Historic, Archive Document

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

62.81

R.B. BUCHANAN'S SEEDS 1922

SOY BEAN PLANT
WITH NODULES ON
ROOTS

BUCK
BRAND
ALFALFA
See page 35

FIELD OF
SOY BEANS
See page 47

BUCHANAN'S TENNESSEE YELLOW DENT See page 45

BUCHANAN'S
WHITE PROLIFIC
SEED CORN
See page 44

STOCK FEEDS

POULTRY FEEDS

MEMBER
MEMPHIS MERCHANTS EXCHANGE

18 SOUTH FRONT STREET

MEMPHIS, TENN. Jan. 1, 1922

To My Customers:-

What Shall I Plant in 1922? This question is being asked by many just now, and not being a farmer, I will not attempt to tell a farmer how to work his land, however I have been dealing with farmers twenty four years, and firmly believe in planting some Cotton on every "Southern Farm" every year, but in planting Cotton in 1922, do not forget that the Boll Weevil is with us, and even if you have never received a visit from him, it may be that he will come to see you this year.

I have heard of Many All Cotton Farmer's "Going Broke" in the past two years, but have yet to meet the first farmer who went broke by having plenty of Corn, Hay, Cattle, Pigs and Chickens on the farm.

Thirty years ago I purchased my first "Garden Seed", planted a garden, worked it before and after school hours, sold the vegetables (that were not used in our home), and started my first Bank Account. I believed then (and have never changed my mind) that a small piece of ground worked as a Garden will furnish more returns, in exercise, health, vegetables and money than anything that one can do.

We have had a fine open season for harvesting the 1921 crop, and we often hear of the farmer who has enough Corn, Hay and other products to do him for two years. Do Not Let This Kind of Talk Fool You. I have heard it before this year, and many things could happen before next harvest time; we could have a drought in 1922 just as we did in 1914.

With this catalogue I send my best wishes to you and yours for the entire year.

Yours very truly,

R. B. Buchanan

PLANT
BUCK BRAND SEEDS

ORDER BLANK OF

Date _____

Date Received _____

sent by.

(State here if wanted by Mail, Express or Freight)

Our Order No.

(Ladies will please put the prefix MISS or MRS.)

Route

Mark Zone No. Here

P. O.

Box

Express or

County.

Amount Received

Freight Office

State

\$

All contracts for Vegetable Plants, Nursery Stock and Sweet Potato Slips are subject to providential hindrance or other causes beyond my control.

Your money's worth or your money back. This is part of my guarantee. It is mutually agreed and understood that the seed ordered of me may be returned any time within 5 days upon receipt of same, if not satisfactory. The money paid for them will be refunded, and I cannot in any way warrant the crop, as it is dependent on so many conditions beyond my control.

Have I your permission to substitute equal or better in nearest variety I can supply if out of variety ordered?.....Answer (.....)

If I can give you better service by shipping prepaid express instead of price postpaid, may I do so?.....Answer (.....)

Don't bother about what the express or freight charges will cost on small packets, ounces and pounds of garden seed, for I pay all express and mail charges for garden seed listed in my catalogue in these quantities.

R. B. BUCHANAN.

TEAR OFF THIS SHEET ALONG THIS LINE

If you get more than one Catalogue please hand it to some friend. All members of one family should order goods under the name of the head of the family. Remember, in sending orders to always sign the name of the head of the family in the same way, that he would in signing a check at the bank. Do not sign your name one time as John Jones and the next time as J. Jones or Mrs. J. Jones. The letter "J." might stand for James or Joseph. Often your Postmaster is confused in delivering mail to the right party on this account, and we of course want you to receive your orders and mail without any unnecessary delay.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

BUCK BRAND TESTED SEEDS

Are Known All Over the South

The manner in which we test our seeds is shown in the accompanying illustration. (This Standard Seed Tester has been on the job in our store for several years and we test each lot of seeds passing through our hands regardless of how large or how small these lots may be.)

The testing of seeds is for two purposes—to determine whether the sample is adulterated and to determine the vitality or germinating power.

Germination is determined by sprouting the seeds under favorable conditions. The sample is well mixed and 100 seeds chosen as they come. They are placed on a square of blotting paper as in the illustration, and kept moist. After the necessary time has been allowed the sprouted seeds are counted and the percentage of germination determined.

Adulteration or impurity is discovered by examining the sample under a lens. We use a powerful magnifying glass that shows up every impurity and every foreign seed, no matter how small. A sample of each shipment of seed is examined before it is accepted and, if found impure, is rejected.

We take these precautions for your protection and to maintain the high standard we have set for Buck Brand Seeds. This is what Buck Brand Seeds mean to you.

FIELD OR GROUND TESTING

Since my last catalogue was issued I have established trial grounds and am giving all seeds an actual out-of-doors test, as shown below.

I have been handling seeds for 25 years, and have never found a reason for planting seeds that have not been tested. If you have any seeds which you intend planting, have them tested. Your State Agricultural College will do this work for you free of charge.

Giving Seeds a Real Field Test at My Trial Grounds

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

How to Order Buchanan's Seeds—Read Carefully

We Fill Orders of All Values, from the Smallest to the Largest, and All Receive the Same Careful and Prompt Attention. Prices in this Catalogue are Subject to Market Changes—Special Quotations Promptly Given.

FREE DELIVERY BY MAIL. We deliver free to any post-office in the United States all Vegetable and Flower Seeds offered in this Catalogue by the packet, ounce, quarter-pound, and all varieties of Tomato and Cabbage Seed in any size package, including pounds. On all other seeds for half-pounds and upwards the Parcel Post table will apply.

When Best to Order. We are fully equipped for filling orders and supplies with New Crop Seeds. Order at once, so that you can have your seed on hand ready to start planting your crops at the proper time without delay.

The Cost of Your postoffice or express money order may, on all orders over \$1.00, be deducted from the amount.

One or Two Cent Postage Stamps. We will accept the same as cash. Do not send other kinds.

If You Live On a Rural Mail Route, just give the letter and the money to the mail carrier and he will get the money order at the postoffice and mail it in the letter for you.

Use Our Order Blank If You Have One. If you haven't one, use any plain paper.

Tell Us In Your Own Way What You Want, in any language. Enclose in your letter the amount of money, either a post-office money order, which you can get at the postoffice, an express money order, which you can get at the express office, or a draft, which you can get at any bank, or put the money in your letter, take it to the postoffice and tell postmaster you want it registered.

Be Sure to Sign Your Name and Address. If by boat or railroad, say distinctly which boat or railroad to ship by, and if freight has to be prepaid, add this amount to your order to prevent delay.

Change of Address. If you have changed or intended to change your address, please let us know; we will change it on our books, so that you will receive our Catalogue at your new postoffice. We thank you for doing this.

Don't Be Afraid You Will Make a Mistake. We receive many orders from young and old who never before sent away for seeds. We are accustomed to handling all kinds of orders. No matter whether your order is in good or bad writing we will promptly fill it and send it to you.

Market Gardeners, Farmers' Clubs and Institutions wanting to purchase Seeds in unusually large quantities should write for special prices. We have made prices very low in this Catalogue, yet when a number of bushels or pounds are wanted we can frequently supply at lower price than by the single pound or bushel. In writing give us a list of quantities and varieties required, and we will return list promptly with our lowest price for the lot.

Always Remember That We Can Save You Money, No Matter Where You Live. Write us about any seed you would like to know of, and your letter will be answered the same day it is received. If you wish to know exactly what the freight or express would be on any article to your station, write us and we will tell you.

AS TO WARRANTY, We Believe Our Seeds will produce for you the best crops you have ever grown, and to show you what confidence we have in our Seeds, if they prove otherwise than represented by us, we will refill order free of charge; but it must be agreed that we do not warrant the crops grown therefrom, either expressed or implied, as to description, purity, productiveness or any other matter and we will not be in any way responsible for them. If the purchaser does not accept our seeds, etc., on these terms they are at once to be returned and the money that has been paid for the same will be refunded. We appreciate your orders and they receive our prompt attention.

GUARANTEE. We Guarantee All Shipments of Seeds, when remittance accompanies order, to reach the purchaser safely and in good condition.

I N D E X

VEGETABLE SEEDS

Page

Artichokes	5
Asparagus Seed	5
Beans, Bush	6
Beans, Bush (Wax)	6
Beans, Bush, Lima	8
Beans, Pole, Lima	8
Beans, Pole	7
Beets, Table	9
Beets, Mangels	9
Brussels Sprouts	11
Cabbage	10-11
Cantaloupe	17
Carrots	12
Cauliflower	12
Celeriac	12
Celery	12
Chervil	14
Collards	11
Corn Salad	14
Corn, Pop	13
Corn, Sweet	13
Cress	14
Cucumber	14
Egg Plant	15
Endive	15
Herbs	29
Kale	15
Kohl Rabi	15
Leek	15
Lettuce	16
Melon, Musk	17
Melon, Water	18-19
Mustard	20
Okra or Gumbo	20
Onion Seed	20
Onion Sets	21
Parsley	21

VEGETABLE SEEDS—Continued

Page

Parsnip	21
Peas (Garden)	22-23
Pepper	23
Potatoes (Irish)	24
Potatoes (Sweet)	25
Pumpkin	26
Radish	27
Rhubarb Roots	33
Rutabaga	31
Salsify	28
Spinach	28
Squash	28
Tomato	29-30
Turnip	31

FARM SEEDS

Alfalfa	38
Barley, Spring	51
Beans, Velvet	52
Bermuda Grass	42
Blue Grass	42
Broom Corn	51
Buckwheat	51
Clover (Alfalfa)	38
Clover (Red)	39
Clovers	39
Corn (Field)	44-45-46-47
Cow Peas, all varieties	56
Fescue (Meadow)	42
Lawn Grass	55
Lespedeza or Japan Clover	36
Red Top or Herd's Grass	42
Sudan Grass	37-42

COTTON SEED

Pages	49-49-50
-------	----------

VEGETABLE PLANTS

Page

Pages	32-33-34-35
Sweet Potato Slips	34-35

ROOTS

Asparagus	5, 32
Horseradish	32
Rhubarb	33

FLOWER SEEDS

Pages	58-59-60-61-62-63
Sweet Peas	58

FLOWERING BULBS

Caladium	64
Gladiolus	64

FRUIT TREES AND SMALL FRUITS

Pages	66-67-68-69-70-71
-------	-------------------

STOCK FEEDS

Poultry Feeds	61
Stock Feeds	61

INSECTICIDES

Insecticides	73
Sprayers	72

FERTILIZERS

Corn and Cotton Grower	78
Vegetable Growers	78

PASTURE MIXTURES

Buck Brand Mixtures	43
Lawn Grass	55
Meadow Mixtures	55

SEE PINK PRICE LIST (Page 82) FOR PRICES ON LARGE QUANTITIES.

R.B.BUCHANAN MEMPHIS, TENN. BUCK BRAND SEEDS AND FEEDS

Parcel Post Map

This applies from Memphis, No. 1, as shown on map. The first zone extends about fifty miles out from here, the second about 150 miles, the third about 300 miles, the fourth about 600 miles, and the fifth about 1000 miles.

Please ask your postmaster what zone you are in, making a note of it and use this map and table.

Seeds, plants and bulbs can be mailed, the rate of postage being 1c for each two ounces on packages weighing up to 8 ounces. Anything over 8 ounces takes the pound rate; that is a package weighing 9 to 16 ounces takes the rate for one pound, and one weighing 17 to 32 ounces takes the rate for two pounds, and so on. Therefore, when you want one pound of seed, remit postage for two pounds, as packing will increase the weight. There will be two or three cents difference.

The weight limit of a single package to Zones 1, 2 and 3 is 70 pounds; to all others, 50 pounds.

We pay postage on all Cabbage and Tomato Seeds; also on other Garden Seeds in packets, ounces, one-fourth and one-half pounds. We pay the EXTRA WAR TAX on all Parcel Post Seeds.

ZONES						ZONES			ZONES		
Weight	1st	2d	3d	4th	5th	Weight	1st	2d	Weight	1st	2d
1 pound	\$.05	\$0.05	\$0.06	\$0.07	\$0.08	21 pounds	\$.25	\$0.25	36 pounds	\$.40	\$0.40
2 pounds	.06	.06	.08	.11	.14	22 pounds	.26	.26	37 pounds	.41	.41
3 pounds	.07	.07	.10	.15	.20	23 pounds	.27	.27	38 pounds	.42	.42
4 pounds	.08	.08	.12	.19	.26	24 pounds	.28	.28	39 pounds	.43	.43
5 pounds	.09	.09	.14	.23	.32	25 pounds	.29	.29	40 pounds	.44	.44
6 pounds	.10	.10	.16	.27	.38	26 pounds	.30	.30	41 pounds	.45	.45
7 pounds	.11	.11	.18	.31	.44	27 pounds	.31	.31	42 pounds	.46	.46
8 pounds	.12	.12	.20	.35	.50	28 pounds	.32	.32	43 pounds	.47	.47
9 pounds	.13	.13	.22	.39	.56	29 pounds	.33	.33	44 pounds	.48	.48
10 pounds	.14	.14	.24	.43	.62	30 pounds	.34	.34	45 pounds	.49	.49
11 pounds	.15	.15	.26	.47	.68	31 pounds	.35	.35	46 pounds	.50	.50
12 pounds	.16	.16	.28	.51	.74	32 pounds	.36	.36	47 pounds	.51	.51
13 pounds	.17	.17	.30	.55	.80	33 pounds	.37	.37	48 pounds	.52	.52
14 pounds	.18	.18	.32	.59	.86	34 pounds	.38	.38	49 pounds	.53	.53
15 pounds	.19	.19	.34	.63	.92	35 pounds	.39	.39	50 pounds	.54	.54
16 pounds	.20	.20	.36	.67	.98						
17 pounds	.21	.21	.38	.71	1.04						
18 pounds	.22	.22	.40	.75	1.10						
19 pounds	.23	.23	.42	.79	1.16						
20 pounds	.24	.24	.44	.83	1.22

Planting, Maturity and Weight Table

This is for field planting, and where plants and roots are stated, it is necessary to have them ready beforehand. The third column indicates the distance that the plants should stand in the rows, and where seed is sown they should be thinned out to this distance. The fifth column indicates maturity from the time plants are planted in the field, or seed is sown in the field. Also note that the last column is the approximate weight of seeds and not products. Time of planting and maturity is for latitude of Memphis.

*Indicates that the crop can either be planted in the Spring or Fall; if in the Spring, February to April; in the Fall, August, September and October.

	Time to Sow or Plant	Distance of Rows Apart	Distance of Plants in Rows	Quantity Per Acre	Ready to Use	Approx. Wgt. of Seeds per bu. in lbs.
Alfalfa	*Feb.-Mch. and Sept.-Oct.	Broadcast	Broadcast	15 to 25 lbs.	June	60
Artichoke—Tubers	Mar. to Apr.	2½ ft.	2 ft.	6 to 8 bu.	Sept to Oct.	50
Asparagus—Seeds	Mar. to Apr.	15 in.	4 to 6 in.	8 to 10 lbs.	3 years	60
Asparagus—Roots	Feb. to Mar.	6 to 8 ft.	12 to 18 in.	4,000 to 7,000	2 years	.....
Barley	Sept. and Oct.	Broadcast	Broadcast	2 bu.	June	48
Beans—Dwarf	Apr. to Aug.	2½ ft.	4 to 6 in.	1½ bu.	8 weeks	60
Beans—Navy	May to June	2½ ft.	6 in.	¾ to 1 bu.	Winter	60
Beans—Soja	May to June	Broadcast	Broadcast	1 to 1½ bu.	Fall and Winter	60
Beans—Pole	May to June	4 ft.	3 ft.	½ to ¾ bu.	10 weeks	60
Beans—Velvet	Apr. to June	4 ft.	3 ft.	½ bu.	Fall	50
Beets—Table	Feb. to July	12 to 18 in.	4 in.	6 to 8 lbs.	1½ to 3 mo.	19½
Beets—Sugar	Apr. to June	2½ to 3 ft.	6 to 8 in.	5 to 6 lbs.	Fall and Winter	19½
Bermuda Grass	May to Dec.	Broadcast	Broadcast	10 lbs.	.....	.....
Berries	Oct. to Mar.	3 to 4 ft.	12 to 16 in.	.....	.....	.....
Broom Corn	April	36 in.	8 in.	6 lbs.	Aug.	48
Buckwheat	June to Aug.	Broadcast	Broadcast	¾ to 1 bu.	Fall	50
Bulbs	Spring to Fall	.....	.....	.....	.....	.....
Cabbage—Plants (early)	Mar. to Apr.	30 in.	15 to 20 in.	10,000 to 14,000	June and July	54
Cabbage—Plants (late)	July to Aug.	3 ft.	2 ft.	7,260	Fall and Winter	54
Carrot	Mar. to June	1 to 2 ft.	3 to 4 in.	3 to 4 lbs.	45 to 70 days	28
Cauliflower—Plants	Mar. to Apr.	2½ ft.	2 ft.	8,000 to 10,000	3 months	54
Celery—Plants	June to Aug.	3 to 4 ft.	6 to 9 in.	15,000 to 30,000	4 to 5 mo.	37
Clover—Red and Sapling	*Feb. to Oct.	Broadcast	Broadcast	8 to 10 lbs.	June	60
Clover—Alsike	*Feb. to Oct.	Broadcast	Broadcast	5 to 8 lbs.	June	60
Clover—Crimson	July to Oct.	Broadcast	Broadcast	12 to 15 lbs.	June	60
Clover—Sweet	*Feb. to Sept.	Broadcast	Broadcast	20 lbs.	.....	60
Clover—White	*Feb. to Sept.	Broadcast	Broadcast	8 lbs.	.....	60
Corn—Garden	Apr. to July	3 to 3½ ft.	9 to 15 in.	4 to 6 qts.	2 to 3 mo.	44 to 50
Corn—Field (drills)	Apr. to July	3½ to 4 ft.	10 to 18 in.	6 to 8 qts.	3 to 4 mo.	56
Corn—Field (checked)	Apr. to July	3½ to 4 ft.	3½ to 4 ft.	4 qts.	3 to 4 mo.	56
Cotton	Apr. to May	36 in.	12 to 15 in.	20 lbs.	Sept.	30
Cucumber	Apr. to July	4 to 5 ft.	4 ft.	2 lbs.	2 to 2½ mo.	39
Egg-Plant—Plants	May to June	3 ft.	2½ to 3 ft.	5,000 to 6,000	60 days	39
Endive	Aug.	18 in.	12 in.	4 to 5 lbs.	2 to 2½ mo.	26
Grass Seeds—Light	*Feb. to Oct.	Broadcast	Broadcast	1½ to 2 bu.	Late Spring	14
Grass Seeds—Lawn	*Feb. to Oct.	Broadcast	Broadcast	80 to 100 lbs.	8 to 10 weeks	20
Horseradish—Roots	Feb. to Mar.	2½ ft.	12 to 18 in.	12,000 to 15,000	6 to 8 mo.	.....
Kale—Spring	*Feb. to Oct.	Broadcast	Broadcast	6 to 8 lbs.	5 to 6 weeks	56
Kale—Winter	July to Oct.	Broadcast	Broadcast	3 to 4 lbs.	Fall to Spring	54
Kohl Rabi—Plants	Mar. to Apr.	1½ to 2 ft.	10 to 12 in.	21,000 to 34,000	2½ to 3 mo.	56
Lespedeza	Feb. to June	Broadcast	Broadcast	1 bu.	August	25
Lettuce—Plants	*Mar. to Oct.	12 to 15 in.	6 to 8 in.	40,000 to 80,000	1½ to 2 mo.	35
Melon—Musk	May to July	4 to 6 ft.	4 to 6 ft.	2 lbs.	2½ to 3 mo.	32
Melon—Water	May to June	8 to 10 ft.	8 to 10 ft.	3 lbs.	3 months	35
Millet—German	May to Sept.	Broadcast	Broadcast	1 bu.	6 to 7 weeks	50
Mustard	*Mar. to Nov.	Broadcast	Broadcast	4 to 5 lbs.	6 to 8 weeks	56
Nursery Stock	Oct. to Mar.	15 to 25 ft.	15 to 25 ft.	.....	.....	.....
Oats—Spring	Feb. to Apr.	Broadcast	Broadcast	1½ to 2 bu.	July 1	32
Oats—Winter	*Feb. to Oct.	Broadcast	Broadcast	1½ to 2 bu.	June 20 to July 10	32
Okra	Apr. to May	2½ to 3 ft.	8 to 10 in.	8 to 10 lbs.	60 to 70 days	48
Onions—For large bulbs	Mar. to Apr.	12 to 14 in.	.....	4 to 5 lbs.	July to August	39
Onions—For sets	Feb. to Apr.	10 to 12 in.	.....	40 to 50 lbs.	July	39
Onion Sets	Feb., Mar., Apr.	12 in.	4 in.	15 to 16 bu.	June	32
Parsley	Mar. to Apr.	12 in.	.....	15 lbs.	July	42
Parsnip	Mar. to Apr.	18 in.	4 to 6 in.	5 to 7 lbs.	Fall and Winter	18
Pasture Mixture	*Feb. to Nov.	Broadcast	Broadcast	25 lbs.	.....	.....
Peanuts	Apr. to June	30 in.	15 in.	1 bu.	Oct.	22
Peas—Smooth	Feb. to Mar.	2½ to 3 ft.	.....	1½ to 2 bu.	7 weeks	60
Peas—Wrinkled	Mar. to May	2½ to 3 ft.	.....	1½ to 2 bu.	7 to 9 weeks	56
Peas—Canada Field	Feb. to Apr.	Broadcast	Broadcast	1½ bu.	June 15	60
Peas—Cow	May to Aug.	Broadcast	Broadcast	1½ bu.	3 months	60
Pepper—Plants	May 15	30 in.	15 to 18 in.	11,000 to 14,000	2 to 2½ mo.	28
Potatoes—Early	Mar. to Apr.	27 in.	10 to 12 in.	8 to 12 bu.	June to July	60
Potatoes—Late	July to Aug.	30 in.	15 to 18 in.	8 to 10 bu.	Oct. to Nov.	60
Sweet Potato—Plants	Apr. 10 to July 1	3 ft.	20 to 24 in.	7,000 to 8,000	Sept. to Winter	45
Pumpkin	May	8 to 10 ft.	8 to 10 ft.	2 lbs.	Fall	24
Radish	Feb. to Oct.	10 to 15 in.	3 in.	8 to 10 lbs.	24 to 40 days	56
Rape	*Feb. to Nov.	Broadcast	Broadcast	6 to 8 lbs.	6 to 8 weeks	56
Red Top Grass	Feb. to Sept.	Broadcast	Broadcast	14 to 18 lbs.	.....	30
Rhubarb—Roots	Feb. to Apr.	4 ft.	2 to 3 ft.	5,000 to 7,000	Next year	.....
Rye	Aug. to Dec.	Broadcast	Broadcast	1 to 2 bu.	.....	56
Salsify	Mar. to Apr.	1½ to 2 ft.	3 to 4 in.	6 to 8 lbs.	Fall and Winter	18
Sorghum	*Apr. to Nov.	36 in.	4 to 10 in.	6 lbs.	Aug.	50
Spinach—Early	*Feb. to Nov	Broadcast	Broadcast	15 to 20 lbs.	8 weeks	48
Squash—Spring	May	4 ft.	3 ft.	3 lbs.	July	26
Squash—Winter	May to June	6 to 8 ft.	6 to 8 ft.	2 lbs.	Fall and Winter	22
Sudan	Apr. to June	30 in.	Broadcast	20 lbs.	Aug. to Oct.	50
Teosinte	May to June	3 to 3½ ft.	8 to 10 in.	3 to 5 lbs.	Aug. to Oct.	46
Tobacco—Plants	May to June	3 to 3½ ft.	2½ to 3 ft	4,800 to 5,000	Sept. to Oct.	35
Tomato—Plants	May to July	4 ft.	3 to 4 ft.	2,700 to 3,600	July until frost	20
Turnip	*Feb. to Nov.	Broadcast	Broadcast	1½ to 2 lbs.	1½ to 2 mo.	56
Vetch	Aug. to Oct.	Broadcast	Broadcast	50 lbs.	May	50
Wheat	Oct. to Dec.	Broadcast	Broadcast	1 to 1½ bu.	June 20	60

BUCHANAN'S

BUCK BRAND TESTED

VEGETABLE SEEDS

Please notice that we pay postage or express charges on all seeds ordered by the packet, ounce, quarter-pound and pound. Cultural directions will be found on most of our packets, but are given at the heading of each class of vegetable listed herein. We list only such varieties as in our experience and judgment are best suited to our climate to produce crops of abundance and quality.

Asparagus

One ounce will sow 50 feet of drill.

COLOSSAL—The approved standard sort. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 75c, postpaid.

PALMETTO—A very desirable bright green Asparagus. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c, postpaid.

COLUMBIAN MAMMOTH—Very large shoots. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c, postpaid.

Asparagus Roots

Plant either in Fall or Spring.

A saving of 1 to 2 years is effected by planting roots. For private use or for marketing on a small scale, beds should be formed 5 feet wide, with 3 rows planted in each, one in the middle and one on each side a foot from the edge; distance between the plants in the rows, 9 inches.

COLOSSAL—2-year-old roots. Doz. 40c; per 50, \$1.00; 100, \$1.75, postpaid.

PALMETTO—2-year-old roots. Doz. 40c; per 50, \$1.00; 100, \$1.50, postpaid.

COLUMBIAN MAMMOTH—2-year-old roots. Doz. 40c; 50, \$1.25; 100, \$1.85, postpaid.

Three-year-old roots of above varieties—Doz. 60c; 50 for \$1.50; 100 for \$2.50, postpaid.

Price, by express, purchaser's expense, 2-year roots, doz. 30c; 50 for \$1.00; 100 for \$1.50. 3-year roots, doz. 50c; 50 for \$1.25; 100 for \$2.00.

