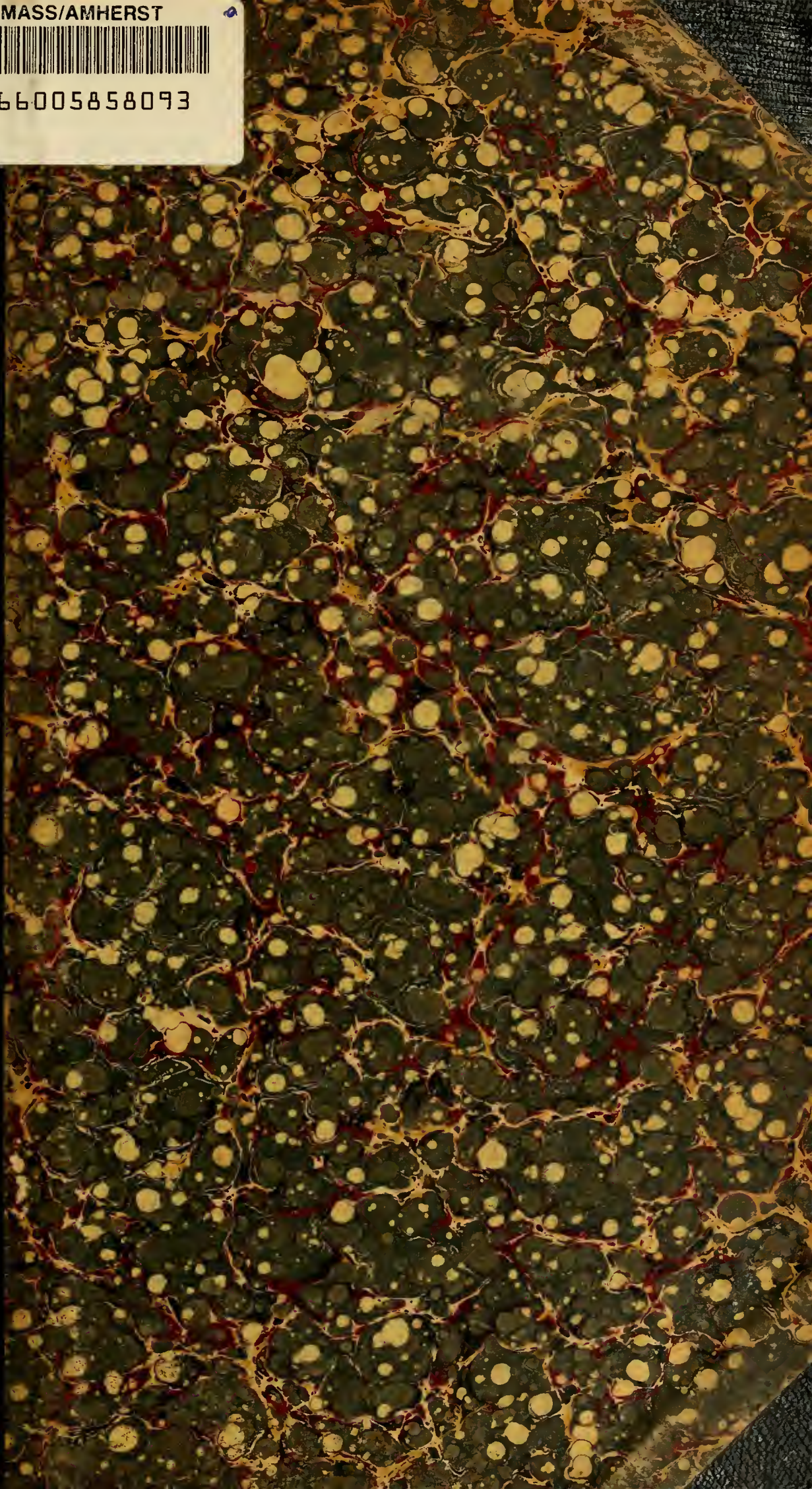


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yours truly
Edwin Lonsdale.

PROCEEDINGS
OF THE
TENTH ANNUAL CONVENTION
OF THE
SOCIETY OF AMERICAN FLORISTS,

HELD AT
ATLANTIC CITY, N. J.,
August 21st, 22d, 23d and 24th,
1894.

PUBLISHED BY ORDER OF THE SOCIETY.

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OFFICERS

OF THE

SOCIETY OF AMERICAN FLORISTS.

For 1894.

President:
J. T. ANTHONY, CHICAGO, ILL.

Vice-President:
ROBT. KIFT, PHILADELPHIA, PA.

Secretary:
WILLIAM J. STEWART, BOSTON, MASS.

Treasurer:
MYRON A. HUNT, TERRE HAUTE, IND.
H. B. BEATTY, OIL CITY, PA., for unexpired term of Mr. Hunt (deceased).

Executive Committee:

For One Year.

C. W. HOITT, Nashua, N. H.
J. H. DUNLOP, Toronto, Ont.
J. C. VAUGHAN, Chicago, Ill.

For Two Years.

BENJ. DURFEE, Washington, D. C.
P. O'MARA, Jersey City, N. J.

For Three Years

ALEX. WALDBART, St. Louis, Mo. | J. C. RENNISON, Sioux City, Ia.
ELIJAH A. WOOD, West Newton, Mass.

For 1895.

President:
EDWIN LONSDALE, CHESTNUT
HILL, PHILADELPHIA, PA.

Vice-President:
E. C. REINEMAN, ALLEGHENY,
PA.

Secretary:
WILLIAM J. STEWART, BOSTON, MASS.

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J. C. RENNISON, Sioux City, Ia.
ELIJAH A. WOOD, W. Newton, Mass.

For Three Years.

Three Members to be appointed by the President-elect, January 1, 1895.

PROCEEDINGS.

ATLANTIC CITY, N. J., August 21, 1894.

A bracing atmosphere, delightful bathing, and the numerous diversions of a popular seaside resort, contributed to make the Tenth Annual Convention of the Society of American Florists one of the most enjoyable yet held. Notwithstanding the attractions of the board-walk and the beach, there was a gratifying attendance at all the business sessions, excepting possibly, in the closing hours of the third day; the prominence given to the social enjoyment feature being apparently without detriment to the practical work of the Society.

The Florists' Club of Philadelphia had made elaborate preparations for the comfort and convenience of their guests of the Society of American Florists, and cordially received the visitors upon their arrival. A series of entertainments, mainly for the ladies, was supplemented at the close of the Convention, by a day of social enjoyment, of which a sail on the ocean and an evening entertainment on one of the piers were special features. The trade exhibition in Morris Guards' Armory and Grand Army Hall was the most complete on record, and to those who studied it, it presented many suggestions of great educational value.

The interior of Odd Fellows Hall, where the Convention was held, was beautifully decorated. A profusion of palms, hydrangeas, gladioli, and other decorative foliage plants surrounded the platform; the rear space being festooned with smilax and asparagus, and the walls lined with bunting.

THE PRELIMINARIES.

Following the appearance on the platform of the officers of the Society and members of the Executive Committee of the Society of American Florists, President EDWIN LONSDALE, of the Philadelphia Florists' Club, inaugurated the proceedings by introducing Rev. P. T. STEWART, pastor of the First Presbyterian Church, of Easton, Pa., who briefly invoked the divine blessing upon the Convention and its labors.

Hon. FRANKLIN P. STROY, mayor of Atlantic City, being introduced by Mr. Lonsdale, delivered an address of welcome. He said he had not any long speech to make, and he knew that his hearers, if they could

appreciate the pressure upon him of his official duties, would not expect one from him; his time being so fully occupied at this season that he scarcely found opportunity to eat his meals. He asserted that it was a pleasure for him, this morning, to come here to welcome this Convention to Atlantic City — one representing a profession universally admired and appreciated. He congratulated the visitors upon this fact, and said he now extended to all of them the freedom of the city, and trusted they would enjoy themselves while they remained here. He expressed the hope that no storms would occur to mar their pleasure, and that finally they would all go home feeling that Atlantic City was a place they would like to visit again. Referring again to the demands upon his time, and pleading these as an excuse for the brevity of his remarks, the mayor concluded with a reiteration of a most cordial welcome to the city.

Mr. WM. SCOTT, of Buffalo, N. Y., being called upon by Mr. Lonsdale to respond, on behalf of the Society to the welcome of the Mayor, came forward and said it was his privilege to voice the thanks of the ladies and gentlemen of the Society of American Florists, for the very hearty way in which the Mayor had welcomed them to this beautiful city by the sea. He felt confident that all of them would take advantage of the privilege accorded by the Mayor in the freedom of the city — than which no more beautiful place in the whole continent of America could have been selected for holding the Convention. Unlike his more fortunate brethren of New York and Philadelphia, who doubtless made frequent visits to Atlantic City, he had never before seen this wonderful city; but he knew that, if his residence was within a hundred miles of it, he would be here every Sunday and the following day. To him the city was unique and simply marvelous. He said that he understood that its normal winter population of from 15,000 to 20,000 had increased within the past few weeks to 160,000. He cited, as an evidence of the orderly character of the place, the fact that although twenty-four hours had elapsed since his arrival, he had failed to see a single instance of disorder, and had yet to discover a policeman. Good humoredly suggesting that the Mayor, whom his hearers had now the honor of seeing, probably embodied in his own personality the majesty and power of an entire police force, and stating that this summer resort was distinguished above all others for its high moral tone, Mr. Scott continued :

I want to remind his Honor (who, though not identified with our business, is an admirer of flowers and interested in their culture), that this little State of New Jersey is one of the banner States, if not *the* banner State in floriculture in this great country. Beginning with New England, and taking the group of the four States, of Massachusetts, New York, New Jersey and Pennsylvania, we have the first home, the embryo of horticulture in this country; but perhaps very few of those who have lately become identified with our business realize the fact that, within a

comparatively recent period, say within ten years, the State of New Jersey has produced more roses, carnations, violets, and other flowers, than all the rest of the continent of America. The largest, if not the most renowned floricultural establishments on this continent, up to a recent date, existed in this State. [Applause.]

Mr. Scott then mentioned the cities in which the annual meetings of the Society had been held, and after again complimenting "the beautiful city on the shores of the Atlantic" as the ideal summer convention city, said he wanted to remind the Society of the debt of gratitude it owed to that city foremost in floriculture, which was known as the "City of Loving Brotherhood." It was to the Philadelphia florists they were indebted for the pleasant meeting now being held — a meeting which promised to be one of the most successful of any yet held. Although the Second Annual Convention was held in Philadelphia, that city had repeatedly endeavored to induce the Society to come back there, and with such success that the Society of American Florists was now again the guests of the Philadelphians. He thought that if matters continued in this way, that city would become the permanent meeting place and the Philadelphia florists would be the hosts all the time. Mr. Scott closed by suggesting that, in availing themselves of the Mayor's offer of the freedom of the city, the visitors should acquit themselves with as much credit as did other guests of the city, who had preceded them. [Applause.]

Mayor STROY (when Mr. Scott had concluded), again came forward and provoked general merriment by remarking, in reply to what that gentleman had said about not having seen a policeman, that he (Mr. Scott) might have cause for not wanting to see one before he got out of town. He then went on to state, as indicative of the good order and decorum of this seaside community, that, although there were more than 200,000 persons within the city limits on the previous Sunday, not one arrest had been made by the local force of sixty policemen. He regarded this as an evidence that the residents and the visitors mutually respected each other. In the present instance, he said he knew that the florists were heartily respected by the people of Atlantic City, and that it was the general wish that their stay would be prolonged as far as possible. [Applause.]

THE PRESIDENT'S ADDRESS.

Upon the close of the preliminary addresses, the President of the Society, Mr. J. T. ANTHONY, of Chicago, assumed the duties of the chair. After a cordial greeting from the audience, President ANTHONY called the Convention to order, and delivered his address, which was followed by applause. The address was as follows:—

Ladies and Gentlemen,—The year which has passed since our last meeting has been one of great depression in all lines of trade. The

florist's business has felt the depression in trade, and has received its first check in its onward progress. Let us hope the check is but temporary.

In view of the fact of the dull times it affords me great pleasure to see so many members of the Society of American Florists present at this meeting. Coming, as they do from all parts of this country, it augurs well for the future meetings of the Society when an attendance of this size can be had in times like the present.

The progress that has been made in ornamental horticulture in the short space of ten years, since this Society was organized, is truly marvelous. A comparison of the chrysanthemum shows of last year, with those of ten years ago, will demonstrate the remarkable improvement that has been made in the cultivation of show flowers. The development of the chrysanthemum has surpassed the expectations of the most enthusiastic cultivator of ten years ago. Though the material progress of these shows has been thus remarkable, it is not more so than has been the increase in their numbers. Only a few years ago flower shows were held in less than a half dozen of our large cities. There are very few towns now of any importance in which a more or less pretentious flower show is not held.

That the improvement of carnations has been nearly as great as the chrysanthemum every one will admit who has seen the splendid display of that flower at the meetings of the Carnation Society. The great improvement in carnations that has been made in the last few years has been almost entirely by American cultivators. The carnation, as grown in this country, differs so materially from those grown in Europe, that those produced here might be called carnations of American type.

While the carnation and chrysanthemum growers have been making these gigantic strides towards the ideal chrysanthemum and carnation, what have the rose growers of this country done to improve that flower? It is true that we have greatly improved our methods of cultivation of the rose for the production of bloom, and are enabled to produce them in larger quantities and of a better quality, leaving the production of varieties almost entirely to growers in other countries where the climate is as different from ours as our methods of cultivation and uses to which we put the rose are different from those of the European growers. The result is that vast sums are paid every year for new roses; very few of which are ever heard of after the first trial. Let me ask the question, why can we not produce our own varieties of roses as we do carnations and chrysanthemums? It is true that it takes a longer time to produce results with roses than with either carnations or chrysanthemums, but would not the results when attained be worth the cost? This seems to me to be the most promising field for some enterprising rose grower. I believe the time will soon come when we shall have a class of roses of American origin especially suited to our climate and requirements.

We had fondly hoped that the bill which is before Congress, granting this Society a national charter, would have passed before now. It is a matter of prime importance that a charter be procured, and it is very desirable that we have a national charter; but if one should not be granted before this Congress adjourns, I would recommend that a charter be secured from the District of Columbia, or some one of the States. The Society of American Florists has been a homeless wanderer for ten years. The time has now come when we should secure a home. A suitable office should be procured for our Secretary where the books and papers of the Society could be kept, and where periodicals and reports on subjects connected with horticulture could be collected, and in time a library.

The Secretary should receive such compensation for his services as would enable him to devote his whole time to the interests of the Society. Much of the work that is now intrusted to committees, such as the committee on statistics and nomenclature, could either be done by the Secretary, or the committee could be materially assisted by him. There are innumerable ways in which a paid officer could be of benefit to the Society. I would earnestly recommend that arrangements be made as speedily as possible to carry this recommendation into effect.

The Secretary and Treasurer should be required to give a bond to the Society for the faithful performance of their respective duties. This has not been done heretofore.

What are to be the future relations between this Society and its numerous offspring, the Chrysanthemum, Carnation and Rose Societies, should receive our serious consideration at this time. That the Chrysanthemum and Carnation Societies have done much good by imparting useful knowledge in the culture of their special favorites we all know, but could not this work be as well done by a section of this Society as by a separate organization? on the principal that in union there is strength. I think the work of all the societies could be much better done by the Society of American Florists. It would certainly be more convenient to have one Secretary's office for all the societies than to have them scattered as they now are.

It seems to me that the Society of American Florists can confer no greater benefit upon the profession than to provide a means whereby the wheat may be separated from the chaff among the army of journeymen florists. I believe it can do this by establishing an examining board whose duty it shall be to examine florists, who may wish to avail themselves of the privilege, granting certificates setting forth the degree of proficiency possessed by each one examined. The examination might be oral or written, or a combination of both. The subjects touched upon would naturally be very diversified, but not more so than the florist's daily work. There should be a separate examination for each specialty; take for example the rose. The one subject might be divided into numerous heads, say:

(a) Propagation; (b) General culture; (c) Insect enemies; (d) Fungous enemies; (e) Fertilizers and how to use them; (f) Growing for flowers; (g) Growing for plants, etc.

A man, who, after wrestling with these inquiries, carried out to their fullest extent, could show a first-class rose certificate would hardly need any other voucher, and one possessing rose, carnation and chrysanthemum certificates would not need any other evidence to prove himself a good all around grower of these flowers. The growing of general bedding plants could be covered in another division, and of hardy plants in still another. Orchids, too, and palms and like decorative plants should be provided for. In these days of specialties it is not necessary that a man should have a high percentage in every department. We already talk of rose growers, carnation growers, etc. If we know just what a man can do (where he is strong and where he is weak), selection for the work of most importance to the employer is simple.

That some such plan would be equally to the advantage of the working florist and his employer no one can doubt, and that it would give our profession a higher standing in the eyes of the public is equally certain; people have a good deal of respect for organized effort in any form. When it is known that a florist, to be recognized as such, must pass a careful examination and receive a certificate of proficiency, people will conclude that he really occupies a higher plane than an agricultural laborer with whom he is very often classed.

As to employers, the granting of certificates should greatly simplify their anxieties as regards help. Those who want good men, worthy of fair wages and fair treatment, will want men who hold certificates; if they want cheap labor they must expect unskilled labor. Such a consummation as this, likely both to elevate the position of the journeyman florist, and to lessen the anxieties of his employer, is surely worth consideration.

The adoption of such a plan of work would also surely strengthen the Society. It would bring to its annual meetings many journeymen anxious to secure certificates from the examining board, (which should be in session at each annual meeting), and certificates issued by it would magnify its importance as an organization of real practical benefit to the trade. Of course the examining boards must be composed of the best and most capable men in the Society in the several divisions, and certificates awarded with the greatest care.

REPORTS OF THE SECRETARY AND TREASURER.

The next order of business being the presentation of reports of officers, Secretary WILLIAM J. STEWART presented and read his annual report. It was as follows:—

SECRETARY'S REPORT.

The story of the meeting at St. Louis last year, having been given in full detail in the printed report, it is hardly necessary to make more than

a general allusion to it on this occasion. There are a few points, however, to which we might profitably give a moment's attention. It had been expected that the World's Fair would prove a contributing attraction, it being the general opinion that the attendance of eastern members especially would be much larger on this account than would ordinarily be the case at a point so far west; but these expectations were not realized, and it transpired that the World's Fair, instead of enhancing our attendance, had the contrary effect. Not many of our craft could spare the time to visit both Convention and Fair, so they naturally chose the latter. Another drawback to last year's attendance was the fear of hot weather; this happily proved to be unfounded, and whatever the ordinary St. Louis weather may be, we must give it credit for having treated us well on that occasion.

These were the drawbacks. They were offset by many advantages which the visitors were not slow to appreciate, and which made the occasion one of the greatest enjoyment to all those who were present. Whether in visiting the far-famed Shaw Botanical Gardens, riding through the beautiful avenues and parks of the city, under the escort of our big-hearted St. Louis brethren, listening to essays and discussions of more than the usual interest and value, or in meeting with the famous horticulturists from the Old World who honored us with their presence, the St. Louis Convention was a continual round of enjoyment, both physical and mental, and all felt at home from the moment we listened to those eloquent words of welcome from St. Louis' gifted mayor until we took a last lingering look at the radiant arches of the illuminated city.

As in every instance where the attendance at the Convention has been small the receipts for the year have been materially reduced. From present indications the falling off is only temporary, however, as a large majority of the members who failed to pay their dues last year are coming forward cheerfully and making their arrearages good and there is no doubt that the present year will see our paid up membership list fully up to the maximum. The whole number of dues collected for 1893 up to August 19th, is 607, and members of 1892, who are in arrears for 1893, number 269, but these figures will change considerably for the better when the large number of arrearages paid up at this meeting are counted.

Death has made unusual havoc in our ranks since we last met. Eleven of our members have been taken away and in this number are included two who were among the Society's founders and have always been faithful workers in its behalf. The list of deaths is as follows:

N. Singler, of Washington Heights, Ill., died August 24, 1893; C. A. Dahl, of Atlanta, Ga., September, 1893; Thomas Hudson, of Northampton, Mass., September, 1893; H. A. Daacke, of New York, N. Y., October, 1893; J. R. Bather, of Clinton, Iowa, November 22, 1893; W. F. F. Murray, of Atco, N. J., November 22, 1893; R. J.

Halliday, of Baltimore, Md., March 11, 1894; Harry C. Gass, of Allegheny, Pa., March 20, 1894; M. A. Hunt, of Terre Haute, Ind., April 23, 1894; L. Guerineau, of Northampton, Mass., June 8, 1894; W. M. Eldridge, of Wilkesbarre, Pa., August 6, 1894.

The regular winter meeting of the Executive Committee was held at Philadelphia on February 13th and 14th. The Philadelphia brethren were kind and thoughtful as always. Many timely questions regarding the Society's future policy and work were brought forward and earnestly discussed, and the foundations laid for the very comprehensive program which is now before you. Among the more important matters considered were our relations with the Hail Association, the Chrysanthemum and Carnation Societies and other auxiliary organizations; the feasibility of devising some equitable and economical plan of greenhouse insurance against fire; the injury sustained by the trade through the shipment of lily blooms from Bermuda and the remedy therefor; the work of the Nomenclature Committee, as well as that of the two special committees provided for at the St. Louis meeting, viz.: on a standard list of commercial decorative plants and statistics of exports and imports. Requisite funds for the needs of these committees in their work were duly provided for.

The change in time for the sessions of this Convention, and substitution of afternoon for evening meetings, was in accordance with the advise and request of Philadelphia members, who explained to the committee that on account of the attractions and distractions peculiar to Atlantic City, a fuller attendance at the meetings would thus be secured.

The annual badges provided for the Society, having been long regarded as inartistic and inappropriate, it was decided to have a new die made which, while adhering to the old design of a rose leaf, should be a more truthful representation of that object, and it is believed that the members generally will be pleased with the change.

Resolutions in memory of the late George W. Childs were drawn up by a special committee, and an engrossed copy prepared and sent to Mrs. Childs on behalf of the Society of American Florists.

Your Secretary would respectfully bespeak for the noted specialists who are to address us, a full attendance of all our members at the meetings; a recognition to which these gentlemen are justly entitled. Note particularly the early hour at which the morning sessions open, and bear in mind that a full hall and prompt opening at the time named in the program will be due courtesy to the essayists, and will conduce to the pleasure of each and every individual by ensuring an early adjournment to the beach and its delights.

The next business being the report of the Treasurer, Mr. S. M. REYNOLDS, of Terre Haute, Ind., responding to the call of the President, came

forward and was introduced as representing the estate of the late Treasurer, Mr. Myron A. Hunt, whose death occurred during the year.

Mr. REYNOLDS said:

Ladies and Gentlemen,—In the ordinary course of affairs I probably would not be here, although I am very much interested in your work because of the beautiful product of your studies. I have never known a bad man to love flowers, and I have never known a lover of flowers to be a bad man. The death of Mr. Hunt was peculiarly a sad one, and probably most of you are familiar with the circumstances of it. He was very much grieved by the sickness of his wife, who had been taken to a private sanitarium for her health; and, despairing of her recovery, suffering with pain and trouble of that kind, and of that kind only, he disposed of himself by his own hand on April 23d of this year. Thus a good man, as good a Christian as ever lived was lost to our city, and to you, members of the Society of American Florists. It became my duty, under the orders of the Court, to take charge of the estate of M. A. Hunt. I found his financial affairs in perfect order; but as there had been no premonition of his sudden death, they required some study and investigation. His accounts as Treasurer of this Association were in first-class shape. The funds are ready to be handed over to his successor, when appointed. The following is a statement of his accounts:—

Balance on hand, \$2,125.58; membership fees since received, \$1,776.
Total, \$3,901.58.

Expenditures (for which I hold vouchers in every case), a total of \$1,747.26.

Leaving a balance in my hands, due to the Association, of \$2,154.32.

Upon my return to Terre Haute, I will send to the successor of your late Treasurer, a proper release to the estate and a draft for the amount. [Applause.]

On motion, the report just read was accepted.

Secretary STEWART, (who had acted as Treasurer *pro tem.* since the death of Mr. Hunt), here made the following statement:—

It has been customary for the Treasurer to bring up the annual statements of his accounts to July 1st. Between the time of Mr. Hunt's death and the 1st of July the transactions were naturally quite small, that being a time of the year when there was not much coming in, in the way of dues, nor much expenditure. I have here an account of my expenditures and receipts, with the bills that accrued during that period. The expenditure was for trifling amounts aggregating \$6.95. The amounts due up to July 1st, are as follows: To the Secretary of the Society for six months' salary, \$375; bill of Mr. J. N. May, for badges and dies, \$95; printing bill, \$4.50; total, \$474.50. This, together with the

cash paid out, amounts to \$481.85. The receipts during that time were \$297. This account has been examined by a committee of the Executive Committee, and has been approved. It stands as an addition to the report made by the gentleman who has preceded me; and the two statements constitute the Treasurer's Report of the condition of the Society up to July 1, 1894.

On motion of Mr. J. M. JORDAN, of St. Louis, the supplemental report just presented was received and ordered to be filed.

NOMENCLATURE COMMITTEE.

Reports from committees being in order, Mr. JOHN N. MAY presented and read the report of the Nomenclature Committee. He explained that the chairman of the committee, Mr. Trelease, was unavoidably absent, being now in foreign lands; and that a portion of the report had been prepared by that gentleman before his departure. An appendix to it had been prepared subsequently.

The following is the report:—

To the Society of American Florists,—Your Nomenclature Committee, appointed by the Executive Committee at its Philadelphia meeting, beg leave to report as follows:—

The committee has made diligent inquiry as to cases of misnaming, corrections and improvements needed in the naming of decorative plants, and other matters falling within the province of the committee, and has ascertained that the work of the Society and its nomenclature committees for the period of years just passed has resulted in a very considerable improvement in the matter of nomenclature in the trade. No very flagrant errors, or nomenclature abuses calculated to deceive, have been reported to the committee. In roses, the nomenclature of which was formerly greatly confused, we are informed on good authority, that for the last two seasons there has not been observed a single case of duplication or misnaming. We have learned that one western florist disposed of a considerable quantity of Virginian stock under the name of *Linum flavum*, a totally different plant, so that the error was detected the moment that the plants began growth; but it is hard even to suggest the reasons for this substitution, which was apparently simply the result of a gross blunder.

This committee records its gratification that the Society, in accordance with the recommendation of the Nomenclature Committee last year, has appointed a committee for the preparation of a standard list of decorative plants handled by the American trade, guided by the principles which were announced at the St. Louis Convention, and which are printed in full in the Proceedings of the Society for 1893, at page 92; and we wish to urge upon every member of the American trade his cordial co-operation with the committee in its difficult but useful task.

Respectfully submitted,

WM. TRELEASE, *Chairman.*

Your committee very much regret the absence of the chairman of this committee, Mr. Wm. Trelease, who has taken great pains with this work, and in his absence, but with his entire concurrence, we present the following as an appendix to his report just read:

We sent out the following letter to the representative men of the country, wherever we thought we could get any information bearing upon the subject; replies to some are herewith attached, or parts of them bearing upon the subject:—

“*Dear Sir,*—The Nomenclature Committee of the Society of American Florists are very desirous of making as complete a report of any misnaming of plants that may be in circulation at this time, or errors, duplicates or anything calculated to be misleading to the florist or general public as possible, and with that end in view the committee through me as the chairman, (Mr. Trelease is absent from the country at this time), specially request that if you can give us any information bearing upon this point you will kindly do so, to enable us to make a full report at once, which cannot be otherwise than beneficial to us all.

Thanking you in advance, and hoping to get your reply soon, I am,
Fraternally Yours,

JOHN N. MAY.

N. B.—Please find enclosed stamped envelope for reply.”

Two parties reply in reference to carnation *Portia* being sold as *Lady Emma*, while the true *Lady Emma*, which was sent out in '75 or '76 was a dull brick red, totally distinct from *Portia*. The general opinion, so far as we can find, is that the variety now offered as *Lady Emma* is *Portia*, pure and simple. Personally I have grown the two side by side as offered by different growers and have never been able to detect the slightest difference. Stock procured from different growers will sometimes for the first season show a little difference in growth but none the second season with me. The variety sold this season as *Bouton d'Or* is not that variety but is *Baron de Rothschild* of the French. The case of Carnation *Geneva* distributed this season by the Wisconsin Flower Exchange, of Milwaukee, Wis., is an unfortunate one as there is already a variety under that name sent out by Messrs. W. P. Simmons & Co., of Geneva, O., some four years ago, and described as “white, striped with purple.” Such duplications of names are calculated to be very misleading and we therefore advise that the name *Geneva* be changed by the Wisconsin Flower Exchange.

In chrysanthemums we find the following:—The variety sent out the present season by two firms, one as *James Comley* the other as *Uncle Sam* are one and the same variety; it is also known around Boston where it has been grown for four or five years as *Donald*, and *Eugene R. Knapp*. We are informed that the variety being reg-

istered by the introducer under the name of *James Comley*, is entitled to that name over all others.

The following synonyms also occur, the first named having precedence by either registration or dissemination:—

L'Enfant des deux mondes — White Boehmer.

W. A. Manda — Patrick Barry.

Domination — Mrs. Geo. Bullock.

J. H. Cliffe — Wm. Simpson.

Portia — Mrs. James Paul.

Princess of Chrysanthemums — Good Gracious.

V. H. Hallock — Dawn.

Ruth — Marguerite Graham.

Mrs. Wm. Tevis and *Golden Wedding* are said by some large growers to be identical, while others say it is doubtful. Should they prove on further trial to be identical, the first name has the precedence, being disseminated first. There are many others with duplicate names, but to give an entire list would, we think, be burdensome to this Society.

In roses we have received only the following two:—

Duchess de Monca has been sent out by two distinct firms, both roses being quite distinct; the one sent out by Weber being much the better variety. Which has the precedence of the name we are unable to ascertain. One correspondent complains that the *Climbing La France* has not the color, shape or fragrance of *La France*, and says his customers say they have been deceived by it.

Of geraniums there is a variety widely distributed in western New York and Pennsylvania, under the name of *Lettree*, the correct name of which is *F. S. Raspail*. *Lettree* was a poor pink variety discarded by most growers years ago. Some of the California growers complain that *Mrs. Robert Sandiford* received from an eastern house, is the same as *Duchess of Teck*, sent out several years ago by an English firm. They also complain that an eastern grower is listing two varieties as *Empress of India*. This, in our opinion, is an error which the parties should correct, as it certainly is likely to cause dissatisfaction and confusion.

Cannas, considering their multiplication of names and wide popularity, appear to have escaped duplication, so far as we have been able to ascertain, with the exception of *Antoine Barton* and *Florence Vaughan*, which in the opinion of experts are synonymous; *Florence Vaughan* being distributed first.

The *De Parma* violet is a sport from the original *De Parma* of the French and Germans, or the *Neapolitan* of the English and Americans, and to designate it from the original should have a distinct name; then if it proves valuable it would avoid confusion in the future.

Magnolia fl. pl. proved identical with *Magnolia stellata*.

Some complaints reach us that catalogue men still persist in wrong

classification of plants. One writer says he supposes that having used them so long they reason as the lawyers do, "the longer you continue to do wrong the less harm there is in it. If you owe a man ten dollars for six years, the debt becomes outlawed; you live on a piece of property for twenty years without paying rent, you may claim it, etc.; and having used wrong classification of plants, etc., for so many years there can be now no harm in trying to mislead the public." This, in our estimation, is mistaken policy, and we think that the Society of American Florists should use its utmost influence to correct all such evils. A case in point is the *Richardia Africana*, commonly called *Calla Lily*, or *Lily of the Nile*. Not being a lily at all it should not be catalogued or sold as such. There are several other misnomers in this line that we think should be corrected.

We feel that we should not be discharging our duty to this Society and its members if we omitted to call the attention of the Society of American Florists to such errors; but we are also very much pleased to add that the work of this Society in this line in former years has had the very desirable effect of greatly improving the general classification and right naming of plants; and with care and earnest work of this Society, we trust that in the near future there will be nothing whatever for such a committee as this to report.

Respectfully submitted,

JOHN N. MAY.

ROBT. CRAIG.

ROBT. GEORGE.

JACKSON DAWSON.

(The reading of the report was much applauded, and upon its conclusion, on motion of Mr. W. K. HARRIS, of Philadelphia, the report was adopted.)

STATISTICS OF FOREIGN TRADE.

Reports of special committees being called for, the President invited a report from the Committee on Statistics of Foreign Trade.

Mr. JOHN BURTON, of Philadelphia, chairman of the committee, responded. He expressed his regret that the committee was not at the present time ready to report. He explained that, as a great part of their report embraced figures showing imports and exports, they had expected to get the work done through the State department, but that the two members of the committee residing in Washington (Messrs. Durfee and Smith), had been so busily engaged — the former being connected with the finance committee of the Senate — that they had been unable to prosecute the work as expected. He intimated that possibly the committee might be able to make a full report at a later stage of the proceedings of the Convention. He also stated that the work was far advanced,

but had not, he thought, yet reached a point at which a report would be of benefit. He added that the committee had not used any of the money so kindly appropriated to it by the Executive Committee.

On motion of Mr. EDWIN LONSDALE, seconded by Mr. JOHN N. MAY, an extension of time was granted the committee.

STANDARD LIST OF DECORATIVE PLANTS.

Secretary STEWART, having received a communication from the Committee on a Standard List of Decorative Plants, here read the report. It was as follows:—

To the Society of American Florists,—At the St. Louis Convention a resolution was introduced by Mr. Hill, calling for the appointment by the chair of a committee to prepare a check list of plants handled by the American trade, for adoption by the Society as its official list. Owing to various reasons, several members of the committee were unable to take the active part in its work that they felt was demanded by the importance of the work entrusted to the committee, and it was therefore thought best by the chairman to postpone its work until this fact could be laid before the Society. At the late meeting of the Executive Committee, held in Philadelphia, a preliminary report setting forth this fact was submitted by the chairman, and the Executive Committee at that time revised the committee on standard lists, so that its membership is now as follows: William Trelease, chairman; Edwin Lonsdale, G. C. Watson, W. H. Taplin, W. A. Manda.

Immediately after the re-organization of the committee, the chairman sent a circular letter containing suggestions for the action of the committee to each member; and these suggestions having been approved, requests were inserted in the principal trade journals, and also mailed to all procurable addresses of florists issuing catalogues, for copies of their late catalogues, and other data, which would be useful for the work of the committee. The burdensome task of classifying the names contained in these catalogues is now under way, under the direction of the chairman of the committee; and so soon as this shall have been completed the compiled list will be carefully revised to bring it into accord with the rules under which the committee works, and this revised list will then receive the scrutiny of specialists in the various branches of decorative horticulture, for the elimination of synonyms; and it is hoped that the list so revised can be adopted by the committee in season to be submitted to the Executive Committee of the Society at its next session.

Your committee recommend that authority be given to the Executive Committee, in case such authority is not already vested in said committee, to adopt on behalf of the Society, and publish such a list at its next session, so that it may be placed in the hands of the trade as early

in 1895 as possible. We do not expect that the spring catalogues of 1895 can be brought into conformity with the list, even if this prompt action is taken by the Executive Committee; but with the standard list in hand, the Nomenclature Committee for 1895 will be able to render much more efficient service than without this guide, and we have no doubt that the prompt publication of the list will make it possible for all dealers who issue catalogues to conform the nomenclature to the wishes of the Society in the catalogues issued for the following spring.

Very respectfully submitted,

WM. TRELEASE.
EDWIN LONSDALE.
G. C. WATSON.
W. H. TAPLIN.
W. A. MANDA.

On motion of Mr. WILLIAM J. STEWART, seconded by Mr. EDWIN LONSDALE, it was voted that the Executive Committee be instructed by the Society as requested in the report just read.

JUDGES OF EXHIBITS.

The Committees on Awards to Exhibits, as constituted by the Executive Committee, were here announced by Secretary STEWART. (Their names will be found appended to the respective reports at the end of this volume.)

DISCUSSION OF PRESIDENT'S ADDRESS.

At this point President ANTHONY temporarily vacated the chair, and his place was taken by Mr. EDWIN LONSDALE, of Philadelphia, who announced as the next order of business a discussion of the President's Address.

Mr. J. G. ESLER, of Saddle River, N. J., opened the discussion. He said: It seems to me that the President strikes a key-note on the subject of the relations between the Society and its numerous offspring; but when he says he thinks that the work of the auxiliary societies could be much better done by the Society of American Florists, I beg to differ with him. Specialists can always do the work pertaining to them better than it can be done by a general body. The question is of enough importance, I think, to warrant the appointment of a committee by the Society of American Florists, whose duty it shall be to endeavor to arrange for closer relations between these societies than now exist, and such as will be satisfactory both to the Society of American Florists and its kindred societies. The work is getting too far apart. I believe they should get nearer together.

Mr. J. M. JORDAN, of St. Louis: The criticism of the Secretary of the Hail Association (Mr. Esler), may be a proper one, but the Hail

Association is not one of those societies which our President has included in his category of auxiliary societies, as that is an incorporated organization, and cannot be merged into or run by the Society of American Florists which is not an incorporated body.

Among other points in the President's Address, the one in regard to issuing certificates of merit to those who have their labor to dispose of and want situations is, I think, exceedingly valuable, and should command our consideration. We have been discussing from year to year, ever since the organization of this Society, in regard to a higher education; and how are we to know whether those who apply for employment are educated unless we do issue certificates showing that they possess the proper qualifications to enable them to fill the situations for which they apply? Although the subject has been discussed many times, I do not know that we have advanced a great deal in the proper direction. If the Executive Board would examine applicants for positions, or would appoint gentlemen of knowledge in the different lines of the business—men like Mr. Harris, of Philadelphia, or Mr. Lonsdale—to make such examinations, they could ascertain in a very few minutes whether the applicants were qualified to fill certain positions. For instance, they could ascertain whether such persons possessed the requisite knowledge to fit them to manage a business in Massachusetts or to do the same thing in New Jersey, in Indiana or in Missouri. The climatic conditions in these localities are distinct and widely different; the atmosphere in Missouri being of an entirely different type from that which prevails in New Jersey. Due regard, therefore, must be had to the effect of the sea air in the latter locality and of the mountain ranges upon the weather of the Mississippi valley.

The same consideration applies in the case of gardeners coming from abroad. Their services are almost valueless in the western dry climate until after they have served there for a year or two, notwithstanding they may have previously served with great distinction in the British Empire. These things should be taken into account, so that men of means who want well informed and well educated men, in carrying on this business, may be enabled to command the kind of service that is essential for success. If they could be assured of the services of such men it would be of great value to culture in this country.

Mr. OLOF JOHNSON, of Memphis, Tenn.: I do not believe that these certificates of examination would be of any practical value except in the section in which they are issued. A man who is a good rose grower in the east could not succeed in the south until he had studied the different situation and the different climate there. Therefore his certificate, while of use in the east, would not be the thing in a far distant part of the country. I think that every florist ought to examine and find out for himself the capabilities of the men who apply to him for work.

Mr. W. B. DU RIE, of Rahway, N. J.: A simple oral or written examination does not cover the whole ground. The individual applying for the certificate may have been "coached," and he may go through a course that would be superficial in itself but sufficient to pass an examination upon; at the same time he would not have an actual thorough knowledge of the business. More than that he might not be energetic, nor willing, nor honest. He may talk well and may be able to tell you very glibly how to do certain things, but the important thing is to find out whether he can *do* well. The question is whether he has enough of push, energy, honesty, and the other qualities of character that are essential to enable him to assist a florist to success in his business.

I think that an examination of this kind is a necessary means for obtaining a certificate; but in addition to that a knowledge of the services and habits of the individual should be obtained, and it ought to be obtained from those who have employed him. That, I think, is fully as important as any written or oral examination that may be given by a committee.

Mr. Du Rie further said that at one time he employed a tramp, who came with recommendations which were written on printed letter heads of the principal florists of the country. The fellow was one of the best talkers; an Austrian by birth, but turned out to be a rascal.

Mr. JORDAN: The recommendations given by some employers are worthless as a general thing. I have knowledge of gentlemen who have stood high in this Society, who have given a man a recommendation for the purpose of getting rid of him. That is one reason why we want this committee from this Society. When a man comes along and wants to be examined, that committee will ascertain where he has worked. His employer, if a respectable man, will answer truthfully when interrogated by the committee.

Mr. P. O'MARA, of New York, here suggested, that as portions of the President's Address had been imperfectly heard by the members, in consequence of noise or other causes, it might be a good plan to provide for the printing of the Address and its distribution to the Convention, as enabling members to look over it and become familiar with its contents.

