Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.



1922

OLDS & WHIPPLE INC. SEEDS AND FERTILIZERS HARTFORD.CONN.



S Ve

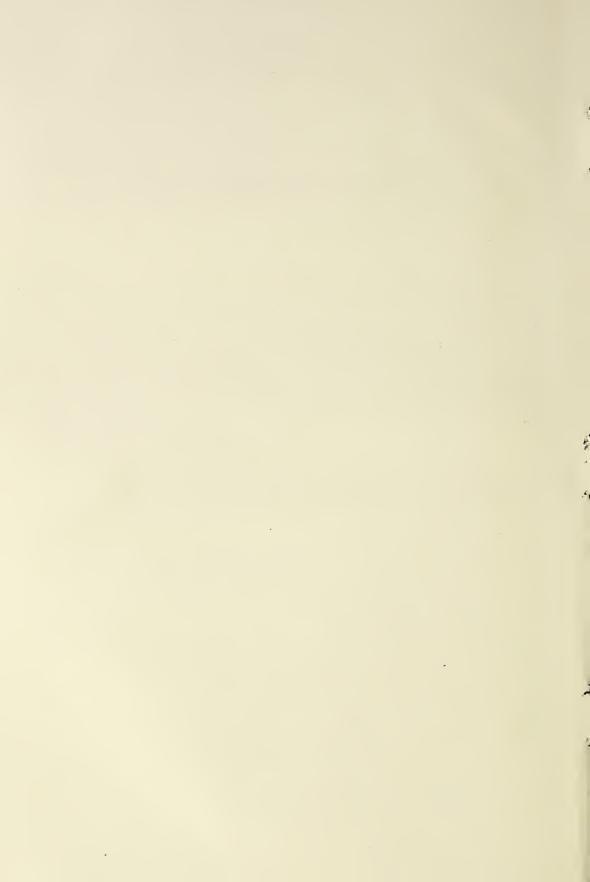
FOREWORD

To Our Friends and Customers:

We are entering our 45th, year of business at the old stand. The year past has been full of difficulties of which we have had our full share, but we face the future with confidence. History repeats itself and as surely as the tide ebbs it will flow and bring to our customers prosperity and in that prosperity we will share. And so, at the beginning of this year we are laying our plans that we may have on hand when the season opens, our usual supply of fertilizer materials and agricultural implements that our trade may require. Prices on both these items are much lower than a year ago, which fact will enable the Farmer to produce crops at less cost.

We extend to our friends our thanks for their loyal patronage in the past and assure them that by square dealing we shall endeavor to merit same in the future.

OLDS & WHIPPLE, INC.



SEED, FERTILIZER

AND

AGRICULTURAL IMPLEMENT CATALOG

For 1922

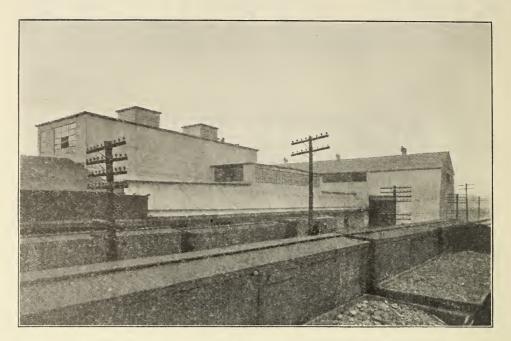


FERTILIZER FACTORY:
Tolland Street, East Hartford, Conn.

MAIN OFFICE AND IMPLEMENT WAREHOUSE: 164-6-8 State St., Hartford, Conn.

OLDS & WHIPPLE, Inc.

NOTE: Stop at State Street Office and secure a written order on Warehouse for fertilizers



A view of our new Fertilizer Mixing Plant as seen from the railroad.



This photograph shows an interior view of one of our storage rooms and was taken before the buildings were entirely finished.

Olds & Whipple, Inc. List of Fertilizers and Raw Materials for 1922

O. & W.'s Special Fertilizers

O. & W. Complete Tobacco Fertilizer

O. & W. Special Tobacco Fertilizer

O. & W. High Grade Tobacco Starter

O. & W. Complete Corn, Onion and Potato Fertilizer

O. & W. Special Corn, Onion and Potato Fertilizer

O. & W. High Grade Potato Fertilizer

O. & W. Complete Seeding Down Grass Fertil-

O. & W. Top Dressing for Grass

O. & W. Bone and Potash Compound

O. & W. High Grade Starter and Potash Compound

O. & W. Lawn Fertilizer Fertilizing Materials

Swift Sure Phosphate.
Swift Sure Bone Meal.
High Grade C. S. Meal guaranteed analysis.
Castor Pomaceguaranteed analysis.
Tobacco stems in bales.
Lime for Agricultural use.
Fine ground Nova Scotia Plaster.
High Grade Muriate Potash.
High Grade Sulphate Potash

Kainit.

Acid Phosphate. Sulphate of Ammonia. Nitrate of Soda.

Sheep Manure.

Dry Ground Fish.

Tankage.

Steamed Bone.

Precipitated Bone Phosphate.

Poultry Manure.

CONCERNING FERTILIZERS

Mixed fertilizers are offered for the year 1922 at a very sharp reduction over the prices prevailing during the past season, and at such low prices that in our opinion the farmer can save nothing by mixing raw materials, and it is very certain that in mixing fertilizers by improved machinery the job is much more thoroughly done than is possible on the farm.

Potash is in plentiful supply and our special formulas are now back on a pre-war basis carrying a full percentage of potash. This, in our opinion, will tend to increase the weight of the tobacco crop. We repeat what was said in our 1921 catalogue, "that it is a mistake to attempt to grow crops on Cotton-seed Meal alone as Meal lacks two important elements of plant food, namely, phosphoric acid and potash." Particularly, as we have been supplying potash in reduced quantities during the past five or six years. To supply these two elements of plant food to those farmers who expect to use C. S. Meal we are again offering our Bone & Potash Compound and our High Grade Starter & Potash Compound to be used at the rate of 1000 lbs. per acre with C. S. Meal or Castor Pomace and we strongly recommend the use of same.

Our Special Mixtures for all Crops

The following pages give you a list of the special fertilizers which we manufacture at our own factory.

These special mixtures are from tested formulae, proved out by practical growing tests. They are finely ground, and mechanically, in such condition, as to render them readily available to the growing crops.

Their use will repay you. They produce the kind of crops that pay. Used and endorsed by best growers.

O. & W. Complete Tobacco Fertilizer

For 1922 this famous formula will be made with the same analysis as before the war. For many years hundreds of acres up and down the Connecticut Valley have been fertilized with our Complete and produced the finest crops of tobacco. It is endorsed by the buyers of the leaf which is the strongest kind of recommendation. No tobacco fertilizer can be made better.

O. & W. Special Tobacco Fertilizer

This is made of the same high grade materials as our Complete both being Cottonseed Meal base, but this Special carrying no Potash, and should be used in connection with a coat of stable manure or tobacco stems. And now, that potash has become reasonable in price we do not recommend the formula alone to grow a crop of tobacco, except in connection with manure and stems.

GUARANTEED ANALYSIS $\left\{ \begin{array}{l} 5 \text{ to } 6\% \text{ Ammonia.} \\ 4 \text{ to } 5\% \text{ Available Phosphoric Acid.} \end{array} \right.$

O. & W. High-Grade Tobacco Starter

This high grade starter has been used with conspicuous success by some of our best growers in the valley. We recommend that it be applied after the first time hoeing. At that critical stage of growth an abundant supply of quickly available ammonia enables the plant to get a vigorous start, overcome and grow away from any unfavorable condition that may exist.

Experience has taught us that the crop that grows quickly, vigorously and does not stop until it reaches maturity produces the best goods.

Apply about 500 lbs. per acre.

Guaranteed Analysis { 10 to 11% Ammonia. 3 to 4% Available Phosphoric Acid.

O. & W. Bone and Potash Compound

This formula was extensively used with conspicuous success in 1921. It is recommended for use with Cottonseed Meal or Castor Pomace for the tobacco crop. It contains the elements of plant food which the above materials lack, namely, available phosphoric acid and potash and when used with meal makes a complete fertilizer. We recommend 1000 lbs. per acre.

GUARANTEED ANALYSIS { $\frac{4}{15}$ to 5% Available Phosphoric Acid. $\frac{15}{15}$ to 16% Actual Potash.

O. & W. High Grade Starter and Potash Compound

This formula is the same as the above with the addition of 5 per cent quickly soluble ammonia and should be used with Cottonseed Meal or Castor Pomace on such tobacco lands as need a starter. The ammonia of C. S. Meal and Pomace is slow acting and on some lands a more quickly soluble form of ammoniate is needed to start the crop. It should be used as our Bone & Potash Compound, 1000 lbs. per acre.

GUARANTEED ANALYSIS

5 to 6% Ammonia.
4 to 5% Available Phosphoric Acid.
15 to 16% Actual Pater. 15 to 16% Actual Potash.

O. & W. Complete Corn, Potato and Onion Fertilizer

This is one of our high grade special mixtures for use on Corn, Potato and Onion Crops.

The sources of plant food are such as are exceedingly available to the plant and best suited to promoting rapid and vigorous growth. Tested at our own farms we are able to speak authoritatively as to its merits. All growers will be repaid by using this special mixture on their Crop.

Our soils are well adapted to the culture of these Crops and to make them profitable as well, is an easy matter if the culture is supplemented and pro-

moted by the use of our special fertilizer.

O. & W. Special Corn, Potato and Onion Fertilizer

This special fertilizer mixture is a great favorite in the big onion districts in Massachusetts and Connecticut. In its preparation, regard for the needs of the onion crop both as to growth and quality, have been considered, and the result is a mixture best suited to the plants needs.

Give this mixture of ours a trial and its use will convince you of our claims

for it. Endorsed by best growers.

Guaranteed Analysis as follows:

3 to 4% Ammonia. 8 to 9% Available Phosphoric Acid.

2 to 3% Actual Potash.

O. & W. High Grade Potato Fertilizer

This is a concentrated mixture running high in analysis in every ingredient, and as a formula, is extensively used in the potato growing sections of Maine. To produce large crops of potatoes you must feed heavily of Potash. This was thoroughly proven during the war, as even when Potash was extremely high and scare some of the Maine potato growers paid the price for this ingredient and were well repaid by increased crop.

GUARANTEED ANALYSIS 5 to 6% Ammonia.
8 to 9% Available Phosphoric Acid.
7 to 8% Potash.

O. & W. Seeding Down Mixture for Grass

Designed to be used when seeding for permanent mowing, running high in every ingredient, and furnishing the essential things for a permanent fertilizer, namely, phosphoric acid and potash.

GUARANTEED ANALYSIS 6 to 7% Ammonia.
8 to 9% Available Phosphoric Acid.
6 to 7% Actual Potash.

O. & W. Top Dressing for Grass

We recommend to be used from 300 to 600 lbs. per acre in the Spring as a top dressing on mowing lots. Made of quickly soluble materials, it can be applied with advantage as late as June 1st.

GUARANTEED ANALYSIS 7 to 8% Ammonia. 4 to 5% Available Phosphoric Acid.

Agricultural Lime

Lime is necessary on many soils to correct acidity and to render available the inert plant food present. We are, however, of the opinion that liming may be easily overdone, that constant application would tend to make the soil alkaline. We offer lime in two forms; Agricultural Lime, which is the flakings at the lime kilns and is made up partly of airslacked lime and also contains some lime that is not thoroughly airslacked. We offer this in carload lots in bulk or bags and in bags less carlots. We can also furnish Ground Limestone in carlots, bulk or bags and in bags less carlots.

Prices on Lime and all fertilizer mixtures on application.

ATOwing to unsettled conditions the prices on all goods in this catalogue are subject to change without notice.

DESCRIPTIVE CATALOGUE and PRICE LIST OF

Garden and Farm Seeds, Agricultural Implements and Fertilizers for 1922

WE DO NOT WARRANT SEEDS

The fact that no reputable seedsman now warrants seeds in any respect being well known renders it unnecessary for us to say very much on this point, as it must be apparent to every intelligent person that no seedsman can afford to send out poor or worthless seeds. There could be no more certain ways of destroying his business. We beg to append the following notice:

The seeds offered in this catalogue have been carefully selected from most reliable sources and we believe them to be first-class in every respect, but we cannot guarantee the crop as too many conditions enter into it. Therefore we give no warranty, expressed or implied, as to description, purity, productiveness, or any other matter of any seeds we send out, and we will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms they are to be returned at once, and if any money has been paid for them it will be refunded.

OLDS & WHIPPLE, INC.

MAIL ORDERS AND SHIPMENTS

Prompt attention to orders by mail. Mailing blank is enclosed in Catalogue to render this service more convenient. Be particular in giving name and address. The new system of Parcel Post enables us to make shipment of large packages by mail.

SEEDS BY MAIL

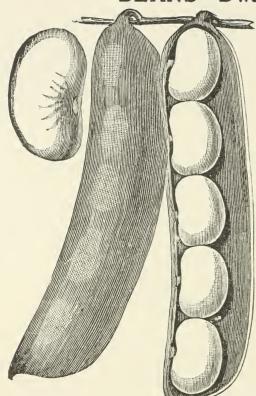
We will pay postage on seeds in packets, ounces, or by pound, with these exceptions; peas, beans, corn, onion sets, grain and grass seeds, which necessitate an extra charge of 5 cents per pound.

ASPARAGUS

An Asparagus bed may be made from one or two year old roots, planted in fall or spring. Plant the roots in rows four feet apart, leaving about twelve inches between plants in the row. Should be planted in trenches and gradually filled in as plants grow. Seeds may be sown in April in drills one foot apart and one inch deep. One ounce of seed will sow sixty feet of drill.

		Per 1/4 1b.	Per 1b.
Donald's Elmira.—Stalks bright green color, of mammoth			
size, tender and succulent,	\$0.10	\$0.20	\$0.75
The Palmetto,—Superior variety, extra large,	.10	•20	.60
Conover's Colossal.—Large and hardy,	.10	.20	.50
Donald's Elmira Roots.—Fine, large, 2 year old and fresh	dug.	Per 10	00, .75
Conover's Colossal Roots.—Fine, large, 2 year old and fre	sh dug.	Per 1	00, .75
Palmetto Roots.—Fine, 2 year old.		Per	100, .75

BEANS-Dwarf or Bush



To produce a regular succession of crops through the season, plant every two weeks, from about beginning of May to end of summer. Plant in rows 18 inches apart, two inches deep; cultivate only when soil is dry, as the scattering of earth on vines will cause them to rust. One quart will plant 100 feet of drill and one and one-half bushels for one acre.

BEANS

Owing to extremely unfavorable weather conditions, the bean crop is very short, some varieties were almost a total crop failure. Stocks are scarce and prices high.

Burpee's Bush Lima,	Per Ib.	5 lb. Lot	15 lb. Lot Per lb.
Burpee's Bush LimaA true bush form and immense			
cropper,	\$0. 35	\$0.30	\$0.25
Burpee's Stringless.—Green pod, extra early,	·3 5	.30	.25
Fordhook Bush Lima.—	•35	.30	.25

	Per lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Improved Rust Proof, Golden WaxEarly, long, round,			
stringless pods,	\$0.35	\$0.3 0	\$0.25
Early Golden Eyed Wax.—Hardy and prolific, flat pods			
early,	.35	.30	.25
Black Wax, Prolific.—Very early, round thick pods,	•35	.30	.25
Wardwell's Kidney Wax.—Early, flat long wax pods, very			
fine,	•35	.30	.25
Early Valentine.—Improved, true round green pod,	.30	.27	.22
Early Yellow Six Weeks.—Flat green pods,	.30	.27	.22
Early China or Red Eye.—A productive variety, green pod,	.30	.27	.22
Horticultural or Cranberry.—Green pod, a superior shell			
bean, medium early,	.35	.30	.25
Low's Champion.—Large green flat stringless pods,	.35	.30	.25
White Kidney.—An excellent shell bean and for baking,			
green pod,	.30	.25	.20
White Marrow.—A fine winter bean,	.28	.23	.18
Boston Favorite.—A large late dwarf horticultural, .	.30	.25	.20
Red Kidney An excellent shell bean, similar to White			
Kidney,	.30	.25	. 20

BEANS-Pole

Plant in hills three to four feet apart, putting four or five beans in a hill, and leaving space in the center for the pole. One quart of limas will plant 100 hills. One quart of the smaller seeded sorts will plant about 200 hills.

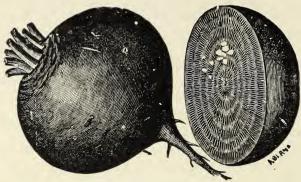
Extra Early Jersey Lima,—An early and large variety, .	Per 1b. \$0.35	5 lb. Lot Per lb. \$0.30	15 lb. Lot Per lb. \$0 25
The Targette A 11 1 1 1 1	• •35	•30	•25
Lima, King of the Garden Large and extremely pro-		Ö	
ductive,	-35	.30	.25
Early CaseknifeLong green and flat pods, used as shell			
and snap bean,	-30	.26	.22
	.30	.26	.22
Early Golden Cluster Wax Pole.—Early golden pods, large			
and tender,	.35	.30	.25

BEETS—Table Varieties

Sow from April to beginning of July, in drills about one foot apart, covering seeds about one inch. Thin the young plants when suitable size for greens to six or eight inches apart. One ounce sows 50 feet of drill, 5 to 6 pounds to one acre.

	Per pkt.	Per oz.	Per 1b.
Crosby's Egyptian.—Early smooth and fine quality,	. \$0.05	\$0.10	\$0.75
Edman's Extra Early.—One of the best,	05	.10	.60

Early Eclipse.—Very early, dark red color,	er pkt. \$0.05	Per oz.	
Early Egyptian.—Good color, a smooth turnip beet,	.05	.10	.60
Early Bassano.—Earliest of all, flesh nearly white, .	.05	.10	.60
Detroit Dark Red.—Smooth, bright red, good keeper.	.05	.IO	.60



Dewing's Early Blood Turnip.

Bastian's Early Blood Turnip.—A quick large growing sort,			
of good color,	.05	.10	.60
Dewing's Early Blood Turnip.—A standard variety of ex-			
cellent quality,	•05	.10	.60
Long Smooth Blood.—An excellent late variety for winter			
use,	.05	.10	.60
Swiss Chard.—Fine for greens, cultivated solely for leaves,	.05	.10	.60

MANGOLD WURZEL

Sow in May or June in rows, 18 inches to 2 feet apart, and thin to 8 inches in the row. The value of these for stock feeding cannot be over estimated. Sow 6 to 8 pounds to one acre.

	Pe	r pkt.	Per oz.	per 1b.
Carter's Mammoth Long Red A heavy cropper, one	of			
the best,		\$0.05	\$c.10	\$.40
Norbiton Giant Long Red.—Very productive, .		.05	.10	.40
Yellow GlobeLarge globular formed roots, good f	for			
shallow soils,	•	.05	.10	.40
Long Red.—Similar to Norbiton Giant,	•	.05	.10	.40
Golden Tankard.—A half-long variety of bright yelle	ow			
color,	•	.05	.10	.40
White Sugar, Lane's Improved.—A well known variety,		.05	.10	.40
Mangold seed in 5 pound lots, 30 cents a pound.				

BROCCOLI

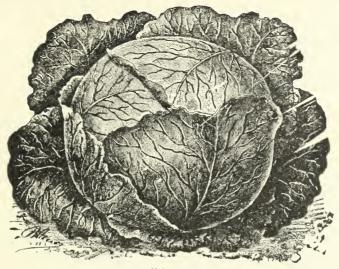
A vegetable resembling Cauliflower but much hardier. Requires the same general culture as cabbage. One ounce of seed produces about 1,500 plants.

	Per pkt.	Per oz.
Purple Cape.—Medium size heads, hardy,	\$0.10	\$0.35
White Cape.—Like Purple Cape, but of cream white color.	.10	·3 5

BRUSSELS SPROUTS

A species of cabbage family and cultivated in about same manner. One ounce of seed will produce about 1,200 plants,

CABBAGE-Early



All Seasons.