Artichoke

One ounce will produce 500 plants.

FRENCH GLOBE, (Seed)—The standard sort. Pkt. 10c; 1 oz. 50c; ¼ lb. \$1.50, postpaid.

JERUSALEM ARTICHOKE ROOTS—1 lb. 25c; ¼ bu. \$1.00, postpaid.

Write for prices on quantities.

Buchanan's Frost Proof Cabbage Plants

These cabbage plants will stand frost with little or no damage and will generally stand light freezes, but when a hard freeze comes, or when we have a fall drought followed by continued winter rains, as in 1919-20, we lose all our plants and have none to sell. However, we don't expect any such winter this year and we do expect to provide our customers with a plenty of these hardy plants this year. The Buchanan reputation is behind these cabbage plants, the same as our seeds, and you can depend on their "making good." We advise as early an order for cabbage plants as you consider safe in your particular locality.

To the Market Gardener who grows cabbage either for shipment or nearby markets, earliness or quick maturity of the crop is a prime necessity if largest profits from a market are to be secured.

To the Home Gardener who wants earliness in maturity, together with avoiding all the trouble of cabbage seed sowing and necessary protection of early sown seed and plants, our practically frost and freeze-proof cabbage plants are both a convenience and a necessity.

Along the South Carolina coast are a number of well protected islands that never feel the cold spells of winter as we do here in the Central South. In that locality the cabbage seed is sown in the fall and makes

Frost-Proof Cabbage Plants.

Asparagus

a slow and vigorous hardy growth all during the winter and in the open ground and can be taken from there and planted anywhere in the Central South between January 15 and March 15 with perfect safety, a thing that is impossible with hot bed or greenhouse grown cabbage plants.

The use of these open air, practically frost-proof plants often enables the gardener to put full-grown heads of cabbage on the market two or three weeks ahead, and naturally he gets the early season top prices for his crop.

To mature good heads the plant must not be too old when shipped. Over on the Carolina Coast Islands are a number of cabbage growers who plant for a surplus of cabbage plants so as to insure having enough plants for their own use in setting out their fields, and if everything goes right they have more plants than they need, and offer them for sale to you and others. What they get out of these surplus plants is so much clear money.

Here is the real important point, however. Once a cabbage plant gets too old before it is transplanted, it is very apt to run to seed instead of producing salable or usable heads of cabbage.

You can't afford to take chances, and you don't with Buchanan's Frost-Proof Cabbage Plants.

VARIETIES: Early Jersey and Large Charleston Wakefield and Early Flat Dutch. By parcel post prepaid to your postoffice.

PRICES: 500 Cabbage Plants, all of the same variety, postpaid, \$1.75; 1,000 or more of the same variety, postpaid, at \$3.25 per 1,000. We will mail these to any address in the United States, postpaid by us.

Per Single Hundred: On small shipments we will furnish 100 plants of any one variety for 50 cents, postpaid. No order for less than 100 plants of any one variety will be filled. Orders are filled by the hundred—not 250 or 350—but 200, 300 or 400. Also, orders for less than 500 of the same variety take the 100 rate—200 of one variety and 300 of another take the 100 rate. At 50 cents per 100 we will send any of the above varieties, postpaid.

By Express: 1,000, \$2.50; 5,000, \$10.00. Write for prices on large quantities.

Beans—Dwarf or Bush Green and Wax Podded Varieties

CULTURE.—One quart will plant 100 feet of drill. Beans are somewhat tender, but it often pays to take some risks. Plant in warm, loamy soil at the beginning of settled, warm weather in spring, and at intervals for succession until September. Rows may be made 2 feet apart, and the Beans planted a few inches apart in the drills, or 3 or 4 Beans in hills 6 to 8 inches apart. Cultivate and hoe frequently, always, however, when the vines are perfectly dry. In hoeing draw the soil up towards the rows or plants. For String Beans, gather the pods clean as soon as fit for use. The plants will remain all the longer in bearing.

IMPROVED EXTRA EARLY RED VALENTINE.—A standard variety, extra early, and for snaps there is nothing superior to this variety among the green podded sorts, both for home use or the market. The pods are round, long, slightly curved and of excellent quality. The seed we supply is produced from stock seed that was selected for both earliness and quality. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

Memphis ships many cars of Green Beans every year—Market Gardeners should talk to us about How to Grow and How to Pack for carload shipment.

Gathering Red Valentine Beans

BLACK VALENTINE.—This Bean has beautiful large pods about 6 inches long, slender, round and nearly straight; stringy, fibrous though fine grained, dark green in color. Seed black. An early, productive, profitable, gardener's variety. The plant is more vigorous and productive than the Red Valentine and pods darker green. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

Stringless Green Pod

STRINGLESS GREEN POD (BURPEE'S).—This is one of the most popular and best of the stringless varieties. It is earlier than the Valentine, absolutely stringless, hardy, vigorous and productive. Pods are long and straight, round, meaty, of green color, and remain tender and crisp a long time after maturity, and are of excellent flavor. Seed of medium size and length, yellowish brown. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 20c; pt. 25c; qt. 40c.

EARLY MOHAWK.—This hardy variety can be planted earlier than others and in this way will often furnish beans fit for

use before any other green podded variety. The plants are large and with coarse dark green leaves. The snap pods are 5 to 6 inches long, very straight and flat, dark green and stringy, very attractive in appearance. Seed of large size and length, mottled brown. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

REFUGEE, OR THOUSAND TO ONE.—A very productive, hardy, vigorous late sort, much in favor with the canning trade. Pods are 5 to 5½ inches long, somewhat slender, round and slightly curved; almost stringless, fine grained, of light green color and of very good quality. Seed long, cylindrical, light drab, thickly dotted and splashed with purple. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

RUBY DWARF HORTICULTURAL.—An improved type of the Dwarf Horticultural, and the best of the dwarf sort for green shell beans for the home or market and can be used as a green-podded snap bean. The plants are productive, very hardy and early. The pods are about 5 inches long, straight, round and stringless. Seed large, oval, plump, pale buff, splashed with deep red. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

Golden Wax Beans

Dwarf Wax Beans

DWARF GERMAN OR BLACK WAX.—A very early dwarf growing variety, will stand close planting; very prolific, pods medium length, stringless and nearly round, of creamy white color. Seed small, oblong, solid black. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

BLACK WAX, CURRIE'S RUST-PROOF.—Very productive, rustless; long, flat pods, which are very crisp, brittle and tender when young. Seed black, fine for shipping. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 40c.

DAVIS WHITE KIDNEY WAX.—One of the most popular flat podded wax beans. Long, handsome, yellow pods of fine quality. Seed medium large, kidney shaped, clear white. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 10c; pt. 15c; qt. 40c.

BUCHANAN'S IMPROVED GOLDEN WAX.—One of the best Snap Beans, with golden yellow pod of excellent flavor. Medium in length, straight and oval. Seed white and mottled brown, round in shape. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 55c, parcel post paid. Not prepaid, ½ pt. 10c; pt. 25c; qt. 45c.

ROUND-POD, KIDNEY WAX (Brittle Wax).—The best of the round podded sorts; early, prolific; pods long, handsome shape and color; entirely stringless; quality excellent. Seed white with brownish-black eye. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post. Not prepaid, ½ pt. 20c; pt. 25c; qt. 40c.

DWARF VARIETIES OF SHELL BEANS.—See page 49.

White Kidney White Marrow Tepary
Pkt. 10c; ½ pt. 15c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 10c; pt. 25c; qt. 40c.

BUCK BRAND SEEDS AND FEEDS

Beans—Pole or Running

CULTURE—One quart will plant about 150 hills. Pole Beans require warm, rich, loamy soil and, in the South, should not be planted until two weeks later than Bush Beans. Plant in rows 4 feet apart each way, or in drills if wire trellis is used. Plant 4 to 6 beans around each pole, or 2 to 3 beans may be planted in hills a foot apart under a wire trellis. Cultivate freely and, if possible, top-dress around each hill with a small quantity of Buchanan's Truck Fertilizer. When hoeing, work this dressing well into the soil.

KENTUCKY WONDER.—Sometimes called Old Homestead. This is no doubt the most popular and practically useful of the green podded pole beans for use as snaps. It is early, very prolific, with showy pods of the most excellent quality. The vines are vigorous, climbing well and very productive, bearing pods in large clusters. The pods are very long, often measuring 9 to 10 inches, and are light green in color, curved and twisted nearly round, and very crisp when young, becoming irregular and spongy as they ripen. Seed long oval, slightly flattened, dun colored. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 60c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 15c; pt. 30c; qt. 50c.

WHITE CREASEBACK.—This variety is valuable for its extreme earliness and its habit of perfecting all its pods within a short time. The vines are medium-sized, hardy and moderately productive. The pods measure 5 to 6 inches long, uniform, round and slender, slightly stringy, very fleshy, brittle and fine grained, good quality and dark green color. Seed small, oval, white. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 60c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 15c; pt. 30c; qt. 50c.

STRIPED SCOTIA OR CORNFIELD BEANS.—A superb long green bean, succeeding better when planted in cornfield than any other variety. The handsome green pods average 8 or 9 beans to the pod, grow very uniform, about 6 inches long, thick meated, rich and buttery. It continues in bearing so long it might be called "Everbearing." Specially adapted to growing on corn, thus economizing space on valuable land, or where poles are scarce. Seed small-medium, kidney shaped, mottled putty color with dark striping. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 60c, parcel post paid. By express, not prepaid, $\frac{1}{2}$ pt. 15c; pt. 30c; qt. 50c.

Striped Scotia Beans

WHITE OR SOUTHERN CORNFIELD.—A popular early green podded pole bean for snapshots; of rapid growth and very productive. Pods grow in clusters and are from 5 to 6 inches in length, perfectly round, being deeply creased or "saddle-backed." The dry seed is pure white and excellent for winter use. Seed small, oblong, white in color. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 60c, parcel post paid. By express, not prepaid, $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 50c.

WHITE KENTUCKY WONDER (Green Pod).—This is truly a grand pole bean for home gardens and in this respect excels anything I know of. The pods are large and fill perfectly, and in the "snap" stage are deep green in color, meaty, stringless and of the finest flavor. When allowed to ripen the shell beans of pure white are most excellent for winter use. Seed small, oval, white in color. Pkt. 10c; $\frac{1}{2}$ pt. 30c; pt. 35c; qt. 60c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 50c.

KENTUCKY WONDER WAX.—This is one of the earliest of the wax podded sorts, and similar to the green podded Kentucky Wonder, but the pods are broader. The pods are very long, handsome light yellow, often over 8 inches long, very fleshy, brittle but stringy. Seed medium sized, oval, flattened, very irregular, usually somewhat shriveled, dark

White Cornfield Beans

Kentucky Wonder

brown. Pkt. 10c; $\frac{1}{2}$ pt. 25c; pt. 40c; qt. 75c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 65c.

HORTICULTURAL POLE.—An old, well known standard sort. Mid-season in maturity, hardy and productive. Pods 5 to 6 inches long, straight, flat, stringless and of fine quality; color dark green, splashed with bright red. The beans are large, ovate, flesh colored, splashed and spotted with wine-red. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 60c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 50c.

LAZY WIFE'S POLE BEANS.—Pods of medium dark green color, broad, thick and very fleshy, and retain their rich, tender qualities until nearly ripe; dried beans are round and pure white in color. Pkt. 10c; $\frac{1}{2}$ pt. 20c; pt. 35c; qt. 65c, parcel post paid. By express, not prepaid, $\frac{1}{2}$ pt. 15c; pt. 30c; qt. 55c.

I insert the above cut to show you how we pack for Parcel Post shipment our orders of 500 and 1000 Sweet Potato Slips. This careful packing is why they reach you in the best of condition, although sometimes on the road several days. See pages 32, 33, 34 and 35 for description and prices.

Lima Beans—Pole and Dwarf Varieties

CULTURE—One quart will plant about 150 hills. Pole Limas require warm, rich, loamy soil. Plant when the soil has become well warmed through in the spring as the seed will rot in cold, soggy soil. When poles are used for support they should be set not less than 4 feet apart each way. Plant 4 to 6 beans around each pole 2 inches deep and thin out to three plants to the pole. Cultivate frequently, but shallow and use a top dressing of good commercial fertilizer or poultry manure, working same well into the soil.

Carolina Small Lima.

CAROLINA SIEVA OR SMALL LIMA—This is the true Butter Bean. The seed beans are very small and white. The plants are of large growth, very early, vigorous and productive, and will stand more heat and drouth than any other of the Limas, and are one of the best for planting in the South. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 20c; pt. 35c; qt. 55c.

KING OF THE GARDEN—An improved strain of the Large White Lima. The pods are about an inch longer, proportionately wider, and uniformly 4-seeded. The vines are hardy and bear abundantly. This is a standard sort and one of the best for main crop. The seed are very large, ovoid, flat, white, with slight greenish tinge. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 60c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

LARGE WHITE LIMA—This well known variety is one of the best of the larger varieties for planting in the South. The

vines are tall and vigorous but slender, with medium-sized, smooth, medium green leaves. The pods are borne in clusters, and are over 5 inches long, broad, very thin. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

BUCHANAN'S MONSTROUS LIMA—The pods of this variety are very large, often measuring 8 inches long and containing seven beans of the most excellent quality, and bearing about the same time as the Large Lima, and the vines are vigorous and strong-growing and are exceptionally productive. The seed are very large. Pkt.

10c; ½ pt. 20c; pt. 40c; qt. 75c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 35c; qt. 55c.

CALICO LIMA (Pole)—The most wonderful producer in the world. The beans are all colors, blotched, blue and red mottled; medium in size and superb in quality. This is an old garden variety that was lost track of for some time, but we have been fortunate in having a nice stock grown the past season. Don't miss Calico Beans when making up your order. Pkt. 10c; ½ pt. 20c; pt. 40c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 20c; pt. 35c; qt. 65c.

BUCHANAN'S POLE BUTTER BEAN—This is an improved strain of the small type regular Butter Bean. Both pods and beans are larger than the Sieva, in fact they are very near as large as Large White Lima, and are wonderfully productive; vines always loaded with delicious, tender beans, and cook soft as butter. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

Dwarf or Bush Varieties

CULTURE—One quart will plant 100 feet of row, or 3 pecks to the acre. Bush Limas require the same cultivation as stated above for Pole Limas, except that the rows should be 2 feet apart and 6 inches of space between each plant in the row.

HENDERSON'S BUSH—One of the most valuable of the bush varieties owing to its extreme earliness, hardiness and productiveness. The plants are without runners but continue to grow and set until stopped by frost. The leaves are small and very dark green. The pods are small, about 3 inches long, containing 3 to 4 beans, which are of excellent quality either green shelled or dry. This variety is much in favor with the canners and none better for the home garden. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

BURPEE'S IMPROVED BUSH—This is one of the earliest of the large seeded Limas. The plants are vigorous and productive. The pods are medium green, very large, about 5 inches long, containing 4 unusually thick and very large beans of excellent quality. Seed very large, thick and usually show a greenish tinge which is generally considered an indication of quality. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

FORDHOOK BUSH—This is the only variety with a stiff, erect bush form habit, branching freely, but branches of upright growth. The pods are produced in large clusters, medium green about 5 inches long and each containing 4 to 5 large beans of the finest quality. Seed large, irregular oval, very thick, white, with greenish tinge. Pkt. 15c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

BUCHANAN'S BUSH BUTTER BEAN—This variety is very similar to Henderson's Bush, being quite similar in character and habit of growth, though the beans are somewhat larger and thicker. Pods are ready for use a week earlier than Burpee's Bush Lima. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 55c.

Large White Lima.

Bush Butter Bean.

Pole Butter Bean.

Garden Beets, Sugar Beets, Stock Beets

One ounce will sow 50 feet of drill.

CULTURE—Sow as early in the Spring as the ground can be worked, and every two weeks after for a succession up to the first of July. Sow in rows from 1 foot to 15 inches apart, and when well up, thin to from 4 to 6 inches. About 6 lbs. of seed to the acre for garden or stock feed. If you are growing for sugar then about 2 pounds of seed to the acre. For general crop, sow about March 15 to May 15. The soil best adapted for beet culture is a light, sandy loam, must be well enriched with stable manure and plowed and harrowed until very fine. Young beet plants make a fine quality of "greens" and are superior to spinach and turnips for this purpose. The consumption of beets increases every year. We offer carefully selected and most popular varieties.

BUCHANAN'S MARKET GARDENER—Our gardeners' favorite owing to its extreme earliness and uniformity in both shape and color. It is without a doubt the best beet for

the home gardener, or for canning. The tops are small and upright in growth. The leaves dark green, shaded red. The roots are medium size, globular, very smooth and of dark blood red color, while the flesh is a deep vermillion red zoned with lighter shade. It is unsurpassed in quality.

Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.00, parcel post paid. In 10-lb. lots or over, not prepaid, 60c per pound.

Market Gardener Beet.

EARLY BLOOD TURNIP—An extra selected, smooth, dark red beet of uniform size and first-class quality. One of the best for main crop, also for sowing in May or June to make late beets for storing for Winter. Pkt. 5c; oz. 15c; ¼ lb. 30c; 1 lb. 90c, postpaid. In 10-lb. lots or over, not prepaid, 60c per pound.

LONG SMOOTH BLOOD—Recommended for late sowing to make a crop to put away for Winter. A fine keeper, remaining sweet and tender until Spring. Pkt. 5c; oz. 10c; ¼ lb. 30c; 1 lb. 85c, postpaid. In 10-lb. lots or over, not prepaid, 60c per pound.

EXTRA EARLY ECLIPSE—A very early beet, making handsome, smooth, round roots with small top and small tap-root, and nearly as early as the Egyptian. Color, bright red; flesh fine grained, sweet and tender. Pkt. 5c; oz. 15c; ¼ lb. 30c; 1 lb. 85c, postpaid. In 10-lb. lots or over, not prepaid, 60c per pound.

EXTRA EARLY EGYPTIAN—One of the very earliest, with small tops and best for forcing or early outdoor planting. Roots distinctly flat and moderately thick, very dark red; flesh dark purplish red, zoned a lighter shade. Pkt. 5c; 1 oz. 15c; ¼ lb. 30c; 1 lb. 85c, parcel post paid. In 10-lb. lots or over, not prepaid, 60c per pound.

CROSBY'S IMPROVED EGYPTIAN—More largely planted for early market than any other kind, and has proved a most profitable and satisfactory crop, particularly with our truckers and large shippers. Pkt. 5c; 1 oz. 15c; ¼ lb. 30c; 1 lb. 85c, parcel post paid. In 10-lb. lots or over, not prepaid, 60c per pound.

DETROIT DARK RED TURNIP—Round; skin dark blood red, flesh bright red. Pkt. 5c; oz. 15c; ¼ lb. 30c; 1 lb. 85c, postpaid. In 10-lb. lots or over, not prepaid, 60c per pound.

BUCHANAN'S CRIMSON GLOBE—A rich, deep crimson beet of perfect globe-shape, smooth and clean. Matures very early, is of a most attractive appearance, and in quality is not surpassed by any other variety. We recommend it not only for market gardeners and truckers, but for the home garden as well. Pkt. 5c; oz. 15c; ¼ lb. 30c; 1 lb. 85c, postpaid. In 10-lb. lots or over, not prepaid, 60c per pound.

Swiss Chard

SWISS CHARD, OR SPINACH BEET—The stalks when cooked and served like Asparagus, make a most delicious salad. The leaves should be prepared like spinach, kale or turnip salad. Sown early in the Spring, it yields salad all Summer. Grow a row and you will not be without it hereafter. Pkt. 5c; 1 oz. 15c; ¼ lb. 35c; 1 lb. \$1.00, postpaid.

Long Red Mangel.

Mangel Wurzel

MAMMOTH LONG RED—The largest stock beet, yields 40 to 50 tons to the acre. Will grow in land containing more alkali than any other beet. All stock except horses eat it readily. The roots are very large, uniformly straight and the flesh is white tinged with rose. Pkt. 5c; 1 oz. 10c; ¼ lb. 25c; 1 lb. 85c, parcel post paid. In 10-lb. lots or over, not prepaid, 50c per pound.

GOLDEN TANKARD—The tops are comparatively small, with the 1-leaf stalk and veins distinctly tinged with yellow. The neck is small. The roots are large, ovoid, but with bottom usually of larger diameter than top, light gray above the ground, deep orange below. The flesh is yellow, zoned with white. Pkt. 5c; 1 oz. 10c; ¼ lb. 25c; 1 lb. 65c, parcel post paid. In 10-lb. lots or over, not prepaid, 50c per pound.

FOR PRICES ON BEET PLANTS, SEE PAGE 32.

Sugar Beets

CULTURE—One ounce will sow 50 feet of drill; 6 pounds for an acre. The Sugar Beets are desirable not only for sugar making but are valuable for stock feeding and when small may be used for the table. The best soil is a rich, friable sandy, or clayey loam. Rich, mucky soil will often give immense yield of roots which, though excellent for feed, are of little value for sugar making. Plant early in spring in drills 2 to 2½ feet apart, and about 1 inch apart in the row, covering with about 1½ inches of fine soil firmly pressed down. Cultivate frequently. When about 3 inches high begin thinning and continue at intervals until the roots stand about 10 inches apart.

The culture of the Mangel Wurzel, also called Mangel, Cattle Beet and Field Beet, is much the same as for Sugar Beets.

LANE'S IMPERIAL—This beet will yield almost as much in bulk as the best mangel and contains more sugar. The roots are smooth, broad at the top and gradually taper. Flesh snow white and crisp. Pkt. 5c; 1 oz. 10c; ¼ lb. 25c; 1 lb. 65c, parcel post paid. In 10-lb. lots or over, not prepaid, 50c per pound.

KLEIN WANZLEBEN—The roots are larger than Vilmorin's Improved and is hardier and easier grown. The tops are rather large and the leaves slightly waved. It is the largest yielding and best for sugar making. Pkt. 5c; 1 oz. 10c; ¼ lb. 25c; 1 lb. 65c, parcel post paid. In 10-lb. lots or over, not prepaid, 50c per pound.

VILMORIN'S IMPROVED—An improvement on the White French Sugar and one of the richest in sugar content. The tops are medium size, with smooth, bright green leaves. The roots are medium size, white with tinge of gray, half long and very uniform in type. The flesh is white and often yields over ten tons to the acre. Pkt. 5c; 1 oz. 10c; ¼ lb. 25c; 1 lb. 65c, parcel post paid. In 10-lb. lots or over, not prepaid, 50c per pound.

R.B. BUCHANAN

MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

American Grown Cabbage Seed

CULTURE—One ounce will produce 3,000 plants. For early use the seed should be started in the house or hotbed January or February. When the young plants are well started, transplant so as to stand 3 inches apart each way. About the end of March they may be transplanted into the garden in rows 3 feet apart, setting the plants 18 inches apart each way. For late use, sow the seed about the middle of May, or sowings can be made up to July 10, in a finely prepared seed bed, later transplanting to rows 3 feet apart, setting the plants 2½ feet apart. Protect against ravages of insects as follows: For cut worms, use Slug Shot and Warnecke's Cut Worm Food; for lice, Tobacco Dust; for cabbage beetle and green aphids, use Kerosene Emulsion, well diluted.

FOR PRICES ON BOTH FROST-PROOF AND HOTBED CABBAGE PLANTS, SEE PAGE 32.

Early Flat Dutch.

Early Varieties

CHARLESTON LARGE WAKEFIELD—This is a few days later than the Early Jersey Wakefield, but makes a larger and firmer head. We strongly recommend it as the best main crop early cabbage grown, for the home garden and market. Our seed of this is grown from a specially selected stock. Pkt. 5c; ½ oz. 20c; 1 oz. 35c; 2 oz. 65c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

EARLY JERSEY WAKEFIELD—A leading variety and one of the best for private or market gardeners' use; conical shape. Pkt. 5c; ½ oz. 25c; 1 oz. 35c; 2 oz. 65c; ¼ lb. 90c; 1 lb. \$2.50, parcel post paid.

EARLY SPRING—The earliest flat headed variety. The plants are vigorous, very compact, with few outer leaves and a short stem. The leaves are nearly round, broad, smooth and of distinctive light green color, almost without bloom. The heads are broad, round, slightly flattened. Pkt. 5c; ½ oz. 20c; 1 oz. 35c; 2 oz. 65c; ¼ lb. 90c; 1 lb. \$2.75, parcel post paid.

COPENHAGEN MARKET—The earliest, large, round-headed Cabbage yet introduced. The heads are round, very solid and exceptionally good quality. Pkt. 5c; ½ oz. 25c; 1 oz. 40c; 2 oz. 70c; ¼ lb. \$1.00; 1 lb. \$3.75, postpaid.

Copenhagen Market.

Second Early Varieties

ALL HEAD EARLY—The largest heading of the second early sorts, of excellent quality. The deep flat heads are remarkably solid, and very uniform in size, of a very compact growth, having a few outer leaves; can be planted as close as the Wakefield. Pkt. 5c; ½ oz. 25c; 1 oz. 40c; 2 oz. 70c; ¼ lb. \$1.00; 1 lb. \$2.25, parcel post paid.

SOLID SOUTH—A magnificent cabbage, resembling the Early Summer, but is earlier, larger, more uniform, has fewer outside leaves. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

EARLY WINNINGSTADT—Conical shape; quality very good. This variety is especially adapted for light soils, where it does better than other sorts. Pkt. 5c; ½ oz. 20c; 1 oz. 35c; 2 oz. 60c; ¼ lb. 90c; 1 lb. \$2.25, parcel post paid.

EARLY DRUMHEAD—A second early, large, round, solid-headed variety. This we consider the best for following Charleston Wakefield; it matures about ten days later. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.25, parcel post paid.