As to the question of labor, he remarked that this was one with which he had considerable to do in his own experience. He said it seemed to him that to attempt to give testimonials or recommendations to persons, testifying to their capacity, might be a good thing in theory, but that it would hardly work out in practice. His personal experience as to the needs of the florists for help resolved itself into about this: That from about the middle of March to some time in April or May, they were fairly flooded with applications *for* good men; that then the demand ceased, and they were flooded with applications for positions

from good men. He was apprehensive that anything like the giving of certificates, as proposed, might be the inception of a labor organization of florists' employees, and that the florists might find themselves some day face to face with an organization like that of the bricklayers or carpenters, which would threaten to call out every employee holding a certificate unless certain wages—say six dollars per day—were paid. It seemed to him that the florists individually would always be able to determine, by personal examination, and a day or two of actual work, the qualifications of the laborer applying for employment. He thought it would not take a longer time than that for a man in the business to find out whether the employee was a good man or not.

Mr. G. L. GRANT, of Chicago: If we are to have any progress in the future I think we will have to adopt tactics different from those we have employed in the past. I have had the privilege of looking over the President's Address (not having been present when it was read), and it has seemed to me that in this recommendation, he has struck an important opening for progress. I think that a good point was made by the gentleman on my left (Mr. Du Rie), in what he said about our wishing to know something more about the man applying for employment than that man might be willing to tell us. Would it not be valuable to have a committee of this organization to whom any member of the craft who might desire to go on record could go? to whom he might communicate everything he knew, more or less, and also information as to where he had worked in the past? Let him give a record of himself, of his ability, and so on. Then let the committee communicate with the parties for whom that man has done work, and ascertain from them, in confidence, just what the man can do, what his habits are, where he is weak and where he is strong; and let that information go upon record for the benefit of the members of this Society. I should say that one great value of a thing of that kind would be in encouraging young men to go upon record in the matter; that it would furnish an opportunity for the studious young man and the young man of good, correct habits to separate himself from the crowd of tramps with which this profession is more or less overloaded. If we will do that, we will take an important step in the right direction, it seems to me.

Mr. O'MARA here suggested, as an additional consideration, the fact that the field of floriculture is not one in which the very highest wages or anything equivalent to them can be obtained for the laborer; therefore it would always be more or less subject to attacks from nomadic laborers, people who imagine they are florists. He said his personal experience was that it very rarely occurred that a really good man as a commercial florist was without a place. Once in a while he may be, but it would be for a very short time. Mr. O'Mara said he thought that the

condition of labor in the floricultural market at the present time hardly required that such a step as was proposed should now be taken. If a committee was appointed to take the matter in charge, he thought they would find a very large task on their hands, and that the result desired by them would seldom be attained.

Mr. W. S. RENNISON, of Sioux City, Ia.: Speaking from the standpoint of a commercial florist, I think something should be done in the matter, and that a committee should be appointed to consider it. We in the west are differently situated from the eastern florists, who have an opportunity of trying their men for a few months, because help is plentiful in the east. To western florists, who have to spend several hundred dollars in trying a man, the question is quite a different one. During the last two years it has cost us in the neighborhood of five hundred dollars to try a man, and probably without sufficiently definite results at the end of that time.

Hon. C. W. HOITT, of Nashua, N. H.: It seems to me that this matter is right in the hands of the florists themselves, and that it resolves itself to this point: That when a man asks for, and you give him a recommendation, upon his leaving your employment you should make that recommendation mean something, you should make it mean just what it says. If you believe him to be a first-class man as a rose grower, state only that fact. Make every man who receives a recommendation from you earn and deserve that which you give him.

In the last ten years applicants for employment have come to me with recommendations from gentlemen known to me and in whose judgment I placed a great deal of reliance. Any one of those recommendations, if I had taken it at one hundred cents on the dollar for what it stated, would have secured the man his place; but upon writing to the gentleman who had given it, I found that the recommendation had a string tied to it, and it was pulled back at once. Now, I submit that recommendations of that kind are dangerous. I contend that no man has a right to give me, for instance, a recommendation as a first-class florist unless I deserve it. You want men who can live up to the recommendations they present—so do I. But a committee of this Society would not ascertain the qualifications of these men, because the recommendations handed to the committee would not be what they purport to be. The desired results may not be accomplished by means of examinations. Oftentimes the young man who talks glibly or writes rapidly passes an examination with a higher grade of merit than one who, with less of self assertion, can go into a greenhouse and get the practical results which the other cannot get.

It is the same in every profession and business. In my own profession, a young man applicant for admission to the bar who passes a clean-cut examination with brilliant success, often proves a failure when he

comes to practice for a living. The proposition made here may be all right in theory; but when you come to the practical, the hard-pan, the hard-headed business workings of the thing, I submit you will not accomplish the results you are seeking for. I submit that if Mr. O'Mara gives a gardener a letter of recommendation to me, and when I inquire whether he means it, he answers, "yes;" that settles it with me. But I want to go a step further than that. I do not want to be compelled to make the inquiry; I want the recommendation that a man presents to me to mean exactly what it says; I want it to be taken literally. By that means you will free yourself of this wandering class of whom the gentleman (Mr. Du Rie) has spoken, and will secure the results that are sought to be secured in the suggestion made by our President.

Mr. ESLER: I ask the gentleman (Mr. Hoitt), what he proposes to do with gentlemen who give recommendations that will not pass at one hundred per cent. value.

Several voices (responding): Sit down on them.

Mr. GRANT: I ask Judge Hoitt if, in his judgment, a half or a quarter of a loaf is not better than no bread at all. That gentleman criticises the value of an examination; still the Judge, I understand, was at one time admitted to the bar through the medium of an examination. The bar association had determined that an examination was necessary. Possibly they did not assume, when they admitted an applicant, that he was going to be a first-class lawyer, but they did feel satisfied that he had gone through a certain process of education which should make him a lawyer of fair capacity, provided he had it in him to become such. Now, this examination may take the same relation. I ask whether an examination into the record of a man, an inquiry into his references through the medium of the gentlemen who have employed him in the past, who are thoroughly familiar with the little ins and outs in the man's character, and know what he can do, whether such an inquiry and the information secured in that way will not get around the worthlessness of the recommendations of which the Judge has spoken and with which we are all familiar? This committee can take the matter up and investigate thoroughly into those recommendations. Let the applicant present the names of those for whom he has worked in the past; let the committee get all the information they can get about the man; and let the man who has a clean record have an opportunity to show it. I think that in this way we will accomplish something.

Mr. J. C. VAUGHAN, of Chicago: I cannot help but endorse what Judge Hoitt has said in regard to the practice by some large commercial houses of issuing certificates to employees who leave them. It is well known among men in the trade that certain large houses, employing hundreds of men, make it a practice to write first class testimonials with

a view to securing the trade which those young men are able to influence after they are located through the country. It is undoubtedly true that such a practice exists; Judge Hoitt has alluded to it, and I feel that I can do no less than endorse what he has said in regard to it. It seems to me that direct information secured by our committee through such houses cannot be of such force as those letters have been.

Mr. J. L. DILLON, of Bloomsburg, Pa.: I do not think it practical to carry out this suggestion. There are in the United States some four or five thousand florists, and their help must number some twenty thousand. Out of this large number of people there would be hundreds who would apply to obtain these recommendations. For the committee to examine each one, and satisfy themselves, would require an immense amount of time. It seems to me it would be simply impossible to give each person a thorough examination and such a recommendation as would carry any weight with the trade.

Mr. O'MARA here remarked that he did not know what large houses may be sending out young men with recommendations, but he assumed that no man, whether in a large or a small house, would send an employee out with a letter of recommendation unless he had some personal knowledge of that man's ability. He (Mr. O'Mara), handled in the course of a year, possibly hundreds, he might say thousands, of recommendations of men coming from all sections of the country and from the other side of the water; and he doubted whether ten per cent. of the recommendations handed to him said absolutely anything. When a man came in and presented to him a recommendation, he read it but found it said nothing. He then sat down and asked the man as to what he was capable of doing or had done. He said he would urge upon every one within the sound of his voice, when giving a recommendation to a man, to make it mean every word that it says. Meaningless recommendations were not worth the paper on which they were written.

Mr. DU RIE said he thought the members of the Society ought to resolve to be very careful in giving recommendations. He suggested that care should also be taken in reading recommendations. Referring to the employee, of whom he had previously spoken as having turned out to be a rascal, he said that that man, when applying to him for employment, had among other letters in his possession, one from the firm with which the preceding speaker (Mr O'Mara) was connected. That letter did not recommend the man, but the man was using it as a recommendation; and any one looking at the heading and not reading the letter would have supposed that it was a recommendation from that firm. Instead of that, it was simply a reply to an application from the man, stating why they would not give him work, viz.: because of their rule not to re-employ any one who had left their service, and adding that

they did not want him to feel badly about it, but that that was the reason they could not take him back. The man had folded this letter in with others, supposing they would not all be read, and he was using it in that way. He would hand out one or two that were actual recommendations; the others merely served to swell the size of the package of letters.

The speaker went on to say that an employer who wanted to say something for a man, on account of that man's service, should be careful not to say too much. Letters which state actual facts in regard to the experience of an employer with a man may be worth something in establishing a character for that man. Deserving young men, who wish to earn a position and a name, are the ones who will be helped by this means. On the whole, perhaps the better way was for each employer to find out by conversation and an actual trial, as to the capabilities of a man. At the same time many employers have not the time to spare for this purpose, and those of the west who send for and bring workmen there from the east are occasionally subjected to a loss of hundreds of dollars because of their being led astray by worthless recommendations.

Mr. JOHN N. MAY, of Summit, N. J.: I want to delay the meeting just a minute. I have studied this subject for many years. In my boyhood days I served some time in Kew Gardens. There was a law brought into operation there which had the effect of making every young man go under an examination before he could get a diploma. They thought that by that means they could send out a better grade of progressive gardeners through the British Empire than they had already. I went through it with all the rest but unfortunately for me (and I am now as I was then) I could not talk much, and I did not get a diploma. But there were many who did not work as hard as I did — they may have worked harder with their tongues — who did get the diploma, and they at once went out into the world.

I have found the same thing constantly through life. It is the theorist who gets the diploma; the hard working man gets to the bottom facts. The latter is the man I want to employ. I will say this to you all, ladies and gentlemen: I have never seen a hard working, industrious, thorough and deserving young man, in this country, walk but a very short time before he could find employment. (Applause.) It is the dead-beats who want the diplomas, who want the letters of recommendation; and they are the ones who will impose upon a committee of this Society or upon any individuals who can be imposed upon. It is not the hard working, trustworthy young man who will ever come to this Society to ask for a diploma. He can get along without it.

Mr. MARTIN FINAGHTY moved that the discussion close. The motion was agreed to without objection.

President ANTHONY here resumed the chair and, being permitted to add a few words on the subject of the preceding discussion, said:

The way in which the idea originally suggested itself to my mind (and that was the way in which I had it written at first and intended to have it so inserted in my Address), was that the Secretary of the Society should issue blanks to the members of this Society, for them to fill out, to be used in the place of ordinary recommendations which, as has been truly said, mean nothing.

I believe there is a great need for some such regulation. I am not one of those who do not believe in an examination. I have been through an examination myself in another line of business, have proved myself thoroughly competent to transact that business and have transacted it for many years successfully. I have made frequent examinations into the capabilities of others in connection with that business, for I would not trust a man to run an engine or even a steam boiler for me, unless I had thoroughly examined him respecting his capacity for such work. I cannot see why an applicant for employment in the florists' business should be exempt from the same examination as to qualifications which is regarded as essential in the case of an engineer. No man should be allowed to run a boiler unless he knows how to run it, and no man will be able to run a florist's establishment successfully unless he knows how to run it. It may be well enough for gentlemen like Mr. O'Mara or Mr. May and others who have large establishments to depreciate the necessity for some established system in this matter, but take the case of a man who is but a small grower or who wishes to employ a private gardener—how is that man to know whether the man who applies to him is a competent florist or only a tramp?

If the idea I suggested is carried out, it may be true that a tramp or an undeserving person may be able to induce a committee of this Society to give him a diploma or a recommendation, but the chances are that the committee will later detect the fraud and will apply a remedy for it. At present a man who wishes to employ a gardener and who is unable to distinguish between the glib talker and the practical florist is denied the opportunity to acquire information as to the qualifications of the applicant from an authoritative source. I think that much can be accomplished if my suggestion is followed in the way I intended it should be when it first occurred to me to present it to the Society, viz., to have the recommendation issued by the Secretary and to have them state what the applicants in question really are. If the man is a propagator let the facts be stated as to whether he is a No. 1, a No. 2, a No. 3, a No. 4 propagator; whether he is an expert or a fair or an indifferent propagator. Where the man has been in a certain employ, the facts as to what he has done, whether he has been at work around a greenhouse or has had a recommendation from some previous employer for whom he was a propagator or in some first-class position, together with exactly how he has acquitted himself in each capacity—all these facts should be stated. If the man has been at work for a dozen or more

employers' the consensus of opinion of each of those employers' recommendations would show just where the man is weak and where he is strong.

I have had, in my own experience, cases which demonstrated the value of my suggestion. Last fall a man who came to me for employment presented a genuine recommendation as a first-class propagator. I have no doubt he was such. But I had a propagator at that time, and did not want to employ a man in that capacity. I afterwards found that the same man was an expert packer. If he had come to me with a recommendation as a packer, I would not have hesitated for a moment to employ him, as I needed a man for that special work; but I did not know the fact that he was such, and he did not mention the fact. Years ago another man came to me with a recommendation as an excellent rose grower. I employed him for two years, but found, that while he was not much of a rose grower, he was the best salesman I had ever seen. Now, all these points should be set forth in the recommendation. The matter should not be left to Tom, Dick or Harry, for, as has been stated here, they will write recommendations which amount to nothing; but by this means you will have a prescribed form. If a recommendation states that Mr. Jones, for instance, has been employed by me in a certain line, you thereby have a fact which you may put down with confidence as something tangible and definite. That which I have now stated is the way in which I originally intended to bring this matter before you, but subsequently I incorporated it in my address in its present form.

The discussion here closed.

PERTAINING TO THE SECRETARY AND TREASURER.

Secretary STEWART read, for general information, two proposed amendments to the By-laws, relating to the duties of the Secretary and Treasurer. (The amendments are given in the proceedings of Thursday afternoon, when they were adopted.)

On motion of Mr. E. A. SEIDEWITZ, of Annapolis, Md., a recess was taken until afternoon.

FIRST DAY — AFTERNOON.

TUESDAY, August 21, 1894.

THE ELEVATION OF OUR BUSINESS.

The first business of the afternoon was the reading of an essay on "Some Requirements for the Elevation of our Business," by Mr. W. H. TAPLIN, of Holmesburg, Pa.

The essay was read as follows: —

Mr. President, and Members of the Society of American Florists,—In considering the problem of the elevation of our business, it will doubtless be remembered by many of those present that various phases of this subject have been very ably discussed by former essayists before this Society, and it will therefore not be necessary to enter into any lengthy explanations or arguments as to why the business needs elevating; the admitted fact that there is room for improvement being quite sufficient excuse for the present writing, and this same fact will, in all probability, furnish the opportunity for much abler papers from other pens at future conventions of the Society of American Florists.

We find from daily experience that the most successful men of business are the most systematic ones, those who pay the strictest attention to the details of organization, and keep thoroughly posted in regard to any movements that tend towards the advancement of those interests in which they are particularly concerned.

Eternal vigilance, we are told, is the price of success, and this is no where more true than when applied to the business of a florist, a business in which the habit of close observation is of the first importance if we desire to keep our stock up to a given standard, and our business abreast with the times, for in this age of keen competition the man who hesitates is lost.

Taking the figures of the last census as a basis, we can safely estimate that our business now represents an invested capital of nearly forty millions of dollars, and an interest of such magnitude as this sum indicates, certainly should have some standing among the industries of the country.

But our methods must be such as to command respect in order to gain recognition from the business world in general, and one great requisite in this direction is the practice of more system in our house-keeping, if we may be permitted to use this term in reference to greenhouse work. The man who takes no account of stock, and does not know the result of his sales in any particular specialty for the past season, nor how those sales compare with the results of former seasons, cannot expect to make much progress toward the elevation of his individual business, and without the efforts of individuals any movement on this line by organizations will naturally prove to be failures.

In the opinion of the writer, systematic work, orderly arrangement and cleanliness are among the first requirements to be observed by the grower of plants who feels interested in the elevation of his business, for on system depends his profit, on orderly arrangement and proper display of his stock depends most of his sales, and cleanliness is as essential to the best growth of most plants. A heavy crop of weeds, muddy walks, broken down benches, and a generally unkempt appearance should not be accepted as indications of how busy we are, but rather as evidence that there is a screw loose in the management.

This state of affairs, though not so prevalent now as it was a few years ago, is still too much in evidence in many establishments, and deserves a radical change; for if order is Nature's first law, we who practice "*an art which does mend Nature,*" as Shakespeare tells us, should surely strive to observe that law.

Have a general cleaning up at proper intervals, keep walks, benches and all the surroundings of the houses neat and tidy, arrange the plants in the most attractive manner, and employ help enough to keep them in that condition. It is false economy to worry along with an insufficient force of men, and we all know that the most efficient and reliable help is the cheapest in the end, and in this connection it may be added that so far as my experience has gone, a proper proportion of men to glass is about one man to each six thousand square feet of glass in an average establishment, unless the business includes much out-door work or jobbing, and in the latter case an extra man or two may be needed during the busy season at least.

A systematic arrangement of the labor should also be made, by appointing certain men to attend to the routine work of watering, ventilating and firing of certain houses, (if the size of the place does not warrant the employment of a regular fireman), and these men to be held responsible for the performance of these duties at the right time, for by this method the men become more interested in the welfare of the plants under their immediate control, and will take some pride in keeping them in condition.

But this idea of systematic work is not only applicable to the grower, for even among the retailers the lack of system is sometimes found, and dirty floors, dusty shelves, and littered counters are sometimes seen where we had been led to expect æsthetic elegance. By the use of the above term, I do not intend to signify velvet carpets, lace curtains, and bell-boy with large gilt buttons, but rather the idea that where choice and delicate flowers are exposed for sale, cleanliness should prevail, and some effort be made in the direction of proper display and adornment.

The retail florist can be, and really is, in some cases, an educator of the public taste, but in order to attain such prominence, he must use business methods, and among these are courteous sales-people, careful attention in the selection and packing of even a small order, prompt delivery, and a regular system of bookkeeping. A closer observance of these items would doubtless promote the interests of this branch of the trade to such a degree that many outstanding liabilities could be more promptly met, and thus much benefit accrue to the trade in general.

But in order to make any of these suggested reforms operative, the proprietor of the establishment must take the initiative, and with the adoption of certain regulations, the habit of neatness and systematic work can readily be inaugurated among the men.

These brief remarks in reference to a more thorough organization of individual establishments as a means of elevating our business, bring to

mind the fact that there is another agency that we should encourage with the same end in view, namely: our national, state and local organizations. It is unquestionably true, that the Society of American Florists has accomplished good in bringing the members of the trade together and stimulating the exchange of ideas, for by no other means could such a representative gathering be brought together, and similar benefits, though in a more restricted degree, have been secured from the various florists clubs and horticultural societies. These influences should be encouraged, for they all tend toward the spread of knowledge of plants, flowers and gardening, and are thus agencies for the promotion and elevation of our business, and as such, should receive our hearty support.

A tasty exhibit at a local exhibition is a good card, and while there is not in all cases an immediate increase in trade from this source, yet it is one of the best opportunities for the florist to display his talent and enterprise, and to create a good impression on the public mind. And still another requirement for the advancement of our business, is for every member of the trade, whether employer or employed, to secure as good a horticultural education as possible.

I believe in a combination of practical experience and theoretical knowledge, with the former predominating; for while we sometimes note actual successes in the trade, made by purely theoretical men, yet the weight of evidence is in favor of the man with experience.

One road to improvement in the matter of education, will be found in encouraging the reading habit among the men in your employ, and if they decline to subscribe to one or more of the various horticultural periodicals, it may prove a good investment for the employer to make a few extra subscriptions each season and distribute the papers among the men.

And in conclusion let me add, that while the present condition of our business is not entirely discouraging, yet it seems that the more general adoption of the three points of (1) *systematic work*, (2) *organization*, and (3) *education*, would tend to improve and elevate it, and with this suggestion, I leave the subject to the wise consideration of the Society.

When the applause which followed the reading of the essay had subsided, the President invited discussion of the subject.

Mr. E. A. SEIDWITZ, of Annapolis, Md.: I think that, in the elevation of any business, the first consideration is to start with those people who intend to go into the business when they are young. It is a shame that our apprenticeship system in this country is so poor. When we take a boy we are compelled to pay him so much for so much service; and too often the consideration with him is not that of becoming an expert in his vocation but simply as to how much money he can earn. The first consideration with many, in almost every business, is as to the amount of money that can be made out of the business. To my mind

that is all wrong. For one, I believe that the florists' business belongs to the arts. I do not think that an employee in a large florist's establishment can be a good grower unless he is in love with his business; for otherwise he will not give to the care of plants that thoughtful, careful attention — that eternal vigilance, if I may so call it,— which is indispensable to success and which cannot be bought with money. I know that some persons may smile satirically when we talk about working for the love of anything; but I contend that until that spirit of self devotion to business is instilled into our employees, we cannot derive from their work that satisfaction which we ought to have, and we cannot elevate them as we should. I remember an instance of this which occurred in my vicinity. A boy with very little education, who had perhaps gone to school until he was eleven years of age and could barely read and do a little addition and subtraction, was promised by his employer a present of a five dollar bill if he would bring into bloom six months later, on the first of January, a certain geranium. The boy accomplished the task and had the geranium in bloom on the day appointed. His employer told me afterwards that that investment of five dollars was the best that he had ever made in his life. It is true that it is money which develops this love for the business, but the fact remains that if that boy had not taken an interest in his work he would not have made the successful grower that he is today.

The speaker here spoke of the different conditions which prevail in the old country. According to the custom there, when a young man had been in an establishment a little while, he was able, through the recommendation of his employer, to get a position with some other grower. In America, when the florist got hold of a good man, he kept him, being afraid that, if he let the man go, somebody who would offer higher wages would get hold of the man and he could not be got back. The speaker thought that the employer should be a little self sacrificing and should try to develop the capabilities of his employees. Referring to the means he had taken to stimulate an interest among young employees, Mr. Seidewitz said he had required his boys to keep diaries in which were entered details of the growing of shrubs and perennials in some corner or space specially set apart for the boy's use. He also stated that he had given the prize money obtained for his chrysanthemums, at exhibitions, to the men who grew the plants; thereby encouraging each man to try to out-do the others. He reiterated that, unless young men were imbued with this love of their business, they would ultimately fail of reaching success, as no business could be elevated by simply looking at the money side of it. [Applause.]

Mr. BENJAMIN HAMMOND, of Fishkill, N. Y., referring to that portion of the essay which speaks of the impression created upon a stranger by a disorderly, careless or slip-shod appearance of things in a florist's establishment, said that the effect of this was to create an impression

unfavorable to the place and the opposite of that which might be hoped for. Instead of conveying the idea that the place was doing a considerable amount of business, the littered up condition of things impressed a stranger or a resident of the locality with the belief that the man in charge had too much to attend to; that he was incompetent and had become rattled.

Referring to the discussion in the morning, upon the establishment of an examining board to examine the qualifications of young men applying for position as florists, Mr. Hammond said that the view taken by some members was that the President's plan would have the effect of licensing a lot of men who were simply tramps and who were too indolent to be of any value to themselves or to any one else. He thought that to deal with this class of men would be like teaching old dogs new tricks; for when a man took to the road, whether he was a printer, a florist, a railroad laborer or what not, it was because that man had lost heart in all the things that make a man. The characteristics of the tramp are a lack of education and more or less indolence. He lacks the nerve to stick at an occupation or to carry through what he undertakes. Mr. Hammond suggested that where the improvement and the advancement of floriculture would come in would be to begin with the young men and lads who are looking toward floriculture as a permanent business. The object of the Society of American Florists, from the outset, had been the elevation of the craft. In years past the gardener or florist had not held the rank or rating in his community to which the profession of floriculture entitled him; the village doctor or apothecary had out-ranked in standing the skilful florist. Many a boy who would be inclined to follow the business, alike for pleasure as for profit, would be more inclined to take it up as a life-work were he sure of the recognition which the great Society of American Florists would have in their power to give through the medium of an examining board and the issuance of certificates. If it was held up before a young man, during his one, two or three years of service, that if he was industrious, studious and attentive to his business, thereby becoming a proficient and useful helper, he could appear before this examining board for examination, he would have an incentive to exertion. The judgment of that board (composed, as it would be, of men whose character and ability would carry weight), would be accepted throughout the country as a thing of value; and the young man who, upon the recommendation of his employer as to his qualifications, had been found by the board to be competent would be benefited by receiving a certificate, stamped with the seal of the Society of American Florists, attesting his ability and past industry; this would be of value to him in all his future career.

Mr. JOHN SPALDING, of New London, Conn., said that, to get at the heart of a thing, the root must be reached. He thought that the root of the boy trouble was that the boys had no education before they

came looking for work. He continued: My experience with boys has been that "one boy is a boy, two boys are half a boy, and three boys are no boys at all." [Merriment.] I ask my friend here to tell me whether he can pick out a boy of twelve or fifteen years of age, in a city of twelve or twenty thousand inhabitants, who would be of any use. I never had but one, and he was a lanky boy of fourteen. I said to him, "You worked at something before you came here?" "Oh, yes," he replied, "I worked in the factory." Now, unless we can get boys who have been taught to use their hands we are absolutely unable to make them of any use to us. I would not have a boy in my place. Since I have got too old to run about after one, I have employed men. [Renewed merriment.]

I remarked, this morning, when the discussion was going on, that the question was a one-sided one altogether. I do not want to renew that discussion but I will say this. Suppose the boys' employers would agree to some method of dealing with them, with tramps and the others, would it not be fair that the workingmen should have an agreement among themselves to look after the employers? When I was a young man, looking for a position as a head gardener in the old world, a gentleman of large experience said to me, "You have the same right to inquire into the character of those who are to employ you that they have to inquire into your character." This is the point I wish to make, that the workingmen in our business have a pretty good right to inquire into our characters; and I tell you we need to make them good and that we ought to deal honestly and fairly with the men. When you have a good man treat him fairly, make it for his advantage and your own for him to stay with you, and you will not have so many tramps. I tell you this, and you know it as well as I can tell you, that you will not make much by changing about. [Applause and merriment.]

Mr. FRED STORM, Jr., of Bayside, N. Y.: I understood the gentleman (Mr. Spalding), to say that since he became too old to run about and look after a boy, he did not care to employ one. I suggest that you would get more good from boys if you would put more dependence upon them. If you are continually running after and nagging a boy, he is simply going to watch to see when you are coming, and then he will work like a steam engine, but will sit idly down when you are not watching. I think that if the boys are given a chance to work for a purpose — if there is a certificate that they can get — they will endeavor to learn rapidly, that they will feel a pride in holding that certificate and will feel that they are men and will have to do men's work. [Applause.]

The discussion here closed.

COMPARATIVE COLORS AND THEIR RELATION TO FLOWERS.

President ANTHONY announced as the next business an essay by Mr. F. SCHUYLER MATHEWS, of Boston, Mass., upon "Comparative Colors and their Relation to Flowers."

Mr. MATHEWS was enthusiastically greeted upon his appearance on the platform. He said: It gives me great pleasure to come before you to speak of something which for some time past I have been interested in and written about. But it is one thing to write to you and it is quite another thing to talk to you. It is one thing to write in black and white what one thinks, and it is quite another thing to make colored papers and your beautiful flowers talk.

Before proceeding to read this little paper, I wish to make a prefatory remark in one way. An old eastern poet said, "I love God, I love children, I love flowers." I think there was a great deal of truth in what he said. I believe that the minister's profession, the florist's profession and the artist's profession are three of the highest in the world. The man whose work in this world is to struggle after truth and tell truth; the man whose work in the world is to show God's sweetest smiles; the man whose work is to paint on paper or canvas God's beauty — these men, I believe, are fulfilling three grand missions.

You, my friends, are closely associated with the artist in your profession. In the matter of color we are all deficient in vision as well as in appreciation. It is not alone people who are not attached to any profession or art, who are perhaps, as we idly say, "color blind," but even some artists. But in truth the truest artists are the greatest colorists, and they are the ones who make color one grand study; but there are very few of them, I am sorry to say. In my profession, out of a hundred men there are only two score who really know what color is. I remember hearing a gentleman say, when looking at pictures in an art gallery, "These pictures are all very beautiful, but I would just as lief have an engraving; I think it tells more truth. I do not understand that picture there; it is one vast daub of green, and in the middle a red spot, and the man calls it a sunset. I could do as well as that with a rotten orange." [Merriment.] Well, we all have our impressions of Nature, and we all draw them differently; but there is one thing we are all after, and that is truth. When today I come before you, and have on this desk a perfect distraction of color, I do not know how I am going to tell the truth. It is not an easy thing to tell, and what is more, what I have to say is not infallible truth.

I do not think there are any two artists who agree on any one subject. As regards schools we all disagree; as regards principle in art we all agree, but as regards the working out of that principle we all agree to disagree. When it comes to these colored papers which I have, and these flowers, given me this morning, which are colored by God's hand, you will see what a little thing man can do and you will see what Almighty God can do through your work, because it is not the wild flowers which give us the beautiful ranges of color; I know of only a few exceptions where the wild flowers are really grand and gorgeous. But

these colors here are really grand colors. Mine are as mud compared with them; and it will not take me very long to prove it to you.*

One of the strongest elements of beauty in Nature is her colors. As time goes on, the people of our country show an increasing interest in pictures which are full of color. We are past the age when steel engravings were popular, and it is not probable that there will be any revival in this department of the engraver's art.

How far the beauty of color in flowers has exerted an influence in this change from monochromatic to polychromatic art I am not prepared to say; but I believe flower colors have had more to do with this matter than we are prone to think. It is only within the past twenty years that the florists have put before the eyes of the public the magnificent pure reds of carnations, and the glorious magentas of the cinerarias. What influence this must have had on the city people who do not possess garden plots, it is not easy to say; but that the florist through his flowers, has been a potent factor in nurturing a love of color, it is reasonable and wise to believe.

But this growing fondness which we indulge in for color, sometimes outstrips our knowledge of its character. We have no reliable nomenclature of color tones, and we resort to nature at once for a color name which scientifically does not exist; as, for instance, peacock blue, cherry red, sulphur yellow, sea green, crushed raspberry, and old gold. We go jumping about among natural objects for similitudes in color, and we do not locate our colors in the rainbow tints.

I would like to call your attention, therefore, to colors as we may find them related to each other in the prismatic condition. I regret that pigment color, all I can refer to directly, is so dreadfully lacking in purity and brilliancy; but at the same time it must be borne in mind that color is color the world over, and there is no color in the prism which cannot be adequately represented by pigment color.

The most remarkable things about Nature's colors, however, is their purity. Flowers possess the next best quality of color tone to that which we see in the rainbow. I must refer to several splendid flowers which illustrate this truth perfectly, "Prince of Orange" calendula, "Portia" carnation, "Empress of India" nasturtium, "Madame Crozy" canna, lemon colored marigold, (African), purple cineraria, violet blue morning glory, and "New Cardinal" poppy.

These flowers show the most extraordinary brilliancy in such colors

*NOTE.—Mr. Mathews here gave some practical illustrations by means of a dial with sixteen colors. He incidentally remarked that considerable error existed in the catalogues in regard to color description; for instance, the nasturtium family could not produce a yellow, yet we find them listed as such. He said the trouble is that color is seen generically, not scientifically. By the use of colored papers, and living specimens of variously colored flowers, the essayist showed how one color in close proximity to another had a distractive influence and modified the apparent hue. He also said that an artist who paints in December a July sunset sky must carry the colors in his head.

as orange, pure red, vermilion, pure yellow, pure purple, and violet. The pigments of the artist's paint box which go by the same names are not comparable with them! If I were to use bits of petals of different flowers, and connect these together in imitation of the prismatic colors, I would have no difficulty in finding colors brilliant enough to match the rainbow! the color *fire* might be gone, but the color *purity* would remain. A dial with sixteen radiating colors made up of flower petals could be completed with the exception of pure blue, peacock blue, and green. These are colors which it would be extremely difficult if not impossible to find in Flora's world. I might specify the sixteen hues as follows.

<i>Pure yellow.</i>	<i>Purple.</i>
<i>Green yellow.</i>	<i>Magenta.</i>
<i>Pea green.</i>	<i>Crimson.</i>
<i>Emerald green.</i>	<i>Pure red.</i>
<i>Peacock blue.</i>	<i>Scarlet.</i>
<i>Pure blue.</i>	<i>Pure orange.</i>
<i>Ultramarine blue.</i>	<i>Yellow orange.</i>
<i>Violet.</i>	<i>Golden yellow.</i>

The colors as they are printed opposite to each other, are what we term complementary hues, that is, they form a full and complete color when mixed together, which we call white.

In bringing this subject before you, of color for comparative examination, I shall try to show how colors can be recognized in their individuality, and how we can avoid confusion in the use of color terms. It is, of course, a matter of education in training the eye so it shall distinguish between tints of similar character; but provided one is not deficient in color sense, and so more or less color blind, it is not difficult to present a few simple colors in such a way that one may easily recognize them ever afterward.

Scarlet is a red color which is characterized by a tincture of yellow. The "Ranunculus" poppy gives us splendid scarlets; the "New Cardinal" poppy, one which I may locate as having come to me from Mr. W. Atlee Burpee, is a scarlet flower with a minimum amount of yellow in its composition, and a most remarkable character of lightness and purity of tone. There is positively no "Ranunculus" poppy which can give us the same color; and indeed, I know of no other flower which will approach it in clearness of hue. I have long since analyzed the color of the "Madame Crozy" canna, and found it an incomparable scarlet; but the character of the color is entirely different from that which we see in the poppy which I mention; it is heavy, and has a surface brightness with no depth at all. A very different flower is the "King of Tom Thumbs" nasturtium; here is a fiery scarlet flower which I cannot copy with any pigment in my paint box; you would smile at the brick dust appearance of my best scarlet vermilion beside the glorious intensity of this nasturtium's petal. A step further in intensity of color and you have the nasturtium "Empress

of India," a scarlet red of great depth, which I am also powerless to reproduce with my paints.

So much for scarlet; but red in purity of tone it is not; this must be borne in mind. I have referred to the poppy family as possessing some splendid scarlets; I might as well include the nasturtium family, as it is capable of giving us scarlet in all its intensity and paleness. But the difference between the two families as regards red is wide. Poppies give us a pure red in a more or less dilute condition; but the nasturtiums are absolutely incapable of producing anything like red in purity of tone. It must not be supposed that the "Rose" nasturtium is an example of pure red even in a qualifying degree; this flower is dilute red scarlet in color tone, so far removed from purity that there is about twenty per cent. of yellow in its make-up.

In the balsam and the phlox families there are no scarlet reds, and as far as my knowledge goes, nothing which remotely resembles them. The so-called scarlet Phlox Drummondii is a pure red flower with no trace of yellow in its composition. I regret constantly the misuse of the color term *scarlet*: the seedsmen's catalogues are full of the word, when what is really meant is only a bright red color. I am glad to see that in the *Century Dictionary*, so recently published, the proper and scientific definition of specific colors is given; the position of the colors in the spectrum is explained, and at once any one may discover by experiment the individuality of a color of a certain name. As an example of this, one may find that scarlet is a red so near the yellow division of spectrum color, that it is distinctively a yellow red and not a bright red.

My salmon rose Phlox Drummondii has an ineffably pale pure red pink color with a suspicious yellow inclination; but after careful examination I have been forced to the conclusion that there is not a particle of yellow in the expanse of the dainty petals. What the seedsmen would undoubtedly call rose pink in color would be crimson pink. I have a lovely pure pink flower among my "Shirley" poppies, but I have never seen a crimson pink, or a pure crimson poppy in any variety of this flower. Crimson is too often a word loosely used; it does not mean dark red, *that* is maroon; it does not mean deep intense red, *that* is pure red perhaps, or a red with some touch of yellow in its composition; but it *does* mean a deep red near the blue division of the spectrum; and consequently crimson must be a blue red. I have crimson zinnias, sweet williams, petunias and silenes, but I have no crimson poppies.

I wish there was time enough for me to say many a good word for the too-often despised color called magenta. But I can only say this: not until the florists discovered the wonderfully deep colored cinerarias, and gave them to us in a profusion of magnificent bloom, did we understand how magnificent magenta could be. The artist who is a colorist, and could learn nothing more about purple reds at an exhibition of cinerarias, would be dead to color influences indeed! and what is more, the

florist who exhibited the flower would be proved the greater man so far as his æsthetic sensibilities are concerned. But I am sure that it is not the artists who are prejudiced against magenta. I could prove that by the recitation of half a dozen facts about as many famous artists. It remains, however, for the florist to persevere with his splendid magentas until he gains the victory over unreasonable prejudice, and convinces the public by orchid and cineraria, that purple red is a grand and dignified color above the disdain of those who delight in unrefined and flashy scarlet geraniums.

Magenta is the contralto and baritone scale of the music of color; it is too rich and deep when seen in all its purity for any but colorists and lovers of color to understand. I believe the florist has gauged the value of the hue in the presentation of it in his glorious cinerarias, and evidently its rich and uncommon music struck his ear long before it had any effect upon the young ladies who like to paint wild roses and poppies! It is not always the smallest ears and bluest eyes which distinguish the beautiful in manifold nature.

As a representative orange flower I might point to the "Prince of Orange" calendula. But orange is a color easily recognized by anyone; there is little chance of its being misnamed. It is only the orange reds which are confusing in their variety. There are orange red poppies, the scarlet runner is orange red, so are some of the geraniums and zinnias. Orange vermilion or orange scarlet are two names for the same color, either of which will do very well; but they are not so often used in the seedsmen's catalogues as they should be.

Pure yellow is a color which in its exact tone is not so easily recognized. Sulphur is a pale pure yellow. But sulphur colored flowers are not so very plentiful as the catalogue would persuade us to believe. There is no sulphur yellow among calendulas, phloxes, nasturtiums, or gladioli.

The buffish tone of the "Pearl" nasturtiums is rather straw color; wild mustard in its paler tints is much nearer sulphur. The outside of buttercup petals is quite a pure yellow, but the shiny inside surface reflects the color to an intensity which approaches golden yellow. The wild evening primrose is quite a pure yellow flower. Coreopsis is golden yellow, and never approaches a pure yellow tone. The sunflower never shows a sulphur yellow, nor is there any rose I know of, not even excepting the beautiful yellow "Scotch" rose, which gives us an absolutely pure yellow.

The true green is really what, among our pigments in the paint box, we call emerald green; this occurs rarely in nature, and I cannot cite any instance of it worth mentioning, unless I refer to indirect color effects in springtime landscapes. A green-blue, or even a pure blue flower does not exist; one-half of the flowers called blue in the catalogues, are not deserving of the name. Such flowers we artists would employ purple paint to copy. I know of no blue aster. Bachelor's

buttons are pretty blue, so is wild chicory. But I would be compelled to use ultramarine to truthfully copy either of these flowers. The blue of some of the convolvulus minor is charmingly bright, and has little purple in its composition. The ultramarine of certain deep-hued morning glories is rich, and true to the color name.

I am perfectly well aware of the fact that a florist or a seedsman must use color names generically so to speak; so the blue aster and the yellow rose are admissible speaking of these flowers in a general way; but it seems to me, specifically the blue petunia, the sulphur nasturtium, calendula, balsam and phlox, the scarlet phlox and balsam, the sky blue aster, the crimson poppy, and the scarlet aster, are non-existent! There is no art of the horticulturist which will induce certain flower families to take on any positive color which is new to them. I think I am correct in making this broad assertion. I allude to specific color; and I am sure that the nasturtium is incapable of absolutely pure yellow.

The green petunia which I have raised with great success, is a well named flower; although the best I can do is to show a specimen with only seventy per cent of the petal surface green — and this not emerald, or true green, but the generic green. No one can possibly object to such a name, nor is there anything wrong in the name black scabiosa. These are both color names which are absolutely true to color effect. But the scarlet balsam had no excuse for itself on any ground, for reasons which I have already stated.

