there is no actual loss on certain plants even at the low price mentioned when they are sold in sufficient quantities."

We do not know whether Mr. Henderson has taken account of the cost of care while growing, interest, taxes, wear and tear etc., but presume this is included in his estimate; and if this is so, then the cost of producing bedding plants has been brought down to a much lower figure than we had believed possible.

Can any other grower produce bedding plants as cheaply?

PLANTS FOR DECORATING.—In this issue appears a very liberally illustrated article on "Plants best adapted for decorating," which we consider of great value to the trade at this time. The constantly increasing demand for plant decorations must be met, but many florists who realize this have been in doubt as to the kinds most available and above all the most profitable for the purpose. To such we would say that no better selection can be made than that indicated by Mr. Ball and that we heartily agree with him as to the wisdom of avoiding too great an assortment. Our illustrations are from photographs of plants of the sizes which can be obtained in quantity at moderate prices—the palms from 2½ to 3½ feet in height.

EXPRESS RATES.—Up to time of going to press the Traffic Committee of the Express Companies had not taken final action in regard to modifying the classification card which went into effect June 15. As abundance of time has elapsed for each member of the committee to have signified his approval or disapproval of the modifying rule it is probable that some member has made objection. If such is the case it may be several weeks before the matter is finally adjusted. It is believed by the officials we have seen that if any objection has been made it is merely to the phraseology and not to the intent of the modifying rule.

THE BUFFALO CONVENTION.—The time is rapidly approaching when the Society of American Florists will again meet in annual convention, and there is every reason to believe that the fifth annual meeting will show the usual increase in attendance over preceding conventions. A most excellent programme has been prepared, the convention hall is admirably adapted to the purpose, the exhibition hall is under the same roof, hotel accommodations are ample and cheap, a rate of a fare and one third for the round trip on the certificate plan has been secured, and the beautiful city of Buffalo offers open handed hospitality.

HAVE YOU done anything toward assisting the Committee on Nomenclature in their work? If you know of any plant which is known by more than one name you are not doing your duty to the trade at large if you do not at once report it to the committee. Your hearty co-operation is necessary to accomplish effective work. Don't let it be said that you failed to do all in your power to assist the committee in its work.

THE WOOTTON ROSE.—Regarding Mr. Bennett's statement that his Woottons were affected with black spot, Mr. John Cook, of Baltimore, the originator of the rose, writes that Mr. Bennett's is the only complaint received and sends a lot of letters from various florists who say that the rose is free from spot with them. And from information received from other sources we are inclined to the belief that the Wootton is fully as free from the ravages of black spot as any of the hybrid tea class.

OUR CONVENTION SUPPLEMENT will be published with the issue of August 15, and the map and directions it will contain will, we believe, be of considerable value to those attending the meeting at Buffalo. Exhibitors wishing to call special attention to their exhibits will find the supplement a very effective medium.

TUBEROUS BEGONIAS.—Messrs. F. J. Meech & Son, Charlevoix, Mich., send us blooms of eight varieties of tuberous begonias which are of great size and most beautiful colors. There is certainly a great future before this race of begonias.

Arrangements for the Coming Convention.

The local committee has secured rates, as follows from Buffalo Hotels:

Hotel.	Can accommodate.	Rate. Am. plan
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Tift House Block.	150-175	\$3 00 5
Troquois,		
Eagle and Main Sts.	300	3 50-4 00
The Niagara,		
Porter Ave. and Seventh St. 120		3 50-4 50
The Genesee,		
cor. Genesee and Main Sts. 125-150		3 00-3 50
Mansion House,		
cor. Exchange and Main Sts. 75		3 00
Stafford House,		
Washington and Carroll Sts. 50-75		2 00
Tucker's Hotel,		
Exchange and Michigan Sts. 30-40		2 00
United States Hotel,		
cor. Terrace and Pearl Sts. 75-100		1 50-2 00
Eagle House,		
Washington and Eagle Sts. 40-50		2 00
Gruener's Hotel (German),		
20 East Huron St.	40-50	2 00
Southern Hotel,		
Michigan and Seneca Sts. 40-50		1 50
St. John's House,		
30 East Swan St.	40	1 50
Tremont House,		
Washington and Seneca Sts. 60		1 50
Brunswick Hotel,		
Exchange and Wash. Sts. 50		1 50
Fillmore House,		
Michigan and Carroll Sts. 40		1 50

Applications for rooms may be made direct to the hotels, or to Thomas Clayton, chairman hotel committee, 90 Richmond avenue, Buffalo, N. Y.

The White House Gardens.

A spacious conservatory is attached to the mansion and entered by two doors from the state apartments, and used as a promenade for guests during entertainments. Inside, the arrangement consists of side benches all around, wide, straight pathways, and middle step and stair stages. The plants are grown in pots and consist of ordinary decorative fine foliage stock, as dracenas, aralias, crotons, anthuriums, ficuses, and the like. Suspended from the roof over the pathways are baskets filled with ferns and pitcher plants. The whole house has more the appearance of a nurseryman's plant house than a conservatory. The building itself is ample—wide, high and long, and affords every facility for a first-class natural arrangement. Why, therefore this miserable get up—these straight pathways, rigid benches; and this crockery warehouse? Of all places in the country where one would expect to find

an appropriately furnished conservatory it is in the one attached to the Executive Mansion of the President of the United States of America.

Regarding the natural style of arranging plants in conservatories, Mr. William Robinson, the most tasteful horticulturist living and the most eminent horticultural reformer who ever lived, has this to say: "The natural method is the true and satisfying one, and moreover, the one best suited to the gardener, inasmuch as it saves much time, and enables him to produce a ravishing effect in winter, and indeed at all seasons. The common way of exhibiting red pots and stages simply makes the infinite grace of vegetation impossible therein. And this in the very house which we place near the mansion to show the choicest treasures of our collection."

Besides the main conservatory there are also other greenhouses for the cultivation of roses, carnations, orchids and the general run of flowering and foliage stock, ferns and bedding plants, and also tanks for wintering aquatics.

There is no attempt at elaborate flower gardening, at the same time a good many coleuses, geraniums, alternantheras and other gay subjects are displayed in beds. And roses, lilies, gladioluses and like summer-blooming plants are freely grown.

NOTICE.

STOCKHOLDERS MEETING.

CHICAGO, July 10, 1889.
Stockholders of the American Florist Company:
You are hereby notified that the annual meeting of the Stockholders of the American Florist Company will be held in Room 17, Tift House, Buffalo, N. Y., Thursday, August 22, 1889, at 3 o'clock P. M., for the purpose of electing directors and officers for the ensuing term, and for the transaction of such other business as may come before the meeting.

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Valley	.40
Mignonette	.40
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Adiantums	1.00
Albanandas	.10
Pink Pond Lilies	8.00

NEW YORK, July 9.	
Roses, Bon Silene, Gontier	\$1.00
" Perles, Niphotos, Souys	3.00
" Mermets, Brides	1.00
" Cupids	2.00
" La France	5.00
" Am. Beauty	1.00
" Jaques	2.00
" Hybrids	10.00
Carnations, long	1.00
Mignonette	1.00
Smilax	1.00
Adiantums	1.00

PHILADELPHIA, July 9.	
Roses, Brides, La France	\$4.00
" Perles, Niphotos	2.00
" Pierre Guillott's	5.00
" Beauties, Laques	8.00
" Marie Guillott's	2.00
Carnations, short	.75
Carnations, long	.50
Stephanotis	1.00
Water lilies	.40
Coropsis	.40
Peas, mignonette	.20
Pansies, cornflowers	.20
Smilax	15.00
Adiantum ferns	1.00

CHICAGO, July 10.	
Roses, Perle, Niphotos	\$3.00
" Bon Silenes	1.00
" Am. Beauties	12.00
" La France, Mermets	3.00
" Brides	5.00
" Bennetts, Dukes	1.00
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Also plants of above by doz., 100 or 1000. 2, 3 & 4 in. Select Stock. Plants in quantity at discount.
WRITE FOR PRICES

The Seed Trade.

SEED TRADE ASSOCIATION.

H. W. JOHNSON, Philadelphia, president; ALBERT M. McCULLOUGH, Cincinnati, secretary and treasurer. The eighth annual meeting at Saratoga Springs, N. Y., June, 1906.

W. ATLEE BURPEE returned from France July 3. He says the Paris exhibition is grand.

ROCKFORD, ILL.—Geo. S. Haskell has returned from California. E. A. Root has gone east.

CHICAGO—S. Y. Haines, of Minneapolis, and N. Groot & Son, of Holland, passed through here July 5.

THOSE who are best posted believe that A. B. Cleveland could be found in some of the western mining districts.

THE JAMES VICK SEEDSMAN COMPANY is offering increased capital stock to the amount of \$250,000; proposing to make its entire capital stock \$400,000.

BOSTON—Mr. William Meggat was in the city July 2. Mr. W. W. Rawson's new four-horse market wagon brought in a \$600 load of vegetables. The seed business is exceedingly light even for the dull season.

AT THE RECENT meeting of the Seed Trade Association the following general disclaimer of responsibility for seeds sold was unanimously adopted to be used the coming season: "While we exercise the greatest care to have all seeds pure and reliable, we do not give any warranty express or implied. If the purchaser does not accept the seeds on these terms and conditions they must be returned at once, and the money that has been paid for the same will be refunded. (Here follows initials of firm.)"

NEW YORK.—William Elliott & Sons in a circular dated July 1 say: Please to take notice that the undersigned, William Elliott, formerly of Young & Elliott, which firm was dissolved by the death of Mr. Young, has this day associated himself and entered into co partnership with his sons, Carroll S. Elliott and William J. Elliott, under the firm name of William Elliott & Sons, in the business of seedsmen and auctioneers, with a place of business at Nos. 54 and 56 Dey street, New York City, formerly occupied by Young & Elliott.

Coming Exhibitions.

August 20-22, Buffalo.—Exhibition at convention of Society of American Florists.

September 17-20, Boston.—Annual Exhibition Mass. Hort. Society.

November 5-8, Chicago.—Chrysanthemum Show Chicago Florist Club.

November 5-9, Indianapolis.—Chrysanthemum Show Society of Indiana Florists.

November 12-16, Philadelphia.—Chrysanthemum Show Pennsylvania Hort. Society.

November 12-14, Boston.—Chrysanthemum Show Mass Hort Society.

November 12-14, Orange, N. J.—Chrysanthemum Show New Jersey Floricultural Society.

November 12-16, Cincinnati.—Chrysanthemum Show Cincinnati Florist Club.

INDENIA.—In the last number of this publication appear colored plates of *Zygopetalum Gibeckii* N. E. Br.; *Masdevallia*

Shuttleworthii Rehb. f.; *Dendrobium Brymerianum* Rehb. f.; *Odontoglossum Hallii* Lindl. var. *Lindeni*.

News Notes.

BALTIMORE.—Robert Patterson has sold out his florist business.

PROVIDENCE, R. I.—Robert Johnston the florist left June 26 for a trip to Europe.

KANSAS CITY, MO.—The loss of glass by hail on R. S. Brown & Son's greenhouses was 1,500 lights, not 500 as stated in last issue.

DETROIT.—Mr. and Mrs. Philip Breitmeyer left on the 9th inst for a three weeks' trip in the east to include all the prominent cities along the coast.

TORONTO, ONT.—The Toronto Electoral District Society's annual flower show will be held in the pavilion at the Horticultural Gardens July 24 and 25.

SAN FRANCISCO.—The *California Florist and Gardener* has been consolidated with the *Pacific Rural Press*, in which it will hereafter appear as a department.

FISHKILL, N. Y.—The firm of I. C. Wood & Bro. was dissolved July 1. The business passes into the hands of Lewis E., Eugene V. and Isaac J. Wood, sons of one of the members of the old firm. Wood Bros. will be the style of the new firm.

UPPER SANDUSKY, O.—On the afternoon of June 30 S. O. Streyby had 2,000 10x12 single thick and 66 double thick lights of glass broken by hail. There was a steady fall of hail for half an hour; some of the stones were as large as walnuts; all his plants and vegetables were seriously injured. No insurance.

WILLIAMSPORT, PA.—The flood of June 1, which covered the entire city four to ten feet, and left mud and destruction behind, covered the greenhouses of Harry Chaapel five to seven feet, six feet in the seed store and four and a half feet in dwelling house. The entire stock of seeds were lost, plants not destroyed but damaged by the mud and water. Had the flood come May 1 instead of June 1 the loss would have been much more serious, but as it is the entire stoppage of business caused by the damage and delay of the mails has been a hard blow to all kinds of business.

Boston Notes.

Mr. James O'Brien, the treasurer of the Gardeners' and Florists' Club of Boston is seriously ill at his home in Jamaica Plain.

The committee in charge of the annual excursion of the club has decided on a trip to Downer Landing, a favorite resort in the harbor. The excursion will take place on Tuesday, July 30.

The annual "school order" was as usual divided among about ten of the prominent city florists. About three thousand of the graduates from the public schools were presented each with a bouquet at the expense of the city of Boston.

The weekly exhibitions of the Massachusetts Hort. Society from July 13 to September 7 inclusive, will be held one week earlier than the time specified on the schedule. This is necessitated by the earliness of the season. The display of Japan iris at the show on Saturday, June 29 was very fine. Those shown by W. C. Strong were superb, some blooms

measuring eleven inches across. J. L. Gardiner and A. H. Fewkes also showed magnificent specimens of the same flower, some of Mr. Fewkes' being seedlings of great merit. W. J. S.

Chicago.

A receiver is disposing of the stock of Hoyt & Erby, florists at 157 Wabash Ave.

Mr. R. W. Rathborne, an amateur at Hyde Park, has on his grounds this summer a very attractive feature in the shape of a hundred and fifty foot hedge of *Delphinium formosum*, with a row of *Salvia splendens* in front of it. Owing to the unfavorable season the salvias are not yet in good bloom, but the delphiniums alone make a handsome show and attract much attention.

Trade is dull as usual at this season. The weather is hot without any qualification and all the retail florists find to do is to fan themselves and make a lame attempt to appear comfortable.

Those in Chicago and vicinity who intend to go to the Buffalo Convention are requested to send their names to the secretary of the Florist Club, 54 La Salle street, that the committee may know how many to provide for. The Chicago Club would be pleased to have florists from other cities who will pass through here travel from this point with them.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advts. not admitted under this head.

SITUATION WANTED—As superintendent of a cemetery. Good references, and 11 years' experience. Address: SUIT., care American Florist.

SITUATION WANTED—By thoroughly experienced florist; age 28. Private or commercial. Good references. S. BATSON, 223 N. Park Street, Kalamazoo, Mich.

SITUATION WANTED—Seed trade. 12 years' experience in leading European and American houses. Age 27. First class references. D. C. 341 W. Second St. Extended, Baltimore, Md.

SITUATION WANTED—As gardener; married; 15 years' experience in rose growing, greenhouse plants, vinerias, etc., and all branches of gardening and florist business. Address: A. Y. Box 255, Phillipsburg, New Jersey.

SITUATION WANTED—As gardener, private place understands thoroughly the care of greenhouses etc.; best of references, English and American experience; single; age 28. Address: A. Y. care R. & J. Farquhar, 198 Market St., Boston, Mass.

SITUATION WANTED—By a young German, age 27, married; 12 years' experience; understands rose growing, market plants and cut flowers. Will come 10th of August or September. Steady place. MRS. LIZZY NETH, 233 S. 2nd St., Brooklyn, N. Y.

SITUATION WANTED—As head gardener on small private place, or as assistant; married; aged 28; understand propagating, greenhouse and general work on private place, sober, trustworthy, good recommendations. A. B. Am. Florist, Chicago.

SITUATION WANTED—on private or commercial place; 14 years' experience in three places; have and had charge of greenhouses; understand growing greenhouse and bedding plants, roses and cut flowers; making up designs and flower work. Reference as to character or ability. Address: E. 1542 N. 11th St., Philadelphia, Pa.

SITUATION WANTED—By a practical and trustworthy man, as florist or florist and gardener. 20 years' experience in large establishments in England and America. Accustomed to vinerias, peach houses, pine houses, stove and greenhouse plants, good rose grower. Age 32. Good references. Address E. T. gen. post box, Riverside, Cook Co., Ill.

WANTED—Can anyone inform me the whereabouts of John Smith, late with C. A. Heiser, Springfield, O. Address: GEORGE S. WHYMAN, 421 East Twelfth St., Kansas City, Mo.

WANTED—Experienced seedsmen to take charge of our seed business. Only one who fully understands the business in all branches need apply. Apply, giving references and salary expected. L. L. MAY & Co., Nurserymen, St. Paul, Minn.

WANTED—A first class gardener and florist to run a garden and greenhouse; must have \$300 or \$400 in cash. A good chance for a first class man. Man can make a good thing; a 2 story house, good barn, wind pump, tanks, hydrant, greenhouse, etc., and manure for one year on the ground. None but a man who can meet the requirements and come well recommended need apply. Address: S. K. HAGINS, Portland, Ind.

WANTED Immediately, an experienced young florist of good character in commercial place near Detroit, Mich. Address at once.

FOR SALE Best paying seed business in the world for amount of capital invested. This will never appear again.

FOR SALE CHEAP A small florists' place and business, with two story frame dwelling in Delaware, O., a thriving city of 10,000 inhabitants. Good trade already established. Good chance for a practical man with small capital. Address

FOR SALE OR EXCHANGE For a first class greenhouse property, a beautiful home 2-story house and outbuildings, 8 acres under cultivation, orchard, small fruits, etc., good water, two squarer front Court House, a healthy climate. For particulars address

FOR SALE.

Price \$2500. Rare chance. Greenhouse establishment; 7 greenhouses in good order, plenty stock, good dwelling house, 1 to 3 acres of good land on lease ground, ground rent low, and lease as long as desired; well located, West Hoboken, N. J., near the rose growing establishment of Ernest Asmus, owned by widow. Must be sold at once. Address M. SE., care Siehrecht & Wadley, 109 Fifth Ave., N. Y.

FOR SALE.

Established Floral business, with dwelling, store and greenhouses connected, in city of Buffalo. Good location. Stock and all included. Address

S. PICKELMAN, JR., 352 William Street, BUFFALO, N. Y.

TO RENT.

Seven greenhouses, dwelling, stable, ground, etc., N. W. corner Fiftieth and Westminster Ave., Philadelphia, adjoining Cathedral Cemetery. Business established. A good opportunity for the right party. Immediate possession.

D. D. L. FARSON,

Hort. Hall, Broad St., Philadelphia.

WANTED.

A stock of HYBRID PERPETUAL ROSES, good strong plants on own roots, for fall bedding—pot grown plants preferred including Jacqs, Baroness, Paul Neyron, La Reine, Am. Beauty; also a good yellow rose, and some good Hermosas. Also Filox Subulata, both white and pink.

C. B. WHITNALL & CO., Milwaukee, Wis.

JOHN H. TAYLOR,

ROSE GROWER,

BAYSIDE, L I, N. Y.

Offers to the Trade the Great TEA ROSE

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

— ALSO —

MME. DE WATTEVILLE, CATHERINE MERMET, PAPA GONTIER, BRIDES, and PERLE DES JARDINS, NIPHETOS.

Write for particulars.

ROSES.

Mermets, Brides, Papa Gontier, Souv. d'un Ami, Bon Silene, Cook, Perle, Niphetos and La France, strong plants from 3-inch pots, \$8.00 per 100. SMILAX. Strong plants from 2 1/2-inch pots, \$5.00 per 100; \$25.00 per 1000. Celery, early transplanted plants \$5.00 per 1000. CHRYSANTHEMMS, best flowering sorts, at \$4.00 per 100; \$35.00 per 1000.

WOOD BROS.,

(Successors to I. C. WOOD & BRO.,) FISHKILL, N. Y.

ROSES.

400 NIPHETOS, 3-inch pots Per 100 \$ 5.00 250 PERLE, 3-inch pots " " 5.00 100 MERMETS, 3-inch pots " " 5.00 150 " " 2-inch pots " " 4.00 100 BON SILENE, 2-inch pots " " 4.00 75 SAFRANOS, 2-inch pots " " 4.00

A. H. POEHLMANN, MORTON GROVE, Cook Co., ILL.

NOW READY FOR DELIVERY!

OUR Celebrated New Pedigree Seedling Roses

FOR 1889.

MRS. JAMES WILSON, (Tea). In this class Novelty has the long, dark, fine wire is very vigorous, the habit excellent, and the flowers which are very large and thus are well above the foliage, and are produced in extraordinary profusion. A magnificent forcing Rose of First quality. Strong plants in 5-inch pots, \$2.00 each; 13 for \$24.00.

LADY ARTHUR HILL, (H. P.) This splendid new Rose is a seedling from Beauty of Waltham. Color rosy lilac, quite a new, whole unique form and a profuse blooming variety. Very superior. Strong plants in 5-inch pots, \$2.00 each; 13 for \$24.00.

MR. JAMES BROWNLOW, (H. P.) A truly magnificent variety of very large size and good form. The color is brilliant crimson, very novel, and growth very robust. It is a marvellous free flowering variety on cut back plants and is especially adapted for forcing. Strong plants in 5-inch pots, \$2.00 each; 13 for \$24.00.

FIRST CLASS CERTIFICATES HAVE BEEN AWARDED TO THESE ROSES.

Descriptive list will be mailed Free on application to the raisers,

ALEX. DICKSON & SONS,

Royal Nurseries, NEWTOWNARDS, County Down, IRELAND.

SURPLUS ROSES.

- 1500 BRIDES. 2000 MERMETS. 700 BENNETTS. 800 AMERICAN BEAUTIES. 700 LA FRANCE. 300 NIPHETOS. 200 PERLES. 1000 DUCHESS OF ALBANY. 3000 PAPA GONTIER.

The above are well grown, strong plants for winter forcing, from 2 1/2, 3 and 4 inch pots. Prices very low.

B. A. ELLIOTT CO.,

No. 54 SIXTH STREET, PITTSBURGH, PA.

SLUG SHOT.

BEEN KILLING BUGS 10 YEARS. SOLD BY SEEDSMEN For pamphlet write to Fishkill-on-Hudson, N. Y.

2000 La France, 3 inch pots... 4 cts. 1500 Niphetos, 3 inch pots... 5 cts. 1000 Gontier, 2 and 3 inch pots... 4 cts. 3000 Smilax plants, 2 1/2-inch pots... 2 cts.