All the Cabbage family require rich, deep, well-drained soil. For the early kinds, plant in rows 30 inches apart and 16 inches between the plants. For the late varieties, three feet between the rows and two feet between the plants. For very early use, sow in January or February in hot-beds. Set out when plants are strong enough into other hot-beds or set in cold frames in March. Transplant when danger from frost is past to open ground. The late, or winter crop seed can be sown in May and the plants set out when large enough.

To destroy the green worm that attacks the cabbage plant, use a solution of one ounce of saltpetre in three gallons of water. One ounce of seed will produce about 3,000 plants, one-quarter pound for one acre.

	Per pkt.	Per oz.	Per lb
Copenhagen Market Extra early round hard head	\$0.10	\$0.25	\$3.00
Early Jersey Wakefield Extra.—A fine, very early medium			
sized market favorite,	.10	.25	3.00
Early Summer.—A superior, second early, heads large			
and solid,	.10	.25	2.50
Early Flat Dutch.—A fine early variety for family use, .	.IO	.25	3.00
Early Winningstadt.—A medium early conical shaped head,	,IO	.25	2,50
Fottler's Brunswick.—A short stemmed early drumhead, .	.10	.25	2.50
All Seasons.—Medium early, very large and sure header,	.10	.25	2.50

CABBAGE—Late Varieties

	Per pkt.	Per oz.	Per 1b.
O. & W. Premium Flat DutchAn extra fine selection o	f		
the large late Flat Dutch,	\$0.10	\$0.25	\$2.50
Improved American Drumhead Savoy.—Large, fine quality	,		
excellent winter cabbage,	10	.25	2.50
Stone Mason Drumhead A large round solid variety	, .10	•25	3.00
Red Dutch Drumhead.—Fine solid dark red heads, .	10	.25	2.50
Hollander, or DanishA superior winter variety, heads	3		
round, very hard, fine and tender,	.10	•25	3.00
Sure Head Large growing, fine heading, solid and large	, .10	.25	2.50



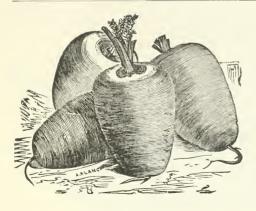
Paris Golden.

CELERY

Sow seed about the first of April in hot-bed or cold frame. Transplant four inches apart, when three inches high in rich soil; water and protect until well rooted, then transplant into rows 5 or 6 feet apart either on surface or in trenches 8 inches deep. Set the plants 10 or 12 inches apart. To blanch draw earth around the plants from time to time.

One ounce of seed will give about 4,000 plants.

	Per pkt.	Per oz.	Per 1b.
Paris Golden, Self Blanching, (French.)-An early golden			
variety, very popular,	\$0.10	\$.60	\$8.00
Boston Market.—One of the best varieties in cultivation,	.05	.25	2.00
	.05	.25	2.25
White Plume.—Easily bleached, usually solid and of a			
	.05	•30	3.0 0
Winter Queen. One of the best winter varieties,	.05	.25	2.50



CARROT

Carrots thrive best in rather light loam; soil should be well cultivated and well fertilized. Plant in rows 14 inches apart, and thin plants to 3 to 5 inches in the rows. Plant from the middle of April to the middle of May.

One ounce will sow 100 feet of drill. 3 to 4 pounds to one acre.

	Per pkt.	Per oz.	Per lb.
Geurande, or New Ox Heart.—An intermediate variety, .	\$0.05	\$0.10	\$1.00
Danvers Half Long.—A most desirable variety, great			
keeper,	.05	.10	1.00
Improved Long Orange.—A large long rooted variety, for			
stock purposes,	.05	.IO	1 00
White Belgian.—Large, white, productive, for stock,	.05	.IO	.75
Early Scarlet Horn.—An early short variety for forcing,			
excellent for table, color deep orange,	.05	01.	1.00
Early Half Long Scarlet.—Stump-rooted, coreless, red			
color,	.05	.IO	1.00
Chantenay.—A half-long, one of the finest for table use,	.05	.10	1.00

CAULIFLOWER

Is one of the most delicious varieties of the Cabbage family. Requires a rich deep soil, a low moist situation being desirable. Plants should be set in rows about 2 feet apart and 18 inches between the plants.

One ounce will sow a bed of 40 square feet and produce about 2,000 plants.

			F	er pkt.	Per ¼ oz.	Per oz.				
Henderson's Snowball.—This ranks extrem										
the early varieties, it is a reliable header of good										
size and of rich white color,				\$0.20	\$0.75	\$2.00				
Erfurt Early Dwarf A good variety,				.20	.75	2.00				
Early Paris.—A standard early variety,				.10	.45	1.40				

CORN-Sweet

Requires a rich warm soil. For early varieties plant when ground has become well warmed; successive plantings may be continued until July. Plant in hills from 3 to 3½ feet apart, according to the height of variety.

One quart will plant 200 hills; 8 quarts for one acre in hills.

e 1h T	of re 1h I of
1b. Per 11	Per lb.
.25 \$0.2	0 \$0.18
.25 .2	81. 0
.25 .2	81. 0
.25 .20	81.
.25 .2	81.
	1b. 5 lb. I. Per lb. 25 \$0.26 .25 .26 .25 .26 .25 .26 .25 .26 .25 .26

P	er lb.	5 lb. Lot Per lb.	15 lb. Lot Per lb.
Shakers Early,-About as early as Minnesota, but larger		,	
•	\$0.25	\$0.20	\$ o. 18
Crosby's Early.—An old favorite, early and of excellent			- 0
quality,	.25	.20	.18
Perry's Hybrid.—Large, early and of good quality, Country Gentleman.—A rich, sweet, deep kerneled variety,	.25	.20	.18
with small cob.	.25	.20	.18
AAROZII AAROZI	3		
	a figure	Tre-	
onaccientalle System (1997)	DEGGS BEBBB	ecos Mones	
A LEGERAL DE LE CONTRACTOR DE LA CONTRAC	ROALS	DODO	
seserrollos estables de la comparta del comparta de la comparta de la comparta del comparta de la comparta del comparta de la comparta de la comparta de la comparta de la comparta del comparta de la comparta del comparta de la comparta de la comparta del comparta de la comparta del comparta del comparta del comparta del comparta del c	enner	GB BOO	3
	1000		
TO SO A KIND ON THE SECOND SEC	-		
Early Maine.			
Squantum.—Perhaps one of the best and sweetest for	-		-0
main crop,	.25	,20	.18
Mammoth Sugar.—Extra large sweet variety, of good	.25	.22	.15
quality,	.25	.22	.18
Black Mexican.—An early, tender corn of fine flavor, .	.30	.25	.20
Golden Bantam.—A yellow sweet corn, extra early and			
extra hardy, very tender and sweet,	.30	.23	.18
Golden Giant.—	.30	.25	.20
CORN—Field			
(Prices subject to market changes.)			
Eureka.—A well known ensilage variety of White Corn. Very			
leafy, of extra large growth, and we believe will			
produce more tons of silage than any other variety.			
For Ensilage only,			
Learning's Early Dent.—A very popular Dent Corn, grown			
for both grain and Ensilage. This variety will mature in this latitude.			
Mastodon Early.—Large, free growing, very productive, .	at r	narket p	rices.
Longfellow.—A yellow flint corn, a well and favorably			
known variety,			
Early Canada Improved.—A ninety day yellow flint corn. An			
old Standard variety grown for grain,			
Canada Red.—A red flint corn developed at our Suffield farm.			
Early and productive,			
	•		

Use O. & W. Special Corn, Potato and Onion Fertilizer

CRESS

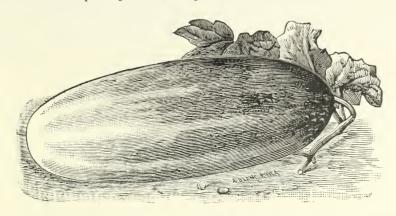
To be planted in drills and sown quite thickly, on good rich ground, in early spring.

One ound	e of	seed wil	l plan	t 100 fe	eet of d	lrill.	Per pkt.	Per oz.	Per 1b.
Curled		•		•			\$0.05	\$0.10	\$0.75

CUCUMBER

First planting should be made in May when ground is dry and warm, in hills about 4 feet apart; thin out to 3 to 4 plants to the hill when established. For pickles plant during the last two weeks in June.

One ounce will plant 50 hills; two pounds for one acre.



Improved Early White Spine.			
	Per pkt.	Per. oz.	Per lb.
Early Russian.—The earliest variety, about 4 inches lon	g, \$0.05	\$0.10	\$1.25
Early Cluster.—Bears in clusters, early and productive,	05	.15	1.50
Davis Perfect.—Dark green, good length, popular.	05	.15	1.50
Snow Pickling.—One of the best pickling,	U	.15	1.50
Improved Early White Spine.—A standard variety	of		
uniform good size and color,	05	.15	1.50
Green Prolific.—The very best pickling sort, .	05	.15	1.40
Boston Pickling Produces an abundant crop of dark gree	en		
color,	05	.15	1.50
London Long Green.—A large and late variety, .	05	.15	1.55

DANDELION

Sow in May in drills 12 inches apart, covering seeds about one-half inch deep. Cultivate to keep down weeds during summer and the following spring leaves will be suitable for cutting. Must be covered in winter to protect from frost.

One ounce for 100 feet of drill. One pound for one acre.

						1	Per pkt.	Per oz.	Per 1b.
Improved Thick-Leave	ed.—5	Standard	sort	, very	productiv	ve,	\$0.25	\$0.75	\$10.00
French Garden.							.15	-35	4.00

EGG PLANT

Plant the seed in hot beds early in spring. Transplant when two inches high into another bed, or small pots. Plant in garden when weather is settled and warm. Should be placed about 3 feet apart, and well watered for 2 or 3 days, until they show signs of being rooted.

	Per Pkt.	Per oz.
New York Improved PurpleThe leading market varie-		
ty, excellent and very productive	\$0.20	\$0.65
Black Beauty-Early, fruit black, round and solid, .	.20	.65

ENDIVE

For early use, sow as soon as ground can be worked in spring in drills fifteen inches apart; thin plants to six inches in the row. Any ordinary soil will do, but a moist place is preferred. To blanch the leaves, gather them together when dry and tie with matting or cover with ordinary flower pots inverted.

One ounce will produce about 3000 plants.

			Per pkt.	Per oz.	Per lb.
Green Curled A standard sort,	•	•	. \$0.05	\$0.10	\$1.00
Moss Curled Very ornamental,	•		05	.10	1.00
Batavian Escarolle.—			05	.10	1.10

KALE or German Greens

Plant the larger varieties in hills two by three feet apart and thin to one plant to the hill. Requires deep, rich soil. Set out plants in June and treat in same manner as for cabbage.

One ounce will produce 2,000 plants.

	Per pkt.	Per oz.	Per 1b.						
Green Curled Scotch.—Leaves of bright green, very tender									
and closely curled,	. \$0.05	\$0.15	\$1.25						
German Greens.—To be sown in fall for spring use,	05	.15	I.CO						

KOHL RABI

An intermediate vegetable between the cabbage and turnip. Prepare as for cabbage. Sow in April in rows 18 inches apart and thin out to 8 inches apart.

One ounce gives 3,000 plants.

			Per pkt.	Per oz.
Early White Vienna.—A standard early, .	•		\$0.IO	\$0.20
Early Purple ViennaVery large and productive,			.Io	.20

LEEK

Sow the seeds in April and transplant in July to rows 15 inches apart and 8 inches between plants.

One ounce will grow 1,000 plants.

							1	Per pkt.	Per oz.	Per 1b.
American	FlagA	hardy	and	profitable	sort,	excelle:	1t			
fo	r winter u	ıse.						\$0.IO	\$0.25	\$2.50



Boston Market.

LETTUCE

Lettuce needs a rich and moist soil, should be sown in rows about 12 inches apart and the plants thinned to 10 inches apart for the heading varieties. When not grown for head they may be sown broadcast. The more rapid the growth, the better the quality.

One ounce for 3,000 plants.

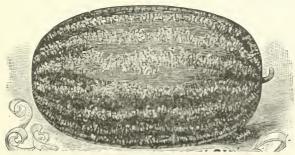
DOSION MATRICE.			
	Per pkt.	Per oz.	Per 1b
May King.—Medium size, early, good heading, a popular			
sort,	\$0.05	\$0.15	\$1.50
Early Curled Silesia.—Sweet, early, good variety.	.05	.15	1.25
Early Simpson.—Early, compact mass of tender leaves,	.05	.15	1.25
Black-Seeded Simpson.—Large light-colored head variety,	.05	.15	1.25
Boston Market.—Early, small heads, very hardy, .	.05	.15	1.25
HansonLarge, solid, crisp head, one of the best out	-		
daam aamta	.05	.15	1.25
Tennis-Ball White Seeded Similar to Boston Market,	.05	.15	1.25
Tennis-Ball Black Seeded Excellent for early large heads.	.05	.15	I 25
Tomhannock.—One of the best varieties for broadcast	:		
cultivation, leaves slightly bronzed, .	.05	.15	1.25
Crisp as Ice. (Bronzed) a fine bronze leaf lettuce, .	.05	.15	1.50
Silver Ball.—Solid, compact head, very handsome, white	2		
and tender,	05	.15	1.40
Big Boston A head lettuce, for forcing or open culture,		.15	1.40

MUSTARD

Sow from April to June in drills one foot apart and cover seed lightly. Used principally for salads.

		Per oz.	Per ¼ lb.	Per lb.
White or English.—For salad or medicinal	purposes,	. \$0.05	\$0.15	\$0.45
BrownMore pungent than white,		05	.20	.75

MELON-Water

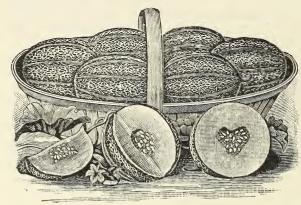


Ice Cream.

A warm light sandy loam preferred. Being tender should not be planted before middle of May. Plant in hills 5 to 6 feet apart each way for the musk varieties and 8 feet apart for the water. Cover seeds about one-half inch deep and when well started thin out to 3 plants in a hill. One ounce will plant about 15 hills; 4 pounds to the acre.

	Per pkt.	Per oz.	Per lb.
Cuban Queen.—Round, large, red meated and sweet,	. \$0.05	\$0.10	\$1.co
Dark Sweet Icing Round, dark green and of a deliciou	S		
flavor, good size,	05	.IO	I.CO
Gray Monarch Very large, of exceptional fine quality			
long, red color and very sweet,	05	.IO	.90

	Per pkt.	Per oz.	Per 1b.
Kleckley's Sweet.—Oblong in form, dark green, thin rim-			
med, flesh bright scarlet, white seed, sweetest of all,	\$0.05	\$0.10	\$1.00
Mountain Sweet An old standard variety, early and			
solid,	.05	.10	.85
Phinney's Early.—Early, reliable, red fleshed, productive,	.05	.10	.8o
Ice CreamWhite seeds, medium size, solid fine flavor,			
one of the most popular varieties grown,	.05	.10	1.00
Kolb's Gem Flesh bright red, almost round, grows large,			
very choice,	.05	.10	1.00
Citron for Preserves.—	.05	.IO	.80



MELON-Musk

One ounce will plant 80 hills; 2 to 3 pounds for one acre.

Rocky	Ford	Melon

•	Per pkt.	Per oz.	Per 1b.
Nutmeg.—A superb green-fleshed variety,	. \$0.05	\$0.10	\$1.00
HackensackLarge, productive and good flavor, gree			
fleshed	05	.10	.90
Rocky Ford.—A very popular variety, flesh light green sweet and delicate flavor,	-	Το.	T 00
	05	•10	1.00
Osage, Green Fleshed.—Very hardy and desirous, .	05	.15	1.25
Early Yellow Cantaloupe.—Early, large and showy,	05	.15	1.25
Miller's Cream.—Thick meated and salmon colored flesh			
delicious,	,	.15	1.25
Paul Rose.—An extra quality, salmon flesh, medium size	.05	.10	.95
Emerald Gem Small, but prolific, yellow meated	. •		
superior quality,	05	.15	1.20
Green Citron Netted Yellow meat, early and good flavor		.IO	.75
Osage, Salmon Fleshed A deliciously sweet melon of fin	e		
flavor,	05	.15	1.20

NASTURTIUM

Cultivated for both use and ornament. Young seeds may be used as capers and leaves for salad purposes. The beautiful flowers, blooming freely all summer add a charm to the garden and lawn. Plant in May.

		Per oz.	Per ¼ lb.	Per lb,
Tall.—An ornamental climber,		. \$0.10	\$0.25	\$0.60
Dwarf.—Fine for borders and beds,		10	.25	.65

OKRA

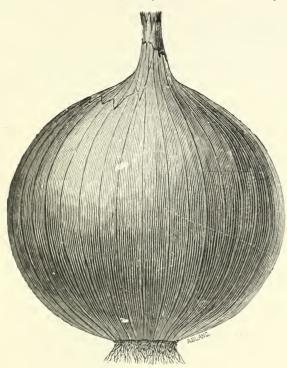
Plant in rows 2 feet apart, thinning plants to 1 foot apart in the row.

Per pkt. Per oz. Per lb.

Dwarf Green.—Early and productive. \$0.05 \$0.10 \$0.60

ONION

(Strictly new seed-Prices subject to change.)



O. & W. Complete Onion Fertilizer.

A fertilizer that will produce remarkable crops. Used by many of the best growers in Massachusetts and Connecticut.

Southport Red Globe.

The onion thrives best in deep, loamy soil, well fertilized. Sow the seeds thinly in drills I foot apart. Cover seeds about ¼ inch, roll and tread soil down solidly. When 3 inches high, thin out to 3 inches apart. Cultivate well and keep out weeds.

One ounce seed will sow 100 feet of drill. Six pounds for one acre.

The seed we offer is HOME GROWN and calculated to give greater satisfaction than western grown seed.

	per pkt.	Per oz.	Per 1b.
Extra Early Red.—Early, of flat shape, mild,	\$0.10	\$0,20	\$1.75
Wethersfield Large Red A large yielder, excellent to			- , 0
keep,	.10	.20	1.75
Southport Red Globe.—Finest large red sort,		.20	1.85
Southport Yellow Globe. Handsome and late variety,	.IO	.20	1.85
Yellow Globe Danvers.—One of the superior yellow globe			
varieties,	.10	.20	1.85
O. & W. Yellow Globe Danvers,-A fine selected strain			
of the Yellow Globe Danvers, specially grown for			
us: very choice,	.10	.25	2.25
Prize Taker Yellow skin, white flesh, good cropper,			
large size,	.10	.25	2 25
Southport White Globe.—Early, mild flavored, large, not			
a good keeper,	.IO	.25	2.50

ONION SETS

Should be planted as early as the ground can be worked in rows 12 inches apart. Set each about 3 inches apart. When onions are grown from sets they can be used in the green state in June, or will ripen by July.

Red Top.						.]	
WhiteP	or	rare-ripes,			•		at market prices.
Potato.			•	•			at market prices.
Yellow.							

PARSLEY

Sow early in spring in drills I foot apart, covering lightly; thin out the plants to 3 to 4 inches apart; used for flavoring and garnishing. A single row forms a good edging for flower-beds or walks.

	Per pkt.	Per oz.	Per ID.
Moss Curled.—Very ornamental and productive, .	05	.15	.90
Curled, or Doubled A most beautiful variety, moss-lil	re		
leaves of handsome bright green color, .	05	.15	.90

PARSNIP

Make the soil very fine and plant the seed very early, in rows eighteen inches apart, thinning plants to three or five inches in the rows; seeds should be covered about one-half inch deep.

Parsnips, aside from table use, have great value for stock-feeding purposes. Are improved by allowing to remain in open ground through the winter.

One ounce to 150 feet of drill; five pounds for one acre.