As regards the various tones of pink and red in roses, I have only a word to say now. Already I have written much on this subject, which has appeared at different times in the *American Florist*. The pinks in roses are generally compound colors; that is, they are made up of a variety of delicate tints which can only be readily distinguished under the microscope. There are pure pink roses and yellow pink roses. The comparative examination of the petals of roses with some of the annuals which I have just mentioned will locate the color of a certain rose without mistake. The rose glories in deep crimsons, and in pale crimson tints; but with scarlet it has nothing to do.

The beautiful reds, and pinks and yellows of carnations it would take too long to describe here with an approach to justice. I consider the carnation the prophet flower of pure and intense reds. The flower is weak in the yellow color, but its pinks are incomparable in brilliancy. The "Grace Wilder's" color is pure and even; not the best of my "Shirley" poppies, nor any of my phloxes can stand beside it. The "Portia's" red is beyond the red of any other flower in my garden, except it be that of a certain gladiolus.

Regarding the broken tones in flowers, I would like to call attention to several. The "Heinemann" nasturtium, a golden brown; the "Edward Otto" nasturtium, a purplish brown; the "Cyclobothera flava," a russet yellow daintily broken in tone. Then there are a num-

ber of maroon pink poppies in the ranunculus division, which I take great pride in growing; but I must complain that the seedsmen do not separate these from the swarms of scarlet and rich red flowers which interfere with the æsthetic tones of the maroon pink ones. So much interest was taken in the "Louis Boehmer" chrysanthemum, particularly with regard to its fine color, that I wonder the seedsmen do not make an effort to group together these odd colored poppies, and make it easy for amateur gardeners to become well acquainted with them. The taste for æsthetic color is growing, and the day will come when magentas, toned solferinos, plum purples, and purple browns in their more delicate tints, will be fully appreciated and admired.

But color is an infinite thing, and its consideration here in connection with flowers must be greatly limited. I repeat that flower colors are so far beyond pigment colors in brilliancy, and the variations are so innumerable that it would take volumes to describe the differences, and infinite patience to pursue the subject to a broad and profitable conclusion.

We have yet to learn a great deal about color; not even the artist can fathom all its depths; certainly the best study of it is in the flower garden, and we owe to our florists, horticulturists and gardeners a great debt of gratitude for their revelations of the most magnificent colors the world has ever seen. It is not on the artist's canvas, but in the gardener's flower that the greatest wealth of color may be seen.

The Convention expressed its appreciation of Mr. Mathews' admirable paper by long continued applause.

The PRESIDENT invited discussion of the paper.

Mr. GROVE P. RAWSON, of Elmira, N. Y., said: Mr. President, after the *de-jeuner*, I suppose dessert is in order; but having such a full meal *a la carte*, we do not require more substantial food; and surely you cannot expect me to improve on the color tone of Mr. Mathews' valuable digest of the subject in hand. I wonder if we can all get around it as the anaconda does in the south when his snakeship swallows a whole subject at a time and digests it at leisure afterwards. I hope the kaleidoscope of harmonizing, contrasting and relative colors here presented has not created any mind-conglomeration as to the color itself as a whole. We have received some pretty hard taps, and like the school-boy who, in his fall when skating, sees stars in broad daylight, we see color as a rainbow tint flashing about us, without being hardly able to place it where it belongs. Or are we like the medical student who, when questioned by his professor and asked to describe the bones of his skull, hesitated, and finally said, "Well, Professor, I have them all in my head, but I cannot place them." [Merriment.]

One point upon which I should like to get Mr. Mathews' test, as practical to florists, is to get a clear idea of the primary colors and then the difference between the tints and shades of color. A shade is a deeper tone than its primary color, and a tint is of a lighter tone than its primary color.

I trust that we florists are not color blind. Such a condition would be very unfortunate for a class which should be able to make Art assist Nature in matters of the ornate and beautiful. Judging from some of the design work we have seen, you would think florists would need to study the harmony of color in relation to flowers. Surely we can all of us profit by the instruction we have received from Mr. Mathews at this time; and the matter is too important a one to be neglected. Of course we need to use color in the arrangement of flowers, and any one who manipulates flowers certainly ought to be an artist in his line and thoroughly conversant with color harmony and technic. The newspapers should have less to say about excrescences of the floral art. There is little excuse for ignorance in these days when knowledge is an open door. Fine design work can be made a picture in flowers in the same way that an artist with his brush paints a canvas. There are plenty of daubs, even in this line, that entail much loss of time and materials; likewise many good flowers are wasted by being crowded into poor design work. We do need to have more education as to primary colors in reference to the arrangement of flowers—a point by which certainly we florists can profit. Good judgment is essential in any line of work or business; and we need to have good judgment not only in the arrangement of flowers, but in the arrangement of their color.

Two rival French sculptors had each an order for a statue to be placed in a high, commanding position. Their finished work was viewed by friends and critics. One piece bore the most careful scrutiny in its delicate modeling and grace of contour; the other, by comparison, was coarse and ungainly looking; when the two statues were mounted the conditions were quite altered. When upon its pedestal, in higher position, the one which had seemed defective assumed all the grace and dignity of expression that was wanting in the belittled and insignificant figure of the other. Study to use color, as florists, to the best possible advantage, either singly, en masse or in design work.

The most magnificent display of glorious color I ever witnessed was in early morning, just off the harbor of Kingston, Jamaica, in the West Indies. Tropic nights are usually surcharged with excessive moisture, and at sunrise the earth's whole immediate surface is enveloped in a white mist that rises alike over mountain, valley and plain. The fervid tropic sun, however, soon gets in his work, and quickly dispels this surplus moisture, fairly licking it up with its fiery tongue but permeating every minutest particle with rainbow tints of glowing color. You appear to look through a gauzy veil of silver mist into a halo of surpassing

radiance. Occasionally you get glimpses of the cocoa palm, with its long shimmering fronds of dark and bronze green, seemingly festooned with tiny electric lights. Big, gay hibiscus flowers become as changeable in effect as a humming bird's breast when emitting flash lights of brilliant color. The high mountain peaks tower up into the shifting clouds ablaze with vivid tints of flame, carmine and gold, while the deep blue violet water beneath reflects and multiplies all these variations and tones of color until you are fairly bathed in their glorious effulgence, and your eyes dazzled with the wondrous splendor. My thought was whether the gates of Paradise were more beautifully guarded.

A good deal is expected of a poor florist. He must be a first-class gardener, of course. At the same time we expect him to be an artist, a mechanic, a chemist and a book-keeper. Who can fill this double compound? Wanted — an ideal florist, an all around man and not a mere machine. [Applause.]

On motion of Mr. P. O'MARA, of New York, a vote of thanks was tendered to Mr. Mathews, for his very excellent paper; also a similar vote to Mr. W. H. Taplin.

THE QUESTION BOX.

At this point the "Question Box" was reached and the first question announced as follows, "What are the advantages of the one judge system in horticultural exhibitions?"

SECRETARY STEWART (being called upon by Mr. O'Mara as one whose wide experience with the subject would enable him to respond), expressed his gratification to know that the gentleman from New York had given him the credit of being able to answer the question. He explained that he had made ineffectual efforts to secure some member who was interested in the subject and would be willing to respond to this question and the one following, viz.: "What are the advantages of the three judge system?" Several members interested in the subject were unfortunately absent — a fact which he regretted as he thought it one well worth consideration, and if it were found that no one now present was prepared to discuss it, he proposed to hold the matter on the program in the expectation of having it brought up at a later stage of the Convention, by some one competent to present it.

Mr. RAWSON: Is not the trouble this, that one judge is not enough and three are too many?

Mr. WM. SCOTT, said that one gentlemen present (Mr. Wood) had gone all the way from Boston out to Denver, last year, to act as a judge on the one judge principle. He requested a response from that gentleman.

Mr. E. A. WOOD, of West Newton, Mass., replied: Mr. President, it has been my privilege to serve under both the single judge and the

three judge system. My experience is that the three judge system is preferable. As you all know, in a large show it takes a great deal of time to judge the exhibits, and exhibitors are anxious to see their prize cards put on and to know who are to get the prizes. If there is but one judge going over them, of course he must be very accurate, and, in looking over the exhibits, he is apt to slip by some defects. With three judges, the defects are more likely to be discovered, as by working together they can find those defects more easily than one man can. I do not know why there has ever been any cry against the three judge system unless it was because of expense or perhaps the inability to obtain the judges. I think that far better judgments are obtained with three judges, where they can be kept well together, than with one.

Mr. GROVE P. RAWSON: I have had experience as a single judge and also in the three judge system. As to the former, it may be questioned whether your judgment is biassed when you are yourself convinced that you are thoroughly sincere, while under the other system the difficulty is for three people to agree. I can see where it is possible for two to get together so as to be of the same opinion, but the third man is a "bee in the bonnet." At a Buffalo exhibition, two or three years ago, the judges' opinion was severely criticised and the florists present thought they would endeavor to straighten matters out themselves by each one judging the articles in question. Strange to relate, no two agreed, thus proving that judging is after all matter of personal taste as well as experience.

Mr. WOOD: Mr. Rawson said that three may not agree. I suppose we all have different opinions and different ideas. With one judge, we have the opinion of just that one man. If a judge can be procured whose opinion, whether he be right or wrong, all exhibitors are willing to abide by, it might be very well; but we all know that, after the premiums have been awarded, competitors who were not fortunate enough to receive the first prize will often go about and button-hole their friends, asking them if they do not think that they (the unfortunates) should receive the premium. These friends would oftentimes answer "yes," as it is far easier to say "yes" than it is to say "no," which of course causes trouble for the judge, and he often goes out of town disliked by all except the most fortunate exhibitors. It is very true that three men may not agree; but when the three men are all good judges and come together, after carefully examining and sealing the exhibits, the average which they determine upon is the best possible judgment that we can get.

Mr. P. O'MARA, remarked that the three judge system was, to his mind, the ideal one. He then detailed an amusing incident, which he had read in the *Gardener's Magazine*, descriptive of the experience of an old exhibitor in England, who at one time served as one of a committee

of three judges. Two of the committee were competent to judge and one was a make-shift selected in the place of the original appointee who did not put in an appearance. At the banquet the third man, who had been able to agree with the other two and who was a very glib talker, responded to the toasts to the judges, and did this so well that, when he sat down, everybody thought he was the man who had done all the judging and that the other fellows had done nothing. [Merriment.]

The next subject under the head of the "Question Box," was "Useful commercial cut flowers other than roses, carnations and chrysanthemums."

Mr. WM. SCOTT, to whom the subject was assigned, came forward and read the following response:

This question referred to me is in my thinking, a little ambiguous, but if it means what other flowers are there for the commercial florist to grow then the answer would be simple, but necessarily very lengthy, for it would include all the flowers that are sold in our greenhouses and gardens except the three above mentioned. It can, I believe, be put down as an indisputable fact that the rose and carnation are the most important flowers, both commercially and any other way, but the chrysanthemum I should not place third. It has sprung within ten or twelve years, into great popularity, but its season at the most is short, and prices have taken a great tumble during the past few years. I must most decidedly place the violet in advance of the chrysanthemum as a commercial flower, for the aggregate paid by our patrons during the year is far more than that paid for "mums," however large, gorgeous, and fantastic they may be. So we will have to call the violet the most important, after the rose and carnation. It is certainly true that it would be impossible to run a retail trade without growing or keeping roses, carnations, and in their season chrysanthemums, but here is a brief list of other flowers used largely in our business. Even if only for variety's sake they must be grown.

First violets, of which I have already spoken. Second, lily of the valley; this little gem is asked for the year around by our best flower buyers, and if you are successful in forcing it and retarding it there cannot be anything yielding a larger percentage of profit. Third, tulips, narcissus and hyacinths; immense quantities of these have been forced during this last fifteen years, perhaps slightly overdone this last three or four years, yet they never can go entirely out of fashion, because they can be had at a relatively cheap price, when roses to make an equal show would cost the purchaser three times the amount. Fourth, *Harrisii* and *longiflorum* lilies; a continual succession of these can be had from November to July, and are now in a general trade actually indispensable. Fifth, *Lilium lancifolium* in variety and *Lilium auratum*

are every summer coming more and more into use, and are now as indispensable in July, August and September as the *Harrisii* are in the earlier months. Sixth, mignonette is a very important crop and a paying one; many thousand feet of glass are devoted to its growth in winter and spring. Seventh, orchids; they may not be considered an absolute necessity to the general florist, but a collection composed of a dozen of the best species and varieties will well pay for the outlay, and where they are grown largely in any establishment there is a steady demand. Eighth, sweet peas are now forced by many, and in the months of March, April, May and June they are in great demand, and a paying crop.

I will not attempt to enumerate many more, but likely enough I have forgotten more than one prominent and important flower to the retail florists; there are a number of flowers which enter into his business, and which you all know, and for a cheaper grade of custom you have to grow more or less of them. There is the zonal geranium, begonias, sweet alyssum, heliotrope, stevia, eupatorium, ten week stocks, pansies and many others familiar to you all. I had almost forgotten two important plants; the poinsettia with its brilliant bracts is one; in many cities they command a most remunerative price. The other is the old calla lily which most of you can remember as long as you can any plant.

If you are the fortunate possessor of a few acres of good land within driving distance of a large town, you can make a comfortable living with a few acres cultivated to flowers. It is the natural and healthy way to exist, and in addition to the flowers you can keep a flock of chickens, cows, pigs, and ducks, some of whom will be producing a crop when you are sleeping.

After the applause subsided, a brief discussion followed.

MR. GROVE P. RAWSON said: I ask the gentleman to give his experience as to growing *Swainsona*. It is called for a good deal now by the smaller or general florists.

MR. SCOTT: I first made the acquaintance of *Swainsona* in Philadelphia, last fall, in the greenhouse of Edwin Lonsdale. Of course you all know the common variety. It is an old plant and has been known a great many years. The variety called *Galegifolia albiflora* is pure white. It needs a temperature of forty-five to fifty-five degrees, what we call a carnation temperature. It is best planted in a permanent border, where its roots can spread out over the greenhouse, and it should be trained up to a permanent pillar. Its flower is exactly like a small sweet pea. It flowers continually, and is very durable when cut. It is one of the very best plants that the general florist can grow. It is as easily grown as a geranium or a heliotrope, and I would advise you, one and all, to procure a few and plant them out.

Mr. J. D. CARMODY remarked that, knowing as he did, Mr. Scott's reputation as a humorist, he had been misled by the name of the plant. He had understood it to be "Swine-sona," and thought it had reference to the "pig-weed" family. [Merriment.]

Mr. SCOTT replied that there was a plant named "Swansona," but this was not "Swainsona." He humorously suggested, that perhaps Mr. Carmody was thinking of the western swine. [Continued merriment.]

The PRESIDENT announced the next subject of the "Question Box," viz. : "What are the advantages of forcing vegetables and fruits, by florists, in plant houses?" (the answer to which had been assigned to Mr. Ed. Swayne), but no response was made.

(Mr. Swayne's reply to that question had been prepared by that gentleman, and forwarded, but failed to reach the Secretary, until after the close of the Convention.) It was as follows :

A good many years ago, before the trait of veracity had reached the development it now enjoys among the florists of America, it is said that in the heart of Rome there opened a tremendous chasm, full of cataclysmic portents, which the oracle declared would not close until there was thrown into it the most precious thing in Rome. Many valuables were cast into it, but it refused to close until a young man, clad in complete armor, spurred his horse into the abyss, when it promptly closed, and Rome was saved. I will not pursue the analogy further than to say, that I have the keenest sympathy with that young man, and that "history has repeated itself," which statement, by the way, was contradicted by a school-boy, who said that his history would not repeat itself.

I do not believe that the brothers have come here so much for solid information as for entertainment, and am therefore reluctant to be serious, in spite of what Robert Craig has called my "venerable appearance." If there is any evil calling for stringent legislation, it is the number of papers of a serious nature, read before people who do not at the time wish to be serious ; and the evil appears in its worst form when such papers are read by the authors thereof. Having had some experience as a listener, I am loth to add to the sum total of human pain, by such a performance.

I judge the question sent me refers to what are known as "secondary crops." Our experience in this locality, has been chiefly confined to the sweet pea and tomato. The former is in some respects an ideal cut flower, — dainty, graceful, fragrant, and borne on long stems, as Messrs. Keats and Lonsdale have said, "on tiptoe for a flight." Its only faults are that it is somewhat ephemeral ; or, as John Thorpe would say, "fugacious," and consequently, cannot be shipped long distances, and

that it has small regard for the florists' wishes as to time of blooming. A neighbor of mine, however, C. J. Pennock, by starting them about September 1st, and growing them in six-inch pots, two plants to the pot, well mulched with cow manure, and watered freely, has succeeded in getting them enough earlier to pay him well for his labor.

The pots were set on the soil among his carnations shading nothing but his propagating bench, and the result was a clear gain. We have started them from October to December and grown in the beds among our carnations have found all blooming about the same time, the advantage gained by the earlier planting being, that there was more wood to produce flowers when the time came. By putting a single plant in a place about two feet apart, in the rows, and the rows three to four feet apart they will not shade the carnations until the shade is rather an advantage than a detriment. Blanche Ferry has been so far, the most satisfactory variety, with an increasing call for white. Let me say in passing that Blanche utterly forgets her name of dwarf, under such conditions, and grows to be eight or ten feet high. If you have a good market within a hundred miles or so, sweet peas will probably pay you among carnations, and I think they could be grown to still greater advantage in a violet house, if you have enough head room, the temperature suiting them, and the violets being nearly done when the peas get very bushy.

As to tomatoes, it seems unnecessary to go over the ground while there exists so complete an article as Wm. Swayne's in "Lamborn on the Carnation." There are however one or two points that have been changed in common practice here. Instead of taking out the leading shoot, we now allow it to grow continuously until stopped finally, and remove the side shoots excepting where two branches are desired. It has also been thought more profitable to plant much more closely than advised and let tomatoes take the place of carnations, earlier and more completely.

THE LATE MYRON A. HUNT.

Mr. JOHN N. MAY, of Summit, N. J., presented and read the following preamble and resolutions, which were received in mournful silence:—

Whereas, It having been our sad misfortune to lose our esteemed, kindly and genial brother, the late Treasurer of the Society of American Florists, Mr. M. A. Hunt, of Terre Haute, Ind., in whose death we have lost a very valuable officer; one whose place it will be hard to fill because of that rare combination of sterling worth, kindly nature and ever genial disposition possessed by our departed friend; therefore, be it

Resolved, That in the death of Myron A. Hunt, the Society of American Florists has lost a valued counselor and trusted officer; floriculture an enthusiastic lover and devotee; and we all a firm and beloved friend, whose genial presence we shall sadly miss from our annual meetings.

Therefore, desiring to publicly express our sorrow and sympathy with the bereaved family, be it further

Resolved, That these resolutions be spread upon the minutes of this Convention, and an engrossed copy be forwarded to the family of our deceased friend.

Mr. J. D. CARMODY, of Evansville, Ind., said: Mr. President, as a member of this Society, as a florist of Indiana, and I might almost say, a neighbor of our lamented friend, I second the adoption of these resolutions. Having been intimately acquainted with Myron A. Hunt, I would say that I know this Society will miss his genial presence. I can testify to the nobility of his nature, the honor of his character, and the purity of his motives, the wide scope of his experience in the field of floriculture and the vast fund of general information which he possessed upon all matters pertaining to our business. He was a good man, an eminently good man. He was an intelligent man, and he has fortunately for us, left behind him for our benefit, some of the fruits of his education in that noble work that he published before he died. Again, I heartily second the resolutions just offered.

Mr. EDWIN LONSDALE: Mr. President, as a further expression of the sentiment of the Convention, I move to amend the resolutions by providing that the vote upon their adoption be taken by the members rising.

Mr. MAY accepted Mr. LONSDALE'S amendment, which therefore, became a part of the original resolution.

A vote being taken, all the members of the Convention present rose in favor of the resolutions, and they were adopted by a unanimous vote.

Mr. ROBERT CRAIG: Mr. President, in view of the action just taken, I move that as a further token of respect to the memory of our departed friend, this Convention do now adjourn until tomorrow morning.

Mr. G. L. GRANT seconded the motion.

A vote being taken an adjournment was ordered.

SECOND DAY — MORNING.

ATLANTIC CITY, N. J., August 22, 1894.

The session opened at ten o'clock, President ANTHONY in the chair.

Secretary STEWART read partial reports from the committees on exhibits. (The reports, in full, will be found in the appendix.)

AT PITTSBURGH, PA., IN 1895.

President ANTHONY announced as the next order of business the selection of a place of meeting for 1895.

Mr. E. C. REINEMAN, of Pittsburgh, Pa., said: Ladies and Gentlemen, as you see by the posters tacked up around the walls here, we would like to have you in Pittsburgh next year. Last year you were in the west; this year you are in the east; and as for next year I think that a more central point than Pittsburgh cannot be had. It is accessible on all sides. It is a city of 200,000, and taking in Allegheny and the surrounding portions, has about half a million of population; this making it almost the fourth or fifth city of the United States, as it should be. We may not have much in Pittsburgh to interest you in the florist line, we have not many establishments there; but we have some few growers there who grow as good stock as is grown in the United States. Our conservatories in Pittsburgh and Allegheny are considered the finest in the country, especially the one in Pittsburgh.

If you should decide to come to Pittsburgh you cannot expect to be entertained, perhaps, as well as you have been heretofore, because we have not the opportunities with which other cities are favored, but we will certainly try our best to make your visit as interesting as possible for you. I hope you will choose Pittsburgh for your meeting place next year, and I do not think you will regret having done so. [Applause.]

Mr. D. D. L. FARSON, of Philadelphia: Mr. President, in rising to second the selection or nomination, as it may be, of Pittsburgh as the place for our next meeting, I may say that we all, or a great majority of us, realize that that location is first-class in every respect for the next Convention. The intimation conveyed by our Pittsburgh brother (Mr. Reineman), that our friends there may not be able to do the entertaining as it has been done heretofore, should be accepted as coming from a very modest man. He is a prudent man and does not want to make any mistakes. When it was my good fortune to enjoy Pittsburgh hospitality, I thought I would never get away from there. They treated me elegantly; they treat everybody well there. They have much for you to see, lots of time to spend with you; and my experience was that they were most generous entertainers. I would say further the central position of Pittsburgh is such that it seems highly desirable for all hands to join in making that the rallying point for next year. I second the motion, and trust that the Society will accept the Pittsburgh invitation and make that the place of meeting for 1895.

On motion of Mr. J. M. JORDAN, of St. Louis, Mo., seconded by Mr. W. B. DU RIE, of Rahway, N. J., the invitation was accepted without objection, and the city of Pittsburgh was chosen by a unanimous vote as the place for the annual meeting in 1895.

NOMINATION OF OFFICERS.

Nominations of officers being in order, Mr. JOHN N. MAX, addressed the Convention as follows: In rising to propose a member of our body for the honored position of President for the coming year, I do so with a good deal of confidence that I shall have the support of a majority of the members here. The gentleman whom I wish to propose is well known to you all; his name is Edwin Lonsdale. [Applause.] I think he is entitled to claim your consideration in more ways than one. He has been connected with the Society of American Florists since its inception. He has served as its Secretary with but very little compensation. He has been an earnest, hard worker in the interests of the Society from the start. He has never yet declined to do anything he was asked to do; and I think the least we can do now is to tender to him the most honored position we can offer him as a body. Furthermore, I think he has some small claim upon the ladies. The ladies, as a rule, are always looking for something higher. You all know that the name "Lonsdale" is a soubriquet for a higher title, one ranking only second to that of a prince, viz.: "The Duke of York." I assure you, ladies and gentlemen, that if you will follow under the honest banner of this leader, he will march you up to the top of the hill, and you will not have to march down again. I ask of you, one and all, your earnest support for my worthy friend, Mr. Edwin Lonsdale. [Applause.]

Hon. C. W. HORT, of Nashua, N. H.: It has been my pleasure, on one or two occasions, to have something to do in presenting the name of a member for President of the Society; and I think you will bear me witness that the gentleman whom I have recommended has always gone through successfully. In seconding the nomination of "The Brave Old Duke of York," I do it with the utmost confidence that that gentleman will fill the bill. He will fill the position because, first, he is a good looking man. [Merriment.] When he is around, the rest of us, if I may use an expressive phrase, are "not in it." Another thing, he is always around. Again, he is the President of a kindred and subordinate society, the Florists' Club of Philadelphia, and his success in that position, which has been apparent to every one who has observed the prosperity of that club, furnishes an additional argument in his favor. Let the one, if you please, be a stepping-stone to the other position. I consider that to a man in the florists' business the honor of the Presidency of the Society of American Florists is one to be sought for. Every member has a right to aspire to that office, and at the same time the office belongs to no one. I submit that at this time, as at every other time, we want to secure the best man for the position; and, while I have heard the names of two or three other gentlemen mentioned for the office, and they are personal and particular friends of mine, and would, I think, fill the position acceptably, I ask you to support "The Brave Old Duke of York," as one who will make not only a successful but a model President. [Applause.]

Mr. E. HIPPARD, of Youngstown, O.: I have the honor of presenting to this Convention, for its valuable consideration, the name of a member who, I think, will give us as good an administration as we could desire to have. He is able and willing at all times, and one who responds quickly when asked to do anything for the organization or any of its members. Without money, without friends, you cannot run this establishment; and I think we need somebody at the head of it in the interest of progress, to keep the organization intact and to further its interests as far as possible. The candidate whom I wish to announce has never failed to respond, financially and otherwise, to an appeal from any member of the craft; and he does this freely and without ostentation. I wish you would all think as I do, and elect as the next President of this Society, Mr. Wm. Scott, of Buffalo. [Applause.]

Mr. E. C. REINEMAN, of Pittsburgh, Pa., in seconding the nomination of Mr. Scott, said that that gentleman had been with the Society since its organization and had done everything in his power to advance its interests. If elected President, he knew that Mr. Scott would do the very best that he could. [Applause.]

No other names being mentioned, nominations for President, on motion of Mr. CHARLES D. BALL, of Holmesburg, Pa., were closed.

The PRESIDENT invited nominations for Vice-President.

Mr. D. D. L. FARSON, of Philadelphia: Mr. President, I again have a pleasant duty to perform. I am aware that it is necessary to have the very best men for our principal officers. We do not pay them a salary, but we rely upon them to act; hence the need to have the highest order of executive ability in those positions. Our By-laws call for a Vice-President, and as our next meeting will be in Pittsburgh, and as the honor we wish to bestow will be of two-fold value if conferred upon a representative of that city, I wish to present the name of Mr. E. C. Reineman. [Applause.] It may appear strange that one end of Pennsylvania should nominate the other end, but I know that Mr. Reineman would not nominate me for this high office, so I am going to be generous.

In placing Mr. Reineman in nomination for Vice-President, I wish to say that the position for which he is named is one upon which considerable work devolves and in which much good can be accomplished; and I am sure there is no man whom I know of who is more capable of performing its duties than the gentleman I have named. [Prolonged applause.]

No other name being mentioned, nominations for Vice-President, on motion of Mr. C. W. TURNLEY, of Haddonfield, N. J., were closed.

The President invited nominations for Secretary.

Mr. J. D. CARMODY, of Evansville, Ind.: Mr. President, I think that the present incumbent of the office cannot be beaten. I put in nomination Mr. Wm. J. Stewart for Secretary for the ensuing year. [Applause.]

Mr. W. K. HARRIS, of Philadelphia: I heartily second the nomination of Mr. Stewart.

No other name being mentioned, the nominations, on motion of Mr. J. G. ESLER, of Saddle River, N. J., were closed.

The PRESIDENT invited nominations for Treasurer.

Mr. W. R. SMITH, of Washington, D. C.: Mr. President, I place in nomination for that office Mr. H. B. Beatty, of Oil City, Pa. He is a gentleman whom we all know. His industry, integrity and high character are assurances of the satisfactory performance of the duties of the office. [Applause.]

Mr. WM. SCOTT, of Buffalo, N. Y.: The honorable gentleman from Washington has taken the words out of my mouth. I second with great pleasure the nomination of Mr. Beatty for Treasurer. [Applause.]

No other name being mentioned, nominations for Treasurer, on motion of Mr. J. M. JORDAN, here closed.

THE BOWLING CONTEST.

Mr. JOHN WESTCOTT, of Philadelphia, chairman of the sub-committee of the Florists' Club of Philadelphia, being here awarded the floor, called attention to the trophies provided for the bowling contest, which were displayed on the platform, and stated in detail the conditions governing the competition for the various prizes.

THE SOCIETY OF AMERICAN FLORISTS, AND AUXILIARY SOCIETIES.

Mr. J. G. ESLER, of Saddle River, N. J., offered the following:—

Resolved, That the President appoint a committee of three to report to the next meeting of the Society of American Florists some plan for a closer union between the Society of American Florists and the minor societies.

Mr. Esler remarked that the resolution explained itself and that the matter would come up for discussion upon the report of the committee.

Mr. J. D. CARMODY seconded the resolution.

Mr. EDWIN LONSDALE suggested the substitution of the term "auxiliary" for "minor" societies, which suggestion was accepted by Mr. Esler, and the resolution was modified accordingly.

The resolution was adopted without objection, and the President appointed as the committee, Mr. J. G. Esler, Mr. E. G. Hill and Mr. H. B. Beatty.

THE BEST METHOD OF GROWING ROSES, AND THE BEST VARIETIES
FOR PRESENT DEMANDS.

An essay by Mr. JOHN H. TAYLOR, of Bayside, N. Y., on "The best method of growing roses, and best varieties for present demands," here occupied the attention of the Convention. The essay was read by its author, whose appearance on the platform was the signal for long continued applause. The essay was as follows:—

The growing of roses under glass has been so thoroughly discussed at our conventions in the past, that I thought best to treat this subject somewhat broadly, and touch on certain points of culture, past and present, especially relating to the health of the rose.

The tendency of growers during the past few years has been to disregard one of Nature's laws, that of rest. All plants require a dormant or semi-dormant period, as is well known to horticulturists; but the system at present pursued, that of constant forcing, has weakened the constitution of the rose. It is impossible to obtain a healthy cutting from plants whose vitality has been sapped year by year by over-forcing or disease.

Plants adapt themselves to changes of climate, treatment and locality, providing this occurs gradually and Nature's laws are not transgressed. By judicious selection and propagation a race of plants can be made healthier, more vigorous, and better adapted to the purpose intended. On the other hand, injudicious and over-propagation will, if continued, bring forth a race of weakly and sickly plants incapable of producing or reproducing.

Littlejohn's methods of growing have been discarded for newer, and what is considered, better ones! Undoubtedly for a few years better financial results were obtained, but at a cost to the health and constitution of the plants. The old method was to grow the plants from good wood struck early in the fall, which would by spring produce strong vigorous plants in six or eight inch pots. These would be plunged outside, thoroughly hardened, and brought into the house in August or September. They were then either planted or potted in ten or twelve inch pots and allowed to flower, giving a fine crop by October.

The finest lot of plants I think I have ever seen was at Mr. Haughton's in the month of August, 1883, plunged outside in eight inch pots. They were *Perles des Jardins*, averaging about fifteen inches high

with from six to eight strong, well ripened shoots, ready and anxious to flower. The house stood empty, but thoroughly cleaned, and the soil had just been put in the benches.

There are probably few present who have not seen such plants, and remember when Madison, Summit and neighborhood was the Mecca of all rose growers. But this proved too slow and expensive for our advanced ideas, and the constantly increasing competition; so that the present method of planting in June or July, plants struck from our overforced stock, and having had no rest or ripening of the wood, has been generally practiced. The consequence has been a more or less general depreciation in the strength of our plants, and so many diseases attack them that a chemist is required to be constantly on hand.

These facts impressed me several years ago, as I noticed a gradual weakening in the vigor of my plants. I decided not to propagate more than was required for my own use, to use nothing but the best wood, and also to rest my roses during the summer months. The result has been more than satisfactory, as my plants have shown year by year more stamina, and have been less subject to disease. The carnation men have already discovered their error, and a number of growers are now propagating their stock from *unforced* plants. Diseases of all kinds are ever present, either in the shape of fungi or insects; whenever a plant becomes weakened by improper treatment it is at once attacked. It is so well understood in animal life that a man who disobeys Nature's laws succumbs shortly to the ever present disease, and yet we do not hesitate to treat our plants to so weaken their constitution that they are unable to withstand the attacks of their enemies.

Having this object in view, namely, the production and growing of vigorous healthy stock, what are the best methods to pursue?

To strike the cuttings in November and December, plants should be carefully grown during the winter, and by March or April should be strong plants in six inch pots. They should then be given all the air possible inside or plunged outside, and kept on the dry side, thus giving a slight rest and ripening the wood. Planting can be done in June or July. The plants should be handled so as to get thoroughly rooted in the bed or benches before allowed to flower. Plants thus treated should be strong dwarf bushes ready to flower as soon as allowed in the fall. The fall treatment of roses is of the utmost importance, as on that depends success or failure during the winter; for a rose once checked at this period will never recover sufficiently to pay during that season. The temperature at night during October and November cannot be strictly adhered to, as the weather and judgment of the grower must regulate what he considers best adapted to the welfare of the plant.

Watering must also be carefully looked after, more so than at any other season; and it is a good rule to keep the plants a little too dry than too moist. More trouble is caused by careless or over-watering at this

period than at any other. In fact the quality of the flower in the early fall should be secondary to the welfare of the plant. As a rule a higher night temperature should be maintained than is conducive to the production of the best flowers. In other words, in September our nights frequently run as high as seventy degrees or over, and the plants should be gradually accustomed to a lower temperature without checking their growth in the two following months. No rule can be laid down, as different seasons require different treatment. As a rule, however, a warm fall will require a higher night temperature than a cold one, owing to smaller amount of artificial heat needed. Once safely in December, the plants, with ordinary care and treatment, should produce good results for the balance of the winter.

The question of beds and benches is still a mooted one, both systems having their advocates. I am using both, but am not prepared to say which is the better one. With pipes run through the beds in stone ducts the soil in the beds can be kept at any required temperature. From experience I have found seventy-five degrees about the best temperature. The Hybrid Teas seem to flower more freely and do not have the tendency to go dormant as when planted in benches. Another method, which is a combination of beds and benches, has given the best results, namely, to board the benches in and have separate pipes underneath for warming the soil, the pipes for heating the house being placed along the sides of the greenhouse, so that the warming of the soil can be done independently of heating the house. The advantage the beds have over benches is that of durability; and I am satisfied as good results can be obtained if properly handled.

The question of carrying roses over one or more years has always been a favorite topic of discussion, and is still an interesting one.

It has been my custom always to carry over about half my plants, and my experience has been that the old ones can be more depended on to do well than the young plants.

The method pursued is to withhold water gradually, beginning the latter part of June until the beds are seemingly dry; after that the house must be carefully watched to prevent the wood from shriveling; syringing should be done daily, and in very warm weather twice a day. Should signs of shriveling appear a slight watering must be given, but not enough to start the beds. By the middle of August the plants will be ready to prune. All but the best wood should be removed, and the other shortened down to from six to eight inches from the bed. A thorough watering should be given as soon as the cuts are healed, then remove all loose soil and give a mulching of half soil and manure. Air, night and day, should be given until the foliage appears hard and dark green. I have a house of Brides treated this way which has been running five years, and is stronger and healthier this year than ever. The base of the stems will measure from one to two inches in diameter. I

shall run it another year. Plants treated in this way have their first crop in October, which is as early as good flowers can be obtained. This treatment gives the plant a period of activity and one of rest. The soil by being dried is sweetened, and the fresh soil added gives all the necessary stimulus.

Like all other horticultural operations, great care and judgment is required from the time of drying until the plants are once more grown vigorously. Too rapid drying or too rapid a start may cause absolute failure.

The following figures taken from the production of 2017 plants of Brides show the result of above system.

First season, 1890-1891. Flowers cut	46,575
Second " 1891-1892. " "	77,231
Third " 1892-1893. " "	74,069
Fourth " 1893-1894. " "	94,409
	292,284
Total for four years,	
Average per year,	73,071

The fourth year shows nearly double the cut of the first year with young plants.

In considering the best varieties to grow, several questions must be considered.

The market requires as perfect a flower as can be produced; in fact competition is so great that only the best can be sold to advantage. Color, size, foliage and keeping qualities all have to be considered. Again, from a producer's standpoint, a rose must be vigorous, floriferous, and able to stand handling and transporting. So far, very few roses among the thousands introduced possess this quality, although great advances have been made during the past years, and judging from the past few years even better varieties for forcing will soon be forthcoming. In fact a great field is open to the hybridizers in this country.

The varieties to be had at present are the following:

American Beauty, syn. Mme. Fred. Jamain. This rose is probably the finest so far introduced.

The Bride is the best white.

Bridesmaid has superceded Catharine Mermet, and is the most satisfactory pink rose yet introduced.

Meteor, splendid in color but lacking in fragrance, and in cloudy weather has a tendency to come dark in color and deformed in shape. A good red rose is still badly needed.

Perle des Jardins is still the best yellow, and in some localities one of the best of all Teas.

Mme. Hoste is remarkably prolific, and when well grown resembles in shape, size and color, Cornelia Cook. A few can be profitably grown.

Mme. Cusin has been badly hurt by the Bridesmaid, but still can be considered as a profitable rose to grow.

Mme. de Watteville, although a beautiful flower and very productive, has proved such a poor keeper in a warm room that the public no longer ask for it.

Mme. Augusta Victoria has proved for winter work a great disappointment, as it has a tendency to come green and keep poorly. In summer it is the best white introduced.

Mme. Testout is still in doubt. The color is beautiful, but it is a poor keeper and shipper.

Papa Gontier has been badly hurt by Meteor, and owing to its short season is now no longer profitable to grow.

Mrs. Whitney is still to be tested. It promises well but lacks substance. A great future should be in store for this class, as it combines fragrance, color and productiveness.

La France, except for summer work, can no longer be classed with the other good pinks.

For all purposes the following are probably the best roses to grow.

Pink	<i>Bridesmaid.</i>
White	<i>The Bride.</i>
Red	<i>Meteor.</i>
Yellow	<i>Perle des Jardins.</i>
Deep Pink	<i>American Beauty.</i>

It would appear advisable to select the best one in each color rather than to grow several shades of any color. A still further advance towards more perfect flowers might be obtained by making a specialty of one or more roses that owing to soil, treatment, or other causes appear to flourish best in any one locality. For instance, Mr. Nash of Clifton, is known principally as a Beauty grower; Mr. Pierson, of Scarborough, as a noted grower of Meteor; Mr. E. Asmus, of Hoboken, a very successful grower of Mme. Cusin, etc.

This list might be considerably lengthened, but I have probably exhausted your patience, even on the subject of the queen of flowers.

The PRESIDENT invited discussion of the subject.

Mr. R. F. TESSON, of St. Louis, Mo.: Like myself, you all doubtless have listened to Mr. Taylor's paper with the interest and attention that are due to anything that is written by a man of his ability and reputation, regarding the queen of flowers; and you all doubtless realize from experience the truth of his remarks. When a paper like Mr. Taylor's has been read, nothing of the more vital points can be lost by a proper discussion of them. We live in such a large country, and one with such a variety of climate, that it is hardly possible to believe that what will succeed in one place will be successful, under practically the same conditions, in another place five hundred or a thousand miles away. We must also take into consideration on this subject, the variations in the soil.

In speaking of Mr. Littlejohn's method and its abandonment for so-called improved methods, Mr. Taylor gives us something for serious and close thought and study. He does not leave us in the dark, however, as he shows us that, by careful selection of wood for propagation and by carrying the plants for two years, we can improve the health of the plant and at the same time increase the cut of flowers. It is useless for me to state the advantages to be derived from carrying the stock two years; you are all familiar with them. I am an advocate of two-year stock. We have been trying this method for several years and have had quite a little experience in it. Mr. Taylor has, as you all know, been experimenting with it for a number of years; in fact, to quote his statement, he has been carrying *Bride* for about five years and he has got the method about perfect for his locality. Still, as I said before, I hardly think that Mr. Taylor would sanction a statement that the method suitable at Bayside, N. J., would suit if applied five hundred or a thousand miles away or would produce exactly the same result. Two years ago in trying two-year stock, we pursued Mr. Taylor's method about as closely as we could, and the result was a partial failure. Last year, profiting by the experience of the year before and noting a good many of the minor points that came up, we tried the experiment again, and from present appearances I think we have made a success of it. The principal points that were our stumbling blocks the first year were, first the water and second the pruning. We found that in our hot, dry climate, where there is no moisture at all in the air, the plants, after they were started into growth, would take almost unlimited water. In order to have them start growth and take hold of the soil quickly, we leave considerable more foliage on the plant than Mr. Taylor does; hardly cutting the roses down to more than eighteen inches. We find that by this method they will take hold of the soil, and all the water that is necessary can be given them. Our soil is a heavy clay loam, drying out in very little time, the particles being so fine that it is a very hard matter to wet it. It takes a large quantity of water to wet it, and it is hard to make it, as you might say, like putty.