EARLY FLAT DUTCH—This is a grand second early cabbage, of large size and A No. 1 quality. Larger than Early Summer. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

EARLY SUMMER—A second early cabbage, which matures about ten days after the Jersey Wakefield. It makes a large, solid, flattish head. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

ALL SEASONS—An early Drumhead cabbage, yielding heads of the largest size. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

SUCCESSION—A good second early round-headed sort, heads very evenly.

Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

Succession.

Early Jersey Wakefield

WE SHIP MILLIONS OF FROST-PROOF CABBAGE PLANTS EVERY YEAR—See Page 5 for Prices.

Cabbage and Collards

Late or Winter Varieties

SUREHEAD—This variety produces large heads, weighing 15 to 20 pounds. The quality is good, and it can be grown either as a second early or late sort. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

IMPROVED LARGE LATE FLAT DUTCH—Heads large, bluish green, round, solid and broad on top, more extensively planted than any other variety. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

Late Drumhead.

IMPROVED LARGE LATE DRUMHEAD—We recommend this for late market. For heading, evenness of crop and size, our strain of this cannot be surpassed. Pkt. 5c; 1 oz. 25c; 2 oz. 45c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

DRUMHEAD SAVOY—This is undoubtedly the finest type of Winter Cabbage. After having been frosted it boils like marrow, and is not surpassed even by the cauliflower in its best condition. Pkt. 5c; ½ oz. 15c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 65c; 1 lb. \$2.50, parcel post paid.

Large Late Flat Dutch.

EXTRA EARLY EUREKA CABBAGE—This is a valuable extra early variety, coming into use as early as Wakefield. The heads are round, slightly flattened and very solid. Fine market gardener's stock. Pkt. 10c; 1 oz. 40c; 2 oz. 75c; ¼ lb. \$1.25; 1 lb. \$4.00, postpaid.

MAMMOTH RED ROCK—This is the largest variety of Red Cabbage and produces heads which are remarkably solid, more so than any other kind. The heads are round with spreading outer leaves and matures at a late season. It is the best and most attractive Red Cabbage grown. Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00; 1 lb. \$3.25, postpaid.

Chinese or Celery Cabbage

CHINESE CABBAGE, PI-TSAI—Makes a rapid growth and has a very attractive appearance. It is the best of the Chinese vegetables for American conditions. It does best where there are warm days and cool nights. Although the Chinese name in translated Cabbage in English, it is not the same habit of growth as the vegetable familiar to us by that name. Pi-Tsai grows like loose lettuce. When cooked it has a splendid flavor, and gives out no offensive odor when cooking. In preparing "Pi-Tsai" for the table, it should not be cooked too long, as its tendency is to become soft. It may be used in soup or boiled whole, or prepared as a slaw or salad. Pkt. 10c; ½ oz. 20c; 1 oz. 35c; ¼ lb. 75c; 1 lb. \$2.50, postpaid.

Brussels Sprouts

Brussels Sprouts are a very delicate vegetable, and deserve a more general cultivation than they receive. The plant belongs to the cabbage family, and should be grown and cultivated like cabbage. The "sprouts" which grow around the strong, upright stems of the plant look like miniature cabbage. Very hardy; improved by frost.

DWARF IMPROVED—Bearing a large crop of small, solid, tender heads. Pkt. 10c; 1 oz. 35c; 2 oz. 50c; ¼ lb. 90c; 1 lb. \$3.00, postpaid.

Southern Collards

CULTURE—One ounce will produce about 1,500 plants, or 150 feet of row. It produces a plant bearing a mass of leaves on the top of a stout stalk, and is a species of cabbage, and the flavor is the same. It is extensively used for the table, for winter greens, throughout the South. Sow the seed thickly in drills, in rich ground, transplanting when about four inches high. In the South, seed may be sown from January to May and from August to October.

GEORGIA WHITE CABBAGE—Whiter and more tender than the Blue Stem. Introduced 15 years ago. Three-fourths of them bunch or head up in winter, weighing 10 pounds or more. Plants grow 30 to 40 inches high and as much across. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 30c; 1 lb. 75c, parcel post paid.

SOUTHERN OR GEORGIA—This variety is the old-time favorite. It stands all sorts of adverse conditions without injury and will make a good crop where the soil is too poor to grow cabbage, and it makes an excellent substitute for that vegetable. Is very hardy, stands winter without serious injury. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 30c; 1 lb. 75c, parcel post paid.

NORTH CAROLINA—A decided improvement, and has proved very popular wherever grown. Has short stem, large spreading leaves, very hardy, withstanding drouth in summer and cold in winter. Its flavor and cooking qualities are the very best. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 30c; 1 lb. 75c, parcel post paid.

Chicory

Chicory is grown for the large, thick roots, which are dried roasted and ground, as a substitute or adulterant for coffee. The leaves are also used as a salad during the early spring months.

WITLOOF-CHICORY, OR FRENCH ENDIVE—Witloof is used principally as a winter salad, and is most delicious served with French Dressing and eaten like Cos Lettuce. The seed should be sown in the open ground not later than June in drills 12 to 18 inches apart, and the seedlings should be planted to stand not closer than 3 inches. Pkt. 10c; 1 oz. 40c; 2 oz. 75c; ¼ lb. \$1.25; 1 lb. \$2.50, parcel post paid.

MURPHY PREFERRED COASTING

An officer on board a warship was drilling his men.

"I want every man to lie on his back, put his legs in the air, and move them as if he were riding a bicycle," he explained. "Now commence."

After a short effort, one of the men stopped.

"Why have you stopped, Murphy?" asked the officer.

"If ye please, sir," was the answer, "Oi'm coasting."

Carrots

CULTURE—For main crop, sow from middle of May to the first of July. Thin out early crop to 5 inches in the row, main crop 6 to 7 inches, the rows 10 inches apart for early crop, 14 for main crop. Hoe often and deeply between the rows. Soil light and loamy, richly manured and deeply dug. Sow at the rate of 2 to 3 lbs. to the acre.

OXHEART OR GUERANDE—One of the heaviest yielders and the best for stiff and heavy soils where the long varieties would fail. The roots are often 3 to 3½ inches thick at the top; nearly oval in shape; the flesh is bright orange, fine grained and sweet. Of the finest table qualities and equally good for stock. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 35c; 1 lb. 90c; postpaid.

SCARLET HORN, EARLY—Very thick roots; fine for frames. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.00, postpaid.

BUCHANAN'S HALF LONG DANVERS—One of the most productive and suits all kinds of soils. The roots are smooth and handsome, deep orange color, medium length, tapering to a blunt point. The flesh is sweet, crisp and tender. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.00, postpaid.

BUCHANAN'S IMPROVED LONG ORANGE—Especially fine on light soils, making long, smooth, tapering roots of a deep orange color, free from side roots and superior in every respect. A fine winter sort for table, market and stock. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 90c, postpaid.

LARGE WHITE BELGIAN—Grown exclusively for stock feeding. Roots about 16 inches long and very thick, white under ground and green above; grows about one-third above ground. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 90c, postpaid.

Cauliflower

CULTURE—The same as for cabbage, except that extra manure and plenty of water will pay upon Cauliflower. If the soil be dry, water frequently, and, if the plants could have a heavy mulch of hay or straw, it would keep the soil moist, and they would not suffer from drouth. The early kinds should be strong enough to plant out not later than the middle of April; the late kinds may be planted out same time as Cabbage.

EXTRA EARLY SNOWBALL—There is no better Cauliflower for Southern growers, and our strain is as fine as can be had at any price. It is not only the earliest to head, but a remarkably sure header, making large, solid, perfect, pure white heads of the finest quality. We recommend it also for the late summer and fall crop. As well adapted for forcing as for growing out of doors. Pkt. 15c; ¼ oz. 65c; ½ oz. \$1.25; 1 oz. \$2.00, postpaid.

LARGE EARLY SNOWBALL—A large strain of the above. Pkt. 10c; ¼ oz. 60c; ½ oz. \$1.00; 1 oz. \$1.75, postpaid.

EXTRA EARLY DWARF ERFURT—The very best and earliest for forcing under glass. Pkt. 10c; ¼ oz. 75c; ½ oz. \$1.25; 1 oz. \$2.25, postpaid.

PLANTS—These we can supply in season. (See end of Vegetables, on page 32.)

Golden Self-Blanching Celery.

Danvers Half Long Carrot.

Celery

CULTURE—Sow the seed in a light, rich, dry border as early as the ground can be worked, in drills 8 or 10 inches apart, and cover the seeds about a quarter of an inch deep, rolling or treading them in if the ground be dry. When fairly out of the seed leaf, they may be transplanted to another bed, or they may be thinned out to 6 to 8 inches apart, and let grow until wanted to plant out in beds or trenches. The beds should be kept well weeded, and an occasional soaking with water in dry weather will do the plants good.

IMPROVED WHITE PLUME—A magnificent celery for early use, and being self-blanching, requires but little working. The stalks and leaves naturally turn white upon reaching maturity. In succulence, crispness and flavor it is all that can be desired. Pkt. 10c; 1 oz. 35c; ¼ lb. \$1.00, postpaid.

GOLDEN SELF-BLANCHING—American grown. The best self-blanching sort, it acquires a handsome golden color without having to be hilled up, which makes a very valuable market sort. Pkt. 10c; 1 oz. 75c; ¼ lb. \$1.00, postpaid.

GIANT PASCAL—In the South this is more generally grown than any other late celery. For fall and early winter it is certainly one of the best. It makes large, thick, solid stalks, with a beautiful creamy-yellow heart; blanched easily and quickly; very crisp and of fine nutty flavor. Pkt. 10c; 1 oz. 20c; ¼ lb. 65c; 1 lb. \$2.00, postpaid.

CELERIAC, OR TURNIP-CELERY, ERFURT—Produces large turnip-like roots which keep well for winter use; it is highly esteemed either cooked for flavoring soup or sliced and used with vinegar, making an excellent salad. It is cultivated like celery, little of no earthing being required. Ready for use in October. Pkt. 10c; 1 oz. 25c; ¼ lb. 65c, postpaid.

PLANTS—These we can supply in season. (See end of Vegetable Seeds, on page 33.)

R.B. BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Corn—Sweet and Roasting Ear

CULTURE—One quart will plant 200 hills; 8 quarts will plant one acre. Sweet Corn varies greatly in hardness, earliness, size and sweetness. The early sorts grow only 3 to 5 feet high and may be planted when the trees are starting out in leaf, about the middle of March, in rows 3 feet apart, making the hills about 1 foot apart. The later and sweeter varieties are more tender and should not be planted until the trees are in full leaf or the seed will rot in the ground. Plant garden corn in rows 3 feet apart, making the hills 18 inches apart in the rows.

Extra Early Varieties

Buchanan's Large Adams

distinct from other sorts, and if you have never tried these two sorts from your own garden you must plant them this year. The stalks are dwarf and sturdy in habit, growing to a height of 4 feet and can be planted thickly; they bear 2 to 3 good ears. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 40c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 15c; qt. 35c.

BLACK MEXICAN—This corn, when young, is very white, but the ripe grain is bluish black. For home use it is unexcelled, being very tender and sweet of quality; it is getting more popular every year. The stalks are about 7 feet high; the ears are 8-rowed, and about 8 inches long. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 45c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 20c; qt. 40c.

Pop Corn

POP CORN (White Rice)—A very handsome and prolific white variety. The ears are 5 to 7 in. long. The kernels are long, pointed and somewhat resembling rice. This excellent, rather late maturing variety yields heavily and is considered the best pop corn for popping. Pkt. 10c; $\frac{1}{2}$ lb. 15c; 1 lb. 20c, parcel post paid. Not prepaid, 1 lb. 15c; 5 lb. 60c.

POP CORN (Japanese Rice)—A great many people like to grow Pop Corn, but there is so much difference in the popping qualities of the various varieties that one hesitates to offer anything in this line unless it has real merit. In this variety we have a dwarf growing corn, a heavy yielder of attractive ears, peculiar in form, but the grain is very similar to the best strain of White Rice Pop Corn. The ears are short and thick, and run very uniform. Of a pearly white, and the grain is of excellent popping quality and flavor after being popped. Pkt. 10c; $\frac{1}{2}$ lb. 15c; 1 lb. 25c, parcel post paid. Not prepaid, 1 lb. 20c; 5 lb. 75c.

POP CORN (Golden Queen)—The largest Pop Corn. The stalks grow 5 to 6 feet high and bear 2 to 3 large ears each. It is yellow, but pops perfectly white. Pkt. 10c; $\frac{1}{2}$ lb. 15c; 1 lb. 20c, parcel post paid. Not prepaid, 1 lb. 15c; 5 lb. 60c.

Medium Early Varieties

ADAMS' LARGE EARLY—Similar to Adams' Extra Early, but two weeks later, and has much larger ears. This and the Adams' Extra Early are very hardy and can be planted earlier than sweet corns. Has small stalks and can be planted close. More valuable for the market than for home gardens, as this as well as the Adams' Extra Early, lacks fineness of flavor found in sweet varieties. Unless given the best cultivation and rich soil, they are not sure croppers. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 40c; parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 15c; qt. 25c.

BUCHANAN'S EARLY SURPRISE—Our own introduction, now too well known to give any lengthy description. It is not a sugar corn, but ranks almost equal. A favorite for early market, larger than the Early Adams corn and only a few days later; ears about 8 inches, always well filled to the tip; grains pure white, tender and makes the very best roasting ears. The genuine stock from our own grower can only be obtained from us. No other dealer can supply Buchanan's Early Surprise Corn. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 20c; qt. 30c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 15c; qt. 25c.

Late, or Main Crop Varieties

COUNTRY GENTLEMAN—This variety has a small, white cob, densely covered with irregular rows of very long, slender, white grains of excellent quality. The ears are 7 to 9 inches long. The stalks are from 6 to 7 feet high. It is well adapted for canning, as well as the

home garden and market, and many consider it the best of the late varieties. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 40c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 15c; qt. 35c.

STOWELL'S EVERGREEN—A most popular main crop variety, and splendid for table use, the quality being excellent. The stalks are of strong growth, about 6 feet high; the 12-rowed ears are about 8 inches long and keep in table condition a remarkably long time. Our stock has been carefully grown and selected. This is one of the best known of the late sorts. Pkt. 10c; $\frac{1}{2}$ pt. 15c; pt. 25c; qt. 40c, parcel post paid. Not prepaid, $\frac{1}{2}$ pt. 10c; pt. 25c; qt. 35c.

Buchanan's Early Surprise

Buchanan's Cucumber Seeds

CULTURE—One ounce will plant 50 hills; 1 to 2 pounds will plant 1 acre. Cucumbers succeed best in warm, rich sandy loam, and should not be planted in open air until there is a prospect of settled warm weather. Plant in hills about 4 feet apart each way, and when all danger of insects is past, thin out the plants leaving 3 or 4 of the strongest to each hill.

CUMBERLAND PICKLE—The best pickling cucumber in cultivation. For productiveness it is unequaled, and the quality of the fruit is the very best. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25, postpaid.

Cumberland Pickle.

IMPROVED WHITE SPINE CUCUMBER—A grand new variety, so very superior to any other stock of White Spine as not to be classed with either in quality or price. Vine is a very strong grower; foliage broad-leaved, deep green, close-jointed, does not sunburn. Blooms early at every joint and sets fruit at every bloom. Large fruit for slicing can be gathered in eight weeks. The finest strain of White Spine in existence, as certified by hundreds of market gardeners. Pkt. 5c; oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25, postpaid.

Long Green.

EARLY GREEN CLUSTER—Fruit small and in clusters; very prolific. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25, postpaid.

EXTRA EARLY LONG GREEN—One of the best general purpose cucumbers in cultivation, the young fruit being very symmetrical in shape, deep in color and very crisp. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.50, postpaid.

Davis Perfect.

GHERKIN, OR BURR—A small oval-shaped, prickly variety, used exclusively for pickles, for which it is very desirable. Pkt. 10c; 1 oz. 20c; 2 oz. 35c; $\frac{1}{4}$ lb. 60c; 1 lb. \$1.50, postpaid.

DAVIS PERFECT—A sure money maker for those engaged in growing cucumbers. Grows under glass as well as out of doors. It is seedless almost one-third the length from the stems. It is a rich dark green and holds its color until nearly ripe. The flesh is of excellent flavor; white, clear, crisp and tender. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.25, postpaid.

Japanese Climbing.

JAPANESE CLIMBING—A distinct climbing sort for covering fences or trellises; fruit 10 inches long, thick, crisp and fine quality; color dark green. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50, postpaid.

BUCK BRAND MIXED CUCUMBERS—A mixture of all varieties, to give you both eating and pickling cucumbers with one planting. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25, postpaid.

White Spine Cucumbers.

Corn Salad

One ounce will sow about 18 square feet.

CULTURE—Sow during August or early in September, in drills one-fourth of an inch deep, and 6 inches apart. If the weather is dry when the seed is sown, tread it lightly to insure germination. Keep weeds down with hoe. Just before the Winter cover thinly with straw or leaves.

LARGE, SEEDED—Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50, postpaid.

Chervil

A hardy annual with aromatic leaves somewhat resembling parsley and, by many, considered superior to it in flavor. The young leaves are used in soups and for flavoring and garnishing meats and vegetables. Sow in early spring in rich, well prepared soil. The seed is slow to germinate, sometimes remaining in the earth four or five weeks before the plants appear. When the plants are about 2 inches high, transplant or thin to about a foot apart. They are ready for use in six to ten weeks from sowing.

CURLED—This very finely curled, double sort, is much superior to the plain variety, being early maturing, handsomer and having fully as fine fragrance and flavor. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 75c; 1 lb. \$2.50, parcel post paid.

Cress

TRUE WATER CRESS—Sow in the spring along the edges of creeks or ponds. Only one sowing is necessary, as it increases rapidly. It not only makes a desirable and attractive plant for creeks or ponds, but purifies the water. Is also developing into quite a profitable industry for shipment to our large markets. Pkt. 10c; 1 oz. 25c; $\frac{1}{4}$ lb. 60c, postpaid.

CURLED OR PEPPER GRASS (Upland)—Can be sown either in the spring or fall. The plants are cut and tied in bunches in the same manner as water cress. Sow in drills 1 foot apart. One ounce will sow about 200 feet of drill. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.25, postpaid.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Egg Plant

CULTURE—Sow in hotbeds very early in spring and transplant when 2 inches high into a second bed or into small pots. If this is not done, thin to 4 inches apart. Do not plant out until weather is perfectly settled and warm. Cool nights or wet weather will check them. Keep some back in frames for a second planting, in case of weather changing unexpectedly. Set out plants 3 feet by 2.

Black Beauty Egg Plant.

about ten days earlier. Very rich purple black. Pkt. 10c; ½ oz. 35c; 1 oz. 50c; 2 oz. 90c; ¼ lb. \$1.50; 1 lb. \$5.50, postpaid.

IMPROVED NEW YORK SPINELESS—The standard, largest and best; large, oval, deep purple; early and productive. One of the best and largest varieties in cultivation. Our strain of this variety is especially fine. The plant is robust, low-growing, branching freely, and bears large, oblong-shaped purple fruits. There are many varieties of Egg Plant offered, but we consider this superior to any other. Pkt. 10c; ½ oz. 40c; 1 oz. 60c; 2 oz. \$1.00; ¼ lb. \$1.50; 1 lb. \$5.60, postpaid.

BLACK BEAUTY—As large as the New York Improved, but

EGG PLANT—See Page 33.

Endive

CULTURE—One ounce will sow 300 feet of row. Endive is one of the best and most wholesome salads for fall and winter use. Sow in shallow drills in April for early use and, for late use, in August and September. When 2 or 3 inches high transplant into good ground or thin out to 1 foot apart. When nearly full grown and before they are fit for the table they must be bleached. This is done by gathering the leaves together with jute twine to exclude the light and air from the inner leaves, which must be done when quite dry or they will rot. By covering fresh plants every few days a succession may be kept up.

LARGE GREEN CURLED—A hardy, vigorous growing Endive with bright green, finely cut leaves. The dense mass of deeply divided leaves formed in the center blanches very readily to a rich cream color. This is a most popular variety. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; ½ lb. 75c; 1 lb. \$1.25, parcel post paid.

GIANT FRINGED OR OYSTER—This variety is so named on account of it being largely used to decorate or display oysters during the winter in the larger restaurants and oyster houses. It is exceptionally handsome and grows exceedingly large in good soil. When fully grown the center portion can be blanched creamy white in color. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; ½ lb. 75c; 1 lb. \$1.25, parcel post paid.

Kohl-Rabi.

Tall Scotch Kale.

Kale or Borecole

CULTURE—One ounce to 200 feet of row; 4 pounds to the acre. Kale is extensively grown in the South during the fall, winter and spring. The leaves used principally for greens and there is nothing better than a pot of kale boiled with bacon. Where climate permits seed may be sown any time from August to October and again during February and March, broadcast or in drills, 18 inches apart so that the plants when small may be cultivated. The quality is improved rather than injured by frost if not too heavy.

DWARF CURLED SIBERIAN—A very hardy and vigorous growing variety of spreading habit, its foliage having a distinct bluish tinge. This is the most popular variety grown, especially in the South. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

DWARF CURLED SCOTCH—This variety is extensively grown in the South for shipment North. The leaves are finely curled, long and attractive. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

TALL GREEN CURLED SCOTCH—The plant of this variety grows 3 to 4 feet high, bearing long plume-like light green leaves, which are deeply cut, also finely curled at edges. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

Kohl-Rabi

One ounce will produce 2,000 plants. Sow in March and April, in drills, thinning plants to six inches.

WHITE VIENNA—This is the best and earliest variety for table use. Pkt. 10c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

Leek

One ounce will sow about 100 feet of drill. Sow early in spring, thin to six inches apart; make rows wide enough to cultivate.

LONDON FLAG—Broad leaves of strong and vigorous growth. Pkt. 5c; 1 oz. 25c; 2 oz. 35c; ¼ lb. 75c; 1 lb. \$2.25, parcel post paid.

Live Plants

I ship many million Live Plants every season To All Southern States.

My Plant Growers know when to plant the seed and how to care for the young plants, and I know how to have them packed to reach you in good condition.

NOTICE—The picture at the left shows how we pack and ship many thousands of small plant orders every year.

Plants Packed for Shipment

Tomato Plant

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Buchanan's Lettuce Seed

One ounce will plant 200 feet of drill, or produce 3,000 plants.

We sell many thousands of Lettuce Plants each season. See page 32 for prices.

CULTURE—Sow in hotbeds in March, and in the open ground as soon as it can be worked, and transplant to rows 8 inches apart. Lettuce seldom, if ever, heads well in hot weather.

Big Boston Lettuce.

BIG BOSTON—Plants are large and vigorous, leaves light green, tinged with reddish brown; stands long before shooting to seed. Grown in the open ground, in the spring or fall. In frames for early spring planting; does well in cold weather and is recommended for fall planting in the South. Pkt. 5c; ½ oz. 10c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 40c; 1 lb. \$1.25, postpaid.

EARLY CURLED SIMPSON—A sure cropper even under adverse conditions. Makes a well blanched, curly, loose head, early, crisp and tender. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, postpaid.

Cream Butter.

CALIFORNIA CREAM BUTTER—A very reliable head Lettuce, good for summer crop. The leaves are smooth and the head is solid and crisp. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

Wonderful.

WONDERFUL—Very large and solid. The inner portion is a beautiful white, the outer leaves dark green. Does well through the summer. Pkt. 5c; ½ oz. 10c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 65c; 1 lb. \$2.50, postpaid.

HUBBARD MARKET—A large cabbage variety, forming a solid head, buttery and yellow inside, and of very fine flavor. Color light green. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, postpaid.

May King.

MIGNONETTE—Small solid, heading, crumpled leaves, edged with reddish brown. The flavor is fine and the leaves crisp. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 30c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

ICEBERG—A large crisp lettuce, always tender. Iceberg stands hot weather remarkably. Give each head 14 inches in a row. The color is light green, lightly tinged with brown. Try this either for home or market garden. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, parcel post paid.

MAMMOTH BLACK-SEEDED BUTTER—A selected strain; large yellow heads. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

WAYAHEAD LETTUCE—Shows a remarkable combination of earliness, firm heading character, a handsome and fine quality. Both in cold frames early in spring and in the open ground in spring, summer and early fall months it has proved to be not only the very earliest and surest heading of all early Lettuces grown, but also of the very finest quality at all seasons. Pkt. 5c; ½ oz. 10c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

WE MAKE A SPECIALTY OF ROOTS, BULBS, PLANTS AND POTATO SLIPS.

See Pages 32, 33, 34 and 35

Wayahead.

MAY KING—Few Lettuces have the robust constitution of this variety for resisting cold and wet weather. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

PARIS WHITE COS—An excellent variety; large, crisp, tender and of fine flavor. Resists warm weather and is the best Cos Lettuce. Known also as Romaine Cos. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

White Cabbage.

LARGE WHITE CABBAGE HEAD—A desirable variety for summer or fall, forming large, compact and beautiful heads. Color light green, stands heat and drouth remarkably well, very highly recommended. Undoubtedly the best summer variety; the heads will frequently weigh from 2 to 3 pounds each. Pkt. 5c; ½ oz. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.25, postpaid.

Muskmelon, or Cantaloupe

CULTURE—One ounce will plant about 50 hills; 2 pounds to the acre. Melons thrive best in a light, rich soil. Plant late in April or early in May, when ground has become warm and dry, hills about 5 feet apart each way. Previous to sowing seed mix a few shovelfuls of well-rotted manure in each hill, plant in each 12 to 15 seeds; when they begin to vine, thin to 3 or 4 of most thrifty plants.

Rocky Ford Cantaloupe.

Green-Fleshed Varieties

BUCHANAN'S MAMMOTH ROCKY FORD (Extra Select)—The general type of this melon is similar to the regular Rocky Ford, but they grow somewhat larger in size, making them a splendid variety for market. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 45c; 1 lb. \$1.50, parcel post paid.