JORDAN FLORAL CO., 706 Olive Street, ST. LOUIS, MO.

ROSES.

Niphetos, Brides and Souv. d'un Ami, 2 1/2 inch pots... 5.00 La France and Niphetos, in 3 in... 8.00 Souv. d'un Ami, in... 7.00

We have an extra fine stock of Perles, La France, Niphetos and Gontier, in 4 inch pots at 1 1/2. Liberal discount on orders of 200 or over.

GERMOND & COSGROVE,

Box 62, SPARKHILL, Rockland Co., N. Y.

Roses for Winter Forcing.

300 in 5 inch pots, very fine, and ready for bedding consisting of following varieties

C. MERMET, PERLE, NIPHETOS. LA FRANCE and BON SILENE.

Address A. G. ATKINS, ORANGE, N. J.

NOTICE.

To avoid all unnecessary correspondence, I would say that my stock of Souvenir of Wootton Roses is at present exhausted, and that I am unable to fill any more orders until later on.

JOHN COOK, BALTIMORE, MD

ROSES.

25,000 of the leading 4-inch roses, at 100 per 1000. TEAS, HYBRID TEAS, and HARDY PERLE PELEAS. Teas \$2.00 per 100. Hybrid 18.00 per 100. My selection of varieties... 10.00 per 100. Fine growing varieties of CHRYSANTHEMUMS, CARNATIONS, and general greenhouse plants. Please list mailed on application.

JACOB SCHULZ, LOUISVILLE, KY

IMPORTED H. P. ROSES.

Worked low on the Market. For a list of varieties and prices, orders received and shipped. Address WILLIAM H. SPOONER, Jamaica Plain, Mass

Hail Insurance.

Among those who have lately become members of the Florists' Hail Association are the John A. Salzer Co., of La Crosse, Wis., and Julius Roehrs, of Charlton Hill, N. J., both of national reputation. The latter insures 33,000 square feet of double thick glass. The fact that men of this character are becoming members is enough to make the croakers eat their melancholy predictions.

Occasionally we meet a rare specimen who says: "We haven't had a hail storm in twenty years, come and see me after I get hit." When the life insurance agent calls no doubt this florist says: "I'm alive yet, call around and see me after I am dead." A parallel character is the one who having been hit by hail says: "We won't have another hail storm in twenty years to come, I guess I will wait." What would you think of the man who having been burned out talked in that style?

Hail insurance costs less than fire insurance and there is no reason why the Florists' Hail Association of America should not become in five years as rich and powerful as its German contemporary, which has been in existence forty-five years. JOHN G. ESLER.

WANTED!

1000 feet or less of 4 inch Greenhouse Pipe. State price for cash.

GEORGE W. LITTLE,
GLENS FALLS, N. Y.

SMILAX.

First Class, from 2½-inch pots.
Price, \$3.00 per 100. \$25.00 per 1000.
Address

J. G. BURROW,
Fishkill, N. Y.

SMILAX.

Extra fine plants, twice cut back, from 2 inch pots, \$3.00 per 100; \$25.00 per 1000. 50 at 100, 250 at 1000 rates.

THEO. BOCK,
HAMILTON, OHIO.

SMILAX.

5000 Smilax in 3-inch pots, per 100 \$4.00; per 1000 \$35.00.

2-inch pots, per 100 \$2.50; per 1000 \$20.

ADDRESS J. D. BRENNEMAN,
STATION F, PHILADELPHIA, PA.

4000 SMILAX.

Fine stocky plants, 3 inch pots, \$3.50 per hundred; \$32.00 per thousand. 2 inch pots, \$2.00 per hundred.

G. PIETTERSON,
HARRISBURG, PA.

"A GREAT HELP

IN CUT FLOWER WORK, AND HAS BEEN GREATLY NEEDED"

So say many of FLORAL DESIGNS, concerning which more can be learned by addressing

J. HORACE McFARLAND, Harrisburg, Pa.

AUGUST RÖLKER & SONS,
44 Dey St., NEW YORK,

Supply the Trade with

SEEDS, BULBS,

And all kinds of

FLORISTS' SUPPLIES.

Price List Free on application with business card.

R. VAN DER SCHOOT & SON,
HILLEGOM, HOLLAND.

LARGEST GROWERS OF

HYACINTHS, TULIPS, NARCISSUS, SPIRÆA, LILIES OF THE VALLEY, ETC.

Headquarters for Forcing Bulbs. Wholesale Importers should write us for prices.



TRY DREER'S GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER,
Philadelphia

**CONVENTION * SUPPLEMENT.**

Our Annual Convention Supplement will be published with the

AUGUST 15 ISSUE.

It will contain a sketch map of the city of Buffalo, give locations of Buffalo Hotels, with rates at each one, directions to reach points of interest, and other notes of value to visiting members.

ADVERTISEMENTS

for the Supplement should be received by **August 7 at latest**, and as much earlier as possible. **Rates** same as in the body of the paper: 10 cents per agate line; page \$42; half page \$21; column \$14; half column \$7; inch \$1.40.

Being mailed with the August 15 issue it will reach members before they start for the convention, and will be their friend, philosopher and guide on the way to and during the meeting. Extra copies will be distributed at the convention.

SEND IN YOUR ADVERTISEMENTS EARLY.

AMERICAN FLORIST CO.,
54 La Salle Street, CHICAGO.

BULBS.
Early Delivery Fall 1889

	Per 100	Per 1000
Lilium Auratum, 6 to 7 inch circum	\$ 4.00	\$45.00
" " " 7 to 9 " "	5.00	45.00
" " " 9 to 10 " "	6.00	55.00
" " " 11 to 12 " "	8.00	70.00
Album (Speciosum) 7 to 8 in. cir.	5.00	50.00
" " extra fine, 10 in. circum	10.00	90.00
Rubrum, 7 to 9 in. circum	6.00	50.00
" " Monstro " "	7.00	60.00
Longiflorum Rex, 4 to 5 in. cir.	3.50	39.00
" " " 6 to 8 in. " "	4.00	40.00
" " extra fine, 7 to 8 in. cir.	6.00	50.00
Kraemer, ex. choice, large bulbs	7.00	60.00
Batemani " "	6.00	50.00

We repack Bulbs on arrival from Japan from heavy clay into sawdust, reducing weight more than half, pick out and replace all decayed ones, pay 20 per cent. duty and deliver 1 c. b. at above figures. Do not fail to send for our full list of

RARE LILIES, SEEDS, PALMS, ETC. NOW READY.

H. H. BERGER & CO.,
SAN FRANCISCO, CAL.

POLMAN MOOY,
P M HAARLEM,
HOLLAND.

TRADE MARK. NO AGENTS

FORCING BULBS
VALUABLE NOVELTIES
IN TULIPS.
BEST FORCING DAFFODILS.
Write for new list, now ready.

BENJAMIN RIMBAUD,
HORTICULTEUR,
QUARTIER DU TEMPLE,
TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD, TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,
PAPER WHITE NARCISSUS,
DOUBLE ROMAN NARCISSUS,
LILIUM CANDIDUM,
ALLIUM NEAPOLITANUM,
FREESIA REFRACTA ALBA
ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

J. A. DE VEER,
183 WATER ST., NEW YORK.

offers Finest Stock of DUTCH BULBS, ROMAN HYACINTHS, PAPER WHITE NARCISSUS, LILIUM CANDIDUM and HARRISII, LILY OF THE VALLEY, FREESIAS, CALLAS and other desirable

FORCING BULBS FOR FALL DELIVERY.
Also prime Nursery Stock, Seeds, etc., from Holland, France, Belgium, Holland and Germany, at Low prices.

SPECIAL IMPORT CATALOGUES FREE TO THE TRADE.
ESTIMATES cheerfully furnished, SATISFACTION GUARANTEED.

P. S. STILL ON HAND: Fresh LATANIA HORBONICA SEED, at 50¢ per lb. in lots of 10 lbs. and upward 50¢ per lb. Special prices on large quantities. Fresh PANDANUS UTILIS SEED, at 25¢ per lb. per 1000. CYCAS REVOLUTA STUMPS, by granted sample, 2 to 3 inch at 25¢ per inch of diameter, to \$75 per 100, 4 to 6 inch, 75¢ per 100. CYCAS LEAVES, (fresh cut), 10¢ each and up, 1/2 and 1/3 per 100.

GIVEN AWAY!

A MILLION FINE BULBS AND PLANTS,
TO THE TRADE AT IMPORT PRICES.

For Catalogues, address
C. H. JOOSTEN,
Importer of Bulbs and Plants,
3 COENTIES SLIP, NEW YORK.
Mention American Florist.

F. E. McALLISTER,
SEED AND BULB MERCHANT, 22 DEY ST., NEW YORK.
SPECIAL OFFER OF FORCING TULIPS, ALL FIRST QUALITY.

Vitus	\$1.50 per 1000	Time von Thol, Scarlet	\$ 2.00 per 1000
Belle Alliance	17.40 "	Richesse de Parme	11.00 "
Crimson King	9.00 "	Kaiser's Crown	24.00 "
Canary Bird	24.00 "	La Reine	15.00 "
Chrysolora	24.00 "	Yellow Prince	24.00 "

1000 Comprised of 100 each of the above sorts, @ \$20.00. Choice mixed Forcing Tulips, @ \$10.00 per thousand.

FORCING BULBS.
GARDINER'S SPECIAL OFFER FOR
FALL DELIVERY.



We mean to give growers more advantages as to price, quality and service than they can find anywhere else. This season's importations (first arrivals) will be here soon. Get your bulbs in early. Don't wait until all the wide-awake men have got ahead of you. No trouble to book your order now. Estimates on anything in the forcing bulb line for the asking.

A FEW LEADING ITEMS

WHITE ROMAN HYACINTHS, first quality, 11 to 12 cent	Per 1000	10.00
Extra selected, 11 to 12 cent	Per 1000	12.00
LILIUM CANDIDUM, extra selected	Per 1000	10.00
" " HARRISII, 5 to 6 inches	Per 1000	12.00
" " Extra selected, 7 to 9 in.	Per 1000	12.00

PAPER WHITE NARCISSUS
GYN SONS, Double Yellow.
FREESIA
Hyacinths, Tulips, Lily of the Valley and Spirea at proportionately low prices.

JOHN GARDINER & CO. Philadelphia
30,000 Dioscorea tubers, 1 year tubers, 25¢ per 100, \$3.00 per 1000. 50,000 Am. Trench and Armasco at 20¢ each are taken at \$8.00 per 100. For cash, balance on time. 200 lbs. Moon Flower seed, full 1889.
MRS J. S. R. THOMSON, Spartanburg, S C

E. M. KRELAGE & SON,
HAARLEM, HOLLAND.

The new Wholesale Trade List of all sorts of DUTCH FLOWER-ROOTS, MISCELLANEOUS BULBOUS and TUBEROUS-ROOTED PLANTS No. 130 is now ready and will be sent to the trade on prepaid application.
NO AGENTS. Please address direct.

"IRISH DAFFODIL" BULBS,
For Forcing.
DELIVERIES, JUNE & JULY.
Send for Wholesale prices to
WM. BAYLOR HARTLAND, Seedsman,
21 PRUDEN ST., CORK, IRELAND.
Established in successive generations.

HULSEBOSCH BROS.,
OVERVEEN, near HAARLEM, HOLLAND.
Grew and Wholesale Dealers in all kinds of Bulbs, Roses, Indian Azaleas, Rhododendrons, Dahlias, Palms, Orchids, Lily of the Valley Pips, Etc., Etc.
Address: **A. HULSEBOSCH,**
P.O. BOX 415, NEW YORK CITY.

BULBS.
Have bulbs for forcing and garden use. Large quantities of Dutch Tulips, Paper White Narcissus, Roman Hyacinths, etc. Also Freesia, Calla, etc. All at low prices. Catalogues free. Address: **A. GIDDINGS, Danville, Ill.**
Mention American Florist.

Substitution.

The first case of substitution which came to the attention of a veteran New York florist was at a public market in Baltimore many years ago. A market woman had a big clump of the old "grass pinks" under her stand, and when a gentleman with three children stopped to purchase a small clump of pinks for each of the children, giving them their choice of color, the woman supplied them with three small clumps, one "red," one "white" and the other "blue," each being broken from the same large clump under the stand.

It is related of a nurseryman of the present day that he considers his orders well filled if his men send trees bearing a name which commences with the same letter as that ordered. If out of plums he sends peaches; as far as the variety is concerned, that is entirely too trivial for an instant's consideration.

It is also stated that some of the large tree dealers send around a list of what they want for the season to various nurserymen to "figure on," and the one who figures the lowest gets the order. In order to figure low he substitutes liberally of what he has a surplus. The dealer again substitutes on his orders, and heavens only knows what the planter is lavishing his care on.

Catalogues Received.

G. J. Alberts & Co., Boskoop, Holland, plants and trees; Geo. W. Miller, Lake View, Chicago, plants; Jno. Laing & Sons, Forest Hill, London, England, plant novelties; Hillebrand & Bredemeier, Pallanza, Italy, seeds and bulbs; Ludwig Moller, Erfurt, Germany, garden supplies; Ellwanger & Barry, Rochester, N. Y., strawberries; Wm. Toole, Baraboo, Wis., seeds; Siebrecht & Wadley, New York, Orchids.

PANSY SEED, NEW CROP.

Orders booked now for delivery July and August at the following special rates.
FRIMARDEAU, choicest French mixed, unsurpassed in brilliancy of color and size of flowers, some measuring from 3 to 4 inches across. Price, per lb. \$25.00, oz. \$2.50, 1/2 oz. \$1.50, 1/4 oz. \$1.00.
TRIMARDEAU, golden yellow, per 1-16 oz. \$1.00.
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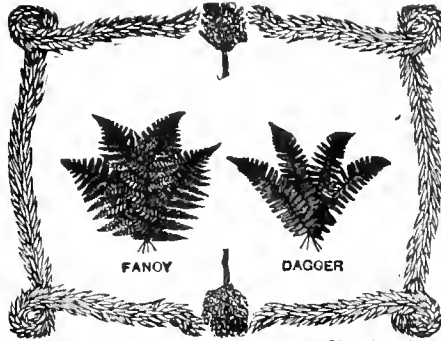
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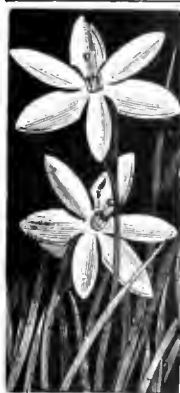
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The object is to bring together florists and the horticultural fraternity in general for mutual improvement and enjoyment. Two nights each month have been set apart for the reading and discussion of papers.

Messrs. W. A. Manda and I. Forstermann have linked hands with Mr. May and with their united and substantial support it will prove an undoubted and assured success. The duties of secretary were conferred upon Mr. A. Dimmock, Summit, N. J. Nearly fifty members were enrolled at the first meeting.

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The largest, most perfect, and finest colored pansies grown. Be sure to sow some of this seed if you wish to have the very choicest pansies.

Extra, Mixed, per trade packet 25c.

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Many additions of Choice New varieties this season.

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**See Adv. of
 OBCONICA**

in May 1 issue, on page 459.

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We have a very fine lot of

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in 2 1/2-inch pots, two to three leaves, and until August 15th, we offer them to the trade at \$10 per 100; \$95 per 1000.

This is a good chance for florists to stock up for winter trade, with strong, thrifty plants at a low price.

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SPECIAL PRICES FOR LARGE QUANTITIES.

LET ME KNOW YOUR WANTS EARLY.

THOMAS S. WARE,

HALE FARM NURSERIES.

TOTTENHAM, LONDON, ENGLAND.

The June Floods.

In the awful destruction of life and property caused by the June floods in several of the states it is likely that many florists are numbered among the victims.

In Williamsport Harry Chaapel was flooded to the depth of about five feet in his store and also in his greenhouses.

In Johnstown Alvar Akers lost his life in the fearful flood that carried away so much of that thriving town; and Robert Leupke only saved himself and family by getting them through the upper windows to the roof of an adjoining house and from there to a third one when the second one started down stream, meanwhile his greenhouses, plants, household goods, clothing, etc., were all swept away. He has since decided to move to East Liverpool, Ohio.

Pittsburg was just west of the flood limit and suffered no loss from this cause.

As to Lottery Tickets.

"When June comes in the florists will find enough to do between the June weddings and school graduations, but just now there is a lull, so that they find time to go once in a while to the base ball game and to the auction sales, to visit their neighbors, and to buy an occasional Louisiana Lottery ticket. Some of them seem to have phenomenal luck in the lottery line."

From "Boston Notes," page 492, June 1 issue AM. FLORIST.

"Embezzler Flann kept a precise account of every dollar he stole, expecting to make up the thefts some day by a big strike in the Louisiana Lottery. Deluded youth. The victims this lottery has lured to destruction are legion, and yet it manages to elude the law and keep right on in its nefarious work."

From Pittsburg Commercial Gazette, June 27.

The boys had better stick to base ball and let the lottery tickets alone.

M. M. BAYERSDORFER & CO.

56 N. 4th St., Philadelphia, Pa.,
Manufacturers and Importers of

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FULL LINE OF METAL WREATHS.

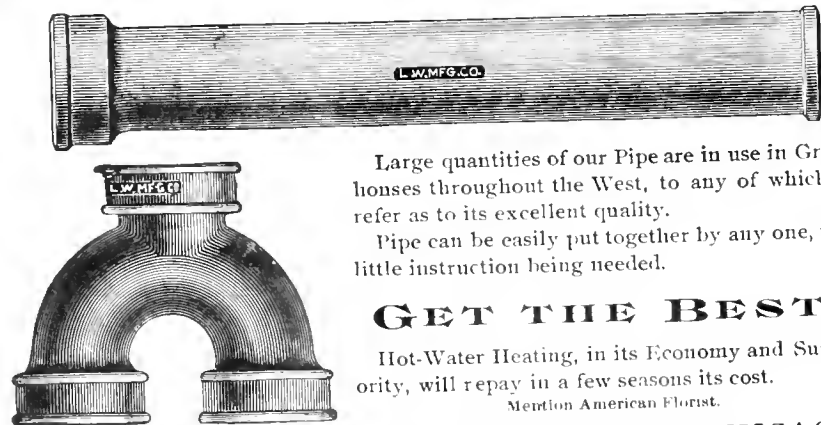
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Pipe can be easily put together by any one, very little instruction being needed.

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Hot-Water Heating, in its Economy and Superiority, will repay in a few seasons its cost.

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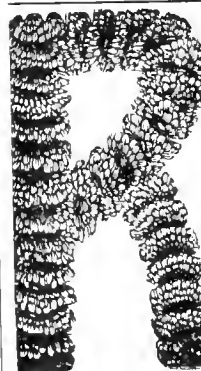


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Postage 15 cts. per 100.

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- 2nd. Give the length and depth of sashes, (depth is down the roof.)
- 3rd. Give the length of house.
- 4th. Give the height from the ground to the comb of roof.
- 5th. Give the thickness and width of rafters or sash bar.



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GLASS FOR GREENHOUSES.

ALL GLAZIERS' SUPPLIES.

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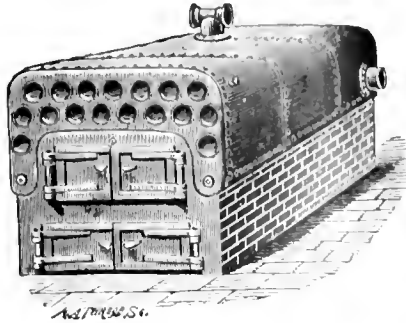
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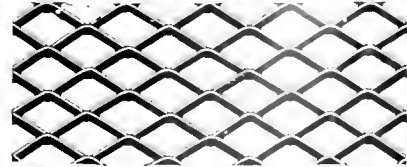
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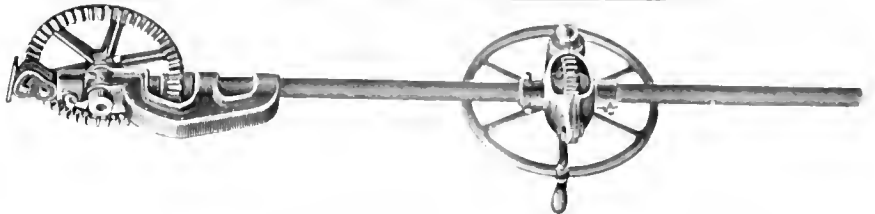
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15 Cts. per Foot, material 3 feet wide. Adapted for Residences, Churches, Cemeteries, Farms, Gardens, &c. All needing Fences, Gates, Arbors, Window Guards, Trellises, etc., write for our illus. price list, mailed free. **THE NEWEST THING AND THE BEST.** Central Expanded Metal Co. | A. W. Expanded Metal Co. Pittsburgh. Chicago. St. Louis Expanded Metal Co., St. Louis.

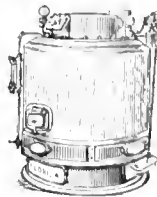


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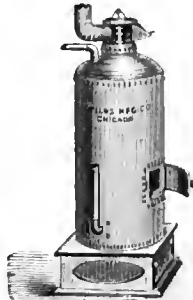
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2 1/2-inch.	per 100,	\$ 50	7-inch.	per 100,	\$ 70
3 "	"	60	8 "	"	80
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5 "	"	1 00	11 "	"	120
6 "	"	2 00	12 "	"	200

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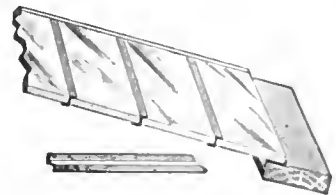
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Lawn Sweepers, Grass Edgers, &c.

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HORTICULTURAL ENGINEER.

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CHICAGO.


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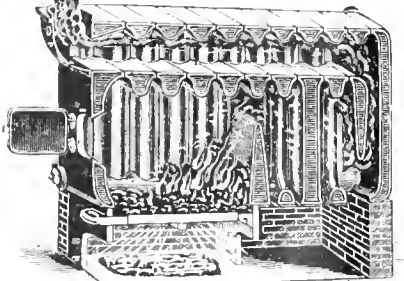
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COAL OIL is the best and cheapest thing for cleaning oleanders, gardenias, euonymous and other hard wooded plants of white and brown scales. I use about two table-spoons full to a quart of water, churn it well with a syringe and then apply with the syringe. An hour or two afterward I give the plants a good washing off with the hose. A. C.