In making these few points, I wish to impress on everybody the necessity of going slow in anything of this kind. A person may be, and probably is, positive that the thing is done safely and profitably at his own place, but it does not follow that the same thing may be done exactly in the same way and with exactly the same results at a distance. There are many small points to be considered; and a small point that you perhaps would overlook you would find to be enough to spoil your work for the whole season. I would like to advise this Society, as our late member, Mr. Hunt, advised me two years ago, when he said, "It is all very well to experiment, but you want to go slow." [Applause.]

Mr. RAWSON here made an inquiry of Mr. May in regard to the results of the meeting of the Rose Society on the previous evening, relative to testing new varieties of roses.

Mr. JOHN N. MAY, having been called upon to mention that subject, said: I would say that in our deliberations in the Rose Society, last night, we about concluded that it would be a good thing to establish an experimental station, for the time being, of probably five or six feet in some good neighbor's greenhouse. I am not a very young man nor yet am I quite decrepit, still I hope to live long enough to see this Rose Society in America — the father and sponsor of the rose — able and willing, financially and intelligently, to take the van in the lead of the whole world. As I mentioned a short time ago in one of our publications, we have today a field before us that is simply immense.

The subject of eel-worms alone presents an immense field for investigation in this country today. Could I have compiled it in set form so as to make it interesting to this meeting, I would have given you enough food for reflection on this one subject to occupy you throughout the entire Convention. A few days before leaving home I went through my letter file, and found that I had eleven hundred and ninety-seven letters on the eel-worm alone. These were not from any one State but from every State of the Union, and from points not one hundred miles apart, this showing that the pest covered a wide field. In my immediate neighborhood such a thing as an eel-worm was not known a few years ago. Today it is a hard thing to find anybody in my section of country, who has not got the eel-worm to a greater or less extent. My friend, Mr. Harris, grew roses in the open ground, five or six feet high, in one season a good many years ago. Now-a-days he has a hard job to grow them as many inches. They did not think then that the eel-worm had anything to do with it, but if they will lift the plants carefully, examine their roots, wash them out, dissect them and put them under a microscope, they will find ten thousand eels in every root-gall. This is the cause of the trouble with the rose today. The eel-worm will be of itself an exceedingly interesting subject to be taken up by the American Rose Society in the near future.

I quite agree with Mr. Taylor in what he says with reference to the constitution of the rose and its ability to resist the ravages of its enemies, and I endorse all he has said in regard to the selection of healthy clean stock of every description in a very careful way. He has referred to an old friend of mine, Mr. Littlejohn — a dear friend of mine for many years. Mr. Littlejohn's idea always was that you had to give plants, if not indigenous to a hot climate, a rest congenial to their nature in winter or some other season. For many years I followed his practice partially and do now to a certain extent. I have seen Mr. Littlejohn cut from a Safrano plant two or three years old, under his method of cultivation, absolutely perfect buds three inches long, buds finer than anything I have seen in Sunset yet. Photographs are in my possession showing how they were produced by his method. The further we divert from the method of that old pioneer in rose growing the further we shall get

away from the object we are aiming at, viz.: the very best and finest qualities we can produce.

Before sitting down I would like to mention one other subject in regard to which I think Mr. Taylor has made a slight mistake. Several persons heard that gentleman give the name "Madame Augusta Victoria." The correct name is "Kaiserin Augusta Victoria."

(Mr. Taylor was here understood to acknowledge the error.)

Mr. May continued: I will say, at the risk of becoming monotonous, that one of the best ways I have found for resting tea roses and give them natural treatment, is to propagate as late as you can in the spring from clean, healthy, vigorous wood. Carry them over in small pots, as small as you can use. Put them out of doors in the fall when the extreme hot weather is past; plunging them, if you will, and let them stay there until frost comes; knock them out of the pots and take them in a north house where the sun will not strike the house and where you cannot give them any heat. Plunge them in sand there until the following March. You will then have given your tea roses all the rest that Nature requires, and you will have good vigorous plants that will yield an enormous crop of flowers.

Mr. ROBERT SIMPSON, of Cromwell, Conn.: I wish to say, in regard to the eel-worm, that my experience is that you find eel-worms more frequently in light soil from up lands or high lands than in soil from low lands. The up lands often contain a good deal of clover root, and that seems to have the eel-worm in it. A year ago last winter, in a house planted in soil from high lands, about three-fourths of the plants succumbed to the eel-worm. In the following season I planted some new stock in soil taken from low land, and I have not seen any trace of the pest since then excepting a little on Mme. Cusin. I have tried Mr. Tesson's recommendation and have found that deluging the plants with water helps to drown out the worm and to kill it, thereby starting the plants into growth.

My experience with bottom heat in the solid beds has been very satisfactory. It has been reported that, after trying it for a year, some growers in the east have discarded that method. I ask Mr. Taylor what has been his experience in the past year, compared with the previous year, as to those solid beds with the bottom heat and whether the plants did as well as they did before.

Mr. TAYLOR replied that in his experience, the plants did even better last year than in the year before because they were older and better established; the roots had gotten hold and produced more and better flowers. An important point was the proper temperature of the soil in the bed. It was a difficult thing to keep the soil warm enough for them to keep moving. He had made some tests, this summer, and

found that the soil temperature averaged about 75° to 80°. He had been trying about 75°, and whether that was too warm or not was still a question. He had tried it only two years. His idea was to see whether, by warming the soil artificially, the desirable result could not be produced of keeping such roses as the Hybrid Teas from going to rest in winter. His experiments, especially with the Hybrid Teas had been very successful. He also said that this idea was not a new one, as the system of growing and forcing asparagus, lettuce and various early vegetables had been practiced in Paris; where they use frames and run their pipes through the frames, thereby warming the soil and forcing the vegetables out. He continued:

The statement that certain parties had given up the deep beds with pipes underneath is erroneous, as they have not done so. The statement was made that Mr. Ernst Asmus had become dissatisfied with his deep beds and had torn them out and given them up, but it was not entirely correct. That gentlemen altered two of them on account of the pipes but he had five others that he did not touch, and these he was running again this year. When I was up there the other day I found that he had torn out two and I inquired why he did it. He explained that the pipes did not work well and he had to take them out and change the whole house. He had four that he put up last summer, and these remained.

Mr. J. M. GASSER, of Cleveland, O.: Concerning the solid beds, I will say that I have been using them now about six years and I do not intend to go back to benches. My beds, however, are a little different from any of the others, and I think they are cheaper in the make and probably not as dangerous as the stone beds with pipes through them. I lay tiles through the bed, cross-wise, to open out onto the walk, on each side. The tiles are four inches apart, being common drain tiles such as the farmers use. They are only nine dollars a thousand, which is cheaper than benches. Then I lay the steam pipes through the walk, over the pipes and cover with boards; so that the heat passes through the tiles. Those tiles will drain the beds better even than stone will, because they are more porous. I have done this for five or six years and think it is a cheaper and better way than any other.

Mr. DU RIE inquired as to the depth of the bed.

Mr. GASSER: The tile is level with the walk. I put six inches of soil over the top. I have a bed that has been five years there, and out of the old house we have cut four or five thousand more roses than out of the house that was newly planted.

Mr. JORDAN: What varieties?

Mr. GASSER: Brides — in fact, all varieties. Brides are the ones I happened to keep time on. I tried it with some young Brides, I kept

the record and I found they were ahead by about four or five thousand roses in a year.

Mr. TAYLOR: As to the depth of soil, we tried eight, twelve, fifteen and twenty-four inches, and I rather favor about five and six inches. (Here the discussion closed.)

ORCHIDS FROM A COMMERCIAL POINT OF VIEW.

The subject of the next essay, "Orchids as commercial flowers," by Mr. WILLIAM MATHEWS, of Utica, N. Y., was here announced.

Secretary STEWART: I have a letter from Mr. Mathews, stating that owing to the sudden illness of his son, he is unable to be here. He has sent his essay on orchids to be read here, and Mr. Goldring, of Albany, has kindly consented to read it for Mr. Mathews.

Mr. SAMUEL GOLDRING, being called upon, came forward and read the essay, which was warmly applauded. It was as follows:—

When asked by our worthy Secretary to prepare an essay on orchids from a commercial point of view, the question flashed through my mind why so many people engaged in floriculture made exceptions to the orchid, and at the same time attempted to grow so many trashy things that are much harder to grow and dispose of than the products of the orchid that are suitable for commerce. Go east or west, you can most generally find many poorly grown marantas, dracænas, crotons, etc., and a host of other things that are of no beauty or utility, unless very well grown, and to grow them well requires both skill and perseverance. Generally speaking, should a gardener ask the proprietor of many of the beautiful conservatory plants that can be found in almost every State of the Union, for a line of hot and greenhouse plants, no matter if they cost double the price of good orchids, there is no refusal, the plants are obtained, and many of them are often useless and unfit for the position in which they are placed, and are much harder to bring to a state of perfection than a large percentage of the orchid family would be. Nevertheless, there seems to hang around the name of orchid a warning not to touch them, and a feeling pervades many otherwise good gardeners that orchids are very troublesome and hard to grow, when in reality, with a minimum amount of care they are the most reliable and easily grown stock that is embraced in the whole category of floriculture.

Some orchidists will persist in saying that orchids for commercial purposes can be counted on the fingers of one's hand. To this dogma I emphatically say, "No." Should a grower confine himself to five species I am certain that in a few seasons he would find the grower who grew a good range of species and varieties would soon outdo him. The beauty of orchid flowers I feel free to say is much increased by grouping sev-

eral varieties together; at the same time I do not deery a display of one variety, whether *Cattleya*, *odontoglossum* or *phalænopsis*.

I do not know of anything that appeals to a really artistic taste as much as a well arranged stage of orchids, intermixed with fine ferns, etc. Unfortunately, many of the most beautiful orchids have very ordinary foliage. If the foliage of the orchid were as ornate as their bloom, then they would be grand indeed.

Commercially, the orchid has scarcely gotten a foothold in this country yet, but the time I am sure is not far distant when it will stand commercially in America in as good a ratio as in European countries, and there will then be few decorative events where the orchid will not be present, not to the injury of other flowers, but to their benefit. If in a decoration one mantel is ordered banked with orchids, the other one must necessarily be more gorgeously banked with other flowers by way of comparison.

Then, again, if you have a commercial stock of orchids, you have always something to help you out. There are times just like at the present writing, when your rose stock is "off crop," carnations scarce, then you can fill the order with orchids much to the pleasure of your customer and profit to yourself. There is another good feature, if you do not want to use the bloom you have out today, they will be just as good one to three weeks hence. So, it is very rarely you lose any orchid bloom, even when you are consigning hundreds of once beautiful roses to the waste barrel.

I have always found that when roses are very plentiful and cheap, nobody wants them. What buyers there are in such times are looking around for some "tid bits." This is another instance where the orchid will come into play to the pleasure and satisfaction of both florist and customer.

Now, I have no doubt that you will consider it a *bold assertion* when I say the orchid gives me less trouble than any other branch of floriculture I am engaged in. In our rose houses we kept fire till about the 5th of June. In our orchid houses the fires were let out about the 15th of April, and not started afterwards—removing a few plants such as *phalænopsis*, a few dendrobes, and things that required strong heat to a palm house, where a gentle fire is kept during the summer. Experience has taught me that there are more orchids killed by coddling with them in a close atmosphere than by anything else.

There is no plant that delights more in a fresh and pure atmosphere. I never think of closing ventilators, top or bottom, in my *Cattleya* houses after about the 15th of April, according to season as to date, even if the temperature should go down to 48 and 50 in the early morning, excepting there should come up a strong cold wind, then the ventilators are shut to prevent a cold biting draft going through the houses.

I suppose, commercially speaking, the grand and main point at issue is the "*great and almighty dollar*" that is unfortunately so dear to the

hearts of most of us, even if we are engaged in one of the most pleasureable occupations on earth. I will confess to the fact that the outlay for a large quantity of orchids will be large in comparison with roses, carnations, etc. At the same time it is a fact that a large quantity of orchids can be bought for a little money, but this grade of stock would be unprofitable and disappointing, for, although it is only a few years that the bloom of orchids have been on sale in public stores, yet it is remarkable how discriminating and æsthetic are the tastes of American ladies in the purchase of those charming flowers. So much have I experienced this that I have concluded that a poor form or color of *Cattleya*, *odontoglossum*, etc., no longer finds a place in my collection, the order being that such stock be at once relegated to the waste heap. In every importation there will be a certain percentage of such useless varieties, which would be dear in a gift. In orchids as in all other commodities, those of a good quality are the cheaper, and I do not hesitate to say that a collection of orchids, well selected and good healthy stock, will prove as lucrative as any other branch of floriculture, but I would strongly persuade intending purchasers to buy good strong stock, whether from the woods or already established plants. I am confident that at present prices no one need fear purchasing established stock. I think it will be cheaper for them if the labor, anxiety and other contingencies are well considered. They will bring a quicker return than stuff from the woods with all the risks, and there are many. Thousands are imported yearly that have either been superheated or sea-washed. If you should get a dose or two of this kind of medicine, as I have, it will tend to dampen the ardor for orchid culture, especially if it should happen at the commencement of your orchid career. I have bought *Cattleyas* at fifty cents dry. I have bought the same varieties established at five dollars. Those at five dollars brought the price of plant back and two and a half dollars profit in six months. The fifty cent one was not at any time in two years worth more than a dollar, flower and all included. So I would strongly advise any one commencing orchid culture to get plants of the best quality obtainable, even if he did not get so many. I have lately had communication from collectors, and they say that it is impossible that orchids can be collected and sold as cheaply as at the present time, as they have to climb much higher up the mountains, which means additional expense. It is the opinion of lots of gardeners that orchids soon get worn out. That is very true, and we see the same condition in all branches of plant culture. Too often has it been my experience to see a once choice lot of orchids steaming and frying in some out of the way corner, without even ever having been treated to a "pot washing." I have seen what were once fine specimens of *Cattleyas* and *vandas* standing in the same pots and positions, year after year, potting material rotten, plants covered with scale, and those who have charge of such stock are the very fellows that cry "wolf," and warn many intending purchasers to go light on orchids, and confidently advise and declare that

the orchid is a hard one. I have a house of Cattleyas that contains a number of plants that were once owned by the venerable Isaac Buchanan, of Astoria, and were purchased about 1883, and had doubtless been in his possession a number of years previously. Those plants are in perfectly healthy condition, and bear a fine crop of bloom annually. I have also plants from the late Dr. Walcott's collection, Mrs. Morgan, and others, that have been in cultivation about twenty-five years. Those plants are today in fine, healthy condition.

I think these few remarks are enough to show that orchids, if well established and kept in clean, healthy condition, are as safe and paying a stock as one can invest in; but, improperly cared for and carelessly and negligently handled, they, like all kinds of choice plants (excepting none), will prove a losing investment; but I do claim that more of the orchid family will stand abuse and improper culture than any other kind of stock I am acquainted with.

In conclusion, I would say that it is a lamentable thing to see so many wealthy people living in luxurious homes, surrounded by fine plant houses, the latter costing from \$5,000 to \$10,000, which do not contain \$500 worth of choice plants of any kind. Often this is the fault of the man in charge, who is either too lazy or too ignorant to care for anything better than a few trashy common things which, by the way, should be furnished by the local florist or plantsman. I have reference to such things as geraniums, coleus, etc. If we had better gardeners we would soon see more houses of choice stock that would be immensely gratifying to the proprietors of such places and at the same time create a demand, and encouragement would spring up all around that would be both beneficial and profitable to the trade and a credit to this glorious country.

The PRESIDENT announced that discussion of the subject was in order.

Mr. EDWIN LONSDALE, of Philadelphia: I have listened to Mr. Mathews' interesting and instructive essay on "Orchids from a commercial point of view," and I agree with him that with proper facilities they are certainly easy to grow. The question has often presented itself to me, however, will it pay for a florist to build houses especially for the growing of orchids? Speaking from my own experience, I never could see my way clear to build orchid houses with a view to making a profit.

We will take a house, say, one hundred feet long and twenty feet or so wide. What will it cost to stock such a house with the more desirable species and varieties of orchids for cut flowers, and use it exclusively for that purpose? Well, according to my experience in buying these blue-blooded aristocrats among flowers, it would cost from \$5,000 to \$10,000. A large amount of money may be spent for orchids, and we may have very little to show for our expenditure. My third speculation in orchids was about four years ago, when I gave a dealer a *carte blanche* order for

\$500 worth. The only stipulation made was, that they should be useful for cutting, and to bloom generally in the winter season. It would be an object lesson were I to give a list of what was sent to me. However, that was "bought" experience. No more *carte blanche* orders from me! I buy now what I believe will suit the trade which I am catering for in Philadelphia.

Compare the amount which it will take to stock an orchid house with what it will require to plant a modern rose house. For from \$150 to \$200 most excellent rose plants may be secured with which to plant this house one hundred feet long, to start for our winter's crop; and the returns will be far greater, per square foot occupied, than will be realized from the orchid house. The first year the orchid house will barely pay five per cent. on the original cost of stock, whereas I have known a rose house to pay for itself in the first year after its construction.

It is of no use whatever for a florist who is in the wholesale business to dabble in orchids on a small scale. We must be either so deep in them that we can cut them nearly every day in the year, or otherwise we should leave them alone altogether. To have a few orchids, generally speaking, is to have them neglected.

It is understood, of course, that if orchids are properly cared for, many of them will increase in value from year to year; but that does not help a florist with only limited capital. It is the first cost of this class of plants which materially reduces the profit. Orchids cannot be grown on the plan of small profits and quick returns. My experience has been the opposite of this, so far.

If we would have variety in our orchid flowers (which is very desirable, I will admit), we will find it necessary to buy some for their own worth and to furnish variety; and these will be found to degenerate under cultivation.

My practice has been to grow many of my orchids in connection with palms, and move them from house to house, according to their requirements. But the Cattleyas, taking them as a whole, do not develop to their fullest capabilities by this course of treatment; yet the returns so far from the investments have not justified me in building a house or houses for their especial culture.

I can quite agree with Mr. Mathews when he makes the statement that the orchid gives him less trouble than any other branch of horticulture in which he is engaged. I fully endorse all that he says on that point, but the additional expense in securing the stock in sufficient quantity to make it an object to grow orchids for profit, far outweighs, to my mind, the difference in care between them and roses or carnations, for instance.

Mr. Mathews advises the safest plan, I believe, when he advocates the buying of good healthy established plants; but for my own satisfaction, I prefer to buy unflowered pieces direct from the woods. It takes more experience, perhaps, to handle this class of plants satisfactorily,

but the charm which goes with the uncertainty of what the value of the flowers may prove to be, overbalances, to my mind, the money profit we may realize from established plants. There is a possibility of a rarity appearing among them, and there is a mild and harmless excitement about this plan of proceeding that compensates for some poor flowers which generally appear in nearly all unflowered batches of orchids received from the woods.

I must place myself on record here by saying that no one appreciates the orchid more than I do, and that I can see for it a great future; but as the question of "Orchids from a commercial standpoint" is under consideration, it seems necessary to look into the subject from a *dollar and cent* point of view, as it has occurred to me, with my experience with it. [Applause.]

Mr. SAMUEL GOLDRING, of Albany, N. Y., was the next speaker. He said that the question of cost or the consideration of dollars and cents, as stated by Mr. Lonsdale, was not the only one at issue. Of course the rose always had been the queen of flowers; but when flower lovers or the general public came to the florist's store and said, "We want to have a very nice decoration for the table tonight, we are going to have some visitors from England or some other country," should they be told that they could only have American Beauties, La France or some other rose, carnations or something in that order? They wanted something new. The speaker said that this had been put to him many times and that he had responded to the demands of the public without thinking of the dollars and cents. He had been told that he could not afford to do this, but he believed that if he suffered loss in furnishing a mantel of orchids, for instance, for a large dinner party or some occasion of exceptional interest and importance, he would be reimbursed for his loss in some other way. He thought that the results accomplished in this way, in furnishing something new and novel, would bear good fruit in time. He said he believed that dealers should not look to the dollars and cents all the time. He knew of many cases where dealers decorated a table with orchids without ever seeing the money back that they had put into what they furnished. When people wanted a table different from anything they had before, the dealer might not be able to charge fifty or a hundred dollars to decorate that table with orchids, but he could charge a fair price and he knew that he was bringing the orchids before the people. "Where is there a mantel or a table today," the speaker asked, "that is more lovely than one of orchids?" He further stated that, on one occasion, last year, when he wanted to fill an order for orchids, which were scarce about New York, he telegraphed to Mr. Mathews, and that gentleman sent him one hundred and fifty Cattleyas, which were very fine. He used these in the table decoration and on the mantel, and such were the effect which they produced that he believed they had brought him one hundred fold all that they cost him. He said

he thought it was all wrong for florists to assume that because there was no money in orchid culture they should throw orchids out and not grow them. He contended that orchid growing ought to be encouraged and that it was one of the things today which florists could go into successfully. He advised the use of orchids, in decorating, alternately with other flowers, so as to bring the former more prominently before the people. He suggested that twenty or thirty feet at the end of a palm house could be devoted for their cultivation, or that they could be hung up in baskets along the roof, and they would amply repay for the trouble connected with them. He repeated that the grower should not look only to himself all the time but should defer to the demands made upon the retailer, who had to supply the public and sell the flowers.

Mr. LONSDALE: I will only say that Mr. Goldring makes a very good argument from the retailer's standpoint; but mine was from the growers standpoint. That, I think, is what we are after at this time.

Mr. GOLDRING: I would ask Mr. Lonsdale, should the grower look only for himself all the time. Who gets rid of the flowers, in this country? I am a grower, and have twenty-seven houses. I have put one or two of them into orchids, and I know that it does no more than pay me. But should the grower think of ever dollar for himself and forget all about the retailer? That is the cause of many strifes today, through the grower wanting everything and not giving the retailer what he can sell. The retailer is the one he has to grow for, and he does not grow for himself. We have to supply the public, and I think that growers should ask the retailers what they can sell.

President ANTHONY (having asked permission to add a word or two on the subject, as he was somewhat interested in growing orchids), said: I have the largest orchid trade in Chicago or in the west, and have grown nearly all the varieties that are grown by the commercial florists. Of all the flowers I have grown for commercial purposes, the one that has given me, perhaps, the most profit and satisfaction is the *Cattleya*. I have received more money from that, in proportion to the outlay, than from any other flower I have handled. Of course I have sold many, nearly all, of the flowers at retail, but I could make money with my flowers if I sold them at wholesale. I grow them among the palms and other plants. I get nearly the same amount from the house that I would get if I did not have any orchids, because I have very few on the bench. They hang above the palms and have done very well. My orchids, all or nearly all, were brought direct from the woods, and they come not, as Mr. Mathews has said, either sea-washed or dried up, but come in very good condition and pay me nearly the price of the plants the first year. So that I am pretty well satisfied I have got my money back from orchids.

The discussion here closed.

RECESS.

In view of the near approach of the time for the noon recess, and the comparatively small number of members remaining in the hall, the reading of Mr. Temple's essay on Cannas was, on motion of Mr. May, deferred until afternoon. A recess was then ordered.

 SECOND DAY — AFTERNOON.

WEDNESDAY, August 22, 1894.

OBJECTION TO AN AWARD.

The session opened with the reading of a number of reports from the committees of judges on awards for exhibits. These were read by Secretary STEWART. When the reading had been concluded, President ANTHONY (having temporarily vacated the chair), said: I wish to say one word respecting one of these awards, that is, that on boilers. I decidedly object to any cast iron boiler being recommended for steam purposes by this Society. It is not a boiler that is worthy of a certificate of merit. The boiler here mentioned is as good a boiler, perhaps, as can be made of cast iron, but it is not as good a boiler as can be made simply for heating greenhouses with steam.

Mr. P. O'MARA, of New York: What is the proper course of action in the event of an objection being made to the report of a committee? Is it the custom of the Society to sanction the report of the committee, or does it refer it back to the committee when objection to it is made?

Mr. ANTHONY: This report has already been referred back. I suppose that the objection to it will be recorded in the report.

Mr. O'MARA: My inquiry was made merely for my own information as to whether, when a committee report here, the Society is called upon to receive and confirm the report, after having discussed it, or to dispose of it finally, by vote, in some other way.

Mr. ANTHONY: The question in this instance would possibly involve a very long discussion before it would be decided. It was discussed at several of our conventions and the subject generally occupied a considerable portion of a session.

Mr. O'MARA: Possibly one way to dispose of it would be to allow the report to stand with the objection to it appended to it. Is that the course it will take?

Mr. ANTHONY: That is the course it will take, as I understand it now.

Secretary STEWART: For the information of Mr. O'Mara, I will state that this same objection was made when this report passed through the Executive Committee this morning. All the reports here read by me were passed upon by the Executive Committee before being presented to the Society. This particular report was given back to the committee with the objection as stated; and that committee subsequently returned it with the following statement appended: —

To the Members of the Executive Committee,—The report returned with instructions has been gone over; and in view of the exhibit, and the knowledge of the subject possessed by the members of the committee on awards, that committee would respectfully request that the report remain as presented.

The subject was here dropped without further action.

CANNAS.

The next business in order being the deferred essay on "Cannas," by Mr. JOHN T. TEMPLE, of Davenport, Ia., the same was read by Mr. Temple, who was enthusiastically greeted.

The essay was as follows: —

A class of plants that is becoming very popular is the cannas. They are rapidly crowding the geranium for the first place in bedding plants; their beautiful and massive foliage stamps them as one of the best decorative plants for all purposes, especially for use in greenhouses, halls, dwellings, etc., while for the lawn they are one of the most satisfactory plants grown, blooming from June until frost, rivaling the improved gladiolus in size of blossom and the brilliancy of coloring of the various shades of red and yellow flowers.

The name canna is, according to some authorities, derived from cana, the Celtic name for reed or cane. They are mostly natives of the Indies and South America. They are easily multiplied by seed and also by division of the roots. Of late years there has been a great improvement in color, size of blooms, and dwarfness of habit of the plants; especially in the hybrid seedlings raised by Mr. Crozy, of Lyons, France. Mr. Crozy is entitled to great credit for the improvement and introduction of the fine varieties that are called the Crozy cannas.

A good many good seedlings are being raised in the United States, and there is no reason to doubt that with our fine climate and soil that we can produce finer varieties than are yet in commerce. After we have obtained the ideal pure yellow canna with large blossoms we should turn our attention to procuring a strain of foliage cannas, with the beautiful colors and markings of the crotons and phrynium, and the

elegant shadings and color of *Dracæna terminalis*; then the canna with its gorgeous flowers, and the size and elegant markings of foliage, would possess almost every quality that the most fastidious would desire. It is feasible as we already have reddish and purple foliage in numerous cannas, and the yellow shade and some markings, as in *Canna Breningsii*.

From the 1st to 15th of April we divide and start the canna in the greenhouse or in a mild hot-bed, in six or eight inches of soil, preferring the hot-bed as it seems more congenial to them, dividing into one or not more than two eyes to each piece. These make larger growth and foliage than if more eyes are left. When they have attained a growth of about a foot high, say about May 20 (with us), we plant out in open ground if the weather is suitable, if not we pot them until ready to plant out. In very windy situations it is best to plant them out as soon as the first leaf shows above the ground; they do not break off so easily, and are hardier and stronger than plants forced to a lengthy growth caused by starting them too early. To be effective the beds should not be too large. Wm. Robinson, in *Sub-Tropical Gardening*, truly says that enormous meaningless masses of them are things to avoid, and not to imitate. The best size of circular bed to plant the tallest varieties in is from fifteen to twenty feet in diameter, made level (with very rich soil, one-fourth of good manure, not too fresh), a little below the surrounding surface, so that the water will not run off as it would do if raised. If the bed is larger than fifteen to twenty feet in diameter for the tallest variety it will look low and squatty, and if smaller it will look too high. A study of the height of the various sorts will prove a good guide for diameter of bed; the taller the variety, the greater the diameter, and *vice versa* for the smaller varieties. A proper planting for effect, whether for one or more seasons should be one of the main ideas of the thorough gardener, but as long as our profession is so truly empirical, so long will the general public regard the civil engineer with more favor or his opinions with more weight than those of the horticulturist.

After they are planted we give them a good watering, then when they have started to grow rapidly, say about July 1, we place the hose on the ground in centre of the canna bed, and let the water run slowly all night. During the warm growing season they cannot have too much water at the roots. I do not advise watering the foliage in beds more than once a week when they are in bloom, as it spoils the flowers, rendering them unsightly and making them fall off much sooner than otherwise. Keep cutting the old flowers off before forming seed and they will bloom continuously until frost.

A well grown canna is an addition to any kind of architecture, and is suitable for planting at base or side of steps and porch. They are very effective planted in clumps or singly along walks in lawns, and are useful for screening unsightly views. A very handsome bed is one of all one color, say Chas. Henderson or A. Bouvier, with a border of some of

the dwarf yellow varieties. In a neighboring terrace lawn the owner has planted clumps of the improved cannas (assorted), at the foot of three terraces, and the plants five to six feet apart. The effect is very pleasing, especially with the grass background. At the World's Fair, between the Horticultural Hall and the greenhouses, were two novel round beds raised eight to twelve feet, the mounds being made, so I was informed, from old boxes, manure and refuse sphagnum moss and soil from cleaning out the greenhouses and sheds. They were planted chiefly with Mme. Crozy cannas, yuccas, ricinus and smaller things to fill bare spots. Being so high they were very effective and showed well John Thorpe's skill and the capability of the canna as a decorative plant.

They are easily grown from seed, blooming the first year. Soak the seed in warm water for twenty-four hours before planting and almost all will come up. There are some good varieties raised this way (especially from the newer sorts), and it should be encouraged, but my advice would be to throw them all on the rubbish heap, unless they are decided and very distinct improvements on such varieties as Chas. Henderson, Alphonse Bouvier, Florence Vaughan, Capt. de Suzzoni, Mme Crozy, Paul Marquant and other good varieties now in commerce. If you raise what you think is a new and good sort it would be better before disseminating to send bloom and plant to some canna expert, who grows in large quantities the improved sorts, so that they can make comparisons, say J. C. Vaughan in the west and Dean, Pierson or Dreer in the east. Or, better yet, start a canna society, auxiliary to the Society of American Florists, which would register and test all varieties before they were disseminated; it would save trouble in canna nomenclature. Some of our European brothers are very extravagant in descriptions of varieties which sometimes need a microscope to detect the slightest shade of difference in color, as many of our importers of roses, geraniums, cannas, etc., know to their loss, so go slow until some other fellow has tested them.

In propagating a new variety for dissemination do not divide too often, as it weakens the stamina and the variety is often condemned, when it has been weakened by over-propagation. When Mme. Crozy was first sent out I bought stock, and commenced to divide, and did so until the foliage was no wider than corn blades, and most of the last division had to be thrown away, for they never made good plants.

Insects. — The canna is, for the size of its leaves, remarkably free from insect pests. I have only noticed red spiders on plants this year that could not be reached by the hose, and on early planted stock a small white hairy worm (name unknown), which rolled up the leaves and cut holes in them, disfiguring them badly; the only remedy I know is to hand pick; I have not seen any of these latter insects since July 1st this year.

Taking up. — The first day after frost I cut off most of the tops, leaving a few leaves on, then take up and plant, without dividing, in boxes in sandy soil, then place in light cellar or under bench in green-

house, care being taken to see that they are given only enough water to prevent drying up, and not enough to cause rot. If I have plenty of room we plant on greenhouse bench and keep growing all winter, and at Christmas and Easter the flowers pay for their keeping.

Qualifications. — A good canna should possess good foliage, a sturdy habit, a large flower, composed of wide and not too long petals of good waxy substance, on a stalk rising well above the foliage, and a good, bright color. The flowers on the stalks should not crowd one another too much and need not necessarily be upright, as is the standard set by some, but may droop, as in the *Iridifolia* or *Ehemanni* type; to some they are more graceful and beautiful than the upright type.

For years I have been testing all the new varieties as they were introduced. Some were extra fine, but many should not have been sent out; some had new shades and marking, but lacked substance and breadth of petals, etc. Some years a variety would do especially well, and the next year a variety that was poor the previous season would take first place. Some plants of a variety do better in some locations than in others, planted at same time and given same treatment.

The best twelve grown this year by me of the previous introductions, are :

Chas. Henderson, of its color, rich vivid crimson, the best canna to date; petal wide, not too much reflexed and of fair substance; very desirable planted singly, at side near foot of entrance steps to residence, also good for beds of all one color.

Florence Vaughan, the gem of all cannas, color bright golden yellow, thickly spotted with bright crimson; petals broad, not too long, and of good substance, flowers lasting well this dry season. Very desirable planted in same way and as a companion plant to Chas. Henderson. It is not quite as showy as Capt. P. de Suzzoni for a bed of yellow on account of the large bright crimson spots neutralizing the golden yellow. I think it is the best type of canna to date, and advise all to plant it. The variety Florence Vaughan was purchased and named by the introducer in this country in the fall of 1891, while Anton Barton, which the Nomenclature Committee claim to be identical, was first offered as a trade novelty for the spring of 1893. A canna committee or society would prevent the circulation of such inaccuracies.

Alphonse Bouvier, the brightest canna for bedding, richest crimson, and will always be in demand, makes grand mass beds; seems to have some *Ehemanni* blood in it, as when the second flower opens on the spike it spreads or droops, same as the *Iridifolia* type, and gives variety and style to this class of plants.

Capitaine P. de Suzzoni is the best yellow for planting in solid bed of one color; it is not a pure yellow, but a canary yellow shade, lightly spotted red so as to intensify the yellow shade. Extra good.

Mme. Crozy keeps up the reputation of being the most free-flower-

ing of the Crozy type of *Canna*; too well known to describe. No one loving cannas can do without it; it generally comes true raised from seed.

Paul Marquant is another grand canna hard to beat; color salmon scarlet.

This season the best dark or purple leaf variety is canna Geoffroy St. Hilaire, a splendid variety for mass beds; flowers orange red.

Another equally good purple leaf canna is J. C. Vaughan, with larger and darker flowers than the preceding; an extra bloomer.

J. D. Cabos and President Carnot are both good varieties that cannot be dispensed with, though J. D. Cabos fades out considerably this dry season.

Count Horace de Choiseul is a variety giving satisfaction this year, though it has done poorly with me for the two last seasons.

Mlle. de Crullion should be planted for its odd shade of yellow, shading to terra cotta; it is a free bloomer.

Everyone should have some plants of *C. Ehemanni*, with grand foliage and beautiful drooping carmine flowers on stray stalks, entirely different from other varieties. It is a gem when well grown. There are other good varieties, as Paul Bruant, Trocadero, H. Vilmorin, Egandale, that did well with me last year, but the above named are the best this year. Of the newest or later introductions that I am testing or have seen, the first one, Koenigin Charlotte, very brilliant scarlet, with a broad band of golden yellow, has flowers of good size and substance; petals not very broad; it will become very popular; a decided novelty. Paul Sigrist, in color is an improvement on Mme. Crozy, but the flowers lack substance and do not last well; it may improve with cultivation.

Lemoine's Eldorado is a grand blooming *Canna*, color light yellow, good sized petals and good substance.

Columbia, an Iowa raised seedling, raised by Kramer & Son, as seen at the Chicago Exposition, also in 1892 at Marion, is a magnificent variety; color bright red; flowers large, upright and supporting one another well on the stalk. Gives promise of being a standard sort in first class. Orange Perfection is another variety that I am testing this year, a dwarf; the color orange scarlet. I do not think much of it with this season's trial.

The following varieties, seedlings raised by M. Crozy, and under control of J. C. Vaughan, are extra good. My notes of varieties at the Chicago Fair, show 103, and M. Mesnier, 107, Chicago, 118, and 124 not named, were extra in 1893; this season they have kept up to their high standing. No. 124 is in style and color of F. Vaughan, but larger flowers. Magnificent, No. 116, P. J. Berckmans, 126, J. W. Elliott, and 127, Mme. Bouvier, are all good sorts; also 100, F. Guillord. Another variety worthy of mention is Admiral Gervais.

In the exhibition hall at Atlantic City, were three varieties that are

identical, viz.: Florence Vaughan, introduced in 1892 ; Anton Barton, introduced in 1893 ; and Comte de Bouchard, 1894. It is not right for the French growers to do this, and this Society should appoint a canna committee to devise a remedy.

Discussion of the essay being in order, Mr. P. O'MARA said: I would like to ask the essayist whether he investigated the published report, which appeared some time ago, that Mme. Crozy was not a hybrid but a species, and that it was identical with *Aurea limbata*, introduced in the early part of the century, from Chili or Peru, I have forgotten which.

Mr. TEMPLE: Yes, I did investigate it. I saw in the September number (1892), of the *American Agriculturist*, the article by Mr. C. L. Allen in regard to Mme. Crozy canna being an old variety. There is in the *Botanical Cabinet*, published in London in 1820, by Loderidge & Son, a description and illustration of a large flowered canna which they call *Canna aurea vitata* or *limbata*. Shortly afterward the *London Gardeners' Chronicle* gave good authorities to the effect that it was not Mme. Crozy. I believe from all the authorities I could find, that it is not the same thing.

Mr. O'MARA: I would state that in the course of a short visit to Mr. Allen which I made soon after this claim was published, he granted me the privilege of looking over his library, and in a book of hand paintings which he showed me, I found a plate of what was alleged to be the *Canna aurea limbata*; and I must say that if Mme. Crozy was compared with it, side by side, it might be very difficult to detect the difference between them. I was pressed for time and did not have an opportunity to talk the matter over thoroughly with Mr. Allen, and it has just come back to my mind now. Possibly it would be well to have the facts developed.

The PRESIDENT invited further discussion, but no response was made.

Mr. O'MARA: I desire to move a vote of thanks to Mr. Temple for his very able essay on this subject; and if the chair deems proper to appoint a committee on the lines laid down, I hope that it will be done. I make a motion accordingly.

Mr. W. K. HARRIS seconded the motion.

The motion was adopted without objection, and later on the PRESIDENT appointed as the Canna Committee, Mr. J. T. Temple, Mr. D. Zirngiebel and Mr. James Dean.

THE CHRYSANTHEMUM.

An address on "The evolution of the chrysanthemum" (under the auspices of the Chrysanthemum Society of America), by Mr. GROVE P. RAWSON, of Elmira, N. Y., was the next feature on the program, and it proved to be one of the most interesting and valuable ever delivered before the Society, and was heard with intense interest. Frequent outbursts of applause accompanied it.

Mr. RAWSON, upon being presented, said:

Honorable President, Ladies and Gentlemen of the Society of American Florists, Greeting,—I cannot say that I am especially fond of conventions of either one sort or the other — I'm not built that way — though of course the Florists' Convention is quite superior to all the others; that goes without saying. I do not suppose I should have been here, in fact, if I had not been sent for, but I am not sorry I came, so far. I do not know, though, that I am a true florist even; I am no bowler; my strong right arm don't work that way; and I have not much stomach girth for liquid refreshments. Why, even a few glasses of Demerara Swizzle were almost enough to give me "foot tangle." Possibly I am a hybrid.

If I had selected my own subject I should have preferred to address you on "Plant life about the Equator." I have had exceptional opportunities for study of natural history in South America. Nature in the tropics is simply grand. I fancy I should have interested you. Vegetable life is so exuberant and in such superabundance that a mere description of its varied species of palms, scandent and upright, the strange flowering trees, the wonderful variety of vines, of shrubby and herbaceous character, the orchid in habitat, far prettier in its natural state amid natural surroundings than as grown under glass, not to mention the splendid fern growth, and floating islands of aquatics — I say a very common statement would command attention, as this field is so much of it unexplored country, being so difficult of access.

But enough. I must stick to my text; the string of my bow at this time is the chrysanthemum. All honor to the glorious flower, the Eldorado of the flower realm. Numerous friends and admirers always look forward to its annual visit, and delight to do appropriate honors suited to the occasion. He comes as a conquering hero assured of festive welcome. Many a feminine bosom flutters at the first sight of his curly golden locks, and she wears him over her heart, though it takes her last penny. "So swell," don't you know! The "mum" is decidedly a ladies' flower. These preliminary months are prophetic of future promise. Now is the time to put in our good work, and be not weary of well doing. By and by we may rest from our labors and enjoy the splendor of his regal presence.