A bbott	s Improved Hollow Crow	rn — A o	reat cronne	er pkt.	Per oz.	Per 1b.
2 2 2 2 2 2 1	and sweet, .		·	 05	.15	.90
Long	Smooth White.—One cultivation, .			.05	.15	.90



PEAS

The wrinkled varieties, while the sweetest of all peas, are more liable to rot, being tender, and need to be planted thicker and later than the round, hard sorts. Soil needs to be well manured. Have the dwarf varieties in rows two and one-half feet apart; those kinds growing two to three feet high, in rows three feet apart, and the tallest in rows four feet apart. The smooth varieties may be sown as soon as ground can be worked; the wrinkled sorts when soil is well warmed.

One quart to 100 feet of drill: one and one-half bushels to an acre.

			= 15 1ota	Lots
Carter's Premium Gem.		Per 1b.	5 lb, lots Per lb.	Per 1b.
East Hartford Extra Early.—True stock, 21/2 feet best ear	1y			
variety in the market, smooth variety .	•	.25	.20	.17

	Per 1b.		15 lb. lot Per lb.
Alaska.—Hard, blue pea, 2½ feet, extra early,	\$0.25		\$0 17
Gradus, or Prosperity.—An extra early wrinkled pea, very			
large pods, of magnificent quality,	35	.30	.24
Carter's Premium GemWrinkled pea, about 12 to 15			
inches high, very productive, early,	.30	. 20	.20
Bliss's American Wonder.—Very dwarf, early wrinkled pea,	.30	.25	.20
Nott's Excelsior.—A wrinkled dwarf, of excellent variety,			
early,	.30	.25	.20
Sutton's Excelsior.—Similar to Nott's Excelsior, but pro-			
ducing larger and more abundant pods,	.30	.25	.20
Daisy or Dwarf Telephone.—Dwarf habit, wrinkled, large		0.7	20
pods, second early,	.30	.25	.20
Bliss's Everbearing. — Very productive, peas large and wrinkled, two and one-half feet high,	.30	.24	.18
McLean's Advancer.—An old and choice variety, two and	.30	• 24	*10
one-half feet high, wrinkled,	.30	.21	.18
Heroine. — Medium early, wrinkled, two to three feet	•50		
high, quality perfection,	.30	.24	.rS
Yorkshire Hero Large, wrinkled pea, tender and fine	0		
flavored, two and one-half feet high,	.30	.24	.18
Thomas Laxton.—Of similar growth to Gradus, a few			
days later, pods are deep rich green. In the			
judgment of many the Thomas Laxon is even			
sweeter and finer flavor than Gradus.	•35	.30	.24
Telephone Four feet high, large peas of rich, sugary			
flavor,	.32	.27	,22
Champion of England.—An old standard variety, late, five			2.5
feet high,	.32		
Canada Field.—For stock purposes,	at N	Iarket P	rices.

PEPPER

Should be started in hot beds, and transplanted into open ground by end of May; set in rows eighteen inches apart and plants about twelve inches apart in the rows.

One ounce of seed will produce about 3,000 plants.

	Per pkt.	Per oz.
Sweet MountainLargely grown for both market and		
home use,	\$0.10	\$0.60
Bull Nose.—This has long been the standard sweet sort, .	.IO	.60
Ruby King.—Most popular large red pepper in cultivation,	·IO	.60
Large Squash.—Thick fleshed, early and mild flavored, .	.IO	.50
Long Red Cayenne. The true Cayenne, hot and pungent,	.10	.60
Small Red Cherry.—A small smooth and round variety;		
productive,	.IO	.60

PUMPKIN

To be cultivated in same manner as squash.	Per oz.	Per 1b.
Small Yellow Sugar.—A handsome prolific variety, good		
keeper, best for pies,	\$0.15	\$1.00
Large Cheese.—Very large and good keeping variety,	.15	1.00
Connecticut Yellow Field Grown largely for stock purposes,	.10	•75

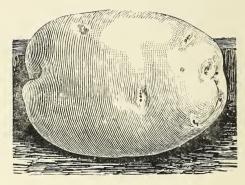
POTATOES—Northern Grown

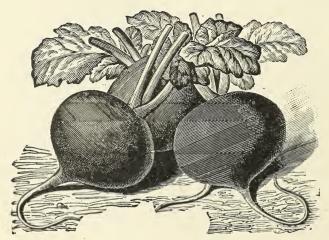
From Aroostook County, Maine.

Use eleven bushels, or four barrels per acre. (See pages 30 and 31 for description of varieties,) AT LOWEST MARKET PRICES.

You will note we have reduced the number of varieties of seed potatoes. We have retained the varieties of real merit and discarded only old and worn out seedlings.

Spaulding Rose
Irish Cobbler,
Carman 3,
Green Mountain (Improved)
Gold Coin,
Dibble Russet.





Deep Scarlet Turnip.

Early Scarlet Turnip.—Round red with white tip,

RADISH

For early use sow in spring as soon as ground can be worked. Sow in drills six to ten inches apart and thin out to one inch apart in the rows; as the roots are more tender and brittle when grown quickly, a rich light soil is preferred. For a succession sow every two weeks.

One ounce will sow roo feet of drill; eight pounds for one acre.

Per pkt. Per oz. Per 1b.
.05 .10 I.00

	Pe	r pkt.	Per oz.	Per 1b.
Deep Scarlet Turnip,-An all red standard variety, .		\$0.05	\$0.10	\$1.00
Early Long Scarlet, Short Top The standard early lon	ıg			
variety,		.05	.IO	1.00
French BreakfastMost popular variety, of olive shape	e,			
red with white tip, quick growing,		.05	01,	1.00
Scarlet Olive Shaped Original strain; quite early, ver	У			
crisp,		.05	.10	.90
White Turnip.—For summer and winter use,		.05	.10	1.00
Black Spanish Long.—Black skin, white flesh—a winte	er			
variety,		.05	.10	1.00
Round Black Spanish.—The favorite German winter radish	1,	.05	.IO	I.CO
Rose Color China Winter.—Grows large and tender, goo	d			
for winter use,		.05	.IO	1,00

RHUBARB

Propagate from roots in richly prepared soil. Plants should be set five feet apart.

SALSIFY, or Vegetable Oyster

Sow early in spring in light rich soil in drills fourteen inches apart and thin out to three inches apart in the row. The roots will be ready for use in October. When cooked the flavor resembles the oyster.

	Per pkt.	Per oz.	Per 1b.
Sandwich Island MammothThis variety grows to an			
unusually large size, roots tender and good flavor	, \$0.IO	\$0.15	\$1.50

SPINACH

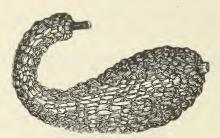
For very early spring use sow in August, for summer use sow in early spring, in drills about ten or twelve inches apart, covering the seed one inch deep. To obtain a succession sow at intervals of two weeks through the season. One ounce to 100 feet of drill, 10 pounds to one acre.

	Per oz,	Per 1b.
Round Thick Leaf Produces dark thick leaves, some-		
what crumpled,	\$0.10	\$0.50
Large Viroflay.—Grows extra large size,	.10	.50
Long Standing, or Evergreen.—Latest in seeding, one of the		
best for garden use,	.10	.50
Savoy Leaved.—Early, wrinkled and hardy	.10	6 o
New Zealand.—A very productive spreading plant, .	.15	.70
In lots of 5 lb. other than New Zealand 40c pe	er 1b.	

SQUASH

Requires rich, warm soil. Plant in hills nine to ten feet apart for running varieties, and five or six feet apart for bush sorts. Leave two or three plants to a hill. Cultivate frequently.

One ounce will sow twenty to forty hills; two to four lbs. per acre.



Summer Crookneck.

	Per pkt.	Per oz.	Per 1b.
Early Summer Crookneck.—The finest bush variety,	. \$0.05	\$ 0.10	\$1.25
Giant Summer Crookneck Larger than the early summer	, .05	.15	1.50
Early White Bush Scallop Matures early and bear	s		
continuously,	05	.10	.90
Early Yellow Bush Scallop Same as Early White, excep			
in color,	05	.10	.90
Hubbard.—The well known and most popular winter	r		
squash,	10	.15	1.75
Boston MarrowA bright orange colored squash fo	r		
autumn, very productive,	05	.10	1.00
Fordhook.—A desirable running variety,	05	.10	1.30
Mammoth ChiliExtra large, grows upwards 100 pound	S		
at times,	05	.15	1.35
Golden HubbardSimilar to the standard Hubbard bu	t		
smaller and earlier and of a golden red color,	05	.15	1.75
Cocozelle.—Compact bush growth, fruit oblong, foot o	r		
more in length, skin dark green with stripe,		.15	1.50



Hubbard Squash.

TOMATO



Sow the seed in March or April in hot bed. Transplant when plants are five inches high to open ground, after danger from frost has passed. Should be set four feet apart each way, on mounds of earth, to allow foliage to open and sun to reach the fruit.

Livingston's Beauty.

Livingston's Deauty.			
	Per pkt.	Per ½ oz.	Per oz,
New Dwarf Champion.—Most popular of dwarf varieties, fruit deep purplish red,	\$0.10	\$0.20	\$0.35
Livingston's Beauty.—A large round solid smooth variety,			
a glowing crimson color,	.10	.25	.40
Acme.—A standard variety, round, bright pink in color,	.10	.20	•35
Livingston's New Stone Large, smooth, solid, scarlet			
color,	.10	.20	.35
Ponderosa.—Largest variety grown,	.10	.25	.45
Yellow Plum.—Small, elegant, fine for preserves,	.IO	.20	.35
Chalk's Early Jewell.—About one week later than Earliana,			
large, solid fine quality,	.10	.20	·35
Spark's Earliana—The earliest large red grown, exceedingly			
productive,	·IO	.25	.40
Bonnie Best.—Very early, vigorous grower, smooth, bril-			
liant, scarlet fruit, very prolific,	.10	.25	.40

TURNIP

For early varieties sow as soon as the ground can be worked in spring.

For fall and winter use, seed should be sown from the middle of July to middle of August, seed generally sown broadcast, using one pound to the acre.



Early Flat Dutch.

	Per pkt.	Per oz.	Per 1b.
Early Purple Top Milan.—Finest early,	\$0.05	\$0.10	\$1.00
Early Flat Dutch White.—A popular market variety, .	.05	.IO	.65
White Strap Leaf Flat.—Fine, handsome, extra early,	.05	.10	.65
Purple Top Strap Leaf One of the standard flat varieties,	.05	.10	.65
Yellow Globe.—Fine for table use, fall and winter, .	.05	.10	.65

	P	er pkt.	Per oz.	Per 1b.
Golden Ball.—Very tender, fine flavored,		\$0.05	\$0.10	\$.65
White Egg.—Handsome, oval form, thin skin, .		.05	.10	.70
Cow Horn.—Pure white, except at top,		.05	.IO	.65
Purple Top White Globe.—A thick, round, quick grow	7-			
ing variety,		.05	.10	.65

RUTA-BAGA

Seed should be sown in drills thirty inches apart, thin out to one foot apart in the row.

	Per oz.	Per 1b.
American Purple Top Swede. — Flesh deep yellow, free growing,	\$0.10	\$0.75
keeper,	.10	.75
Skerving's Improved.—Standard field variety,	.10	.75
Long Island Purple Top.—Yellow turnip of best quality, .	.10	.75

HERBS

							Per pkt.	Per oz.
Summer Savory,							\$0.10	\$0.20
Sage,		•			•	•	.10	.60
Sweet Marjoram,							.10	.30
Thyme,							.15	•75
Dill				•	•		.05	.10

TOBACCO

We are very careful in the selection of our tobacco seed, growing much of it on our own farm and saving the seed from only such plants as bear the correct type of leaf. We buy only of the most reputable growers. This seed is thoroughly blown which removes all the light seed, as we believe the heavier seed makes the strongest plants.

	Per ½ oz.	Per oz.	Per lb.
Willow Brook Broadleaf.—Specially grown and selected, .	.25	.50	7.00
John Williams' Broad Leaf,	.25	.50	7.00
Havana, Special selected type, round point leaf, very			
choice,	.25	.50	7.00
Cuban Type, shade grown,	.40	.75	9.00

It Pays to use
OUR COMPLETE FERTILIZER
FOR THE TOBACCO CROP.

O. & W. LAWN GRASS SEED

A Perfect Lawn Mixture.

Our lawn grass mixture is composed exclusively of the best seeds of the choicest fine bladed grasses free from weeds.

It will produce a rich, velvety lawn, an enduring, elastic turf. To get the best results proper drainage and thorough preparation of the soil is necessary; this being done our seed mixture assures a beautiful lawn.

We recommend sowing about one quart to a space fifteen feet square, or four bushels to the acre.

Price, Per gt., 30c. 2 gts., 55c. ½ peck, 85c. Peck, \$1.60 Bush, \$6.00

Our Lawn and Garden Fertilizer

For Spring and Early Summer Treatment

To maintain a luxuriant lawn, proper fertilizing is necessary. The old method of applying stable manure, so objectionable because it carries weed seeds as well as being unsightly and odorous, is no longer practiced. We manufacture a lawn dressing carrying all the essential plant foods so necessary to produce luxuriant growth and dark, rich green color so much desired.

We recommend for lawns that it be used at rate of 100 lbs. for 7,500 sq. ft. For gardens double the quantity.

PRICES (Delivered in the city):

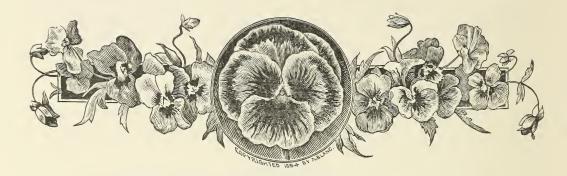
	100	50	25	10	5 lbs.
Garden Fertilizer	\$3.50	\$1.90	\$1.25	\$0.75	\$0.40
Lawn Fertilizer	3.50	1.90	1.25	.75	.40

We also have for Lawns and Gardens:

	100	50	25	10	5 lbs.
Bone Meal	\$3.75	\$2.00	\$1.35	\$0.75	\$0.40
Sheep Manure	3.25	1.85	1.25	.65	.35
Pulverized Poultry Manure	3 50	1.90	1.25	-75	.40
Hard Wood Ashes	3.00	1.75			
Lime	1.50	.90	.60	.40	.25
Tobacco Dust	2.50	1.50	.85	. 50	.30

Our O. & W. Lawn and Garden Fertilizer A SPECIAL FERTILIZER FOR LAWNS AND GARDENS

A Selected List of Popular Flower Seeds



The cultivation of flowers well repays all the labor and care bestowed on them. Much of the disappointment attending unsuccessful cultivation could be overcome by careful planting and observance of those conditions of soil and growth peculiar to these sensitive plants. The soil should be mellow and well enriched with compost or fertilizer. If made into beds they should be well drained. The soil also requires to be made as fine as possible, not lumpy. Seeds should be covered in strict proportion to their size. The smaller seeds need little, if any covering.

After sowing they should be well *firmed* by pressing the surface with a smooth planed board. On each package directions are given specific to that kind.

	Pkt.		Pkt.		Pkt
Ageratum,	\$0.05	Cosmos, Mixed,	.10	Morning Glory, \$	0.05
Sweet Alyssum,	.05	Crysanthemum,		Nasturtium, Tall,	.05
Asters, White,	.IO	White,	.10	Dwarf,	.05
Mixed,	.10	Mixed,	.10	Poppy, Shirley,	.IO
Bachelor's Buttons,	.10	Dahlia, Single,	.10	Mixed,	.IO
Balsam, Mixed,	.05	Double,	.10	Pansy,	.IO
Carnation,		Four-O-Clocks,	.05	Petunia,	.10
Marguerite,	.10	Forget-me-not,	.10	Phlox, Drummondi,	.IO
Calliopsis,	.10	Gaillardia,	.10	Stocks Mixed,	.IO
Canna, Mixed,	.05	Heliotrope,	.IO	Sweet William,	.05
Candytuft,	.05	Hollyhock,	.10	Verbena,	.05
Castor Beans,	.05	Marigold,	.05	Zinnia,	.05
Chinese Pink,	.10	Mignonette,	.10		

SWEET PEAS

The Queen Flower of the Garden

A List of the Choicest Selected Named Varieties of the Famous Spencer Type of Sweet Peas.

For many years we have taken just pride in our sweet peas. This year we offer these separate named varieties of the Spencer sweet peas, whose wonderful coloring and form will surely prove a great delight to our customers. We shall have these separate varieties in bulk for those who desire to plant straight colors and also a mixture of these same varieties for those who wish to sow in this way. Everyone should try some of these famous Spencer Sweet Peas. You will be amazed at the beauty and showing they make.

	1 ₂ OZ.	oz.	⅓ lb.
Mrs. Routzhan.—Apricot, pink and straw color,	\$0,20	\$0 30	\$0 So
Apple Blossom.—Crimson and light pink,	6.6	1.6	6.6
Asta Ohm.—Pinkish lavender, charming soft lavender			
suffused with mauve,	4.6	6.6	6.6
Aurora.—Orange and white striped,	4.6	4.6	6.6
King Edward.—A deep red	4.6	4.4	4.6
Dainty.—A white with pink edge. Ground color is pure			
white with a very distinct margin of rose pink, .	"	6.6	6.6
Elfrieda Pearson.—Light, pink flowers of extra large size,	6.4	6.6	"
Florence Nightingale.—Bluish lavender, enlivened by a			
very faint sheen of rose pink,	66	4.6	6 6
Primrose.—The color is a clear primrose throughout.	6.6	6.6	6.6
Flowers measure two inches across			**
George Herbert.—Rose crimson, gigantic flowers, borne four to a stem,	6.6	4.4	4.6
Queen Victoria.—Buff with a blush tint, a most pleasing			
color effect	h 6	6.6	6.6
Senator.—Chocolate, purple and white striped. A combi-			
nation of deep claret and chocolate on a field of			
lilac	6.6	6.6	e t
Thomas Stevenson.—Flowers of bright, flaming orange of		4.6	
immense size,	**		**
Tennant.—A purplish mauve, the best of the heliotrope shades,	4.6	6.6	6.6
White Spencer.—Pure white wave flowers of large sizes, .	6.6	6.6	66
white openies. Tute white wave nowers of large sizes,	6.7	1/ 14	n or 1h
Choice Spencer Mixed.—A mixture of these choice	OZ.	¼ 1b.	per 1b.
Spencer varieties,	\$0.20	\$0.60	\$2.00

Sweet Peas should be planted in drills about 2 inches deep, well manured and given plenty of water.

List of Grass, Clover and Millet Seed

Inoculate this Seed with FARMOGERM (At market Prices)

Inoculate this Seed with FARMOGERM

Timothy, or Herd's Grass. One of, if not the commonest and best known grasses. Very valuable for hay. Perennial, fibrous and often bulbous rooted.

(45 lbs. to the bushel).

Red Top. Is a fine permanent grass. Often sown with timothy and red clover, in which case the clover soon disappears to be replaced by timothy, which in turn gives way to the red top. Very valuable in mixtures for permanent pastures.

Chaff Red Top 10 lbs. to the bushel. Fancy or cleaned 35 lbs. to the bushel.

Kentucky Blue Grass. Also called June grass. Root-creeping, perennial, flowers in June. It requires about two to three years to become well set and does not arrive at perfection as a pasture grass until the third or fourth season.

(14 lbs. to the bushel.)

Orchard Grass. A perennial grass, flowers from June to July. Very valuable for pastures, also in connection with timothy and clover for hay crops. When used with timothy use one bushel orchard and 8 lbs. clover. If sown alone use three bushels to the acre. (14 lbs. to the bushel.)

Rhode Island Bent. Root-creeping, perennial, flowers in July. Very value able for lawn purposes. Sow from three to four bushels to the acre. (10 lbs. to the bushel.)

Large Red, or Mammoth Clover. Grows from four to five feet high; stocks so coarse that cattle will eat but leaves only, but by its judicious use, exhausted lands may be reclaimed. (60 lbs. to the bushel.)

Medium Red Clover. The most important of all the varieties of clover for the practical purposes of agriculture. Sown with timothy and other grasses it produces desirable hay or pastures. (60 lbs. to the bushel.)