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Will Cost less, Use less Fuel, and has more advantages than any other Boiler in the market
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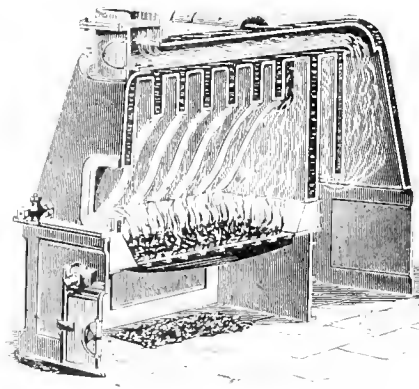


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and **MEDALS** have been given at all the Large Expositions of this Country. Made in two Styles, as **MAGAZINE BURNERS** and **SURFACE BURNERS**, and in two Forms, both **PORTABLE** and **BRICK-SET.**
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THE AMERICAN FLORIST



America is "the Prow of the Lessel; there may be more comfort Am. J. Florist, Vol. IV, No. 96, August 1, 1889, p. 5."

Vol. IV.

CHICAGO AND NEW YORK, AUGUST 1, 1889.

No. 96.

THE AMERICAN FLORIST

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Entered as Second Class Mail matter.
Published on the 1st and 15th of each month by
THE AMERICAN FLORIST COMPANY

Subscription, \$1.00 a year. To Europe, \$1.50.

Address all communications to

AMERICAN FLORIST COMPANY,
51 La Salle Street, CHICAGO.

SOCIETY OF AMERICAN FLORISTS.

FIFTH ANNUAL MEETING

AT BUFFALO, N. Y.

August 20, 21, 22, 1889.

Wm. J. STEWART, Secretary, 67 Bromfield St., Boston, Mass.; M. A. HUNT, Treasurer, Terre Haute, Ind.

The annual dues of \$1. may be forwarded to either the secretary or treasurer before the meeting who will return a receipt and badge by mail. In this way you can materially lighten their labors at the convention and avoid delay in securing your badge on the opening day.

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THE BUFFALO CONVENTION—The time is rapidly approaching when the Society of American Florists will again meet in annual convention, and there is every reason to believe that the fifth annual meeting will show the usual increase in attendance over preceding conventions. A most excellent programme has been prepared, the convention hall is admirably adapted to the purpose, the exhibition hall is under the same roof, hotel accommodations are ample and

cheap, a rate of a fare and one third for the round trip on the certificate plan has been secured, and the beautiful city of Buffalo offers open handed hospitality.

Arrangements for the Coming Convention.

The local committee has secured rates as follows from Buffalo Hotels:

Hotel.	Can accom- modate.	Rate. Am plan
Tift House, Headquarters		
Tift House Block	150-175	\$3.00
Iroquois		
Eagle and Main Sts.	300	1.75-2.00
The Niagara		
Porter Ave. and Seventh St	120	1.35-1.50
The Genesee		
cor. Genesee and Main Sts.	125-150	1.00-1.50
Mansion House		
cor. Exchange and Main Sts.	75	.75
Stafford House		
Washington and Carroll Sts.	50-75	.75
Tucker's Hotel		
Exchange and Michigan Sts.	30-40	.20-1.00
United States Hotel		
cor. Terrace and Pearl Sts.	75-100	1.50-2.00
Eagle House		
Washington and Eagle Sts.	40-50	.20
Gruener's Hotel (German)		
20 East Huron St.	40-50	1.20-1.40
Southern Hotel		
Michigan and Seneca Sts.	40-50	1.15
St. John's House		
30 East Swan St.	40	1.00
Tremont House		
Washington and Seneca Sts.	60	1.50
Brunswick Hotel		
Exchange and Wash. Sts.	80	1.15
Fillmore House		
Michigan and Carroll Sts.	40	1.15

Applications for rooms may be made direct to the hotels, or to Thomas Clayton, chairman hotel committee, 90 Richmond avenue, Buffalo, N. Y.

RAILROAD RATES.—To secure the rate made by the passenger associations when going to the Buffalo convention this month you will pay full fare going and when purchasing your ticket ask for a certificate of such purchase from the agent selling you the ticket. This when countersigned by the secretary at the convention will be an order to the Buffalo agent to sell you a return ticket at one third fare. Ticket agents are supplied with blank forms for the certificates. Don't neglect to secure one properly filled out when purchasing your ticket as otherwise you will not secure the reduced rate on the return trip. Orders for return tickets at the reduced rate will be good up to and including the 20th, three days after the final adjournment on the 23d.

FROM BOSTON TO BUFFALO—The delegation from Boston to the Buffalo meeting will leave at 3 p. m. Monday, August 19, via Hoosac Tunnel and West Shore railroad. New England members who wish to join should send their names at once to the secretary, W. J. Stewart, Boston, or to the vice president, L. H. Foster, Dorchester, and berths on sleeper will be reserved for them. Railroad fare for the round trip \$11.20.

FROM CHICAGO TO BUFFALO.—Advantageous arrangements have been made for transportation to Buffalo. The party will leave at 3 p. m. Sunday, August 18, by one of the most popular routes, reaching Buffalo the following morning. Special cars will be provided and dining car will be attached to the train at 6 p. m. Florists west of Chicago who can arrange to travel from this point with the party are cordially invited to do so. Drop a card to G. L. Grant, 51 La Salle street, Chicago, and berth will be reserved for you.

THE CONVENTION SUPPLEMENT will be mailed with next issue and extra copies distributed at Buffalo. Advertisements for it should be sent as early as possible, reaching us by August 7 at latest; earlier will be better.

Programme for the Buffalo Convention.

The official programme for the Buffalo meeting of the Society of American Florists has been issued. We give it below:

TUESDAY, AUG 20, 1889.

FIRST DAY MEETING AT 10 A. M.

Address of welcome, Hon. Philip Becker, Mayor of Buffalo—Response, Mr. A. P. Calder, Boston—President May's Address—Reports of Secretary and Treasurer—Reports of Standing Committees—Reports of Special Committees—Miscellaneous Business—Discussion of President's Address.

FIRST DAY MEETING AT 7 P. M.

ENTERTAINMENT BY THE SOCIETY OF AMERICAN FLORISTS AT THE BUFFALO HOTEL.

WHAT VARIETIES OF ROSES of recent introduction are specially useful to the florist? Reply by E. G. Hill, Richmond, Ind.

Will the Rose-bug commonly found in greenhouses survive freezing? Reply by Chas. P. Anderson, Flushing, N. Y.

Southern grown Rose Bushes. A. C. Oelschig, Savannah, Ga.

What is the best way to keep Green-fly from Roses without fumigating?

Where does the Rose-bug deposit its eggs?

Perles and other Roses on the Banksia and similar stocks—are they preferable to those on own roots?

The influence of soil on Cautions—what is the effect of transplanting from light to heavy soil, or vice versa? Reply by Wm. Swayne, Kennett Square, Pa.

What are the best varieties of A. Geas for Christmas blooming?

What is the best method of raising the Mezonette in winter?

Can any of the following plants be profitably grown in winter for cut flowers? *Fragaria cordata*, *Ron. leclercii*, *speciosa*, *Hemerocallis*, *Ranunculus*, *Anemone*, *Aster*.

Winter blooming Heaths.
What is to be recommended as new or promising for the cut flower trade?

WEDNESDAY, AUG. 21, 1889.

SECOND DAY—MORNING SESSION, 9 30.

Selection of place of meeting for 1890
—Nomination of officers for ensuing year.

ESSAY—*Elevation of our Business*, ROBERT CRAIG, Philadelphia, Pa.

Discussion.

ESSAY—*Education*, H. H. BATTIS, Philadelphia, Pa.

Discussion.

SECOND DAY—EVENING SESSION, 7 O'CLOCK.

ESSAY—*The Establishment of an Experimental Garden*, JOHN THORPE, Pearl River, N. Y.

Discussion.

QUESTION BOX.

What are the necessary qualifications for properly filling the following situations: 1. Grower in commercial greenhouses; 2. Head gardener on a private estate; 3. Florist in a public institution; 4. Superintendent of public parks and grounds. Reply by Peter Henderson.

Is the sale of flowers in the streets of large cities an injury to the general business of the stores? Reply by F. M. Huntzman.

Is the practice of advancing prices of cut flowers on special occasions injurious to the trade. Reply by J. C. Vaughan.

What per cent over cost should be a general basis for prices in conducting a retail cut flower trade. Reply by John Westcott.

How can local clubs and the national society best work together to promote their common interests? Reply by J. D. Reynolds.

Can the general florist engage to advantage in the hardy plant and shrub business for lawn decoration? Reply by Wm. Scott.

Palms, ferns and decorative plants, their value in floral decorations. Reply by M. H. Norton.

It what way can a florist most successfully start in business in a country town?

What hardy and half-hardy plants may be used for decorative purposes in severe weather?

Can the Society do anything to regulate the prices of bedding plants throughout the country?

THURSDAY, AUG. 22, 1889.

THIRD DAY—MORNING SESSION, 9 30.

Election of officers.

ESSAY—*Useful Summer Blooming Flowers*, A. E. WHITTLE, Albany, N. Y.

Discussion.

ESSAY—*Horticultural Exhibitions*, EDWIN LONSDALE, Chestnut Hill, Pa.

Discussion.

THIRD DAY—EVENING SESSION, 7 O'CLOCK.

ESSAY—*Landscape Gardening*, W. M. McMILLAN, Buffalo, N. Y.

Discussion.

ESSAY—*Orchids, The Natural Habitat of the Leading Varieties*, J. FOKSTIEMANN, Summit, N. J.

QUESTION BOX.

What is the best method of caring for wrought iron boilers when not in use? Reply by M. A. Hunt, Terre Haute, Ind.

What are the results of experiments with water gas? Reply by J. T. Temple, Davenport, Ia.

What are the advantages of the electric light?

What is the experience in the use of petroleum?

Best method of packing plants for express?

Materials for flues?

How to prevent waste in fuel?

FRIDAY, AUG. 23, 1889.

FOURTH DAY

The fourth day will be devoted to social enjoyment. The great feature of the day will be an excursion to Niagara Falls, 23 miles distant from Buffalo. The Buffalo Florist Club will arrange for an excursion train, and procure lowest rates for trip and incidentals at the Falls. On return to the city a collation will be tendered the Society by the Buffalo Club. A large hall, capable of seating the whole company at once, will be provided. A base ball game and other diversions will follow.

Philadelphia.

At the last meeting of the Florists' Club Mr. W. W. Coles, of Lansdowne Heights, delivered an address on "Grafted Tea Roses for winter blooming." Mr. Coles after one winter's careful trial of grafted roses, alongside roses on their own roots, has come to the conclusion that there is no difference. He fully expected to note an improvement with W. F. Bennett, but there was none. The subject for the next meeting is: "What can the members of the Florists' Club of Philadelphia do to advance the interests of the S. A. F. at the approaching convention to be held in Buffalo in August?" President Robert Craig was selected to prepare and deliver the paper.

A trip through Craig & Bros.' extensive establishment at Forty-ninth and Market streets, revealed the fact that this enterprising firm has a finer lot of palms this season than ever. The house which was planted in camellias for a number of years has had to give up those old fashioned and at one time most popular flowers to make room for arecas, latanias, kentias and the phoenixes, as also have one or two houses, which for some time past had yielded fine blooms of the H. R. roses, Jacquemiot, Magna Charta, Baroness Rothschilds, Merveille de Lyon and Captain Christy. A house full of Mrs. John Laing, I think, still remains to delight the connoisseur with its delicious fragrance and delicate coloring for a few more winters to come.

To return to palms, what a sensible move it is to grow these and kindred plants, and especially the varieties in quantity that have proven so useful for the adornment of homes in the dull and dreary winter season. Many of Philadelphia's florists are adding them to their stock. In addition to the old reliables, H. A. Dreer, Craig & Bro., Charles D. Ball and David Fergusson & Sons, Messrs. Alburger Bros., W. K. Harris, J. William Colflesh and John Burton have each a fine stock of the best varieties. All palm growers and buyers have awarded the palm to Mr. Burton for the best lot of *Areca lutescens*. And Mr. Harris holds his own as the best exponent of the culture of *Pandanus Veitchii*.

Before this is in press all the florists will have planted their roses and their houses will be put in order preparatory to the trip to Buffalo. A very general disposition to go prevails and a good time is confidently expected.

H. A. Dreer is adding more greenhouses to his already very large establishment. Craig & Bro. are building one. John Burton has rebuilt three, two rose houses and one for smilax in the most approved and substantial manner. H. C. Woltemate has plans out for a new rose house after the style of the best built in these days.

C. S. Price and Coles & Whitely, of Lansdowne Heights, will plant very few

American Beauty and Bennett roses, whereas A. L. Pennock & Son, of the same place, will increase the area devoted to the Beauty. C. F. Evans' Rowlandville nurseries are not planting quite so many of Beauty and Bennett as heretofore.

Craig & Bro. are planting about the same number each of the last named and have planted quite largely of "Wootton," Duchess of Albany and Mme. Hoste. The latter will not, from present indications, be of much service for late spring or summer blooming. It is small and off color. Its friends claim that it will amply make up for these shortcomings in the winter season when the buds are of more value.

Mr. M. F. Gallagher, the genial florist from Chicago, is "doing" the town. He is in the hands of Mr. D. D. L. Farson, who welcomes any brother florist at his cosy office at Horticultural Hall. Mr. Julius Roehrs, of Rutherford, N. J., and Mr. J. M. Keller, of Bay Ridge, N. Y., spent a few days here last week. They are very much interested in palms.

Commodore Westcott, of the Rose Bud Fishing Club, has announced that the annual excursion to the fishing grounds of Barneget Bay will take place the first week in August. It is expected that the club will be in session five days. Vice Commodore James Dean, of Bay Ridge, will be present, and it is to be hoped that Ernest Asmus, of West Hoboken, and John N. May, of Summit, will favor the club with their presence as they did last year. E. L.

Boston Notes.

The retail florists all close at 5 p. m. during July and August.

Trade at the sea side resorts has been very light this season.

L. Prang & Co. have issued a beautiful little pamphlet on "Our National Flower." It is artistically illustrated with colored plates of the trailing arbutus and golden rod.

David Allan is justly proud of an unusually brilliant variety of *Epidendrum vitellinum*. One spike in bloom at present bears twenty-two flowers.

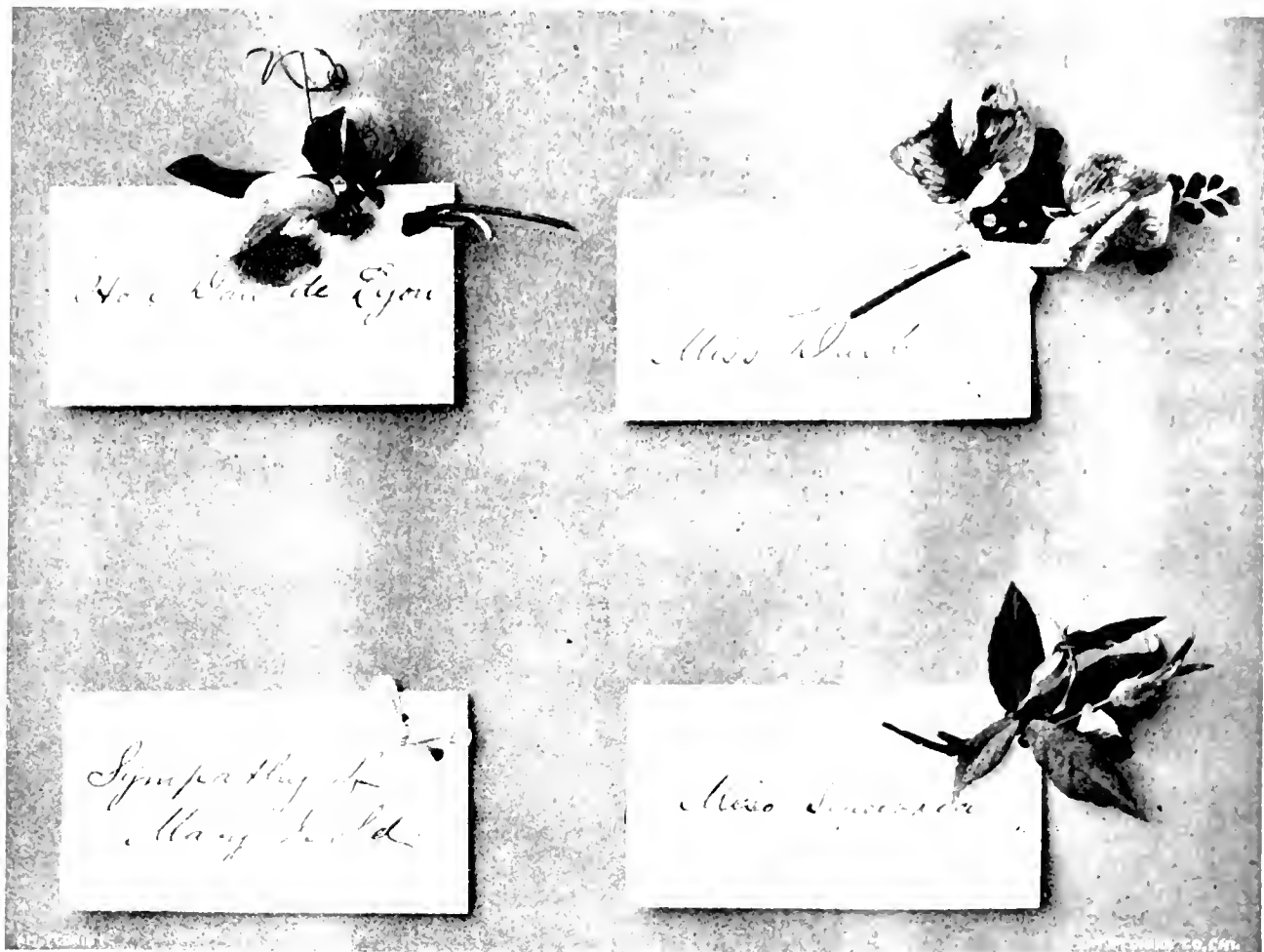
A very severe hail storm struck in this vicinity July 17. Greenhouses and garden crops suffered severely. Lynn and Newburyport appear to have sustained the most damage.

James Dennis, formerly of Mt. Auburn, and Walter Butler have gone into business together and are erecting two houses at Readville, on land close to the railroad station. Their specialties will be violets and carnations.

Thermopsis Caroliniana from the mountains of North Carolina, is a hardy perennial of great beauty, that has been recently introduced here. It promises to be exceedingly popular. Propagates readily from seed.

Mr. Samuel A. B. Bragg, superintendent of Mt. Hope Cemetery, died at his home in Dorchester July 17, at the age of 64. The news of his death was a severe blow to those who knew him. It falls to the lot of but few men to be so universally beloved. Of him it may truly be said that he had not an enemy. He was a member of the Gardeners' and Florists' Club of Boston, a delegation from which attended the funeral.

M. of Pittsburg, seems inclined to censure slightly in his note on "Lotteries" in the last number of the FLORIST. The writer, in humble imitation of the daily newspapers regarding the prize fight, would say that he is not in "favor of" lotteries "but must give the news." But M. must not feel too safe as



C.A. 05

to base ball either. It is also a matter of news that "the boys" sometimes return from the ball games with less money than they had when they started.

W. J. S.

Chicago.

Mr. P. Transon, of P. & E. Transon, nurserymen, Orleans, France, paid this city a visit July 19.

A bed of geraniums over a third of a mile long is a feature at South Park this summer. It is about three feet wide and completely encircles the main bedding near the greenhouses.

Mrs. J. C. Vaughan and Miss Florence Vaughan have returned from a lengthy visit in California.

S. D. Bradford, of Colorado Springs, Colo., is here taking a look through the parks.

At the last meeting of the Florists' Club the social feature predominated. Entables and drinkables of the kinds and sizes most affected by florists were provided and were heartily enjoyed. During supper an informal discussion as to the best ways and means of making the coming exhibition a success was carried on with the result of arousing much enthusiasm, and if the show is not an overwhelming success it will not be the fault of those who were present on this occasion.

Cards.

BY H. H. BATHES.

Every florist should have a place set aside for blank cards and small envelopes where they can be kept from dust and moisture; it is generally better to put them in some convenient place that customers may help themselves.

Three sizes are found useful, quite small ones for gentlemen, medium for ladies, and you will often find it a great convenience to have a much larger size, for the use of clubs, firms, and their employes, when they send funeral designs. It is generally better taste to enclose the cards in an envelope addressed to the person that is to receive it.

When necessary to attach cards to designs it should be done as neatly as possible. We have often seen a hole punched with a knife, and a piece of wire run through. A better way is to make two eyelet holes and tie a piece of ribbon into a double bow knot (as illustrated), then fasten the wire on the loop underneath. If it be a funeral design for an aged person a few sprays of wheat drawn through the bow is good, if for a child some simple little flower is pretty.

You will also find illustrated three cards which we offer as suggestions for dinner cards. The idea admits of many variations, and good opportunities of displaying taste. We have used them a

number of times with considerable success; the florist is not only credited with good taste, but he can be sure that the flowers used in this way harmonize with his other decorations, too often do elaborately colored dinner cards detract from the delicate tints of the flowers.

Florists who are fortunate enough to have many orders for "dinner decorations" know that there is considerable money expended for dinner cards, often very valuable souvenirs are given. Can not we florists divert some of this money, so that it will not only bring profit and credit to us, but pleasure to our customers? By giving this subject some thought, and exchanging ideas, we may be able to make the floral dinner card fashionable next season. Let us not make them too elaborate, but rich and chaste.

The writer of these articles thinks there will be no better opportunity for him to explain his position in offering these designs, he does not for a moment think them perfect, but looks upon them simply as suggestions put in tangible, but open to criticism, and by such criticisms no one will be more willing to learn than himself. As the editor states in July number, they are hence written at his suggestion, and I feel confident he will gladly publish my notes that may be offered on the arrangement of flowers,

pointing out the defects of designs illustrated where they are weak, and how they can be improved.

Color has such a prominent place in the arrangement of flowers that the writer is always disappointed when he sees the photographs so colorless and flat, due consideration must be allowed for these two defects.

Notes From Washington.

BY WM. FALCONER.