Chrysanthemums appear upon the scene with such eclat that old time favorites give way for the time being by mere force of circumstances, unable to cope with such prodigious displays of gorgeousness and brilliancy. What flower excels it in color effect? Its various tints and shadings are at times unique, and again startling as to the ordinary rules of color harmony. As well get out your paint pot, and try to reproduce a glorious sunset sky, as to perfectly describe the colors of many chrysanthemums. Nature defies imitation when she gets down to business. When you want a yellow that is pure gold, a ruddy orange or lemon tint, amber, cream or buff, what flower can so satisfy you as does the chrysanthemum? In this respect the "mum" is a peerless flower and unequalled. In its form and shape it is alike varied and interesting.

It is said of some people, don't you know, that they "travel best on their shape." The chrysanthemum might well do so, besides it belongs to the "big four" — roses, carnations, chrysanthemums, violets. The orchid and lily claim they don't care for the combination.

While chrysanthemums do not attract the furor of some few years past, and the public press is not so enthusiastic in its exaggerations, and the Hardy type is no longer a novelty, but nevertheless still attractive, and most people are more or less familiar with the "swelled" heads of some of the big fellows, yet all the same the chrysanthemum is no back number, nor will it ever be. It has come to stay.

Ward McAllister's edict that it is now too common for the exclusive "four hundred," is worse for 'em than it is for it; and for any one to utter such treason is a shameless affront to the entire chrysanthemum race. So much so that the poorest 'mum would feel dishonored to bear his name! No fears, though, but chrysanthemums will flourish when Ward himself is quite forgotten. "You can't sometimes most always tell what you least expect the most" — still I have no doubt the king will reign, whether subjects do him honor or no. *Vive le roi* chrysanthemum! or dub the flower "Queen of Autumn," if you like!

The chrysanthemum is more useful and popular today than ever before. We cannot do without it, nor would we. It fills in a gap. It has its essential place that no other flower does or can occupy.

The best word that you can say for a good aster bloom is that it *resembles* a 'mum.

Chrysanthemums usher in November with many a magnificent flower show and private exhibition that otherwise would not be. Florists and Flora's realm ought to be exceeding grateful and do homage to a flower that serves so grand a purpose. Here's to the health of Chrys. Chrysanthemum — whose shadow, may it never grow less, but enlarge!

And I am proud to say
That I honor its sway
In dull November weather;
When it rules the day
And is bright and gay
As birds of tropic feather.

I am still speaking of the good qualities of chrysanthemums in general. I have not yet got round to its distinctive features of later development. There have been notable improvements in some new varieties, as well as heaps of rubbish palmed off on the public not worthy to have been disseminated, and this fact has lessened the general interest in new varieties not fully tested, or well medaled, certified and abundantly advertised; and many of these even failed to become standard sorts, from one reason and another. For the good of the cause it is not wise to have *too* many new kinds offered at a time. There isn't so much room at the top as there used to *was*. By all means let the new comers be distinct in some special feature, as well as up to the required standard of what we expect of a good chrysanthemum. And don't patch out "sets" with one or two of doubtful value. We are already overstocked in this line.

As a matter of fact, there are few connoisseurs at the present time who are willing to pay a dollar or so for a two-inch chrysanthemum whose merit, after all, is but a question of circumstance or lottery. There are so many — too many — good tested kinds as it is, that it is difficult indeed to draw the line what to retain or discard. The whole chrysanthemum field has been pretty well plowed over of late, in that good, bad and indifferent sorts are alike covered up, some even buried alive that perhaps may be revived again in due time.

No matter how many disappear or are trampled under, the rank and file knows no loss. There are plenty of enlistments to fill up the gaps. Recruits from abroad and at home, from the east and from the west, a very cosmopolitan army, making a confusion of tongues! No wonder our Chrysanthemum Society demands registration, and many of these foreigners require naturalization papers! "Restricted emigration" is one of the topics of the day, why doesn't it apply to chrysanthemums!

Just to sell over the counter, one need grow but comparatively few kinds, standard sorts, white, yellow and pink mostly. But a large collection has its own especial interest. The enthusiastic chrysanthemist creates a special demand for his fine stock. Enthusiasm is no mean factor in the development of trade these days. It comes under the head of advantageous advertisement.

As you all know, some varieties of "mums" you will find useful for one purpose and some for another. There are those to be grown in pots for exhibition to single stems, bush plants and standards, as also for cut flowers. Amateurs and private gardeners occasionally train them into fantastic shapes; all well enough, if it please their fancy, and there is sufficient growth to hide the topmast, mainstays fore and aft, as well as the jib boom. The presence of sticks, wires, or supports of any kind, if at all prominent, considerably detracts from the natural beauty of a specimen plant, no matter how otherwise well grown.

Let the Japanese grow a chrysanthemum bloom three feet across, as it is said they do (my authority is H. Izawa), where is its beauty, when

its thin petals have to be kept in place by a wire network support? Give me less flower and more substance.

Reminds me of a story in war time. A soldier home on a furlough noticed for the first time the ladies new style of wearing their hair, when it was caught at the nape of the neck in a rather heavy net, the so-called "water-fall." "Why," said he, "have the women got so darned lazy that they have to carry their hair in bags?" Really, we have not much use for a chrysanthemum that can not stand alone on its own merits, *causa sine qua non*.

I believe in evolution as to the chrysanthemum, the fittest will survive; that is my idea of evolution, pure and simple. As the saying goes, "You can't make a whistle out of a pig's tail," the *material* isn't suitable. The so-called connecting links between the animal and vegetable kingdom are at once separate and distinct after all, whatever the supposed affinities may be.

Four, five years ago anything most would pass muster that was a chrysanthemum. They were all of 'em quite too lovely for anything! Single ones that looked like daisies and smelled like violets? Every style was lauded and praised, including the pin wheel, Catharine wheel, feather duster, water lily and "chalice" shaped flower, as were the anemones and pompous. Now, these classes are *non est* as to popular favor, and even the Japanese must have less feathers and more petals.

However, when we become too critical we may lose the zest of complete enjoyment. I wonder if this incident is at all apropos. An Irish woman and her daughter came into my store lately to order a flower piece of some kind. The mother had her eye on something large and showy, when made up, plenty of this, and that, and so on. The girl remonstrated, suggesting a more simple arrangement, but was entirely squelched with "Molly, it's meself that's doin' it, and I'm glad I haven't got an educated taste as the likes of you." Oh, it's not half bad.

A musical critic is often so impressed with his own individual art that he quite lacks any appreciation of a brother artist. The "doctors" don't agree when it comes to judging chrysanthemums. Their relative value will vary, much according to the experience and individual taste of A, B, C. One will condemn what another recommends, the difference of opinion being largely mere point of view.

I will simply give my experience, and confess I do not know all about the subject, nor do I ever expect to. There will always be something to learn in this line or any other, and the more you know only opens up new and greater possibilities for further attainment. Again there will always be different methods of accomplishing the same results.

For myself, I know that I can grow as good chrysanthemums as any I have ever seen on exhibition, with a high average of first quality bloom, and with but a very small percentage of plants failing to flower, or producing imperfect blooms. It is not my thought to go into detailed cultural directions, nor is it necessary; that ground was well gone over

last year in Elmer D. Smith's admirable essay, "Bench grown chrysanthemums."

I plant my first lot in solid beds about the first of July from three and four inch pots, good strong plants that have not become starved or woody. I would not want to plant them much earlier than this date, judging from my experience. With me, I get larger flowers, more substance and earlier in bloom, than if planted out in May or June. I stake nothing on the fact, as a rule, it is simply my experience.

Those planted on benches for early and mid-season blooms are in place by the 15th of July, while the late ones for December flowers are not potted off from the propagating bench much before the last of the month, and planted in August. These late ones are all grown to single stems, one flower each from crown bud cuttings, lateral and terminal shoots, according to the variety.

I use plenty of half rotted cow manure for compost, with stiffish sod turned over and stacked up the preceding spring. There is much more "move" to it than if piled up for two or three years, and is better for general planting of stock inside, though not so good for potting purposes, a little too rough and coarse perhaps.

While I use coke for drainage in the bottom of rose benches, with chrysanthemums I use manure instead, the "mums" being so much more voracious a feeder I prefer this course to using liquid; I only use liquid for pot plants.

Give a chrysanthemum too much strong drink and he will suffer from "sour stomach," dyspepsia, and the whole plant will appear to have a bad attack of jaundice. Use it, of course, as necessary, but there is danger of over-feeding. When malformed blooms stare you in the face you feel like using "cuss words." Stimulants *ad libitum* are as bad for "mums" as for the human species. In planting chrysanthemums carefully select your young stock same as you would for roses; hard, woody or starved plants ought to be at a discount, even if they are new "mums," and is a waste of time and space. You need to be more particular with some varieties than others, especially those that make a thin wiry growth to start with, as Mrs. M. J. Thomas, Mrs. Robt. Craig, M. B. Spaulding, H. Waterer, and the like. Healthy young stock of Golden Wedding grows quickly and vigorous, but if it once becomes "hard" its growth is stunted and it rusts badly.

Mrs. Craige Lippincott will stand right still when stunted that way, or else put out new growth from the bottom that generally fails to bloom at all.

Mrs. Geo. Bullock (Domination) acts much the same way. By the way, the former name is entitled to precedence. There are fewer chrysanthemums imported under number than of yore, consequently less confusion in names and synonyms. Examples are V. H. Hallock *vs.* Dawn, Mrs. Humphreys *vs.* Snowball, Nineveh *vs.* Charity, Bride of Roses *vs.* Wm. Tricker, *et al.* Besides, our Chrysanthemum Society registers the

names of new aspirants to public favor, and the debutants are thus properly chaperoned. That's all that saved us from having a baker's dozen Ruth Clevelands when the first baby put in an appearance at the White House. What about Esther?

Quite a chapter could be written on histories of synonyms. Good Gracious, the sport of Princess of Chrysanthemums, is classed by many as synonymous with Princess, whereas the real article is a bona fide sport, distinct in habit, of better shape and color, and holding its big graceful flower quite erect. I have another sport similar to Good Gracious in every way, except being pure white. I am waiting to see whether it is to be reliable or not. I wouldn't want it to be entailed with curvature of the spine, same as Princess.

I had a yellow sport from L. Canning that showed up grandly last fall. It gave a tremendous deep bloom of pure golden yellow, lasting a whole month on the plant. Habit dwarf and sturdy like the parent. Still, whether it will pan out satisfactory on further acquaintance is all guess work. Sports should be thoroughly tested one or two seasons, same as we expect of seedlings. A good many seedling novelties that have shown up splendidly at exhibitions, receiving certificates and medals, have really proved utterly valueless. Some of our most desirable varieties originated as sports. Among the newer ones are Chas. Davis, from Vivian-Morel; L'Enfant des deux Mondes, from Louis Boehmer; Clinton Chalfant, from Jos. H. White; Kate Mursell, from Robt. Bottomly and others.

Of the newer sorts, the very earliest ones are the most sought after. I venture to say that E. G. Hill & Co., have sold one hundred Mrs. E. G. Hill to one of Challenge for this very reason. By the first of October chrysanthemums are in demand and you are repeatedly asked "how soon will they be ready?" The earliest flowers are quickly disposed of to good advantage, in time to use the allotted space to carnations or some other crop.

As far as I am able to judge of the novelties offered last season, I consider the best very early sorts to be Mrs. E. G. Hill, Yellow Queen, Lady Playfair, Clinton Chalfant and Thos H. Brown. Doubtless there are others not so well advertised. These earliest sorts are over-stepping each other year by year, and are also of much better quality than formerly. Let the good work go on.

I do not mention Mrs. Craige Lippincott, as the merits of this excellent early yellow are sufficiently well known. It is a fine thing, as most of you are aware. The early French varieties of Delaux are of but moderate quality, and not enough substance to grow under glass. I state my own experience. Possibly there are exceptions, as the list is a very large one. Of the extreme late ones are Challenge, Laredo and Eider-down, yellow, pink and white.

Eugene Dailedouze probably showed up to the best advantage of

any one chrysanthemum offered last fall. It seems to be all right, and much is expected from it.

Maj. Bonnaffon is another very good one indeed, and so is Minerva, of a rich bright yellow. Marie Louise is a graceful dainty white.

Mutual Friend has good substance, and Mrs. J. Geo. IIs is distinct and very durable as a cut flower, as was evidenced at the World's Fair chrysanthemum show. A. H. Fewkes pleased all who saw it at its best last year. It is confidently expected to be on the front row along with the other good yellows. It is rather after the style of Minnie Wanamaker in build, and reminds me of Mrs. F. L. Ames, '93, also first-class.

Pitcher & Manda is distinct from contrasting color. Other certified sorts are Achilles, pearl white, Farview, crimson lake, Silver Cloud, white and salmon, White Rock and Inter-Ocean.

From over the water came the two sports, Chas. Davis, and L'Enfant des deux Mondes ("The child of two worlds" shortened by common consent to "White Boehmer,") and the two seedling Reys, Mme. Edward (renamed), and M'lle Therese. This notable quartette were visitors at the World's Fair, and much admired. I don't think they had any cause to grumble for not having been hospitably received.

Varieties wanted for exhibition purposes should be selected among the mid-season kinds, as at this time novelties, curiosities, monstrosities or anything out of the usual line in shape or color will attract attention that would otherwise be of doubtful value.

Some good large disheveled and curled blooms of Bronze and Golden Dragon occasioned as much comment last fall as anything I grew, but were of no other value aside from exhibition.

The evolution of popular taste *a la mode* demands a full high rounded flower of good substance and pleasing color, and at the same time not stiff or rigid outlines, as Golden Wedding, Emma Hitzeroth, Mrs. Craige Lippincott, The Queen, Mrs. Jerome Jones, G. W. Childs, J. R. Pitcher, and others. Good foliage is another requisite in the general make-up of an ideal chrysanthemum. Wm. Falconer and White Boehmer are very popular with the home trade, but do not ship well. Do you remember the advent of Mrs. Alpheus Hardy and the boom it was to chrysanthemums? No prima donna was ever half so much talked about either by word of mouth or through the public press. I saw it for the first time at Philadelphia on exhibition under a glass case. It proved as good a "drawing card" as an Egyptian mummy or a live mermaid. Golden Hair is claimed to be a worthy yellow of this class; we have had nothing of any real value in this color up to the present time. The numerous claimants were simply adventurers.

Chrysanthemums are like certain fruits, there is a great difference in their shipping qualities. Some of the very best strawberries for near at home use will not bear carriage any distance, so it is with many chrysanthemums. The splendid blooms of Vivian-Morel, Niveus and others of similar build are better for the home market. Not that they lack sub-

stance, but are difficult to ship on account of their shape. These do not travel so well on their "shape" as do some others.

Bryden Jr. and M. B. Spaulding are splendid yellows, representative of what "the golden flower" ought to be, rich color, large, full and shapely.

Mrs. Robt. Craig and its "double" except in color—a light yellow—I refer to "Congo," introduced by Yoshiike, are both extra good. The blooms are very durable either cut or to remain on the plant. These are really hybrid in class, partaking of the breadth of petal and grandeur of build of the Japanese, with the spherical outline of the Chinese.

Golden Gate, J. C. Vaughan and Chicago are very attractive blooms if cut before the eye becomes prominent.

Col. W. B. Smith and Edward Hatch would both be grand if they could only hold their heads up. A little weakness in the stem is a bad fault in 'mums, and unfits them for general duty.

Our fair English cousin Florence Davis has either a weak neck or else is too modest by half. A chrysanthemum with a weak stem is as bad off as a man without any liver—neither of 'em "haven't got long to stay here," and it is *pro bono publico*.

Chrysanthemum "The Queen" is the typical American Girl, and fitted by nature and education to adorn the highest position. I admire the Grace Hill type, a rich blush incurve of remarkable substance, though not entirely covering center; still with the incurved sorts the suggestion of an eye does not detract at all from the symmetry of the flower. Indeed graceful outlines are often wanting in the densely doubles. Mermaid is of this type, but deeper color and quite covering the center. It is an all 'round variety. Good for cut flowers and for exhibition, also makes a good pot plant, though some authorities proclaim it a poor grower.

Reflexed and recurved sorts should be full and double for the most part. This class has been much improved of late years, and we now have some superb varieties for exhibition and cut flowers. Jos. H. White is a distinct type and one of the most popular. Eda Prass, Niveus, Charles Davis and Tuxedo are each representative. Tuxedo is the best amber or orange cut flower to date, splendid keeper and shipper.

I think W. W. Coles is prettier for showing the eye than if it was more double. It has a most pleasing flower of particularly bright color. There is nothing just like it. Individuality is as marked among chrysanthemums as in pausy faces. The one, so diverse in color and shape, others in striking variations of color and expression.

To grow chrysanthemums well one needs to know their separate individuality, and like some people you know, improve on acquaintance. But a single variety affords material for a diffusive English treatise. In our climate, under glass, chrysanthemums are much easier grown, and with less care and expense, than in England. Besides, we can grow them in half the time and by simpler methods. Let a novice read or

study the elaborate English cultural directions and he would be ready to give up in despair. Experience is always the best teacher, though sometimes it costs us pretty dear—" *Le coût en ôte la goût* " the French say — the cost takes away the taste.

Belle Poitevine is a beauty of the regularly incurved ball shape Chinese section. It is a very early sort and exceedingly useful for cutting. Makes the prettiest boutonniere of any chrysanthemum extant in my opinion, and first-class for plateau work, with growing ferns bedded in the moss. (This is the proper way to use ferns for this purpose, be the flowers what they may.) Belle Poitevine is much like Mrs. Geo. Rundle in general effect, easier grown and earlier is its distinctive feature. It is a grand keeper, as all kinds should be, selected for cut flowers. It is aggravating enough to have a flower go all to pieces almost as soon as cut, like Mrs. Langtry, L. Canning and Mabel Simpkins. In a short time these varieties resemble plucked geese, and eye each other askance — all "eye," in fact, in their denuded state. I grow Belle Poitevine largely, and Carry Denny, of similar build, an early bright amber, that takes well with the home trade.

Marguerite Graham is a later cut flower kind I think highly of. A shapely white, luminous with golden light. This has grand keeping qualities also.

I greatly admire early Dr. Callandreau, of similar tint, as probably you do. The white and gold effect is much like some silks; in certain lights one tone is prominent, that shifts to the other according to focus.

You can't improve on Molly Bawn and Mary Louise, for a plateau of white with adiantum ferns. Try them in this way, and work out the same idea with young plants of croton and *Grevillea robusta* for yellow and bronzed colored chrysanthemums. A plateau of chrysanthemums when well done is a thing of beauty, or it may be coarse, crowded and bulky. Right here there's a chance for nice discrimination. Often blooms that look well in a tall vase are out of place in a plateau arrangement.

American Beauty is a grand decorative flower, but in a hand bunch to carry *does* look stiff and awkward. A bull in a china shop is no more out of place than a big pæony in a lady's hair! Why can not chrysanthemums have special uses same as roses and other flowers?

Ivory is still the best representative white chrysanthemum, all things considered. I believe it scores the greatest sum total of good points.

Wm. H. Lincoln occupies nearly as prominent a place among yellows. New varieties come and go without seemingly affecting their relative position.

Mrs. M. W. Redfield is an excellent early pink reflexed cut flower kind, after the general style of Ivory. Try it. At the second chrysanthemum show in New York, as I remember, the best flower on exhibition was Troubadour, now little seen — therefore the judges would say "distanced." None that have come after equal its clear shade of old rose. Under artificial light its fine color is distinctively characteristic.

We have a great many lilacs and magentas that are dull and inharmonious. We have no use for 'em, that is to sell over the counter, or for "making up." Except for purposes of exhibition, the extra tall growing kinds will be discarded among commercial growers. Mrs. E. G. Hill is almost too tall for the shelf. What about Harry Balsley? Isn't it a beautiful thing? And V. H. Hallock is a waxy flower of perfect tint. Doubtless I grow some kinds I have found satisfactory that you may have discarded, and *vice versa*. I can grow my own "G. P. R." profitably, but I don't ask you to bother with it.

There is no *absolute* standard of excellence, save in a general sense. We are all of the same opinion as to some special kinds being good all 'round varieties; aside from this judge and choose for yourself. There is no occasion for growing poor ones though.

Robt. Bottomly or its synonym, Lady Lawrence, Pelican and Mrs. M. J. Thomas are particular favorites of mine. I would also mention Mrs. Humphreys (Snowball); Snowball is a better descriptive appellation. Mrs. Humphreys is the name of Elmira's pioneer florist, now out of business. I well remember the late Peter Henderson's enthusiasm in speaking of this excellent cut flower variety. I still find it one of the most useful late kinds. Personally, I am fond of the bronzes. When I saw Comte de Germiny for the first time I thought it the most wonderful flower I had ever seen; and the first sight of Mrs. Wheeler produced an impression I am not likely to forget.

Hicks Arnold makes the best trained standard of any chrysanthemum that I am acquainted with, growth free and vigorous, and perfecting numerous good sized blooms. Pitcher & Manda have shown this up in fine form at several exhibitions. A large specimen shipped to the Buffalo chrysanthemum show two years ago arrived in splendid shape with hardly loss of a single bloom, speaking well for its durability. Chrysanthemum plants in flower don't usually ship very satisfactorily. By the time they get through with the express company, what with bent or broken stems and damaged flowers, their ornate beauty is done for. Hicks Arnold is one of the very best bronzes for commercial use. Nearly all of the bronzes show to best advantage at night, under artificial light, then they are beaux and belles, the observed of all observers, the cynosure of all eyes. H. F. Spaulding is exceedingly attractive in color as well as distinct in shape. It would come in under this general class, as would E. G. Hill, A. Swanson, Harry May, Alcazar, Barouald or Moseman, Mrs. J. T. Emlin, Prince Kamoutski and Thos. Cartledge, comprising a fine lot.

I regard Waban an exhibition flower par excellence. It has remarkable depth, quite full enough and of sufficient substance for the purpose. It should be bench grown; is no pot plant.

There are several of the older varieties that still hold their own, and are to be depended on for faithful steady work. Cut Puritan early and its lavender shading is lovely. As a bush plant it is an "old soger," as

are *Beaute des Jardins*, *Mabel Douglas*, *Pere Deleaux*, *Tokio*, *Cullingfordii*, *Source d'Or* and others. *Frank Wilcox* used to be a favorite sort for bush plants, in habit all that could be desired, but its flowers, profuse as they were, altogether too stiff and looking like immortelles. *Juvena* makes a good "bush" pot plant. I would like to see its striking color duplicated in a large flower. As a rule these shades so quickly fade and lose their brilliancy. *Grand Mogul* is an example.

Auriole is a halo of silvery yellow, unlike any other. *Miss Mary Weightman* is a feathery globular mass of bright gold, also distinct, and *Mrs. L. C. Madeira* quite another type.

Harn Ko's twisted incurve and its soft clear mauve tint is different from anything I know of. It is one of the very latest and valuable on this account. *H. Waterer* is another good sort in demand for late cutting on account of its brilliant color. This variety is a little difficult to grow, but does well from late struck cuttings.

Yonitza and *Miss Meredith* are in use for late crop. *Mountain of Snow* is a regular mountain of growth, but produces a good flower on top. I saw a fine batch of this variety at *John N. May's*, a few years ago. *Jessica* is by no means out of date for early large blooms, and *Minnie Wanamaker* is as stately as ever.

I find *Harry E. Widener* and *Edwin Molyneux* rather inclined to be variable. Both these varieties, though introduced with a flourish of trumpets, are not nearly so much in demand as they were. Have they deteriorated? *Curly yellow Yeddo* is not half bad when well done, and the tangled golden shock of *Mrs. I. C. Price* charms the eye at once. *Thos. C. Price* is labeled "crushed strawberry," though it doesn't look at all "sat down upon," but is too stiff and solid an incurve.

Le Tonquin is a reflexed type of flower, with crimped petals spirally twisting after the form of a corkscrew of peculiar effect, while *Ben d'Or* is a veritable little bunch of yellow pine shavings.

Marvel is as distinct in its contrasting color as *Pitcher & Manda*. When it was considered a novelty, grand bush plants were shown at the Philadelphia exhibitions. At night no fair maid present had such a lovely pink and white complexion.

Lillian B. Bird is still another type—good when well done. Its color is charming; nothing "off" about it, just the right tone. We sometimes grumble about the odd shades of many chrysanthemums as being of little value to the general florist. Take my word for it, they are "not in it" with sweet peas. Some of the "new" colors are simply "horrid."

Mrs. D. D. L. Farson and *Lizzie Cartledge* are good samples of the greatly improved reflexed type. *Mrs. Fottler* is the best of its class and type. Its silvery shade of rosy lilac is a better tone of color than any of its numerous seedlings. At maturity its soft fleecy outlines the ladies term "fluffy." "Just look at that big fluffy flower," they say, "isn't it sweet!" *Mrs. Irving Clark* of the pæony type is too coarse to suit me, but commands respect for its size; "big head and little in it" is what I say of it.

W. N. Rudd is probably the best of the elk's-horn type, and John H. Taylor represents the reflexed *plumed* flowers, white, delicately shaded pink. There are several good ones of this class, all popular as cut flowers.

Mrs. E. D. Adams is an exhibition variety of the "swirled" type, of huge size at its best. It was well advertised at the time of its debut.

Mrs. J. G. Whilldin has been well received from the first. *Pity Gloriosum* has such a weak stem, otherwise there would still be room for it. Mrs. J. N. Gerard and *Rohallion* are struggling hard to hold their own with the new comers. Will they do it? *Mandarin*, an early Indian red, resembling *Tuxedo* in shape, did well with me last year. I was surprised to find it so good.

When Geo. W. Childs doesn't burn it is fine. What furor and interest it excited when it was first placed on exhibition at Orange, N. J. The rose *Waban* was also shown in excellent form at this time. I never saw it so good elsewhere. Strange it should have so deteriorated! How do you account for it?

Shasta, Mrs. W. K. Harris, *Eldorado*, Mrs. A. Carnegie and others are too difficult to grow to be satisfactory. If weak stems must go, weak growers will follow suit. As evolution unfolds its plans it is plain to be seen that only the fittest can hope to survive.

What may we expect ten years hence? Will the standard varieties of today hold their own, or do some kinds deteriorate? It would almost seem so, judging from the past. What do you think about it?

Tubiflorum, *Ismail* or *Thistle*, *Golden Thread*, *Medusa*, *Val d'Or* and *Mme. Hoyslet* are especial curiosities among the entire *chrysanthemum* family. The latter because it is the smallest of the tribe, but half an inch in diameter!

Chrysanthemums do well in the south, the West Indies, and in South America, where the thermometer runs up to one hundred and sixty degrees in the sun. You meet with the Chinese section more than all the others, and there is no regular season of bloom. They go at it when they feel like it, and are in proper condition.

The first *chrysanthemum* I remember to have seen was a magenta pompon 'way back, when I was a little chap some thirty years ago. As I recall it now it was a shapely plant, full of flowers, standing in a bay window of a friend's house. I noticed it in passing. I stopped, looked, went in and admired. Just to think of it! A plant like that in full bloom 'way into November! Florists were a *rara avis* in those days. A tea rose was a novelty, coleus almost unknown, no double geraniums, palms seldom seen, and so on. Times have changed! Do you manage to keep your end up? progress, and not fall into slovenly retrogression? As little orphan Annie says:

"The gobble-uns 'll git you,
Ef you
Don't
Watch
Out!"

Gradually I became used to seeing chrysanthemums; and the rich yellows of the Chinese section began to show up here and there. Early in the seventies I grew *Laciniatum* for cut flowers. I thought it was an awfully pretty thing, and still think so, though it has been crowded to the wall by the big fellows that have come after and rule the day. Bulls and bears have the best of it now and control the market. Not much show for pompons and anemones! Both these classes resent the injustice of being placed so entirely in the background.

M. Charles Lebocqz is the most violent in his vituperation, as he was the representative leader of this class. A fellow who has been "cock of the walk" doesn't enjoy being knocked from under; 'tisn't human nature, and please give chrysanthemums credit for having "feelins" as well. Thirty years have marked marvelous changes in the old time *artemisia*, as it was called then. How long ago is it, some twelve years — '81-'82 — since was introduced to America a set of imported "mums;" among them the Japanese varieties *Gloriosum*, *Mme. Desgranges*, *Lady Selbourn*, *Mme. La Croix* and *Fantasie*? Well, they were great, were they not? The interest and enthusiasm excited by these early adventurers, with John Thorpe at the helm, has worked wonders, and made "Uncle John," as some one has said, the godfather of the chrysanthemum in America.

In this connection I would mention the valuable service of H. Waterer as importer and introducer. I would not forget the obligations that are due the veteran W. K. Harris. I honor that man for his grand service to the "mums" as well as his knowledge and skill in other lines of the florist's art. In the wake of these early beginnings a noble host have followed on. They are all representative men known to you all. I need not particularize. Thus was the success of the chrysanthemum assured by the painstaking study of practical workers, and improvement has been both steady and rapid to the present time. So thoroughly has the subject been entered into by these experts, reducing theory to practice in the matter of seeding and hybridization, *et al*, that we have even discounted the Japs. American chrysanthemums abroad are receiving high honors, and the most distinguished attention, same as our ladies always command. God bless 'em — the ladies!

What improvement *can* be made remains to be seen. Certainly not any great stride as to quality, substance and build of flower blooms, the standard sorts are really quite good enough in this respect, and habit and growth is about what it ought to be, sturdy and short-jointed. There will doubtless be many new shades and tones of color, probably a much brighter red, possibly a blue (not dyed in the wool), and again distinctly striped and variegated kinds if you care for them.

What size they will attain, too, is a matter of conjecture and speculation. The big Japanese sort referred to is quite single and not what we want. Let the good work go on, I say, but at the same time, attention growers. Look to your laurels. Don't attempt to gull either the

unsophisticated public or the poor florist with anything inferior to what we already have, or we'll cry out with the small boy, "what ye givin us?" No, indeed, it won't work, we have had enough of this sort of business along back. Let's stop it.

But we will accept a Vigilant for outside breezy water and white-caps, if she can hold on to her centre-board, and award the cup to Britannia for inside work. There are Vigilants and Britannias among chrysanthemums, both good in their respective place, and excel under certain conditions either for cut flowers or exhibition.

How old is the chrysanthemum? It is as old as the hills, ye flower of the gods. Yet I have never been able to find out definitely; the Japs won't tell us for a fact, and the Chinese keep "mum." Anyway, it comes to stay, so what's the odds! It doesn't hardly do to rake up ancestors, rarely is it wise, we might unearth skeletons, and skeletons are not always dry bones, they sometimes have unsavory odors. Isn't it enough that it's the biggest flower out, and likely to remain so?

As we have already said, it is the flower par excellence for decorations and general decorative work. Apropos the common fault is overcrowding.

I have one or two chrysanthemum "yarns" before I close.

A customer came into my store last November when "mums" were in good display. "Vell, how you vas, mein Herr. My! shiminies! ain't dose nice ein grosse posy blumen," pointing to a vase of big fellows. "I vants ein sausage bokay vor mein best girl." "A sausage bouquet?" I thought a moment — "Ah, I suppose you refer to a corsage bouquet?" "Ya, dot ist so." "Well, one of these large blooms will be amply sufficient, I think." "I mind notings the price, Katrina ein shöne fine frau-lein, makes your eyes most vater, see 'er pooty vace. I dakes de vohl lot," and he did.

Katrina must have been the bloomingest girl out mit her big "sausage" bouquet.

I had an order for a church wedding; the bride's bouquet was a huge bunch of Ivory "mums," to be carried by a small boy as page. It was a comical sight to see the little chap stagger under his load. For once people forgot to look at the bride.

A young minister, who was inclined to take love for a text, as parsons sometimes do, was courting a pretty girl, a musician to-wit. One day he took her a box of chrysanthemums, but she was not at home, so left them with Bridget, who passed them over to her mistress as "Christian anthems," that Rev. So and So had sent her, with his compliments. Without undoing the parcel she returned the same with a curt note, "That she preferred to select her own *music*."

What's in a name? Anything that smells as sweet would be a rose! Shall it be plain "mum," chrysanthe, or chrysanthemum?

Let me not entirely exhaust your patience. I close with this toast:

Here's to the health — a *votre santé* — of every American florist, man

or woman, born of any nationality, so long as their feet are on American soil, American good will above them, and America's blue sky is over all—*provided*—that they pin their faith on the chrysanthemum.

(At the close of the essay the Convention manifested its appreciation of the treat it had enjoyed by long continued hand clapping and cheers.)

Mr. C. WILLIAM TURNLEY, of Haddonfield, N. J.: Mr. President, I rise to express my high appreciation of this very elaborate and complete essay on the Queen of Autumn. It is the most interesting essay that I have listened to in many a year. I think that the essayist is pre-eminently entitled to a vote of thanks, and I now move that a vote of thanks be extended to him for his very elaborate and complete treatment of this subject.

Mr. P. O'MARA seconded the motion.

Mr. JOHN N. MAY: I think we have been entertained in a way that deserves more than the usual recognition; and, with the permission of Mr. Turnley, I move to so amend his motion as to provide that the thanks shall be tendered by the members rising.

Mr. May's amendment being accepted as a part of the original motion, and the latter being carried unanimously, the Convention arose and tendered its thanks accordingly.

AQUATICS.

The subject of the next essay was "Aquatics," and the paper was read by its author, Mr. Wm. Tricker, of Clifton, N. J. It was frequently applauded. The essay was as follows:—

Mr. President, Ladies and Gentlemen:—This is a progressive age, and as floriculture is making rapid strides it behooves every florist to keep abreast of the times. During the past decade much has been accomplished in our profession; many additions have been made to the list of useful plants for general decoration and for cut flowers; the increasing interest in cultivation of the rose and carnation has resulted in the formation of a Carnation Society, and later, Rose Society; but no one dreamt ten years ago there would be a Chrysanthemum Society. The introduction of the Chrysanthemum as a florists' flower was an innovation, and many considered it only fit for Chinese and Japs; but the stately Queen of Autumn is with us still in all her splendor. More can be said of the wondrous increase in the demand for palms, ferns, ornamental and flowering plants for decoration, and what shall we say of the change in our public parks, gardens, and cemeteries; the millions of plants grown annually for their embellishment, and for private gardens, from those of the millionaire to the small plot of the mechanic, how many millions more? This is a vast field for the florist, and floriculture knows no limit.

Aquatic gardening is apparently in its infancy, though aquatics are as old as the hills, but this class of plants now commands our attention. Aquatics are associated with the history of the ancient Egyptians, where mention is first made of the Egyptian lotus, *Nelumbium speciosum*, the worship of which was common with them. Sculptural representations of it are found among the ruins of Egyptian temples. It was not only known to the ancient Egyptians, but was common in olden times in East and West India, China, Japan, Persia, and Asiatic Russia. The Chinese have ever held it in sacred regard, but that character was not limited merely to ornamental purposes; the roots (or tubers) were used and still are as an article of diet. The American lotus, *Nelumbium luteum*, was well known to the Indians as an article of diet, but has of late been disregarded. This is a distinct species and must not be confounded with the Egyptian lotus nor Pharaoh's locust, with which we have been so familiar this year.

Nymphaeas are also widely diffused, and are found in all parts of the world, each different country possessing species peculiarly its own. But of all the nymphaeas no species can compare with *Victoria regia*; and although many species were known in England prior to the introduction of the latter, the cultivation of aquatics received a stimulus thereby, which extended to the United States, the effect of which is felt by us this day. The discovery of this wonderful plant by Mr. Bridges, an English traveler, in 1845, created such an enthusiasm as nearly cost him his life. His first impulse was to obtain specimens of the flower, and he would have to attempt to enter the water, but was warned by the Indians who accompanied him that the stream swarmed with alligators; happily for him and us he lived to express his wondrous amazement of his discovery; he successfully carried to England the seed that produced the first plant, which became so famous. This was in the year 1849, when a tank was built expressly for the new plant in the great conservatory at Chatsworth, under the management of Mr. Paxton.

It is interesting to note that they were progressive florists in the United States at this date, although neither rapid transit nor ocean greyhounds were established, yet the result of such an achievement in floriculture was not only known here, but a similar tank and greenhouse were constructed, and the *Victoria regia* was successfully grown by Mr. Caleb Cope, Philadelphia, Pa., in 1851. Considering the time when the *Victoria* flowered in England — November, 1849 — there was little time lost, and this act exhibited an enthusiasm and enterprise worthy of our day.

The foregoing is the earliest record of aquatic gardening in this country. With the *Victoria* was also introduced *Nelumbium speciosum*.

The construction of the *Victoria* tank and house was such as to stimulate natural conditions. The warm water and tropical atmosphere were not enough; the water had to be kept in motion; a water wheel was constructed for this purpose, and a stream of water constantly flowed, which was conducted into a cistern or reservoir in the middle of the vegetable

garden which was used for watering in those days, before city water hydrants and hose were thought of. In this cistern the *Nelumbium speciosum* was planted and was a great success. After this small aquariums and ponds were made out-of-doors by different people and aquatics were more or less grown.

It is sad to relate of this enterprising gentleman, as of many others since, that he died very shortly after this event and that the glory and pride of this horticultural establishment thereafter departed. On this historical spot stands the Forrest Home for Aged Actors.

Yet another, a pleasing feature in connection with this first *Victoria* in the United States, and which makes this event most interesting. We have today at the head of the Department of Parks in the capital of the Union, a man of singular ability, experience and judgment, who was an employee in the gardens of Mr. Caleb Cope when the first *Victoria* and lotus were grown. I refer to Mr. Geo. H. Brown.

The State of Massachusetts appears to have been the next in order of date where the cultivation of the *Victoria regia* was engaged in; the earliest grower in that State being John Fisk Allen, of Salem, who on the 18th of June, 1883, exhibited a leaf of *Victoria regia*, four feet in diameter; on the 16th of July, one five and a half feet, and on the 4th of August, a flower, all at the rooms of the Massachusetts Horticultural Society. Daniel Waldo Lincoln, of Worcester, was the next cultivator in Massachusetts; he had the *Victoria* soon after Mr. Allen, but the exact date is not known. The *Victoria* still led the way, and in the year 1856 it was grown in Cincinnati by Mr. George Pentland, gardener to Nicholas Longworth, Esq., but its cultivation did not become general, and would not now under such expensive modes of culture.

Attempts to cultivate *Nelumbium speciosum* are reported prior to Mr. Cope's venture. In 1839 it is stated by Hovey that *Nelumbium speciosum* was naturalized near Philadelphia, blooming abundantly all summer, and growing in a shallow ditch where it covered the surface of the water with its broad peltate leaves and strong flower buds, which expanded in all the splendor of oriental magnificence. The report was discredited by the Boston boys who contended it was nothing more than the American lotus. However, the archives of the Pennsylvania Horticultural Society contain the following report (if not destroyed by fire): At the meeting held February 1840, the committee on distribution of seeds submitted their report, from which it appears two parcels of seed had been received; one from Calcutta, presented in 1838 by Dyllwyn Parrish, contained among other things seed of *Nelumbium speciosum* and *N. album*, and Mr. R. Buist succeeded in raising plants of these species, which were considered very rare in this country, if indeed they existed except from these Calcutta seeds.

From 1856 to 1876, very little was done in the way of aquatic gardening, but at the latter date Philadelphia was again to the front, and a plant of *Victoria regia* was a novel and attractive feature of the Centennial

Exposition. About the year 1880, Mr. Sturtevant reintroduced *Nelumbium speciosum*, when it was planted in a pond near Bordentown, N. J. Here was the most successful attempt to naturalize this oriental species which has astonished both the new and old world. Mr. Sturtevant also succeeded in introducing several species of *Nymphæa Victoria* and a full line of aquatic plants which were distributed to all parts of the United States.

About twenty years ago Mr. Samuel Henshaw, of West New Brighton, Staten Island, established *Nelumbium speciosum* from seed obtained from the late Secretary of State Frelinghuysen, who got them from the United States Consul at Japan. But many years before that, the late Thomas Hogg sent to Isaac Buchanan about thirty varieties of *nelumbium*, which were all lost through being planted in running water, in the grounds of the latter gentleman, at Astoria, L. I. Mr. Henshaw also obtained a plant of *Nymphæa cœrulea* in 1875, from the late Wm. Bennett, of Flatbush, and I learn from the same source that L. H. Meyer, of Clifton, S. I., grew *N. Devoniensis* about the same period. In 1880, Benjamin Grey, of Malden, exhibited before the Massachusetts Horticultural Society, *Nymphæa Devoniensis*, *N. cœrulea* and *N. dentata*, receiving an award therefor.