White Clover. The value of this clover is well known; it is found in most every natural pasture. It is adapted to all soils. Being deep-rooted it withstands drought when grown on dry, sandy sections. It should form a part of all mixtures for permanent pastures. (60 lbs. to the bushel.)

Alsike, (Clover). This is one of the hardy varieties. It resists cold, extreme drought and wet, and on rich warm soils yields immense crops of hay, or pasture of good quality. (60 lbs. to the bushel.)

Alfalfa (Clover). A heavy forage crop doing well in almost all localities. Requires well limed soil and good drainage.

Hungarian (grass) Millet. Splendid forage crop for light land. On rich land two crops may be grown the same season. Withstands drought and yields abundantly. (48 lbs. to the bushel.)

Golden, or German Millet. A heavier cropper than the Hungarian, and needs a longer season and a stiffer soil, stands up well, is easily cured, makes a coarse, harsh hay, which is greedily eaten by all kinds of stock. (50 lbs. to the bushel.)

Japanese Millet. This is by many considered the most valuable of all forage plants. It makes more hay than German millet or any other. Although it grows large, sometimes seven or eight feet high, the hay is of excellent quality. It is adapted to all sections.

Use O. & W. Special Grass Fertilizer The Fertilizer That Makes Grass Grow.

Grain and Miscellaneous Seeds for Fodder Ensilage and Soiling Crops.

(All at Prevailing Market Prices.)

Inoculate this Seed with FARMOGERM

Ensilage and Fodder

The productive capacity of the farm for stock purposes is greatly enhanced by the growing of silage crops.

It has become well known that by the feeding of silage there is a marked increase of profits to the dairy farmer.

We have a selected stock of seeds for silage and green fodder crops as listed below.

Eureka. The greatest of Ensilage varieties. A White Corn of extra large growth leafy and yielding immense returns for silage,

Leaming's Dent Corn. A very early and productive variety.

Mastodon Dent Corn. A strong growing, early, with large stalks and large grain.

Improved Canada Corn,—The standard yellow flint corn.

Longfellow Yellow Flint. A well known flint variety.

Sweepstake Ensilage. A new variety and highly recommended.

Canada Field Peas. Grown largely with oats as fodder crop. At market prices.

Leguminous Plants as Soiling Crops

All the leguminous plants (peas, clovers and beans, etc.,) have the power of taking up the free nitrogen in the air and converting it into available forms of ammonia so very valuable as a fertilizing ingredient to the soil.

Therefore the roots (or, as in some cases where the entire plant is turned under) provides a large supply of available ammonia for the crops which are to follow.

Cow Peas,					at lowest	market	prices
Soja Beans (Soy	Beans)	,			6.6	6.6	- "
Mammoth Cloves		•	•	•	66	"	6.6
Medium Clover,			•			6.6	"
Vicia Villosia, ot	· Hairy	Vetch,		•	6.6		"

GRAINS

Barley.	•			at lowest	market	prices
Japanese Buckwheat,			•	"	"	- "
Silver Hull Buckwheat,		•	0	٠,	6.6	"
Rye,				6.6	66	"
Seed Oats, .	•				at marke	t price

Use "O. & W." Special Grain Fertilizer

Inoculate this Seed with FARMOGERM

MAINE SEED POTATOES

Grown for Seed by

SEED GROWERS IN MAINE.

IT PAYS TO PLANT MAINE SEED

We do not believe any argument is necessary to convince our Farmers that it pays to plant Aroostook County Maine Seed. Potatoes from the far North are grown under ideal conditions.

Aroostook County has the natural Potato soil and an almost perfect Potato

climate. This combination produces the heaviest crops.

According to the 1921 government reports, the Maine Potato Crop averaged nearly 300 bushels per acre. This is nearly double any other section, and three times the average yield of most states.

Northern Seed brought to our State, has a vigor that our own Potatoes do not have, produces healthier vines and a much larger yield of Potatoes.

It pays to plant Maine Seed.

PROFITS IN POTATOES

Increased profits from Potatoes depend largely upon increased yield, better

quality and lower production cost.

Acre costs are practically fixed. Machinery and labor saving devices reduce them. Proper spraying and cultivation improve yields and quality and prevent unnecessary losses.

In 1920, reports received from nineteen farmers in Michigan and Wisconsin, who harvested both fertilized and unfertilized Potatoes, showed an average gain of over 200 bushels for each ton of Fertilizer. Figure the profits for yourself, It pays to Fertilize liberally.

ADOPT THESE PRACTICES FOR PROFITS IN POTATOES:

Start with Maine grown, disease-free Seed.

2. Get more hills and consequently more Potato to the acre, by closer planting.

Use Fertilizer liberally.

4. Protect the crop from insect pests and plant diseases by proper spraying, so that the plant can make the best use of the plant food elements.

5. Use up-to-date machinery to reduce labor costs.

We speak from experience when we say it is a mistake:

To cut Seed a long time before using;

To allow the Fertilizer to touch the Seed pieces:

To allow the Seed pieces to remain in the sun uncovered; To plant Seed grown in any section but the far north;

To plant less than 4 bbls. per acre;

To expect a good crop from small Seed pieces;

To plant Potatoes without first thoroughly pulverizing the soil;

To buy Seeds from any but reliable Seedsmen.

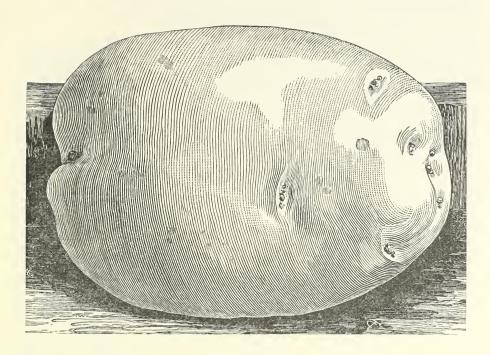
Spaulding Rose.—This is a Rose variety, pink skin, good table quality and an enormous yielder.

Irish Cobbler.—An excellent extra early variety, will mature in seven weeks from time of planting; in color pure white with deep eyes, usually of good

cooking quality.

Dibble's Russet—Our Connecticut State Station says relative to this resistance to drought injury which was so serious and unusual last year (1918), taking the form of prematuring and wilting and we have no hesitancy whatever in stating that it is a decidedly valuable potato to grow here on that account. We found it last year a good yielder and quality seems to be usually good under most conditions, and potatoes kept very well." This potato was originated in New York State but our stock on this variety comes from the state of Maine.

Use O. & W. Potato Fertilizer



Carman 3.—A late Maine crop potato; this variety will produce almost all large potatoes and but few small ones, claimed by its introducers to outyield any other variety. Good keeping qualities.

Gold Coin.—Productive and of unsurpassed quality, very uniform in size. Skin a light golden tinge, usually having a russet appearance which indicates good table qualities; a vigorous grower not easily effected by blight.

Improved Green Mountain.—This variety is too well known to require any description; it is recognized as the standard of excellence in all New England; white skinned, oval formed, smooth and attractive and a good yielder.

To get the best results potatoes must be carefully sprayed. Use Bordeaux Mixture Powder, 8 pounds to 50 gallons of water. Apply 50 gallons of this solution per acre. First application when vines are from four to six inches high. Subsequent applications from 10 days to 2 weeks until 4 to 6 applications have been made. This treatment is to control blight and flea beattle. As soon as potato bugs put in their appearance add 4 to 6 lbs. of Arsenate of Lead Paste or 2 to 3 lbs. Arsenate of Lead Powder to each 50 gallons of diluted Bordeaux Mixture or 50 gallons of water if Bordeaux is not being applied. One application of Arsenate of Lead is usually sufficient to control Potato Bugs. However, during seasons when they are especially bad, two to three applications may be necessary to cover new growth of foliage.

It Pays to use our Potato Fertilizer

BUG DEATH

NON-POISONOUS



PATENTED MARCH 16TH '97.
Pat. March 16 and Nov. 9, 1897.
Pat. in Canada, Nov. 2, 1897.

BUG DEATH IS A NON-AR-SENICAL Insecticide and Fungicide, successfully used for 24 years for Chewing Insects on Potatoes, Tomatoes, Squashes, Cucumbers, Melons, Cabbages, Celery, Strawberries, Currants, and many other crops.

B. D.
Sifter
75 Cents.



PRICE LIST

1	Pound !	Package,	-	-	\$.15
3	66	46	-	-	.40
5	66	44	-	-	.60
12	1-2 16.	46	-	-	1.30
10	0 lb. ke	g, -	-	-	8.50
Di	ckev D	uster -	_	_	.50



WE CARRY IN STOCK AT ALL TIMES AT MARKET PRICES:

Arsenate of Lead Powder
Bordeaux Mixture Powder
Lime Sulphur
Pyrox

Paris Green

Black Leaf "40"

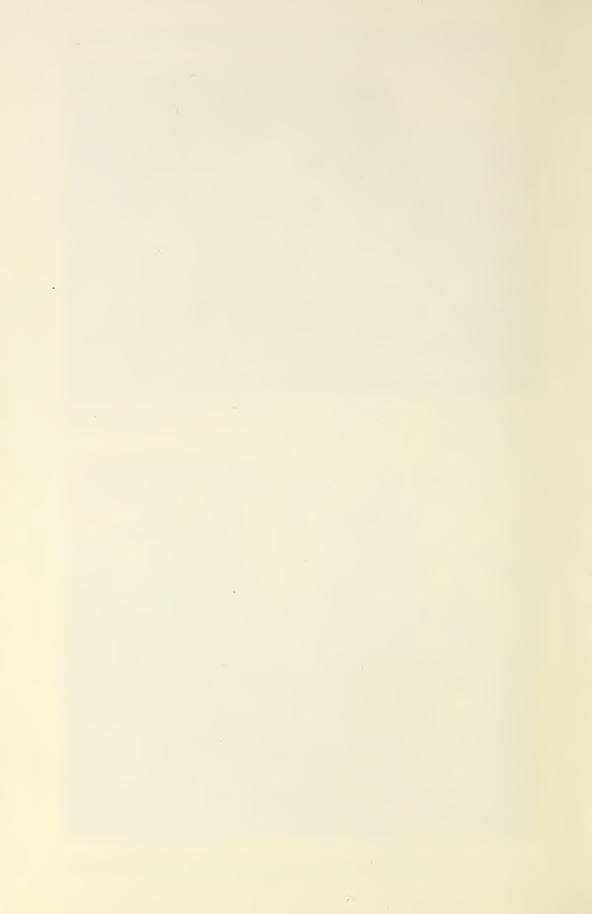
Plant Lice Killer



July 25, 1921. Farnham Tobacco Crop., East Windsor Hill, Conn. Showing Round Tip tobacco in younger stage of growth.



July 25, 1921. Farnham Tobacco Corp. Photo of Round Tip tobacco grown in the open. On the above date this tobacco was about eight feet tall and promised a tremendous crop. Large users of Olds & Whipple, Inc. fertilizers.



Agricultural Implements Farm and Garden Tools

Owing to unsettled market conditions, all prices on implements and tools subject to change without notice.

The following pages are devoted to a description of farm implements which we sell. Our selection of these has been made in the same careful way as governs the selection of all the goods we offer to our customers.

Our object and desire being to sell only the best and such as will be most acceptable to our trade, both in point of service, convenience, and economy.

A partial list follows of some goods we do not illustrate. Read it over carefully as it may contain something you need. Samples of all may be seen at our showrooms, 164-8 State St., and prices will be made upon application. Write us also if what you need is not listed here, as we aim to make our store the headquarters for everything needed on the farm.

Clipper Smoothing Harrow (in one, two, or three sections)

Doe Plows.

"M" Plows.

Road Plows.

Eclipse Weeders.

Field and Garden Rollers.

Mowing Machines.

Hav Rakes.

Tedders.

Prout Hoes.

Field Markers and Ridgers.

Horse and Hand Corn Planters.

Wheelbarrows.

Canal Barrows.

Grindstones.

Forks.

Hoes.

Shovels.

Farmers' Set Kettles or Cauldrons (with or without furnace) in different sizes.

Binding Twine.

Hay Carriers, Forks, etc.

Axes.

Garden Hose.

Corn Husker

McWhorter No. 21 Hand Fertilizer Sower

Hay Loaders, Side Delivery Rakes and Knife Grinders.

We will gladly make prices and send special reading matter on any of the above.

PLEASE NOTE.

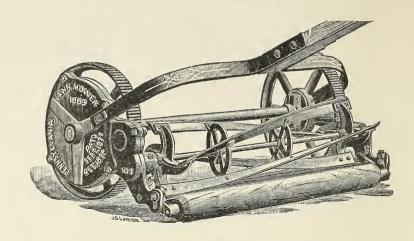
We make a point of keeping on hand a line of repairs for Plows, Harrows, and all other implements we sell.

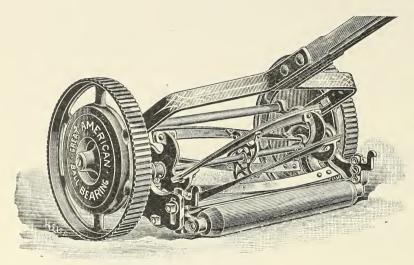
"PENNSYLVANIA" Hand and Horse Lawn Mowers

Sizes 15, 17. 19, and 21 inch, High Wheel.

The "Pennsylvania" has been recognized for many years as the standard among Lawn Mowers.

Cuts longer grass, requires less repairs than any other mower made. Used on the State Capitol grounds and by all first class gardeners everywhere.





GREAT AMERICAN Lawn Mower

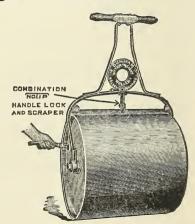
Sizes 15, 17, 19 and 21 inch., High Wheel.

This Mower is of the same manufacture as the "Pennsylvania," and is a high grade machine throughout. Has ball-bearing equipment which insures less friction and wear. It has been sold by us for eleven years and given highest satisfaction.

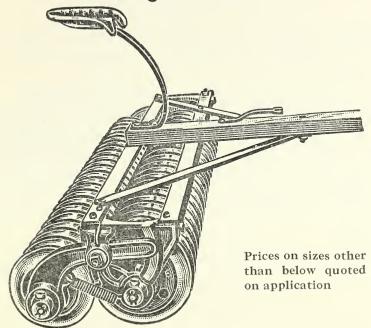
The Genuine Dunham Water Weight Lawn Roller

The water weight lawn roller has almost entirely superceded the old fashioned cast iron roller. By regulating the amount of water it can be made to weigh as desired. We offer it in three sizes:

	Diame- ter	Width of Drum	Weight Empty	Weight Full	Price
WB 3	14"	20"	46 lbs.	149 1 bs.	\$16.00
WB 5	.18"	24"	76 ''	275 ''	19.00
WB 7	24"	24"	95''	500 ''	22.00

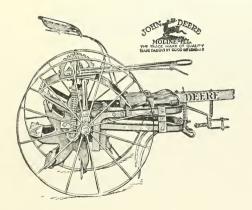


The New Roller-Bearing, Light Draft, D-Type Brillion King Soil Pulverizer



To make your soil yield the greatest possible return for your money, time and labor, you must first properly prepare the seed bed. A certain amount of moisture is absolutely necessary for dissolving the plant food particulars in the soil. Therefore, the soil must be so pulverized and packed as to retain the proper moisture for feeding the plant. Mere plowing and harrowing is not enough as there is too much air space left between the furrow slices. Heavy sod land should be well disced before the pulverizer is used. Most farmers who have tractors do both operations at once by hitching the pulverizer behind the harrow. Made in single and double gang and in many sizes.

F-84 Single Gang 8 feet long, 21 sections, 15" in diameter, . Price \$57.75 Less 5% discount for cash



STALK CUTTERS

These machines are great labor savers. Any farmer raising a considerable acreage of corn, Primed or Shade tobacco should own one.

Nine knife John Deere Cutter, with Neck Yoke and Evener, \$52.50 Less 5 % discount for cash Above Machine less Neck Yoke and Evener, 50.00

Less 5% discount for cash

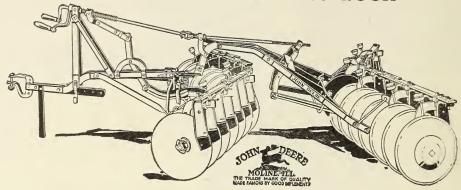
LAND ROLLERS

8 Feet in Length

Price \$45.00

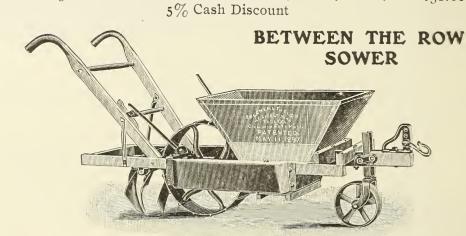
5% discount for cash

JOHN DEERE MODEL "L" TRACTOR DISC HARROW WITH YIELDING LOCK



For Use with Any Standard Tractor Convenient Angling Cranks Patented Aligning Device

A Flexible Tractor Disc Harrow Adjustable Disc Scrapers

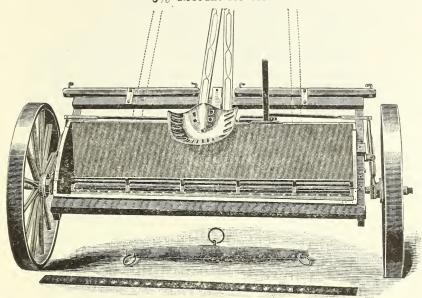


For sowing fertilizers between rows or for doing other surface work, as some tobacco growers claim that a part of the fertilizing should be done after the first hoeing. The machine is made with wheel inside the frame, and covers a space of 12 inches wide with fertilizer. It has three cultivator teeth, adjustably attached to back end of machine for covering. Price, \$30.00.

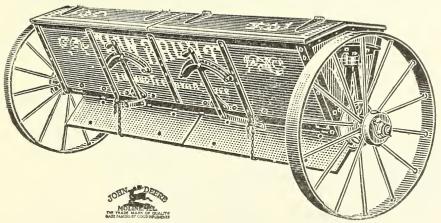
5% discount for cash

Stevens Fertilizer Sower

8 feet, 3 inch, \$72.00 Made in Two Sizes: 5 feet, 10 inch. \$63.50 5% discount for cash

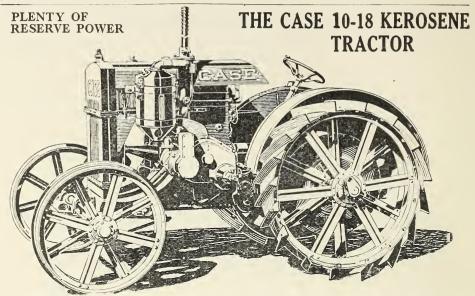


Van Brunt Lime and Fertilizer Sower



This sower is built in the standard size to cover eight feet of ground with a carrying capacity of ten bushel. For strength, durability and simplicity it is unexcelled. It is built with an improved rotary wing feed (none better). It has been thoroughly tested and is adapted to distribute crushed lime rock, slacked lime, all brand of standard commercial fertilizer, nitrate of soda, land plaster, wood ashes, etc., in any desired amount from 150 to 8000 pounds per acre according to bulk and weight of material. The improved rotary wing force feeds are so constructed that lime or fertilizer does not drift but is sown evenly from each feed.

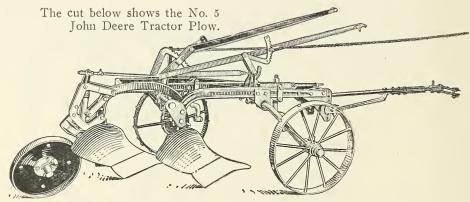
Price \$72.00 5% discount for cash.



This Case 10-18 Kerosene Tractor can easily pull a two bottom plow seven to eight inches deep, or a five section spike-tooth harrow, or a seven foot double action Disc Harrow.

It is small and compact, turns in a twenty-two foot circle, is built of the finest materials, and is noted for its performance, durability and economy. Investigate this better Tractor before you buy. Let us point out its superiorities.