THE BERTHOLDI Fountain was a present to the U. S. government. It was erected in the middle of the large lawn in the Botanical Garden. Noticing it there I asked Mr. Smith how could the garden afford to provide for such a magnificent piece of art? His reply was: "That reminds me o' an aul' Scotch wifie, Janet o' Auldearn; Her guidman, Sandy, cam' hame a' nicht an' he was awfu' fu; so woman-like, Janet started to berate him soundly. 'Whisht, whisht, Janet, woman,' implored her spouse, 'it's nae sae bad as that, the whuskey did ua' cost me ouything; I got it a' for nocht!'" And so it was with the fountain, it didn't cost the garden anything, the government paid for putting it there.

THE "INDIAN" MOUNDS AT MOUNT VERNON.—At the far end of the west lawn are two mounds, one in each corner. President Buchanan planted an elm tree on the top of the right hand mound, and a year or two ago Mrs. Grover Cleveland planted another elm—a graft from the Washington elm at Cambridge, Mass—on the other mound. Harriet Lane was present when both of these trees were planted. How these mounds came there can best be related in the words of General Washington's old gardener. "Thim mounds there mark the burial place o' two Indian chafes. They had fallen out and came to the General to have him settle their dispute 'Git out there on the lawn an' fight it out,' was Washington's reply. 'Yis, sor, an' bedad they did. They fought there on the lawn till both were dead, and then the one buried the other under each o' thim mounds in the corners there."

THE MOTHER-IN-LAW PLANT is a name suggested by Mr. Smith for the dieffenbachia. It happened in this way: At a horticultural exhibition at Baltimore some years ago a newspaper reporter wishing to get some points about the plants, huttonholed Mr. Smith. Mr. S. in the course of his explanations came upon the dieffenbachia and began telling the reporter the effect of the dumb cane (the old name for the dieffenbachia) upon the tongue of any one who should be unfortunate enough to taste it. A bright light sprang into the poor scribe's eye, for no doubt he was a victim, and he exclaimed, "Oh what a splendid plant it would be for a mother-in-law!" Mr. S. at once saw the point, and advised him to call it the Mother-in-law Plant, which the newspaper man did for all it was worth. And next day thousands of people rushed to the exhibition and gladly paid their quarter for the privilege of beholding the salve for their domestic affliction.

THE COMMERCIAL WORTH OF THIS NAME.—At an auction sale of plants at Pittsburg soon after that, Mr. Smith tells me, the auctioneer was crying out in despair—"Who'll give me twenty-five cents for this beautiful plant, the Dieffenbachia Seguine?" and no bidders. A gentleman present suggested to him to put it up by its new name, the Mother-

in-law Plant. He did this and inside of two minutes every plant was sold for seventy-five cents a piece.

UNDER THE name of Begonia Gibsoni I have for the last 13 years grown the double-flowering evergreen sort which is sometimes catalogued as B. Gilsoni, and I attributed its origin to Mr. Gibson, an English collector and for many years superintendent of one of the London parks. But Mr. Smith says I am mistaken, and that he himself not only is the author of the name Gilsoni, but also the one who gave me (in 1876) my first plant of it.

ITS HISTORY is this: Mrs. Livingston, a lady from New York state and who had a colored gardener named Gilson, sent a piece of a new double-flowering begonia which her gardener had raised, to Mr. Smith for his opinion and wished him to suggest a name for it. Mr. Smith, in compliment to the gardener who raised the plant, named it after him, Begonia Gilsoni. And he informs me that it is the only contribution to horticulture, he knows of, that has been given by a colored man.

DOLICHOS JAPONICUS is the fastest growing vine I know of; the vines will run 40 feet in a year. The leaves are large, trifoliate, on long petioles. The flowers don't amount to anything. The plants are herbaceous and make new vines every year. It is a hardy (even with us in New York) perennial. Capital for quick effect. It is much used about Washington. At Major Cranebrook's I saw it used as a greenery against the stable wall. But I don't like it for this purpose. Our ivies and ampelopsis are unsurpassed for covering walls; and for dense foliage vines the Aristolochia Siphon and menispermums are better than the dolichos.

THE STRAUSS COMPANY are building immense additions to their greenhouse establishment. Evidently rose growing pays. They use steam heating and are eulogistic in its praise. Some of the Furman boilers with pipes and connections had just arrived and were ready to be put in.

THE HOUSES are large, wide, high-roofed, roomy and well raised above the ground, and the lights are exceptionally large. The pitch of the roof on the front side is 45°, on the north side it is flatter. This insures a large measure of light and heat and freedom from drip. And although the new houses are ranged in front of each other, no two of them are joined together, but all are some distance apart from one another, and as they are built on sloping ground no one of them shades the other.

THEIR ROSES looked fine, and finest of all was Wootton. It was still in bloom and about the only one in flower.

THE CLARK BOYS are an industrious trio. Their greenhouses are beside and in front of Strauss'. They grow roses, also a miscellaneous collection of flowering and furnishing stock, and handle their plants with skill and success. It was well nigh 8 p. m. when we called there, and we left those young men tearing into the foam pile with barrows and shovels and sweating like race horses, for they were making up their rose benches. This is just the material out of which successful florists evolve. The elder brother used to be with Mr. Smith at the Botanical Gardens, and Mr. S. tells me he was one of the best and smartest practical men he ever had.

The Gardens of the Agricultural Department, Washington.

These are the gayest in the city. The large acreage of grass lawns, the undulated character of the ground and the multitude and great assortment of trees, including groups, lines and individuals, render a display of color desirable, providing it is kept together, and this is just what Mr. Saunders has done. A water course is filled with aquatics, and in it *Nymphaea tuberosa* and *N. odorata* are in full bloom; *Nelumbium speciosum* is hardy and growing with the luxuriance of a spatter dock, and the water chestnut (*Trapa natans*) has become an unwelcome weed.

The large greenhouses are filled with an assortment of economic plants and some decorative ones. Considerable space is devoted to growing and propagating pine apple plants for distribution in Florida and elsewhere where they will thrive. A full set of all the choice varieties cultivated in Europe has been imported and are being multiplied with despatch; suckers and tops are in more demand than fruits, but Mr. S. tells me he cut some 10-pounders last year. A large span-roofed greenhouse is devoted to grapevines, not so much for the fruit as for the wood for propagating purposes. There are also several other greenhouses used for propagating, and one filled with orange trees.

Saul's Nurseries, Washington.

Mr. Saul has a seed and florist store on Seventh street, the principal business thoroughfare in the city, also greenhouses and extensive nursery grounds a few miles out of town. The street railway is now being extended out as far as the nurseries.

This is an old-fashioned nursery on an old-fashioned plan, and perhaps carries a larger assortment of plants than any other concern of the kind in the country. If you can't find any particular plant you want, just send to Saul of Washington, and most likely you may get it. John Saul is a florist of the old school, apart from plants as a business commodity, he loves plants and keeps them because he loves them.

He does a large business in orchids and imports heavily. But he tells me he feels the depressing effect of the rafts of orchids that are disposed of at the auction marts in New York. And his orchids looked well. He was fixing them up. At this time of year when the greenhouses are emptied of other material a little time and more room can be spared for these aristocrats among plants. His cypripediums in addition to having been potted in moss were plunged in a bed of moss; this is to keep all evenly moist and lessen the daily drenchings of water.

Salt in the greenhouse benches; where the workmen were cleaning up things, I noticed they had spread a heavy coating of rough salt over the gravel on the plant benches. This was to kill any worms or other vermin that might be lurking there.

Elliottia racemosa is a shrub from Georgia. It had gone out of flower but its unfamiliar face attracted my attention. It was growing in the open nursery and seemed perfectly hardy there and to enjoy its quarters. Mr. S. was very enthusiastic over it. "Send us a plant" of course was the result. Some may laugh at me and say it won't be hardy with us in New York, it will die sure. Well, perhaps it will perish, but the experience won't, and that's worth a quarter.



JAC. VAN M. STAMINEUM

Clematis Stans is a hardy herbaceous non-climbing species, two feet high, and with small, pale blue, fragrant blossoms. It was in full bloom, and I wanted to buy it, but John wouldn't sell it as it was his stock plant. Little plants are well enough, but I have a weakness for big blooming plants right away. This is an illustration of a florist of the old school, a man who has plants and flowers in his heart as well as in his pocket.

Hedera dentata is a very large leaved handsome ivy and it was growing beautifully against a north-facing wall. Mr. S. assured me it is the hardiest of all ivies, and this I can readily believe as it is the largest leaved, for it is proverbial that the larger the foliage, the hardier is the ivy. It is different from *Hedera Røgeniana* which also is a very large leaved ivy, and much grown. In the *London Garden* of July 9, page 7, and just to hand I find this ivy illustrated and described.

A bed of *Lilium auratum* in bloom out of doors caught my eye, but on investigation I found they were grown in pots and the pots plunged. And, really, this is about the only sure way of dealing with this capricious lily. You needn't tell me about instances where you have seen it in the most magnificent condition year after year grown out of doors. I've so seen and had it myself, and then disease would suddenly appear and sweep the field. But grown in pots it is always good.

Hydrangea Thunbergii was in fine bloom as a hardy shrub. Its flower heads are "single" and bluish and produced in great profusion. This shrub is hardy at

Boston, and should be grown by everybody who cares for summer flowers. Even if it be cut to the ground in severe winters it starts afresh in spring, and in June blooms out gayly. *Hydrangea hortensis* does not always do this. W. F.

Vaccinium Stamineum.

The subject of this engraving is an ericaceous shrub from two to four feet high, native from Massachusetts to Georgia in dry woods. The flowers are conspicuous for their long straight anthers, projecting far beyond the short spreading white corolla with pointed lobes.

The berries are of a greenish white color and scarcely edible. The plant blooms from May to June and is one of our most beautiful small-flowered ericaceous shrubs, and might be profitably forced for cut flowers. Like all the ericaceous shrubs it is of slow growth, plants seldom flowering in less than three years, but plants might be collected in their native localities and grown in the nursery one or two years when they would be fit to use. I think this is a shrub that enterprising nurserymen would do well to look up whether for the shrubbery or for forcing.

JACKSON DAWSON.

Arboretum Notes.

Twenty minutes ride from the Boston station of the Boston & Providence R. R. brings us to Forest Hills station. Alighting here, turning to the right up the road into the grounds and past the handsome

stone building of the In by Institute, down a little path through the shrubbery across the nursery grounds, then over the meadow by a winding path through the clover and daisies, up over the hill and we come in sight of the little propagating house where all the grafting and seedling for the Arnold Arboretum are done.

As we approach the potting shed the familiar tap, tap, tap of the little pots on the bench is heard, and passing in we find ourselves in the presence of the presiding genius of the place, the best informed man in this country on the propagation of trees and shrubs, Jackson Dawson.

A hearty welcome we are sure of, and Mr. Dawson is always ready no matter how busy he may be, to stop and reply to the same old questions that he has doubtless answered hundreds of times before. To go with you through the grounds, up and down the nursery rows, directing your attention to this or that shrub, its flowers, fruit, history or its value for one purpose or another, and to impart useful information such as no one else can impart and in a manner which he alone is master of.

Here in this unpretentious little greenhouse 10x20 feet heated by a little Hitchings conical boiler, are accomplished veritable wonders of propagation. Seeds are constantly arriving from all parts of the world, and they must be tough seeds indeed that will not waken into active life under the skillful hands of Mr. Dawson. The seeds are first sown in pots, pans or boxes, and as they come up are pricked off into shallow boxes, the soil used being composed of about equal parts of sand, loam and peat.

Most of this seed sowing is done in the winter. Many kinds are very slow to germinate, some taking two years before showing signs of life. During all this time they are carefully watched, covered with damp sphagnum and kept moist all summer long, and on the approach of winter are placed in frames until about February 1, when they are removed to the house, and under its encouraging warmth soon come up. Some of the coarse hard-shelled seeds, such as the plums, crataegues and tulip trees, are put in boxes of wet sand where they are allowed to remain a long time to slowly soften them.

The stocks for grafting, when it is known in advance what will be required, are kept over in small pots from spring, the best results being always obtained where the stocks are thoroughly rooted in the pots. Most of the grafting is done from December to May, beginning with the evergreens and ending with the deciduous trees.

The yearling grafts and seedlings are packed away in the fall on shelves in a pit, where they are aired occasionally through the winter to guard against excessive dampness, and in spring are set out in rows in the "infant" nursery, and one year afterward are in proper condition to be planted in the regular nursery rows or where they are to remain permanently. Forty to fifty thousand seedlings are thus produced and handled annually. There are seven acres of nursery under cultivation in botanical order and scarcely a weed is to be seen. In the infant nursery there are at all times not less than twenty thousand young plants of all descriptions, seedlings, grafted, etc., and these are all transplanted and replaced annually.

In the propagating house are to be seen now over a thousand *Andromeda*

speciosa which were sown last February and are now two inches high, several thousands of the "high-bush" blueberry, which, by the way, are commonly regarded as very difficult to start, an equal number of tiny *Rhododendron maxima* and *Berberis Thunbergii*, about twenty newly found species of roses, besides new varieties of clematis, pyrus, spiraea, prunus, etc. in large numbers.

Mr. Dawson shows among his newest acquisitions vigorous grafted plants of *Pinus ponderosa*, a magnificent pine with needles nine inches long, which originated as a chance seedling at Mr. H. W. Sargent's place at Fishkill Landing. Also a new weeping Ginkgo tree, known as *G. biloba pendula*.

What becomes of this vast accumulation of young trees and shrubs? From five to seven thousand go in exchange annually to the various agricultural colleges and experimental stations in this country and in Europe and Japan. There is a great and increasing demand abroad for American stuff. Large quantities of seeds and plants are received in exchange or from interested collectors. Dr. Regel, of the Imperial Botanic Garden at St. Petersburg, is one of the largest contributors, and a considerable quantity is also received from Kew gardens.

The larger part of the young plants, however, are set out as fast as the grounds can be got ready, on the slopes and banks of the Arboretum Park, which is fast becoming one of the grandest features of Boston's park system. With the exception of the roadways and policing which the city of Boston assumes, the whole work is conducted under the supervision and at the expense of Harvard University.

WM. J. STEWART.

Boston, July 8, 1889.

Plants for Decorating.

I see that Mr. Ball omits from his list of palms *Chamaerops gracilis*, one of the very best of its class, low, compact and bushy, the base breaks all around with young plants and makes a solid filling very desirable in many situations. *Phoenix sylvestris* is also a good tough plant and strong grower. Don't overlook *Phoenix canariensis* if you want something you can bang around; it stands lots of abuse, anything except freezing; it stands the hottest sunshine in vases or bedded out in tubs.

For outdoor decorating *Areca lutescens* and *Lantana borbonica* are worthless here, but for house decorating *Areca lutescens* is first on the list. No doubt some varieties of palms that are useful in the east would be of no use for outdoor summer decorating in the west. Mr. Ball's excellent article covers those best for house decorating only. Will not he or some other eastern palm grower give us a list of palms and other decorative plants that are most valuable for use in vases, on lawns, etc. Western florists would undoubtedly like to try any they have not yet had.

ROBERT S. BROWN.

Kansas City, Mo.

Geranium Bruanti.

Mr. James McKenna in *FLORIST*, July 1, asks if there is any difference between *Geranium Double Gen. Grant* and *Bruanti*. Perhaps that depends upon where the stock of *Bruanti* is purchased.

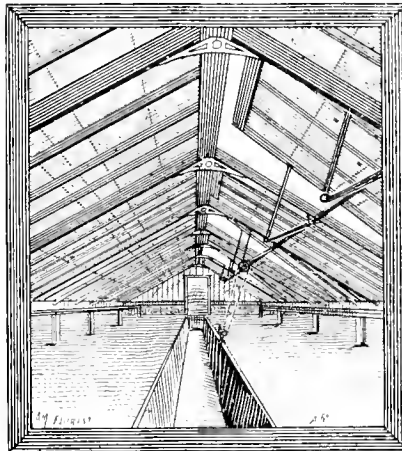
Last year I had both growing in the same bed and failed to see any difference, but this year I purchased *Bruanti* of another dealer and find it rather more double, much brighter and altogether a

decidedly better geranium. A few days of damp weather completely ruins the entire truss of *Double Gen. Grant* while *Bruanti* stands damp weather well and soon recovers. GEO. H. HENDERSON.

Dover, N. H.

Tuberous Begonias.

I have forwarded to you by express to-day a box of blooms of my seedling tuberous begonias. The plants from which these flowers were gathered have been raised from seed sown on the 9th of January last. After growing on the seedlings in a greenhouse and hardening them off well we planted out several thousands of them in beds in the open air on the 20th of May. They have grown pretty well since then and are now



INTERIOR OF LOWN GREENHOUSE P

coming nicely into bloom. The light colored varieties are later in blooming than the high colored ones, and the yellows the latest of all.

I sowed a lot of choice seed early last summer, but not early enough to have strong plants in time to set them out of doors, so I grew them along during summer in cold frames slightly shaded. Early in September I lifted and potted them and brought them into a light greenhouse in which I used a little fire-heat night and day. They were a mass of bloom through October and November. I selected the ones with the strongest constitution and best shaped flowers in their respective colors for seedling, and saved all the seed possible about the middle of December. And it is from plants raised from this seed, as already stated, that the flowers I have sent to you have been gathered. T. G.

Hackettstown, N. J., July 2.

[A large and lovely lot of flowers, single and double, and ranging in color from glistening, velvety scarlet to pale pink; also shades of yellow. The largest single flower was 4 1/2 inches across. The double blossoms were very full; the largest rosette being two inches across. There is a bright future ahead for tuberous rooted begonias for summer gardening.]

Cost of Production.

Like many others I don't think that plants, even the commonest kinds of bedding plants, can be raised for thirty cents a hundred. To grow plants in large quantities requires a good supply

of stock plants, these are the raw material in a plant factory. It costs to produce the stock plants and to care for and prepare them several months beforehand. Even if grown outside in summer they have to be housed on the approach of winter and every square foot of space under a glass roof costs money.

The hand that writes this has time and again taken off, trimmed and put in propagating bed three thousand rose cuttings a day. Any one accustomed to the handling of small stuff can do the same thing, so that there is nothing extraordinary in the quantity of work reported to be done at Mr. Henderson's establishment, but who can say that that single day's work was one third or one fourth the cost of production.

There is a material difference in the cost of different kinds of plants that are raised from cuttings. Geraniums are one of the most costly of common things, on account of their leafiness, they require room. If any one can raise them for less than \$25 a thousand in 2 1/2-inch pots I would like to know his methods.

Many kinds can be more cheaply raised from seed than by cuttings, by sowing in flats, transplanting in flats and finally potting. Many growers dispense with transplanting in flats, but transfer from the seedling boxes at once to small pots, but they don't get as good plants in the same time. Carnations are among the cheapest that can be raised from cuttings. For an early crop of these the grower has to sacrifice his blooms by cutting back, but for the general crop he can sell his flowers and get a good supply of cuttings from the same plants.

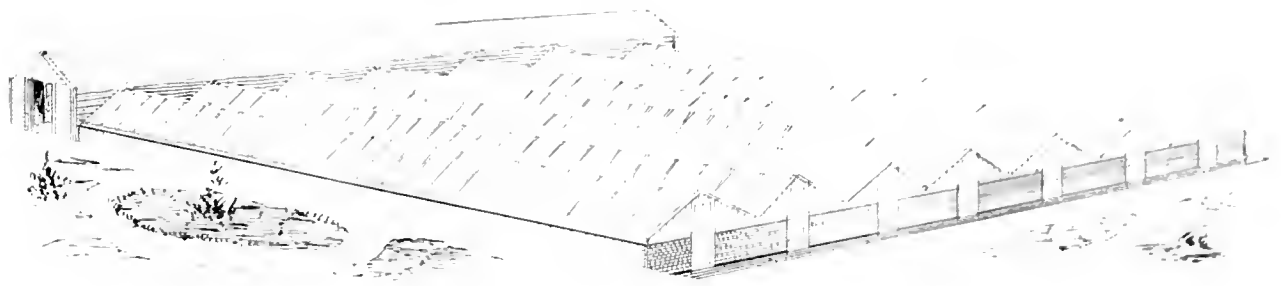
H. P. roses can also be very cheaply raised, where the plants are forced into bloom in winter and early spring for the sale of flowers as is now so extensively done. The flowers are generally disposed of at a good profit and from the same plants a good crop of cuttings can be obtained, which may be said to cost nothing for the care of the stock plants. The same, however, cannot be done with the monthly roses. For these the plants have to be, or at least ought to be, raised for the exclusive production of cuttings. Cuttings and blooms cannot be taken from the same plants without injury. Every healthy leaf taken from an evergreen rose while in a growing state is a damage to the plant.

Delaware, O., July 18. E. FRYER.

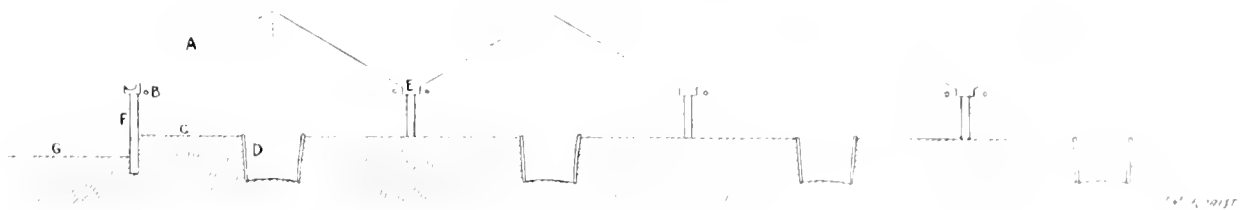
Cost of Production.

The note on "Mr. Henderson's Plant Factory" may be all right, but it is misleading. The majority of florists don't stop to think of the actual cost to them of growing their plants, and many of the smaller florists can grow only one crop.

Place 10,000 plants in 2 inch pots as close together as they can be set and they will cover a space 4 feet wide and 100 feet long. If not sold when they had made a certain amount of growth they would soon be spoiled by crowding each other and becoming drawn. To give them sufficient room it would be necessary to take out one half, which would leave you 5,000 plants. It would not be long before this would have to be repeated and your space would contain only 2,500 plants. If treated properly they will by this time be in 3-inch pots nice bushy plants ready for sale, and I don't think that the grower could afford to sell them for less than \$60 per 1000. This would give him \$150 for the use of the space occupied and other expenses. I think that this is as low as they can be grown at a profit.