In 1883 Hovey & Co. and Mr. Grey exhibited *nymphæa*, and in 1884 N. S. Simpkins, of Yarmouthport, entered the field.

In 1886 aquatics were introduced into Central Park, New York. *Nelumbium speciosum* is there naturalized and is one of the most striking features of the park.

In 1888 L. W. Goodell appeared on the scene with a tank of aquatic plants at the annual exhibition of the Massachusetts Horticultural Society. A year later H. H. Hunnewell exhibited a collection.

Amateurs now commenced the cultivation of aquatics, and choice specimens were to be seen at Newport and in the neighborhood of Boston, Chicago and other cities. Mr. Chadwick, president of Chicago Horticultural Society, grew aquatics, which undoubtedly led to the introduction of these plants into Lincoln Park in 1888, then under the able management of Supt. J. A. Pettigrew. The cultivation of *Victoria regia*, as well as all available *nymphæas* at that day has given Chicago and her parks a world-wide reputation. Other parks and gardens have introduced aquatics with surprising results, and today they are the most popular plants. The *Victoria* has been grown in the Botanic Garden, Washington, D. C., and other Southern States without artificial heat after planted out, and probably the first instance of such is recorded by the Wilmington, N. C., *Messenger*, when Dr. Bahnson, after several attempts, succeeded to flower the *Victoria* in the open at Salem, N. C. In most cases it has been only a partial success when attempted to be grown without artificial heat; it must necessarily be late in the season before planting out or run the risk of losing all (as is the case this summer at Washington.) In many instances where steam power is used in

factory, pump or for other purposes, the waste steam can be utilized for the heating of the tank, but the safest and best method is to have an independent heating system.

The introduction of Victorias into our gardens and parks opened up a wide field for the general cultivation of tropical nymphæas, which has now become general in most of our public parks; also by a large proportion of the wealthier class who own and maintain beautiful grounds. A few enthusiastic amateurs who grew aquatics for pleasure and recreation have done more for the advancement of this now popular class of plants than all the public institutions in the country, and it may safely be said that in no other country can such aquatic gardening be seen at the present day as in the United States.

In England, where every known variety finds a home, few, if any, growers have ventured to cultivate the tender nymphæas save in aquatic houses; hence it is very difficult to compare the same or to know the species by description of plants grown under glass with less light and solar heat, as given. The plants here are more vigorous, have more substance, and the color of the flowers and foliage is intensified.

Aquatics attracted the attention of foreign visitors at Chicago last summer, as well as many other visitors, and many received an object lesson which will be productive of good results.

It is very noticeable that, from very early date, in this as in all branches of horticulture, the true cultivator desired to improve, if possible, original species, and as a result the first hybrid nymphæa was effected by Mr. Paxton, gardener to the Duke of Devonshire, at Chatsworth, England, in 1850. After it came *N. Kewensis*.

The first hybrid raised in this country originated with Mr. E. D. Sturtevant, and was named *N. Sturtevantii*; it is a flower of unsurpassed merit. M. B. Latour-Marliac surprised the world with his no less wonderful productions, which were exhibited at the Universal Exhibition, Paris, in 1889. These have gained a world-wide reputation, and have given an impetus to the general cultivation of aquatics, especially of hardy nymphæas in Europe and largely in the United States.

Among growers in the United States several natural hybrids have been effected by insects, which work is likely to be repeated where aquatics are grown in large ponds. One of the best selections of such is *Nymphæa odorata Caroliniana*. I had the privilege last year of presenting before the public at Chicago, some hybrids which were the progeny of carefully selected parents. These are quite distinct and desirable varieties.

This assembly represents all the different phases of floriculture, cut flower and commission men, plant growers, wholesale and retail, in all branches. There is a growing interest in floriculture. Parks and gardens are public factors in this line, and florists must grow various kinds of plants to meet the ever increasing demand for the embellishment of the home, the flower garden, parks and cemeteries; and swamps, bogs,

ponds, now unsightly and in some instances nuisances, are destined ere long to become veritable Edens. The time is come when people not possessing a natural piece of water conclude they must have some kind of a water garden, and artificial ponds, tanks, basins are made to accommodate these charming and interesting water nymphs. This particular flora is represented at the present time by about fifty species, collected from all parts of the globe, and hybrids; also the Indian, Chinese and other lotus, and innumerable other aquatic plants.

Among the hardy plants are classed all nelumbiums, nymphæas, including the native species *N. odorata*, *N. o. gigantea*, *N. o. Caroliniana*, *N. o. rosea*, *N. tuberosa* and *N. t. rosea*; also *N. alba*, *N. a. candidissima*, *N. candida*, *N. pygmæa*, *N. Marliacea-rosea*, *N. M. albida*, *N. M. carnea*, *N. M. chromatella*, *N. Laydekeri rosea*, *N. odorata sulphurea*, *N. helvola*. These are all perfectly hardy, and once established take care of themselves as do the native species. They embrace the soft and delicate shades in color from pure white, yellow, pink, deep rose, and produce charming scenery with their pleasing foliage and enchanting flowers, associated with numerous water loving plants, as iris, spiræa, variegated rushes, acorus, reeds, arundo, bamboo, typha, sagittaria, hibiscus, ornamental grasses, etc. But we must not omit the most gorgeous varieties of water lilies from the tropics, the pale to deep blue, or royal purple, the carmine and crimson. These are as easy to grow in the open in summer as is a coleus, with unquestionably greater results. The water garden is not complete without the *Victoria regia*, but at present this will not be extensively grown, though with a nominal outlay, or where a tank can be heated by the greenhouse plant, the *Victoria* will be a wonderful attraction, and business men know what an attraction is worth.

Discussion of the subject being invited, Mr. GROVE P. RAWSON responded: Mr. President, I regard this as a very valuable paper. It will read well afterwards too. I regard aquatics among bedding plants, if I may speak of them in that way, as occupying the same position which the orchid occupies amongst cut flowers. Over there in the Exhibition Hall, I think they command more attention than anything else; and, as the essayist has said, they are going to be more and more in demand. I wish you could see aquatics in South America, in habitat, as I have. Whole acres of *Victoria regia*; many of the flowers measuring fourteen inches across, with the floating islands of aquatics that form in the dry season, moving about and occasionally anchored here and there, comprising nymphæas, nelumbiums, *pontederia*, and other species — the whole making a most beautiful picture. I believe that aquatics have a great future in America, and that they will be more and more in demand.

I think we ought to give a vote of thanks for this paper, which is evidently one that has been prepared with the most careful study. I make a motion to that effect.

Mr. Rawson's motion to tender thanks to the essayist, Mr. Tricker, was adopted unanimously.

SUCCESSFUL VIOLET CULTURE.

An essay on "Successful violet culture," by Mr. ANDREW WASHBURN, of Bloomington, Ill., was the next to command attention. Its author was not present.

Secretary STEWART: I learn that Mr. Washburn has been taken ill and had to leave the hall. Mr. O'Mara has kindly consented to read Mr. Washburn's short paper on violets.

Mr. O'MARA here came forward, and read as requested.

The essay was as follows:—

This subject of so much interest and importance to the members of this Society, having been assigned to me for a reply, I have attempted with some hesitancy its consideration, mainly for the reason that others who grow violets successfully advocate quite different methods; therefore I shall speak only of the way in which we have found success.

We propagate our plants by a division of the old stool, not later than the middle of February, using only vigorous offshoots; discarding all plants having large and woody-like stems; put in two inch pots, and grow in a cool house under the same conditions we give the flowering plants (which will be named later), and when well rooted remove to cold frames there to become hardened and ready to plant in the field as early in April as possible.

We plant in the field in rows fifteen inches apart each way in good rich soil, and give frequent cultivation with the wheel hoe. During the summer the plants are kept free from weeds and all thin runners removed, care being taken not to remove the new growing crowns, so that by fall there should be enough bud producing crowns around the original plant to make plants from five to eight inches in diameter.

Violets should be planted on well drained land, and at no time should be allowed to flag for want of moisture, or their vitality will be impaired and the plants become an easy prey to disease. We have found it necessary during our past dry summers to irrigate our plants, and to this we attribute largely our success.

The plants should be carefully lifted in September before danger of heavy frosts, care being taken that their roots be broken and exposed as little as possible, and planted in the houses in about six inches of good soil.

This soil we prepare several months before it is wanted for use, and is composed of good loam and well rotted manure from the stables; after setting, the plants should be thoroughly watered and for several days frequently syringed.

At this time a light shading on the glass will be beneficial. We have sometimes used a clay wash which will be removed by the first good rain.

We have had the best success in houses about ten feet wide running east and west with a walk in the centre and tables on each side, built so as to bring the plants as near the glass as possible and with provision for ample ventilation.

The night temperature should be kept as near as may be at forty to forty-five degrees, with a day temperature of from sixty to seventy degrees. Higher temperature will lessen the formation of buds and encourage a growth of foliage.

In cold weather much care should be exercised in watering, and the foliage should only be wet in the morning of clear sunny days; at other times if needed, water only the ground between the plants. During the flowering season the plants should be kept free from runners, and all leaves removed that have passed their usefulness.

By this method of culture our plants have given an average of thirty to forty good flowers from October to March.

Of violet disease I am unable to speak, we have never had it. Man in vigorous health is not susceptible to disease. Good sanitary conditions are necessary to good health, and as with man, so with plants; they will respond to like conditions, and given an abundance of pure air, water, cleanliness and suitable cultural methods may we not hope to escape violet disease and still have success in violet culture?

After the usual applause, discussion of the paper was invited.

MR. GROVE P. RAWSON, who made the only response, said: I also have been fortunate in growing violets, and I regard this paper as presenting the truth in a nut-shell. There is not much for me to say.

On motion of Mr. W. B. DU RIE, the thanks of the Convention were voted to Mr. Washburn for his practical paper on violet culture.

THE QUESTION BOX.

President ANTHONY here introduced the "Question Box," and announced as the first subject, "The use and application of sub-irrigation in plant growing," the answer to which had been assigned to Mr. John N. May.

Mr. MAY responded: Irrigation is one of the things which we, as florists, do not thoroughly understand in its full importance as a factor in producing the best results, particularly in such a season as the present one; and I am afraid that anything I may have to say will throw but very little light upon the subject, as my experience in this line has been very limited indeed. But I have found that a very liberal application of water

at the roots of plants is beneficial, whereas if only a limited quantity is given the beneficial effect is not apparent. The best results obtained have been, so far as my observation goes, in giving a large amount about once a week rather than smaller amounts more frequently. The mode of application is to draw a shallow drill, four or five inches deep, along each side of the row of plants which it is desired to irrigate; then turn on the water and allow it to run slowly until the trenches become full from end to end. Then regulate the supply so as to make it just sufficient to keep the same full as long as it may be considered necessary to thoroughly soak the whole soil as deep as the roots go. With such a crop as sweet peas, for instance, which root very deeply, fifty gallons of water to the square foot planted will be none too much if the soil is naturally of a porous nature. Such an application once a week will prove infinitely more beneficial than a much smaller amount applied oftener. The nature of the sub-soil must be studied, of course, and the amount to be given regulated accordingly. No stated rule can be laid down as suitable for classes of soil or varieties of crop to be treated, but the same rule applies here as in all other matters appertaining to our business — what is worth doing at all is worth doing well.

No response was made in regard to the next three subjects in the "Question Box." The subject, "Profitable winter blooming plants," to which a reply had been received from Mr. W. K. Harris, closed the list of subjects.

The reply of Mr. HARRIS was read by Secretary STEWART, as follows:—

The question assigned to me to answer is "Profitable winter blooming plants." The question is a broad one, and gives no specific meaning. I suppose the inquirer meant plants grown in pots for the purpose of decorating conservatories, windows and other places on festive occasions. The word "profitable," in this connection, means that plants can be disposed of for more than the cost of production; or to obtain from them how much more, is a question for each individual to decide for himself. I desire more than some of my brethren, and having my desire gratified, I am enabled to meet my obligations more promptly than many of my fellow craftsmen.

From my standpoint of profit, there are but few varieties of flowering plants in pots that will pay to grow, and they must be grown in limited quantities. This branch of our business is on the wane. The demand has been growing less year after year for the past ten or twelve years. There was more demand fifteen or twenty years ago than there is today for winter blooming plants in pots. Under the cool shadows of such facts there is but little encouragement to foster or develop nature's beauty in form of blooming plants in pots:

To brighten weary winter's gloom,

And to scent its cold breath with the fragrance of June.

The scene of this gloomy picture from one branch of our business lies in Philadelphia, the place where I have watched and catered to this line of horticulture for the past twenty-seven years. (My remarks refer to this locality only, not being acquainted with the demands of other markets.) I have grown nearly all of the popular plants of the day, and have introduced many novelties with some success, and many failures. I will not attempt to name or enumerate the many varieties of plants I have grown in the past, as I do not wish to take up too much of your time, nor to wander so far from the question, although it might be interesting to some.

The following, I think, will be more or less profitable to grow. I will open the list with chrysanthemums, as the festive season opens with the advent of her queenly beauty. They are wanted in large quantities, but not as many as former years. Poinsettia and stevia are both good in limited quantities for Christmas. Carnations, in variety, are wanted, but do not grow them unless you can produce good plants in six-inch pots full of buds and bloom for fifteen or twenty cents each; I can not. *Begonia incarnata robusta* is the finest of all begonias when well done for the holidays. *Begonia rubra* is a fine pot plant when well grown. Cyclamens and primulas are very popular, but the former require some skill and much care to grow. *Lilium Harrisii* is in fair demand from Christmas to Easter. *Azalea indica* is the most popular of all winter blooming plants in pots from December to May. *Genista canariensis* and *raccmosa* in small quantities from the 1st of February to Easter. Ericas or heather; *hyemalis*, *Wilmoreana* and *gracilis* are the best of this extensive class of plants. *Cineraria hybrida* is always wanted in goodly numbers. They make a big show on the florist's counter, but a very small one on the grower's ledger. Paris daisy (*Chrysanthemum frutescens*), is quite a favorite all winter. *Mahernia odorata* is admired for its fragrance, or its vulgar name "honey bell," I know not which. Mignonette, heliotrope, violets, pansies, English primroses, hyacinths and narcissus are all wanted in limited quantities in the latter part of winter and early spring; but the price is so low for them, it is a question to me whether they are worth bothering with. Some years ago there was a good demand for this class of plants at fair prices, but they no longer seem to please the masses.

The above is about all I can think of that would pay to grow in any considerable quantities, although there are many other flowering plants that could be disposed of in moderate numbers, such as libonias, linums, and the many varieties of winter flowering begonias, etc. In fact, any plant that is pretty and showy will find some admirers, but not enough to make it an object of profit. We can not give correct advice to a grower what he should grow. One man may be able to grow a plant quicker and better than another can; therefore he could grow it cheaper, or make more money at the same price than his competitor. Hence the importance of self reliance upon self judgment. And again, I have ever

found, he that is always giving advice himself is most in need of that which he parts with so freely. One thought more, Mr. President, and I am done.—

Nature, like friends, will help the strong,
 Neither has much time for the weak, in life's busy throng;
 So work, and on yourself depend!
 Then Nature kind will make yourself your dearest friend.

On motion of Mr. THOS. FOULDS, of Gwynedd, Pa., the thanks of the Society were voted to Mr. Harris.

EXPERIMENTAL STATION AT CORNELL.

Secretary STEWART here read for general information, a letter addressed to the Society, which had been received from Mr. Michael Barker, of the Cornell University Experiment Station. The letter was as follows:—

ATLANTIC CITY, N. J.

MR. WM. J. STEWART, FLORISTS' CONVENTION HALL:—*Dear Sir,*
 —It will doubtless interest you and many of the trade and amateur growers to know that we are experimenting largely with violets and chrysanthemums. Our immediate aim, so far as chrysanthemums are concerned, is to collect all the novelties available, and to grow and compare them with standard varieties so as to ascertain with some accuracy the amount of progress which is being made with these flowers. We also propose to grow all the varieties of the violet in the market with a view to the selection of kinds most useful to the florist, and we shall give considerable attention to the insects and diseases which affect chrysanthemums, violets, roses and carnations.

Through the generosity of some of the leading growers, we have received a full assortment of the new chrysanthemums sent out last spring; but we have still some space for such varieties of the violets as are not common in cultivation, and at all times we shall be glad to have diseased or insect-infested specimens of any of the leading florists' flowers and plants.

On our investigations of these matters we shall report to all concerned in due time, and thus we hope to be of some slight service to the florists throughout the country. All we ask in return is a supply of material to work upon. Next year we propose to enter upon even more extensive experiments with chrysanthemums and violets, and it is expected that we shall then have such additions to our plant as will enable us to give roses and carnations similar consideration.

I regret exceedingly that pressure of work deprives me of the pleasure of meeting many old friends at Atlantic City, especially as I am anxious to personally thank all those who have already aided or promised to aid us in the foregoing lines of action; but Prof. L. H. Bailey, who is the leading spirit in the movement, will attend the Convention on Wednesday and gladly furnish interested parties with all details of our intentions. With best wishes for the success of the Convention,

Yours very sincerely,

MICHAEL BARKER,
Horticultural Department, Cornell University.

Hon. C. W. HOITT, of Nashua, N. H., suggested the necessity of taking some formal notice of Mr. Barker's communication. He said that the experiments were of considerable importance, and he had understood that the reports were accessible to every member of the Society. He knew that Secretary Stewart, with his usual diligence and courtesy, would acknowledge the receipt of the letter, but he thought some further action in the matter should be taken, and that it was due to Mr. Barker that the Society should express to him its thanks for the part he had taken, should assure him of its assistance and co-operation in the work. He made a motion accordingly.

The motion was adopted.

An adjournment was here ordered until the following day.

THIRD DAY — MORNING.

ATLANTIC CITY, N. J., August 23, 1894.

The attendance of members at the opening of the session was unusually large but a diminution of the number was perceptible immediately after the announcement of the result of the election for officers.

MISCELLANEOUS BUSINESS.

Secretary Stewart announced, for general information, sundry details of the arrangements for the social entertainments on the following day; also the names of Vice-Presidents who had been elected by State delegations. Upon the request of the President, he called attention to the requirement for the exhibition of the badge of the Society by each member, before depositing his ballot for officers.

ELECTION OF OFFICERS.

The Society proceeded to the election of officers for the ensuing year, when President Anthony appointed the following as tellers to distribute and count the ballots, etc.: Messrs. C. W. Hoitt, Harry Sunderbruch, Robert F. Tesson, and Samuel Goldring.

The election of a President was the first in order. Ballots having been distributed and collected, the tellers retired to count the same and after some time, Judge Hoitt, on behalf of the tellers, made the following report, as the result of the ballot;

Total number of votes cast	221
Necessary for a choice	111
Of which number Edwin Lonsdale received	135
William Scott received	86

Mr. LONSDALE'S election was announced by the President, and the announcement was followed by long and tumultuous applause.

Mr. SCOTT: Mr. President, I would like to make a present of eighty-six votes to Mr. Lonsdale, so that we may consider he is elected unanimously. [Cheering.]

Mr. SCOTT, (responding to repeated calls), ascended the platform and said: Some two or three months ago it was proposed to me by some intimate friends of mine, it was not my own idea, that I should run for President of the Society of American Florists. I told them I was flattered but thought I could fill the duties of the office and would make a run for it. I had no idea of who was to be my opponent, but the moment I heard that the noble "Duke of York" was to be my competitor, I was less confident of success; and I do honestly think that if it had been anybody else than the "Duke of York," I would have received many more than eighty-six votes. I will give you another opportunity at it, it may be next year. In electing Mr. Edwin Lonsdale you have chosen one of the most worthy, amiable and honest men in this country. [Applause.]

Mr. LONSDALE, responding to calls, expressed his thanks for the honor conferred upon him. He said that, having had "the Great Scott" as his worthy opponent, he did not know which way the thing was going and therefore refrained from preparing a speech that would be worthy of the occasion and now had a good excuse for not having one prepared. He expressed the hope and belief that the Society of American Florists, which had been so successful, would, with the help he would get from every member, continue on in its career. He said he felt he could claim this because all could do something to further the general welfare, and he knew that every member had this at heart. [Applause.]

The election of a Vice-President being proceeded with, and there being but one candidate for the office, the Secretary was instructed, on motion of Mr. John N. May, to cast a ballot, representing the vote of the Society, for Mr. E. C. Reineman.

The ballot was cast and Mr. Reineman's election announced.

Mr. REINEMAN, being called upon, returned thanks for the honor conferred upon him. He remarked that he was not now a florist exactly, that he had been one but had been knocked out by the hail, though he had been with "the boys" ever since and hoped to remain with them. He pledged his utmost effort to advance the interests of the Society and said he thought he would have an opportunity to do plenty of work for it when the members came to Pittsburgh next year. He hoped to see a good attendance there, where everything needed in the way of public halls and the usual accommodations were to be had; and he felt sure that the meeting there would be a pleasant one.

The Society then proceeded to the election of a Secretary for which office but one candidate had been named.

On motion of Mr. P. O'MARA, the ballot of the Society was cast by Mr. Lonsdale for Wm. J. Stewart, who was declared unanimously elected.

Mr. STEWART (after being called out, and presented by President Anthony as the newly elected Secretary) said: I have just had the honor of being introduced to you as "your newly elected Secretary." I am glad to know that I am still considered so young as to be a new Secretary. [Merriment.] This is the eighth time that you have been pleased to honor me in this way, and with each repetition, I must say I appreciate it more and more as a proof not only of your satisfaction with the way I have done my work for you, but more than that, as an assurance of your friendship, which I have had every evidence of possessing, not only in my official relations with you, but wherever I have met you personally and socially. I do not know of anything in the world that would give me greater pleasure than the consciousness that I have the friendship, good will and affection of the florists of the United States. [Applause.] I have tried to do my duty in connection with this office in the past, and I certainly feel that I have an incentive to try more earnestly than ever and to work harder for you in the future. I do not know that any man could have a greater incentive than that which you have given me in this renewed proof of your confidence and esteem. I thank you sincerely. [Applause.]

The election of a Treasurer being proceeded with (for which office but one candidate had been named), the ballot of the Society, on motion of Mr. C. H. ALLEN, was cast by the Secretary for Mr. H. B. Beatty, who was declared unanimously elected for the ensuing year or until his successor should be installed.

Mr. BEATTY, being called out, returned his thanks. He said: Like Brother Lonsdale, I was so uncertain in regard to my election that I have not prepared any set speech, but your kind reception has much gratified me and I thank you very heartily for what I consider the greatest honor you could confer upon me. [Applause.]

Mr. JOHN BURTON, of Philadelphia, here made an announcement of certain details of the shooting match on the following day.

FERTILIZERS AND THEIR APPLICATION.

The next business, according to the program, was an essay on "Fertilizers and their application," by Mr. ROBERT SIMPSON, of Cromwell, Conn. The essay was read by Mr. Simpson, and received with applause. It was as follows:—

I must ask you to be as patient as possible this morning while you listen to my very prosaic remarks. Devotees of the rose, the orchid, the chrysanthemum and the violet have charmed us as they have descanted

on the beauty or sentiment of their favorite flowers, but you will all agree with me that my subject is not one which lends itself naturally to poetic utterance. The question of fertilizers, however, is one that interests every grower of plants and flowers, and if I cannot treat the subject from the standpoint of the chemist as well as that of a grower, I can at least relate a little of my own experience.

According to my observations a great many growers attach too little importance to the quality of the soil, especially for roses, thinking to make up for any deficiency by a liberal application of manure. But can the necessary elements be supplied in this way? I should certainly answer in the negative. If it were possible to get a soil sufficiently rich in all that is necessary for the proper development and sustenance of our greenhouse plants, without any addition of fertilizers, I would be only too glad to use it. Few of us, however, are fortunate enough to possess such a soil; one of the greatest mistakes, however, that a florist can make is to put up a range of greenhouses where the soil in the immediate vicinity is unsuited for greenhouse purposes. Nothing in the shape of large glass and model greenhouses, or even special treatment, can compensate for poor soil. The question then is, what can be considered the best soil for such crops as roses, carnations, chrysanthemums, etc.? My choice would be two inches from the top of an old rich pasture, where the soil is inclined to be a heavy loam and the land is low enough to catch the deposit from the continual washings, yet not low enough to be sour and wet; this cut in the spring as early as the land is dry and laid up with good cow manure of the previous season in thin layers in the proportion of four parts soil to one of manure; if the soil is naturally very rich less manure will answer, and if very poor a larger quantity should be used. Mr. Hunt, in his book, "How to grow cut flowers," strongly condemns the use of cow manure where the animals have been fed with slops from distilleries, claiming it to be as fatal to plants as the refined product is to man; if such is the case, beware! At any rate that from grain fed animals is so much stronger and better that whenever possible it should be used.

Horse manure I would never mix with the soil for roses under any consideration; it may when thoroughly decomposed be used as a top dressing, but its action in the soil is often pernicious in the extreme. I have seen it fill the beds so full of white fungus, resembling mushroom spawn, until the whole thing was matted together and smelled abominably; at other times toadstools would spring up so rank that there was danger of lifting the plants bodily out of the bench; it is needless to say plants cannot thrive under such conditions.

Sheep manure I consider one of the very best fertilizers we have, used either in liquid form or mixed with the soil at the time of planting; but I have never dared to mix it in the compost heap, for too much of it in one place is certain death to all vegetable life. I know of one large grower who declares he will never use another shovelful of it as long as

the world stands; upon enquiring how much he mixed with his soil I found he used somewhere about one part sheep manure and three parts soil. You won't be surprised his plants had the jaundice. We have proof of the powerfulness of sheep manure as a fertilizer if we look at the crops of grain produced by land that has been pastured with sheep. I know of nothing in the way of animal manure that can equal it as a crop producer, but we must use it cautiously; two hundred pounds to a one hundred foot house of roses or carnations will not be too much if it is pulverized and evenly mixed with the soil, or the same amount can be used as a top dressing. Having secured good soil and good manure and planted therein good plants, the most natural thing in the world is that they should grow, providing of course that all other conditions are favorable.

When we undertake to furnish food to a plant or a number of plants it is reasonable to suppose we will understand the particular requirements of the plants and the nature of the food we propose to supply; but I fear a great many of us will have to admit that our knowledge is very scant indeed. If we knew enough about the laws of chemistry to analyze our soils and determine what properties are lacking which are known to be essential to the complete development of certain plants, how much guessing and puzzling we might save ourselves, how many failures and partial failures we could prevent; and for the young men of today there is no excuse for this ignorance; if we for the space of one year would devote the leisure time now trifled away to the study of chemistry as it relates to our business we would acquire sufficient knowledge to make us much happier and wiser men. Searching for information on this subject, I addressed several inquiries to Professor Halsted, who I believe is here this morning, and I do not hesitate to say he will be most happy to reply to any questions of a scientific nature bearing on our subject. My first question was "To properly develop such plants as roses, violets, carnations and chrysanthemums what chemical properties should the soil possess?" Here is the answer: "The soil for growing roses, carnations, violets, etc., should contain among the leading ingredients of plant food, potash, phosphoric acid and nitrogen, these three being the elements that are most usually absent, one or all, in a soil that is unfit for such plants. In addition to these three substances there needs to be lime and a small amount of iron and other substances; but as these with rare exceptions are present in sufficient quantity nothing further need be said of them. Clay and sand make up the bulk of ordinary soil in connection with the decaying vegetable matter, and this latter furnishes nitrogen." Professor Johnson, in his work "How crops feed," says practically the same as Professor Halsted. Speaking of the relative importance of the different ingredients of the soil he says, "Those which like oxide of iron are rarely deficient, are for that reason less prominent among the factors of a crop; if any single substance, be it phosphoric acid or sulphuric acid or potash or magnesia, is lacking in a given soil at

a certain time that substance is then and for that soil the most important ingredient. From the point of view of natural abundance we may safely state that on the whole available nitrogen and phosphoric acid are the most important ingredients of the soil, and potash perhaps takes the next rank. These are most commonly the substances whose absence or deficiency impairs fertility, and are those which, when added as fertilizers, produce the most frequent and remarkable increase of productiveness.' These three ingredients then, nitrogen, phosphoric acid and potash, are the most likely to be absent or deficient in our soil, and for that reason are to us the most important.

How are we to discover their presence in the soil, and if not present how can they be introduced? In reference to the above I asked these questions: "What elements of plant food are found in unleached wood ashes, in nitrate of soda, in sulphate of ammonia and in kainit?" And received this reply: "The leading food element in wood ashes is potash, but as it is the residue after the burning of a vegetable substance, it contains all of the mineral substances which the plant takes from the soil, and the list would be a long one, including lime, magnesia, iron and not to forget phosphoric acid in combination with lime and so on. Nitrate of soda contains nitrogen in combination with sodium, and is a very satisfactory source of nitrogen; and applied in small quantities the plant quickly responds to the nitrogen that is thus received. Sulphate of ammonia also contains nitrogen, and one of the elements of ammonia which is united with sulphuric acid. Kainit is a mixture of very many substances, as potash, common salt, salts of magnesia, and other substances." All these elements or substances may be in the soil in sufficient quantity at the time we fill our benches and plant our roses, etc., and as a result the plants make beautiful growth, but after a time we fancy they are not doing so well, they haven't the same vigor, the same beautiful glossy foliage; the flowers are not quite as large perhaps, and we think something is wrong; and so it is, the supply of food is giving out, the soil is being exhausted probably ten times as fast as it would be out of doors; the growth is much more rapid, and while it only rains once a week, or once a month in the garden or field, it rains every day in the greenhouse, washing down through the benches each time in solution all the different kinds of plant food. It has been proven that plant food is carried down in the water through the drains of well drained land, in quantity sufficient to mature a crop of grain; this being the case we can readily understand how impoverished our soil in a greenhouse bench must become if the amount of food is not constantly added to.

As a general thing when rose foliage has a pale, yellowish, sickly look, it is a sign the plants lack potash, in which case I should use wood ashes at the rate of one barrel to a one hundred foot house of the regulation width. About a month ago we found a house of Perles planted for the summer trade that had just this look, but after a liberal dose of wood ashes they are today as thrifty and well colored as could be desired.

Fruit growers claim that the "yellows" on peach trees can be overcome to a great extent by a liberal use of potash.

Nitrogen, perhaps the most necessary food ingredient, is usually present in sufficient quantity I think where an abundance of manure is incorporated with the soil, but this is not always the case; and I have come to the conclusion that when plants in a greenhouse bench present a stunted appearance without any apparent cause, the roots being in a healthy state, and all other conditions being favorable, the soil does not possess nitrogen in sufficient quantity, or else what it does contain is locked up and is not available for the use of the plant. I had an illustration of this last fall in a house of *Mermet* and *Bridesmaid* roses. The house was not completed until sometime in August, hence was planted rather late, but the plants were large and vigorous, and the soil as far as we could tell fairly good; the house itself was all that could be desired, yet somehow the plants did not grow, but immediately after planting took on that hard look which none of us like to see. We waited as patiently as possible until a little ahead of Christmas, and then concluded something must be done, or we would never cut enough to pay for heating the house. We accordingly commenced a systematic feeding from a couple of barrels brought into the house, using sulphate of ammonia and fresh cow manure one week, and alternating with nitrate of soda and sheep manure. The animal manure was used in very small quantities, and the salts at the rate of a three-inch potful to a barrel of water. They were watered with one of these liquids once a week for about two months. The change was almost instantaneous, and was most remarkable; they at once began throwing up strong shoots from the root, and while they never grew as large as some of the plants in the other houses, yet they produced large crops of flowers, the individual blooms were large, the foliage was perfect; the plants in fact became so strong and vigorous that we selected all our cuttings of those varieties from these same plants, in preference to any others on the place. This should be a sufficient reply to those who claim, that while nitrate of soda and similar fertilizers may stimulate a plant for a time, they simply do so at the expense of the plant's constitution, being almost certain to produce a soft, unhealthy, unnatural growth.

Some years ago I had a house of *Mermet* roses which began to go back during the early winter, and it soon looked so disgraceful that we would have pulled out the plants if it had been possible to use the house for another crop, for they looked for all the world as if they were in the last stages of consumption. We debated for some time as to what we should do with them, and finally concluded to try the same experiment I have just mentioned, nitrate of soda and sulphate of ammonia. My employer had very little faith in them, but as he said, the roses were dying anyway, and if this new fangled stuff killed them outright there would be very little loss. The day after they had received the first dose, I took a look to see if they had improved any; you can imagine how I felt, for there

was hardly a leaf left on the plants. I thought "we have fixed 'em sure," but we picked up the leaves and kept right on with the fertilizers, and strange as it may seem, before spring this was the best house of Mermets we had.

I am fully aware when I speak of nitrate of soda, that some of you will shake your heads in disapproval; there have been cases of injury to plants, the result of its use (abuse I should say), and there will continue to be similar cases in all probability where care is not taken to use only the safe quantity. I have used nitrate of soda for almost all kinds of greenhouse plants, and am not aware that it ever injured any one of them.

A word about phosphoric acid; I can not tell you what symptoms are manifested by the plant when there is a deficiency of this ingredient in the soil, but as I have never heard or read of there being too much of it for the plants' welfare, we are safe in furnishing a liberal supply. There is no question of its being a great factor in furnishing food to plants. Bone meal is one of the best sources of phosphoric acid, yielding as it does from twenty to twenty-five per cent. I have in mind a farm which invariably produced wonderful crops; the only fertilizers used were barn yard manure, and for all root crops such as turnips, etc., a liberal sprinkling of half inch bones; this had been kept up for at least thirty years, and as there was a systematic rotation of crops each one fed more or less on the bone in the soil. It was not unusual for a crop of oats to average one hundred and twenty bushels to the acre. There is danger from bone meal in the greenhouse, however, if it has come in contact with acids; Mr. Hunt mentions having lost \$2,000 worth of new roses at one time in this way. It behooves us then to make certain that our bone is absolutely pure.

Lime is usually present in the soil in sufficient quantity, but an addition of this important ingredient to heavy or clayey soils is often very beneficial; it acts as an enricher, as a sweetener, as a pulverizer, and as an insecticide, hence its value to the florist. I had a peculiar experience this spring in the use of lime. Two benches of ferns planted out for cutting became infested with a black fungous growth which threatened the destruction of every plant; we scratched it off, but it grew again, and the plants got smaller daily, when it occurred to us to use air slacked lime as a top dressing; I was sure it would kill the fungus, and didn't know but it would kill the ferns too; but we tried it, a good covering, over crowns and all, and strange to say that while it did not kill the parasite, only checking it, it started the ferns into active growth, and since then we have picked in large quantities the longest and finest adiantums I have ever seen grown on a bench. It is hardly necessary to say I shall not be afraid to use lime on ferns in the future.

Perhaps the most satisfactory and economical method of supplying food to such plants as roses and carnations during the winter and spring months is by means of liquid manure. I have a decided objection to

laying manure on the benches as a top dressing in the late fall, or during winter, believing it to do more harm than good; it prevents evaporation and keeps the sun from the roots at the time when they are benefited the most by its direct action. I do not wish it understood that I dislike mulching at any and all seasons of the year, for I have regularly attended to this operation twice during the season with all tea roses, the first time in August, and the second about March; the first saves a great deal of watering and is entirely gone by November, and the March mulching gives the roots new material to run in and also prevents severe drying out. Between these dates and in fact after the latter date I consider liquid manure cheaper, cleaner in the house and more effective; for ordinary purposes that made from animal manure is the safest and best; four pecks of cow or horse manure, two pecks of sheep manure, or one of hen droppings, is sufficient to make one hundred gallons of liquid. I have known people who never thought liquid manure was strong enough, unless its odor was powerful enough to drive most people away from the house where it was being used; but this is against all reason and common sense, far better to use it weak and often; plants, like animals, should be fed regularly if they need feeding at all, not gorged today and starved for a month. Their food also should be changed from time to time, so that what is not supplied in one form may be found in another.

A word about the mode of applying liquid manure. The old method was to use barrels in the walks, and apply with the watering pot, and a beautiful job it is, crawling along a twelve-inch walk with a three-gallon can in front of you. I have been there, perhaps some of you have; with such a system the man who has charge of your houses is hardly likely to remind you when the appointed day for going through this performance arrives, and I don't blame him. This old fashioned method may do where the place is very small, and can hardly afford to put in anything very expensive, but where there is much glass something better and cheaper in labor should be devised. We have a system which works so nicely, that I will try to describe it to you as briefly as possible.

A large tank holding from eight thousand to ten thousand gallons is built directly under the stable; I should mention the fact that there is a cellar under the building, and in this cellar is our tank, six feet deep, half above ground and half below; the drainage and manure from six horses and two cows find their way into it through an opening in the floor, and this with a change to sheep manure, or nitrate of soda occasionally, gives us all the strength we require. By opening a valve the liquid flows by gravity into another tank which is connected with the steam pump. If the water should get too strong we dilute by starting up the clean water pump and running both at the same time. There is no carting of manure, very little mixing, and no disagreeable sights or smells for visitors. You will readily understand the saving in labor over the barrel and watering pot system, when I say that six men with hose and one to run the pump can water everything in our greenhouses in half

a day, whereas with the old method it would require seven men four full days to do the same work, costing just seven times as much, and not giving half the satisfaction.

In conclusion, I would say, that with fertilizers, as everything else, we must study, we must observe, we must experiment; Nature's secrets are all locked to the indolent and indifferent, but to the man who will dig, who will search, who will explore, she will yield the key, and lay bare her hidden treasures.

Mr. BENJAMIN HAMMOND, of Fishkill, N. Y.: I listened with much pleasure as Mr. Simpson laid bare the basis facts of successful fertilization of soil, laying great stress upon the simple fact that no plant can grow unless it be fed. It has been said that water is Nature's common carrier, and it is well known that all plant food, to be available, must be in solution. A practical knowledge of chemistry is one pre-requisite today for any man who assumes to be a manager of a place, whether large or small, in which plants are grown for pleasure or for the market. The growth of plants varies little in the assimilation of food from that of the animal body. If you want bone in your nursing infant it is necessary that the infant should have what is necessary to make bone. Lime water, as you know, is a favorite formula with a physician to give to a puny, delicate child. If we want woody fibre in a plant it is necessary to give it that which constitutes the strength of woody fibre. If you want firm and temperate growth, you want the substance that makes growth to be applied in a soluble form, so that it can be absorbed by the plant into its cellular tissue and can develop the herbaceous matter.

These things have been so well brought out by Mr. Simpson, that in no pamphlet or book that it has been my fortune to read, have I seen them so well and concisely stated as in his paper. The fact with which he began should be borne in mind; that it is of no use to start a place where you cannot get natural soil suitable for the work you intend to carry on. I do not think that anybody would be inclined to go away up on yonder beaches, which some of us visited yesterday, for soil to start a market garden, calculating to obtain from that soil what would be early vegetables for your city markets. There would be no sense in such a thing. In using soil in your houses you must take into consideration whether you are getting that which is most suitable for feeding your plants with. That most successful man in the culture of roses, Mr. John N. May, of Summit, N. J., by the aid of a large steam plant, sterilizes the soil used in his benches, so that what would not conduce to successful growth may be eliminated; in other words, as you sterilize milk so that it will be absolutely healthy, he sterilizes his soil.

The artificial manures to which Mr. Simpson has referred can be of immense value when used reasonably, although in some cases there may be a prejudice against their use. They should not be too strong. You

will bear in mind that a chemical salt is a strongly concentrated substance. For instance, potash is taken from the ashes of burned wood, and nitre is obtained from organic matter which originally contained the salt in the minutest of quantities, or it is found in the dry deserts of Chili and Peru, the result of vast evaporation. When you have these things in concentrated form, you are able to give food to your plants by dissolving a small quantity of the fertilizer or the chemicals in a large quantity of water, but by making it too strong you will do more damage than good. Their effect upon the structural growth of growing plants, when properly dissolved and applied, is similar to that of the lime water when given to a delicate child. When fertilizer so applied becomes assimilated in the plant and acts on the substances which form the solid texture of the plant, it takes away from it the weakness and the yellowness and adds to it the lustre, the darkness and green which are the indications of health and vigor.

I regard this paper of Mr. Simpson's as worthy of the most careful study. If revised in some particulars, it would be worth publication in pamphlet form for free distribution by you employers to your men upon whom you have to depend so much for the success of your crops. [Applause.]