Price of Tractor with choice of Tractor Plow or Harrow \$700.00 F. O. B. Factory. This price subject to change without notice.



When you buy any plow you make an investment that is mighty important to you. Plowing is the basis of your business. The quality in the plow you buy, largely determines the result from this basic operation. Buying a Tractor Plow is especially important to you. A Tractor Plow does work on a big scale—the quality of the work counts in proportion. A Tractor Plow has to meet heavy strains—its ability to keep on doing good work is a vital factor to consider. John Deere Tractor Plows are made to meet every Tractor Plowing requirement to best advantage. Into their construction goes the experience of more than 80 years of leadership in plow-making. There is special satisfaction to every user in the continued good service the John Deere Tractor Plows give. No. 5—1441S. 28 inch cut with combination Jointer and Rolling Coulters.

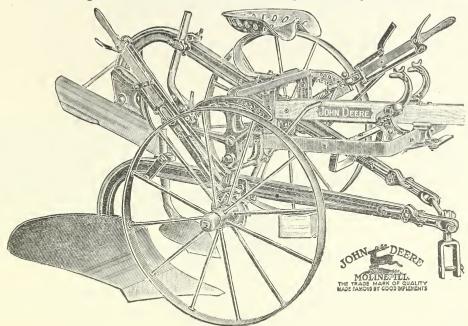
Price.....\$150.00 less 5% Discount for Cash. No. 40—1441S. 28 inch cut with combination Jointer and Rolling Coulters.

No. 40—1441S. 28 inch cut with combination Jointer and Rolling Coulters.

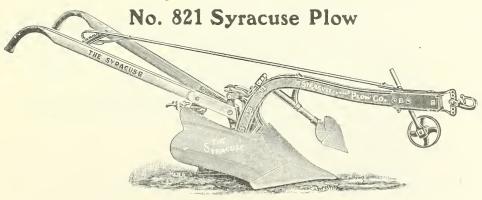
Price......\$90.00 less 5% Discount for Cash.

The No. 40 Plow is designed to follow the Fordson Tractor. It is superior in our opinion, to any other Plow designed for this Tractor, as it has a flexible attachment.

The John Deere Two Way Sulky Plow



Combined in the John Deere two way plow are a number of strong, valuable and distinguishing features. Among these are the patent auto foot frame shift, all steel and malleable frame and steel arch, long malleable beam clamp, automatic shifting hitch and horse lift, unusually wide bearing base and adjustable jointers, For hillside or irregular fields, where it is desirable to throw earth all one way. there is no equal to the two way.



Price	No.	821	Chilled full trim				\$25.50
6.6	6.6	821	Steel Board				27.25
6.6	6.6	822	Chilled full trim				24.50
6.6	6.6	822	Steel Board				26.25

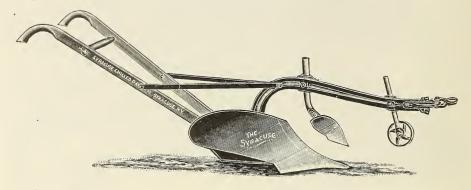
5% discount for cash

This is a truss beam plow combining lightness with strength.

No. 32 Syracuse Plow

With Steel Beam and Steel Mouldboard.

HAS NO SUPERIOR.



Workmanship and material of the very best grade and quality obtainable. Light, yet strong and durable, with superior turning qualities. Every plow fully warranted. Price, \$23.50. No. 31, Price \$25.00.

5% discount for cash

No. 99 SYRACUSE CONTRACTOR'S PLOW

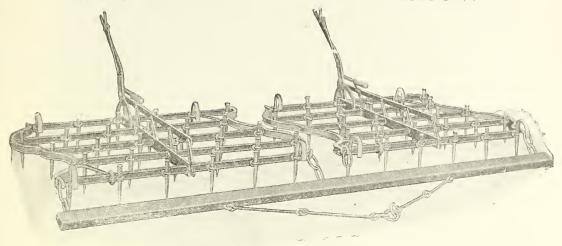


This has steel truss beam, steel mouldboard and landside, separate shin piece, heavy overlaid wrought steel share, adjustable shoe in place of wheel, loop handle wear irons, very strongly built, slight turning capacity. Suitable for severe grading purposes in shale or hard pan.

No. 99 Four to eight horses. Weight 310 lbs. Price \$47.50 No. 98 Pavement Plow (Reversible Point) "34.25 No. 1 Contractor's Plow (Chilled) "25.75

5 % discount for cash

PEG-TOOTH LEVER HARROW



The teeth are 1/2 inch extra heavy. Bars have malleable clips. Adjustable teeth.

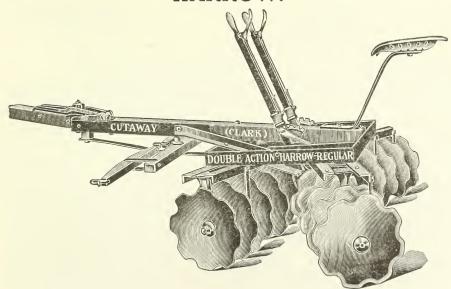
\$20.00

2 Section (50 Teeth) with Spanner,2 Section (60 Teeth) with Spanner,

22.00

5% discount for Cash

CLARK'S CUTAWAY DOUBLE ACTION HARROW.

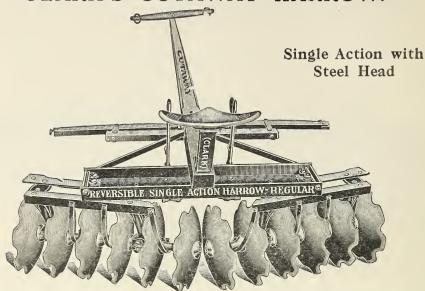


The Cutaway Double Action possesses every feature that adds efficiency, convenience or adaptability and economy to a disc harrow

-	· · · · · · · · · · · · · · · · · · ·	aupeusille	and cconor	uy to a misc	Hallow.		
	A4-Regular	16-16 incl	disc 4½ ft.	cut, 2 HH		Price	\$58.75
	A5— "						70.75
	A6-Regular	· 24-16 incl	disc 6½ ft.	cut, 3 HH		6.6	76.50
	A6— ''	24-16 ''	" 6½ "	" 4 HH		1.6	78 50
			~ 11				

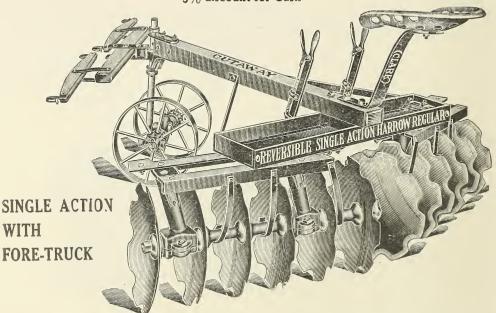
5% discount for cash

CLARK'S CUTAWAY HARROW.



This is a standard harrow, thoroughly well made, equipped with the justly celebrated Clark hard-wood journals. These journals outwear metal, give less friction and are cheaper to replace.

Either solid or cut out discs
A6-12—Sixteen inch cut-out discs, complete with neck yoke and eveners, \$42.00
5% discount for Cash



The above cut shows the Clark cutaway Harrow equipped with tongue truck or fore carriage. This truck is all steel, durable and strong yet light; it has first, the adjustable hitch to meet the height of any team, second, adjustable tongue attachment to suit the height of any harrow; third, axle joint so that either wheel may run over clods, stones and other obstructions without affecting the even, regular draft of the harrow.

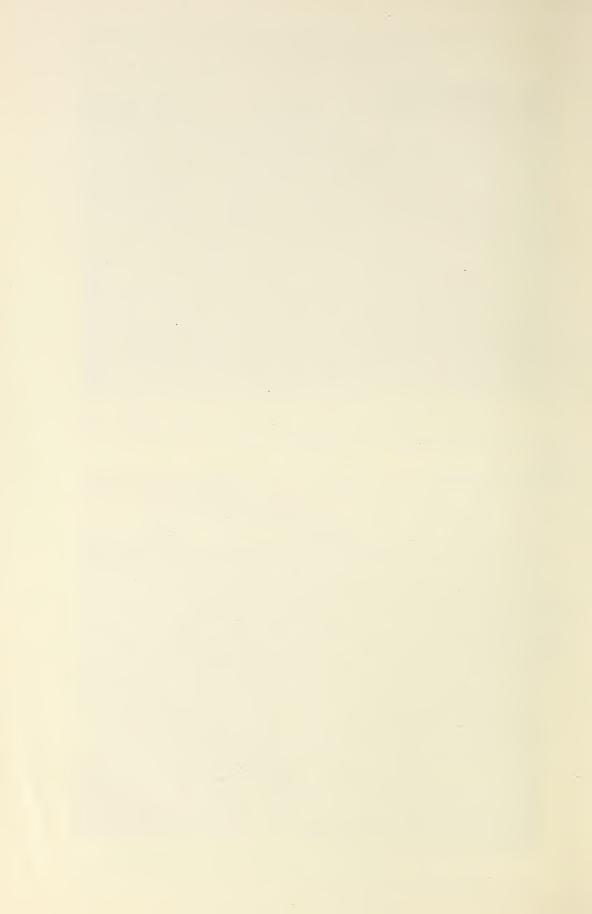
A6—Regular 12-16 inch disc, - - Price complete, \$49.00 Fore-truck only \$9.00 5% discount for Cash

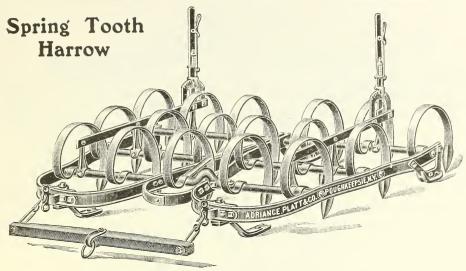


July 25, 1921. Frank Harvey, Windsor Locks, Conn. On the above date Mr. Harvey was about to begin harvesting a very fine crop of fifteen acres of John Williams Seedleaf grown entirely on Olds & Whipple, Inc. fertilizers.



A. C. Leone, Silver Lane, Conn. Mr. Leone is one of the largest growers in this section and on July 25, 1921, his crop showed fine growth. He later harvested an almost perfect crop of Broadleaf.



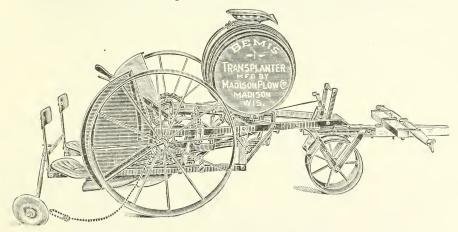


This is not a cheap tool, either in construction or price. It is for the man who wants the best and most satisfactory. The frames are of heavy channel steel, two inches wide. As the frames are carried high above the ground, they will last a lifetime.

Price for 15 '	Tooth .					\$22.50
" 17	4.6					25.50
Price of 17 to	ooth Riding	g Harrow	with w	heels at	ıd seat	32.50
		5% disc	ount for	cash		

The Bemis Transplanter

For Setting Tobacco and Other Plants



The above is the well known Bemis Transplanter made by Madison Plow Co. of Madison, Wis., with all improvements to date.

This machine is too well known to need any endorsement from us. Nearly every tobacco farm in the Connecticut Valley is equipped with one of these implements.

Price \$96.50. 5% discount for cash. Equipped with Double Truck \$1.50 Extra

Use O. & W.'s Special Tobacco Fertilizer.

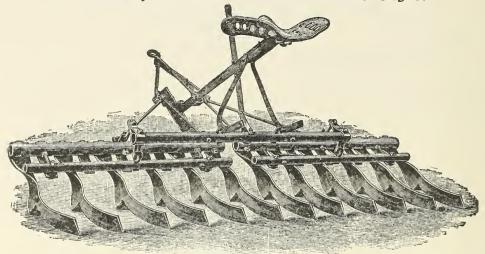
ACME Pulverizing Harrows.

Warranty. I hereby warrant each and every part of each and every "Acme" Pulverizing Harrow against breakage for the term of one season after it leaves the manufactory or any of my storehouses, and I hereby authorize Agents and Dealers to Furnish free New Parts to Replace Broken Parts; the only stipulation being, that the farmer demanding such parts shall sign a statement that the breakage occurred in fair usage, which statement shall be countersigned by the Agent or Dealer from whom the Harrow was purchased.

DUANE H. NASH, Manufacturer.

No. 23. Two=Horse Size. Works 6½ ft. Wide.

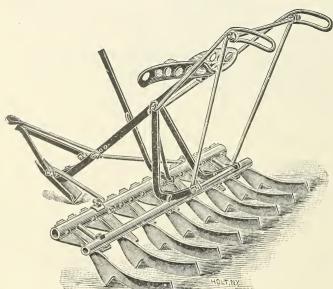
Riding Harrow. Flexible Style.



The gang bars may be made rigid, when desired by means of braces provided for that purpose.

Price of No. 23, (two=horse style), \$24.00

5% discount for cash



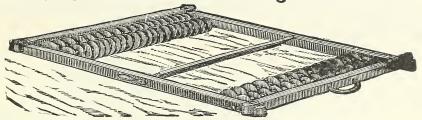
Size H. For One Horse

Size H is built on the same plan as No. 23. Has eight Colters, also Crushing Spurs. Works about 4 feet, 4 inches wide, weighs about 90 lbs.

Price. \$17.00

5% discount for cash

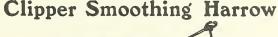
The Meeker Smoothing Harrow.

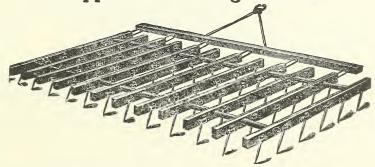


A perfect harrow and land roller combined. This harrow has become a great favorite among all classes of farmers and market gardeners.

It has four (4) sets of rollers containing 58 steel discs. These discs grind all lumps and save the work of raking and also mash small stones below the surface better than any field roller, leaving the land smooth and level.

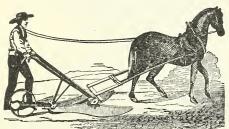
8 in. disc Harrow \$30.00. 10 in. disc Harrow \$35.00. 5% discount for cash.





The teeth are %16 in. round, and are attached to bars by malleable clasp, and are so arranged that by hitching to one end of harrow the teeth pull slanting as shown in cut, by hitching to other end the teeth pull straight. Wood frame.

			n			
"	2	6.6	(including	spanner)	18.75	
			"		29.00	5% discount for cash



Goslee's Potato Coverer and Tobacco Ridger

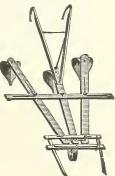
Price, Plain \$16.50 5% discount for cash.

Goslee Improved Field Marker

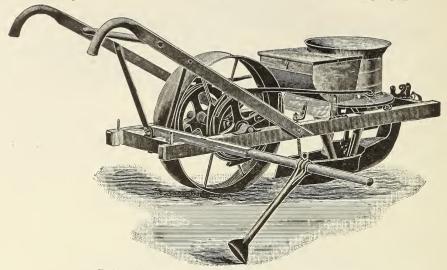
(Spread 2 to 4 feet)

This machine is designed to mark out rows any width for any crops grown in rows. Teeth are adjustable to any size and depth drill.

Price, \$14.50 5% discount for cash.



"KING OF THE CORNFIELD"



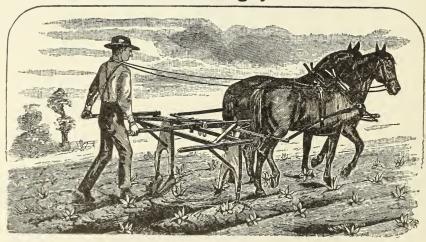
Price \$36.00

5% discount for cash.

Corn, Bean and Pea Planter and Fertilizer Distributor

Every machine is warranted to be well made of good material, and guaranteed to do its work perfectly and satisfactorily with the different kinds of seeds, as we claim, if used according to directions.

Prout's Hoeing Machine

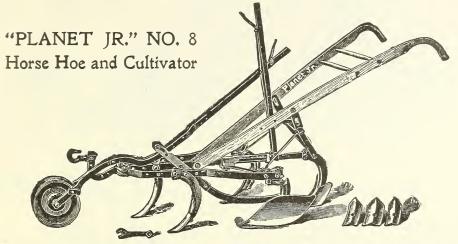


Unlike the Cultivators and Horse Hoes now in common use the whole surface or distance of 2 ft. more or less, on each side of plant is cut over with this machine, all the weeds are removed. The hoe steels being made tapering permit of cutting close up to plant without injury to the roots.

Price, plain \$27.00 Price, with wheels \$30.00 5% discount for cash.

THE "PLANET JR" HORSE TOOLS

Complete Descriptive Catalogue Sent on Application

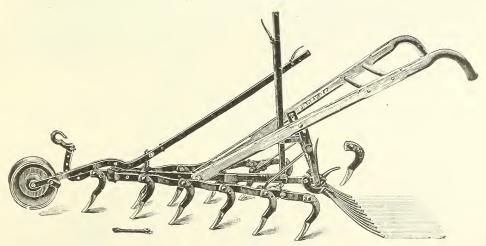


No. 8—With Depth Regulator, Lever, Steel Wheel and Lever Expander, - Price, \$19.50
No. 7—Same as No. 8, except it has no Depth Regulator, - - - - Price, \$19.50
No. 9—This tool is identical with the No. 7 Horse Hoe, but it has a

No. 9—This tool is identical with the No. 7 Horse Hoe, but it has a plain wheel instead of one operating by a convenient lever, - - - Price, 17.00

5% discount for cash.

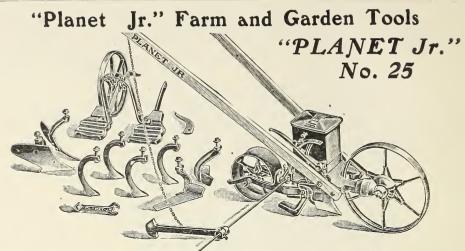
The "PLANET JR." Twelve Tooth Harrow, Cultivator and Pulverizer



The above is a great labor saving tool. Try one and be convinced of its superior qualities. No farmer should be without one.

Price, plain, \$13.00 With Wheel, \$16.75 Complete, \$20.00 5% discount for cash.

We sell as an extra an eighteen and twenty-four inch Sweep, with special standard which is used in place of the pulverizer for leveling and weed cutting. It is adjustable in height. Furnished in place of pulverizer if desired.



Hill and Drill Seeder and Double Wheel Hoe. Price, \$23.00. 5% discount for cash.

"PLANET JR." No. 4

Combined Hill and Drill Seeder, Wheel Hoe, Cultivator and Plow.

PRICE, complete, - \$19.50 " as a drill only, - 15.50 5% discount for cash.

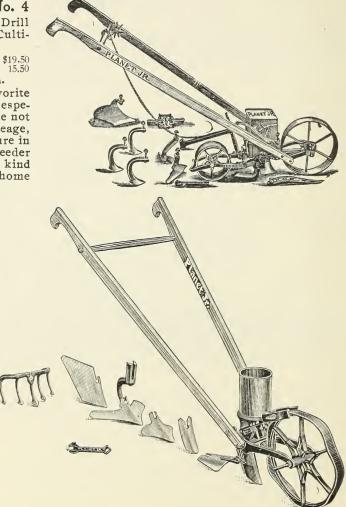
This is a prime favorite with all gardeners, especially those who while not having a large acreage, derive a lot of pleasure in using a Combined Seeder and Cultivator of this kind in caring for the home garden.

"PLANET JR." No. 31

Combined Drill Seeder and Wheel Hoe. Price \$13.00 complete. Price as a Drill Seeder only, \$10.50(No.31D). Price as a Wheel Hoe only \$6.50 (No. 33).

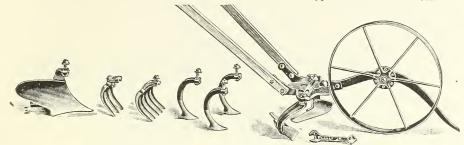
This is a thoroughly well made machine, and will sow even a small packet of any garden seed at any thickness desired with the greatest precision from 1/4 to 2 inches deep.