LOW GREENHOUSES OR PITS



SECTIONAL VIEW OF LOW GREENHOUSES OR PITS

A. Sash 6 x 1 feet. B. 1½-inch steam pipe. C. Cemented bench 4½ feet wide. D. Walk 2 feet wide and 6½ feet from ridge. E. Yellow pine gutter 10 x 1 inches. F. Front wall 3½ feet high. G. Ground level.

I know that Mr. Henderson sells in large quantities, but he would have to have an immense market and then grow only a few varieties of soft stuff. As for seedlings the majority of florists could not sell them at any price. I think that \$15 is too low an estimate for care, firing, interest, etc., even for a common greenhouse with brick flue and certainly for a house put up as good as money can make it and heated by hot water or steam. Don't let the average florist or would-be plant grower think he can grow 1,000 plants for \$10 and get rich from his sales. He would find the balance on the wrong side very soon. ROBERT S. BROWN.

Kansas City, Mo.

Low Greenhouses or Pits.

EDITOR AMERICAN FLORIST:—In accordance with the promise that I made when you called on me a few weeks ago, I herewith send you a few notes with sketches of our low greenhouses or pits recently erected. There is nothing new in the plan, it is almost identical with what we and others have had in use for the past thirty years, except it be that instead of lifting the sashes individually for ventilation with an iron bar for a lever, we now apply the ordinary hoisting apparatus, so that every alternate sash on the south side can be lifted to a height of nearly four feet. This was the great desideratum in our first erections of these low houses, whether of fixed roofs or portable sashes, that for the purposes for which such houses are best adapted—the growing of hardy or half-hardy stuff—sufficient ventilation could not be obtained. These low houses are formed of sashes 6 x 4, the glass is double thick, 10 x 11. All sashes on the north side are screwed down, also every alternate one on the south side, the others being used for ventilation. This abundant means of ventilation makes such houses adaptable for any purpose that cold-frames or sunken pits are generally used for,

such as the growing of violets, pansies, daisies, bulbs of all kinds, or, in short, any plant whose nature rebels against a high temperature in a dormant state. For dormant hybrid roses, clematis, hydrangeas and carnations, we find them particularly useful, and we never before have had such satisfactory results from that class of plants.

The space occupied by these houses on our place is 300 feet long by 90 feet wide. The length is crossed by two potting sheds each 15 feet wide. As will be seen by the ground plan, the paths are sunk, the sides of which are held up by brick on edge laid in cement; the benches are all cemented, thus always presenting a clean, smooth surface on which to set plants. The posts supporting the yellow pine gutters are locust, so that houses so built, we believe will stand for at least twenty-five years, with but a trifle for repairs. The heating is done by steam, by three of Lord & Burnham's No. 5 hot-water boilers with a steam dome attachment. The two 1½-inch pipes in each house are attached to the gutter-plate, as shown in the plan, which is sufficient to keep out frost in coldest weather, if heated by hot-water it would require exactly the same amount of 4-inch pipe to do the same work. It is in such conditions as we have here, however, where steam has the advantage over hot-water, the extreme point to be heated being nearly 600 feet from the boiler pit, it would hardly be practicable to heat with hot-water at such a distance.

This block of pits was erected by Lord & Burnham, and cost \$7.50 per running foot, for each house, complete. This, of course, far exceeds in cost that of the ordinary sunken pits, which we used for the same purposes sometimes using them as sunken hotbeds, heating by manure, but two years' working of this new plant has convinced us that we would have been many thousand dollars in pocket had we made the erection a dozen years ago instead of bungling along with the

cold sunken pits, because, not only is there always loss by breakage in matting up such pits, but often great loss to plants is sustained from snow storms when the pits have to be kept closed. As a matter of fact, although the area covered by these low houses is considerably less than what we had in sunken pits and cold frames, our output of plants has been more than doubled, and at much less expense in labor. Against that, of course, is the cost of fuel, which I estimate to be only about \$500, as the temperature is at all times low, but taken all together, it is perhaps the most satisfactory change in our greenhouse plant that we have ever made.

Although we use these houses only for half-hardy stock, and keep them at a low temperature, of course, they can be used for other greenhouse stock by increasing the heat; but for growing flowers in winter, or for growing plants requiring a high temperature, such houses are not so well adapted as the modern rose house, which I believe to be the best for any purpose of flowering or fruiting plants in winter. But most florists growing a general stock, always find a necessity for cold frames or retarding pits and for such purposes, I doubt if this style of low greenhouses can be much improved upon.

PETER HENDERSON.

Jersey City, N. J., July 11, 89.

It should be added that surplus water drains into the cemented walk, and the houses having a slight fall the water flows easily in the side gutters to one end where it is carried off by a sewer. The rafters and ridge pole are of yellow pine. It will also be noted as shown in sketch of interior that each sash which is raised by the ventilating machinery is provided with two arms, one on each side. At the apex of the roof the two rafters and the ridge are solidly united by a small iron truss, which is undoubtedly of considerable value in strengthening the roof and keeping it in shape. ED.

Greenhouse Heating.

In spite of all the information which has been given us by able men at the S. A. F. conventions and through the columns of the FLORIST on this subject many of us are still lamentably ignorant. I have been traveling around among florists considerably lately and have been constantly on the watch for points in regard to the heating question, being still in search of the most simple, thorough and economical system. I have no doubt many may think that enough has been said and written on this subject, but while I have learned much from the discussions I am anxious for more knowledge. It may be thought by some that by this time every one in the trade should know all about heating. Well, I do not, and the question of perfect heating is just as new and important to me as ever. I have several questions to ask, and I should be glad if those who can speak from personal experience would give the facts through the columns of the FLORIST, for I believe that others would be equally benefitted.

1. Where houses are piped with heavy 4-inch cast iron hot water pipes can they be heated with low pressure steam as well as if the pipes were smaller, that is the sized pipes usually used for steam?

2. Where one set of houses is fitted with 4-inch cast iron pipe and another set with 1½ or 2-inch pipe can both be successfully heated by low pressure steam from the same boiler?

3. A set of houses is heated by hot water in both 4 inch and 2-inch pipes, on one boiler and consequently on one level, another set of houses on a level 1½ to 2 feet lower is to be heated, can the two sets of houses on different levels be successfully heated by low pressure steam (regulating by check valves) from one boiler, using say 1½ or 2-inch pipe in the houses on the lower level? Will the steam circulate properly?

In regard to the last proposition the main difficulties to overcome are the difference in size of pipe and the different levels. There are no doubt similar cases arising troubling readers of the FLORIST and authoritative answers will undoubtedly benefit others as well as myself.

H. A. SIEBRECHT.
New Rochelle, N. Y.

Greenhouse Walls.

To determine the value of greenhouse walls constructed of different materials as a protection against the weather four sections six feet long by four high were constructed in the new greenhouse recently erected at the Hatch Experiment Station, Mass. This account is taken directly from the report.

Section 1—Concrete (Rosindale cement one part to three parts of sand.)

Section 2.—Hollow brick 9 inches thick.

Section 3—Framed hollow wall covered with lining boards, building paper and sheathing on the outside; and the same, without the paper, on the inside.

Section 4.—Same as section 3, but the space was filled with dry fine shavings.

In each of these walls was made a space five inches wide and one foot long running to the center, in which were placed thermometers so protected as not to be affected by the inside temperature of the house. Other thermometers were placed upon the inside surface of the walls similarly protected from inside temperature.

The temperature of each kind of wall, both inside and surface, was recorded at 7:30 a. m., 3 p. m. and 9 p. m. The experiment continued from January 9 to

March 1, and the results are recorded in a table which is too long to reproduce.

The report continues: Much has been said and written as to the protective value of the building materials commonly used in the construction of greenhouse walls, but generally without facts or figures to substantiate the statements. After the extended observations recorded above we feel that we have facts and figures which lead to the following conclusions: 1st, That on the inside of the wall, the lined board walls, filled with shavings, give the best results, that with the hollow space being but little less valuable. 2d, That hollow brick and concrete walls are about equally valuable in protecting from cold, but not equal to the framed and board walls. As to the cost of construction there can be but little difference, and the important question of durability can only be determined after ten or fifteen years' service.

An experiment in glazing has been tried at the same place. A portion of the house was glazed with Gasser's patent zinc joints. These joints (which are illustrated, with method of using, in advertisement in the FLORIST) allow the glass to be laid flat on the sash bars, with little or no chance for the frost to act upon the putty as in lapped glass. No water can enter between the laps of the glass to start it from place when frozen, and no air can possibly enter no matter how strong the wind may blow. In glazing the strips were simply dipped in linseed oil and the glass tacked in place with ordinary zinc points; large points not being needed as with lapped glass. As no laps were made there is a saving of 1/8 to 1/4 inch with each light of glass used. The drip of water that runs down the glass inside was found to be no more than with lapped glass.

Conclusions: 1. By the use of these strips there is a saving in glass. 2. The glass is more easily laid. 3. Less putty is needed. 4. The frost can not get under the glass as readily as when lapped. 5. The glass does not slip down if the lower light is well fixed in place. 6. No air can penetrate between the joints. 7. No more drip was observed than with the lapped glass.

The question of repairs in case of breakage seems not to have been considered. Perhaps others who have used this method can report upon that point. A perfectly practicable method of laying glass flat is much to be desired.

L. WIGHT.

Non-Inflammable Wood.

In the *Manufacturer and Builder* for May, appears a report of two professors at the Ghent University on a series of experiments and investigations in connection with rendering wood uninflamable. The following conclusions were arrived at:

"Although wood cannot practically be rendered so fire-proof as not to be destroyed by heat, it is very possible to deprive it, to a considerable extent, of the property of catching and communicating fire, and to this end it is sufficient to coat the wood with a suitable composition.

"In the majority of cases, coating with a brush is the only practical solution of the question, and the substances most to be recommended for use in this manner are cyanide of potassium and asbestos paint."

"ARE YOU going to the Buffalo convention?" "Why, certainly! Are you?" "Most assuredly!"

News Notes.

HAMPDEN, MD.—M. A. Hautske has built a new house 70x12.

SARNIA, ONT.—Jas. Macklin has built another grape house 50 x 15.

KINGSTON, ONT.—J. L. Nicol is preparing to build a new house 20 x 100.

ARLINGTON, MD.—T. V. Sutton has completed three houses 100x20 each.

ROCKLAND, ME.—A. I. Mather is building a commercial greenhouse 18x100.

DETROIT, MICH.—S. Taplin has just recovered from a severe attack of typhoid fever.

BROCKVILLE, ONT.—R. B. Heather is building two houses 20 x 100 to be heated by hot water.

GENEVA, O.—W. P. Simmons & Co. are preparing to erect two new houses to be 96 x 18 each.

ST. CATHERINES, ONT.—Mr. John Holder, the florist, was married July 1 to Mary A. Genge.

PHILADELPHIA.—H. A. Dreer has added two new houses 100 x 10 each, heated by steam.

MONTREAL.—Wilshire Bros. have purchased land on Mt. Royal avenue and intend to build thereon two greenhouses 95 x 13 each.

MINNEAPOLIS.—The Exposition directors have voted to offer \$400 in premiums for competitive floral displays by members of the local Florists' Club.

KANSAS CITY, MO.—Probst Bros. are putting up eight new houses each 90 feet long with latest improved ventilators for growing roses, ferns and orchids.

PROVIDENCE, R. I.—Four great beds of roses were the June attraction at Roger Williams Park. There are 1,100 plants in the four beds and include about 60 varieties.

YOUNGSTOWN, O.—E. Hippard has in course of construction five houses, one 100x22 and four 12x100. A fifty-acre tract in the northern part of the city is to be turned into a public park.

LONDON, ONT.—Jas. Gammage & Son are building two houses 20x100 each, to be heated by steam. Fred Dicks has completed two houses 20 x 100 and one 40 x 10, heated by hot water.

BALTIMORE.—John Donn is arranging to tear down his greenhouses and remove to rebuild on another location. R. Schmidt has completed two houses 70x18 each and commenced the erection of another 120x40.

WAVERLY, MD.—J. B. McLaughlin has built two new houses, 70 x 16 and 70 x 12 respectively. Joseph Wolf has added three houses 100 x 20 each, heated by steam. Wm. Patterson has in course of construction three houses 104x14 each.

HAMILTON, ONT.—Webster Bros. are building five houses, three 80x20, one 80x17 and one 40x10. Both hot water and steam will be used for heating. E. T. Townsend is preparing to add two houses 16x90 each, to be heated by steam.

LANCASTER, PA.—Wm. Rohrer, son of A. D. Rohrer, has put up three houses 135x20 and two 135x9 that are complete in every respect. A. D. Rohrer & Bro. are adding six houses 40 x 10. M. A. Bitner has built five houses 120 x 19, and Albert M. Herr is adding eight houses 100 x 9. All are heated by steam.



"YOUR CHOICE FOR A QUARTER."

WASHINGTON.—Field Bros. have purchased three acres of land north of Seventh street road on which they intend to build several large rose houses. Mr. Field will soon start on a two months' trip through Belgium and Germany. J. H. Small & Sons have built two palm houses 75 x 10 each. J. R. Fremian has added two houses 25 x 20.

KANSAS CITY, MO.—R. S. Brown & Son have bought two acres on Troost avenue for \$11,000, to which they will later remove their entire greenhouse plant. They will push the wholesale plant trade harder than ever the coming season. J. N. Kidd has taken a partner, the boys expect to give them a reception on his return from St. Louis.

SAN DIEGO, CAL.—The *Sun* relates how a Ventura lady commenced on a small plot of ground to grow flower seeds and met with such success that she has now ten acres devoted to the work and finds it very profitable. It is predicted that nearly all of the seeds and bulbs now imported from Europe will in time be supplied to the trade by this state.

LONDON.—The annual exhibition of the National Rose Society was held at the Crystal Palace July 6. There was an immense crowd at the show, many undoubtedly being attracted by the presence of the Shah of Persia. In spite of the very unfavorable weather this year for roses the exhibits were excellent, which spoke well for the skill of the exhibitors.

PITTSBURG.—The contract for the building of the aquatic house in the Allegheny Parks has been let to Thos. W. Weathered's Sons, New York, and work will be commenced at once. The floral decorations on the occasion of the recent meeting of the Elks are described by the local press as unusually elaborate. Ludwig & Richter, of Allegheny, did the work.

TORONTO, ONT.—J. H. Dunlop is building two rose houses 18 x 135 each. S. Tidy & Son have opened a store at 164 Yonge street, as has the Victoria Floral Co. at 560 Yonge street. Levi Taylor has built several new houses on Bolton avenue. P. Fogarty has added two houses 60 x 10 each and one 60 x 16. A. Fraser one 60 x 16. Cotterill Bros. are building one 20 x 130,

and H. C. Butterworth is preparing to erect one 20 x 150.

BOULDER, COLO.—The meeting of the State Horticultural and Forestry Association was held here June 19 and 20. The main exhibits were of fruits and vegetables, though some greenhouse plants, flowers and floral designs were shown. J. E. Hubbard took nearly all the premiums on greenhouse plants, W. W. Willmore first on collection of cut roses, M. G. Smith on hand bouquets and A. Gallup of Denver on floral designs.

BALTIMORE.—A number of the florists who have been in the habit of selling flowers on Eutaw street above Lexington were on July 6 prohibited by the police from putting up their stands. On the 8th the Gardeners' and Florists' Club met and appointed a committee to wait on the mayor and demand his protection. The following were the committee: James Pentland, chairman; Wm. Fraser, Wm. McRoberts, Wm. Sands, Robert Graham and Wm. Christie. They waited on the mayor with a petition signed by property-holders in favor of allowing florists to continue their sales. The mayor, after hearing the statement from the committee ordered them to occupy their stands as heretofore. Some have been selling in that locality twenty-six years under license. The florists at Waverly were jubilant at the mayor's decision in their favor. The difficulty first originated with the store-keepers on Eutaw street, who wanted the florists to vacate the street in front of their stores.

The Court Memorial Fund.

The treasurer reports amount of contributions received to this date \$231. The following is an extract from a letter written to the treasurer by a prominent English horticulturist. "Bravo America! What an agreeable surprise you have in store for the friends of the late Mr. Court in this country. Can I ask, is there any limit to the generous impulses of the American people? Can we hope ever to make them feel our gratitude? Can it be possible that they realize the bond of affection which they are creating in our breasts, to last not for a day, but forever. Had we only had the power to deliver this news to that dear, meek, manly soul, whose presence you are about to make us feel again and again."

"Your Choice for a Quarter."

"Four nice Luizets for a quarter," wholesale price on the same day to the regular florists, \$2 per dozen. "Old roses," you say? Not a bit of it. Luizets fresh and quality good. This is no fancy tude, but an actual fact the past season.

The retail florists had the street fakir killed some time ago. They had him very much dead, but he seems to be an exceedingly lively corpse. Move him off the sidewalk and he takes to the street, off the street and he ensconces himself in a private doorway or vacant nook, where having got the consent of owner or lessee he is safe and can snap his fingers at policemen and florists alike.

It looks very much as if he had come to stay. And he has the best side of the bargain every way. He takes no orders ahead, hence is under obligations to nobody. And when "stuff" is scarce and prices high he just lays off somewhere and waits quietly for the turn in the tide, and he don't have to wait long either in these days of overproduction.

Watch the grower in the morning as he goes from store to store with his box of flowers. He is deliciously independent, he won't break prices, no, not for the world. But just follow him after he has gone the rounds and see him bring up at the fakir's. Listen to the trading now and you will have a treat. It is diamond cut diamond, but the wily fakir knows he has the last call, so in the end he is pretty sure to buy at his own price. He will soon be out on the corner with his bunches of flowers stuck in rows on a perforated board, almost under the very shadow of the poor chap who pays a high rent and three times as much as he for the same goods.

And does the conscience of the grower ever smite him? Oh, no, the fakir does a cash business and the jangle of the money has a fascination far exceeding that of due bills and book accounts, and has a wonderful effect upon consciences. Besides the grower has not forgotten how a year or so ago this same store florist coaxed him away in the fall from the commission man with smiles and wiles and cunning sophistry, and how afterwards when the spring time came and flowers became a drug in the market he had unceremoniously given him the bounce.

And won't the florist pay the grower off some day for his funny business with the fakir? Bless you, no. Next fall he will love him just as of old—so the everlasting see-saw between the growers and the dealers goes on, and the cunning street fakir rakes in the benefit. The boss street fakir of Boston is in Europe this summer traveling for pleasure, while his poor neighbors, the store-keepers and the growers, say they can not afford to go to Buffalo this year. Who would not be a fakir? W. W. S.

Pacific Coast Notes.

On my recent visit to California, Oregon and Washington Territory, I was impressed with the beauty and vigor of the flowers, shrubs and trees, as well as with the fruitfulness of the orchards and vineyards. The effects of the currents of the Pacific Ocean on the climate of our western coast, even so far north as Alaska, is remarkable, and this influence I largely attribute the success of the hardy flowers and fruits which grow in San Francisco were often 100 feet high, and roses all along the coast were far more healthy and vigorous than in New York state. Shrubs and trees grow

successfully there as far north as Tacoma, W. T., without protection, which would perish in New York state under the same circumstances unprotected.

Golden Gate Park, San Francisco, embraces 1,500 acres, taking in a large mountain. It is not entirely completed, but as far as complete the work is effective and pleasing. As every plant must be irrigated the expense of maintaining is great.

The mountains along the stage road to the Yosemite valley are beautifully covered with forests, mostly "sugar pines" so called, many of enormous size. There are various spruces, firs and cedars often growing in fissures of rocks on abrupt mountain sides, where there is but slight trace of soil and where rain seldom falls. There was in June a profusion of flowers on these Sierra Nevada mountains, azaleas, lupines, Mariposa lilies, columbines, wild marigolds and others. Earlier in the season I am told these mountains are carpeted and ablaze with flowers, far more numerous than in June, when the soil becomes quite dry.

To say that certain flowers or fruits will thrive in a certain state is to make a wild statement of no value to the planter, for different sections of most states differ as widely as it is possible to imagine. For instance, Washington Territory west of the mountains has a moist, mild climate and is heavily timbered, while east of the mountain slopes the climate is very dry and there is no timber worth mentioning.

The Mariposa Big Trees (Sequoia gigantea), are wonderful. I measured one, 50 feet in circumference. There are 600 in the Mariposa Grove. It resembles the cedar in texture and color of wood, and is a conifer. CHARLES A. GREEN.

Rochester, N. Y.

SITUATIONS, WANTS, FOR SALE.

Advertisements under this head will be inserted at the rate of 10 cents a line (seven words) each insertion. Cash must accompany order. Plant advs. not admitted under this head.

SITUATION WANTED—By a first class rose grower, propagator and cut flower worker, with a large firm, will be ready August 15. Address E. C. PARTON, Denver, Col.

SITUATION WANTED—As under gardener in private or commercial place by a young man of 20, excellent references; 5 years experience. Address A. DAVIES, Box 35, Wixom, Mich.

SITUATION WANTED—Have had six years' experience in greenhouse, lawn and garden, understand market plants, cut flowers and flower beds. Good reference. Address H. M. AMI Florist.

SITUATION WANTED—By a practical and trustworthy man, as florist and gardener. Rose growing a specialty. References. Address JAS. P. HENNERLY, Oakdale, Suffolk Co., N. Y.

SITUATION WANTED—By young man, age 23, with some experience, in first class rose growing establishment, where able to get full knowledge of the business. References if wanted. Address P. O. Box 3, Mount Auburn, Mass.

SITUATION WANTED—By an Englishman as manager, single, age 28; first class rose grower, propagator and plantsman. Can furnish the best of references. Address R. C. care W. J. Stewart, 65 Bromfield St., Boston, Mass.

SITUATION WANTED—A practical florist of executive ability and experience in all departments of the business; propagating, rose growing, cut flowers, plants, etc.; private or commercial. First class references. Address PLANTSMAN, care American Florist, Chicago.

SITUATION WANTED—Private or commercial. English; married; 15 years experience in all branches; abstainer; good references. East preferred. Address, stating wages, C. WALTERS, 151 North Glen Ave., W. Wichita, Kan.

SITUATION WANTED—As rose growers and propagators. Can take entire charge of private or commercial place. No objection to going east or west; by two experienced florists. Address GARDENER, 109 Arapahoe St., Denver, Colo.

SITUATION WANTED—As foreman, private or commercial. Good rose grower and general greenhouse work. Also landscape gardening. Is now engaged as head gardener City Park, Reading. Address HOSKIN & GILES, Reading, Pa.

WANTED—700 ft. 4-in. greenhouse pipe. State cash price. KIRKHAM & FORBES, Kalamazoo, Mich.