Mr. JOHN H. TAYLOR: In the admirable paper just read by Mr. Simpson, one point touched upon was the fact that bone treated with sulphuric acid is injurious to plants. It undoubtedly is to rose plants when mixed with the soil. It can, however, be used as a liquid manure. The essayist did not mention one very excellent fertilizer, namely, hiperphosphate. This fertilizer is treated with sulphuric acid in order to make the plant food more available. A good hiperphosphate should contain all the elements necessary to sustain plant life. It generally contains a large proportion of nitrogen, potash and phosphoric acid. Florists have not been using it, owing to the fact that it was considered too powerful. In experimenting with hiperphosphates I find they can be used with safety as a top dressing or as a liquid manure. By its use in small quantities we have a complete manure, and one that is more available than can be obtained by using a special fertilizer, as it acts very rapidly.

My experience with fertilizers has been very similar to Mr. Simpson's; that is, to apply frequently but in small quantity at a time. In fact, as far as fertilizing is concerned, more damage is done by over-feeding than too little feeding. In the greenhouse we have our plants so much under our control that nine-tenths of our plants get too much instead of too little food.

Mr. Taylor was understood to add, in reply to an inquiry by Mr. Simpson, that the quantity of hiperphosphate necessary to give satisfaction was about a three-inch pot full to four gallons of water.

Mr. JOHN N. MAY: Mr. Simpson has made one statement which I think ought not to go forth without some qualification; and that is that he has never found nitrate of soda to do harm to any growing plant. In that gentleman's experience it may be so, but I wish to say that nitrate of soda, whether applied judiciously or injudiciously, (more often the latter is the case, of course,) to rapid growing chrysanthemums is undoubtedly injurious. I have tried it for five different seasons to satisfy myself, and I am satisfied that nitrate of soda, applied to chrysanthemums in any stage of their development is injurious. It produces a soft, weakly growth, and oftentimes, if applied just before the sun strikes the plant, it will burn the foliage. I wish to make this statement because I know that many people are trying nitrate of soda in various ways, and Mr. Simpson's valuable paper will probably induce them to try it on chrysanthemums, when a man with only a few plants would be a great sufferer.

Mr. May closed by proposing a vote of thanks to Mr. Simpson for his admirable and highly interesting paper.

The motion was adopted and the discussion here closed.

THE CLASSIFICATION AND INSPECTION OF COMMERCIAL PLANTS.

An essay upon the above named subject, by Mr. G. L. GRANT, of Chicago, Ill., was here read by its author and commanded close attention. The usual applause followed its delivery. It was as follows:—

This subject is entirely too large to cover in an essay of ordinary length, and I shall do no more than present the several main points for the consideration of the Society.

It will be admitted by all that the present description of plants by size of pot means little or nothing. We all know that the variation in quality among a large lot of two and one-half inch stuff is simply immense, and runs all the way from first class, to stock fit only for the rubbish heap.

Can we devise a classification that will make it possible for the grower to intelligently offer his stock for sale, and for the buyer to purchase with discrimination when it is impossible for the latter to personally inspect it?

Probably plants cannot be so accurately classified as some other things, but we can, beyond a shadow of a doubt, devise a system that will be a vast improvement upon the one at present in use.

It seems to me that the number of perfect, healthy leaves upon the plant will more nearly determine its actual value than any other one characteristic. I believe we can come closer to an accurate classification than by this means; but this feature will be an essential point in any system that may be devised. Mind I do not say merely the number of leaves alone, but the number of *perfect* and *healthy* ones. The leaves may be either large or small and still meet the requirements. It is a botanical

axiom that the number and condition of the leaves correspond to the number and condition of the roots in a normal plant. With diseased roots a plant cannot produce healthy leaves and with diseased leaves it cannot produce healthy roots. Are not then the number and condition of the leaves a true index of the value of the plant?

Of course the size of the pot should also be considered. In classifying young tea roses, I would say that a first-class plant in a two and one-half inch pot should have not less than twenty perfect, healthy leaflets; a second class one not less than fifteen, and a third class one not less than ten. It would be necessary to consider each class of plants separately of course, as a rule, for one might not be just to another. It might even be necessary to consider each variety separately. Even doing this it would not be such a great amount of work to cover the plants most commonly bought and sold through the medium of correspondence.

I would suggest that a competent committee be appointed to devise a system of classification on the line noted, and submit the same at the next annual meeting for the consideration of the Society. I would suggest further that the committee be requested to prepare a comprehensive exhibit of commercial plants of the various classes, the same to be displayed in the exhibition hall for the information and criticism of the members.

Certain it is that we must make a serious attempt to solve the problem of classification if the shipping trade is to continue its growth. In the sharp competition that now prevails there is a continual tendency toward lower quality in order to meet lower prices. Often the "cheap" plants would not be accepted as a gift if the actual quality was known to the buyers. I consider it the duty of this Society to make it possible for the grower of really good stock to so offer it in his printed list or advertisement that its value will appear and be appreciated, and for the buyer to be able to know what he is buying.

FINAL RESOLUTIONS.

The following were constituted a committee to report final resolutions for the action of the Society: Messrs. Grove P. Rawson, Wm. Scott and John Spalding.

THE QUESTION BOX.

The only remaining order of business at the morning session, the "Question Box," was here taken up. The first subject was "The value of auction sales of plants and flowers." Mr. Robert Craig, to whom the reply had been assigned, was not present.

Mr. P. O'MARA, being called up by Mr. Du Rie for the reply, briefly remarked that he thought the value of auction sales would be measured by exactly the same standard that applied to private sales of plants and flowers; that a good price for them was a good thing, and a poor price was a bad thing.

The following reply to the inquiry, "How to destroy red spider," was received in writing from Mr. GEO. KLEHM, Arlington Heights, Ill., who was unable to be present: When spraying is properly attended to you will very seldom find this insect on any place, but when the red spider has a foothold, you can very easily destroy it if you have the convenience to heat your spraying water. We have a cistern built underground ten feet wide by fifteen feet deep, bricked, and cemented, and arched over the top. This cistern is near our boiler and pump. In this cistern we run steam pipes, and we heat the water to about one hundred to one hundred and ten degrees, and after spraying with a good force with this warm water once or twice, you will find your red spider has deserted. When the water is warmer than the air is, you will always find that the red spider will let loose of the leaves with hard syringing, but when the water is cold you will find that the insect will cling very tight to the leaves.

The next question, "What are the results of growing carnations under glass all summer?" was the subject of a reply by Mr. FRED DORNER, of Lafayette, Ind. Mr. Dorner's reply was in writing and was accompanied by a communication apologizing for his absence on account of the illness of his son.

Secretary STEWART read the reply as follows:—

In answer to this question I have to say that the results were very unsatisfactory with me. I planted a house, arranged with side and top ventilation, with well-grown plants from four-inch pots, the first days in June. The plants grew very slowly; scarcely any advance could be noticed for a long time. They required daily watering. Quite a number were lost by decaying right above the ground; any other disease I did not notice. The plants had rather a healthy appearance but were nearly at a standstill, and by the first of September my field grown plants coming through a three months' drought were larger than those under glass with daily watering. The object of having larger plants and earlier blooming was a total failure, for those plants housed the first part of September were away ahead in time, quality and quantity of flowers.

A second house in course of construction with no roof on, I planted at the same time with equally strong plants. Careful watering was attended to. These kept pace with the field grown plants which had no rain at all. The same disease made its appearance, the decaying of the stems near the ground, and quite a good many plants were lost. But here I had an advantage over the delay of transplanting the field grown plants, for they gave me earlier flowers; but on the whole, not enough to warrant all the extra work. I put the glass on this house the middle of September. From my own experience, and what I heard from several other growers who had made the same experiments, I came to the con-

clusion that by careful field growing, careful lifting and planting in the houses, we gain the best results, far better than by growing them under glass all summer.

On raised benches the soil gets too hot, either wet or dry during the hot summer months for carnations to grown in. Better results may probably be gained on solid beds, but I consider it doubtful. The desire for earlier and better flowers, especially for the fall exhibitions, gave rise to these experiments, and we might be successful if we could control temperature as well as we can moisture without impairing the sunlight during the summer months; but as this is not the case, we have to make our efforts in a better field culture and a more careful transplanting to the houses.

“The advisability of flower markets ” was the next subject. Mr. WM. FEAST, of Baltimore, to whom this subject had been assigned, being called upon by the chair, came forward and made the following reply: Having been requested to make a few remarks in reply to the question just presented, I am afraid that what little I may say will have little or no weight in comparison with what has already been said on the subject. I will, however, with your permission, give a brief outline of the working of our Baltimore Exchange, allowing you to draw your own conclusion as to its advisability. As far as we Baltimore florists are concerned, our Exchange has passed the stage of advisability and has become a necessity, inasmuch as it is the only recognized place in our city at which to buy at wholesale, for we have no commission houses there. That fact alone is responsible today for the organizing of our Exchange; and I doubt whether, had Baltimore been blessed with her just proportion of commission houses, as other cities are, the Exchange would ever have been established. However, it is established and has come to stay. It was established not with the intention of making money for stockholders, but for the mutual benefit of growers and dealers alike; and for that reason the shares of stock were placed at five dollars each. All consignors were requested to take at least one share, so as to entitle them to the privilege of having their goods sold at ten per cent. commission.

The affairs of the Exchange are governed by a board of seven directors, three dealers and four growers, elected to serve for one year. They in turn elect their own officers, consisting of president, vice-president, secretary and treasurer; also a price committee composed of two growers and one dealer, whose duty it is to place prices on the blackboard once every week. The president and secretary, being recognized as the executive heads, are responsible to the Board for the fulfillment of all orders passed by them at their monthly meetings. In that way the employes of the Exchange have in reality only two officers to obey, which avoids confusion and does away with too many bosses. Our present force consists of salesman, lady bookkeeper and two boys. A regular double entry set of books is kept, and we endeavor to settle with growers

every week. We are at present using the autographic register, which makes it next to impossible for anything to go wrong with the charges and cash. This I will explain. We have two registers, one for cash with red tickets, and the other for charges or blue tickets. Every sale that is made for cash is itemized on a red ticket with grower's name, price, total of sale and number of ticket. All of this is duplicated on rolls in the register, and the same with charges. Every item is credited direct to growers from these tickets, and the ledger accounts at the end of the week have to agree with total cash and charge sales, as indicated on the two rolls in the register. Should there be a difference it is easily discovered, as every ticket is numbered and must agree.

We have another very good feature, and that is our advertising wall space. We have a large blackboard with a space ruled eighteen inches by twenty-four inches, for which we charge five dollars per year. The matter can be written in chalk or printed, as preferred. We found this scheme to take very well last season, and it brought in a handy sum which helped considerably to keep our expense account down.

In conclusion permit me to say, that we consider our Exchange an ideal wholesale place in every respect, inasmuch as the growers direct its affairs and govern to a certain extent the price of their product; and at the same time the influence exerted by the dealer lessens the possibility of dissatisfaction as regards prices.

Adjourned until afternoon.

THIRD DAY — AFTERNOON.

THURSDAY, August 23, 1894.

After an interval of waiting, President ANTHONY called the Convention to order.

PERTAINING TO THE SECRETARY AND TREASURER.

Secretary STEWART submitted and read the following amendments to the By-laws, of which previous notice had been given:

Add to Section 2 (relating to the duties of the Secretary), the following: "He shall also receive, receipt for and remit to the Treasurer such annual dues as may be paid to him; and shall give a bond in such an amount and with such security as the Executive Committee shall, from time to time, consider sufficient."

Add to Section 3 (referring to the duties of the Treasurer), the following: "The Treasurer shall give a bond for such amount and with such security as the Executive Committee shall from time to time consider sufficient."

Mr. P. O'MARA moved the adoption of the amendment.

Mr. W. R. SMITH seconded the motion.

Mr. J. G. ESLER inquired whether, if the amendments were adopted, there would be any system by which either the Secretary or the Treasurer would have a check upon each other.

Secretary STEWART replied: The only system hitherto has been this: The Secretary receives no money and none is likely to pass through his hands except that which comes from the payment of dues; and the payment of dues is always acknowledged by consecutively numbered receipts. These numbered receipts have corresponding numbers on the bound stubs in the book, and all the money has been paid to the Treasurer on the basis of these stubs. A book of fifty stubs has been assumed to represent one hundred and fifty dollars. If a receipt was for any reason destroyed it was accounted for.

Mr. ESLER: Has the Treasurer furnished those stubs or books?

Mr. STEWART: No; they have always been furnished by the Secretary.

Mr. ESLER: Understand, I am not insinuating that there is or would be anything improper on the part of the Secretary, but the proper way to do business is in a business-like manner, and I think it would be proper for the Treasurer to furnish the Secretary with those books, and for him to hold the latter accountable for them.

Mr. STEWART: Well, your Treasurer is present, and I serve notice upon him now that I would be very glad to have him furnish me with the books.

Mr. BEATTY, (the Treasurer): The Secretary has been doing this work so acceptably for many years that I would not think for a moment of changing it, because I think he is better able to receive the dues from the members than is the Treasurer. It relieves the Treasurer, of course. There is no authority in the By-laws for the Secretary to do it, and this amendment is proposed in order to bring the By-laws in accord with the way we have been doing business. Mr. Esler states that there is a right and a wrong way to do business. We have been doing the business in the right way, but the By-laws have not been written quite in the right way.

Mr. STEWART: I regard Mr. Esler's suggestion as a good one and perfectly proper. I should prefer to see it followed out.

Mr. ESLER: It would relieve you of an amount of responsibility; and under the present practice we might at some time, in the case of a

dishonest Secretary, lose some money because we do not know how many books are received.

Mr. O'MARA's motion was here adopted, and the amendments were ratified without objection.

FOREIGN AND DOMESTIC STATISTICS.

President ANTHONY announced as the next business an essay on "The value and importance of statistics, foreign and domestic," by Mr. BENJAMIN DURFEE, of Washington, D. C.

Mr. W. R. SMITH stated that it had been impossible for Mr. Durfee, on account of his arduous duties, to attend the Convention. As the subject was an important and interesting one, and as Mr. Durfee could do ample justice to it, Mr. Smith asked that leave be given that gentleman to print his essay.

Mr. J. G. ESLER moved that leave be given, as requested.

Mr. P. O'MARA: Of course the intention is to have the essay incorporated in the Report of this Society, not merely to print and distribute it?

Mr. SMITH: Certainly.

Mr. ESLER's motion was adopted without objection.

FIRE INSURANCE FOR GREENHOUSES.

The item of "Miscellaneous Business," being reached at this point, the Convention took up the subject of fire insurance for greenhouses.

President ANTHONY stated that the report of the committee appointed at the St. Louis meeting to consider the matter, of which Mr. E. H. Michel, of St. Louis, was chairman, would be presented by Mr. Seidewitz.

Mr. E. A. SEIDEWITZ: I regret to state that Mr. Michel, the chairman, was taken ill some time prior to the meeting of this Convention. He had all the statistics and reports in his possession until a week or so before our coming together here. At that time the reports were handed over to me, but the committee had very little time in which to get up a report. Mr. Michel handed us an incomplete report, and from the papers submitted to us, we have endeavored to make the report as full as possible. I will now read the report, part of which is in the wording of Mr. Michel. It has appended to it the classification which the committee would put before the Society for its consideration.

The report was read as follows:—

Your committee in the matters of fire insurance in its effort to secure definite information regarding the amount of insurance carried by florists and the rates of insurance usually paid, has failed to elicit important statistics, because the large majority of the florists failed to respond to the requests made both through the trade papers and to each individually by circulars. We received answers, however, from about two hundred and fifty greenhouse men; the total value of whose houses aggregated over \$1,500,000. Out of this number only one hundred carried fire insurance to the amount of \$300,000, paying from one-fourth per cent. to three and one-fourth per cent. premium per annum; the average rate being one and one-half per cent., or not quite as bad as we were led to believe they were before we had entered upon our work. The higher rates were rather exceptional, the general charge in large cities being from one per cent. to two per cent.

The two hundred and fifty florists answering our questions, reported twenty-five fires which had occurred in their vicinities during the past year. An exceedingly high estimate of the total losses in these fires would place the amount at less than \$10,000. The value of the properties of those who reported alone being \$1,500,000, we are perfectly safe in placing the value of the properties in their vicinities, including their own, at \$3,000,000, which makes the rate of loss at an unfairly large percentage on the glass insured. The risk in almost every case where there was a fire was through the careless manuer in which the flues or chimneys were built, or through the carelessness of placing ignitable material on the flue or boiler.

The causes of the different fires were as follows:—

No reason given, four.

Defective flue, seven.

Carelessness, five.

Over-heated chimney too near wood-work, one.

Pipes too near floor beams, one.

Defective gas pipe, one.

The lowest rates given by any was by the Reading Mutual, one-fourth per cent. on greenhouses and contents. The Western, one-third per cent. for greenhouses and contents. The Royal of Liverpool in one instance gave one-fourth per cent., and in another, one and one-fourth on greenhouses, showing that the local agent took into consideration the style of risk.

While it seems that the majority of florists do not insure their houses, thinking that the risks are slight, still there would be many who would insure had they cheap rates offered them. In order that we may receive such reductions in the rates of insurance, we have made a classification of greenhouses, which we place before you for your attention. Having settled upon a classification, we would suggest that such classifications be placed before the board of underwriters, and show this body

that greenhouse risks are good risks if the houses are properly constructed. There is no doubt that if this matter is properly put before the underwriters we will receive the benefits of a reduced rate.

Classification.

First. Greenhouses in good condition, heated by hot water or steam, or both, where boilers, flues and pipes are properly insulated, and having fire-proof boiler pits. Each house being separate and detached, except for one connecting hall or shed to each one hundred feet in length of the house with water under pressure on the premises, and being within reach of a fire department. A watchman on the premises at night. One per cent. for three years.

Second. Greenhouses heated partly by hot-air flues and partly by hot water or steam, or both. All other conditions the same as above. Two per cent. for three years.

Third. Greenhouses heated by hot-air flues in especially good condition. The other conditions the same as above. Three per cent. for three years.

Add for no watchman twenty-five per cent. to rate of premium.

Add for no fire department twenty-five per cent. to rate of premium.

Add for no water under pressure fifty per cent. to rate of premium.

Add for every attached greenhouse twenty-five per cent. to rate of premium.

Old and dilapidated houses heated by flues to be excluded from insurance.

Kindling wood in contact with flues, boilers or steam pipes, or iron flues in contact with wood-work of any description, to cancel obligation of company insuring in case of loss.

Where oil is used as fuel the risk is to be governed by the rules of insurance companies regarding its use.

We believe risks as above could be profitable taken at above rates.

E. H. MICHEL,	} <i>Committee.</i>
J. G. ESLER,	
E. A. SEIDEWITZ,	

Mr. H. A. SIEBRECHT, of New Rochelle, N. Y.: The report certainly gives us some data as to fires that have occurred, the risks that the various florists run, the net insurance; and the classification they make is a very good one. This is certainly a beginning, and I think the matter should be fairly and fully considered. We should hear from those who have made the matter a study so that we may get at some favorable rate and be able to insure our property reasonably.

Mr. J. G. ESLER: My work on the committee consisted largely in talking the matter over with insurance companies. I found that one

difficulty was that the companies had concluded that greenhouses were very dangerous property to insure. They made no distinction in greenhouses as to good risks or poor risks. I think that if a classification of this kind was placed before the board of underwriters and also in the hands of every member of the Society of American Florists, to be used with his agents, we could get insurance companies to recognize that there is a difference in greenhouse risks. When we get them to recognize that fact, better rates will follow. It is a question of time as to when we will get better rates; we are not going to get them today or tomorrow. They have been taking a lot of greenhouses that ought not to have been insured, but they did take them and they lost money on them, and the better class of greenhouses has had to suffer for it in their rates of insurance.

Mr. J. L. JORDAN: If I understood the report correctly, a rate is fixed for greenhouses heated by hot-air or flues, that is, where a flue is put in at one end and smoke and heat go through the other end. For one, I am entirely opposed to recommending their being insured at any rate at all. It is not a good insurable risk.

Mr. ESLER: Make the rate higher.

Mr. JORDAN: You will find that the higher the rate is the more likely they are to have a fire.

The speaker here referred to two fires at his greenhouse or in the barns and sheds adjoining, which occurred in the summer when there was no fire around the greenhouse, and had occurred probably through accident or the work of tramps or thieves in using matches. He also stated that he had been enabled of late years to get a rate on greenhouses of one per cent. per annum, but none on plants. This had been considered in his locality, a low rate; a higher rate was paid on merchandise in the stores.

Mr. ESLER: I will say to Mr. Jordan that the committee took that matter into consideration, and he will remember that we excluded greenhouses heated by flues. But there are cases where a man may have half a dozen or a dozen greenhouses heated by hot water, and still have one greenhouse flue-heated and perfectly protected. While he would have to pay the high rate for all on account of the flue-heated greenhouse, it seems to me it would be rather hard to exclude it. That is why we have left the clause in whereby we recommend a company to take insurance upon that class. The classification simply points out to insurance men that those greenhouses are dangerous risks.

Mr. J. D. CARMODY: I think one thing that has been brought out by the discussion upon that class of risks is the unfortunate fact that

some florists are not honest. The general impression is they are. I say it here (I do not want anything said about it outside), that there are some who are known to be not honest. I call to mind a case of that kind. A man who worked for me (I don't know whether he acquired his dishonesty from me or not), went out from my house and established a house for himself; and when I followed him up afterwards, I found some of my appliances in his place. He got the little rat-trap he built heavily insured, perhaps at the rate of twenty-five cents a foot, and he had a brick flue in it. He propagated an immense quantity of plants of the coleus and alternanthera; he filled a whole bench. Somehow or other his greenhouse took fire. He declared that those alternantheras were worth five cents apiece in the cutting bench, and he got some friends of his to swear they were worth all of that. He claimed a thousand dollars of insurance for what I would not have given twenty-five dollars for; and he got five hundred dollars insurance when he ought to have been sent to the penitentiary. This happened five or six years ago, before the present permanent character of building with modern appliances was the rule. Well, insurance companies get their data from such instances of rascality, and we must disabuse their minds of the unfavorable impressions they have received.

Mr. SIEBRECHT: I move that the report of the committee be accepted with thanks; that they be requested and instructed to continue in their good work; that we give them a little more power, that is to say, that they shall improve this classification and make a fuller report; that this shall be done at the expense of the Society; that the Society shall appropriate a reasonable sum or whatever is required to get the information desired, when the committee should go to the insurance companies and place before them an honest report, and assure them that this Society will vouch for the honesty and integrity of those who may avail themselves of that plan of insurance. In that way I think we can get a reasonable rate of insurance on greenhouse property. In my opinion the greenhouse risk is a good risk, if your houses are properly constructed and if you are vigilant, especially if you keep a night watchman, and more so if you have plenty of water pressure and are near a fire department. All those things are to be considered, and the plan should be suggested as to a low rate of one dollar for three years on a good risk. If there be no water pressure, add fifty per cent.; if there be no watchman, add twenty-five per cent. to the rate of premium.

I think if this plan is put before the underwriters they will be impressed favorably by it. They will know then that it is not alone the dilapidated places that are insured, and that the object of insuring is not to get money upon them improperly. We want to put down and keep out that class of men who would insure their property for the purpose of taking advantage of an insurance company; we do not want them in our Society; we do not want to do anything for them until they repent and become honest.

Mr. ESLER: I think that Mr. Siebrecht's motion is all right but that the recommendations would have more weight with a board of underwriters if they were presented by the officers of this Society, or if those officers used their influence in the matter.

Mr. W. R. SMITH: I think that smoke flues should be left out of the classification. They are a thing of the past. With that amendment, I think the classification should be adopted by the Society.

Mr. SIEDEWITZ remarked that he thought the suggestion of Mr. Smith would not be treating some florists fairly. He thought that the insurance companies ought to be allowed to take any risk they chose to take for a certain sum.

Mr. ESLER said that the recommendation of the committee had been made with the expectation that the Society, knowing much more on the subject than the committee, would suggest changes in the classification. The committee did not pretend to be infallible. He suggested that if the change indicated by Mr. Smith was made it would simply put the smoke-flue greenhouses under the head of "dangerous" and recommend that they be not taken. If then the insurance companies did take them it would be at their own risk. The figures suggested by the committee were simply those which they thought ought to be charged.

Mr. O'MARA remarked that, as it was admitted that the committee had no right to dictate terms to the insurance companies as to rates, (which of course the companies would not allow), it was inconsistent to embody in the paper a risk which the committee said the insurance companies should not take. He thought the paper as read should be accepted, without tacking on to it a statement that there was a certain grade of houses which the insurance companies should not take. If they wanted to take a greenhouse with a flue in it, at their own risk, they should be allowed to do so.

Mr. BEATTY said he coincided in the view expressed by Mr. O'Mara. He went on to explain that the phraseology of the committee's report was objectionable in so far as it could be construed as an attempt to dictate to the insurance companies how they should run their business. He thought that the committee had done a great deal of work and he would not attempt to deprecate their labors but he thought that the classification would read better if, instead of fixing one per cent. for three years, for instance, the risk should be rated as a first-class one or such a risk as the insurance companies take for one per cent. per year, thereby simply giving the opinion of the committee in regard to the risk. He was apprehensive, however, that the opinion of the committee would not have much weight with an insurance company in effecting a change of their rates, as these were uniform and long established.

Mr. SIEBRECHT replied that his motion did not propose to call for any set rate but simply that the matter should be left in the hands of the committee; that then the officers of the Society should take part in it, complete the classification and put it before the underwriters. In this way the insurance companies, being given a better understanding of the risks, as to whether they were extra hazardous or ordinary, might be led to reform their rates and make them more favorable to the craft. He further stated that he did not at present insure, though he formally had a blanket insurance on \$20,000 worth. Fires had occurred in badly kept, delapidated places in his neighborhood and he was among those who felt the consequences, the companies raising the rate to one per cent. and then wanting one and a quarter. He stopped insuring with them and for the last eight years had done his own insuring and would continue to do it unless a reasonable rate was granted. If he could get such a rate as had been mentioned here, he would again insure because a man felt safer in going away from his property, when he knew there was something there if a fire did occur, although every effort had been made to prevent it.

Mr. SMITH explained that he had ascertained that smoke flues had already been eliminated from the classification, and therefore he withdrew the amendment he had suggested. He said that what the committee had proposed were simply suggestions, that he regarded them as excellent and that it was a mistake to construe them as attempts at dictation.

Mr. SIEDEWITZ referred to the difference between rates in different places and said that Mr. Michel's figures had been obtained from the insurance companies themselves and that they represented the average amounts of insurance.

Mr. SIEBRECHT replied that the reason of the disparity in the rates was because the matter had never been worked up and was not understood by the insurance companies. When they lost a risk on an old greenhouse they were led to conclude that all greenhouses were alike. The committee, by keeping at their work, would enable the companies to understand the actual nature of the risks.

Mr. BEATTY said his objection was not to going before the insurance companies but the manner of going. He contended that a single classification could not cover a greenhouse in New York and another in Illinois but that the insurance men would want to see each property separately and would fix the rate for each independently. He thought they would be glad to do this.

Mr. ESLER said that, to meet the views expressed, he had appended to the classification the words, "We believe that risks as above could be

profitably taken at these rates." He also stated, as showing what insurance companies knew about a greenhouse they insured, that, upon inquiring of the officers of a New York company, with whom he was acquainted, he was told by them that they had but one greenhouse on their books and they could not answer whether it was heated with steam or hot water.

Mr. BEATTY suggested that it was the local agents, not the officials of the company, from whom such information could be procured, and that Mr. Esler had not gone to the right party. He said he was only objecting to the matter in the way it read, as it was telling an insurance company it must take a risk at one per cent a year.

President ANTHONY here stated the question to be on adopting the classification.

Mr. ESLER: I think it was included in the pending motion that the officers of the Society of American Florists should place it before the underwriters throughout the country.

Mr. BEATTY: It was to that I was objecting.

Mr. SIEBRECHT called for the reading of his motion from the stenographic minutes.

Mr. ESLER remarked that a certain amount of data on greenhouses, which had been accumulated by the committee, was available for use.

Mr. CARMODY said he thought it would be a good idea for the committee to present the data to the boards of underwriters for their consideration.

Mr. SIEBRECHT: That is the motion.

Secretary STEWART said that, at the risk of being accused of a desire to shirk some responsibility, he would express a very decided opinion upon the matter. He asked what did the officers of the Society know about the data referred to. The gentlemen who had secured it were thoroughly interested in it and in touch with the subject—who could present it to the underwriters as they could? He felt sure that the cooperation of the officers of the Society would be given and that this could be counted upon, but for the officers of the Society to go to the underwriters about a matter they had not studied up would be a mistake. He insisted that action could more properly be taken by the committee.

Mr. O'MARA: I think the original motion was to that effect (and

that the stenographer's record will show it), viz., that the report of the committee be received with thanks, that the committee be continued and that they carry out these recommendations which they make. I think that that is the motion which is now pending.

Mr. ESLER: Is this committee to understand that they are to represent the Society of American Florists and to speak for the Society of American Florists as being behind them, or are we to act simply as a committee?

Mr. SIEBRECHT: That was my motion, to have the committee act as the representative of the Society of American Florists. The officers of the Society of American Florists are not to do any work particularly; they are to give you their sanction, they are to be at your back. For instance, if you want to have a signature to anything, the Secretary of the Society or the President could be asked to sign his name to a statement put forth by the committee.

At this point the text of Mr. Siebrecht's motion was read, for general information from the stenographic notes, as follows: That the report of the committee be accepted with thanks; that they be requested to continue in the good work, and be given a little more power; and that the necessary expenses be paid by the Society to continue the work.

President ANTHONY stated the question to be upon the motion as read; and a vote being taken, the motion was adopted without objection. In this way the subject was disposed of.

THE UNEXPIRED TERM OF TREASURER HUNT.

Mr. WM. SCOTT here addressed the Convention, and stated that owing to the death of Treasurer Hunt, and the fact that the term of the successor of that officer dated from January 1, 1895, to the end of that year, the Society was at this time without a Treasurer. He explained that it had been generally supposed that the newly elected Treasurer (Mr. Beatty), would enter upon his duties immediately upon his election, but this was an error, and therefore it was necessary to make some provision to cover the interval between the present date and January 1. Mr. Scott then nominated Mr. Beatty for Treasurer to serve for the period stated.

No other nominations being made, the Secretary was instructed, on motion of Mr. SIEBRECHT, to cast a ballot representing the unanimous vote of the Society for Mr. H. B. Beatty for Treasurer, to fill the unexpired term of the late M. A. Hunt, viz., until January 1, 1895.

The ballot was cast, and Mr. Beatty's election announced by the chair.

FINAL RESOLUTIONS.

The report of the committee on final resolutions was read by Secretary STEWART, as follows:—

*Mr. President and Members of the Society of American Florists,—*We, your committee on final resolutions, beg leave to submit the following report:—

WHEREAS, The florists of the City of Brotherly Love have honored our Society by extending to us the most cordial reception and providing for our comfort and entertainment at Atlantic City,

Resolved, That this Society takes pleasure in returning the most sincere thanks of each member present for the profit and enjoyment received.

Resolved, That we especially honor the worthy Mayor Stoy, of Atlantic City, for his pleasant word of greeting, good will expressed, and for the freedom of the city.

Resolved, That to the Florists' Club, of Philadelphia, we owe a debt of gratitude for their assistance in the transaction of business pertaining to our Society, and providing so interesting a program of entertainment.

Resolved, That to the several committees of the Florists' Club, of Philadelphia, individually and collectively, the earnest thanks of the Society are due for the manner in which all matters of business and entertainment have been carried out.

The ladies offer cordial thanks to Mr. Chas. D. Ball, for their entertainment Wednesday afternoon per special train along the beach to Carisbrooke Inn and return; including music and refreshments, as well as a pleasant social hour at Carisbrooke Inn. Also for the steamboat ride Thursday afternoon.

Thanks are due Mr. John Westcott, chairman of bowling committee, and to the generous donors of prizes offered.

For the yachting cruise from the Inlet out to Sea, one and all extend the right hand of fellowship to chairman Robert Craig.

For the shooting tournament—a novel and exciting feature—well contested by several clubs—all honor to the chairman of said committee, Mr. John Burton.

For the elaborate and unique entertainment in the Pavilion of the Iron Pier, the Society would render its most heartfelt thanks to Mr. Robert Craig, as chairman.

To Vice-President Kift, as a prominent factor of the success of the meeting in its general arrangements, the Society is alike grateful; and would make special mention of the courtesy of the Philadelphia Ledger in offering us more space and attention than we have received heretofore from the public press.

Resolved, That we, visiting florists of the Society of American Florists, shall ever hold the Florists' Club of Philadelphia before us as an example of free and generous hospitality.

Respectfully submitted,

GROVE P. RAWSON.
JOHN SPALDING.
WILLIAM SCOTT.

The resolutions were heartily applauded, and on motion of Mr. J. M. JORDAN, adopted unanimously.

THE NATIONAL CHARTER.

Mr. W. R. SMITH: Mr. President, I have been anxiously waiting all day for a telegram from Washington, telling me that our charter had been secured. The bill providing for it has passed both houses of Congress, and all that now remains to be done with it is to have it engrossed in the Senate and presented to the President to have it become a law. I am sure that its ultimate success is only a question of time. We therefore should have some provision for a called meeting of the charter members, to be held in the city of Washington, at such time as may be appointed. I now offer the following:

Resolved, That the officers of the Society be authorized to call a meeting to organize under the charter at such time as they may deem proper.

The resolution was adopted.

Mr. H. A. SIEBRECHT moved that the thanks of the Society be tendered to Mr. Smith for his labors in procuring the charter.

Mr. SMITH modestly protested against the motion, but his protest was drowned in calls for a vote on the motion.

Mr. O'MARA; I think the thanks of the Society are certainly due to Mr. Smith. It is really a poor compensation, and yet it is all that Mr. Smith asks and more than he asks. He is one of our earnest and unassuming members, one who works in the dark and asks nothing from us. I think we ought to insist upon thanking him, whether it is agreeable to him or not.

Mr. Siebrecht's motion was here adopted; the only negative vote being that of Mr. Smith himself.

ADJOURNMENT.

On motion of Mr. O'MARA, there being no further business, the Convention at 4.10 o'clock P. M. adjourned.

THE ENTERTAINMENT ON FRIDAY EVENING.

After a day of recreation as the guests of the Philadelphia Florists' Club, the members of the Society of American Florists and their ladies enjoyed an entertainment provided for them in the Casino on the iron pier. The evening program included songs, recitations, cornet solos and dancing by expert performers and amateurs, also the presentation of a scene from Henry IV., in which Messrs. Burt Eddy, Wm. K. Harris Edwin Lonsdale and P. O'Mara took part.

Prior to the performances, Mr. ROBERT CRAIG, chairman of the local committee of arrangements, welcomed the visitors. He said he was present to express to them the kindly greetings of the Florists' Club of Philadelphia, and the satisfaction of the Club that they had been honored tonight with the presence of so large an audience. He continued:

You will pardon me if I say only a word or two about the Convention which has just closed and the lesson that may be drawn from it. This is the first time we have attempted to hold a Convention of the Society at a seaside resort so pleasant as Atlantic City, and there are many diversions here which naturally tempt people away from the meetings and from the exhibition; but with the exception of the closing session, I think the attendance at the Convention, considering everything, was very gratifying. The exhibition was an excellent one in many respects. Many new classes of great merit were shown, especially gladioli and cannas. That exhibition, for those who took the pains to study it, was full of suggestions of great educational value.

Some questions which have come up in connection with this Convention will press themselves upon the Executive Committee as never before. We certainly cannot entirely ignore the social enjoyment feature of the Convention. The attendance here tonight shows that social enjoyment is in some degree necessary. I believe there are fully as many here tonight as there were at any session of the Convention, [merriment], which shows that it is proper and right that we should cater to that feature. Just how far we may do so without injuring the practical work of the Society is a question not for me to discuss tonight but for you all to think about and to write to the Executive Committee about at your convenience. I know that they will be glad to consider it at their next meeting. We had some fears that so many outside attractions here would affect the success of the Convention, but we venture to hope that any disadvantages on that score have been offset in some degree by the coolness of the atmosphere, the delightful bathing and the bracing air here at the seaside, which is in such striking contrast with that of the large cities in August. Let me look forward a moment to our next Convention, which is to be in Pittsburgh. Pardon me if I say a word about the hospitality of the florists of Pittsburgh. It is beyond measure. When the Carnation Society met there, a year or so ago, they were entertained in that city as they never had been entertained before; the thoughtfulness of the florists there was exhibited in a marked degree and their hospitality was boundless. I predict for your meeting in Pittsburgh the greatest success. The men of Pittsburgh are practical and they are hospitable. But I will not inflict any more words upon you, as we have prepared an entertainment tonight of considerable length and one which we hope will please you.

The program for the occasion was then gone through with; refreshments being served to the guests at intervals.

During the evening, Mr. William Scott, being called upon for some

remarks, spoke of the hospitality of the Philadelphia Club and said that, while all of the eight annual conventions he had attended had been most enjoyable affairs, the present one was entitled "to take the cake." Meanwhile the business of the Convention had not been neglected but it had been demonstrated that the social element was a necessary factor for the success of the Convention. He advised the Pittsburgh brethren not to try to emulate Philadelphia in entertaining but merely to make the Society welcome, to put their hands out and say, "We are glad to see you. What is your name?"

Mr. Scott then referred to the shooting contest and expressed the hope that similar competition would be inaugurated at future meetings. He said it had created quite as much excitement as the bowling contest and was just as harmless. He complimented the gentlemen who had taken such an active part in providing for the entertainment of the Convention and mentioned, in this connection, Messrs. Craig, Westcott, Watson, Burton, and Kift.

Referring in a humorous way to the winners of the individual prizes (outside of the teams), in the bowling contests, he said that the boys had been bribed to set up the pins close together for the fortunate bowlers, to whom it was now his duty to award the prizes captured so unfairly. He then announced that the winners were Robert Craig, George C. Watson and John Westcott, to each of whom he presented a trophy.

(The gentlemen named here came forward and bowed their thanks).

Later in the evening, Mr. J. M. Jordan spoke briefly upon the career of the Society since its organization.

The singing of "Auld Lang Syne" was followed by a hop, which terminated the entertainment.

WILLIAM J. STEWART,

Secretary.

APPENDIX.

A COMMUNICATION.

[See page 119.]

THE VALUE AND IMPORTANCE OF STATISTICS, FOREIGN AND DOMESTIC.

Members of the Society of American Florists,—When the subject of the value of statistics was assigned to me there was every prospect that valuable data connected with European floriculture would be secured in time to form the basis of the essay; and to this end circular letters to consular and diplomatic agents of the United States abroad were formulated and mailed. No valuable responses have been received as yet, and the authority and power of the State Department has been invoked with a view to securing, at as early a date as possible, such detailed replies from abroad as will give to our Society a knowledge of the popular bulbs, roots and plants in each country of Europe, the amounts of each produced, their dispositions both at home and abroad, the methods of cultivation peculiar to each section of Europe, the characters of soil, the climatic influences, the methods of transportation to market and the trade regulations governing sales, the character of chemical and natural manures and methods of application, and the methods of retailing adopted in the various centres of European countries for the sale of plants and flowers. All these elements it is desired to place before the Society in such a way as to stimulate active domestic competition. It was deemed advisable to extend the inquiry so as to embrace methods of greenhouse and conservatory construction, and the various appliances for heating and ventilating. Having all these points in mind, I have felt it to be much better to simply state to you the character of the investigation which is to take place, and submit from time to time reports covering such information as we may secure.

I take it that no member of the Society fails to see the great importance to himself and to the other members, of an up-to-date history on all the points above enumerated. You can all readily perceive how immensely valuable to the farmers of the south would be an intimate knowledge of the element for a successful cultivation of the Roman hyacinth, the various forms of narcissus and of Dutch bulbs, and how like groping in the dark it is to attempt their cultivation without this intimate knowledge of the best methods in the countries where they are

most largely produced and have been for centuries. We have seen many statements in our trade journals calling attention to the fact that in the south there exists today every element necessary to this successful line of work, but these statements are based upon the most cursory knowledge, either of conditions abroad or at home.

It is my desire to simply, in an elementary way, set forth these facts as I have above, not merely to advise you of the effort which is being made abroad to secure this information, but largely to encourage those of our citizens who have been educated in these lines in Europe to come forward in our public trade journals, and in clear and plain language enlighten the rising generation of florists on all points within their knowledge.

I trust that this short explanation may be satisfactory as an introductory to future work, and I thank you for your courtesy.

Respectfully,

BENJ. DURFEE.

REPORTS OF EXHIBITION COMMITTEES.

FLORISTS' SUPPLIES.