5% discount for cash.

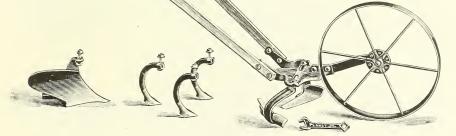


"PLANET JR." NO. 16 Single Wheel Hoe, Cultivator, Rake and Plow Price \$10.25

5% discount for cash.



"PLANET JR." No. 17
Single Wheel Hoe, Cultivator and Plow.
Price, \$8.75
5% discount for cash.



No. 171/2 "PLANET JR." Single Wheel Hoe

(Same as No. 17 less Plow)

Equipment:

r pair six-inch hoes
3 steel cultivator teeth
1 leaf lifter

PRICE, \$7.60. 5% discount for cash.

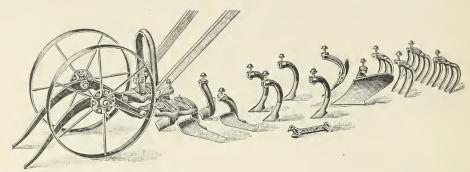
No. 18 "PLANET JR." Single Wheel Hoe

Equipment:

One pair six-inch hoes, oil tempered PRICE, \$6.25 5% discount for cash.

THE "PLANET JR." No. 11 Double Wheel Hoe, Cultivator, Rake and Plow. Price \$16.00

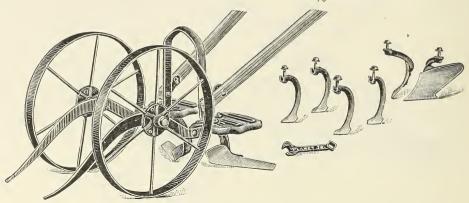
5% discount for cash.



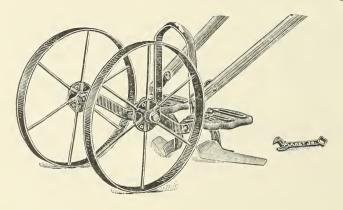
THE "PLANET JR." No. 12 Double Wheel Hoe, Cultivator and Plow.

Price \$12.50

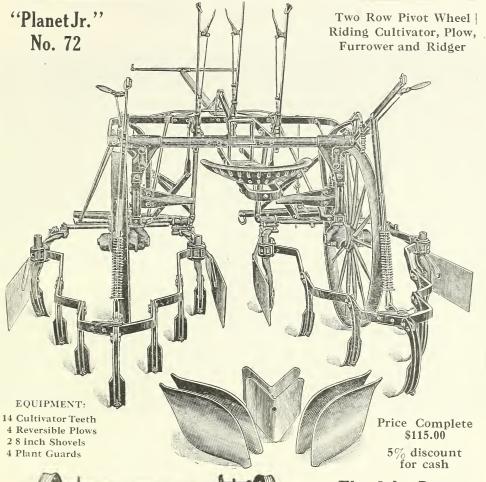
5% discount for cash.



The "PLANET JR." No. 13 Double Wheel Hoe. Price \$9.00 5% discount for cash.



Send for Special Catalogue "Planet Jr." Tools



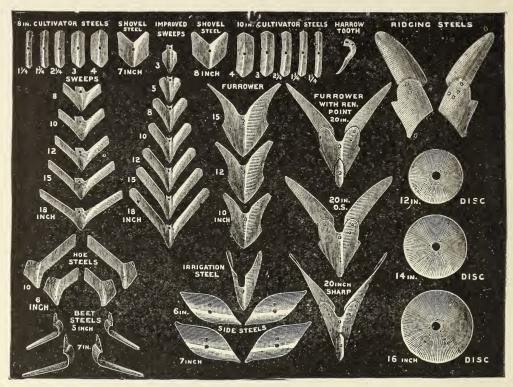
The John Deere Riding Cultivator K C 156 Spring Trip Eight Shovel This new Implement has assumed a most

This new Implement has assumed a most commanding position in the Cultivator trade because it embraces new ideas and improvements which make it easy to handle and capable of doing finer work than any other machine offered to the public.

Price \$60.00

5% discount for cash

"PLANET JR."



Varieties of Steel Plates made for the "Planet Jr." Horse Hoe.

The 1½ inch steels throw almost no furrow, and run very deep, yet work beautifully as cultivating teeth and subsoilers, very desirable where the soil is to be broken up thoroughly without hilling, as where the ground is clean, but beaten down by rains, or baked by the sun. The next two sizes, 1¾ and 2¼ inch, are desirable for general cultivation, and do superior work in hard lands. The next is 3 inch; this is the size, with one 4 inch for the rear standard, which is sent out with the Horse Hoe, unless otherwise ordered, being best adapted to general work in all kinds of soil.

8 inch Improved Sweeps,	8 inch Improved Sweeps	s,60		
-------------------------	------------------------	------	--	--

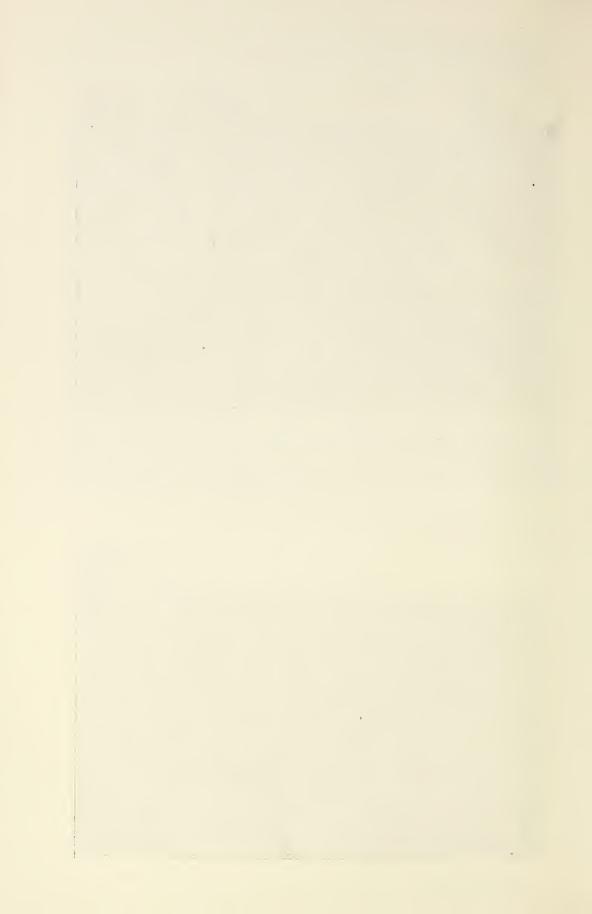
Improved Sweeps do not fit Horse Hoe Side Standards.



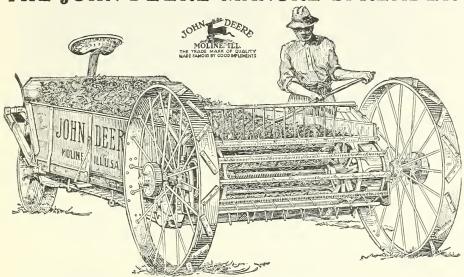
Brewer Bros., Hockanum. Brewer Bros. are among the largest individual growers in the Connecticut Valley and customers of Olds & Whipple, Inc. for many years. Photo shows one of their fields of Havana. This crop was harvested by the priming method.



Fidel Bantle, Glastonbury, Conn. Old fashioned Hockanum Broadleaf grown on Olds & Whipple, Inc. fertilizers.

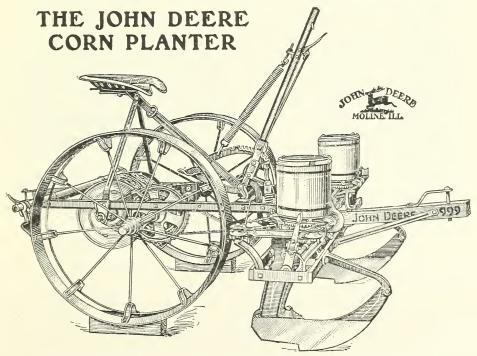


THE JOHN DEERE MANURE SPREADER



The low down Spreader only 36 inches from the ground to top of the box making it very easy to load. The beater is made entirely of steel and is mounted on the axle doing away with unnecessary chains and gears. An endless apron with patented apron drive prevents racing of the apron under all conditions. It is very simple to operate, has only two levers and turns in its own length.

Size "B" 40 Bushel, Price \$195.00. Size "A" 30 Bushel, Price \$190.00. 5% discount for cash.



Accuracy in planting has been the main object in designing the John Deere No. 999 Corn Planter. The advantage in using this planter is with proper handling it will plant the desired number of kernels in each hill. Every one of these machines is rigidly inspected before leaving the factory. The change from hilling to drilling or vice versa is instantly made. No extra attachments or tools are required.

Complete with check rower and fertilizer attachment, Price \$97.00. Less check rower. Price \$89.00.

Automatic Hiller Attachment, Price \$3.00. 5% discount for cash.



PURINA ASSURES MORE EGGS

You are assured the greatest possible egg return for every cent invested when you feed Purina Chows,

You can't afford to maintain scientific laboratories. The variety of ingredients which you can obtain conveniently are limited; your exact knowledge of chemical elements in feeds is more or less limited. You do not have efficient machinery to insure an absolutely uniform mixture. But you can get all this by feeding Purina Poultry Chows.

We also have in stock a special feed for pigeons called Pigeon Chow.



A Cow can give milk to her fullest capacity only when fed the right proportion or balance of milkmaking materials. Milk is made up of Protein. Carbohydrates, Fat, Minerals and Water, in pro-

portions that, practically speaking, can't be varied. Instead of making imperfect milk, a poorly fed cow gives less milk.

Feed Purina Cow Chow

and your cows will get all the Protein and Calcium needed to balance your Carbohydrate rough-

All we ask is that you give Purina Cow Chow a trial and let your milk scales show you why you should keep on feeding it.

You can't change the ingredients of milk. You must supply just the proteins, ash, starches and fats that are found in milk. Purina Cow Chow is a scientific mixture of linseed meal, gluten feed from corn, cottonseed meal, hominy feed, molasses, alfalfa, and a little salt. Every ingredient used is of recognized value for dairy cows and gears up the milk supply for the winter months.

The combination provides just the variety, relish, minerals, proteins and bulk that are required. Purina Cow Chow also keeps a cow in good flesh and splendid condition and shows up in the milk pail through the long winter months.

condition, and shows up in the milk pail through the long winter months.

You wouldn't think of giving your cows and chickens the same unbalance feed that feeders used 20 or 30 years ago. It wouldn't pay. Then why not keep up

with the times and feed your horse according to modern methods?

Purina O-Molene satisfies every requirement of the horse's strangely arranged digestive system. It is easily and rapidly digested—none of it is wasted. That's why it takes so much less O-Molene than oats and corn to keep a horse up.

Feed O-Molene to your Horses and Mules.





The Iron Age

(Improved Robbins)

Potato Planter

Price \$128.00

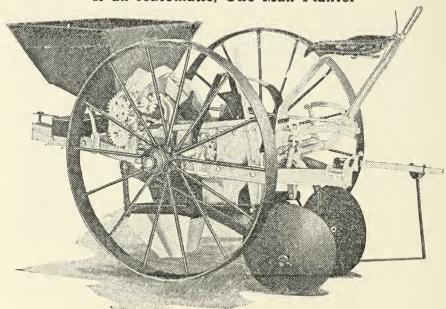
No.400R. with regular Fertilizer Distributor and Shield Plow

Discount for Cash 5%

A Planter that does not injure the seed as it is all handled automatically.

A Planter that places every seed piece exactly as you want it. A Planter that sows fertilizers at the same time, but none of it where it touches the seed.

The Hoover No. 400 Visible Potato Planter Is an Automatic, One Man Planter

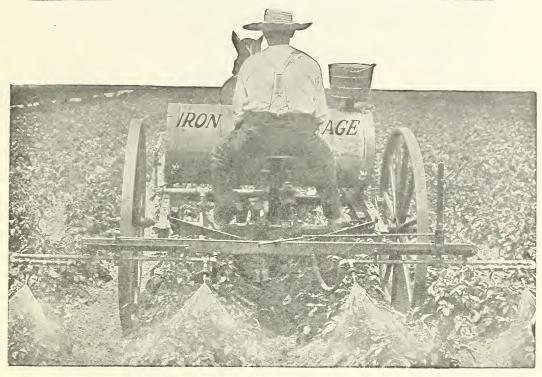


This planter was designed to meet the general demand for a strictly high-grade, up-to-date potate planter, one that would be just as satisfactory for planting potatoes as the "Hoover" Potato Digger has proved for digging them.

The fertilizer attachment is designed to meet the varied requirements of potato growers, as it will put the fertilizer either below or above the seed, as the operator desires.

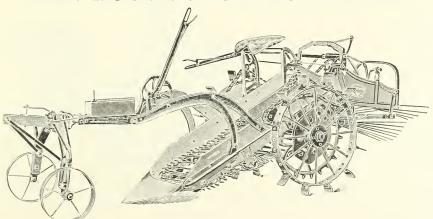
Price Complete, with Fertilizer Attachment,

\$128.00



You cannot raise Potatoes successfully unless you Spray
Price \$163.00 Discount for Cash 5%
No. 354S 4 Row 55 gal. tank
Shafts—Duplex Pump—Wind Shift—Nozzle Strainer

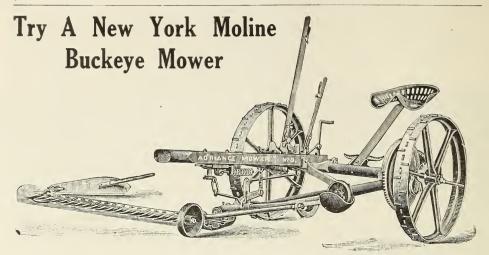
THE HOOVER POTATO DIGGER



This Potato Digger has become the standard of excellence everywhere. It is now used more largely in the potato growing section of Maine than any other make.

It separates the potatoes from the vines and weeds leaving them in a clean narrow row. Two horses will handle the machine under ordinary conditions. It is a great labor saver.

No. 330, Price \$130.00 No. 330E, Price \$122.00 Less 5% for cash



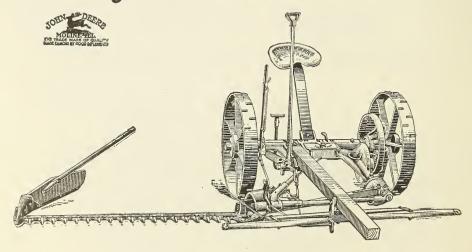
The best method of draft for a mower ever invented is the Moline "Spring Draft."

In all work it produces more uniform and *lighter* average *draft*, and secures other even more important advantages.

We have them from 3½ ft. to 6 ft. size. Get Special Circular on these.

5 ft. size, Price \$79.00 3½ ft. size (10) Price \$76.00 Less 5% discount for cash

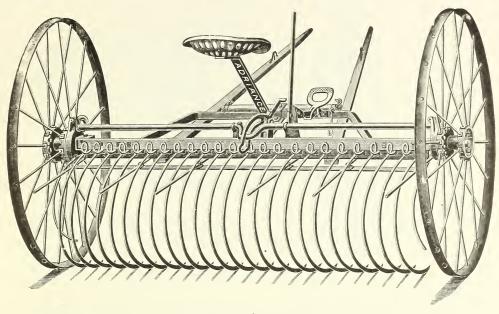
The John Deere-Dain Mower



This mower is noted for its strength, durability, light draft, ease of management and superior cutting power. Frame is one piece of iron—all parts are held securely. Compensating gears remove strain from bearings and transmit instead of consume power. All levers are easy to operate, and a boy can readily handle them. The knives can be closely and accurately adjusted to center in their guards, doing away with knife breakage and making easy cutting.

5 Ft. Vertical List . Price \$82.00

The MOLINE (All Steel) Self-Dump Rake

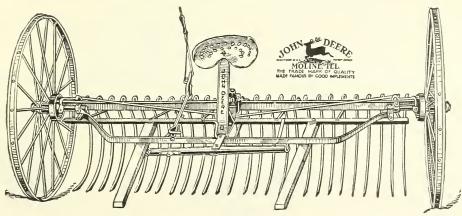


DO NOT BE MISLED. There is but little difference in the general appearance of Rakes, yet one may be very superior, both in utility and durability than another. This is a superior rake and we can give you reasons why it is so.

Price \$40.00

Less 5% discount for cash

JOHN DEERE STEEL SULKY RAKE



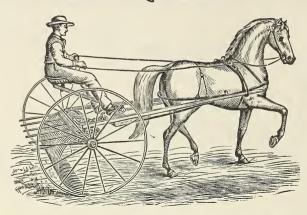
Designed and constructed to do every class of work required of a Sulky Rake in an efficient and satisfactory manner. This rake is simple, strong and durable. By making the principal working parts reversible, the life of a John Deere rake is practically double that of the ordinary.

8 Foot 26 Tooth

Price \$40.00

Less 5% discount for cash

HAY RAKES



The Yankee Rake (wood) The Wiard Rake (wood) New York Champion Rake (wood) \$38.00

Less 5% discount for cash

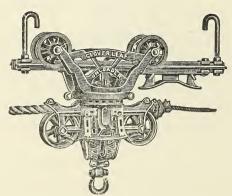
The Myers Clover-Leaf Unloader

PRICES

Clover Leaf Hay Unloader No. 114 \$8.50 Double Steel Track 25c per ft. Hanging Hooks 15c each Rafter Brackets ·7C 3/4" Floor Hooks 15C Wood, Knot passing, pulley Fig. 1120 75c Double Harpoon fork Fig. 1314 -3.00 Four tine Grapple fork Fig. 1351 10.00 Six 1438 12,00

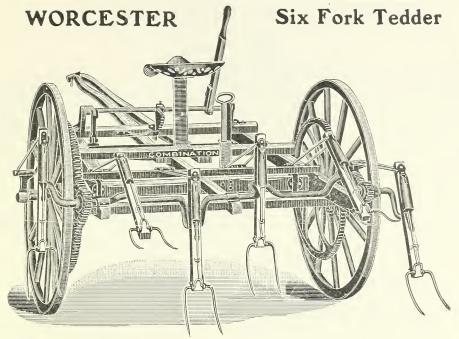
5% discount for cash on complete outfit







The advantage of a hay carrier as a means of storing away Hay or Grain are so well known that it is not necessary to go into details. They save the time and expense of from one to three men at harvest time—a large item.



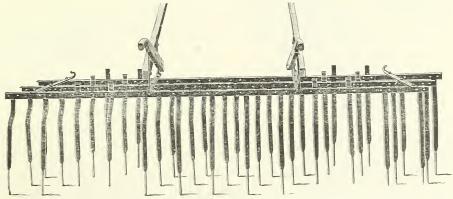
Price - \$56.00 5% discount for cash

In the construction of this machine all the improved features of the Bullard and Mudgett Tedders are used with further valuable improvements of the makers. Their aim has been to make a tedder that would be more durable and hence cost the user less for repairs than any machine now on the market. We believe this has been accomplished.

THE ECLIPSE WEEDER

Price \$13.00

5% discount for cash



The teeth are round and each one can be raised to different heights. Does most thorough and perfect work. May be adjusted for either hard scratching or for light work. Suitable for all soil conditions.

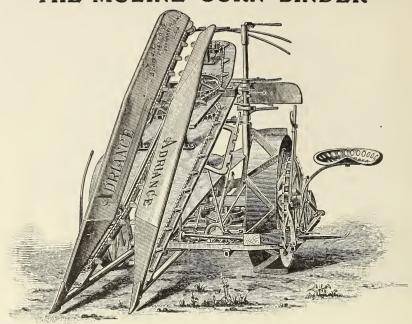
HALLOCK WEEDER

Price \$15.00

5% discount for cash

A standard weeder having curved teeth.

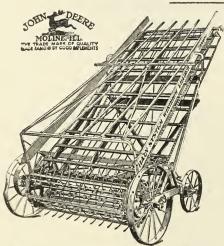
THE MOLINE CORN BINDER



This machine cuts the standing corn, binds it and delivers it in bundles ready for shocking. In the construction of the Adriance Binder no expense is spared to make it the lightest draft and the most durable of any of its class on the market.