ROCKY FORD—We have an especially fine, improved strain of this popular melon as now grown at Rocky Ford. The fruit is small, almost round, smooth, showing no ribs, and densely covered with a heavy gray netting; flesh thick and deep green, showing a faint lining of pink or gold at the center; of the highest quality. An excellent shipping sort. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.25, parcel post paid.

BALTIMORE OR ACME—A fine early, oblong, green-fleshed variety, of good size; noticeably ribbed and heavily netted. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.25, parcel post paid.

IMPROVED LARGE BALTIMORE—An improvement on Baltimore or Acme; of general form, but somewhat larger; green-fleshed. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.50, parcel post paid.

HACKENSACK—Large, round and of good quality, a popular variety; early. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 40c; 1 lb. \$1.25, postpaid.

EXTRA EARLY HACKENSACK—An early strain of the well known large Hackensack. Very popular with the market gardeners, as it is the first of the large melons to be ready for market. The fruit is of good size, round and heavily netted. Flesh green, very sweet and good flavor. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.50, postpaid.

MONTREAL GREEN NUTMEG (Montreal Market)—Green fleshed. The largest of the Nutmeg variety. Skin is dark green in color; the ribs broad and prominent; flesh thick, luscious and melting. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.40, postpaid.

NETTED NUTMEG—This splendid melon is one of the very best varieties for either home use or market. It has a very small seed cavity, deep green flesh and is of very uniform shape, average about 5 inches. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

Salmon-Fleshed Varieties

BANANA—Shaped somewhat as name indicates; grows about 2½ feet long; flesh deep salmon colored and of only fair quality. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.50, parcel post paid.

BURRELL'S GEM—An excellent small melon of the Netted Gem type; somewhat later than that variety and a fourth larger; fruit oblong, distinctly ribbed and heavily netted; flesh deep salmon, of fine quality. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 35c; 1 lb. \$1.25, parcel post paid.

HOODOO—A splendid, small, mid-season variety; fruit round with tendency to heart-shape, densely covered with fine gray netting; flesh very thick, with small seed cavity; of a rich orange color and highest quality. A fine shipping sort. Pkt. 5c; 1 oz. 15c; 2 oz. 30c; ¼ lb. 50c; 1 lb. \$1.50, parcel post paid.

BUCK BRAND (Surprise)—The nearest thing to the old-fashioned muskmelon that you can get. Fruit round, slightly oblong, with a very thin, nearly smooth, pale green skin; flesh thick and of deep salmon color. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.50, parcel post paid.

TIP TOP—In shape varies from round to slightly oblong; rather large in size and somewhat late in maturing. Skin pale green, distinctly ribbed and lightly netted; flesh deep rich salmon, sweet and spicy. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.50, parcel post paid.

HONEY DEW MELON—This new melon is unlike the ordinary muskmelon or cantaloupe, both in appearance and flavor, the outer skin being smooth, hard and nearly white. The melons are large, round to oval in shape, extremely thick-meated and have a very small seed cavity; flesh is light green, very solid and of a rich honey-like flavor, luscious and juicy, much more so than any variety of muskmelons. It is an excellent keeping melon and fruits may be laid away for use late in the fall when they will be greatly appreciated, not only for their delightful flavor, but because the other varieties of melons are gone. On account of the hard shell it is an excellent shipper, carrying safely for long distances without being bruised or damaged in any manner. Pkt. 10c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 50c; 1 lb. \$1.75, parcel post paid.

Nutmeg Cantaloupe.

R.B.BUCHANAN**MEMPHIS, TENN.** **BUCK BRAND SEEDS AND FEEDS**

Buchanan's Southern Grown Watermelon Seeds

CULTURE—One ounce to 40 hills; three or four pounds to the acre. Drop in hills six to eight feet apart, six to ten seed, one inch deep, and thin to three best plants. The proper time to plant melons in this section is generally about the middle of April.

Buchanan's Improved Watson Watermelon

BUCHANAN'S IMPROVED WATSON WATERMELON—This seed is saved from the most perfect melons, none weighing less than forty pounds each and from many that weighed seventy pounds each. This seed is then graded and cleaned, and consequently will produce finer and larger melons than the regular stock. If you want something extra, order this special stock this season.

The Watson has rightfully been the most largely planted melon in the South for shipping purposes. It's a splendid melon for shipping, for nearby markets and for home use. It is an excellent combination all-purpose melon for you to grow.

There has been much complaint about the Watson "running out," and this is absolutely true of a large part of the Watson

seed on the market. It is seed saved from the tail end of the shipping crop, seed from malformed, rotten-ended runts and culls. You can't afford to plant such seeds. Plant Buchanan's Seeds, the very finest you can buy.

In eating quality the Watson is away above the average and its tough, medium thick rind makes it ship equal to the old shipping sorts. Its dark green color and generally handsome appearance make it a seller at top of the market prices. Pkt. 10c; 1 oz. 20c; $\frac{1}{4}$ lb. 45c; 1 lb. \$1.25, postpaid. In 5-lb. lots or over, not prepaid, \$1.00 per lb.

With every order for Garden Seed amounting to \$2.00 or more I will enclose one full size packet of Buchanan's Improved Watson Melon Seed FREE, if you will write for same when ordering.

A Field of Buchanan's Improved Watson Melons, Taken at Our Growing Station

R.B.BUCHANAN**MEMPHIS, TENN.** **BUCK BRAND SEEDS AND FEEDS****Buchanan's Watermelon Seeds**

CULTURE—One ounce to 40 hills; three or four pounds to the acre. Drop in hills six to eight feet apart, six to ten seed, one inch deep, and thin to three best plants. The proper time to plant melons in this section is generally about the middle of April.

IRISH GREY—A distinct and valuable new variety, producing more good merchantable melons under the same conditions than any other variety; the eating quality is unbeatable; the sparkling red flesh is very sweet and entirely free from stringiness; the size is uniformly large, color of rind yellowish grey and almost as tough as the Citron; earlier than the Watson, and will keep in good condition a long time after picking; stands long-distance shipping well; the rind will not sunburn; vines are vigorous, healthy and hold up and produce fine melons late into the summer when other sorts die out. Plant Irish Grey for home or market use and you'll be pleased. Pkt. 10c; oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.25; 5 lbs. \$5.00, postpaid. In 10-lb. lots or over, not prepaid, 90c per lb.

ALABAMA SWEET—This is an excellent shipping melon. The rind is dark green, marked with a still darker green mottled stripe, and while thin it is very tough. The flesh is bright red, fine grained, sweet and luscious. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. 85c, parcel post paid.

BLACK DIAMOND—Immense size; grows to average 75 to 90 pounds; rich, dark green, uniform, round to oval shape; flesh deep red, of fine quality. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. 85c, parcel post paid.

FLORIDA FAVORITE—Fruit long, dark green, mottled and striped with a lighter shade. Rind thin but firm. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

KLECKLEY'S SWEET—This very popular melon is one of the best for nearby markets. Fruits are medium size, oblong, of a dark green color and have very thin rind. Flesh bright scarlet with solid heart, crisp, sugary and melting, and entirely free from stringiness. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

SWEET HEART—A splendid shipper, early, large, oval, light green. Rind thin, but firm. Flesh bright red, sweet, very tender, firm and solid. Pkt. 5c; 1 oz. 10c; 2 oz. 20c; $\frac{1}{4}$ lb. 30c; 1 lb. 85c, parcel post paid.

HALBERT HONEY—Each Melon contains but few seeds and the crisp, deep red flesh looks as if frozen to crystal-like iciness. The meat is so crisp and tender that well-ripened melons split ahead of the knife in cutting. Melons are long, blunt at both ends and vines very productive. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

TOM WATSON WATERMELON—The Melon is almost seedless, some not having one-third as many seeds as other melons. Our seeds are the choicest. Very prolific—six carloads on ten acres often made; shape long, color dark green, no stripes, large, oftentimes 50 to 60 pounds. No finer eating melon ever known. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

COLE'S EARLY—Is the finest watermelon for family garden. The melons are not large, seldom over 12 inches in length by 9 inches in diameter, but what they lack in size is more than made up in number and solidity. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. \$1.00, postpaid.

GEORGIA RATTLESNAKE—Melons are long in shape, of light green color, with dark stripes and of uniformly large size and symmetrical shape. The rind is remarkably thin, though it stands shipping well. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

Georgia Rattlesnake Melon. **Kleckley's Sweet Melon.** **Halbert Honey Melon** **Tom Watson Melon**

Mustard

CULTURE—One ounce will sow about 80 feet of drill. For early salad sow in February, and for general crop, at intervals through the spring, in rows 6 inches apart, and rather thick in rows.

SOUTHERN GIANT CURLED—The favorite kind here, sown largely for the market. Leaves are pale green, large and curled or scalloped on the edges. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 60c, parcel post paid.

ELEPHANT EAR (Smooth Leaf)—This is a splendid variety for the market gardeners and amateurs, and will surely give satisfaction wherever planted. The leaves are smooth, very large, and always tender and succulent, makes a large plant. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 75c, parcel post paid.

WHITE MUSTARD
— Will stand the winter and adapted for fall planting; used for salad. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 75c, parcel post paid.

White Globe Onion

Onion Seed

CULTURE—Sow in rich, sandy soil, in drills 1 foot apart, as soon as the ground can be worked in spring—at the rate of 4 to 5 lbs. to the acre. Thin to 3 or 4 inches, using the rake and hoe frequently to keep down the weeds. The finest onions are produced by the new method of sowing the seed in hotbed in February and March and transplanting the seedlings to the open ground.

WHITE LARGE PORTUGAL—The standard large flat sort of the New York markets. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 65c; 1 lb. \$2.25, parcel post paid.

LARGE WHITE GLOBE (Southport Strain)—One of the best; produces fine crops of silvery white, globe-shaped Onions of very mild flavor. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 65c; 1 lb. \$2.25, parcel post paid.

YELLOW GLOBE DANVERS—A well known standard variety of uniform shape and excellent quality, bright yellow color. Pkt. 5c; 1 oz. 25c; 2 oz. 50c; ¼ lb. 65c; 1 lb. \$2.00, parcel post paid.

IMPROVED RED BERMUDA—A large, quick growing red variety; very tender and juicy; a large yielder and a good keeper. Pkt. 5c; 1 oz. 25c; 2 oz. 40c; ¼ lb. 75c; 1 lb. \$2.00, parcel post paid.

LARGE RED WEATHERSFIELD—It is of a beautiful form, skin deep purplish red, flesh purplish white and of a very fine grain. Pkt. 5c; 1 oz. 15c; 2 oz. 30c; ¼ lb. 60c; 1 lb. \$2.00, parcel post paid.

LARGE RED GLOBE (Southport Strain) — The finest large red sort. Pkt. 5c; 1 oz. 30c; 2 oz. 50c; ¼ lb. 70c; 1 lb. \$2.25, parcel post paid.

Okra, or Gumbo

CULTURE—One ounce sows 50 feet of drill. Extensively grown in the South, and should be better known, as it is a delicious vegetable. The young green pods make a healthful and delicious soup and, when pickled, are a fine salad. Sow after the weather has become warm in rows 3 feet apart, 2 feet apart in the rows. Will succeed in any good garden soil.

WHITE VELVET — Bears round, white, smooth pods, unlike other varieties, which are ridged or square-edged. Pods are large and are produced in great abundance. The market gardeners' favorite. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 60c, parcel post paid.

EARLY DWARF GREEN — Of dwarf growth but immensely productive. The pods are tender, of best quality, and are borne throughout the season. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 65c, parcel post paid.

TALL OR LONG GREEN—Pods long, slender, dark green, and ridged; very tender and is a most popular green variety. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 65c, parcel post paid.

PERKINS' MAMMOTH LONG POD—This variety is about three feet high, very early and productive. Pods deep green, very long, slender, slightly corrugated, very tender and of good quality. Pkt. 5c; 1 oz. 15c; ½ lb. 35c; 1 lb. 65c, postpaid.

HUFFMAN'S EARLIEST — Blooms often when plant is no higher than your finger and begins bearing oftentimes when the fourth leaf appears, 3 feet high, and pods 6 to 12 inches long. It is a dwarf variety and is the earliest of all the usually sold Okras. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 65c, parcel post paid.

White Velvet Okra.

Red Weathersfield Onions.

R.B.BUCHANAN**MEMPHIS, TENN.** **BUCK BRAND SEEDS AND FEEDS**

Onion Sets

CULTURE—Plant 4 inches apart, in rows $\frac{1}{2}$ -inch deep and 1 foot between rows, but do not cover sets entirely, except the Potato Onion, which should be planted in rows 2 feet apart and 9 inches apart in row, cover 1 inch. All onion sets are sold 32 lbs. to bushel and are subject to market changes. One quart weighs 1 lb. Grown from seed that has been sown too thickly to attain a large size. These small onions are planted out and are soon ready to pull for the table or bunch for market. If left to stand they make ripe onions of excellent quality. Maturing about six weeks earlier than crop grown from seed.

White Silverskin.

Red Weathersfield.

Yellow Danvers.

White Silverskin . . . 1 qt. 20c; 4 qts. 90c; peck \$1.75, postpaid
 Red Weathersfield . . 1 qt. 20c; 4 qts. 75c; peck \$1.50, postpaid
 Yellow Danvers . . . 1 qt. 20c; 4 qts. 75c; peck \$1.50, postpaid
 Winter Top Shallots . . 1 qt. 20c; 4 qts. 75c; peck \$1.50, postpaid

ONION SETS

I have large stock. Can quote on any quantity. Write, wire or phone for prices.

White Multipliers.

Winter Top Shallots.

Yellow Potato Onions.

Buck Brand Garden Seed Collection

For 35c we will send you, postpaid, to any P. O. in the U. S., the following 15 packets of garden seed:

Blood Turnip Beet.	Purple Top Strapleaf
White Cabbage Lettuce.	Turnip.
Scarlet Turnip Radish.	Imp. White Spine Cucum-
Large Late Drumhead Cab-	ber.
bage.	White Velvet Okra.
Sou. Giant Curled Mustard.	Acme Tomato.
White Bush Squash.	Southern Collards.
Flat Dutch Cabbage.	Long Scarlet Radish.
Rocky Ford Muskmelon.	Ga. Rattlesnake Watermelon

15 5c Size Packets, postpaid, for 35 cents.

Buck Brand Flower Seed Collection

For 25c we will send you, postpaid, to any P. O. in the U. S., the following 12 packets of flower seed:

Alyssum, Sweet.	Sweet Peas, Mixed.
Pink, Mixed.	Nasturtiums, Tall.
Morning Glory, Mixed.	Phlox, Mixed.
Petunia, Mixed.	Cosmos, Mixed.
Candytuft, Mixed.	Gourds, Mixed.
Four O'clock, Mixed.	Pansy, Mixed.

12 5c Size Packets, postpaid, for 25 cents.

Parsley

CULTURE—Soak the seed in warm water for several hours, and sow in border or frame; thin the row or transplant to another bed. If to be carried late into the fall, set eight inches apart both ways, and cover with litter. It will go through the winter with moderate protection. Use one ounce of seed to 150 feet of drill. Make open ground sowing in April.

CHAMPION MOSS CURLED—A choice selected strain with beautifully crimped and curled bright green leaves. Pkt. 5c; 1 oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

DOUBLE CURLED—Compact, very curly and finely cut; bright green color. Pkt. 5c; 1 oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 80c, parcel post paid.

PLAIN or SINGLE—Leaves are flat, deeply cut, and dark green. Pkt. 5c; 1 oz. 15c; $\frac{1}{4}$ lb. 35c; 1 lb. 90c, parcel post paid.

Sweet Potato Slips

WE ARE PROBABLY THE LARGEST SHIPPERS IN THE SOUTH. See pages 32, 33, 34 and 35.

Parsnips

CULTURE—Sow as early in the spring as the ground can be worked, in drills 18 inches apart. Only rich soil should be used and the ground should be thoroughly and deeply cultivated before sowing seed. Thin to 6 or 8 inches apart in the rows. Hoe and cultivate frequently to keep the weeds down.

SUGAR OR HOLLOW CROWN—The best for table use; a vegetable of merit, easily raised and of great productiveness. Pkt. 5c; 1 oz. 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

LONG SMOOTH—Roots very long, sugary and of most excellent flavor; very hardy. Pkt. 5c; 1 oz. 10c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

Hollow Crown Parsnip.

Buchanan's Garden Peas

CULTURE—Sow as early as the ground can be worked and again every ten days for succession. Peas may be sown in this vicinity as late as the 20th of August. Medium and late Peas must be planted early; Extra-Earlies may be planted again in August. Sow in single or double rows from 4 to 6 feet apart, according to the different heights, about an inch apart in the row (except such sorts as we note to sow thinly) and 4 inches deep. In this climate, the First and Best Pea, if planted from the 10th to the last of August, will produce a fair crop for fall picking, when Peas will be most acceptable. Hoe often and keep the ground clean and fine.

Those marked with a star (*) are wrinkled marrows, and, unless otherwise stated, should be sown thicker than the round Peas, and not until the ground has become warm, as they are more liable to rot. They are the finest flavored of all Peas. Those marked (†) are large-podded sorts.

Ameer Peas.

Extra Early and Early Varieties

ALASKA—This is the earliest of all small podded peas. Universally used for first planting; the vines are a distinctive light green, and from 2 to 3 feet high. Pods are dark green, about 2½ inches long, straight and well filled with small, smooth blue-green pea of excellent flavor. This pea is a heavy yielder and a favorite among market gardeners. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c; 4 qts. \$1.50, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 45c; 4 qts. \$1.40.

***ALDERMAN**—It is of the finest large podded summer varieties. The vine grows 5 feet in height, and is of a dark green coloring, as are also the large pods. Pods frequently measure 6 inches in length and contain from eight to nine large peas of superior flavor. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c; 4 qts. \$1.50, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 45c; 4 qts. \$1.50.

AMEER, OR LARGE ALASKA—A fine variety which is rapidly becoming more popular with those who want a larger podding pea of the Alaska type. The vine is 3 feet high, more vigorous and of the same color as the Alaska. Pods are one-third larger and filled with 5 to 7 large round peas of fine flavor. The crop ripens about a week later than the Alaska. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c; 4 qts. \$1.50, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 45c; 4 qts. \$1.40.

***AMERICAN WONDER**—The earliest of the dwarf, wrinkled sorts. The vines are 9 to 12 inches high and produce a good crop of well filled pods, nearly 3 inches long, containing 5 to 7 large peas. Very sweet and tender. The seed is pale green, flattened and wrinkled. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 60c; 4 qts. \$2.00, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 50c; 4 qts. \$1.75.

FIRST AND BEST—Extra Early; one of the earliest tall varieties, with smooth, white peas. Vines are about 30 inches high; pods short and well filled; quality the best. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 50c; 4 qts. \$1.25.

***GRADUS OR PROSPERITY**—This pea is an extremely early large-podded, wrinkled variety, which matures only a few days later than the little round-seeded, small-podded varieties. The vines are nearly 4 feet high and the pods are very large, well shaped and pointed. The peas are large and light green in color. One of the best sort for the garden. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c; 4 qts. \$1.60, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 50c; 4 qts. \$1.50.

***PREMIUM GEM (Improved Little Gem)**—A very desirable early green, wrinkled, dwarf variety. The vine is very productive and grows to a height of from 15 to 18 inches. The pods are of medium size, about 2¾ inches long, and crowded with six to eight very large peas of fine quality. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 50c; 4 qts. \$1.50, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 55c; 4 qts. \$1.25.

***THOMAS LAXTON**—A very early wrinkled variety of great merit. Vine vigorous of medium height about 3 feet, similar to that of Gradus, but darker in color, hardier and more productive. Pods large, often 4 inches long. The green peas are very large, of fine, deep color and unsurpassed in quality. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 55c; 4 qts. \$1.50, parcel post paid. Not prepaid, ½ pt. 15c; pt. 25c; qt. 50c; 4 qts. \$1.25.

Gradus or Prosperity.

Second Early or Main Crop Varieties.

CHAMPION OF ENGLAND—A very productive standard main crop variety, one of the best flavored of the late peas. The vines are 4 to 5 feet high, and the foliage is medium green. The pods are medium dark green, broad and nearly straight, and about 3 inches long. We have a fine stock of these peas. Pkt. 10c; ½ pt. 20c; pt. 35c; qt. 65c; 4 qts. \$2.00, parcel post paid. Not prepaid, ½ pt. 15c; pt. 30c; qt. 50c; 4 qts. \$1.75.

TELEPHONE—A standard variety, grows tall and large; peas are wrinkled and of fine quality. Vines and foliage are strong and heavy, medium green. One of the best main crop varieties. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 60c; 4 qts. \$2.00, parcel post paid. Not prepaid, ½ pt. 15c; pt. 35c; qt. 50c; 4 qts. \$1.75.

LARGE WHITE MARROWFAT—This variety is very tall, about 5 feet, and of strong growth. The pods are about 3 inches long, round, light green and somewhat rough. The peas are large, round, smooth and creamy yellow. It is a very desirable variety for summer use and is undoubtedly one of the most productive of the garden peas. Pkt. 10c; ½ pt. 15c; pt. 25c; qt. 40c; 4 qts. \$1.00, parcel post paid. Not prepaid, ½ pt. 10c; pt. 20c; qt. 40c; 4 qts. 85c.

LARGE BLACK EYE MARROWFAT—An excellent tall variety, about 5 feet high. It is a very prolific bearer of large pods, about 3 inches long. Seed large, smooth, round, light creamy yellow, with black-eye. One of the very best of the Marrowfat sorts. Pkt. 10c; ½ pt. 20c; pt. 30c; qt. 40c; 4 qts. \$1.00, parcel post paid. Not prepaid, ½ pt. 10c; pt. 15c; qt. 25c; 4 qts. 85c.

Peppers SWEET AND HOT

CULTURE—One ounce will produce about 1,000 plants. Sow in hotbed in March and transplant to the open ground as soon as the weather is warm and settled. Set in 3-foot rows about 2 feet apart. Cultivate well and keep free from weeds; hen manure or Truck Grower Fertilizer worked into the soil when the plants are young will greatly increase the yield.

CHINESE GIANT—Plant dwarf, fruit of mammoth size, very broad but rather short. It is very late and a rather shy yielder. Popular on account of its large size and mild flavor.

Pkt. 10c; ½ oz. 30c; 1 oz. 50c; ¼ lb. \$1.50; 1 lb. \$6.50, parcel post paid.

Crimson Giant.

Bell or Bull Nose.

CRIMSON GIANT—An early maturing large size sweet pepper, similar in shape to Chinese Giant, but much longer, and flesh thicker. It is exceptionally mild and very prolific; earlier than the Chinese Giant. Pkt. 10c; ½ oz. 30c; 1 oz. 50c; 2 oz. 75c; ¼ lb. \$1.50; 1 lb. \$6.00, parcel post paid.

BELL OR BULL NOSE—A well known variety; large and oblong, bright crimson, and a good bearer; not as sweet as the Chinese Giant. Pkt. 10c; ½ oz. 30c; 1 oz. 50c; 2 oz. 75c; ¼ lb. \$1.50; 1 lb. \$6.00, parcel post paid.

RUBY KING—A pepper of large size, well known and much esteemed by truck growers. When ripe, its color is a beautiful ruby red, very attractive and of good quality. Pkt. 10c; ½ oz. 30c; 1 oz. 50c; 2 oz. 85c; ¼ lb. \$1.50; 1 lb. \$5.50, parcel post paid.

LONG RED CAYENNE—A strong, hot pepper, having long, slender, bright red pods about 4 inches long. Both the green and ripe peppers are used for pickling. Pkt. 10c; ½ oz. 30c; 1 oz. 50c; 2 oz. 85c; ¼ lb. \$1.50, parcel post paid.

EARLY NEAPOLITAN—Earlier than any large, sweet pepper, and a wonderful bearer; single plants often yield 30 to 40 peppers, and continue loaded with fruits right up to frost. Bright red, thick-meated, very sweet and mild; 4 inches long by 5 to 6 inches round; keeps a long time. Pkt. 10c; 1 oz. 50c; 2 oz. 75c; ¼ lb. \$1.40, parcel post paid.

Champion of England.

Chinese Giant.

PIMENTO—This is a heart-shaped variety, most all meat. Very mild and of elegant flavor. Requires rich soil and plenty of moisture to make fruits grow to perfection. This is the variety used by canners. Pkt. 10c; ½ oz. 20c; 1 oz. 40c; 2 oz. 75c; ¼ lb. \$1.25; 1 lb. \$4.00, parcel post paid.

RED CHILI—Small and very pungent, used for chili sauces. Pkt. 10c; ½ oz. 35c; 1 oz. 65c; 2 oz. \$1.00; ¼ lb. \$1.75; 1 lb. \$5.00, parcel post paid.

TABASCO—Very pungent and strong. Pkt. 10c; ½ oz. 35c; 1 oz. 60c; 2 oz. \$1.00; ¼ lb. \$2.00; 1 lb. \$5.00, parcel post paid.

MIXED RED HOT—A mixture of all varieties of Hot Pepper. Pkt. 10c; ½ oz. 25c; 1 oz. 40c; 2 oz. 75c; ¼ lb. \$1.00; 1 lb. \$5.00, parcel post paid.

MIXED SWEET MANGOES—Mixed varieties of Sweet Pepper for Mangoes. Pkt. 10c; ½ oz. 30c; 1 oz. 65c; 2 oz. \$1.25; ¼ lb. \$2.00; 1 lb. \$5.00, parcel post paid.

Killing Potato Bugs
See page 73 for de-
scription and price-
list. Kill the bugs and
help the plants.

BUCHANAN'S

CERTIFIED NORTHERN GROWN

SEED POTATOES

Selected Seed Irish Potatoes

Will mature in 70 to 90 days, according to the variety. Cut two eyes, drop them every 15 inches and make rows 3 feet apart; cover eyes 2 inches; plant in February, March and April for early crops.