H. Bayersdorfer & Co., Philadelphia, certificate of merit for largest and best general collection of Florists' Supplies and Fancy Baskets.

Ernest Kaufmann & Co., Philadelphia, honorable mention for display of Fancy Baskets and Sheaves of Wheat and for collection of Metal Designs.

Z. De Forest Ely & Co., Philadelphia, highly commended for general collection of Florists' Supplies.

N. Steffens, New York, honorable mention for collection of Florists' Wire Designs.

W. C. Krick, Brooklyn, N. Y., certificate of merit for collection of Immortelle Letters and Designs.

J. C. Meyer & Co., Boston, honorable mention for Silkaline.

A. Herrmann, New York, certificate of merit for large and complete collection of Metallic Designs.

Whilldin Pottery Co., Philadelphia, certificate of merit for largest and best collection of Fancy Jardinieres.

S. A. Weller, Zanesville, Ohio, honorable mention for Fancy Jardinieres in artistic designs.

A. Blanc & Co., Philadelphia, honorable mention for large collection of imported Japanese Flower Pots.

Aug. F. Brabant, New York, certificate of merit for collection of Florists' Pins.

SAMUEL GOLDRING.

H. A. SCHROYER.

WALTER S. RENNISON.

PLANTS.

We find the following exhibitors are entitled to awards as mentioned below:

To Robert Craig, Philadelphia, Pa., a certificate of merit for collection of highly colored, healthy *out-door* grown Crotons, and honorable mention for general collection of Palms, Ferns, etc.

To Edwin Lonsdale, Chestnut Hill, Philadelphia, Pa., certificate of merit for fine grown specimens of *Areca lutescens*.

To Siebrecht & Wadley, New Rochelle, N. Y., honorable mention for collection of Palms, Ferns, Orchids and Decorative Plants.

To Henry A. Dreer, Riverton, N. J., a certificate of merit for a collection of fine grown Palms and Ferns for general florists' purposes.

To Pitcher & Manda, Short Hills, N. J., a certificate of merit for collection of Palms, Ferns, Orchids and Stove Plants.

To Pitcher & Manda, certificate of merit for *Anthurium crystallinum variegata*.

Pitcher & Manda, *Strobilanthes Dyerianus*; highly commended.

W. A. Manda, South Orange, N. J., highly commended for a general collection of Plants.

Edw. A. Seidewitz, Annapolis, Md., highly commended for collection of well grown *Cyclamen persicum giganteum*.

To Chas. D. Ball, Holmesburg, Pa., honorable mention for general collection of Palms and Decorative Plants.

F. R. Pierson Co., Tarrytown, N. Y., highly commended for general collection of Palms and Decorative Plants.

To Storrs Harrison Co., Painesville, Ohio, honorable mention for collection of Budded Hybrid Perpetual Roses.

AUG. W. BENNETT.

J. F. HUSS.

J. A. KRAMER.

 BULBS AND SEEDS.

Your committee begs to report that a certificate of merit be awarded J. C. Vaughan, Chicago and New York, for his very complete display and extensive variety of bulbs.

Z. DeForest Ely & Co., Philadelphia, Pa., be highly commended for *Lilium Harrisii* and *candidum*, *freesia*, Roman hyacinths, *narcissi* and *callas*.

F. R. Pierson Co., Tarrytown, N. Y., be highly commended for Roman hyacinths, *narcissi*, *Lilium Harrisii* and *candidum*, and collection of *freesias*.

Pitcher & Manda, Short Hills, N. J., highly commended for *callas*, *Lilium Harrisii*, *longiflorum* and *candidum*, Roman hyacinths, *narcissi* and *freesia*.

Henry F. Michel, Philadelphia, Pa., highly commended for *cineraria*

and primula seed, *Lilium Harrisii*, callas, freesias and Roman hyacinths.

Henry A. Dreer, Philadelphia, Pa., highly commended for his neat exhibit of hyacinths and tulips.

C. H. Joosten, New York, highly commended for *Lilium candidum*, *Harrisii* and *longiflorum*, *Ornithogalum arabicum*, Roman hyacinths, narcissi and callas.

WM. K. HARRIS.

HENRY YOUNG.

CUT FLOWERS.

Cushman Gladiolus Co, Cleveland, O., collection of seedling Gladiolus. Certificate of merit.

Wm. Tricker & Co., Clifton, N. J., exhibit of Water Lilies and other Aquatics. Certificate of merit.

John N. May, Summit, N. J., new rose, "Mrs. W. C. Whitney." Honorable mention.

Collection of hardy perennial Phlox. Received in poor condition. Cannot judge of their merits. Evidently a fine collection in variety of colors.

Edward S. Schmidt, Washington, D. C., collection of Water Lilies and Lotus. A commendable exhibit.

Thomas Foulds, Gwynedd, Pa., two vases of roses, Catharine Mermet and Bride. Unusually good for summer. Honorable mention.

H. A. Dreer, Riverton, N. J., collection of Canna flowers. Certificate of merit.

Henry Pfister, Executive Mansion, Washington, D. C., collection of Water Lilies. Honorable mention. Also, seedling Cannas; owing to their being received in poor condition, cannot judge of their merit.

F. R. Pierson Co., Tarrytown, N. Y., large vase of Meteor roses. Honorable mention.

Pitcher & Manda, Short Hills, N. J., collection of hardy herbaceous Cut Flowers. Honorable mention.

THOMAS CARTLEDGE.

W. E. KEMBLE.

THOS. A. COX.

GREENHOUSE APPLIANCES AND FLOWER POTS.

Certificate of merit for Flower Pots to A. H. Hews & Co., North Cambridge, Mass.

Honorable mention to Whildin Pottery Co., Philadelphia, for Flower Pots.

Highly commended, Parmenter Manufacturing Co., East Brookfield, Mass., for Flower Pots.

Certificate of merit to Hitchings & Co., New York, for Ventilating Apparatus.

Honorable mention to E. Hippard, Youngstown, Ohio, for Standard Ventilating Machine.

Honorable mention to Quaker City Machine Works, Richmond, Ind., for Challenge Ventilating Apparatus.

Honorable mention to the Ormsby Ventilating System, Melrose, Mass.

Honorable mention to Chadborn-Kennedy Manufacturing Co., Fishkill-on-Hudson, N. Y., for Chadborn Automatic Hydraulic Ventilator. Deserving the attention of the florists.

Honorable mention to Hitchings & Co., New York, for Greenhouse Benches of iron; also honorable mention to Hitchings & Co., New York, for Greenhouse Construction of iron.

Highly recommended, Hitchings & Co., New York, for Greenhouse Gutter.

Certificate of merit for construction of greenhouses of Cypress Lumber to Lockland Lumber Co., Lockland, Ohio.

CHAS. ZELLER.

W. ELLISON.

E. HAENTZE.

BOILERS AND HEATING APPARATUS.

Your committee examined the exhibits of above, and would award certificate of merit to The Herendeen Manufacturing Co., Geneva, N. Y., for their display of Furman Boilers; noting their admirable construction and adaptability for the consumption of the smaller sizes of coal, they being the cheaper, and also their adaptability for either water or steam.

Honorable mention to Hitchings & Co., New York, for their exhibit of Boilers, noting simplicity of construction and ease of operation.

The exhibit of Thomas W. Weathered's Sons, consisting of Models of their Boilers, is highly commended for their improvements and ease of operation.

JOSEPH HEACOCK.

ROBERT F. TESSON.

MISCELLANEOUS EXHIBITS.

Edwards & Docker, Philadelphia, exhibit an assortment of Waterproof Paper Folding Boxes for shipping cut flowers. We find them compact and well adapted for the purpose. Certificate of merit.

D. B. Long, Buffalo, N. Y., has on exhibition Photographic Album of Floral Arrangements. Certificate of merit.

The J. Horace McFarland Co., Harrisburg, Pa., show specimen Catalogue Work. Highly commended.

Frank L. Moore, Chatham, N. Y., shows the "Workesy" Buckle, which is attached to a strap, holding together a series of trays for the shipping of cut flowers, the device enabling the strap to be quickly detached. Certificate of merit.

Thomas Woodason, Philadelphia, Pa., exhibits a Bellows for distributing powdered insecticides; also, one for spraying liquid insecticides. We find these bellows excellent in every way, giving an even spray. Certificate of merit.

He also exhibits a Hose Mender which we find cheap and durable.

C. H. Joosten, New York, exhibits a Bellows for distributing insect powder; style B. We find it an excellent bellows for vineyard work. Honorable mention.

Benjamin Chase, Derry, N. H., shows excellent painted wooden Labels and Plant Stakes. Highly commended.

The Worcester Wire Co., Worcester, Mass., show a Wire Flower Support. We find this a practicable, durable, cheap and quickly adjustable support, especially adapted for staking carnations. Certificate of merit.

A cheap Wire Nippers exhibited by the above. Highly commended.

Powell Fertilizer and Chemical Co., Baltimore, Md., make a good display of their Insecticides and Plant Food. Highly commended.

The Bonaffon Steel Fence Co., Philadelphia, show a good, durable, neat, wrought Fence. Certificate of merit.

Hose Connection Co., Kingston, R. I., exhibit the Kinney Pump for the distribution of insecticides and manures. We find it a practical device for distributing such materials. Certificate of merit.

Rose Manufacturing Co., Niagara Falls, N. Y., exhibits Sulpho-Tobacco Soap. Certificate of merit.

James R. Wotherspoon, Philadelphia, Pa., displays a collection of well made Watering Pots of galvanized iron, with nozzles of copper. Highly commended.

EDWIN A. SEIDEWITZ.

E. G. GILLETT.

C. G. WEEBER.

REPORT OF MEETING OF THE FLORISTS' HAIL ASSOCIATION.

The Board of Directors recommended the following amendments to the By-laws of the Association.

1st. Amendment to Section 1 of Article II.: "The President shall preside at all meetings of the Association and Board of Directors, and also sign all drafts upon the Treasurer, and shall keep a record of all such drafts, and have a general supervision of the affairs of the Association, and fill any vacancy that may occur for unexpired term; such

appointments to be ratified by a majority of the Board of Directors.”

This amendment was unanimously adopted.

2d. Section 2 of Article IX.: “The Secretary shall receive \$400 per annum for his services.”

Unanimously adopted.

3d. Section 3 of Article IX.: “The Treasurer shall receive \$75 per annum for his services.”

Mr. Du Rie moved to amend to make this section \$100 per annum.

The amendment was adopted with only one dissenting vote.

4th. Section 4 of Article IX.: “The President shall receive \$50 per annum for his services.”

Unanimously adopted.

5th. Section 1 of Article I.: “The term of office of the Board of Directors shall be three years, two to be elected each year, and every third year one additional, making a board of seven directors, and that the Board elected after the adoption of this article, shall arrange their term of office to comply with this section.”

Unanimously adopted.

Upon motion of John T. Temple it was resolved that the report of the Secretary and Treasurer be printed in the *American Florist* and *Florists' Exchange*.

The following Directors were then elected: William Scott, James Horan, E. G. Hill, John T. Temple, Julius Roehrs, J. C. Vaughan, and Albert M. Herr.

The following reports were read by the Secretary and Treasurer:

SECRETARY'S REPORT.

The Florists' Hail Association now consists of five hundred and seventy-four members in good standing, and the risks in force on August 1, 1894, are equivalent to a single risk upon 6,653,695 square feet of glass, divided as follows: On single strength glass, 2,218,169 square feet; on double strength, 3,163,388 square feet. Extra half, 74,295 single and 17,442 double; extra whole, 408,045 single and 739,735 square feet of double strength glass.

Ten thousand four hundred and eight feet of single thick and 1,666 feet of double thick were broken by hail during the past year, being a trifle over one out of every 213 square feet of single and one out of every 1,899 feet of double insured.

The total cash balance in the Treasurer's hands is \$5,200.15; this, together with \$3,000 in securities invested for the reserve fund, makes the total assets \$8,200.15, against which there were no liabilities on August 1, 1894.

Of the cash balance \$4,560.60 belongs to the assessment fund and \$639.55 to the reserve fund.

Owing to the depletion of funds by the disastrous losses of last year, it was necessary to levy the fifth assessment on May 1, 1894, which, not-

withstanding the prevailing business depression, was responded to by a greater percentage of members than any previous assessment.

The sudden death of Treasurer Hunt, upon the eve of the levy of this assessment was especially unfortunate, but by prompt action on the part of the officers and directors, the business of the Association was transacted with trifling delay; thereby in an entirely unexpected manner furnishing a perfect test of the stability of the Hail Association and the perfection of its methods. Your Secretary desires to tender his thanks to members for their patience and forbearance while order was being restored out of the chaos caused by the sudden demise of the late universally lamented Myron A. Hunt.

The fifth assessment brought to the treasury of the Association, \$3,299.51.

The expenditure for salaries, postage, expenses, stationery, etc., for the year is \$569.62. The amount paid for losses is \$715.77. When compared with the expenditure of \$5,856.83 last year for glass broken, it will be seen that the members of the Florists' Hail Association have reason to congratulate themselves upon their good fortune, which has not been shared by many florists who were not members of the Association.

During the past year the Secretary has been able to locate fifty-five hail storms in twenty different States, some being especially violent.

At the end of seven years the Florists' Hail Association has performed all that the most sanguine projectors claimed, and it is safe to say has fairly earned the confidence reposed in it by its members.

JOHN G. ESLER,
Secretary.

TREASURER'S REPORT.

During the past year three persons have officiated as Treasurer, as will be seen by the following reports:

Cash in hand, reported by J. C. Vaughan, last year,	\$1,679.20	
Amount received by J. C. Vaughan to Sept. 17, 1893,	162.99	
Salary as Treasurer, J. C. Vaughan		\$4.50
Cash transferred to Treas. M. A. Hunt by Treas. J. C. Vaughan		1,837.69
	<u>\$1,842.19</u>	<u>\$1,842.19</u>

Cash in hand, received by M. A. Hunt from J. C. Vaughan	\$1,837.69
Received by M. A. Hunt, from fees, new members re-insurance, and six months' interest on bonds	375.41

The following bills were paid by M. A. Hunt:	
By printing receipts (Hackensack Republican)	\$4.00
By advertising annual meeting (American Florist)	1.96
By advertising annual meeting (Florists' Exchange)	1.00
<i>Carried forward</i>	<u>\$2,213.10</u> <u>\$6.96</u>

<i>Brought forward</i>	\$2,213.10	\$6.96
By advertising annual reports (American Florist) .		8.00
By 500 certificates (Wilson & Humphreys)		4.00
By 200 orders on Treasurer (Hackensack Republican)		1.50
By Membership in Protective Association		5.00
By 600 letterheads (Florists' Exchange)		5.25
By advertisement, 1 year (American Florist)		25.48
By expenses of M. A. Hunt to Chicago		9.00
By stamped envelopes and printing (Moore B. Langen)		8.25
By amount returned to Bradford Rosery		3.50
By filing certificate with Secretary of State of N. J. .		1.00
By filing report with Secretary of State of N. J. . .		20.00
By 1,500 applications (Florists Exchange)		8.25
By advertisement, 6 months, (Florists Exchange) . .		6.75
By 650 assessment blanks (Florists Exchange)		4.00
By 1,000 envelopes (Hackensack Republican)		3.25
By 1,000 applications		7.75
By Ellis Bros., Keene, N. H., loss		11.01
By R. E. Nace, Royersford, Pa., loss		10.25
By Henry Krinke, St. Paul, Minn., loss		18.30
By Fred Burki, Bellevue, Pa.		47.76
By mortgage, reserve fund investment		500.00
Balance paid by McKean & Co., for M. A. Hunt to J. G. Esler, Treasurer		1,497.84
	<u>\$2,213.10</u>	<u>\$2,213.10</u>

TREASURER'S STATEMENT FROM MAY 1, 1894.

RECEIPTS.

Received from McKean & Co., account of M. A. Hunt	\$1,497.84
Received from McKean & Co., account of J. M. Jordan, being funds received by the President	516.90
Received by Treasurer for re-insurance	9.94
Received by Treasurer from all other sources	4,241.00
Total	<u>\$6,265.68</u>

DISBURSEMENTS.

Paid Chapin Bros., Lincoln, Neb., 16 St. Houses	\$43.50
Paid Chapin Bros., Lincoln, Neb., Union College Houses	35.60
Paid Hackensack Republican, 500 postal notices	7.00
Paid expressage on Treasurer's books and papers	1.45
Paid Stamm & Clare, Hutchinson, Kansas, loss	11.53
Paid Emma Killenberger, Fort Dodge, Iowa, loss	16.74
Paid Langdon & Belt, Sterling, Ill., loss	39.25
Paid F. M. Pennock, Charlestown, West Virginia, loss	6.70
Paid expressage ou blanks and Treasurer's vouchers	1.25
Paid J. C. Willis, East Rochester, O., loss	27.45
Paid Florists' Exchange, 500 proofs of loss	10.75
Paid Florists' Exchange, 100 warrants	1.50
<i>Carried forward</i>	<u>\$202.72</u>

<i>Brought forward</i>	\$202.72
Paid over remittance, amount returned	1.38
Paid Hackensack Republican, 1,000 envelopes	3.00
Paid Moore & Langen, circulars50
Paid J. M. Jordan, President, expenses to Terre Haute, postage, expressage, etc.	18.10
Paid Sugust Mining, East St. Louis, loss	30.80
Paid Ella Campbell Wilson, Cleveland, Ohio, loss	18.19
Paid Florists' Exchange, 150 note circulars	3.75
Paid F. Hahman, Philadelphia, loss	11.07
Paid C. V. Evans, Kearney, Nebraska, loss	8.78
Paid J. P. Corn, Jr., Lexington, Mo., loss	45.38
Paid Chas. P. Muller, Wichita, Kansas, loss	5.81
Paid S. D. Bradford, Colorado Springs, loss	43.60
Paid Fred Ehrbarr, Cleveland, Ohio, loss	37.75
Paid W. H. Culp & Co., Wichita, Kansas, loss	4.50
Paid estate of M. A. Hunt, salary as Treasurer	30.00
Paid C. E. Kern, Kansas City, Mo., loss	58.37
Paid Florists' Exchange, 500 letter circulars, 300 note circulars, and 100 noteheads	14.00
Paid Frank Luce, Ashtabula, Ohio, loss	123.96
Paid Mrs. S. E. Luther, Lawrence, Kansas, loss	4.58
Paid J. S. Morris, Glen, Kansas, loss	14.67
Paid Steinhauser & Eagle, Pittsburgh, Kansas, loss	4.69
Paid Florists' Exchange, advertisement, 6 months	6.50
Paid William Clark, Colorado Springs, Col., loss	7.30
Paid The Heite Floral Co., Kansas City, Mo., loss	13.88
Paid Jennie E. Keeling, Canton, Ill., loss	4.00
Paid A. J. & S. M. McCarthy, Canton Ill., loss	10.25
Paid J. M. Jordan, salary as President, 1894	30.00
Paid John G. Esler, salary as Secretary, 1894	250.00
Paid John G. Esler, salary as Treasurer, May 1 to August. 1, 1894	12.50
Paid John G. Esler, for postage, Secretary and Treasurer	45.50
	<hr/>
	\$1,065.53
Balance in bank	5,200.15
	<hr/>
	\$6,265.68

THE RESERVE INVESTMENT CONSISTS OF

No. 1. One 5% Lake View bond for	\$500.00
No. 2. One 4% City of Chicago bond for	500.00
No. 3. Two 5% County of Du Page bonds for \$500 each	1,000.00
No. 4. One 4½% Village of Evanston bond for	500.00
No. 5. One 8% mortgage note of Isabell Pearce, of Terre Haute, Ind.,	500.00
	<hr/>
	\$3,000

And six months' uncollected interest upon bonds Nos. 1, 2, 3 and 4, and upon mortgage note.

JOHN G. ESLER, *Treasurer.*

At a meeting of the Directors subsequently held, J. M. Jordan was

elected President; James Horan, Vice-President; John G. Esler, Secretary; Albert M. Herr, Treasurer.

The term of office of Directors was arranged by drawing, and resulted as follows: John T. Temple and Wm. Scott, one year; Albert M. Herr and E. G. Hill, two years; James Horan, Julius Roehrs and J. C. Vaughan, three years.

CHRYSANTHEMUM SOCIETY OF AMERICA.

A meeting of the Chrysanthemum Society of America was held at Atlantic City on Wednesday afternoon, August 22, 1894, President E. A. Wood in the chair. In the absence of Secretary Elmer D. Smith, Edwin Lonsdale was appointed secretary *pro tem*.

The election of officers for the ensuing term resulted as follows: Elijah A. Wood, President; E. G. Hill, Vice-President; John N. May, Treasurer, and Elmer D. Smith, Adrian, Michigan, Secretary.

It was on motion agreed that committees of threes be appointed to receive and examine seedling chrysanthemums and sports in the different cities as follows:

BOSTON.—A. H. Fewkes, (flowers to be forwarded express prepaid to Horticultural Hall), Lawrence Cotter, James Wheeler.

NEW YORK.—Eugene Dailedouze, (flowers to be forwarded express prepaid, care John Young, 53 W. 30th Street), Ernst Asmus, Wm. Tricker.

PHILADELPHIA.—Edwin Lonsdale, (flowers to be forwarded express prepaid, 1514 Chestnut Street, care Pennock Bros.), Robert Craig, Thomas Cartledge.

CINCINNATI.—Richard Witterstaetter, (flowers to be forwarded express prepaid, to corner 4th and Walnut streets), Fred Walz, H. L. Sunderbruch.

CHICAGO.—W. N. Rudd, (flowers to be forwarded express prepaid, to Room 202, 185 Dearborn Street), Frank Leslie, E. A. Kimball.

It was ordered that the foregoing committees be in session October 20 and November 10, in their respective cities, where the blooms submitted for judgment will be examined and reported upon under the following conditions, viz.:

Not less than six blooms of each variety to be shown, and these to be only such varieties as have been given at least the second year's trial.

No member of a committee shall exhibit his own blooms before a committee of which he is a member.

It will be well for those who exhibit seedlings under number to also provide the committee with a name to be used in case the variety is commended, so that they may be reported upon by name rather than number.

It was on motion agreed that a committee of three be appointed to prepare a scale of points for the use of judges at chrysanthemum exhibitions, for consideration at the next annual meeting.

A communication was received from Mr. Michael Barker, Ithaca, N. Y., which was on motion received and filed.

In order to make sure of the name of this organization, it was voted that it should be known as the CHRYSANTHEMUM SOCIETY OF AMERICA.

It was moved, seconded, and duly carried, that the report of the Secretary, Elmer D. Smith, on registration of new varieties be printed in the Proceedings of the Society of American Florists.

EDWIN LONSDALE, *Secretary pro tem.*

New chrysanthemums disseminated and registered in 1894 are as follows:

By John N. May, Summit, N. J.—Achilles, Malmaison, Mayflower, Minerva, Titian, Yellow Queen.

By E. G. Hill & Co., Richmond, Ind.—Mrs. E. G. Hill, Challenge, Inter-Ocean, Beau Ideal, Eugene Dailedouze, Abraham Lincoln, Century, Elegant, Lagoon, Mrs. Jas. Thompson, Richmond Beauty, Mrs. P. W. Smith.

By Thos. H. Spaulding, Orange, N. J.—Thos. H. Brown, Miss G. H. Bates, Mrs. W. H. Trotter, Esther Cleveland, Wm. Plumb, Eiderdown, R. L. Beckert, Wanlass, Frank Hatfield, Shawmut, Snowflake, Mrs. R. English, Mrs. John Dallas, Judge C. S. Benedict, Maud Pierson, Fairview, Judge Addison Brown, Silver Cloud, J. Pitchers, Great Republic, Cinderella, Christa Bell, Mary Hill, Goliath, White Bock, Black Diamond, Roger Williams, Heron's Plume, James Comley, Flossie A. Williams, Conqueror, Golden Queen, George Raynor, L. L. May, Meteor, Laura Cushing, M. B. Little, Mrs. A. E. Boynton, R. C. Martin, R. McArthur, Silver Bell, Silver Queen, Thalma, Wilbur Condon, Wildfire, Waldemar.

By Pitcher & Manda, Short Hills, N. J.—Georgiene Bramhall, Mrs. Jas. B. Crane, Mrs. H. McK. Twombly, The Livingstone, Bonnie Marjorie, Charlotte, Miss Florence Pullman, Miss E. T. Hulst, Mrs. Geo. H. Morgan, Mrs. Florence P. Langham, Jessie Godfrey, Miss E. K. Kingsley, Thomas Emerson, Mrs. George West, W. C. Cook, Miss Tocie Belle Harper, Mrs. John H. Starin, Mrs. Paul Wilcox, Mrs. Mary A. Forepaugh, J. J. Hill, Mrs. W. K. Vanderbilt, Mrs. Archibald Rogers, Mrs. Howard Rinsk, Miss Agnes L. Clucas, Mrs. Marshall Crane, Mrs. James Eadie, Geo. Schiegel, Mrs. Charles Lanier, Mrs. E. O. Wolcott, Mrs. Geo. J. McGee, Mrs. A. H. Ewing, Elizabeth Bisland, Dorothy Toler, Adele Merz, Mrs. Geo. M. Pullman, Mrs. Sarah Rose, Mrs. W. R. Merriam, Robert M. Grey, Hon. Thomas Lowry, Miss Louise Harts-horn, Katherine Richards Gordon, Mrs. F. Gordon Dexter, Garza, American Eagle, Partridge, Yellow Hammer, Condor, Titmouse, Silver Bill, Tanager, Red Robin, Toucan, Falcon.

By Peter Henderson & Co., New York.—Uncle Sam, Thomas Jones, Marion Henderson.

By John H. Sievers, San Francisco, Cal.—Mrs. J. Geo. Iis, Freda, Mrs. Nellie P. Moulton, Lurline, Geo. E. Goodman, Sophie Sievers.

By H. Yoshiike, Oakland, Cal.—Perfectio, Capt. J. C. Ainsworth, Amber Ada Spaulding, Pride of California, Fisher's Torch, Amoor, Formosa, Morocco, Quito, Satisfactio, Tasmania, Yukon, Arctic, Castle Peak, White Lotus, Bangkok, Mount Hamilton, Golden Castle, Mount Everest, Oruba, Port Imperial.

By F. L. Chandler, South Lancaster, Mass.—Sayonara.

By Fred Dorner & Son, Lafayette Ind.—Maj. Bonnaffon.

By Mann Bros., Randolph, Mass.—Mutual Friend.

By R. Witterstaeter, Sedamsville, Ohio.—Marie Louise.

By Edwin A. Seidewitz, Annapolis, Md.—Sebrina.

By W. A. Chalfant, Springfield, Mo.—Clinton Chalfant.

By J. C. Vaughan, Chicago, Ills.—Constellation, Joanna.

By Vick & Hill, Rochester, N. Y.—Geo. S. Conover.

By Nathan Smith & Son, Adrian, Mich.—Laredo, Iora, J. A. Pettigrew, Miss Hattie Bailey, Oriana, Ingomar, Golden Hair, A. H. Fewkes, Prairie Rose, Lady Playfair, Mrs. Jos. Rossiter.

The following names have been registered since the last meeting but these varieties are not yet in commerce.—Erato, Iliawatha, Eureka, Nyanza, Polyphemus, Brick Top, Monte Vista, Camilla, Nissus, Eudymion, Ursino, Orange Judd, Minnehaha, Durango, Proserpine, J. J. B. Hatfield, Zipangi, Mrs. E. H. Hunt, Mrs. F. G. Darlington, Nyanza, Sundew, Columbine, The Debutaunt, Conspicua, Infatuation, Agrippa, Colloseum, Venus de Medici, Isoleon, Castillian, Zulinda, Sunrise, Constellation, Pluto, Peach Blossom.

The Society are indebted to Prof. L. H. Bailey for *Annals of Horticulture* and to The American Florist Co. for their Trade Directory.

ELMER D. SMITH, *Secretary.*

FLORISTS' INTERNATIONAL TELEGRAPH DELIVERY ASSOCIATION.

At the meeting of this Association, held on Thursday Evening, Aug. 23d, the Secretary's report showed that the volume of business done had considerably increased over that of last year. Several alterations have been made in the by-laws and also in the rules and regulations governing the workings of the Association.

Officers for the ensuing year were elected as follows: President, H. A. Siebrecht, New York; Vice-President, Thomas Cartledge, Philadelphia; Secretary and Treasurer, H. B. Beatty, Oil City, Pa. The Board of Managers are: Messrs. Cartledge, Whitnall, Siebrecht, Seidewitz, Smyth, Small, Jordan, Gasser and Feast. A European agent has been elected in Vienna; this is the first member from abroad, but it is expected that in

a short time foreign agents will be established at the principal watering places and large centers in Europe.

A circular letter is to be issued to every prominent retail florist in every city, informing him of the rules and regulations and terms under which this Association is doing business; also, giving the names of the members of the Association, so that the retail florist will be enabled to transmit any order he may take to such member; and the party so transmitting the order will receive the same percentage from the Association as the members themselves.

FLORISTS' PROTECTIVE ASSOCIATION.

At the meeting of this body, held on Wednesday Evening, August 22, a plan was formulated by those present that will undoubtedly add to the efficiency of this Society. The Secretary's report showed that the usual volume of business had been done, and a slight increase in membership.

THE AMERICAN ROSE SOCIETY.

This Society assembled on Tuesday Evening, August 21; the meeting was a very enthusiastic one, the principal rose growers attending the Convention being present. The following officers were elected: President, Robert Craig, Philadelphia; Vice-President, John H. Taylor, Bay-side, N. Y.; Secretary, H. B. Beatty, Oil City, Pa.; Treasurer, John N. May. The Executive Committee will be chosen by the Chairman-elect, and will commence work immediately. This Society, from present indications, promises to become one of the leading auxiliary bodies. The same constitution and by-laws (which set forth the aims and objects of the Society), with few exceptions, were adopted.

H. B. BEATTY, *Secretary.*

LIST OF MEMBERS FOR 1894-95.

ARKANSAS.

Bowen, Wm. M., Box 10, Newport. |

CALIFORNIA.

LOUIS EDLEFSEN, East Los Angeles, *Vice-President*.

Armstrong, Robt., Mountain View,
Santa Clara Co.

Berger, Mrs. H. H., San Francisco.

Clack, Sidney, Del Monte Gardens,
Monterey.

Edlefsen, Louis, 524 Downey ave.,
East Los Angeles.

Sproule, Jas., Sherwood Hall Nur-
series, San Francisco.

COLORADO.

Clarke, William, 318 E. Platte ave.,
Colorado Springs. |

Wood, E. A., Denver.

CONNECTICUT.

GEO. H. ROWDEN, Wallingford, *Vice-President*.

Atwood, Geo. W., 250 Smith st.,
Hartford.

Anstin, Ed., Suffield.

Bindloss, T. Palmer, New London.

Champion, J. N., New Haven.

Clark, Mrs. M. G., Willimantic.

Coombs, John, 118 Benton st.,
Hartford.

Dallas, A., 32 Union st., Waterbury.

Duncan, J. W., Black Rock.

English, E. S., Pomfret.

Geduldig, G., Norwich.

Hill, Morris A., Ansonia.

Horan, James, Bridgeport.

Ives, J. H., Danbury.

Lines, C. P., 23 Beers st., New
Haven.

Marchand, P., So. Manchester.

O'Hara, Eugene, Thompson.

Reck, John, Bridgeport.

Rowden, Geo. H., Wallingford.

Smith, Jos. F., 62 Main st., Norwich.

Snow, W. J., 434 Bank st., Water-
bury.

Spalding, John, New London.

Spear, D. A., Asylum st., Hartford.

Wiard, F. S., Yalesville.

Whitehead, Geo. B., Green's Farms.

Whiting, A., Farmington ave.,
Hartford.

DELAWARE.

Baylis, L. E., 9th ward, Wilming-
ton. |

Brinton, Chas. E., Wilmington.

Grant, Henry, Penna. ave., Wil-
mington.

DISTRICT OF COLUMBIA.

PHILIP GAUGES, Washington, *Vice-President.*

Brunger, C. A., Industrial School, W. Washington.	Hitz, John, 917 R st., N. W. Wash- ington.
Clark, Jas., Bladensburg Road, Washington.	Kane, H. A., care C. Strauss & Co., Washington.
Clark, W. S., Bladensburg Road, Washington.	King, W. H., Langdon.
Durfee, Benj., Washington.	Oliver, G. W. Botanic Garden, Washington.
Freeman, J. R., 612 13th st., Wash- ington.	Reynolds, C. Leslie, Botanic Garden, Washington.
Gauges, Philip, Botanic Garden, Washington.	Shellhorn, Christian, 441 Centre Market, Washington.
Gude, Adolphus, 1224 F. st., Wash- ington.	Small, Archie, Washington.
Gude, Wm. F., 1224 F st., Washington	Smith, W. R., Botanic Garden, Washington.

FLORIDA.

Lewis, W. F., Pensacola.

GEORGIA.

THOMAS H. BROWN, West Atlanta, *Vice-President.*

Brown, Thomas H., West Atlanta.	Plumb, William, Atlanta.
Guien, A., 1483 Broad st., Augusta.	Wachendorf, Ed., Atlanta.
Oelschig, A. C., Savannah.	

ILLINOIS.

ANDREW WASHBURN, Bloomington, and E. WEINHOBBER, Chicago, *Vice-Presidents.*

Ammann, J. F., Edwardsville.	Hauswirth, P. J., 318 Wabash ave., Chicago.
Anthony, J. T., 3425 Prairie ave., Chicago.	Heinl, Jos., Jacksonville.
Baller, F. A., Bloomington.	Heinl, F. J., Jacksonville.
Buckbee, H. W., Rockford.	Heller, J. A., 1117 North 8th st., Quincy.
Buettner, Emil, Park Ridge.	Hunt, E. H., 68 Lake st., Chicago.
Chadwick, W. H., 402 Rialto, Chicago.	Kanst, Fred., South Park, Chicago.
Cole, J. M., Peoria.	Kay, John C., Rock Island.
Corbrey, T. J., 64-66 Wabash ave., Chicago.	Kennicott, F., 34 Randolph st., Chicago.
Deamud, J. B., 34-36 Randolph st., Chicago.	Kidwell, J. F., Chicago.
Eddy, Burt, 146 W. Washington st., Chicago.	Killen, J. E., Irving Park, Chicago.
Fehr, A. G., Belleville.	King, F. J., Ottawa.
Franks, Thomas, Champaign.	Klehm, Geo., Arlington Heights.
Gardner, Mrs. S. P., Hinsdale.	Lane, John, 4801 Lake ave., Chicago.
Gentemann, C. F. W., Quincy.	McAdams, Andrew, Hyde Park.
Grant, G. L., 322 Dearborn st., Chicago.	Murray, J. C., Peoria.
Grossart, G. W., Belleville.	Newett, Alex., Jr., 22d and Millard ave., Chicago.
Guy, E. W., Belleville.	Phelps, H. L., Springfield.
Halsted, A. S., Belleville.	Raynolds, J. D., Riverside.
Hay, Chas. E., Springfield.	Silliman, Mrs. I. C., 118 Ogden ave., Chicago.
	Smyth, W. J., 270 31st st., Chicago.

ILLINOIS — Continued.

Stromback, C., Lincoln Park, Chicago.	Walcott, S. A., Batavia.
Sundmacher, W. H., Chicago.	Washburn, Andrew, Bloomington.
Swayne, H. S., Bloomington.	Weinhoeber, E., 417 Elm st., Chi- cago.
Thorpe, John, Chicago.	Wilson, Jas. S., care J. C. Vaughan, Chicago.
Vaughan, J. C., 88 State st., Chicago.	

INDIANA.

FRED DORNER, JR., Lafayette, *Vice-President.*

Balmer, J. A., Vincennes.	Hartje, John, 1637 N. Illinois st., Indianapolis.
Baur, Alfred, Richmond, Ind.	Heinl, John J., Terre Haute.
Bertermann, John, Indianapolis.	Hill, E. Gurney, Richmond.
Bertermann, William G., Indian- apolis.	Hunt, C. A., Terre Haute.
Carmody, J. D., Evansville.	Reiman, Mrs. W. A., Vincennes.
Coles, W. W., Kokomo.	Stuart, J. S., Anderson.
Dorner, Fred., Lafayette.	Wade, John H., Evansville.
Dorner, Fred., Jr., Lafayette.	Wiegand, A., 7th and Illinois sts., Indianapolis.
Evans, J. A., Richmond.	
Gause, G. R., E. Main st., Richmond.	

IOWA.

W. E. KEMBLE, Oskaloosa, *Vice-President.*

Barr, F. D., Davenport.	Kramer, Judson A., Marion.
Bahr, F. G., Davenport.	Laisle, Christ, Keokuk.
Bills, F. L., Davenport.	Rennison, J. C., Sioux City.
Dannache, Chas., Davenport.	Rennison, W. S., Sioux City.
Greene, W., Box 58, Davenport.	Temple, J. T., Davenport.
Harkett, W. A., Dubuque.	Wilcox, J. F., Council Bluffs.
Kemble, W. E., Oskaloosa.	

KANSAS.

Coventry, M. J., Fort Scott.	Whitcomb, A., Lawrence.
Mueller, Chas. P., Wichita.	

KENTUCKY.

W. S. BELL, Lexington, *Vice-President.*

Bell, W. S., 23 East Short street, Lexington.	Rayner, Charles, Anchorage.
Hobbs, T. C., Anchorage.	Reimers, E. G., Baxter ave., Louis- ville.
Nanz, C. G., Owensboro.	Schultz, Jacob, 1325 E. Broadway, Louisville.
Power, E., Frankfort.	

LOUISIANA.

JOHN EBLEN, New Orleans, *Vice-President.*

Eble, Charles, New Orleans.	Vigne, L., 108 White st., New Orleans.
Eblen, John, Hurst street, New Orleans.	Virgin, Uriah J., New Orleans.
Maitre, R., New Orleans.	

MAINE.

GEORGE L. MAHONEY, Saco, *Vice-President.*

Dirwanger, Joseph A., Portland.	Moses, F. H., Bucksport.
Mahoney, George L., Saco.	Wallace, Alexander, 136 Vaughan st., Portland.
Morton, W. E., Portland.	

MARYLAND.

E. A. SEIDEWITZ, Annapolis, *Vice-President*.

- | | |
|---|---|
| Bester, Henry A., 36 E. Baltimore st., Hagerstown. | Hahn, E., 1345 So. Charles st., Baltimore. |
| Bester, William, 205 So. Potomac st., Hagerstown. | Holzappel, Henry, Jr., Hagerstown. |
| Burger, Fred. G., 1128 Greenmount ave., Baltimore. | Kress, E., 2506 North ave., Baltimore. |
| Cook, John, 318 North Charles st., Baltimore. | Millman, F. X., Green st. station, Cumberland. |
| Donn, John, 1st Toll gate, Harford road, Baltimore. | Rodgers, Jas. G., Jr., Govanstown. |
| Feast, C. F., Baltimore. | Seidewitz, E. A., Annapolis. |
| Hermann, Charles, Frederick. | Smith, G. V., 1101 E. Baltimore st., Baltimore. |
| | Wiedey, John, Mt. Washington. |

MASSACHUSETTS.

J. F. HUSS, LENOX, and LAWRENCE COTTER, Dorchester, *Vice-Presidents*.

- | | |
|---|--|
| Adams, C. Thompson, West Medway. | Gordon, George, Beverly. |
| Aitken, M., Springfield. | Greaves, Thomas, North Easton. |
| Allan, David, Cliftondale. | Griffin, Wm., Lenox. |
| Anderson, George M., Wayside Farm, Milton. | Harris, F. L., Wellesley. |
| Ball, Peter, Malden. | Hews, A. H., North Cambridge. |
| Barker, J. G., Jamaica Plain. | Huss, J. F., Ventfort Hall, Lenox. |
| Becker, Frank, Cambridge. | Junkins, Geo. S., Lawrence. |
| Berry, R. E., Boston. | Kingman, M. B., Amherst. |
| Betts, Chas. E., Worcester. | Knapp, W. H., Newtonville. |
| Bock, W. A., North Cambridge. | Lange, H. F. A., Worcester. |
| Bowditch, A. C., 32 Webster ave., Somerville. | Loveless, Alfred J., Lenox, Box 45. |
| Brague, L. B., Hinsdale. | Mann, Mary S., Florence. |
| Breed, E. W., Clinton. | Manning, A. C., Reading. |
| Cameron, Robt., Botanic Garden, Cambridge. | Manning, J. W., Jr., Reading. |
| Clapp, E. B., 175 Boston st., South Boston. | Manning, W. H., Brookline. |
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