WANTED—A young man to grow plants and roses for market. Single German preferred. F. A. CHAPMAN, Grand Rapids, Mich.

WANTED—Immediately, a single man, in a moderate sized florist establishment. F. FOUNTAINE, 113 N. Erie St., Racine, Wis.

WANTED—A first class cut flower man. Permanent situation providing party suits. References required as to character and ability. No tramps need apply. L. A. CASPER, Council Bluffs, Iowa.

WANTED—Middle aged man who understands the florist business, one who wants a good home and willing to work for small wages. Must be honest and sober; work very light. Address L. R. FOX, 117 E. Fulton St., Gloversville, N. Y.

WANTED—Single man to run my greenhouses on shares, or will lease same. Two 75 ft. houses nearly new—head house with sleeping room. Steam heat. Best of references given and required. Address A. E. HOYT, Atkinson Depot, N. H.

WANTED—To buy or rent, greenhouses with established trade; must be in good condition and well stocked, with all conveniences, &c., for doing business and room to increase. Address, giving full particulars, price, etc. GREENHOUSES, care American Florist, Chicago.

WANTED—On a commercial place, a gardener—single German preferred—thoroughly experienced and successful in growing roses, cut flowers in variety and bedding plants. To the right man a permanent situation. Address with references J. NEWMAN & SONS, 61 Tremont St., Boston, Mass.

WANTED—Experienced commercial florist as assistant foreman at Dreeb's Nursery, River-ton. The application of only first class men with ability and experience in all commercial places and best of references will be entertained. Lock Box 1048. HENRY A. DREER, Philadelphia.

WANTED—A sober and industrious man, as general manager, to take charge of 100,000 feet of glass and 10 acres of ground; must be competent to grow a general assortment of cut flowers, and understand the management of men. We have good men who have been with us for many years in each department. JORDAN FLORAL COMPANY, 706 Olive St., St. Louis, Mo.

WANTED—A first class gardener and florist to run a garden and greenhouse; must have \$30 or \$40 in cash. A good chance for a first class man. Can make a good thing of a 2-story house, good bath, wind pump, tanks, hydrant, greenhouse, etc., and manure for one year on the ground. None but a man who can meet the requirements and come well recommended need apply. Address S. K. HAGINS, Portland, Ind.

WANTED—At once, a florist, must know how to propagate, understand floral designs and landscape gardening. Will require first class references with application; must be sober, honest and industrious. Salary \$30 per month board and lodging free—with an increase to the right man. Situation permanent. Don't answer unless you fill above requirements and can come at once. No useless correspondence desired. S. WACHENHEIM, Vicksburg, Miss.

FOR SALE—A bargain; second-hand—used part of two months only—No. 2 Weathered boiler; good as new. Address Box 131 Foxboro, Mass.

FOR SALE—A fruit and vegetable garden, with glass, containing 11 acres, 2 1/2 miles from city, for \$2,000. Address care Box 646, Kalamazoo, Mich.

FOR SALE—A No. 4 Hitchings Conical Boiler. One season's use. Price, \$40 Address ALMA S. PATTERSON, Fort Scott, Kansas.

FOR SALE and LEASE—My greenhouse and nursery business. Rare chance for good florist with some means. Full. FRITZPER, Sedalia, Mo.

FOR SALE OR RENT—Greenhouse property, only one in the growing city of Asbury Park; established 10 years; good location, artesian water, and doing a good business. Address J. H. B. P. O. Box 251, Asbury Park, N. J.

FOR RENT—A rare chance for a young man to rent four greenhouses, cottage, tool house, putting shed, etc., large garden. Rent \$30 only; \$300 to \$400 cash will buy the present tenant out. Box 1 Tuckahoe, N. Y.

FOR SALE—Good established florist business with 5 greenhouses, a 5-room dwelling, 1/2 acre of land, large choice collection of plants, five blocks from postoffice, in County Seat of 8,000 inhabitants. Address S. H. B. care American Florist.

FOR SALE—Our entire hot water heating apparatus, consisting of six nearly new Littlehugh Smith & Lynch, and 7 zinc boiler, 6000 ft. 4-inch pipe & fittings. Offer solicited, or price sent on application to J. NEWMAN & SONS, Boston, Mass.

FOR SALE CHEAP—or would take a partner: 3 good greenhouses—4,000 feet of glass—with a good stock of plants, 2 acres of land and a dwelling house with 9 rooms. Easy terms. Address MR. F. ROGERS, 248 Nicolett Ave., Minneapolis, Minn.

FOR SALE CHEAP—A small florists' place and business, with two story frame dwelling, in Delaware. On a thriving city of 10,000 inhabitants. Good trade already established. Good chance for a practical man with small capital. Address BUCK & THOMPSON, Delaware, Ohio.

FOR SALE OR EXCHANGE—For a first class greenhouse property, a beautiful home, 2-story house and outbuilding, 5 acres under cultivation orchard, small fruits, etc., good water, two squares from Court House, a healthy climate. For particulars address P. O. Box 265, Denton, Tex.

WANTED.

50 FARFUGIUMS. 50 MME. POLLOCK-GERANIUMS. 6 MARANTA ZEBRINA. Name size of plants and price.

JOHN A. SALZER SEED CO.,
LA CROSSE, WIS.

FOR SALE.

One of Myers & Co.'s (Philadelphia) Hot Water Boilers, largest size, in good condition—used three seasons. Also over 2000 feet 4-inch pipe, 400 feet of which is extra heavy. For terms, etc., apply to

JOHN CURVEN, Jr.,
VILLA NOVA, Del. Co., PA.

For Rent.

Near Philadelphia, five greenhouses, 7,000 feet of glass heated by steam and hot water, houses in good repair, including stable, office, ground, etc.; would suit party having cut flower trade in city, also good local trade. Stock for sale.

Address

Box 341, Media, Pa.

FOR SALE.

A well established business, consisting of three greenhouses and small store, all centrally located together, next door to the postoffice, in a live young city of 15,000 inhabitants. Buildings are on leased ground, lease does not expire for 10 years. This is a rare chance and will be sold cheap. For full particulars, address

Box 457 Hornellsville, N. Y.

ROSES FOR PLANTING

Catherine Mermel, Mme. de Walleville,
Perle des Jardins, Papa Gontier,
La France, Sunsel,
Bon Silene, and The Bride.

These roses are very strong plants from

3, 3 1/2 and 4-inch pots, and in prime condition for planting.

WRITE FOR PRICES.

Brown & Canfield,

ROSE GROWERS,

SPRINGFIELD, ILL.

ROSES.

Mermets, Brides, Papa Gontier, Souv. d'un Ami, Bon Silene, Cook, Perle, Niphotos and La France, strong plants from 3-inch pots, \$5.00 per 100.

SMILAX—Strong plants from 2 1/2-inch pots, \$3 00 per 100; \$25 00 per 1000.

Celery, early transplanted plants, \$5.00 per 1000.

CHRYSANTHEMUMS, best flowering sorts, at \$1 00 per 100; \$35.00 per 1000.

WOOD BROS.,

(Successors to I. C. WOOD & BRO.) FISHKILL, N. Y.

ROSES AND SMILAX.

La France and Goutiers, 3-in. pots, 4 cts.

Niphotos and Mermets, 3-in. pots, 5 cts.

Heavy Smilax, 2 1/2-inch pots, 2 cts.

JORDAN FLORAL CO.,

706 Olive Street, ST. LOUIS, MO.
Mention American Florist.

100 NIPHOTOS, 3-inch.
50 BON SILENE, 3-inch.
100 LA FRANCE.
150 MERMETS, 2-inch.
1000 SMILAX, 3-inch.
1000 " 2-inch.

A. H. POEHLMANN,
MORTON GROVE, Cook Co., ILL.

ROSES.

1000 fine Catherine Mermets, 3-inch pots, at \$5 per 100. Also 10000 large Neapolitan VIOLETS, plants in open air, \$25.00 per 1000.

Address LINCOLN HEIGHTS NURSERY,

NEWTOWN, Bucks Co., PA.

WOOTTONS.

WE HAVE STILL A FEW LEFT AFTER PLANTING 20,000 FOR NEXT WINTER'S CUT.

These 20,000 plants required 1,800 running feet of Greenhouses 16 feet wide, which we have erected at a cost of \$35,000, to be devoted exclusively to "WOOTTONS."

WHY WE PLANT THIS ENORMOUS NUMBER, AND WHY YOU SHOULD DO LIKEWISE :

Because it is the best red rose in the world.
 Because it blooms continuously for the whole year.
 Because it is as large as an American Beauty, and
 Because it is of a much richer color.
 Because it blooms best in winter.
 Because with us it never has shown disease.
 Because reports from hundreds of growers are favorable.
 Because next winter it will pay four times the profit of any other rose.
 Because the greatest profit will be this coming season.

Because it is no snare and delusion like hundreds of others that you and I have tried.
 Because it has been thoroughly tested.
 Because we offer it at reasonable figures.
 Because red roses will take the lead this winter.
 Because it is a home production.
 Because it has taken first prizes whenever exhibited.
 Because **ALL THE FLOWERS ARE PERFECT, WITH LONG STEMS AND ELEGANT FOLIAGE.**

REMEMBER THE \$300 PRIZE WHICH WE OFFER.

Plants in perfect order, from 3-inch pots, at \$180 per thousand; \$100 per five hundred; \$25 per hundred, less quantity, 50 cents each, during August and September.

C. STRAUSS & CO., ROSE GROWERS, WASHINGTON, D. C.

JOHN H. TAYLOR,
 ROSE GROWER,
 BAYSIDE, L I, N. Y.

Offers to the Trade the Great TEA ROSE

MME. CUSIN.

The leading Rose in New York market this season. Sixty thousand buds cut from 200 running feet of glass, from July 1st, 1888 up to Feb. 1st, 1889.

— ALSO —

MME. DE WATTEVILLE, CATHERINE MERMET,
 PAPA GONTIER, BRIDES, and
 PERLE DES JARDINS, NIPHETOS.

Write for particulars.

NOTICE.

To avoid all unnecessary correspondence, I would say that my stock of Souvenir of Wootton Roses is at present exhausted, and that I am unable to fill any more orders until later on.

JOHN COOK,
 BALTIMORE, MD.

ROSES.

35,000 of the leading Foreign and Bedding varieties TEAS, HYBRID TEAS, and HYBRID PERPETUALS. Teas, \$3.00 per 100; Hybrids, \$4.00 per 100. My selection of varieties. Also the leading Prize winning varieties of CHRYSANTHEMUMS, CARNATIONS, and general Greenhouse stock. Trade List mailed on application.

JACOB SCHULZ,
 LOUISVILLE, KY.

G. BENARD,
 ORLEANS, FRANCE.

ROSES ON THEIR OWN ROOTS

A SPECIALTY.

Special Offer for Fall Delivery.

	Per 100	Per 1000
Anna de Diesbach.....	\$1.00	\$9.00
Captain Christy.....	1.00	8.00
Hermosa, 1st size.....	2.25	20.00
" 2nd size.....		16.00
Laurette de Messimy (New China).....	9.00	80.00
Mme. Gabriel Lanzer.....	4.00	30.00
Mme. Plantier.....	3.50	30.00
Magnus Charta.....	7.50	50.00
Sony de la Malmaison.....	4.00	35.00
Ulrich Brunner.....	4.00	30.00
AMPELOPSIS VEITCHII, 1 yr. transplanted per 1000 lot.....		10.00
LILACS, CHARLES X, pot grown for 1 yr.....	25.00	

Nursery stock of all descriptions at very moderate prices. Cash with order from unknown correspondents. For particulars apply to

E. BENARD, Jr.,
 SAN DIEGO, CAL.
 or to **C. RAOUN,**
 296 Pearl St., N. Y.

ROSES.

150 PERLES, 150 NIPHETOS, 150 BRIDES, 100 GONTIERS, 500 LA FRANCE. These are in 4-inch pots, well grown, and free from any disease. Will sell, out of pots, for 25 per 100.

G. R. CLARK & CO.,
 SCRANTON, PA.

Roses for Forcing.

Healthy, vigorous plants from 4 in. pots, Perle, Mermet, Bride, Niphetos, Papa Gontier, Bennett, etc., at \$6.00 per 100.

RAWSON the Florist, Elmira, N. Y.

SMILAX.

Good strong plants at \$5.00 per hundred.

ROSES.

A fine assortment of Teas—will only name a few of the leading varieties.

Adam, Bride, C La Barthe Etoile de Lyon, I Sprunt, Safrano, Marie Lambert, M. Margottin, M. Van Houtte, P. de Hohenzollern, White Bon Silene, Hermosa, Douglas, Malmaison.

NOISETTES.

M. Niel, Chromatella, Gloire de Dijon, and R. M. Henrietta.

Price, \$1.00 per 100, \$3.00 per 1000. Have also a good stock of young Hybrids of the following varieties

Gen. Washington, H. Schultzeiss, Mme. A. Duron, Mme. Masson, Paul Neyron, Coquette des Alps, Dr. Hogg, Giant of Battles, Crown Prince, and others at \$6.00 per 100, \$18.00 per 1000.

Gen. Jacqueminot, \$1.00 per 100, 4 inch pots, \$12.00 per 100.

Strong Baltimore Belle, in 4 inch pots at \$8.00 per 100.

GEO. W. MILLER,

1748 N. Halsted St. CHICAGO

ROSES.

Perle, Niphetos at \$1.00 per 100, 4 inch pots. La France and Gontier, 100 per 100. Very strong plants. For particulars apply to VERY LOW PRICES. Correspondence solicited.

GERMOND & COGROVE,

Box 5, SPARKILL, Rockland Co., N. Y. Mention American Florist.

IMPORTED H. P. ROSES.

W. Wood, 107 1/2 N. W. 1st St., CHICAGO, Ill. Orders from outside of city sent by express. See list of varieties in our circulars. Also, WILLIAM H. SPOONER, Jamaica Plain, Mass.

THE AMERICAN FLORIST

Subscription \$1.00 a year. To Europe, \$1.50.

Advertisements, 10 Cents a Line, Agate; Inch, \$1.50, Column \$4.00. Cash with Order.

No Special Position Guaranteed.

Discounts, 3 months, 5 per cent, 6 months, 10 per cent, 12 months, 20 per cent.

No reduction made for large space.

The Advertising Department of the AMERICAN FLORIST is for Florists, Seedsmen, and dealers in wares pertaining to those lines ONLY. Please to remember it.

Orders for less than one-half inch space not accepted.

Advertisements for August 15 issue must REACH US by noon, August 9. Address

THE AMERICAN FLORIST CO., Chicago.

GERANIUMS.

From a pigeonhole of this year's catalogues we selected eight that contained good sized lists of geraniums, and proceeded to condense the various lists into one. We imagined that after combining two of the longest lists those listed in the remaining catalogues would be mainly duplicates, but to our surprise the duplicates were comparatively rare, except in one instance where one list was an exact copy of another and it was evident that both catalogues were printed from the same copy, but this duplicate is not included in the eight catalogues mentioned above.

We found that in the eight catalogues selected there were listed 385 varieties of geraniums (zonals only), and that where duplicates did occur more often than not, the names were spelled differently, though most frequently sufficiently alike to identify them as one and the same to any one familiar with the names. It is quite probable that over 500 varieties of geraniums (zonals only) were listed in the American catalogues for 1899, and how many are the same variety traveling under two or more names and how many are so near alike that one or the other should be discarded? is an interesting question. That at least one half of those listed should be thrown out there can be but little doubt. Too frequently new introductions are no improvement on or are inferior to existing varieties and some means should be adopted to prevent the admission to our lists of new varieties until they have been passed upon by some competent authority who shall determine whether they are desirable additions. It would seem that this is a matter which the national society should consider.

We now propose to call attention to some of the vagaries of the geranium lists in the eight catalogues in question, among which are included those of our best known florists, and we trust that the errors to which attention is here called will not be repeated in the same catalogues for 1899.

In one catalogue we find listed "C. A. Knorr," in another "Comte A. Knorr," and still another "Contre-Admiral Knorr." Lemoine gives it as "Contre-admiral Knorr," which is undoubtedly correct and shows that of the American catalogues none of the three is correct. One catalogue has "Esperance," which is correct, and another has "L'Esperance," which is incorrect; one has "Gloire de Corbanay" and other "Glory de Corbenay;" one has "King Olga," another "Koniga Oglea" and another "Konigin Olga;" one has "Deruchette" as Lemoine gives it, and another has "Deruchute Lerbois" (abbreviation may be forgiven but adding on, never); others are "Emile de Girardin" and "Emil Girar-

din;" "Guillon Mangelles" and "Guillon Mangilli;" "Kate Patterson" and "Kate T. Patterson;" "Re Umberto" and "Umberto;" "Abricote" and "Apricote" (Lemoine gives it "Abricot") and so it might be continued into a lengthy list.

Why this lack of uniformity? Is it simply carelessness on the part of the compilers of catalogues? In any event it is a disgrace to the profession. Let us hope that more care will be expended upon the catalogues for 1899, and that lists will be more thoroughly weeded of kinds which should have been discarded long ago.

EXPRESS RATES.

We are pleased to state that a modification of the classification which went into effect June 15 has been made by the Traffic Committee of the Express Companies. The new rule reads: "Live plants of all kinds, boxed or crated so that they may be packed with other freight without damage, single merchandise rates. When not so packed not less than double merchandise rates." We received advice of this action shortly after we had gone to press for last issue and the new rule will undoubtedly be in the hands of all agents by the date of this issue.

The inconvenience and trouble to shippers caused by this disturbance in rates has been considerable, and it was all due to the hasty, ill-considered action of one official. It seems that this gentleman one day noted among the freight carried by his company a large rubber tree, some six or seven feet high, with no packing whatever, merely a tag with directions tied to its stem. It was an unwieldy thing to handle and extremely difficult to pack without injury, in fact could hardly be placed in the car in an upright position. After ascertaining that the plant was billed at a single rate he formulated the double rate classification which was adopted by the traffic committee, the members thinking that it applied only to plants in flower and specimen decorative plants. In fact when we laid the matter before one of the committee June 18, he attempted to convince us that small roses and similar plants were not "flowering and ornamental plants." Since that time however we have been advised of several cases where agents have exacted double rates on small plants tightly boxed.

As the case now stands open trays of plants and single specimens without any crating are still subject to the double rate, and we doubt the wisdom of an attempt to have these included in the single rate classification. It is a matter of regret that we overlooked shipments in baskets when formulating the modifying rule, as these make handy packages, but we are inclined to believe that convenient packages which can be easily handled and packed with other freight will be billed at a single rate. Should double rates be exacted on any such shipments advise us and we will lay the matter before the traffic committee.

TUBEROUS BEGONIAS.

Another and larger lot of blooms of tuberous begonias has been sent us by Messrs. F. J. Meech & Son, Charlevoix, Mich. Some forty varieties were represented in addition to fifteen unnamed seedlings raised by Mr. Meech.

Among the single varieties Prince of Wales (Laing), crimson, 4½ inches across; Duchess of Edinburgh (Laing), salmon, 4 inches across; Princess Louise,

white, and Mrs. Bellew (Cannell), deep rose, 3 inches across, were most noticeable, the color of the first named variety being unusually rich and velvety. So many of the doubles were of such excellence that it would be difficult to make a choice. Terre de feu (Lemoine), is dark pink, of very large size and very double; Clemence Denisart, a beautiful pink and fully as large; Rosamonde (Leguin), pink; H. Barnet (Laing), almost crimson, 3 inches across and very double; Goliath (Leguin), pink; Glow (Laing), scarlet; Jubilee (Laing), deep rose; Felix Crousse (Crousse), scarlet; Bouton d'or (Lemoine) rich yellow; Louis d'or (Lemoine), lemon yellow; Gabrielle Legros (Crousse), white with yellow tint; Mrs. French (Crousse), white; Mrs. Amy Adcock (Laing), scarlet with white center; Angés Sorel (Leguin), beautiful light pink; Mrs. Arnoult (Arnoult), rich pink; Thalie (Lemoine), small white; Little Beauty (Laing), dark rose; Longfellow (Lemoine), rose; Wm. Bealy (Crousse), scarlet with salmon shade; Le Grand Citoyen (Lemoine), dark scarlet; Ionia (Laing), red; Comtesse H. de Choiseul, pink; Gluck (Van Houtte), dark rose; Prince de Battenberg (Van Houtte), pink, of very large size. Several of Mr. Meech's seedlings are excellent, a single salmon pink 4½ inches across will undoubtedly find favor. Had anybody told us ten years ago that we would ever see begonias equal to any in this collection we should certainly have laughed at him.

For a selection of a half dozen double varieties we picked out the following (judging from the flowers and knowing nothing of the habits of the plants): Clemence Denisart, pink; Bouton d'Or, yellow; Lucy Closon, white; Jubilee, rose; Glow, scarlet; Terre de feu, dark pink. To complete ten varieties we added Rosamonde, pink; Mrs. Arnoult, pink; Comtesse H. de Choiseul, salmon pink; H. Barnet, crimson.

GERANIUMS SUNLIGHT AND B. K. BLISS.—A correspondent writes that in his soil and with his treatment these two geraniums can not be distinguished as two varieties. Regarding the matter Mr. Thorpe writes: "Sunlight is not the same as B. K. Bliss. They are both chickens of mine. Sunlight is a shade lighter than B. K. B., the flower a trifle better shape, but B. K. B. surpasses it in size of flower truss and general good properties, and is two years younger." It is possible that our correspondent has received plants of one of these varieties under the two names. It may be a case of substitution or carelessness on the part of the party from whom he purchased, but is not a case of renaming.

THE BEST GERANIUMS.—In order to determine which geraniums are most valuable in all sections of the country for bedding we request each grower of these plants to drop us a postal card naming his best single scarlet, best double scarlet, best single pink, best double pink, best single white, best double white, best single any other color and best double any other color. Remember that the first requisite of a bedder is to stand the sun and look well through the summer. A full report can not fail to be of great interest and value to all in the trade. Don't neglect to do your share. It will cost you only a moment's time and one cent.

COST OF PRODUCTION.—On the blank form sent out for our plant trade reports we added a query worded as follows: "Have you kept a record of expense so

that you could determine the cost of producing bedding plants? If so give your estimate on the cost of producing good plants of geraniums in 4-inch pots; verbenas in 2 1/2-inch pots; coleus in 2 1/2-inch pots; alternantheras in 2 1/2 inch pots." Out of the sixty replying to the other queries but eight had kept any accurate record, though several sent in estimates. An average of the reports received is as follows: Geraniums in 4-inch pots \$6 per 100; verbenas in 2 1/2-inch pots \$2.50 per 100; coleus and alternantheras \$2 per 100. All of the estimates were very close to these figures, hence it may be considered a fair average.