Use plenty of well rotted manure with either Truck Guano or Cotton Seed Meal, this should be put down in the furrow and then throw a little dirt on the top of it. Do not let the potatoes come in contact with the fertilizer as they will be very liable to rot. Keep well cultivated. One peck will plant 125 feet of row; 7 to 10 bushels will plant an acre, depending on the size of the seed.

It's just as important that our people of the South raise Irish potatoes to the extent of their home needs at least as it is for them to raise bread and meat.

Most all of us have tried potatoes and in many cases with indifferent success or possibly total failure. In the great majority of cases failure has been caused by the planting of potatoes unfit for seed, usually bought without much thought from local merchant because of greater convenience and cheapness.

It is just as important that you be careful in seed potato buying as it is to be careful in buying seed of cabbage, watermelon or tomatoes. Unless the seed potatoes have been bred and grown for seed purposes; unless they are right varieties and grown in a locality that fits them to be planted in the South, greater or less disappointment in the crop is sure to follow.

The whole South gets loaded up every spring with the cheaper grades of common farm crop potatoes from Maine that have no right to be called seed potatoes and should never be brought here except for eating purposes. The same is equally true of potatoes brought in here from western states.

We sell nothing but the best grown seed stock of Maine and Wisconsin potatoes obtainable in the three best varieties for the South named below. We naturally cannot compete in price with your local merchants who handle the cheaper grades.

The Food Administration has directed that all potatoes be sold by weight. The seed trade generally has adopted the 150-pound bag as the standard, and quotations will be made on that basis. This will set at rest for all time the question as to what constitutes a standard barrel or bag of potatoes. The present custom now settles it on the 10-peck or 150-pound basis. Plant plenty of potatoes with good seed stock.

Buchanan's Red Triumph Potato

BUCHANAN'S RED TRIUMPH—The most valuable potato for the South. We sell five times as many Triumphs as all the others combined. It's adapted to all parts of the South, from Kentucky to Florida, from the Carolinas to Arizona. It's an extra early, and with our pure Maine-grown seed stock it's the surest producer of any, while its handsome appearance when first dug makes it a ready seller at top prices on any market. It withstands heat and drought to a wonderful degree and makes a good crop when other varieties burn up and make nothing. Vines are smaller than other varieties, the strength of the plant going into making potatoes rather than into the vine. This is the right potato for you to plant if you want an extra early and sure cropping potato of the very best quality. It will give you entire satisfaction. Write for market prices when ready to buy.

SOUTHERN TENNESSEE RED TRIUMPH—For first and second crop. Grown by experienced growers and seed selected carefully each season for our trade.

EARLY ROSE—This old-time variety is still very popular. It is a long potato and pink in color at the bud end. Grows to a good size, yields well and is of fine quality. Northern Grown Seed.

WRITE FOR POTATO PRICES—At the time this part of our catalog goes to the printer prices on seed potatoes have not settled. It is impossible to make prices that will stand through January, February and March. When in the market write us for prices on the quantity and variety you want, using Quotation Sheet in back of this catalog. Our seed potatoes are right quality and prices will be in line with the quality.

COLD STORAGE POTATOES—We will have a nice stock of different varieties of seed potatoes, kept in cold storage for late planting. Write for prices in June or July.

BUCHANAN'S IRISH COBBLER—We grow Irish Cobbler and we like it. In shape it's much like Triumph, but more oblong; color of skin a creamy white, slightly netted with lighter color. Cooks quickly, is almost pure white, mealy, but not too dry. A good shipper and good keeper for home use and nearby market. Write for our best market prices when ready to buy.

Lookout Mountain Potato

LOOKOUT MOUNTAIN POTATO—Second Crop only. Very prolific, late; long keeping variety, for planting in June or July; grows large tubers, pure white, smooth, of good quality. No other variety stands our hot climate as well. We book orders now for shipment first of June.

FOR PRICES ON IRISH POTATOES, SEE PINK PRICE LIST, PAGE 82

Buchanan's Hand Selected Seed Sweet Potatoes

Our Seed Stock of Sweet Potatoes are inspected, assorted and stored in an especially built Potato House at digging time which is usually during October, we do not remove these seed from the Potato House until we are ready to bed for Slips or have received an order for Seed Sweet Potatoes, as the Sweet Potato will decay very quickly after being removed from the Potato house. We will not ship Seed Sweet Potatoes in sacks and only pack them as follows: 1 peck box, 11 $\frac{1}{4}$ lbs., and 1 bushel basket, 45 lbs.

We begin shipping Seed Sweet Potatoes about the 15th of March, as weather before that time is entirely too cold, and Seed Sweet Potatoes will decay very quickly if handled or bedded too early.

We use every precaution in selecting, assorting, handling and packing, but make absolutely no guarantee whatever on them. They leave our store in good condition, and will be shipped at buyer's risk only.

We price only five varieties, the same in $\frac{1}{4}$ bushel boxes and 1 bushel baskets. If wanted in larger quantities, write, wire or phone for prices. Prices; $\frac{1}{4}$ bu. box, \$1.75, postpaid. By express, not prepaid, $\frac{1}{4}$ bu. box \$1.50; 1 bu. basket \$3.00.

We make no charge for boxes, baskets, barrels or packing. For prices on Sweet Potato Slips, see pages 32, 33, 34 and 35.

PORTO RICA YAMS—We have grown this Sweet Potato for five years and the demand for both Seed and Slips has increased each year. It is fine grained, juicy, as good for eating as the Nancy Hall and has the additional quality of being a good winter keeper. Color, golden red, running, late maturing, good keeper and I consider it the best Sweet Potato grown today for home use.

NANCY HALL—This is our most popular Sweet Potato because of its early maturing and ready sale on all markets, especially the Northern markets, where the Southern Nancy Hall is known as the best eating Sweet Potato grown.

Color, yellow, slightly running, ready to harvest in July, fine for cooking, but does not keep during the winter as well as the Gold Coin or Porto Rica.

BUNCH WHITE TRIUMPH—The earliest maturing Sweet Potato grown. Not considered a good cooking potato for table

use, but owing to its earliness and great yield, it is used quite extensively for stock feeding, especially hogs. Many hog breeders plant this potato and let their hogs do the harvesting. Color, white, matures in June, bunch vines, poor winter keeper.

GOLD COIN—A great favorite with market gardeners, because of its beautiful color and good keeping qualities, owing to the fact that it is similar to the Nancy Hall in color, shape and size, it is often sold for same late in the spring when all other varieties have been exhausted. Color, golden yellow, running, ready to harvest in July, and the best winter keeper known.

BUNCH YAMS—The best known of the forked leaf varieties; a great favorite with many who have used this potato for years; does not yield as well as many of the newer varieties, but the quality is unsurpassed. Color, deep yellow, late maturing, bunch vines; good keeper and very popular for home gardens.

1. The South will produce more than One Hundred and Fourteen Million bushels of Sweet Potatoes in 1921.
2. Arkansas, Mississippi and Tennessee will produce one-fifth of the entire crop.
3. The average production of the three above States for 1921 is 103 bushels per acre.
4. Your State Agricultural Experiment Station will be glad to send you Bulletins on the Sweet Potato.
5. For more information on Sweet Potatoes write United States Department of Agriculture, Division of Publication, Washington, D. C., for Farmers' Bulletin Nos. 26,999 and 1059.

Porto Rica Yam,

Nancy Hall,

White Triumph,

Gold Coin,

Bunch Yam

Buchanan's Pumpkin Seed

CULTURE—One pound will plant 40 to 50 hills; 5 pounds will plant one acre. Plant in hills 8 to 10 feet apart each way, four seed to the hill. For a good crop the soil should be rich. Cultivate same as cucumbers or melons. Pumpkins should not be planted in the garden, as they will readily mix with squash, much to the detriment of same. Many pumpkins are raised between corn hills, where they should be planted about 15 feet apart.

Genuine Green Striped Cushaw

GENUINE GREEN STRIPED CUSHAW—This is one of the finest pumpkins in cultivation. It is a large crookneck variety, grown largely in Louisiana and other Southern States, and extensively by the local market gardeners. Fruits are very large, with crooked neck. Color creamy white, irregularly striped or traced with green. Flesh light yellow, very thick, rather coarse, but sweet. Very hardy, bugs seldom bothering them. Can be grown among corn and makes heavy yields. Fine for stock and table purposes. Our private stock of this variety is unexcelled. Pkt. 5c; 1 oz. 10c; ½ lb. 50c; 1 lb. \$1.25, postpaid. 10-lb. lots or over, not prepaid, \$1.00 per lb.

KENTUCKY FIELD—Large, round, flattened fruits, much ribbed and creamy-buff in color; flesh is salmon color and very deep; of fine quality and one of the best for canning. Also grown extensively for stock, in the South. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 50c, parcel post paid.

LARGE CHEESE—Most extensively used for feeding stock; also used for making pies. Often planted with corn. Pkt. 5c; 1 oz. 10c; 2 oz. 15c ¼ lb. 25c; 1 lb. 75c, parcel post paid.

QUAKER PIE—A small to medium-sized variety, rather pear-shaped; color creamy-white inside and out; of good quality. Pkt. 5c; 1 oz. 15c; 2 oz. 20c; ¼ lb. 30c; 1 lb. \$1.00, parcel post paid.

SUGAR, OR NEW ENGLAND PIE—This variety is small, but of most excellent quality for pies. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 30c; 1 lb. 90c, postpaid.

TENNESSEE SWEET POTATO—Of medium size and nearly bell-shaped, with neck slightly crooked; skin creamy white, sometimes slightly striped with green; flesh creamy white, deep, fine-grained, and of excellent quality. One of the favorite old Southern sorts. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

KING OF THE MAMMOTHS—The giant among pumpkins; specimens have been grown to weigh 250 pounds and reaching two feet or more in diameter; fruit round and flattened, slightly ribbed; skin salmon-orange; flesh bright yellow, and very thick. Pkt. 5c; 1 oz. 15c; 2 oz. 20c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

FREE TO CUSTOMERS

Many of my customers are not aware of the fact that the Department of Agriculture at Washington, D. C., have printed bulletins on many subjects and practically every known farm product, which are absolutely free to all those asking for same. There are Bulletins on Agriculture, Horticulture and Floriculture. You will notice through this catalog that we give many bulletin numbers on subjects listed, and all that is necessary to obtain this bulletin is to address a postal card to the Department of Agriculture, Bureau of Publications, Washington, D. C., as follows: "Please send me Bulletin No. _____," and name the subject and give the number. Write name and postoffice address plainly.

PUMPKINS should be grown more largely on every farm in the South. Many sorts are splendid for pies and baking; others make a wonderful feed for stock during the winter months. This is a neglected crop in the South now, but should be more largely grown. Pumpkins are easily sold in the towns and cities when not wanted for use on the farm. Plant them on the farm in 1922—it will pay you.

Japanese Pie Pumpkin

JAPANESE PIE—Shaped somewhat like the Cushaws and grows to a large size; skin deep green with dark stripes and rough ridges on the neck; flesh deep yellow and of the highest quality; seeds sculptured like Chinese letters. This is one of the best varieties to plant for home use. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.50, parcel post paid.

King of the Mammoths

Buchanan's Radish Seeds

CULTURE.—Sow in open ground, in spring, as soon as the soil can be worked. Sow in rich, sandy loam, in drills 18 inches apart; thin plants to prevent crowding. Keep the soil loose and apply a little nitrate of soda. Successive plantings should be made every ten days or two weeks, to keep up a continuous supply of crisp and tender radishes. For early use plant the round or button radishes and olive shaped. For later use plant the long and half-long varieties, as they root much deeper and better resist heat and drought. What are known as winter radishes should be sown in August and September. All radishes should be sown thinly in drills one foot apart, seed covered $\frac{1}{2}$ inch and kept clear of grass and weeds. Sow one ounce of seed to 100 feet of row; 10 to 12 pounds per acre. Our radish seed is of the very best, grown from carefully selected and transplanted roots.

Radish, Early Scarlet White Tipped

Round and Turnip-Shaped Varieties

EARLY SCARLET TURNIP (White Tipped)—One of the best early radishes for the home garden and a great favorite in large markets for early planting outdoors. The roots are nearly round, slightly flattened on the underside. The color is very bright, deep rose-carmine scarlet with a distinctly white tip. The flesh is white and of the best quality. The stock we offer is exceptionally attractive in its splendid coloring. The scarlet is unusually deep and affords a distinct contrast with the large, clear white tip. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 40c; 1 lb. \$1.00, parcel post paid.

CRIMSON GIANT—Suitable both for forcing or early planting out of doors. A remarkable feature is that it will grow double the size of other round red forcing Radishes and still remain solid, not showing the least sign of becoming hollow. In shape it is round to oval and very attractive. The flesh is mild and tender. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 85c, parcel post paid.

EARLY SCARLET TURNIP—A well known and highly esteemed variety; extensively grown for market. A turnip-shaped sort; skin bright scarlet, flesh white, a very quick grower. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. 85c, parcel post paid.

BUCHANAN'S EPICURE RADISH—It is the quickest growing Radish we know of, maturing in eighteen days. Firm, very mild in flavor and never pithy. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.25, parcel post paid.

FRENCH BREAKFAST—Of oblong form, color bright carmine with clear white in the lower portion. Very tender and mild. Good outdoors or under glass. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. 85c, parcel post paid.

BUCHANAN'S SCARLET GLOBE—One of the earliest and best for forcing; color a very handsome shade of scarlet; mild flavor, crisp and juicy; stands a great amount of heat without becoming pithy. This variety does equally well for forcing and outdoor planting. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 35c; 1 lb. 85c, parcel post paid.

Long Fall and Winter Varieties

HALF LONG DEEP SCARLET—The roots of this hardy and desirable sort are of a very brilliant, deep, rich red color and half long, with a somewhat tapering point; the flesh is very white, crisp and tender; of quick growth and seldom pithy. Pkt. 5c; 1 oz. 10c; 2 oz. 20c; $\frac{1}{4}$ lb. 35c; 1 lb. \$1.00, parcel post paid.

WHITE ICICLE—One of the best early long, white sorts, suitable either for forcing or growing outside. Roots somewhat shorter and tops smaller than White Vienna. Very crisp and tender and of a beautiful waxy white color. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 30c; 1 lb. 90c, parcel post paid.

LONG SCARLET SHORT TOP—The best of the long red radishes. It is very early, of good size, fine quality; most largely planted of all long red radishes. Pkt. 5c; 1 oz. 10c; 2 oz. 20c; $\frac{1}{4}$ lb. 30c; 1 lb. 90c, parcel post paid.

WHITE VIENNA, or LADY FINGER—A medium early maturing, long white summer radish; roots are 6 to 7 inches long, white, slender and smooth. This variety grows more above the ground than the Icicle and consequently is more or less tinged with green at the top of the root. Pkt. 5c; 1 oz. 10c; 2 oz. 20c; $\frac{1}{4}$ lb. 30c; 1 lb. 90c, parcel post paid.

LONG BLACK SPANISH—One of the latest and hardiest varieties for winter use; grows to large size; roots 8 to 9 inches long and 2 to 3 inches in diameter, nearly black in color. The flesh is white, very firm and of good quality; a very popular market variety. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 30c; 1 lb. 90c, parcel post paid.

CHINA ROSE, WINTER—One of the very best winter sorts, roots are cylindrical, or largest near the bottom, stump-rooted, or blunt at both ends; skin smooth and bright, deep rose color; flesh white, crisp and pungent; the roots are 4 to 5 inches long and 2 inches thick. Pkt. 5c; 1 oz. 10c; 2 oz. 20c; $\frac{1}{4}$ lb. 30c; 1 lb. 85c, parcel post paid.

Buchanan's French Breakfast Radish

Spinach

CULTURE—One ounce to 60 feet of drill; 8 to 10 pounds to the acre. For an early summer crop sow early in the spring, in drills 1 foot apart, and thin out to 2 inches in the row. For winter and early spring crop sow either broadcast or in drills about the first of September or later.

BLOOMSDALE CURLED SAVOY—A most valuable variety. In appearance the leaf is wrinkled in the same way as that of the Savoy Cabbage, hence the name. It produces nearly twice the bulk of crop as the ordinary sort, is fully as hardy, and in all other respects equal. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 75c; 5 lbs. \$3.00, parcel post paid.

BROAD LEAVED FLANDERS—One of the most vigorous and strong growing varieties. The leaves are nearly round, uniformly deep green, quite thick. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 75c, parcel post paid.

LARGE VIROFLAY THICK LEAF—A variety with very large, thick leaves, making it especially desirable where bulk is wanted. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 20c; 1 lb. 50c, parcel post paid.

NEW ZEALAND—Grows 1½ feet high and, if transplanted, two or three feet will produce an abundant crop in the hot weather when the ordinary spinach cannot be had. Pkt. 10c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

VICTORIA—One of the best varieties for spring growing, as it stands fully two weeks longer than any other sort before running to seed. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; ¼ lb. 25c; 1 lb. 65c, parcel post paid.

Bloomsdale Spinach.

For more information on Squash, write Department of Agriculture, Division of Publications, for Bulletin 668.

Golden Custard.

White Scallop Squash.

Crookneck Squash.

Squash Seed

CULTURE—After danger of frost is past, plant in a warm, well pulverized, rich soil, mixing well rotted manure with the soil in each hill. Plant 8 or 10 seeds to the hill; the bush varieties 4 to 6 feet apart, the running sorts 8 to 10 feet.

DELICIOUS—A fall or winter sort, of medium size; top-shaped in form, dark green in color. The flesh is dark orange, very sweet, dry and delicious. An excellent keeper. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

EARLY WHITE BUSH—The well-known summer variety. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

GIANT YELLOW SUMMER CROOKNECK—The best summer variety. Fruit is large, bright yellow, and covered with warts. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 50c; 1 lb. \$1.50, parcel post paid.

GOLDEN CUSTARD—This is a flattened, scalloped bush squash of the largest size. Flesh is pale yellow and of very fine flavor. Except for color, this squash is identical with the Mammoth White Bush. This is a splendid yellow variety to plant. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

Salsify.

GOLDEN SUMMER CROOKNECK — A bush variety, early and prolific; surface deep yellow, densely warted, quality and flavor good. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

MAMMOTH WHITE BUSH—Similar to Early White Bush, except that they are larger and more uniform in shape, and about five days later. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; 1 lb. \$1.25, parcel post paid.

HUBBARD — One of the best winter squashes; flesh bright orange yellow, fine-grained, very dry, sweet and richly flavored. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.50, parcel post paid.

Salsify, or Oyster Plant

CULTURE—One ounce is sufficient for 75 feet of drill; 5 to 6 lbs. to acre. Plant usually latter part of March, in rows from 2 to 2½ feet apart, thinning later to about 4 inches in the row. Does best in very rich soil.

MAMMOTH SANDWICH ISLAND—Large and strong growing, with smooth white tapering roots of delicate but distinct flavor. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 60c; 1 lb. \$1.75, parcel post paid.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Buchanan's Tomato Seeds

CULTURE—One ounce of seed will produce from 2,000 to 3,000 plants. Sow the seed in hotbeds during March. When the plants are 2 inches high transplant into cold frames, plant boxes, paper pots or earth bands. After all danger of frost is over, set these plants into the open ground. The soil should be warm, mellow and fertile. Set plants 4 feet apart each way. To insure best results, it is advisable to train tomato vines to stakes or trellises. Cultivate often, and as long as the plants permit.

Buchanan's Beefsteak Tomatoes

ACME (Pink)—A well-known, hardy, early and productive sort; fruit of fair size, round and smooth; color purplish pink. Acme is solid and of excellent flavor. Pkt. 5c; 1 oz. 25c; 2 oz. 40c; $\frac{1}{4}$ lb. 85c; 1 lb. \$2.00, parcel post paid.

BEAUTY (Pink)—A productive main crop variety; fruits large and exceptionally smooth, solid and of excellent quality; color purplish-pink. This is one of the best mid-season or main crop varieties for table use. Pkt. 5c; 1 oz. 35c; 2 oz. 60c; $\frac{1}{4}$ lb. 90c; 1 lb. \$2.50, parcel post paid.

BEEFSTEAK (Red)—This valuable new tomato was introduced by Peter Henderson. It is of remarkable size, frequently weighing a pound or more. Color brightest crimson scarlet; very solid, with few seeds, and ripens evenly to the stem. Very productive and early, considering its size. Pkt. 10c; 1 oz. 40c; 2 oz. 75c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$4.00, parcel post paid.

EARLY DETROIT (Purple)—This splendid variety is the largest and best of the early purplish pink tomatoes. The fruits are very smooth, uniform in size, nearly globe-shaped, firm and of excellent quality. Early Detroit is most valuable as a shipping variety, as well as for home or market use. Pkt. 5c; 1 oz. 25c; 2 oz. 50c; $\frac{1}{4}$ lb. 90c; 1 lb. \$3.00, parcel post paid.

FAVORITE (Red)—Very prolific, solid, and ripens early and evenly; smooth, free from cracks, holds its size till end of season and of first-class quality. Fine canner; color dark red. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; $\frac{1}{4}$ lb. 65c; 1 lb. \$2.00, parcel post paid.

GOLDEN QUEEN (Yellow)—Large, smooth fruits, of a beautiful golden color; quality excellent; attractive for slicing and mixing with sliced red sorts. Pkt. 5c; 1 oz. 40c; 2 oz. 75c; $\frac{1}{4}$ lb. 90c; 1 lb. \$2.25, parcel post paid.

DWARF STONE (Deep Scarlet)—This is the best of the dwarf tomatoes, although rather late in maturing. The fruits are large, smooth, round, very solid, and of a deep scarlet color. Pkt. 5c; 1 oz. 40c; 2 oz. 75c; $\frac{1}{4}$ lb. 90c; 1 lb. \$2.50, parcel post paid.

EARLIANA (Bright Scarlet)—The earliest and best of the very early tomatoes; very productive for an early sort; fruits are of fair size, round, very smooth and solid, and produced in clusters in center of the plant; color bright scarlet. Pkt. 5c; 1 oz. 30c; 2 oz. 50c; $\frac{1}{4}$ lb. 85c; 1 lb. \$3.00, parcel post paid.

JOHN BEAR— (Red)—This variety produces largest fruit of the extra early sorts. Fruits are large, nearly round, smooth, firm, of excellent quality; color bright red. Pkt. 5c; 1 oz. 30c; 2 oz. 50c; $\frac{1}{4}$ lb. 85c; 1 lb. \$2.50, parcel post paid.

BUCK BRAND TOMATO — (Red)—Produces the most perfect high crown tomato ever grown. They ripen evenly right up to the stem, are a brilliant red color, almost seedless, uniform in size, and bear 100 to 120 fruits to the vine. Pkt. 5c; $\frac{1}{2}$ oz. 25c; 1 oz. 35c; $\frac{1}{4}$ lb. 85c; 1 lb. \$2.50, parcel post paid.

Favorite.

Early Detroit.

Tomatoes—Continued

BUCHANAN'S PONDEROSA (Purple)—An exceptionally large, purple-fruited tomato, and for home use one of the best; fruits very solid, with few seeds. We have a very much improved stock of this variety which lacks considerable of the roughness and tendency to split which it formerly possessed. Pkt. 10c; 1 oz. 40c; 2 oz. 75c; $\frac{1}{4}$ lb. \$1.25; 1 lb. \$4.50, parcel post paid.

LIVINGSTON'S GLOBE (Pink)—A variety of almost perfect shape. Medium size and purplish-pink color. Used very largely for greenhouse planting; also grown extensively in the South for shipping to Northern markets. It is early, productive, of very fine flavor, and so firm and solid that it

Buchanan's Ponderosa
Tomato

A few facts you may not know about the Tomato:

1. Its native home is South America, and was known to the natives long before that country was discovered by Europeans.
2. The Tomato, originating from a wild plant, has been cultivated in America more than 200 years.
3. The Tomato needs abundant sunlight and plenty of moisture.
4. There are fifteen different types of Tomatoes now cultivated.
5. If more information is wanted on Tomato Growing, write United States Department of Agriculture, Division of Publication, Washington, D. C., for Farmers' Bulletin 642, "Tomato Growing in the South."

Dwarf Giant.

Red Rock Tomato.

Stone Tomato.

is a splendid shipper. Pkt. 5c; $\frac{1}{2}$ oz. 20c; 1 oz. 35c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.50, postpaid.

STONE (Deep Red)—The standard and general favorite with truckers and canners; always dependable, very vigorous and productive; fruits round, large, solid, smooth and deep red in color. The most popular of the late or main crop sorts. Pkt. 5c; 1 oz. 30c; 2 oz. 50c; $\frac{1}{4}$ lb. 90c; 1 lb. \$2.25, parcel post paid.

BUCHANAN'S "DWARF GIANT"—This is much the largest fruited of all dwarf tomatoes. The color is a rich purple crimson, and the depth of color is maintained throughout the entire fruit. Pkt. 10c; 1 oz. 40c; 2 oz. 75c; $\frac{1}{4}$ lb. \$1.00; 1 lb. \$3.25, parcel post paid.

TRUCKER'S FAVORITE (Purple)—A popular purple-fruited, on the order of the Beauty, and of the same general habit of growth; the fruit is, however, more flat. It is a main crop variety, maturing the same as Red Majestic, and equally as productive. Pkt. 5c; 1 oz. 35c; 2 oz. 60c; $\frac{1}{4}$ lb. 90c; 1 lb. \$2.50, parcel post paid.

RED ROCK (Bright Red)—A very fine selection of the Matchless type; medium early, round, smooth and bright red, makes a good canning variety. Pkt. 5c; 1 oz. 30c; 2 oz. 50c; $\frac{1}{4}$ lb. 90c; 1 lb. \$3.00, parcel post paid.

RED CHERRY—Fruits very small, about the size of a large cherry, smooth and round; for preserves. Pkt. 10c; 1 oz. 35c, parcel post paid.