Price, plain with 3 H Hitch, \$210.00 "with Tongue Truck, 230.00

5% discount for cash.



A Dain Side Delivery Rake

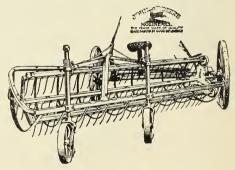
Will prove a profitable investment for any hay grower, for in addition to increasing the feeding value of the product it saves time by hastening the curing process.

Dain System 4 Wheel Rake, \$100.00 5% discount for cash.

Dain System Six Foot Hay Loader With Fore Carriage

Price \$100.00 5% discount for cash.

Will handle anything from the lightest swath to the heaviest windrow Strong and serviceable. The modern way of handling hay is the side delivery rake and hay loader.

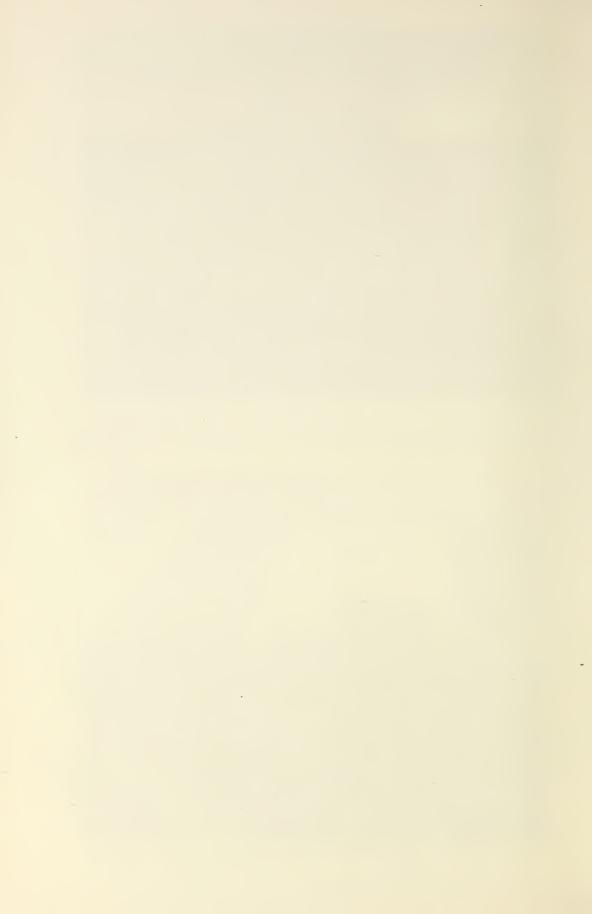




July 25, 1921. J. W. Dunn, Broad Brook, Conn. Mr. Dunn is an extensive grower at Rye St., Conn. On the above date showed beautiful growth. This crop grown on Olds & Whipple, Inc. fertilizers.



Jacob Limberg, Glastonbury, Conn. Thirteen acres Broadleaf. A 100% crop grown on Olds & Whipple, Inc. fertilizers.



CANAL BARROWS



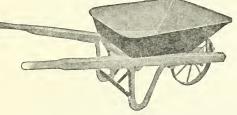
Full bolted with Wood Tray, Wood or Steel Wheel

Price \$4.50

Full Bolted with Steel Tray, Wood or Steel Wheel

Price \$5.25





Mortar Barrow Price \$7.50

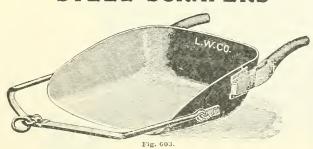
GARDEN BARROWS

Lansing No. 4 Large \$8.00 Lansing No. 3 Medium 7.00

Buchs No. 2 Large 8.50 Buchs No. 3 Medium 8.00

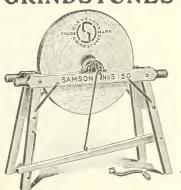


STEEL SCRAPERS



No. 3 Special, 3 cu. ft. \$10.50 No. 2 Special, 5 cu. ft. 11.00 No. 1 Special, 7 cu. ft. 11.50

GRINDSTONES



No. I Sampson Wood Frame . . Price \$9.50 Bicy cle Frame 9.50



A Seed Inoculant that Increases Crop Production

Seeds of all legumes—beans, peas, clover, alfalfa, and related crops—will yield far better if inoculated with Farmogerm, and in addition leave in the soil a heavy deposit of nitrogen which benefits all succeeding crops. Gardeners and farmers who have used Farmogerm would not be without it.

Farmogerm Stays Good Indefinitely
Farmogerm keeps for years. Because of the
method of sealing the bottle—a patented stopper
which admits filtered air and keeps out all impurities—Farmogerm is just as good in five years as
when first bottled. Other inoculants get weaker
each day—Farmogerm always has its full
strength. Just add water and shake the bottle and
sprinkle over the seeds as directed. Your crop will
benefit beyond your expectations.

Farmogerm is Economical
No other inoculant on the market is so strong
and virile; no other inoculant will thoroughly treat
as much seed. The one-acre size bottle of Farmogerm is sufficient for 15 pounds of clover, 20
pounds of alfalfa, 100 pounds of Canada Field
Peas, 60 pounds of Vetch, etc. A different bacteria is required for each crop. When ordering,
be sure to state what crops you wish to inoculate.

FARMOGERM PRICES REDUCED

New scientific methods of manufacture have given lower prices. You cannot now afford to do without Farmogerm.

A special composite culture is prepared for peas, beans and sweet peas—¹/₄-acre size only. You'll get more peas and beans, and larger sweet peas by using this. Ask for No. 5, price 50 cts.

Farmogerm prices are: 1-acre size, \$1; 3-acre size, \$2.50; 12-acre size, \$9. Full directions accompany each bottle.

FARMER'S CALDRON FURNACE

A necessity on every farm, for heating water and cooking Stock feed



These Furnaces may be had fitted to burn either Coal or Wood. The Kettle may be bought sepaately and set in brick work if desired. Prices on application.

O. &. W. Guaranteed HOUSE PAINTS

Our Blue Label Paint is a pure linseed oil product, in 24 shades.

Ironite Barn and Roof Paint in 6 shades. A moderate priced paint, very satisfactory.

Wagon Paint in 5 shades.

Carriage Paint, a high grade varnish paint in 7 shades. Floor Paint, very durable in 6 shades.

Send for color cards.

We also carry a complete stock of Varnish Stains, White and Blue Enamel, Screen Paint in Black and Green, Varnish-Spar, Floor, Furniture, Etc., Liquid and Japan Dryers, Wood Filler, Crack and Crevice Filler, Shellac, Paint and Varnish Remover, Putty, White Lead, Turpentine, Pure Linseed Oil and colors in Oil.

Preparation of the Surface. Always allow a new building to stand a short time preferably through one or two rains before painting. Never paint over a rough or scaly surface. Sandpaper and a wire brush will remove roughness, but blisters require thorough use of a paint burner.

We also sell B. P. S. Paint

YOU MUST PAINT

How often you must do it depends upon the paint you use. For long wear and all around satisfaction, we recommend **B. P. S. Paint.** We know that it is ground fine and works so easily under the brush that you can paint with two or three gallons less than with a cheap per-gallon paint. With B. P. S. Paint you will

USE LESS TO DO MORE

The labor usually costs three times as much as the paint, so be sure to employ a good painter. Good judgment in applying is as necessary as good paint.

Square and Round Point D. or Long Handled Shovels No. 2, \$1.50 No. 3, \$1.60



D. or Long Handled Spades \$1.50



Genuine Oliver Ames Shovels. No. 2, \$2.00 No. 3, \$2.10

TOBACCO HOES

These Hoes are specially adapted to Connecticut Valley Trade.



Size $2\frac{1}{2}$ & 3 x 8 inches									Price
	•	•	•	•	•	•	•		\$.90 each
2½ & 3 x 9 "		•							.95 ''
$2\frac{1}{2}$ & 3 x 9\frac{1}{2} "									, ,
	•	•	•						1.00 "
2½ & 3 x 10 "	•	•							1.00 "
2½ & 3 x 11 "									1.10 "
				•	•		•	•	1.10

Special Hoes for Shade Grown Cultivation

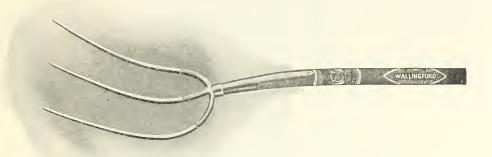
Blade 7 x 2½ inches.	•	• *		•			\$.85 each
$7\frac{1}{2} \times 2\frac{1}{2}$.	•	•	•		_ •	•	.85 ''

GARDEN OR FIELD HOES

STEEL GARDEN RAKES

			Handle						Price, \$.90 each
10	"		"						1.00 "
18	"	"	"			•	•	•	" I.IO "
Wir	e Law	n Ra	akes, 24 I	ooth	•	٠.	•	•	·· ·75 ··

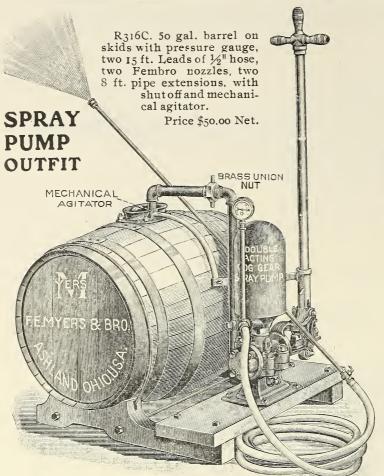
Oval Three=Tine Ferrule Hay Forks



		Straight Bent	handl	e											Price,	\$.95 I.00	
4 1/2			6.6		Ť		Ť		•		-				"	1.00	6 6
5			"												6.6	I.IO	6.6
5 1/2	ft.	6.6	"												6.6	1.25	6.4
				1	W/	4 7	JT	R	F	1	F0	R	K				



	Price	' Price	Price	Price
	Common ferrule			
	Mall. D. Handle	Wood D. Handle	Wall D Handle	Wood D Handle
4 Tine	\$1.25	\$1.45	\$1.35	\$1.65
5 ''	1.50	1.70	1.60	ı.So
6 "	1.80	2.00	1.90	2.05
Large	4 Tine Fork for	handling ligh	t manure \$2.3	25
	Long Handle S			
5 ''	" " T	Plain " .	. 1.4	
9				7 -
	SPADI	NG FORI	K, C	
	OTTIDI	JUL I CILI		
L. H. 4 Tine Strap	ferrule		Pr	ice. \$1.40 each
Mall. D4 " So D				' I.50 ''
			•	1.,70
Wood D. 4 Tine "	• •	•		' 1.So ''
3.4.4	MILLION AND	DOMAMO	IIOOKO	
MA	NURE AND	POTATO	HOOKS	
5 Tine Bent Head,	Solid Steel Potato	Hook .	. Pri	ce, \$1.10 each
6 " " "	b((((,	11		" I.20 "
4 " Manure Hoo	k		·	'. I.IO ''
E ((((((•	" T 20 "



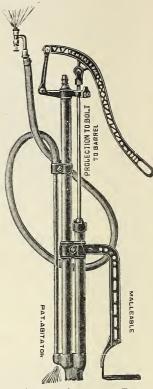


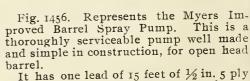
Fig. 1726-R324. Represents the Myers Lever Bucket Spray Pump made of brass and fitted with brass ball valves and patent agitators. The cylinder is 1½ inches in diameter with solid plunger.

The air chamber is 50 per cent larger than the ordinary bucket pump, has malleable iron foot rest and malleable lever.

This pump can be operated with one-half the power required by the ordinary spray pump owing to the advantage of the lever handle.

Price \$6.00

No. 327½ Little Giant Bucket Spray Pump 4.00



It has one lead of 15 feet of ½ in. 5 ply discharge hose graduating vermorel nozzle and both jet and mechanical agitators.

305B - \$12.50

R318B Myer's Cogged Gear Barrel Spray Pump for closed head barrel.

Price \$13.50



There is nothing so vital in the operation of machinery as lubrication, and Tractors are affected more severely than any other machinery, if the quality of the oil or proper manner in oiling is lacking. The life of the machine depends more absolutely on lubrication than any other factor.

The J. I. CASE THRESHING MACHINE CO. recommends Havoline "K" for use in their tractors.

We carry this oil in barrels and five gallon cans.

Sheet Metal Department

We specialize in all kinds of tin and sheet iron work to order. Estimates given on all kinds of tin roofing, gutter and conductor work.

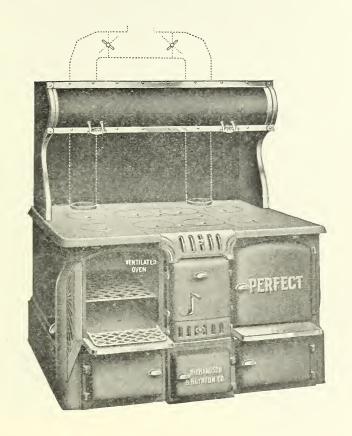
We make tobacco seed bed sterilizing pans in any size desired. These pans are made of extra heavy galvanized iron, reinforced with angle iron on top and sides and fitted with pipe connections to connect with boiler. These pans are placed over the seed beds and live steam turned into them which will destroy all germ life. They have proven very beneficial and insure growth of good sturdy plants. Prices on application.

We make ventilators of galvanized iron for roofs of tobacco sheds in any size required. Strong and well made.

O. & W. Asphalt and Slate Surface Roofing

A Ready-To-Lay Roofing for Tobacco Sheds, Barns and Garages. Made of long wool felt saturated with asphalt. Slate or plain surface. Fire resisting and water-proof. 108 square feet to the roll. Easy to lay and cheaper than shingles. Nails and cement with each roll.

Richardson "Perfect" Double-Oven Ranges



We believe this to be the best double-oven range manufactured.

Two large ovens that cook and bake to perfection. Powerful water backs that heat an abundance of hot water. Designed to meet the requirements where a large amount of cooking is desired.

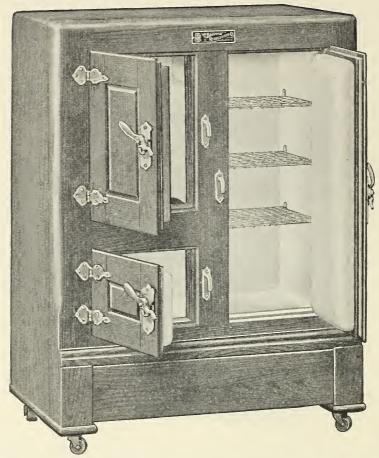
Several of our large Tobacco Plantations are equipped with these ranges.

Price and catalogue on application.

BALDWIN

DRY AIR REFRIGERATORS

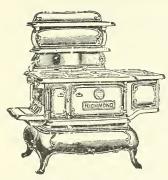
THE BOX WITH THE STEADY COLD WAVE



Baldwin Dry Air Refrigerators are built of best quality kiln dried stock. Their base is a strong frame, one side of which is covered with a heavy non-conducting sheathing paper, and the other side with two thicknesses of heavy sheathing paper. This with inside walls and outside casing, gives six insulating surfaces and dead air space, and covers every joint and nail in the frame.

By this method of construction we have a perfect air-tight dead air space between the two walls, a most desirable feature, dead air being conceded to be the best non-conductor of heat and cold. No charcoal or other filling being used, the walls do not bulge or swell. Where packing is used, it is liable to absorb and retain moisture, and to settle between the walls or sift out during transportation and use, leaving an empty space around the top of the refrigerator. Made in a large variety of styles and sizes. Send for Catalogue and Prices.





THE RICHMOND RESERVOIR RANGE

For the country home where there is no available hot water supply. These tank ranges are ideal water heaters

as well as good cookers.

Florence Automatic Oil Stoves.

Perfect Cooking and Baking done on these Oil Stoves. Absolutely safe, clean and odorless.

Two, Three and Four Burner. Single and Double Ovens.

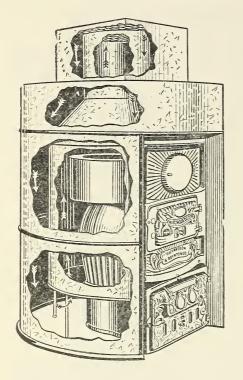
Prices on Application.

These Oil Heaters do perfect baking and cooking. Fitted with oven, any kind of baking may be done. They are absolutely safe as the oil reservoir is outside the stove and the supply is conducted through pipes only as required.



Beautiful in design and finish. All sizes.

Do Not Shiver Through Another Winter. It Is So Easy To Be Warm.



We offer you a condensed heating plant thoroughly tried out for three years and giving perfect satisfaction in thousands of homes in all parts of the country.

This system not only sends the warm air throughout the house but draws the cooler air from the floor to the register and reheats it, thereby producing perfect circulation.

The "Richardson One-Pipe Heaters" are so constructed that they heat the entire house through the one register. This register is divided into two parts. The warm air passing up in a

constant flow through the center opening and the cooler air being drawn down to the Heater through the outer section.

These heaters are adaptable for old houses as well as new. There is no ripping up of walls and partitions for the installation, but merely the fitting of one floor register.

The ease and quickness with which they are put in does not annoy or inconvenience the house owner—all that is needed is a cellar and a good chimney.

These Heaters are made in different sizes. Send for our new Catalogue.

Where houses are not adapted for the ONE-PIPE Heater we can install a furnace with a pipe to every room. Estimates cheerfully given.

USEFUL CHEMICAL MEMORANDA

(Partly from the first annual report of the Connecticut Agricultural Experiment Station, 1876.)

Animal and vegetable substances, such as flesh, bone, wood, grain, manure, and the like, contain three classes of materials: Water, Organic Matters and Mineral Matter or Ash. If we heat a piece of wood, a whisp of hay, a bone, or a portion of manure or soil, in an oven, the water will be dried out. If we put the dried material in the fire, the Organic Matter, which consists mostly of the chemical elements, carbon, oxygen, hydrogen, and nitrogen will be burned away, and there will remain the Mineral Matter or Ash. The ash of these different materials generally contains more or less potash, soda, lime, magnesia, iron, alumina, silica, phosphoric acid, sulphuric acid, chlorine, or other ingredients. The proportions of these vary widely in different substances, from the large quantities to the merest traces.

Moisture.—All fertilizers contain more or less water, which, of course has no commercial value, and serves to make them heavier and relatively poorer in valuable ingredients. In the analysis that which is removed by heating to 212° Fahrenheit (or in some cases to a somewhat higher temperature), is designated as moisture. By subjecting the dried material to a higher temperature, the organic and volatile matters are driven off, and the ash remains. By treating this ash with strong acids, all that is of any value is dissolved.

Sand and Insoluble Matters.—The residue, which resists the action of both fire and strong acids, consists of silica and other mineral matters. These possess no fertilizing value, and are classified as sand, etc.

Nitrogen, Ammonia.—In our ordinary fertilizers, much or all of the nitrogen exists in unavailable forms. By more or less rapid alterations, by decay or otherwise which take place in the soil, these are changed to other compounds, which the plant can readily use as food. Of these latter nitric acid, which contains nitrogen combined with oxygen, is one; ammonia which consists of nitrogen and hydrogen and is represented by the chemical formula N. H. is another. 14 parts by weight of nitrogen unite with 3 parts of hydrogen to form 17 parts of ammonia. Accordingly 14 parts of nitrogen are said to be equivalent to 17 of ammonia, or what is the same thing 100 parts of nitrogen are reckoned as equivalent to 121 parts of ammonia. In pure sulphate of ammonia, all the nitrogen is in the form of ammonia. In Peruvian guano, some of the nitrogen exists as ammonia also. In our ordinary fertilizers there is little or no ammonia. The very common practice of reckoning nitrogen as ammonia in fertilizers which do not contain it in this form is incorrect, misleading and therefore wrong, and ought to be abolished. Ammonia combined with sulphuric acid, forms sulphate of ammonia; nitric acid combined with soda, forms nitrate of soda.