HAIL INSURANCE.—Persons desiring to join the Florists' Hail Association at Buffalo should measure their glass before going to the convention. Measure your single and double thick glass separately, and the secretary will fill and receive your application on the spot. The directors and officers will impart whatever information may be desired to any one interested in hail insurance.

THIS ISSUE completes the fourth volume of the FLORIST, which shows an increase of twenty four pages over volume III. Volume IV bound in half leather uniform with previous volumes may be had by the 15th inst. at \$2.25 prepaid by mail or express.

SOME SPECIMENS of the "Dew Seedling" strawberry sent us by H. F. Dew, Lausing, Mich., were of unusually large size and excellent flavor.

CONVENTION SUPPLEMENT advertisements should be mailed to reach us by August 7 at latest, and as much earlier as possible.

IT PAYS to have a few things extra well grown, that your neighbors do not have. They will attract attention and make sales. B.

KENNICOTT BROS.,
WHOLESALE FLORISTS,
 TO THE TRADE ONLY.
 ALL CUT FLOWERS IN SEASON.
 Write for price list. Consignments solicited.
WIRE-WORK made to order, and in stock.
 27 Washington Street, CHICAGO.
 TELEPHONE NO. 466.

IF YOU WANT CHOICE, FRESH
CUT FLOWERS,
 WELL PACKED AND SHIPPED
 PROMPTLY, YOU SHOULD ORDER OF
CHAS. H. FISK,
Wholesale Florist
 116 & 118 DEARBORN STREET,
CHICAGO.
 AND RELY ON GETTING THE BEST
 STOCK IN THE MARKET.
Store Open Day and Night.

I keep a full stock of
WIRE DESIGNS
 of superior workmanship and at lowest prices. Extra pieces of any description made to order on shortest notice. Send for Catalogue.
CHAS. E. PENNOCK,
WHOLESALE FLORIST
 38 So. 16th Street, Philadelphia, Pa.

Wholesale Markets.

Cut Flowers.

BOSTON, July	
Roses, Teas	\$1.00
" Fancy	1.00
Valley	1.00
Carnations	1.00
Sweet Peas	5.00
Pink Pond Lilies	5.00
Blue Pond Lilies	5.00
Smilax	1.50
Adiantum	1.00

NEW YORK, July	
Roses, Bon Silene, Gontier	\$1.00
" Perles, Niphotos, Sonys	1.00
" Mermets, Brides	1.00
" Cousins	1.00
" La France	1.00
" Am. Beauty	1.00
" Jargis	2.00
" Hybrids	10.00
Carnations, long	1.00
Mignonette	.50
Smilax	1.00
Adiantum	1.00

PHILADELPHIA, July	
Roses, M. Gaillets, Niphotos	\$1.00
" Perles	1.00
" La France	1.00
" Pierrettaulils	1.00
" Bennetts, Dupes	1.00
Carnations, long	1.00
Carnations, short	.50
Stephanotis	1.00
Water lilies	4.00
Coropsis	.50
Sweet peas, cornflowers, etc	.50
Glabolus	2.00
Smilax	1.00
Adiantum ferns	1.00

CHICAGO, July	
Roses, Perle, Niphotos	\$1.00
" Bon Silenes	1.00
" Am. Beauties	1.00
" La France, Mermets	1.00
" Brides	1.00
" Bennetts, Dupes	1.00
Carnations, short	.50
Carnations, long	1.00
Callas	10.00
Smilax	1.50
Adiantum	1.00
Haises	.75
Glabolus	8.00
Tuberoses	2.00
Sweet Peas	25.00

WM. J. STEWART,
Cut Flowers and Florists' Supplies
 WHOLESALE
 67 BROMFIELD ST., BOSTON, MASS.

N. F. MCCARTHY & CO.,
WHOLESALE FLORISTS
and Jobbers in Florists' Supplies,
 1 MUSIC HALL PLACE, BOSTON, MASS
 Also entrance from Hamilton Place through Music Hall.

We keep a large supply of Fancies and Carnations always on hand. Return telegram sent immediately when unable to fill orders.

— Auction Sales of Plants Spring and Fall. —

WELCH BROS.,
WHOLESALE FLORISTS.
 165 Tremont Street BOSTON MASS.
 We make a specialty of shipping choice Roses and other Flowers, carefully packed, to all points in Western and Middle States.
 Return Telegram is sent immediately when it is impossible to fill your order.

W. F. SHERIDAN,
Wholesale and Commission Dealer in
CUT FLOWERS,
 NO. 50 W. 30TH ST., NEW YORK.
 Orders to be shipped will receive prompt attention.

ROSS & MILLANG,
WHOLESALE FLORISTS,
 No. 1168 Broadway,
 Bet. 27th & 28th Sts., NEW YORK.

THOS. YOUNG, JR.,
WHOLESALE FLORIST
 20 West 24th Street,
NEW YORK.

VAUGHAN'S
CUT FLOWER DEPT.
 88 State St., - CHICAGO.

Receives Fresh Flowers in truck and express DAILY.
 Send your orders to the above address, where they will be attended to properly.

REMEMBER: When you come to Chicago for Flowers to sell, VAUGHAN has also.

W. S. ALLEN,
WHOLESALE DEALER IN CUT FLOWERS.
 36 EAST 23rd STREET, NEW YORK.
 ESTABLISHED 1877.
 Price List sent upon application.

LaRoche & Stahl,
Florists & Commission Merchants
 OF
CUT FLOWERS.
 1237 Chestnut Street, - PHILADELPHIA
 Consignments Solicited. Special attention paid to shipping. Mention AMERICAN FLORIST.

C. STRAUSS & CO.,
 Telephone - WASHINGTON, D. C.
 Roses planted for Winter 1889-90.
 20,000 WOOTTON, 2,000 MME WATTEVILLE
 15,000 PERLES, 2,000 MME CUSIN.
 10,000 LA FRANCE, 1,000 LUCIOLE.
 3,000 AM. BEAUTY, 6,000 BRIDES
 2,500 PURITAN, 2,000 MERMETS.
 2,000 MME. HOSTE, 2,500 GONTIERS

EDWARD C. HORAX,
WHOLESALE FLORIST,
 36 WEST 29TH STREET,
 The Bride, Mermet, and Am. Beauties, SPECIALTIES. NEW YORK.

HAMMOND & HUNTER,
 Wholesale dealers in
Cut Flowers and Florists' Supplies
 61 West 30th Street, NEW YORK.

GEO. MULLEN,
WHOLESALE FLORIST.
Florists' Supplies Always on Stock
 17 CHAPMAN PLACE,
 100 School St., near Parker House
BOSTON, MASS.
 Orders by Mail, Telegraph, Telegram, or Express promptly filled.

CUT FLOWERS
 The choicest Cut Flowers at lowest prices shipped to D. D. Telephone orders will receive prompt attention when ordering by telegraph or express. Address.
J. L. DILLON, BLOOMSBURG, PA.

THE OAKLEY ROSE HOUSES
 ROSE BUDS WHOLESALE.
 Beauty, Bride, La France, Perle, Bennett, Niphotos, Mermets, Pap Gontier
CHAS. L. MITCHELL, MGR.
 P. O. Box 188, CINCINNATI, OHIO
 Also plants of above by doz., 100 or 1000. 2, 3 & 4-in. Select Stock. Telephone orders will receive prompt attention. Write for prices.

The Seed Trade.

SEED TRADE ASSOCIATION.

H. W. JOHNSON, Philadelphia, president; ALBERT M. McCULLOUGH, Cincinnati, secretary and treasurer. The eighth annual meeting at Saratoga Springs, N. Y., June, 1900.

CARL SCHMIDT succeeds Haage & Schmidt in the well known firm of that name at Erfurt, Germany.

TORONTO, ONT.—Steele Bros. & Co., the seedsmen, have opened a new retail store, 120x44 feet, on King street with an elevated conservatory 16x12.

RICHMOND, VA.—T. W. Wood & Sons have enlarged their seed warehouse by putting in five floors 75 x 25 with an elevator suitable to carry heavy seeds and bulbs.

ROCHESTER, N. Y.—Morehouse & Annis are making contracts for a new store, corner North A and Main street, with four floors 84x25 with steam elevator, to be completed October 1.

C. A. REESER in a personal card in his catalogue complains bitterly of competitors who have stolen his list of names valued at \$20,000 and cautions the public that the firm of ——— & ——— C ——— C ——— is the one referred to.

LATEST cable advices from Holland report tulips a short crop and scarce. This is contrary to the expectations of American growers and dealers who have generally reduced their orders. The week of hot weather early in May hurt the foliage and has caused most bulbs to ripen early.

NEW YORK.—The A. C. Nellis Company, seeds, at 64 Cortlandt street, is in the hands of Deputy Sheriff McGinnis, on two judgments for \$1,082, which President A. C. Nellis confessed to his attorneys and wife, the result of a quarrel between the president and some of the stockholders. The latter have elected another president in place of Mr. Nellis, and will try to have the judgments vacated. Mr. Nellis claims that these stockholders are trying to get possession of the company, to the detriment of the creditors. It is said the merchandise debts are only \$2,000. The company was incorporated in July, 1884, with a capital stock of \$50,000, succeeding A. C. Nellis Co., who had been in business at Canajoharie, N. Y., where the company's gardens have since been located. The Peroxide Silicate Company, at 422 West street, was sold out by Deputy Sheriff Anderson yesterday under two judgments aggregating \$1,345, realizing about \$750. The liabilities are reported to be about \$17,000, of which \$12,000 is due the treasurer, H. B. Farrington, for money advanced. The business has been established several years, and was incorporated January 13, 1888, with a capital stock of \$50,000. The company manufactured a preparation for destroying insects on plants. It is expected that the company will be reorganized.—*New York Times*, July 19.

NOW IS THE TIME to send in advertisements for the Convention Supplement, which we shall publish with next issue.

P. H. MEEHAN, the well known rose grower, is now located in Richmond, Va. Mr. Meehan has had good success in several large places in Illinois and ought to do still better where the climate is so well adapted for roses.

GERANIUM BRUANTI.—When I first got this geranium I set it down for Heteranthe (Double Gen. Grant), though I could hardly believe that the firm I bought of would knowingly send out an old plant under a new name. There is a great similarity, one could be easily sold for the other, yet there is a difference. In Bruanti the truss is more compact and a deeper scarlet. Both are good sorts, but Bruanti is the best with me.

Kansas City, Mo. ROBT. S. BROWN.

News Notes.

IONIA, MICH.—The Ionia Pottery Co. is manufacturing standard pots.

MEADVILLE, PA.—August Krueger sailed July 10 for an European trip.

DENVER, COLO.—C. R. Gallup lost nearly 5,000 feet of glass by hail during the last storm.

GRAND RAPIDS, MICH.—T. R. Renwick & Co. are building a new greenhouse 150 x 20.

SYRACUSE, N. Y.—I. E. Marquise has built three new houses, 50x18, 50x10 and 110x17½ respectively. Also an office 20 x 16.

MANHATTAN, KANS.—The Kansas State Agricultural College is arranging to build three greenhouses 70 x 11 each, to be heated by hot water.

WEST GROVE, PA.—Mr. Conard, of Dinee & Conard Co., is making a trip to Paris with Mrs. Conard. G. H. Leahy, of the same firm, was married July 1.

GREAT BEND, KANS.—Hail smashed 300 feet of glass on the greenhouses of Mrs. J. E. Patton June 15. The loss was promptly paid by the Hail Association, in which she held a policy.

WORCESTER, MASS.—H. F. A. Lange is building three new houses which will take 5000 feet of glass to cover. They will be devoted to roses. With this addition Mr. Lange has a total of 30,000 feet of glass.

NEW BRITAIN, CONN.—The horticultural society organized here last April has now on its rolls seventy-three names and applications are coming in at each meeting. The last meeting was held July 2.

NEW YORK.—At the annual meeting of the New York Florists' Club held July 10, the following officers were elected for the coming year: John H. Taylor, president; Julius Roehrs, vice-president; Chas. B. Weathered, treasurer; Wm. S. Allen, secretary.

NORMAL, ILL.—The Home Nursery company and Fruit-growers exchange, to grow and sell nursery stock, has been incorporated with headquarters here. The capital stock is \$75,000; incorporators, W. H. Schuman, Geo. A. Griggs, H. M. McKnight, J. I. Gnathrie and J. E. Baker.

SAN FRANCISCO.—Spring plant trade was about 10 per cent larger than last year; no change in prices; increased demand for roses and palms; less call for

coleus and soft wooded plants; collections about as usual. In our semi-tropical climate many people propagate their own geraniums and other bedding plants, but something new and choice will always find a buyer.

LOUISVILLE, KY.—Jacob Schulz is rebuilding three houses 20x70 each with cedar and cypress. Ed. Morat is building eight more new houses 25 x 80 each for roses for winter flowers. George Morat has bought a new place next to Ed. Morat's and is preparing to build thirty new houses. Wm. Mann has just completed three new houses. Business here is dead at present.

NEW YORK.—The first orchid auction sale at August Rolker & Sons drew together quite a goodly company of both growers and amateur orchid men and very fair prices were realized. Mr. August Rolker, the senior member of the firm, was the auctioneer and he is not only efficient but seems anxious to be very fair in every way and courteous in his manner. If this auction business is to be continued, as in all probability it will be, it is well that there is at least some competition, and it is indeed surprising that another plant auction house was not opened before this.

BALTIMORE.—The Lutherville Nursery and Florist Company, of Baltimore county, was incorporated July 12. The capital stock of the company is \$50,000. The incorporators are: William H. Baldwin, Jr., Andrew L. Black, Chas. McRae, Lemuel T. Appold and E. J. Codd. The directors for the first year are: Charles Markell, Andrew L. Black, Alfred J. Carr, Charles McRae, David Abercrombie, George J. Storck and Lemuel T. Appold. Work has been commenced on the construction of three greenhouses on Seminary lane, in Lutherville, two of which will be 18x200 feet and one 18x150 feet. The houses will be heated by steam.

BUFFALO.—The Buffalo Florists' Club met July 12 to make further arrangements for the coming florists' convention. The following local committees were decided on: Reception committee, Thos. Clayton, chairman, and 16 assistants; committee on ball game, E. J. Mepstead, chairman, and two assistants; committee on entertainment of ladies, R. F. Lawrence, chairman, and four assistants; committee on printing and badges, E. J. Nolan, chairman, and three assistants; committee on excursion, lunch and entertainment, William Scott, chairman, and two assistants; bureau of information, J. W. Constantine, chairman, and three assistants; committee on decoration of convention hall, C. F. Christensen, chairman, and three assistants; committee on decoration of club rooms, W. A. Adams and three assistants.

A. T. MERRICK,
HORTICULTURAL ENGRAVER.
Room 711, Chicago Opera House Block,
CHICAGO.

THE SYRACUSE NURSERIES
OLD AND RELIABLE, LARGEST AND MOST COMPLETE Assortment of Nursery Stock in America.
are growing the best
In BUDDED APPLES and STANDARD PEARS they acknowledge no competition—quality considered. Nurserymen and Dealers will consult their own interests by getting prices on this SUPERB STOCK before buying. Special inducements to buyers in large quantities.
SMITH, POWELL & LAMB, SYRACUSE, N. Y.

Coming Exhibitions.

August 20-22, Buffalo.—Exhibition at convention of Society of American Florists.

September 17-20, Boston.—Annual Exhibition Mass. Hort. Society.

November 5-8, Chicago.—Chrysanthemum Show Chicago Florist Club.

November 5-9, Indianapolis.—Chrysanthemum Show Society of Indiana Florists.

November 12-16, Philadelphia.—Chrysanthemum Show Pennsylvania Hort. Society.

November 12-13, Boston.—Chrysanthemum Show Mass. Hort. Society.

November 12-14, Orange, N. J.—Chrysanthemum Show New Jersey Floricultural Society.

November 12-16, Cincinnati.—Chrysanthemum Show Cincinnati Florist Club.

SMILAX.

Extra fine plants, twice cut back, from 2 inch pots, \$3.00 per 100; \$25.00 per 1000 50 at 100, 250 at 1000 rates.

**THEO. BOCK,
HAMILTON, OHIO.**

4000 SMILAX.

Fine stocky plants, 3 inch pots, \$3.50 per hundred; \$32.00 per thousand. 2 inch pots, \$2.00 per hundred.

**G. PETERSON,
HARRISBURG, PA.**

10,000 SMILAX PLANTS.

Extra strong, grown in 3-inch pots (cut back to make bushy), at \$4.00 per 100; \$25.00 per 1000.

5,000 grown in 2 1/2-inch pots, \$3.00 per 100, or \$28.00 per 1000.

**PAUL BUTZ & SON,
NEW CASTLE, PA.
Mention American Florist.**

SMILAX.

First Class, from 2 1/2-inch pots. Price, \$3.00 per 100; \$25.00 per 1000.

PANSIES.

Breer's Finest Mixed Pansies, \$5 per 1000. Address

**J. G. BURROW,
FISHKILL, N. Y.**

SMILAX.

Nice thirty plants for immediate planting, 2 1/2-in., \$3.00 per 100; \$25.00 per 1000.

CHINESE PRIMULAS.

Nice, strong young plants for early fall blooming, 50 cents per dozen; \$4.00 per 100.

**F. A. Baller,
BLOOMINGTON, ILL.**

SMILAX.

Strong, 2 1/2-in. pots, in first class shape for planting, \$2.50 per 100; \$20 per 1000.

Smilax in first class strings six feet long, good stock \$8.00 per 100.

**Wm. J. Eisele,
TORRISDALE, PHILADELPHIA, PA.**

SMILAX.

1000 STRINGS TO CUT. Smilax plants in 4-in. pots. Prices on application.

**W. J. DOWNS,
EVANSTON, ILL.**

SMILAX.

500 plants, 2 1/2-in. pots, \$3.00 per 100. THE WISCONSIN FLOWER EXCHANGE, 133 Mason Street, MILWAUKEE, WIS.

THE WEST SHORE RAILROAD

TO THE BUFFALO CONVENTION.

THE WEST SHORE RAILROAD offers the direct and most popular route between NEW YORK and BUFFALO to the florists who contemplate visiting Buffalo at the time of the next convention, August 20 to 24, 1889, inclusive.

As a scenic route the "West Shore" is unsurpassed, passing as it does through the magnificent scenery on the west bank of the world famed HUDSON RIVER and the picturesque MOHAWK VALLEY. A view of these scenes alone is worth many times the cost of the journey.

The equipment in luxurious appointments and elegance of finish is unsurpassed. Magnificent Drawing Room and Sleeping Cars on all through express trains between NEW YORK and BUFFALO. No extra fare charged on any through fast express trains. The lowest rates of fare authorized will be granted to florists purchasing their tickets to Buffalo and return via West Shore Railroad.

Florists from BOSTON and NEW ENGLAND POINTS can secure through Sleeping Car accommodations to Buffalo via Fitchburg (Hoosac Tunnel Route) and West Shore Railroads. The Fitchburg Railroad is the only line running Sleeping Cars through between Boston and Buffalo in connection with the West Shore Railroad.

The following condensed time table shows departure of West Shore Train from New York and intermediate points, and the arrival of these trains at Buffalo.

	P. M.	P. M.	A. M.	A. M.
Leave New York (H. Jay St. N. R.)	7:00	8:00	11:00	12:00
" New York (H. W. 43 St.)	7:15	8:15	11:15	12:15
" Weehawken West Shore Station	7:40	8:40	10:40	11:40
" Cranston	8:15	9:15	11:15	12:15
" West Point	8:45	9:45	11:45	12:45
" Cornwall	9:15	10:15	11:45	12:45
" Newburgh	9:45	10:45	11:45	12:45
" Kingston	10:15	11:15	11:45 P. M.	12:00
" Suffern	10:45	11:45	12:15 A. M.	12:45
" Catskill	11:15	12:15	1:15	1:45
" Albany	11:45	12:45	1:45	2:15
" Canajoharie	12:15	1:15	2:15	2:45
" Utica	12:45 A. M.	1:45	2:45	3:15 P. M.
" Syracuse	1:15	2:15	3:15	3:45
" Newark	1:45	2:45	3:45	4:15
" Rochester	2:15	3:15	4:15	4:45
Arrive Buffalo	6:05 A. M.	12:40 P. M.	11:40 P. M.	1:00 P. M.

Daily. * Daily except Sunday

The following condensed time table shows the leaving time of through Express Trains from Boston via Fitchburg R. R., and the arrival of these trains at Buffalo via West Shore R. R.

Leave Boston via Fitchburg R. R.	7:30 A. M.	7:00 P. M.	7:00 P. M.
Arrive Buffalo via West Shore R. R.	11:40 P. M.	6:00 A. M.	12:40 P. M.

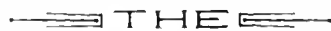
Daily. * Daily except Sunday

Any reservations in Sleeping Cars, or any additional information desired can be obtained by addressing or calling on

C. E. LAMBERT, Gen'l Pass'r Agent West Shore R. R., 5 Vanderbilt Ave., New York
H. B. JAGOE, Gen'l Eastern Pass'r Agent West Shore R. R., 303 Broadway, New York.
J. R. WATSON, Gen'l Pass'r Agent Fitchburg R. R., Boston, Mass.
A. A. SMITH, New England Pass'r Agent West Shore R. R., 40 Washington St., Boston, Mass.

**TO THE
BUFFALO CONVENTION,**

August 20th to 23rd,



Chicago, Detroit & Niagara Falls Short Line

will sell to Members attending the Florists' Convention at Buffalo on August 20th to 23rd, tickets at *One and One-Third Fare*, Chicago to Buffalo and return. Elegant Day Coaches, Palace Sleeping Cars, and Dining Cars on all Trains via this Route. Trains depart from Dearborn Station, corner Polk and Third Ave., Chicago, at 3 p. m., and 9:05 p. m., daily.