RED PEAR—Used for preserving and to make "tomato figs." Fruits bright, distinctly pear-shaped and of excellent flavor. Our stock is the true pear-shaped. Pkt. 10c; 1 oz. 25c, parcel post paid.

YELLOW PEAR—Fruits similar to the Red Pear, but of rich, clear, yellow color, and quite distinct from the variety sometimes sold under this name. Pkt. 10c; 1 oz. 25c, parcel post paid.

YELLOW PLUM—A small, yellow-fruited variety much resembling a plum in size and form; for preserving. Pkt. 10c; 1 oz. 25c.

PEACH—Desirable for preserving or for table decoration. The fruit resembles a peach in shape and size and the color is a light terra cotta red with a delicate bloom. The flesh is of good flavor. Pkt. 10c; 1 oz. 25c, parcel post paid.

For more information on Tomatoes, write Department of Agriculture, Division of Publication, for Bulletin No 642.

The experts who grow our seeds are the best in the country, and we know that our seeds are as good as can be produced. We also make sure, by a careful trial, that the varieties we sell are those best suited to the needs of our customers. Everyone likes a good Tomato, and every garden should have at least a dozen hills of Tomatoes. They may take a little more work than some other vegetables, but the occasional hoeing needed is well repaid by the constant supply of delicious fresh fruit all summer long. When the first frost comes in the fall, there are usually a number of green tomatoes left on the vines; these make an excellent pickle, which will be relished the whole winter. We pay special attention to raising Tomato plants for the home garden.

A SAD BLOW

The Newlyweds have a home in the suburbs, and Mrs. N. was relating her disappointment with her garden to a sympathetic caller. "We did hope to have luck with our tomatoes," she said, "but even those failed us."

"What was the trouble?"

"You know, there are several kinds of tomatoes, and we thought we had planted the red kind, and now those horrid old tomato bushes are just covered with green ones, which we don't want at all, as we never eat pickles."

Buchanan's Turnips and Rutabagas

CULTURE—One ounce will sow 200 feet of drill; 1 to 2 pounds for an acre. For early use, sow seed of flat varieties in open ground in spring, in drills 1 foot or more apart, using seed sparingly. Thin to 3 or 4 inches apart. For succession sow every two weeks until May. For fall and winter sow in August and September. A good crop may often be grown by scattering seed thinly in the cornfield at the last cultivation.

Purple Top Globe.

AMERICAN RED TOP WHITE GLOBE—A large globular variety, very even in shape and of handsome appearance. The crown is purplish red and the remaining portion clear white. The flesh is white, of excellent quality and desirable for table use. The variety is a good keeper and a fine market sort. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 60c, parcel post paid.

AMBER GLOBE—One of the best yellow-fleshed sorts; roots globular and large size; skin clear yellow except the top, which is tinged green. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 65c, parcel post paid.

EARLY WHITE FLAT DUTCH—A very early flat, white turnip of medium size and fine quality. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 20c; 1 lb. 65c, parcel post paid.

EXTRA EARLY PURPLE TOP MILAN—Extremely early and of splendid quality; bulbs of medium size, flat and white, with a bright purple top. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; $\frac{1}{4}$ lb. 50c; 1 lb. \$1.50, parcel post paid.

LARGE WHITE GLOBE STRAP LEAF—A perfect globe in shape; skin and flesh pure white, firm and sweet. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c, parcel post paid.

LONG WHITE COW HORN—Roots are often 12 to 15 inches long and 3 inches in diameter, round, carrot-like in form and slightly crooked; clear white in color except a shade of green at the top; quality good. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c, parcel post paid.

PURPLE TOP STRAP LEAVED—The most widely cultivated and best known variety; a very early, productive sort; roots are flat, medium sized, purple or dark red above ground, white below; flesh white, tender and fine grained. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 20c; 1 lb. 60c, parcel post paid.

LARGE PURPLE TOP WHITE GLOBE—Quite similar to Purple Top Strap Leaved, except in form, being almost a perfect globe; a very superior sort. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 60c, parcel post paid.

SEVEN TOP—Grown almost exclusively for the tops, which are used for greens. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 20c; 1 lb. 50c, parcel post paid.

SOUTHERN PRIZE—Superior to Seven Top as usually sold and extensively grown in the South, where the tops furnish

Large White Globe.

an abundance of cuttings. These are valued highly for salad or greens. The roots of Southern Prize are valuable as well as the tops, being remarkably large, symmetrical and excellent for feeding stock. A favorite for forage in the Virginias and Carolinas, where it usually thrives throughout the winter without protection. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 20c; 1 lb. 65c, parcel post paid.

WHITE EGG—An early, oval or egg-shaped variety; roots of medium size, smooth and clear white; of the very best quality. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c, parcel post paid.

YELLOW ABERDEEN—A late, medium-sized, long-keeping variety; roots round, yellow, with a purple top; flesh tender and sweet. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 65c, parcel post paid.

Rutabagas

Sow in drills or broadcast in June, July and August.

IMPROVED PURPLE TOP RUTABAGA—An improved strain of the finest yellow-fleshed rutabaga grown. Hardy, sweet and a good keeper. Pkt. 5c; oz. 10c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c, parcel post paid.

WHITE SWEDE, or RUSSIAN—Roots very large, nearly globe-shaped, with a small neck; color white with a green shade at the neck; flesh white, firm and sweet. Pkt. 5c; 1 oz. 10c; 2 oz. 15c; $\frac{1}{4}$ lb. 25c; 1 lb. 75c, parcel post paid.

Purple Top Strap Leaf

Buchanan's Big 7-Turnip Collection, 35 cents

The most popular of all turnip collections. This gives every family in the South a full supply of early, medium and late turnips. No other house offers you such a bargain in turnip seed as this. For 35 cents we will send you postpaid one ounce each of Extra Early White Egg, Purple or Red Top Strap Leaf, Early White Flat Dutch, Purple or Red Top Globe, Yellow or Amber Globe, Improved American Rutabaga and Seven Top—7 ounces of Turnips, all different, for 35 cents, delivered at your postoffice. No other varieties will be sold at this price and no changes will be allowed in this collection. If you do not want to plant all this seed this spring, what you hold over is perfectly good for your late summer and fall sowings. 7 OUNCES, 7 VARIETIES, 35 CENTS, POSTPAID.

BUCHANAN'S ROOTS, HERBS & VEGETABLE PLANTS

PLEASE READ THIS BEFORE ORDERING PLANTS

HOW WE SHIP—All Plants, Roots and Bulbs are forwarded by Express or Parcel Post; if by express, you pay charges when goods delivered to you; if by parcel post, charges paid by me. Notice that I quote Postpaid such Plants, Roots and Bulbs as can be sent by parcel post.

Many of my customers live at a distance from the express office, making it more convenient for them to receive their goods by Parcel Post, especially when they are busy in the spring, and we have a special department for packing Live Plants so they will reach you in the best of condition when shipped by Parcel Post.

SAFE ARRIVAL GUARANTEED—We guarantee the safe arrival of all goods sent by express or mail to points within the U. S. proper. If a package sent by express or mail is injured or lost we will replace it as soon as informed of the fact. Goods sent in any other way are solely at purchaser's risk. Claims for damages must be made on receipt of goods. We do not hold ourselves responsible for failure after delivery of the goods in good condition.

TIME OF SHIPMENT—All orders for Vegetable Plants will be filled in season, when plants are in right condition, and at the right time. See dates below when different varieties are ready for shipment.

We can supply in any quantity, in their proper season, all Vegetable Plants here mentioned, and ship directly from beds, well packed, on the shortest notice. **NOTICE**—If we should for any reason be out of any variety ordered, we will send some other similar variety in place of it, unless requested to the contrary.

At prices quoted, they are sent by express at purchaser's expense, excepting where noted by mail. As plants are perishable, we advise all large lots to be forwarded by express.

PACKING FREE—We make no charge for boxes, packing or delivery to any Express, Freight or Steamboat Line in Memphis.

We strongly recommend our customers to have their orders forwarded by express, as our experience shows that this method is the most satisfactory, except on very small packages. All Potato Plants Packed 100 to a Bundle.

Asparagus

ASPARAGUS ROOTS—A saving of 1 to 2 years is effected by planting roots. For private use or for marketing on a small scale, beds should be formed 5 feet wide, with 3 rows planted in each, one in the middle and one on each side a foot from the edge; distance between the plants in the rows, 9 inches. Price, parcel post paid, 2-year Roots, doz. 40c; 50 for \$1.00; 100 for \$1.75. 3-year Roots, doz. 60c; 50 for \$1.50; 100 for \$2.50. Price, by express, purchaser's expense, 2-year Roots, doz. 30c; 50 for \$1.00; 100 for \$1.50. 3-year Roots, doz. 50c; 50 for \$1.25; 100 for \$2.00.

We have three varieties—Columbian Mammoth, Palmetto, Colossal.

Frost-Proof Cabbage Plants

Ready January 1st.

These are hardy outdoor-grown plants that will stand very cold weather. The seed is planted in October and November, in a section in the South especially suited for this purpose. We are growing several million of plants this year, and will be able to supply all orders.

The use of open air, practically frost-proof, cabbage plants often enables the truck gardener to put full-grown heads of cabbage on the market two to three weeks ahead of the ordinary home-grown plants, and, of course, he gets the top price for his crop.

The Frost-Proof Plants do not look a bright green color, like the tender hotbed seedlings, as naturally their outdoor winter growth, standing through frost, light freezes, discolors them and gives them a stunted appearance. Set them out, and their excellent growth, as soon as the weather warms up, will prove their worth.

These plants are from the very best grown seed, and will be sent both from Memphis and from our growers at purchaser's option at prices below.

Will have the following varieties:

Early Jersey Wakefield

Charleston or Large Wakefield

Early Flat Dutch and Succession

Prices, by parcel post, 100 for 50c; 500 for \$2.00; 1000 for \$3.00.

No orders filled for less than 100 plants of a variety.

By express, not prepaid, 500 for \$1.75; 1000 for \$2.75.

Herb Seeds

Sow seeds in shallow drill a foot apart, and when up thin out and transplant to a few inches apart

Packet, Parcel Post Paid

Basil Sweet—For flavoring soups.....\$.10

Dill, Mammoth—Used for flavoring pickle..... .10

Lavender—For oil and distilled water..... .10

Marjoram, Sweet—Used in seasoning meats..... .10

Rosemary—Aromatic leaves are used for seasoning..... .10

Savory, Summer—Used as a culinary herb..... .10

Sage, Broad leaved—A popular flavoring plant..... .10

Thyme—Much used for seasoning..... .10

HORSE RADISH ROOTS—Horse radish is used in most every household during the fall and winter months when the fresh product is ready. As soon as the ground can be worked in the spring set the roots in rows 6 inches apart, and about 6 inches apart in the rows, very little cultivation is needed. Late in the fall pull as many roots as will be required for your winter use, cut off tops, store them in a barrel and fill in with sand, place them in a cool cellar, grate as wanted. A bed once planted lasts for years. Price, parcel post paid, doz. 40c; 50 for \$1.00; 100 for \$1.75. By express, not prepaid, 50 for 90c; 100 for \$1.65.

DELIVERIES OF ALL PLANTS WILL BE MADE SUBJECT TO CROP FAILURES AND OTHER CAUSES BEYOND OUR CONTROL.

R.B.BUCHANAN **MEMPHIS, TENN.**

BUCK BRAND SEEDS AND FEEDS

Beet Plants

Ready March 10th to May 1st.

Eclipse Early Detroit Crosby Egyptian

Prices, Hotbed Stock, 50 for 35c; 100 for 60c, parcel post paid. By express, not prepaid, 100 for 40c; 500 for \$1.75; 1000 for \$3.00.

Cauliflower Plants

Ready March 10th, and up to May 1st.

Early Snowball Dry Weather

Prices, Strong Hotbed Stock, doz. 40c; 50 for \$1.00; 100 for \$1.50, parcel post paid. By express, not prepaid, 50 for 75c; 100 for \$1.00.

Celery Plants

Ready April 15th, and up to June 1st.

Hend. White Plume Golden Self-Blanching

Prices, Hotbed Stock, doz. 25c; 50 for 50c; 100 for 75c; 500 for \$2.00; 1000 for \$3.50, parcel post paid. By express, not prepaid, 50 for 35c; 100 for 60c; 500 for \$2.00; 1000 for \$3.25.

Hotbed Cabbage Plants

These are grown in hotbeds and are, of course, a bright green looking plant, but they should not be planted out until the 10th or 15th of March.

Early Flat Dutch Early Jersey Wakefield
Large Late Drumhead Early Summer
Succession Charleston Wakefield

Prices, 100 for 40c; 500 for \$2.00; 1000 for \$3.00, parcel post paid. By express, not prepaid, 500 for \$1.75; 1000 for \$2.75.

Egg Plants

Ready April 20th, and up to June 1st.

Black Beauty New York Improved Purple

Prices, Hotbed Stock, doz. 35c; 100 for \$1.50, parcel post paid. By express, not prepaid, 100 for \$1.25.

Prices, Transplanted Stock, doz. 75c, parcel post paid. By express, not prepaid, 100 for \$3.50.

Lettuce Plants

Ready March 1st, and up to May 1st.

Big Boston Large White Cabbage Head

Prices, Hotbed Stock, 50 for 25c; 100 for 50c, parcel post paid. By express, not prepaid, 100 for 40c; 1000 for \$3.00.

Pepper Plants

Ready April 20th, and up to June 1st.

Chinese Giant Long Red Crimson Giant

Prices, Hotbed Plants, doz. 35c; 100 for \$1.50, parcel post paid. By express, not prepaid, 100 for \$1.00; 500 for \$4.00.

Prices, Transplanted Stock, doz. 50c, parcel post paid. By express, not prepaid, doz. 60c; 100 for \$4.00.

Rhubarb Roots

The planting of rhubarb roots is usually more satisfactory than to attempt to start from seed. Both time and labor are saved where the former method is followed. Roots such as we furnish should be set into well enriched soil at least five feet apart each way. The stalks should not be pulled the first season. The blossom stalks, however, should always be cut back so as not to exhaust the plant by going to seed. Mailing Size, each 15c; doz. \$1.50, postpaid. Extra Large, each 35c; 3 for \$1.00; doz. \$2.75, by express only.

Hotbed.

Transplanted.

Potted.

Tomato Plants

Ready March 25th, and up to June 1st.

Our own growing; all first-class stock; varieties as follows:

Acme Dwarf Giant Ponderosa
Early Detroit Beauty Stone

Prices, Hotbed Stock, or Seedling Plants, doz. 25c; 100 60c, parcel post paid. By express, not prepaid, 100 for 50c; 1000 for \$5.00.

Prices, Transplanted Stock, doz. 35c; 100 for \$1.50, parcel post paid. By express, not prepaid, 100 for \$1.75; 1000 for \$7.50.

Prices, Potted Plants, doz. \$1.00, parcel post paid. By express, not prepaid, doz. 75c; 100 for \$5.00.

These two pictures are made simply to show you how we pack all Roots, Herbs and Vegetable Plants, that they reach you in good condition. Regardless of how small or how large your order for Roots, Herbs or Vegetable Plants might be we give each order the same careful attention. If your order should be for 1 dozen Horse Radish Roots, 1 Rhubarb Root, 100 Cabbage Plants or 500 Sweet Potato Slips, it would have our careful attention, be wrapped and packed in stout pasteboard box made especially for this purpose.

Picture at right shows how we pack orders of 1000 Cabbage, 1000 Sweet Potato Slips, or a like amount of other plants. We use bushel baskets as shown left-hand cut for packing orders of 2000 or more plants. If your order was for 5000 Sweet Potato Slips we would pack in two baskets; if 10,000, in four baskets, etc.

WE ARE PROBABLY THE LARGEST SHIPPERS OF SWEET POTATO SLIPS IN THE SOUTH—ORDER EARLY.

Page 33

Buchanan's Disease-Free Sweet Potato Slips.

All Potato Plants packed
in 100 to each bundle.

My Slips are grown in Shelby County, Tennessee, and it may be interesting to you to know that Shelby County, Tennessee, produces more Sweet Potato Slips than any county in the world.

My Slips are produced from disease-free mature Sweet Potato Seed, and not from immature Potatoes, or what are usually called "Strings."

The Sweet Potato is subject to many field and storage diseases, and it is possible that you have diseased Potatoes, and the ground in which you have been growing these Potatoes is contaminated with some of these diseases, and as I know the Sweet Potato is fast becoming one of the South's best money crops, I would like to see you as my customer get started with a few Disease-Free Plants.

I use every precaution from the time my Sweet Potato Seed are harvested up to the time the Slips leave our hands going to you to avoid these diseases.

Having handled Sweet Potatoes and Slips for the past 25 years, I feel that I have learned many things about the Sweet Potato and the diseases with which it is subject to, and I want you to raise a fine lot of Potatoes in 1922, and not to raise a large lot of diseased Potatoes which are about 50 per cent worthless at digging time.

Sweet Potato Slips are planted in rows about three feet apart, and the Plants set twelve inches apart in the row. It takes about 7,500 Plants for each acre of ground.

For a home garden 1,000 Slips will make you a nice patch, and I ship many orders of 500 and even 100 Plants to those having small gardens.

About Prices: This catalogue is printed long before my Sweet Potato Seed is even bedded for Slips, and as the season has much to do with prices on

Slips, I only quote prices on 100, 500 and 1,000 lots, and I always take care of the customer ordering small lots, regardless of the out-turn of my beds.

I also have many customers who buy 100,000 to 500,000 Plants a season, and I am in a position to quote on large quantities most any time, but will not hold up my small orders to make a large shipment to one customer, for the small orders are given the same careful attention as large ones.

I have many customers who make up many shipments or orders of 100, 500 and 1,000 lots among their neighbors, and send them to me, getting the advantage of the quantity price. When we receive these orders we tag each order with the owner's name and pack and ship all together, and it is easy to hand each neighbor his Plants when you receive them. I give you an example below:

John Smith,	500	Gold Coin Potato Slips
Bill Jones,	1,000	Nancy Hall Potato Slips
Will Johnson,	2,500	Porto Rica Yam Potato Slips
Sam Johnson,	1,000	White Triumph Potato Slips
	5,000	

The customer who sends in an order like this gets the advantage of the price in 5,000 lots, also the advantage of a lower express rate than if each one ordered his Slips on a separate order.

I am always ready to give you close prices on 5,000, 10,000, 20,000 or larger lots.

Write, wire or phone for prices when ready to buy.

Write the Department of Agriculture, Division of Publications, Washington, D. C., for Farmer's Bulletin No. 1059 on "The Sweet Potato Diseases," and read same carefully. You will learn much about the Sweet Potato and its diseases.

Sweet Potato Slips

We begin shipping Sweet Potato Slips April 10th and ship every day until July 1st; when sending your order state what day you want slips shipped.

PORTO RICA YAMS—We have grown this Sweet Potato for five years and the demand for both Seed and Slips has increased each year; it is fine-grained, juicy, as good for eating as the Nancy Hall, and has the additional quality of being a good winter keeper. Color, golden red, running, late maturing, good keeper and I consider it the best Sweet Potato grown today for home use. Price, parcel post paid, 100 for 50c; 500 for \$1.90; 1000 for \$3.50. By express, not prepaid, 500 for \$1.50; 1000 for \$3.25.

NANCY HALL—This is our most popular Sweet Potato, because of its early maturing and ready sale on all markets, especially the Northern markets, where the Southern Nancy Hall is known as the best eating sweet potato grown. Color, yellow, slightly running, ready to harvest in July, fine for cooking, but does not keep during the winter as well as the Gold Coin or Porto Rica. Price, parcel post paid, 100 for 50c; 500 for \$1.85; 1000 for \$3.25. By express, not prepaid, 500 for \$1.50; 1000 for \$3.00.

Write or phone for prices on larger quantities.

EARLY WHITE TRIUMPH—The earliest maturing sweet potato grown, not considered a good cooking potato for table use but, owing to its earliness and great yield, it is used quite extensively for stock feeding, especially hogs; many hog breeders plant this potato and let their hogs do the harvesting. Color, white; matures in June, running vine, fine winter keeper. Price, parcel post paid, 100 for 50c; 500 for \$1.85; 1000 for \$3.25. By express, 500 for \$1.50; 1000 for \$3.00.

Write or phone for prices on larger quantities.

Porto Rica Yams.

Nancy Hall.

GOLD COIN—A great favorite with market gardeners, because of its beautiful color and good keeping qualities; owing to the fact that it is similar to the Nancy Hall in color, shape and size, it is often sold for same late in the spring when all other varieties have been exhausted. Color, golden yellow, running, ready to harvest in July, and the best winter keeper known. Price, parcel post paid, 100 for 50c; 500 for \$1.85; 1000 for \$3.25. By express, not prepaid, 500 for \$1.50; 1000 for \$3.00.

Bunch Yams.

Early White Triumph.

BUNCH YAMS—The best known of the forked leaf varieties; a great favorite with many who have used this potato for years; does not yield as well as many of the newer varieties but the quality is unsurpassed. Color, deep yellow, late maturing, bunch vines, good keeper and very popular for home gardens. Price, parcel post paid, 100 for 50c; 500 for \$1.85; 1000 for \$3.25. By express, not prepaid, 500 for \$1.75; 1000 for \$3.00.

Write or phone for prices on larger quantities.

Scientists now tell us that the Sweet Potato comes nearer being a balanced ration for human beings than any vegetable grown.

Gold Coin.

Cutting and Stacking Lеспедеза Hay (Japanese Clover) on Farm of Ed Carr near Vanndale, Arkansas.

Lespedeza (Japanese Clover)

This Page was in My 1921 Catalogue and I think enough of it to put in My 1922 Catalogue Without Change

I visited the farm of Ed Carr, October 6th, 1920, found him as shown above stacking Lеспедеза hay, the first crop of Lеспедеза he had ever harvested. To use his own words this piece of land, about six acres, (ordinary white sandy loam upland) he had sown in Red Oats the latter part of February (one bushel, 32 lbs., to the acre) and had sown the Lеспедеза on same, April 10th (1 bushel, 25 lbs., to acre). About June 10th he cut a fine crop of oats which saved him many dollars on his feed bills in laying by his 1920 crop, and October 4th he cut the lespedeza hay, raked it on the 5th and was stacking it on the 6th, and from a close estimate he had made two tons of the best hay that can be made on any kind of land regardless of how rich or poor the land might be and which was selling that same day at a farm only a few miles north of his farm at \$25.00 per ton in the field, as fast as it could be baled.

Just to the left and adjoining this Lеспедеза in the same field and on the same white sandy loam soil was planted cotton as you can see in the picture just behind the men and wagon at the left.

We made a careful estimate of the cotton as we did the Lеспедеза and decided it would take four acres to produce one 500-lb. bale of short cotton. It does not take a smart man to figure which crop was worth the most to Ed Carr. To say nothing of improving his land with the Lеспедеза, but just for comparison, will say that one acre of this ground produces a crop of oats and two tons of Lеспедеза hay the same year which is worth \$25.00 per ton or \$50.00 as against four acres same kind of land producing one bale of short cotton which might be worth between \$30.00 and \$50.00, if you could find someone with the \$30.00 or \$50.00 who wanted the bale of cotton. I will not attempt to compare the cost of seeding, cultivating, harvesting and selling four acres of cotton, for you, a farmer, can do that better than myself.

Just five miles from Ed Carr's farm at Vanndale, I talked with one of my customers who had just harvested 10 acres of Lеспедеза which produced 600 bales, weighing 70 lbs. each, or 42,000 lbs., twenty-one tons, which was worth, at \$20.00 per ton, \$420.00. You will notice in figuring this I am knocking off \$5.00 per ton from what the hay was actually selling for at that time just a few miles north of this place.

Late that same afternoon, I talked with a young farmer at Cherry Valley, Ark., which is a few miles north of Vanndale, who had sown two acres of Lеспедеза as a trial and had cut, baled and sold 151 bales off this two acres, weighing 80 lbs. each, 12,080 lbs., or a fraction more than 6 tons at \$25.00 per ton, which amounts to \$150.00, and he says, "I have the money in the bank."

Riding along the road the next morning, I saw a farmer in the cotton field building a cotton house. He was nailing on the roof while his children were on the ground handing him the boards. I could not help but compare him with the farmer whom I had met the day before who had cut, baled and sold his two acres of Lеспедеза and had the money (\$150.00) in the bank, while this cotton farmer was simply getting a house ready to put his cotton in until he could take it to the gin, pay the ginner and then take the baled cotton to the Supply Merchant to help pay for the hay he bought of the Supply Merchant last spring at about \$50.00 per ton to feed his stock while he made the cotton.

Ten Rules to Remember About Lеспедеза

1. Lеспедеза is the salvation of Southern worn cotton lands.
2. Lеспедеза has never failed to grow on any soil in the Middle or Southern states.
3. Lеспедеза is the one seed that the Creator of All Things sent to us of the Southland to restore our Worn Cotton Lands.
4. Lеспедеза is a clover (Japan Clover) and any Clover improves any land on which it will grow and Lеспедеза will grow on any land in the South, regardless of how poor it might be.
5. Lеспедеза is the only clover that will grow successfully on and materially improve worn and sour hillsides, at the same time furnishing excellent pasture or nutritious hay in abundance.
6. Lеспедеза produces the cheapest crop of good hay that can be grown on Southern land and furnishes the most economical fertilizer.
7. Lеспедеза can be broadcasted in February, March or April on fall-sown wheat or oats, or spring-sown oats. Sown on the poorest, roughest, rockiest hillside or worn-out farm, it will take hold and thrive, and has been known to subdue broom sage.
8. Lеспедеза may be allowed to stand indefinitely after ready to cut without damage to the quality of the crop. While it thrives on any kind of land, it makes larger hay crops on fertile land, often producing two to four tons of hay per acre. Planted on thin or stony hillsides, it not only prevents washing, but soon fills gullies.
9. Lеспедеза will cure quicker after being cut than any clover known, often it is cut one day, raked the second day and baled the third day.
10. Lеспедеза being one of the leading crops of the South, we have made an exhaustive study of its growing and seed conditions and we are fitted to take care of your wants if you want the best, cleanest seed obtainable.