Phosphoric Acid: Soluble, Reverted and Insoluble.—By phosphoric acid is understood the compound of phosphorous and oxygen, which is represented by the chemical formula, P₂O₅. This combined with lime, forms phosphate of lime. The phosphate of lime which occurs in bone, and in South Carolina and other fossil and mineral phosphates, contains three parts of lime to one of phosphoric acid. This is often called bone phosphate, and is insoluble in water. When the bone phosphate is treated with sulphuric acid, the latter takes part of the lime to itself, forming sulphate of lime, and leaves the phosphoric acid in the form of a Superphosphate. This last is soluble in water, and when used as a fertilizer can be taken up by the plant at once, while the bone phosphate is slowly available as plant food. Phosphoric acid which has been rendered soluble, often enters into other forms of combination with lime, alumina, etc., which, though insoluble in water, are soluble in citrate of ammonia. The terms, reverted, reduced and precipitated, are applied to it when in this form.

The reverted phosphoric acid ranks in solubility, and consequently in value, between the soluble and insoluble. The soluble and reverted are sometimes

classed together as Available phosphoric acid.

In some analyses the percentage of phosphoric acid is not stated separately, that of "bone phosphate of lime" being given in its stead. Sometimes the expression "soluble bone phosphate of lime" is met with, which is certainly a misnomer. 142 parts by weight of phosphoric acid P₂ O₅ unite with about 168 parts of lime C A O to form 310 parts of bone phosphate CA₃ (PO₄)₂; 100 parts or pounds of phosphoric acid are said, therefore, to be equivalent to 218 parts of bone phosphate. Special stress is laid on this point, because those not familiar with chemistry are apt to be deceived in comparing analyses, in some of which the term phosphoric acid, and in others the term bone phosphate, is used. It would be more accurate and clear, and in every way better to discard the term bone phosphate of lime in analyses of fertilizers, and speak only of phosphoric acid.

Potash, or potassa, is the compound of the metal potassium with oxygen, which is represented by the chemical formula K_2O or KO. This combined with sulphuric acid forms sulphate of potash. Potassium and chlorine together form chloride of potassium, or "muriate of potash," as it is called by dealers.

Ioo pounds of pure sulphate of potash contains about 54 pounds of "actual potash." Ioo pounds of sulphate of potash are therefore said to be equivalent to 54 pounds of actual potash, and vice versa, 54 pounds of potash, in the sulphates are reckoned as equivalent to 100 pounds of sulphate of potash. In the "muriates" 100 pounds of chloride of potassium are reckoned equivalent to about 63 pounds of potash, and vice versa.

Carbonate of Potash, K₂CO₃ — This fertilizer chemical is the ingredient which gives to wood ashes and cotton hull ashes their value as tobacco fertilizers, and it is practically free from magnesia. It was formerly prepared by extraction from wood ashes, and formed the "pearl ash" of commerce. It has been used with good effect as a tobacco fertilizer in the Poquonock experiments.

The following figures will be found useful in calculations of the composition

of fertilizers.

NITROGEN COMPOUNDS

14.	parts	of Nitrogen	are o	contained i	n 17.	parts	of Ammor	ıia.
100.	- "	"	6.6	66	121.43	- 66	"	
82.35	6.6	"	"	66	100.	66	66	
17.	"	Ammonia	6.6	- "	66.	"	Sulphate	of Ammonia.
100.	6.6	"	"	66	388.2	"	- "	"
25.8	66	"	"	"	100.	44	6.6	66
14.	"	Nitrogen	"	66	66.	46	66	"
100.	"	"	"	"	471.4	"	"	"
21.2	"	6.6	"	44	100.	66	"	"
14.	66	"	66	6.6	54.	4.6	Nitric Ac	id.
100.	66	6.6	6.6	66	385.7	6.6	"	
25.9	66	6.6	66	"	100.	"	"	
14.	66	6.6	6.6	6.6	85.	6.6	Nitrate Se	oda.
100.	"	"	44	"	607.1	"	"	"
16.47	"	"	"	"	100.	6.6	66	. 6
54.	66	Nitric Acid	6.6	46	85.	6.6	66	16
100.	66	"	"	"	157.4	66	"	14
63.5	44	"	"	4.4	100.	66	66	66
85.	66	Nitrate of S	oda co	rrespond to		"	Ammonia	
100.	"	66	"	"	20.	6.6	"	
500.	"	66	"	"	100.	4.6	" "	

PHOSPHORIC ACID

100. parts of Phosphoric Acid correspond to 218.3 parts of Bone Phosphate. 45.8

POTASH (Potassa)

100.	parts of	Sulphate of	Potash cot	itains 54.08	parts of	Potassa.	
184.9	- "	(1	66 11	100.	6.6	"	
100.	66	Chloride of	Potassium	correspond	to 63.17	parts of	Potassa.
T 58. 2		6.6	66	٠6 [*]	100.	- "	"

INDEX

	age	Forks:	rage
Asparagus,	6		0 -
Beans, Bush,	6	Hay,	67
Beans, Pole,	7	Manure,	67
Beets,	7	Spading,	67
Blue Grass (Kentucky)	28	Furnaces,	74
Bone Meal,	25	Garden Fertilizers,	25
Broccoli	8		63
Brussels Sprouts,	9	Grindstones,	0.
Bug Death,	32	Harrows:	
Bug Death Sifters,	32	Acme,	44
		Clark Cutaway, Regular	42
Cabbage,	9	Clark Cutaway, Double Action	
Caldrons,	64	Clipper Smoothing	45
Carrot,	11	Deere Model L. Tractor,	36
Cauliflower,	11	Meeker,	45
Celery,	10	Spike Tooth,	41
Chicken Feed (Purina)	54	Spring Tooth,	43
Cow Feed (Purina)	55	Hay Loaders	62
CLOVERS:		Tray Loaders	
Medium Red,	28	HAY RAKES:	
Mammoth or Large Red,	28	Dain Side Delivery,	62
White,	28	Deere Steel,	59
Alsike,	28	Moline Steel	59
Alfalfa,	28	New York Champion,	60
		Wiard Wood,	60
Corn, Field,	-29	Yankee Wood,	60
Corn, Sweet,	11	Hay Tedders,	61
CORN BINDERS:		Hay Unloaders,	60
Moline,	62	Herbs,	24
· ·	02	Hoes,	66
CORN PLANTERS:		Horse Feed (Purina)	55
Deere, No. 999,	53	1101001 000 (1 11111111)	
King of the Corn Field,	46	Kale,	14
Cress,	12	Kohl Rabi,	14
Cucumber,	13	L 4 D - 11	36
		Land Rollers,	25
CULTIVATORS:	~ 1	Lawn Fertilizer,	$\frac{26}{25}$
Deere Riding,	51	Lawn Grass Seed,	20 34
Hand, (See Planet, Jr. Imp.)49		Lawn Mowers,	
Horse (See Plant Jr. Imp.)	47	Lawn Rollers,	34
Dandelion	13	Leek,	14
Egg Plant,	13	Lettuce,	15
Endive,	14	Lime, Agricultural,	4-20
Farmogerm	64	Manure Spreaders,	53
Fertilizer Sowers, Broadcast,	37	Markers, Field,	45
Fertilizer Sowers, Row,	36	Melon, Musk,	16
Flower Seeds,	26	Melon, Water,	15
	20	ATACION, TTUCCA, TTUCK	

INDEX—Continued

	Page		Page
MILLETS:		Potato Coverers,	45
Golden,	28	Poultry Manure (Pulverized)	
Hungarian,	28	Prout's Hoeing Machine,	. 46
Japanese,	28	Pulverizers,	
		Pumpkin,	. 20
Mowing Machines:			
Dain,	58	Radish,	
Moline,	58	Rakes, Garden, (See Hay Rake),	65
Mulford Cultures,	63	Ranges,	71-73
Mustard,	15	Red Top,	. 28
		Refrigerators,	
Oil (Havoline)	69	Rhode Island Bent,	. 28
Oil Stoves,	73	Rhubarb,	
Okra,	17	Roofing,	
Onion Seed	17	Ruta Baga,	
Onion Sets	18		
Orchard Grass,	28	Salsify	
Delat	C.F	Scrapers (Ox Shovels)	
Paints,	65	Sheep Manure,	
Parsley,	18	Sheet Metal Department,	70
Parsnip,	18	Shovels,	66
Peas,18		Spinach,	21
Pepper,	19		
		Sprayers:	
PLANET JUNIOR IMPLEMENTS:		Iron Age, 4-Row,	57
Cultivators, Hand,49	0-50	Myers Barrel Outfit,	
Cultivators, Horse,	47	Myers Barrel Pumps,	
Cultivators, Riding,	51	Myers Bucket Pump,	
Extras,	52	Myers Bucket I ump,	00
Harrow, 12-Tooth,	47	Squash,	. 22
Seeders,	48	Stalk Cutters,	35
,		Sweet Peas,	
PLOWS:			
Deere Sulky,	39	Timothy,	28
Deere Tractor,	38	Tobacco Seed,	
Syracuse Walking39		Tobacco Transplanters,	43
Sylucuse Walking	, 10	Tomato,	23
Potatoes,)-31	Tractors -(Case 10-18)	
Potato Diggers,	56	Tractor Plows,	38
	33	Turnip,	23-24
POTATO PLANTERS:		Weeders,	61
Hoover,	56	Wheelbarrows,	63
Iron Age,	56	Wood Ashes,	25
11011 1180,	.00	Wood Asiles,	20

SEED AND PLANT TABLES.

				Quantity	Weight
Barley				per Acre 95 to 120 lbs.	Per Bu. 48 lbs.
Blue Grass (Canada)				. 25 to 40 lbs.	
" (Kentucky) .				. 25 to 40 lbs.	14 lbs.
Buckwheat	: :			. 50 to 60 lbs.	
Clover-Alfalfa (Broadcast)			. 20 to 30 lbs.	
" (Drills) .	,			. 15 to 20 lbs.	60 lbs.
" Crimson				. 10 to 20 lbs.	60 lbs.
" Red				. 10 to 15 lbs.	
" White				. 5 to 10 lbs.	60 lbs.
Corn (Hills)				. 15 to 20 lbs.	
" (drills for fodder) .				. 60 to 75 lbs.	
" (broadcast)				. 120 to 150 lbs.	
Cow Peas in Drills				. 60 to 90 lbs.	
Millet (Common)				. 25 to 40 lbs.	
" (Hungarian) .				. 25 to 40 lbs. 12 to 20 lbs.	
Oats				60 to 90 lbs.	
Orchard Grass				25 to 40 lbs.	
Rape (broadcast)				5 to 6 lbs.	
" (drills)				. 3 to 4 lbs.	
Red Top (unhulled) .				. 25 to 40 lbs.	
" (recleaned) .				. 10 to 15 lbs.	
Rhode Island Bent Grass				. 25 to 40 lbs.	
Rye Grass (Italian) .				. 40 to 50 lbs.	
Soia Beans (broadcast)				. 50 to 7 5 lbs.	60 lbs.
(in rows)				. 20 to 30 lbs.	
Sudan Grass				. 15 to 20 lbs.	
Timothy				. 15 to 30 lbs.	45 lbs.
Vetch (Spring)				. 50 to 70 lbs.	
Vetch (Winter)				. 30 to 60 lbs.	
Wheat				. 90 to 120 lbs.	
Potatoes,				. 12 Bu.	60 lbs. 8 pounds
Timothy, together, for	one acre				{ ½ bushel
Timothy, Red Top,	one acre,.				1 bushel
Peas in drills are sown 11/2	to 1½ bushel	s to the acre			(2 2 401101
Carrots,				usually sown to the acr	e, 2½ to 3 lbs
Beets,					4 to 6 lbs.
Parsnips,					3 to 6 lbs.
Onions,				4 4 4 4 4	4 10 0 105,
Ruta Bagas,				44 44 44 44	T ID.
Turnips,				66 66 66 66 66	1 10 1/2 108.
Beans,					$1\frac{1}{2}$ to 2 bu.
0 111 1	a D .	1.4 101		PH 0 1 1	
Quantity of	Corn Requi	rea to Pia	int an Acre	, Five Grains in a	mill.
3 ft, x 2 , , ,		18 qts.	3 ft, x 3		, 14 qts,
3½ ft, x 3					, 8 qts,
3 ft, x 4 , , ,		7 qts.	33/4 ft, x 3 4 ft, x 4		, 6 qts.
Nu	mber of Pla	ints per A	cre at Give	en Distances.	
ı ft. xı ft,		43,560	9 ft. x 9 ft		527
1½ ft, x 1½ ft,		19,360	12 ft. x 12 ft		537
2 ft, x 2 ft.		10,890	15 ft, x 15 ft		, , 163
21/2 ft, x 21/2 ft, ,		6,969	18 ft. x 18 ft.		. 134
3 ft. x 3 ft.		4,840	20 ft, x 20 ft		. 100
4 ft, x 4 ft, ,		2,722	25 ft. x 25 ft		73
5 ft, x 5 ft, ,		1,742	30 ft. x 30 ft	t, , , , ,	47
6 ft, x 6 ft, ,		1,210	40 ft. x 40 ft		20
Quantity of Se				er of Plants, or Ni	ımber
	of Hills,	or Lengtl	of Drill.		
Asparagus	7 07 to 6=	ft. of drill	Much Mal-		oz. to 60 hills
Asparagus,	. 1 oz. to 65	it. of drill	Musk Melo		oz. to oo niiis

Asparagus,				1 oz. to 65 ft. of drill	Musk Melon	. I oz. to 60 hills
Beets,				I oz, to 50 ft, of drill	Okra , .	τ oz, to 40 ft, of drill
Beans, Dwarf,		,		1 qt. to 100 ft. of drill	Onion,	1 oz. to 100 ft. of drill
Beans, Pole,		,	•	I pt, to 150 hills	Onion Sets, small,	1 qt, to 4 ft. of drill
Carrot, ,				1 oz, to 150 ft, of drill	Parsley, , , ,	1 oz, to 150 ft. of drill
Cabbage,	,			1 oz. to 3,000 plants	Parsnip,	1 oz, to 200 ft, of drill
				1 oz. to 3,000 plants	Peas,	1 qt. to 100 ft of drill
				1 oz, to 4,000 plants	Pumpkin,	I oz, to 40 hills
Cucumbers,				r oz, to 50 hills	Pepper,	1 oz. to 2,000 plants
Corn,			,	I qt. to 400 hills	Radish, , ,	1 oz. to 100 ft. of drill
Dandelion.		6	,	I Oz. to 200 ft of drill	Salsify,	1 oz, to 70 ft, of drill
Endive,		,		1 oz, to 150 ft. of drill	Spinach, , ,	1 oz. to 100 ft. of drill
Egg Plant,				1 oz to 2.000 plants	Squash, early,	1 oz, to 50 hills
Lettuce,			,	I oz, to 4,000 plants	Squash, marrow, .	1 oz. to 16 bills
Leek,				1 oz, to 100 ft. of drill	Tomato, , .	1 oz, to 3,000 plants
Watermelon,				r oz, to 80 hills	Turnip,	

One Gallon, by the U. S. Standard Unit of Liquid Measure contains 231 cubic inches. The U. S. Bushel contains 2,150.42 cubic inches.

An Acre contains 43,560 square feet,



O. & W. 1922 Paint Price List

	Gals.	½ Gals.	Qts.	Pts.	½ Pts.
O. & W. Guaranteed House Shades	3.25	1.75	1.00	.55	.30
Outside White, 100% Pure,	3.50	1.90	1.10	.60	.35
Starred Shades	3.75	2.10	1.15	.65	.40
Flat White	3.50	1.90	1.10	.60	.35
Opake White Enamel	5.00	2.60	1.40	.80	.50
Floor & Deck Paint	3.25	1.75	.95		
Ironite Paint	1.85	1.00			
Wagon Paint—Regular	3 .25	1.75	.95	.60	$\cdot 35$
Wagon Paint—Red	3.50	1.85	1.00	.60	.35
Auto and Carriage Paint			1.10	.65	.40
Stove Pipe Enamel				.45	.25
Varnish Stain	2.75	1.50	.85	.50	.30
Spar Varnish	5.00	2.60	1.40	.80	.50
Floor Varnish	4.00	2.25	1.25	.70	.45
Interior Finish	3.50	1.85	1.00	:60	.35

Lead, putty and shellac are sold according to market prices. We offer a full line of pure colors in oil; also paint supplies of all kinds, including marine paints.

Liquid paints in five gallon kits, 5 cents per gallon less than in gallons. In full barrel lots, 10 cents per gallon less.

Prices subject to change without notice.

Olds & Whipple, Inc.

164-168 State Street

Hartford, Conn.

N. B.—O. & W. Outside White is guaranteed absolutely 100% pure, containing the best pure lead, zinc, linseed oil and dryer *only*.

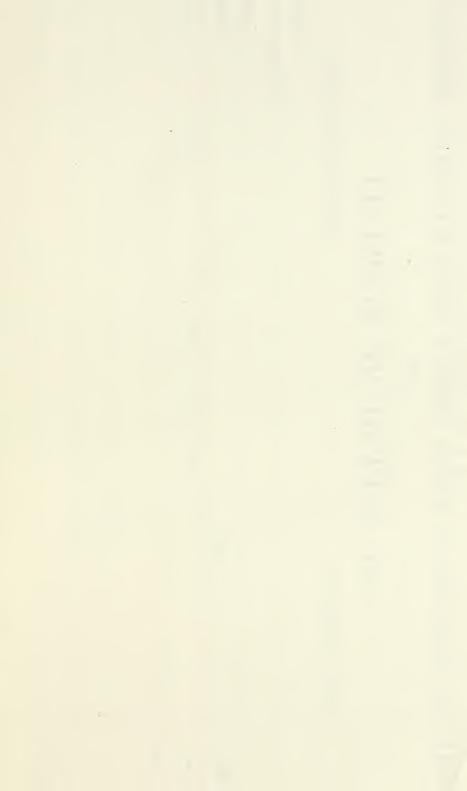
O. & W. 1922 Paint Price List

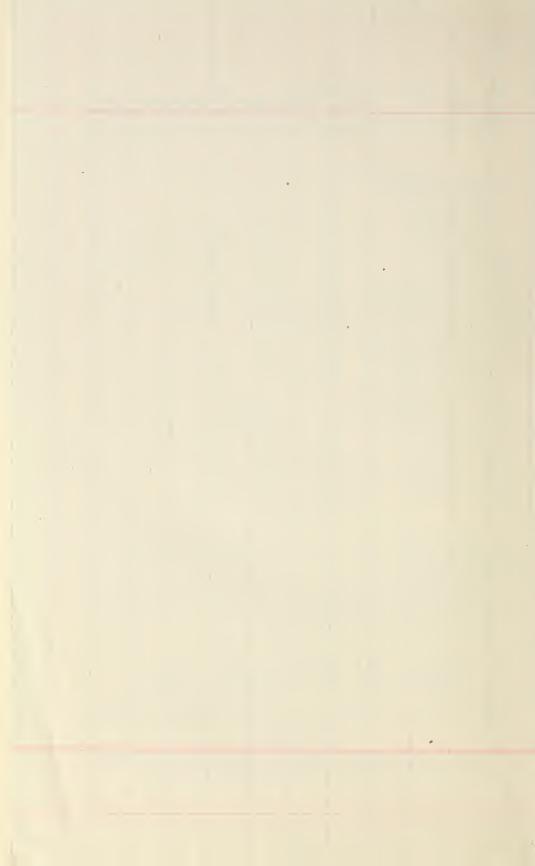
		and the same of th
() *		

Olds & Whitaple, Inc.

Hardly State Street Marched, Conc.

and the second s





ORDER SHEETS FOR FARM AND GARDEN SEEDS

FROM

OLDS & WHIPPLE, Inc.

164-6-8 STATE STREET,

HARTFORD, CONN.

P. O. Address

Name

Ship by

Ship to

Quantity.

NAME OF ARTICLES WANTED.

Date

Price.

192

OFTHE SE WHITTEN SE RILLO

٠