For full information call on or address

C. S. FRANCIS, City Ticket Agent,
108 CLARK ST., CHICAGO

IT IS A CONCEDED FACT that there is no better place in the U. S. for the Nurseryman to sort up Dealers for the Florist to order, than at the **PAINESVILLE NURSERIES.** A full list of



**BULBS, SHRUBS, ROSES AND PLANTS,
FRUIT AND ORNAMENTAL TREES,**



Remarkably fine and profitable stocks of
**PEARS, PLUMS, PEACHES, CHERRIES,
 APPLES, QUINCES, APRICOTS, MULBERRIES,
 GRAPEVINES, SMALL FRUITS, ETC., ETC.**
 Introducing the **CRAWFORD STRAWBERRY.**
SEND FOR FREE CATALOGUE AND PRICE LISTS
 (Give postal address)
THIRTY-FIFTH YEAR. 700 ACRES. 24 GREENHOUSES

Address **THE STORRS & HARRISON CO., Painesville, Lake Co., Ohio.**

Are You Going to the Convention?

"Are you going to the convention?" asked a live florist of another who was not quite alive.

"I don't think I will," was the reply. "What good will it do me, going there, spending money and losing time?"

"What good? Why, man, you don't know what good it will do you until you go yourself, but I will tell you what good it has done me. While attending these conventions for the last three years I have learned more than I had before in twenty years. I have made money and I have saved money through the Society of American Florists, and the AMERICAN FLORIST paper has been a regular good partner to me. You come and see my place now, you know how it used to look. Will you go this time?"

"Well, yes, I'll go this time, and if it does me any good I will join the society and stick to it. I don't suppose the loss of the amount the trip will cost would hurt me very bad for once."

"If you don't say afterward that you are glad you went and thank me for urging you I'll pay your expenses."

Both are now making preparations to attend the Buffalo convention. There are hundreds more that need a similar stirring up. H. A. S.

High Express Charges.

I have been paying high express charges on plants received right along without a murmur until now comes a case of plants from New York without a cover, with double former charges, \$5. Yes, I paid it, but I will buy no more orchids until—I thank you, I have just read your remarks page 550, and it occurs to me, suppose that plants packed with

dry moss in tightly covered case, billed "dead fern roots, moss and broken pottery" i. e. bill the other end of the plant, or simply as "plant roots." No reflection on the florist or live plants, and I don't blame the express company for exacting high charges for live plants standing upright in an open case or basket.

Chicago. JOHN LANE.

Narcissus Poeticus Double.

Replying to your note on this variety, there are two sorts, one a great deal more lovely and valuable than the other. *Narcissus poeticus patellaris plenus* is one variety in which the seed organs are not entirely suppressed and which seeds freely with me; the red rim is always visible and the bloom much smaller. *Narcissus poeticus grandiflorum plenus* is quite a different plant. The flowers and bulbs are extra large, the latter flat at the base and the bloom snow white, very double and not a trace of seed organs or rim, the latter so thoroughly suppressed. The former is plentiful in England, the latter scarce unless in some Dutch gardens

Cork, Ireland. W. B. HARTLAND.



A. BLANC,
Horticultural Engraver,
PHILADELPHIA.

5000 ELECTROTYPES
for ILLUSTRATING
FLORISTS, SEEDSMEN &
NURSERIES CATALOGUES
CHEAP.

A FULL SET OF CATALOGUES
ILLUSTRATING
ALL CUTS, SENT ON RECEIPT
OF 50 cts., WHICH
DEDUCT FROM FIRST
ORDER.

Electro of this Cut 75c.
A larger one \$1.50.

AUGUST RÖLKER & SONS,
44 Dey St., NEW YORK,

Supply the Trade with

SEEDS, BULBS,

And all kinds of

FLORISTS' SUPPLIES.

Price List Free on application with
business card.

R. VAN DER SCHOOT & SON,

HILLEGOM, HOLLAND.

LARGEST GROWERS OF

HYACINTHS, TULIPS, NAR-

CISSUS, SPIRÆA, LILIES

OF THE VALLEY, ETC.

Headquarters for Forcing Bulbs, Wholesale Importers should write us for prices.



TRY DREER'S

GARDEN SEEDS

Plants, Bulbs, and Requisites. They are the best at the lowest prices. TRADE LIST issued quarterly mailed free.

HENRY A. DREER,
Philadelphia



CATALOGUE FREE FAXON'S SEED SPECIALTIES

Asters, Pansies, Sweet Peas, Nasturtiums, and Danvers Onion. ESSAYS:—Annuals and Their Cultivation, 10 cents. Garden Vegetables, 10 cents. Both, and Catalogue, 10 cents, if you mention this paper.

M. B. FAXON, 21 SOUTH MARKET ST. BOSTON MASS.

CONVENTION * SUPPLEMENT.

Our Annual Convention Supplement
will be published with the

AUGUST 15 ISSUE.

It will contain a sketch map of the city of Buffalo, give locations of Buffalo Hotels, with rates at each one, directions to reach points of interest, and other notes of value to visiting members.

— ADVERTISEMENTS —

for the Supplement should be received by **August 7 at latest**, and as much earlier as possible. **Rates** same as in the body of the paper: 10 cents per agate line; page \$42; half page \$21; column \$14; half column \$7; inch \$1.40.

Being mailed with the August 15 issue it will reach members before they start for the convention, and will be their friend, philosopher and guide on the way to and during the meeting. Extra copies will be distributed at the convention.

SEND IN YOUR ADVERTISEMENTS EARLY.

AMERICAN FLORIST CO.,

54 La Salle Street, CHICAGO.

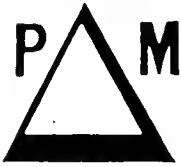
建 BULBS.
Early Delivery Fall 1889

	Per 100	Per 1000
Lilium Auratum, 8 to 7-inch circum	\$ 4.00	\$45.00
" " 7 to 9 " "	5.00	45.00
" " 9 to 10 " "	6.00	55.00
" " Monstro, 4-in. diam.	8.00	70.00
Album (Speosolun) 7 to 8-in. cir.	9.00	80.00
" extra fine, 10-in. circum	10.00	90.00
Rubrum, 7 to 9-in. circum	6.00	50.00
" Monstro	7.00	60.00
Longiflorum Ext., 4 to 5-in. cir.	3.50	30.00
" " 5 to 6-in. " "	4.50	40.00
" extra fine, 7 to 8-in. cir.	6.00	50.00
Kramel, ex. choice, large bulbs	7.00	60.00
Batemanni	8.00	50.00

We repack Bulbs on arrival from Japan from heavy clay into sawdust, reducing weight more than half, pick out and remove all decayed ones, pay 20 per cent duty and deliver F. O. B. at above figures. Do not fail to send for our full list of RARE LILIES, SEEDS, PALMS, ETC. NOW READY.

H. H. BERGER & CO.,
SAN FRANCISCO, CAL.

POLMAN MOOY,



HAARLEM,
HOLLAND.

TRADE MARK.

NO AGENTS

FORCING BULBS

VALUABLE NOVELTIES
IN TULIPS.

BEST FORCING DAFFODILS.

Write for new list, now ready.

BENJAMIN RIMBAUD,

HORTICULTEUR,

QUARTIER DU TEMPLE,

TOULON var. FRANCE.

Telegraphic Address, BENRIMBAUD, TOULON.

MR. RIMBAUD is now booking orders for

Early White Roman Hyacinths,

PAPER WHITE NARCISSUS,

DOUBLE ROMAN NARCISSUS,

LILIUM CANDIDUM,

ALLIUM NEAPOLITANUM,

FREESIA REFRACTA ALBA
ODORATA,

And many other French Bulbs (good for forcing). Prices on application.

As some of these bulbs, especially White Roman Hyacinths, last year were not sufficiently produced for the demand

ORDER EARLY TO SECURE STOCK.

Immortelles Dyed and Natural Yellow at moderate prices.

J. A. DE VEER,
183 WATER ST., NEW YORK.

offers Finest Stock of DUTCH BULBS, ROMAN HYACINTHS, PAPER WHITE NARCISSUS, LILIUM CANDIDUM and HARRISII, LILY OF THE VALLEY, the Berlin pipe and Dutch pumps, FREESIAS, CALLAS, AND OTHER DESIRABLE

FORCING BULBS FOR FALL DELIVERY.

Also prime Nursery Stock, such as Roses, Azalea, Camellia, Rhododendrons, Seeds, etc. from leading growers in France, Belgium, Holland and elsewhere at the lowest prices. SPECIAL CATALOGUES FREE TO THE TRADE.

Import orders for Dutch Bulbs requested before August 15. ESTIMATES OF COST FREE IN NEW YORK. CHEERFULLY FURNISHED.

SMILAX.

First Quality pot plants at \$2.00 per 100, \$18.00 per 1000. Samples mailed on receipt of 10 cts. Your trade solicited. Satisfaction assured.

PANSIES.

OVER 100,000 SOLD from August 1st 1888 to May 1st, 1889, without a single complaint, an item worth your attention if you buy plants. Another item is the low price 1 cent per 100 for good, stocky plants, ready August 15th to November 1st. Write for particulars.

SEND FOR PANSY AND SMILAX CIRCULAR.

ALBERT M. HERR, Lock Box 338, Lancaster, Pa.

SLUG SHOT.

BEEN KILLING BUGS 10 YEARS.

SOLD BY SEEDSMEN

For pamphlet write to Fishkill-on-Hudson, N. Y.

F. E. McALLISTER,

SEED AND BULB MERCHANT, 22 DEY ST., NEW YORK.

SPECIAL OFFER OF FORCING TULIPS. ALL FIRST QUALITY.

Atlas	\$11.50 per 1000.	Duc von Thol, Scarlet	\$ 5.00 per 1000
Belle Alliance	17.50 "	Duchess de Parma	11.00 "
Crimson King	9.00 "	Kalzers Kroon	25.00 "
Canary Bird	21.00 "	La Reine	15.00 "
Chrysolora	21.00 "	Yellow Prince	21.00 "

1000 Comprised of 100 each of the above sorts, @ \$20.00. Choice mixed Forcing Tulips, @ \$10.00 per thousand.

FORCING BULBS.
GARDINER'S SPECIAL OFFER FOR
FALL DELIVERY.



We mean to give growers more advantages as to price, quality and service than they can find anywhere else. This season's importations (first arrivals) will be here soon. Get your bulbs in early. Don't wait until all the wide-awake men have got ahead of you. No trouble to book your order now. Estimates on anything in the forcing bulb line for the asking.

	Per 100
A FEW LEADING ITEMS	
WHITE ROMAN HYACINTHS, first quality, 11 to 15 cent	\$2.00
-Extra selected, 11 to 15 cent	2.50
LILIUM CANDIDUM, extra selected	3.00
" " HARRISII, 3 to 4 inches	3.50
" " Extra selected, 2 to 3 in.	4.00
PAPER WHITE NARCISSUS	4.50
VON STON, Double Yellow	5.00
FREESIA	5.50

Hyacinths, Tulips, Lily of the Valley and species at proportionately low prices.

JOHN GARDINER & CO. Philadelphia

30,000 Doseoret bulbs, 1 year tubers, \$1.00 per 100, \$20.00 per 1000. 50,000 Van Pretter and Atkinson at 20,000 are taken at \$8.00 per 100. \$1.00 cash, balance on time. 200 lbs. Moon Flower seed, fall 1889.
MRS. J. S. R. THOMSON, Spartanburg, S. C.

E. M. KRELAGE & SON,
HAARLEM, HOLLAND.

The new Wholesale Trade List of all sorts of DUTCH FLOWER-ROOTS, MISCELLANEOUS BULBOUS and TUBEROUS-ROOTED PLANTS

(No. 426 w.) is now ready and will be sent to the trade on prepaid application.

NO AGENTS. Please address direct. Mention American Florist.

MULSEBOSCH BROS.,
OVERVEEN, near HAARLEM, HOLLAND.

Growers and Wholesale Dealers in all kinds of Bulbs, Roses, Indian Azaleas, Rhododendrons, Dahlias, Palms, Orchids, Lily of the Valley Pips, Etc., Etc.

Address **A. MULSEBOSCH,**
P. O. Box 415, NEW YORK CITY.

BULBS.

Hyacinths, Dutch Double Single, etc. etc. etc. Hyacinths, Romans, Single White, etc. etc. etc. Tulips, forcing and garden, etc. etc. etc. Paper White, Double, and Single, etc. etc. etc. Single, Japan, etc. etc. etc. Freesia, etc. etc. etc. Pansy Seed direct from Europe. Send for Fall Trade List.

A. GIDDINGS, Danville, Ill.
Mention American Florist

**"A GREAT HELP
IN CUT FLOWER WORK, AND
HAS BEEN GREATLY NEEDED"**

So say many of EUROPEAN DESIGNERS, concerning which more can be learned by addressing

J. HORACE McFARLAND, Harrisburg, Pa.

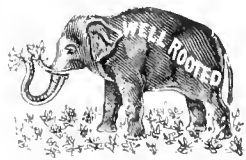
St. Joseph, Mo.

After reading the rather conflicting report of spring sales from this city, which appeared in the last number of the FLORIST, I feel like making some explanation as to my part of it.

I keep a daily account of plant and cut flower sales, but separate; these are footed up at the end of each month, so that at a glance I can compare the month's sales with the corresponding month of other years. Now while this season our sales apparently run lighter, yet when I came to foot up the gross receipts from plants for the months of April and May I found there was an increase of a little over 10 per cent over the corresponding months of last year, which in my report I put in round numbers.

In geraniums I increased my stock fully one third over last year and as the season turned out I had that increase left on my hands. Finding there was an overstock of geraniums on the market and learning that my neighbors were cutting, I put the price down from \$2 per dozen to \$1.50 for 4 inch, which I consider is as low as this size can be profitably grown. I doubled my stock of alternantheras and other small bedding plants and sold out clean.

D. M. REICHARD.



500,000
CELERY
PLANTS

Very strong well grown plants WHITE PILL ME, KALAMAZOO, GOLDEN DWARF, GOLD-EN SELF-BLANCHING, \$2.50 per 1000; \$2.00 in 5,000 or 10,000 lots.

THE EVERBLOOMING PRIMROSE OBCONICA.

Strong plants out of small pots, by mail or express, \$5.00 per 100; \$30.00 per 1000. Larger plants, out of 3 inch pots, by express, \$8.00 per 100.

NOTE.—Every order is packed with the greatest of care, with my own personal attention, in the lightest possible way. I study to please all.

CHAS. T. SIEBERT,

Stanton Ave., East End, PITTSBURGH, PA.

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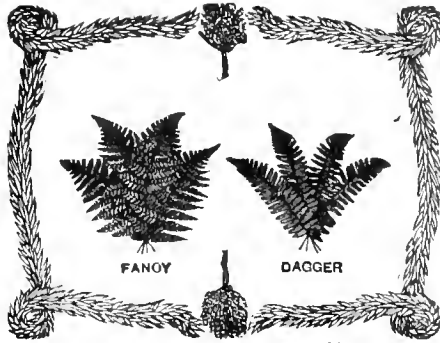
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A Correction.

ED. AM. FLORIST;—A mistake occurred in my article in last issue which may mislead some readers. Like most florists I sometimes get mixed up in names and I wrote alopecurus instead of stenotaphrum, which latter I should have written. Therefore for Alopecurus aureus marginatus read Stenotaphrum Americanus variegatum. JOHN. B. KELLER, Rochester, N. Y.

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TRIMARDEAU, choicest French mixed, unsurpassed in brilliancy of color and size of flowers, some measuring from 3 to 4 inches across. Price, per lb. \$25.00, oz. \$2.50, 1/2 oz. \$1.50, 1/4 oz. \$1.00.

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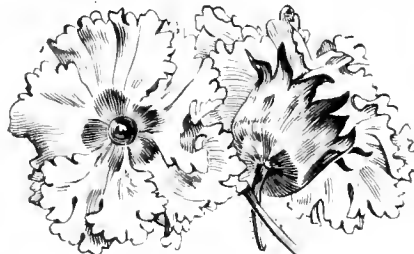
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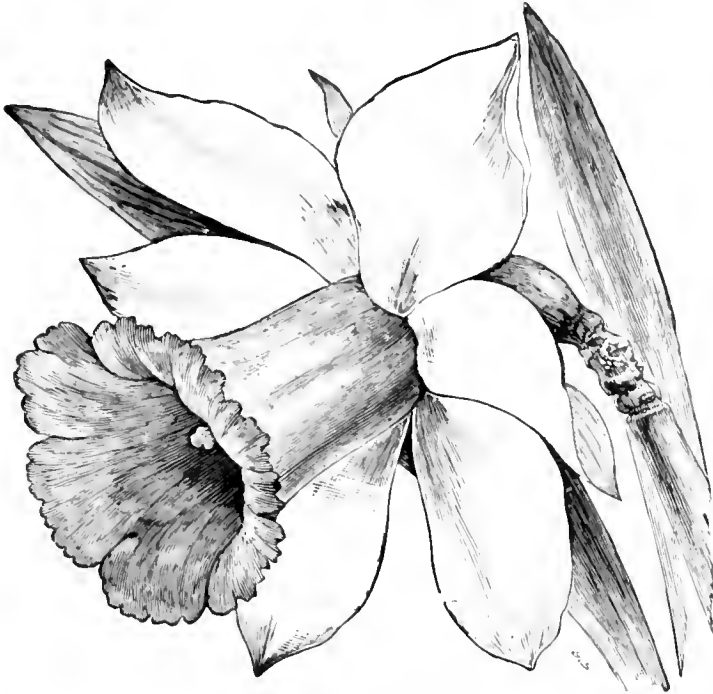
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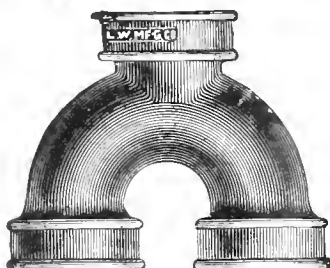
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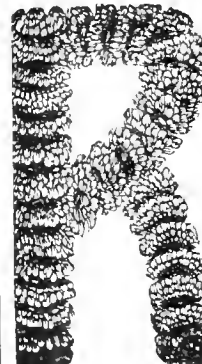
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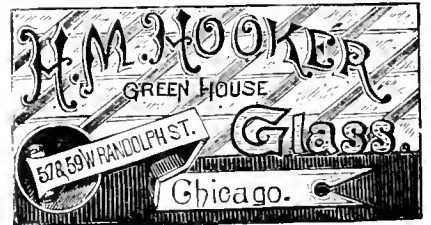
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It kills insect life on man, animal, or plant, without injury to the skin, wherever parasites may appear.

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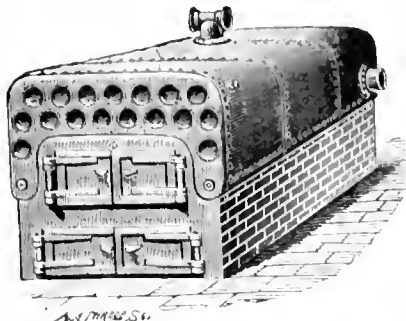
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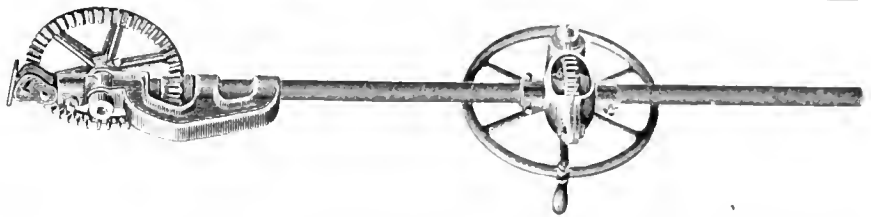


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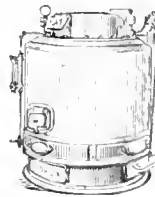


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2 1/2 inch.	per 100.	30	7 inch.	per 100.	50
3 "	"	40	8 "	"	60
3 1/2 "	"	50	9 "	"	70
4 "	"	60	10 "	"	80
5 "	"	75	11 "	"	95
6 "	"	90	12 "	"	110

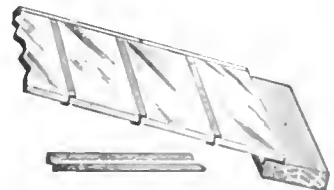
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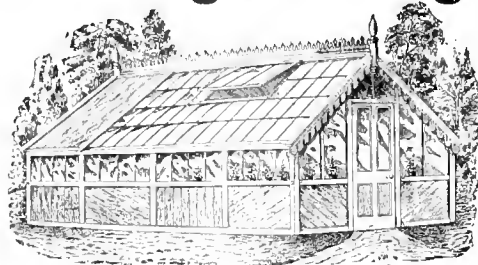
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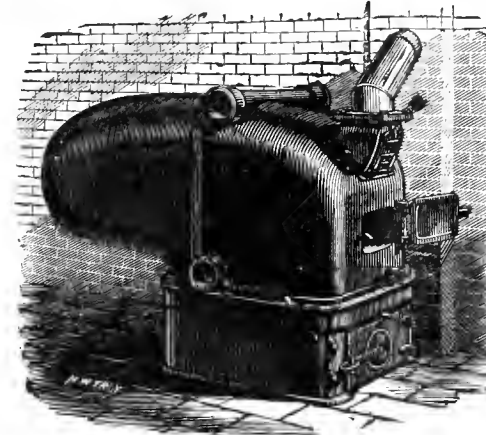
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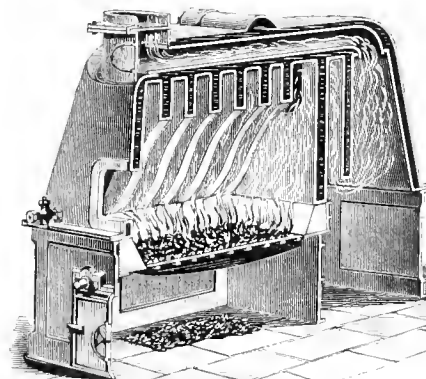
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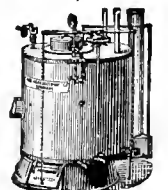
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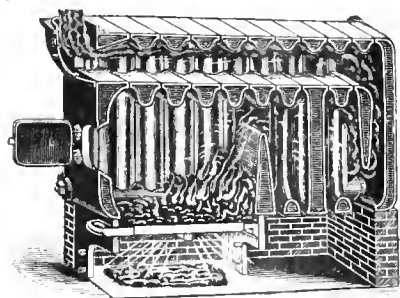
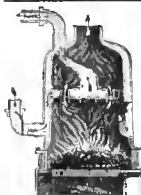
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