Price, 1 lb. 40c; 1bu. (25 lbs.) \$5.00, Postpaid. Write for prices on quantities.

Buchanan's Sudan Grass Seed

This grass is an Annual belonging to the Sorghum family. The first seed was secured from Khartum, Sudan, in 1909. When planted in rows and cultivated in fairly rich soil it grows to a height of 7 to 9 feet and has stems $\frac{1}{4}$ inch in diameter. Broadcasted it rarely exceeds three to five feet in height and the stems are much finer in diameter. Sudan Grass is not particular about the soil but it does best in fairly rich clay loam; stools abundantly, as many as 100 stalks coming from a single root. In general appearance, Sudan Grass is very much like Johnson Grass, but they are entirely distinct, for Sudan Grass lacks root stocks and, therefore, never becomes troublesome as a weed.

A CATCH CROP

Belonging to the Sorghum family it has a short growing season maturing for hay from about 75 to 80 days. This quality allows for its use as a catch crop. Sudan Grass should not be planted until the soil has become warm in the spring. Planting in cold soil delays germination and dwarfs early growth. It can be sown any time during the summer as long as 70 to 80 days intervene before the date of the first expected frost.

HOW TO PLANT

Sudan Grass can be sown in rows 18 to 42 inches apart and cultivated like corn or it can be drilled in with a grain drill or sown broadcast by hand. Planted in rows 36 to 42 inches apart two to three pounds per acre of good seed is sufficient, in rows 18 to 24 inches apart 4 to 6 pounds and drill or broadcast, 16 to 24 pounds per acre.

Sudan Grass is easy to cut with a mower and cures readily so that the process is much the same as that of the millet or any other hay grass and yields from 2 to 4 tons of cured hay per acre. It is best to cut just after full bloom, so that it will have as much time as possible for the second growth. After cutting it renews its growth promptly and in about 40 to 50 days another cutting is ready. Sudan Grass grows abundantly after the first cutting and the second is very fine stemmed.

Sudan Grass makes a very nutritious and palatable hay which is greatly relished by both cattle and horses. Also can be cut green and used as a soiling crop to good advantage. Sudan Grass matures for hay in about the same length of time as Millet. The quality of hay is much superior to Millet hay and is recommended as a substitute for Millet as a catch crop.

A HEAVY HAY PRODUCER

We are recommending Sudan Grass to our customers as a dependable, safe, profitable forage and hay crop. It possesses wonderful hay-producing qualities, and for home consumption or on the market it is more than equal to the millets and native grass hays. Sudan produces from two to ten tons of hay to the acre. These figures may sound too big to be really true, but they are based on weight crops reported by the Experiment Stations from all over the United States. Compared with the common hays of the Southwest, Sudan possesses a remarkably high acre feeding value.

A SUCCESS AS A PASTURE

Sudan grows right along under heavy grazing, and it is a noticeable fact that stock prefer it to the native grasses. There is no crop that you can sow that will stand as much heavy grazing as Sudan Grass. All kinds of stock, hogs, cattle, horses, sheep, etc., like it. No farmer should fail to plant a pasture crop of Sudan. It will grow right along in dry spells when other grasses curl and stop.

ABOUT PRICES

We contract for our seed direct from the producers whose fields are inspected and certified by Government Inspectors. Be careful about buying Sudan Grass Seed from unknown dealers. Remember, cheap seeds are the most expensive article of merchandise that you can buy. For more information, write Department of Agriculture, Division of Publications, for Bulletin No. 605. We purchase our seed in carload lots, thus getting advantage of the quantity price and cheaper freight rates; so that we are in position to supply you at the lowest possible price of heavy cleaned seed of high germination. Price, 1 lb. 25c; 5 lbs. 75c; 20 lbs. \$2.00, parcel post paid. Write for prices on larger quantities.

MOWING SUDAN GRASS TO BE RAKED FOR HAY ON AN ARKANSAS FARM.

BUCHANAN'S

RECLEANED AND TESTED

CLOVERS AND PASTURE SEEDS

American Grown Alfalfa Seed

About Prices Clovers and Grasses

The prices of Clovers and Grasses are changing constantly, and were we to quote definite prices on large quantities in this catalogue they would probably be incorrect before we received your order. Send us a post card and immediately upon receipt of it we will send you our regular quotation card quoting the lowest prevailing prices, which we will guarantee for a stated period.

Preparation of the Seed Bed

Because of the fact that Alfalfa Seeds are so small, these suggestions apply only when the ground is in the best of condition. This means that the soil must be pulverized and compact. A single plowing and harrowing is not usually enough. The ground will settle so much after this that many of the Seeds will be worked loose from their soil contact. It is impossible to give definite suggestions that will be applicable in all cases. All that we wish to do here is to emphasize the need of getting that ground into the right condition, by whatever means are best suited. It is poor economy to slight the cultivation.

Inoculation

Bacteria used in connection with the sowing of Alfalfa Seed acts as a crop insurance and as a crop stimulator. In many cases Bacteria are not actually necessary to produce some growth, BUT can you afford to run the risk of a total loss? (See page 80.)

Sowing Alfalfa Seed

When Alfalfa is advertised as 99 per cent pure, a lot of people rush for it. It sounds fine. But, stop to ask what the other 1 per cent is. It may be Weed Seeds, and is too important to overlook. On the average there will be 225,000 Alfalfa Seeds to the pound. If there is 1 per cent Weed Seeds, sowing 10 pounds to the acre, will put 22,500 Weed Seeds to every acre of the field. That does not sound so good. Buy your seed where you know that you are not buying Weed Seeds. Weed Seeds are too expensive at any price.

Alfalfa

The Hay and Forage Crop of the Delta, or heavy black lands. The hardiest, most lasting and most valuable of all clovers for hay, forage and fertilizers. Once established, it is the most productive and the finest hay of them all, often yielding five crops in a season and furnishing pasture in winter. Failure to get and maintain stands of Alfalfa may be attributed to several causes that can be overcome, such as careless seed bed preparation; neglect to use inoculation and lime in some form to counteract acid in soil; time of sowing and irregular and late cutting. Alfalfa should never be cut so late that there is not time for another growth before freezing weather, nor should cutting be delayed after the bloom appears, as the crown will die and fail to send out new sprouts.

Alfalfa may be sown successfully in this section in September and October and February 15th to April 15th.

The Production of Alfalfa Seed

For satisfactory hay crops, Alfalfa may be grown in nearly any part of the country. To produce seed of good quality certain conditions are essential, and to explain to our customers how and why it is that we are always able to supply seed of the very finest type, we wish to call your attention to a few of the requirements of seed production, and to the fact that the seed we sell was grown under the most favorable conditions.

For best results, in producing seed of strong vitality, seed that will develop into husky, healthy plants, the ground should be free from acid and rich in all of the minerals, Iron, Sulphur, Potassium, Calcium, Sodium, and the like. Alfalfa is a rank feeder and without an abundance of these the seed is going to lack vigor. There must be sufficient moisture to keep the plant in a good growing condition, but not so much that a rank growth of hay will be produced. Clear, sunny weather is essential while the seed is maturing.

Certain sections of the United States offer a combination of all of these desirable points for the production of high quality Alfalfa Seed. Here the soil is fertile, and rich in lime and the other salts. With but very rare exceptions there is sufficient rainfall to supply the plant with all the moisture that it needs for vitality, but on the other hand the season is almost invariably dry enough during the second crop to prevent a heavy growth. The seed ripens thoroughly.

We should like to quote from a leading Seed Authority of the East as follows:

"From the standpoint of purity and economy, everything is in favor of American grown upland Seed. Alfalfa reaches the highest point of development in certain sections of this country. American upland Alfalfa will recover more quickly after being cut, and will have a larger yield of Hay than Seed produced from any other country, for the reason that these certain sections furnish ideal conditions for the growth of Alfalfa and development of the Seed. It is also possible to get Seed from these sections that are absolutely free of Weed Seed." This is the secret of our success in building up a wonderful trade on our Buck Brand Alfalfa Seed, simply knowing where to get the best Seed obtainable.

AMOUNT TO AN ACRE.—Our general rule is 15 to 20 pounds per acre, but I have customers who sow from 25 to 30 pounds to an acre, they saying that they want the Alfalfa to crowd out the Crab Grass Seed, and not the Crab Grass Seed to crowd out the Alfalfa.

I handle only the purest American grown seed obtainable, regardless of cost. Each lot received is tested for fertility, and the result carefully recorded. I have hundreds of satisfied customers growing Buck Brand Alfalfa—a proof of the quality I claim.

Price—Any amount from 1 lb. to 15 lbs., 23c a pound, postpaid. Write for prices on larger quantities.

DAKOTA No. 12 ALFALFA—I carry a small stock of this seed for such of our customers as demand this variety, but it has not been tried sufficiently in the humid atmosphere of this section to justify my recommending it. It has been recommended by the Mississippi Experiment Station at Stoneville. Sown at rate of 15 to 20 lbs. to acre.

Price—Any amount from 1 lb. to 15 lbs., 27c a pound, postpaid. Write for prices on quantities.

R.B. BUCHANAN**MEMPHIS, TENN.** **BUCK BRAND SEEDS AND FEEDS**

Buchanan's Recleaned Clover Seeds

The farmer who includes Clovers in his rotation of crops is the man who is today growing larger crops of all grains, year in and year out, than he who follows any other rotations. It will pay as a hay crop or pasture, to say nothing of the improvement in the soil after growing Clover a year or so; then fields which have once grown a crop of Clover are very readily seeded again. No Clover does well on sour soil. Use lime (see page 78) freely where necessary, but grow Clover in some form, and remember that we now have, in addition to the regular types (the common forms), Alfalfa, the most vigorous and lasting of all Clovers; Melilotus Alba, or Sweet Clover, a big thrifty plant, which will grow on land too poor for any of the other types, and in one or two seasons put the land in condition to grow any of them; and Japan Clover, an annual plant sown in the spring (see below), and thriving on waste land and that which is too poor for other crops. All these are described under separate headings.

RED CLOVER (Medium)—Southern farmers are fast realizing the great value of this crop for pasture, for hay, as a soiling crop and for fertilizing, but many have yet to learn the importance of quality in Clover Seeds. I am selling an increasing quantity each year, and my customers report most satisfactory results. This variety is largely planted in Louisiana, Mississippi, Tennessee and other Southern States, being admirably adapted to the hill parts of the South, especially the valley lands of North Georgia, Alabama, Mississippi and States farther north. It makes two or more cuttings of hay each season, and is fine for pasturage in a combination with other clovers and grasses. Sow seed during the fall and spring, at the rate of 12 to 15 pounds to the acre. A bushel weighs 60 pounds. Price—5 lbs. \$1.60; 10 lbs. \$2.90; 15 lbs. \$4.25, postpaid. Farmers' Free Bulletin No. 455, Red Clover.

RED CLOVER (Mammoth or Sapling)—It greatly resembles the Medium Red, but grows coarser and more vigorous. It is the best Clover for pasturage, as it will produce an enormous yield and is of the highest feeding quality, but not as desirable for Hay. Specially desirable for hog pasture. You can enrich your soil more cheaply by sowing Mammoth Clover and plowing it under than any other way. Price—5 lbs. \$1.75; 10 lbs. \$3.10; 15 lbs. \$4.75. Write for prices on quantities.

ALSIKE or SWEDISH CLOVER—This is one of the hardest varieties known. It is perennial and does not winter-kill. It will do better on moist land than any other variety of Clover, and is suitable for either hay or pasture. When sown with other grasses, it forms a thick undergrowth and greatly increases the yield. It is frequently sown both with Medium Red Clover and with Timothy, and the quality of hay thus produced is excellent. It is fine-stemmed and leafy and thus is quickly cured. Sown alone for forage, 12 lbs. per acre; in mixture, Alsike 4 lbs., Red Top 6 lbs., Timothy 5 lbs. Price—5 lbs. \$1.60; 10 lbs. \$2.90; 15 lbs. \$4.25, postpaid. Write for prices on quantities.

WHITE or DUTCH CLOVER—Largely used for sowing on lawns mixed with Kentucky Blue Grass and other grass seeds, and is very valuable because it supplies nitrogen to the soil and increases the fertility and makes the plant root more available for the use of the grasses. It is of value to the summer pastures and should be used in all grass seed mixtures sown for either lawn or pasture. Price—1 lb. 60c; 3 lbs. \$1.70; 5 lbs. \$2.60, postpaid. Write for prices on quantities.

SWEET CLOVER (Melilotus Alba)—A variety of Clover which, while young, resembles alfalfa, but on mature development grows from 4 to 6 feet in height. It is extremely vigorous and especially adapted to waste lands, though by many prominent farmers and stock raisers is used on good land for a crop forage. It is very vigorous in growth, standing frost and drouth remarkably well, the tap root penetrating the soil very deeply, and occasionally used as a drainage plant for wet soils. It will grow on almost any barren hillside, in bottoms, and is equally adapted to all good farming lands. Sweet Clover is one of the most valuable crops for bees, being the main honey plant in many sections. We handle only the White Blossom variety, which we consider the best. Can be sown either in spring or fall, preparing and sowing as you

would for Red Clover. Owing to the difficulty of getting clean seed free of Johnson Grass and Weed Seed, we have discontinued handling this seed in the chaff, and handle only the clean seed or hulled seed. Sow 12 to 15 lbs. to the acre. Price—5 lbs. \$1.00; 10 lbs. \$1.60; 15 lbs. \$2.00. Write for prices on quantities. Farmers' Free Bulletin No. 797, Sweet Clover; Growing the Crop.

SOUTHERN BURR CLOVER—For the Southern States this is a most valuable soil-improving and winter-grazing crop, growing luxuriantly all through the winter and until summer. After once being seeded, it reseeds itself and improves in growth and appearance each succeeding year. It is admirably adapted for use with Bermuda Grass, and the combination of the two makes a splendid all-the-year-round pasturage. It is also well adapted for use in regular pasturages, and will give a considerable increase in the quantity of pasturage just at a time when it is most appreciated. The plant matures its seed early in the spring, and produces seed abundantly after the first year, and no reseeding is necessary, unless the clover has been pastured so closely as to prevent it from maturing seed. When sown on Bermuda Grass sod the sod must be scarified to give the Clover a chance to get its roots in the soil below the layer of Bermuda roots. This scarifying is also beneficial to the Bermuda Grass. Burr Clover produces its seeds in slender, prickly pods, which come spirally wound up into a ball or boll.

Treatment of Seed for Planting—So many people have trouble in securing a stand. You can have a success by the following method, which has been tried out by experiment stations all over the country and by ourselves: Have two pails of water, or tubs of water, one cold or cool water, the other hot or scalding water. First, dip or soak your seed in the cold water for one hour or more; then transfer to the hot water, allowing it to remain only one minute; then put back into the cold water and let it remain about 20 minutes. This restores the inoculation which is taken out of the burr when first put into the cold water. After this spread in the shade, allowing it to dry so that you can sow it. Price—1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid. Write for prices on quantities. Farmers' Free Bulletin No. 693, Burr Clover.

CRIMSON CLOVER succeeds on most any grade of soil. Sown at the rate of 15 lbs. per acre, any time after August 15 and up to Nov. 1, or can be sown between cotton or corn during August, using 6 to 10 lbs. to the acre. Crimson Clover furnishes good hay and adds fertility to the soil. For best results, inoculate seed with Mulford Culture. Price—5 lbs. \$1.25; 10 lbs. \$2.25; 15 lbs. \$2.75, postpaid. Write for prices on quantities. Farmers' Free Bulletin No. 550, Crimson Clover; Growing the Crop.

JAPAN CLOVER (Lespedeza Striata)—To obtain a good stand, disc-harrow your land, then scatter the seed on top, roll the field; this will cover them enough. Sow in March or April. Seeds weigh 25 lbs. per bushel. Sow 20 to 25 lbs. per acre. Grows anywhere; is tenacious in any soil; lasts always; well known in the South. It may be classed among the most valuable hay and pasture plants in the Southern States. Price—5 lbs. \$1.50; 10 lbs. \$2.75; 25 lbs. \$5.00, postpaid. Write for prices on quantities. Farmers' Free Bulletin No. 441, Japan Clover, or Lespedeza.

For Alfalfa, Sweet Clover, Common Clover, Soy Beans, Cow Peas, Vetch, Garden Peas, Beans, Sweet Peas and All Legumes

KINDS OF BACTERIA

There are many kinds of legume bacteria, differing from each other in shape, size and general characteristics. There is a separate bacteria for each of the legumes. Alfalfa has its own bacteria. There is separate and distinct germ for the different kinds of beans and peas, as well as a separate germ for each of the clovers, red clover, alsike clover, crimson clover, etc., each having its own germ. Sweet clover, however, has practically the same germ as alfalfa. Mammoth clover, being only a development of red clover, has the same germ as the red. With these exceptions, each legume has a different germ. Each legume, therefore, must have its own kind of bacteria, and without nodules the plant can take no nitrogen from the air.

HOW TO INOCULATE THE SEED

Each bottle of bacteria, as it reaches the customer, is only partially filled with bacteria. When ready to inoculate the seed, remove the rubber cork, fill the bottle about two-thirds full of water and stir and shake thoroughly. Spread the seed on a clean floor. Pour the diluted bacteria out of the bottle into a pan, adding enough more water to nicely moisten all the seed. This will require at least a pint for each bushel of seed. Sprinkle the seed either by hand or with a sprinkling can stirring the seed well with the hands so that each seed is moistened. Dry in a cool, airy place, but keep them out of the sunshine while drying.

SOWING THE TREATED SEED

Inoculated seed should be sown soon after they are sufficiently dry to handle. If slightly moist all the better. It is a good plan to treat the seed in the evening and sow early the next morning. If placed in a dark place, however, they can be kept for many days, but they should be slightly moistened again, with water, just before sowing.

BUCHANAN'S HAND SELECTED NONSENSE

I have never read anything like these two pages in a Seed Catalogue, and do not believe you have; but if you get as much pleasure out of reading them as I have gotten out of working them up, we are both satisfied, and if you like them, write and say so.

GOVERNOR'S GOVERNOR

When the late Senator Taylor, of Tennessee, was governor of that state he was interrupted just as he sat down to luncheon at home one day by a message from the capitol to the effect that two men from an outside town wanted to see the governor at once.

The governor said to Sam, his negro butler, who brought in the message: "Sam, tell them I'll be right down."

"Yes, sir," said Sam. "Sam," broke in Mrs. Taylor, "you tell them the governor will be down in half an hour—after he has finished his luncheon."

"Sam," said the governor, "say I'll be right down."

"In half an hour, Sam," said Mrs. Taylor.

"Sam," said the governor, "do you know who is the governor of Tennessee?"

"Yes, sir," replied Sam; "I'll tell 'em you'll be down in half an hour."

SUPERFLUOUS

"I understand," he said, "that they have a curfew law out here now."

"No," answered his informant. "They did have one, but they gave it up."

"What was the trouble?"

"Well, the bell rang at nine o'clock and almost everyone in the neighborhood complained that it woke him up."

AN EPITAPH

Here lies in pieces
Alonzo M. Chowder,
Who dug his potatoes
With blasting powder.

I KNOW

I used to think I knew I knew,
But now, I must confess,
The more I know I know I know,
I know I know the less.

REASON ENOUGH

"Why does the giraffe have such a long neck?" asked the teacher.
"Because its head is so far away from its body," hopefully answered the boy.

ALAS, TOO LATE!

Beggar—Please, sir, I've a sick wife—could you help me out?

Passer-by—I can give you a job next week.

Beggar—Too late! She'll be able to go to work herself by then.

NO ALTERNATIVE

May, I object to that young man kissing you in the hall every night."

"Well, father, there's no other place. You and mother insist on sitting up in the living room."

SOME PREACHER

An Indian named Big Smoke, who was employed as a missionary in Oklahoma, was asked by a tourist what he did for a living.

"Umph," said Big Smoke, "me preachin'."

"What do you get for preaching?"

"Ten dollars a year."

"Well," commented the white man, "that's damned poor pay."

"Umph," replied Big Smoke, "me damned poor preacher."

A small boy had eaten an excessive amount of dinner, and his mother said, "Jack, if you eat another bite you will burst."

"All right, ma," Jack replied quickly; "pass the pudding and get out of the way."

HE WAS GAME

Visitor—So you've had three dogs, eleven cows and two horses killed by automobiles so far this year. Why don't you put in a complaint?

Farmer—Never. I'm willing to take my medicine. I was one of the boys that kept hollering for good roads.

Senator Money, of Mississippi, asked an old colored man what breed of chickens he considered best, and he replied; "All kinds has merits. De white ones is de easiest to find, but de black ones' de easiest to hide aftah you gits 'em.

NO SHOW

"Judge, Your Honor," cried the prisoner at the bar, "have I got to be tried by a lady jury?"

"Be still!" whispered his attorney.

"I won't be still! Judge, I can't even fool my own wife, let alone twelve strange women. I'm guilty!"

RELATIVE RANK

"And do you think I would prove a satisfactory mate with whom to sail the sea of life?" he asked softly.

"Oh, so-so," the maiden responded coolly. "You'd do pretty well as a mate, I guess, if you clearly understood who was captain."

USUALLY

Teacher—Now, children, it is a curious fact that the bee stings only once. Boy—But, isn't once enough?

Little Boy—Mother, are there any men angels in heaven?"

Mother—Why, certainly, dear.

Little Boy—But, mother, I never saw any pictures of angels with whiskers.

Mother—No, dear, men get in with a close shave."

THOSE CLASSY NEW DISCS

New Hubbe—Do you suppose, darling, that you could make four of these cakes exactly thirty inches in diameter?

Wife—Why, yes; I suppose so.

Newhubbe—Fine. I was going to get some wire wheels for the flivver, but these would be cheaper and more durable.

A man arrested for murder bribed an Irishman on the jury with a hundred dollars to hold out for a verdict of manslaughter. The jury was out a long time, and finally came in with a verdict of manslaughter.

The prisoner rushed up to the Irish juror and said: "I'm obliged to you, my friend. Did you have a hard time?"

"Yes," said the Irishman; "the other eleven wanted to acquit you."

NAILED

Householder—Here, drop that coat and clear out!

Burglar—You be quiet, or I'll wake your wife and give her this letter I found in your pocket.

THE LOCALITY

"Johndear," for that seemed to be his name, began the new voter, addressing her husband, "how can we scratch a candidate intelligently if we do not know where he itches?"

"He always itches for office, wherever that may be," replied the wise and able man.

NO REASON TO WORRY

"But, doctor," the patient protested, "suppose this operation does not succeed?"

"Oh, don't worry about that," the surgeon responded cheerfully; "if it doesn't you won't know it, and what you don't know doesn't hurt you."

THE PARENTAL BLESSING

When Billy asked for Mary's hand, Said pa, "Take her, my son.

My trouble's o'er; I'm feeling grand; But yours have just begun."

THE SYMPTOMS

Doctor—When do you feel the pain worst?

Boy—Just before school time, sir.

HIS NARROW ESCAPE

The back-yard farmer rests from toil,
And naught disturbs his slumbers,
Because the bugs, instead of he,
Dined on his green cucumbers.

SOMETIMES THE CASE

Young Huggins married yesteryear
The fascinating Myrtle.
He thought she'd be his jellyfish;
She proved a snapping turtle.

WELCOME ASSURED

I know I shall be welcomed home
Without perchance or maybe.
George surely will be glad I've come—
I left him with the baby!

A WELL-EARNED NAME

"I never knew," said Farmer Pickens, "Jest why some girls are known as chickens,

Till at our fair I seen, by heck,
A breed they call the Naked Neck."

A SLIGHT MISTAKE

"Ah, when love's dream comes true! What a delight it is to witness the joy of others! Did you ever in your life see anyone look so happy as the bridegroom yonder?"

"Hush! That's not the groom—that's the fellow the bride jilted six months ago."

THE RIGHT KIND

Attorney—Explain to the jury what you understand to be a lawful fence.

Farmer—A lawful fence is bull strong, horse high and pig tight.

JUST ABOUT

"Cheer up, old man. There's no use in worrying."

"I know. It's just about as useless as telling a man not to worry."

WRONG GENDER

There was a city lady visiting some relatives in the country, and as she was walking down the lane she saw some calves.

Thinking to display her knowledge, she remarked, "Oh, what pretty little cowlts."

Bill, the farm boy, came up about that time, heard her remarks and said: "Excuse me, miss, but them's bullets."

PROBABLY OVERDRAWN

The farmer told a funny yarn;
I think it was a lie.
He said he bent his cornstalks down
To let the moon go by.

THE BOSS IS MARRIED

"Who is it?" harked the boss.
"Guess who," cooed a feminine voice over the phone.

"My guessing days are over, miss. I'll call one of the junior clerks."

OFTEN EXPENSIVE

"Politeness costs nothing."
"I dunno. When I'm polite enough to listen to one of these slick book agents he generally lands me."

NOT TO BE MISSED

"Why wouldn't you marry a widower, Madge?"

"Why, my dear Ethel, when I marry I want the fun of taming my man myself."

JUDGING BY HIS HABITS

Visitor—Does Mr. Crawford, a student, live here?

Landlady—Well, Mr. Crawford lives here, but I thought he was a night watchman.

EQUIVALENT

School Nurse—Did you open both windows in your sleeping room last night as I ordered?

Pupil—No, ma'am; not exactly. There is only one window in my room, but I opened it twice.

A STARTLING MESSAGE

A traveling salesman, in a strange town, was given the shock of his life when he received a message from his wife, which read as follows: "Twins arrived tonight; more by mail."

FORTUNATE

"What is the matter, daughter?"
"Tom and I have quarreled and have parted forever!"

"Well, that's good. He'll probably not be here for a couple of evenings, then, and you can get caught up on your sleep a little."

Editor Scanty Creek News:

Dear Sir—My garden is overrun with mint. Please advise me how to get rid of it.

OLD SUBSCRIBER.

Thoroughly sprinkle the mint with moonshine liker, then pull down the bars and turn in a herd of prohibitionists.—Ed.

Buchanan's Grass Seeds, for Pasture and Hay

See top of page 38 about pricer on Clovers and Grasses.

BERMUDA GRASS—Very popular and a great boon in the South for pasture; when once established no amount of drouth or hot weather will kill it out. It succeeds on nearly all soils, furnishing a constant growth of grass during the summer, but becomes brown and bare in the fall and winter. It cannot be recommended too highly for pasture and general culture in the South, and it is also excellent for summer lawns. Its strong, creeping roots will absolutely prevent wash. Sow April or May (6 lbs. to acre). Price, 1 lb. 65c; 5 lbs. \$3.00; 10 lbs. \$5.00, postpaid. Write for prices on quantities. Farmers' Free Bulletin No. 814, Bermuda Grass.

KENTUCKY BLUE GRASS—This famous grass is well known in all sections and, where the land is suitable, is one of the most profitable of all for pasture. It generally grows well on any stiff or loamy soils in central and Northern states, and succeeds fairly well in some sections of the South, where lime is present in the soil, being largely used with Bermuda Grass. Kentucky Blue Grass is at its best in the spring and fall months, but being rather sensitive to heat, does not grow luxuriantly during the summer months. It takes a considerable time to get a good stand of this, as it grows very slowly at the start, but when once established, forms a close, compact turf, making a fine pasture, and is most excellent for lawn. (Bu. 14 lbs.) Sow 30 to 40 lbs. to the acre. Price, 5 lbs. \$3.00; 10 lbs. \$5.15, postpaid. Write for prices on quantities.

ENGLISH BLUE GRASS—A splendid grass for permanent pastures, starting early and also making excellent pastures very late in the season. It makes good hay, growing on almost any soil, thriving best in that which is moist. (Bu. 14 lbs.) Sow 25 to 35 lbs. to the acre. Price, 5 lbs. \$1.50; 10 lbs. \$2.60, postpaid. Write for prices on quantities.

ORCHARD GRASS—A valuable grass for pasture or hay land, and on account of its earliness is very valuable for a permanent pasture. It furnishes the first green grass in the spring and until late in the fall. When closely cropped it grows up very quickly and is ready for grazing again in 10 to 12 days. It will stand drouth and is hardy. It grows in tufts, and is therefore best sown with Red Clovers, Rye Grass, etc. It is well suited for shady places, such as orchards and groves. Grows on all kinds of land, but does best on deep, rich, sandy loam or clay soils. (Bu. 14 lbs.) Sow 21 to 28 lbs. to the acre. Price, 5 lbs. \$1.50; 10 lbs. \$2.60, postpaid. Write for prices on quantities.

PERENNIAL RYE GRASS—Used very largely in Europe for both hay and pasture, and well adapted to this section also, for both. It is a strong grower, starting very early in the spring and can be used to great advantage in mixtures. (Bu. 24 lbs.) Sow 30 to 50 lbs. to the acre. Price, 5 lbs. \$1.00; 10 lbs. \$1.60, postpaid. Write for prices on quantities.

ITALIAN RYE GRASS—A valuable grass for most soils, making a rapid growth used either alone or in mixture with other grasses for hay. If sown alone use 2 to 3 bushels per acre; if with red clover, $\frac{1}{2}$ to 1 bushel per acre. (Bu. 24 lbs.) Sow 30 to 50 lbs. to the acre. Price, 5 lbs. \$1.00; 10 lbs. \$1.60, postpaid. Write for prices on quantities.

RED TOP or HERDS GRASS—Succeeds better on more soils than any other grass, and in all sections of the United States. Grows slowly, but becomes very vigorous later and spreads rapidly into a compact sod. Suitable to stiff soils and in low situations subject to overflow, producing luxuriant growth, attaining a height of 3 to 3½ feet. For the best quality hay it should be cut when in bloom; ripens about the same as Timothy. (Bu. 30 lbs.) Sow 10 to 12 lbs. to the acre. Price, 5 lbs. \$1.50; 10 lbs. \$2.60, postpaid. Write for prices on quantities.

TIMOTHY—Suitable for any rich bottom or upland; makes fine hay. Sow in March or April, also September and October. (Bu. 45 lbs.) Sow 10 to 15 lbs. to the acre. Price, 5 lbs. 75c; 10 lbs. \$1.15, postpaid. Write for prices on quantities.

CANADIAN BLUE GRASS—A flat-stalked meadow grass. Grows a foot or more high. Recommended for horses, cows and sheep. Thrives well on clay. (Bu. 14 lbs.) Sow 30 to 40 lbs. to the acre. Price, 5 lbs. \$2.50; 10 lbs. \$4.15, postpaid. Write for prices on quantities.

TALL MEADOW OAT GRASS—Very desirable for permanent pasture and meadows, because of its early growth, also from the fact that it produces a heavy growth after being mown,

Sudan Grass

and lasts several years. It grows wherever Orchard Grass will. (Bu. 14 lbs.) Sow 28 to 30 lbs. to the acre. Price 5 lbs. \$2.50; 10 lbs. \$4.15, postpaid. Write for prices on quantities.

SUDAN GRASS—Sudan is probably the wild original form of the cultivated Sorghums. It is a tall annual, growing under favorable conditions to a height of 6 to 10 feet, but when broadcasted thickly, it grows only 3 to 5 feet high. The stems are fine, the largest stalks seldom larger than a lead pencil. Where the plants are scattered, they stool abundantly, as many as 100 stalks coming from a single root. In general appearance, Sudan Grass is very much like Johnson Grass, but they are entirely distinct, for Sudan Grass lacks root stocks, and, therefore, never becomes troublesome as a weed. The stems are leafy, erect and seldom lodging. The grass cures easily, making hay of excellent quality, which is readily eaten by all kinds of live stock.

Sowing the Seed—The seed should not be sown until the ground and weather becomes warm, in this section not earlier than the 1st of May. Can be sown either in drills from 18 inches to 2 feet apart at the rate of about 10 pounds per acre, and cultivated, or can be broadcasted or drilled thickly at the rate of 25 to 30 lbs. per acre. See page 37 for more information on Sudan Grass. Price, 5 lbs. 75c; 10 lbs. \$1.15, postpaid. Write for prices on quantities.

Buck Brand Pasture and Grazing Mixtures

For farmers who are intending to put land down permanently to grass, our special Grass and Clover Mixtures are decidedly better than sowing two or three varieties together.

The prices on all feedstuff have been so high during the last few years that all farmers and stockmen see the necessity of making every acre of land pay, and there are thousands upon thousands of acres of land all over the South that are not working, that would pay big if sown down to Permanent Pasture. Every farmer knows the value of pasture for all stock and we have a mixture listed below suitable for any Southern soil, read them over carefully and have a good pasture so the stock will gather their own feed. Our pasture mixtures can be sown any time you have your land well prepared during the months of September, October, November, December, February, March and April.

Prices on Clovers and Grasses are constantly changing—see top of page 38 in regard to prices.

BUCK BRAND SHADY PASTURE No. 1—This mixture is composed of the grasses and clovers which grow best in the shade; as we know every farmer wants some shady spots in his pasture if it is possible to have same, also wants his shady ground to produce, therefore we furnish this mixture composed of the following grasses and clovers: Kentucky Blue Grass, Japan Clover, English Rye Grass, White Clover, Meadow Fescue, Red Top, Orchard Grass, mixed, of fresh, clean, high germinating seeds. Sow 14 lbs. to the acre. Price, 1 lb. 40c; 5 lbs. \$1.75; per bu. of 14 lbs. \$4.00, parcel post paid. Write for prices in larger quantities.

BUCK BRAND UPLAND MIXTURE No. 2—This mixture is what we call our main pasture mixture or mixture for general planting and is composed of clovers and grasses which do well on our Southern uplands, mixed of the highest grade seeds that money can buy: Perennial Rye Grass, Tall Meadow Oat Grass, Orchard Grass, Red Top, Blue Grass, White Clover and Japan Clover. Sow 20 to 25 lbs. to the acre. Price, 1 lb. 40c; 5 lbs. \$1.75; per bu. of 14 lbs. \$4.00, parcel post paid. Write for prices on larger quantities.

BUCK BRAND LOWLAND PASTURE No. 3—Most every farm has some low land which is unfit for cultivation owing to its remaining wet until too late to plant in the spring, and this very land would be made to pay well if sown with our Lowland Pasture Mixture. The formula for this mixture has been tried on many thousands of our Southern farms with excellent results. Mixed of following seeds: Alsike Clover, White Clover, Red Top, Timothy, Orchard Grass, Italian Rye Grass, Blue Grass and Alfalfa Clover. Sow 14 to 20 lbs. to the acre. Price, 1 lb. 40c; 5 lbs. \$1.75; per bu. of 14 lbs. \$4.00, parcel post paid. Write for prices in larger quantities.

BUCK BRAND PERMANENT MEADOW No. 4—This special mixture for mowing hay is composed principally of grasses and clovers which ripen together for the first cutting, but it also contains smaller proportions of other grasses, which will increase considerably the second cutting and also add very much to the pasturage yield in case it is desired to use the field for pasturage afterwards.

Farmers are realizing more each year the value of those idle acres if put to work and also the value of a hay crop, especially when the crop is improving the land. Many acres, considered worthless and grown up in weeds, have been brought back to a high state of fertility by running a few years in a meadow.

This mixture contains: Red Clover, Alsike Clover, Red Top, Tall Meadow Oat Grass, Perennial Rye Grass, Orchard Grass, Timothy and Japan Clover. Sow 14 lbs. per acre. 1 lb. 40c; 5 lbs. \$1.75; 14 lbs. \$4.00, postpaid. Write for prices in larger quantities.

BUCK BRAND PERMANENT HOG PASTURE No. 5—This mixture is offered with the confidence that it will give stock raisers entire satisfaction. It has already been thoroughly tested and proved of great value for all kinds of stock. It contains four varieties of clover, beside many kinds of grasses. We do not recommend this to entirely displace our Annual Hog Pasture Mixture, as it will not produce so much in bulk, nor make new growth so quickly after pasturing. It is, however, a substantial mixture which will prove a profitable investment to any farmer and, we are safe in saying, cannot be equaled anywhere. Not only is it suitable for hogs, but sheep, cows and horses relish this rich pasturage. You cannot afford to be without it. Composed of the following grasses: Hulled Bur Clover, White Sweet Clover, Orchard Grass, Rye Grass, Blue Grass and Red Top. Sow from 20 to 25 lbs. of seed an acre. Price, 1 lb. 40c; 5 lbs. \$1.75; per bu. 14 lbs. \$4.00, parcel post paid. Write for prices in larger quantities.

BUCHANAN'S

SOUTHERN GROWN AND TESTED

CORN AND COTTON SEEDS

Buchanan's Selected Seed Corn

I devote four pages listing twenty-four varieties of Seed Corn. On page 45 I have listed Buchanan's Prolific for the first time, and only have a limited amount of this seed to offer this year. Read what I have to say on that page regarding this Corn.

BUCHANAN'S WHITE GIANT, White Cob (120 days)—This corn has more notes of distinction than any other variety. Has a very large ear usually measuring 9 to 12 ins. long. The grains are very large, being deep, wide and thick, and are pure white. For meal it is almost unbeatable. In appearance and growth it is identical with our Giant Red Cob, the only difference being the color of the cob, which is white. It is a splendid yielder, producing under ordinary conditions 70 to 80 bushels to the acre. Matures in 100 to 120 days, depending on the weather. Stalks are 9 to 12 feet high, broad, strong and short jointed. A variety of great individuality and immense productiveness. Our stocks will please; they will produce big yields. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck, \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

HUFFMAN'S WHITE (120 days)—It has deep grains, comparatively small cob, and makes a good growth of both stalk and fodder. Our stock of this has been grown by Mr. T. L. Huffman of Normandy, Tenn., the originator of this variety, for the past ten years, and selections and improvements made each successive year. We recommend this as a most satisfactory and large yielding white field corn, especially for river low lands. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

BOONE COUNTY WHITE (120 days)—A large eared late maturing variety. An excellent variety where the season is not too short for maturity. Is especially adapted to Southern States and yet is grown quite extensively in the East for fodder purposes. Requires from 100 to 120 days to mature, making it one of the latest; therefore largest varieties of white corn grown. In our opinion one of the best white corns for bottom lands and good soil. The ears are of large size, well proportioned, well rounded at butt and tip. The up-to-date type has a deep narrow grain giving the largest possible amount of corn to the cob. This variety yielded well even in the past dry season and we cannot recommend it too highly. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck, \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu., \$3.00.

ST. CHARLES WHITE, RED COB (100 days)—A large, medium late, tall-growing variety, producing an abundance of fodder. The ears are very large, both in length and circumference. The grains are long, broad, deep and firmly set in a medium large red cob. Price, $\frac{1}{2}$ gal. 40c; 1 gal. 60c; 1 peck 90c, postpaid. Not prepaid, 1 peck 75c; 1 bu. \$2.00.

TENNESSEE WHITE, RED COB (120 days)—An extra large field corn; grains long, broad and evenly lined on large red cob. The ears of this sort will run from 9 to 12 inches long and have from 18 to 20 rows. It is rather late maturing sort, but for bottom land and main crop this corn cannot be excelled. This is not only one of the largest grain, greatest yielding and one of the highest feeding and best milling corns grown in the South, but owing to the fact that the stalks grow from 8 to 12 feet high, are broad, strong and short jointed, it makes one of our best ensilage corns. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$2.75.

IOWA SILVER MINE (90 days)—The stalks grow to a height of 7 or 8 feet, and set the ears about $3\frac{1}{2}$ to 4 feet from the ground. The ears measure from 10 to 12 inches in length. They are very uniform in size and shape, 16 to 20 straight rows of deep, pure white kernels, on a small cob. It is the heaviest yielder we know, having yielded over 100 bushels to the acre. Seventy pounds of ears will make 62 pounds of corn. It is entirely distinct and will give satisfaction. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 80c; 1 bu. \$2.00.

NEW MADRID WHITE, RED COB (100 days)—One of the best all-round white sorts for rich land, producing a large crop of the finest quality of corn. The ears average about 10 inches in length, of uniform size, and great depth of grain. The ears are well filled and solid. This corn is a large yielder. This corn derives its name from the fact that it has proven the best main crop corn for that excellent corn growing country in New Madrid County, Missouri. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 75c; 1 bu. \$2.00.

BUCHANAN'S PAYMASTER (100 days)—A small ear red cob corn, which has proven so satisfactory on our Southern uplands, it is a similar type to our Tennessee Red Cob white, in fact it was originated in Tennessee, grows two good-sized ears to the stalk and has a very small cob, it will produce more corn on medium land than any of the large one-ear varieties. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

Buchanan's Paymaster

Buchanan's Selected Seed Corn—Continued

TENNESSEE CHAMPION WHITE DENT (90 days)—It is the earliest large-eared white field corn known. It is an early White Dent, coming in almost as early as the Adams Early, but much larger; sample ears have been shown us 14 inches in length and 3½ inches in diameter. For stock feeding it is very valuable; coming in as it does when all fodder is short, it fills a breach which all stock feeders can appreciate. Again, it is a corn that has made itself before the hot, dry weather and when other field varieties must make their growth. Champion Early White Dent is a safe crop to plant anywhere. It adapts itself to soils of any degree of fertility. On rich lands, Champion will make enormous yields, and on thin land it adapts itself to hard conditions, and comes nearer to making a crop than any other white corn you can plant. Price, ½ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu., \$3.00.

CHAMPION WHITE PEARL (100 days)—The stalk is short and thick. The ears grow long on the stalk, from 7 to 12 inches in length, almost parallel throughout, of medium size, averaging 16 rows of grains. The grains are pure white, very deep, compact, and heavy. The cob is small. By a test 70 ears weighed 87½ lbs., of which the cobs alone weighed only 7 lbs. It makes superior quality of corn meal. Price, ½ gal. 50c; 1 gal., 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu., \$2.75.

White Prolific Corn

MOSBY'S PROLIFIC (120 days)—The most prolific corn in existence; the stalks are tall, bearing 3 to 5 fine ears. The grains are long, set close to a small white cob, very uniform in shape, well filled. It has good roots and will withstand storms better than any other prolific sort. Another important feature of this fine corn is its abundant foliage, which renders it superior to most sorts for ensilage purposes. This is a Southern corn, and is recommended for general crop. It is purely white, small cob, deep full grain, neither too hard nor too soft, and stands crowding in the drill as close again as any other kind. Ears of medium size. Price, ½ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

NORTH CAROLINA (120 days)—Our grower of this variety of corn lives in Shelby County, Tennessee, has grown no other corn for years. He has bred this corn to a medium stalk, producing 4 to 6 ears. This corn will stand in the field after maturing through rain, storms, and snow, and deteriorates less than any variety of corn grown today. While this variety has always been considered one of the best upland corns, I have many Delta planters who plant North Carolina year after year on bottom land, and tell me that they can leave it in the field until after Christmas and gather corn, every ear being sound. A beautiful white prolific corn, well adapted to both field and table purposes, just flinty enough for milling. Price, ½ gal. 50c; 1 gal. 75c; 1 pk. \$1.00, postpaid. Not prepaid, 1 pk. \$1.00; 1 bu. \$3.00.

BUCHANAN'S PROLIFIC—A White Prolific Corn of medium height stalk, bred to produce two good ears; will often produce three or four if planted on heavy land. I am not making any unusual claims for this Corn, but I believe I have produced the best main crop Corn that can be planted in the South, and am only offering a limited amount of this seed this year, and want to distribute it among my customers in small quantities, of one gallon or less to the customer, that they may give it a fair test and report to me their results, and I will ask each of you who purchase this Seed Corn to write me about Oct. 1, 1922, giving the following information: Kind of land planted, amount and kind of fertilizer used, if any time taken to mature, kind of season and amount produced to the acre. Price, 1 qt. 35c; ½ gal. 60c; 1 gal. 90c postpaid.

COCKE'S PROLIFIC (110 days)—A famous Virginia variety with a record of 80 bushels per acre. A sure cropper, especially for uplands. Ears always fill out to tip of cob, no matter how unfavorable the season. Ears of average size for a prolific corn, grain and cob white and the hard, flinty grains make fine meal and are resistant to weevils. Average 3 to 4 ears per stalk. Price, ½ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

HICKORY KING (110 days)—This is an entirely distinct variety among the white corns, combining the largest grain with the smallest cob. A single grain will completely cover the cob of an ear broken in half. It is a greater yielder, giving more shelled corn to the acre bulk of ears than any other variety. It is satisfied with any kind of soil, and will produce good strong stalks, bearing two and occasionally three, good ears. A good drouth resister. We recommend it very highly. It yields good crops on light soils and is one of the most productive and profitable white varieties for planting in the South. Ears fill out well and will make more shelled corn to bulk of ears than any other variety. It is good for roasting ears to follow Early White Dent; makes splendid quality of corn meal, and is just the right sort for stock feeding, being almost all corn and very little cob. Price, ½ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

Read Page 78 For Information on Fertilizers For All Crops

Write Department of Agriculture, Bureau of Publications, Washington, D. C., for Farmers' Free Bulletins mentioned through this catalogue.

BUCHANAN'S TENNESSEE YELLOW DENT CORN, SEE PAGE 46

Mosby's Prolific

Buchanan's Prolific

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Yellow Varieties of Corn

TENNESSEE YELLOW DENT (90 days)—My most popular variety of Field Corn, produces a medium stalk with two good ears of uniform size and shape, 8 to 10 inches long, with 14 to 18 straight rows of yellow kernels on a medium-sized red cob, and ears are well filled out over tip. Tennessee Yellow Dent is often called drouth resister, as it will produce more corn on our thin uplands during a drouth year than any known corn, owing to its earliness in maturing, it is planted by the man who is short of feed, and comes in just in time to finish his crop, when his own feed is so near exhausted and all feedstuff is usually at the highest market prices. I do not consider it a good main crop corn for bottom lands as it will not stand bad weather as well as the white prolific varieties. I sell more of this variety of corn each year than any two varieties combined. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

MAMMOTH TENNESSEE YELLOW DENT (110 days)—A larger and longer ear than the above and it takes twenty days more to mature, otherwise very similar, this corn is grown in the second bottom farm on the Tennessee and Cumberland Rivers in this State, and a great favorite with the Ohio River planters. The ears are of perfect shape, with from 10 to 14

straight rows of bright golden yellow grains, remarkable in size and filled out completely to the extreme end of the cob. The richness of color and fine quality of grain make it vastly superior for grinding into meal. The grains are not of a hard, flinty nature, neither are they so soft as to be greatly shriveled. The ears are easily shelled, although the kernels are firm on the ear and in every respect as perfect a type as could possibly be had. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

IOWA GOLD MINE (90 days)—An early yellow sort, having good size ears. It originated in the West where it is very popular, and east of the Mississippi has found high favor among most growers. Grains are golden yellow, very deep, set on small cobs and an ideal sort for bottom lands or where there is trouble with curing because it dries out easily and quickly without molding. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 75c; 1 bu. \$2.50.

REID'S YELLOW DENT (110 days)—We offer the pure type of this leading standard variety, which stands among the best all-round purpose Yellow Dent Corns grown. Color deep yellow, with lighter cap. Grains very deep, closely packed; butts and tips almost entirely covered over. Slightly rough, with grains dented on top. Leaves and stalks of Reid's Yellow Dent make the finest ensilage and fodder. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

YELLOW LEAMING (90 days)—This is one of the earliest Yellow Dent Corns in cultivation, ripening in 90 to 100 days from planting, surpassing the yellow Canada and flint varieties in earliness, productiveness, and quality. The ears are large and handsome, with deep, large grains, orange yellow color and red cob. Stalks medium sized, tapering gradually, producing two good ears, each of which husks and shells easily. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 85c; 1 bu. \$2.75.

CUBAN YELLOW FLINT (100 days)—This variety is absolutely weevil and bird proof. The husk covers the ear so completely and tightly that it is practically impossible for any bird or weevil to get to the corn in the field. It is the hardest grained and makes the most solid ear of any corn we believe is in existence. It is a wonder for resisting drouth and will stand more wet weather than any corn we have planted. This corn contains only 12% moisture at husking time, and is so dry when picked that it is ready for immediate export, to any European market, even Liverpool buyers preferring it to all other kinds, because it will not heat in transit and will always arrive in good condition. This corn produces two to three ears to the stalk. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.25, postpaid. Not prepaid, 1 peck \$1.00; 1 bu. \$3.50.

The prices on Field Seeds are constantly changing. The prices quoted here are based on market prices when this catalog went to press. I will at all times give my customers the benefit of any decline in the market price.

Tennessee Yellow Dent

Hickory King

R.B.BUCHANAN **MEMPHIS, TENN.**

BUCK BRAND SEEDS AND FEEDS

Ensilage and Fodder Corn

TENNESSEE GIANT RED (120 days)—Superior for feeding and silage. Acknowledged by everyone, who has grown this grand corn, to be the largest grain, heaviest ears and the grandest yielding corn in the world if grown on rich, heavy land. For feeding stock it has no superior, having a higher feeding value than any other variety. It is a very large corn, of unusual size and length. On good land, ears will run from 11 to 13 inches with occasional specimens 14 inches long. Grain $\frac{5}{8}$ -inch long and very wide and thick. Fourteen to sixteen rows. This corn is a winner for our rich Delta lands, from which section we have received glowing reports of its success. Price, $\frac{1}{2}$ gal. 60c; 1 gal. 85c; 1 peck \$1.25, postpaid. Not prepaid, 1 peck \$1.00; 1 bu. \$3.50.

EUREKA ENSILAGE CORN—The Eureka Corn is very popular and desirable both for ensilage and for field crop purposes. It grows very tall and leafy, and is very productive; grows from 12 to 18 feet high. It is short-grained, but one of the most productive, both in growth of fodder and grain, of any of the standard varieties, the ears frequently measuring from 10 to 14 inches long, and has from 2 to 3 ears to the stalk and, on good land, will yield 60 to 135 bushels per acre. This corn, like all two or three-ear kinds, does best on good corn land and is specially desirable for bottom land or even low grounds. For this class of soil this is one of the largest yielding of white corns. Its great value for ensilage is due to its enormous growth and great productiveness of leaves. It originated in Virginia, and is Virginia-raised corn, but is very generally used and sold for ensilage in the North and West, and gives the best and most satisfactory results. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck 90c; 1 bu. \$3.00.

MEXICAN JUNE CORN (80 to 90 days)—This corn, originally from Mexico, has a distinct place to fill in the Cotton Belt, not as a general crop corn, but one to fill in with on late plantings. It is largely used in the Southwest for planting after oats and wheat. We do not advise (if grain is wanted) planting until after June 1st in the Southeast. Between June 15th and July 1st is better. If planted earlier the tendency is to run largely to stalk and making little grain. It is a great drouth resister and usually, if there is enough moisture to sprout the seed, a crop is assured. If wanted mostly for forage or ensilage, plant in April or May. Early planting makes stalks 12 to 15 feet high, leaves 4 to 6 feet long. Ears 8 to 9 inches long, grains short to medium, cobs medium in size and, while blue and red grains often appear, sometimes only one to three to the ear. This apparent mixture of color is peculiar to many varieties of Mexican corn. Mexican June also makes fine roasting ears for use right up to frost. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck, 75c; 1 bu. \$3.00.

BUCHANAN'S WHITE JUNE (80 to 90 days)—Considered by many as a superior variety to the Mexican June originated in Mexico, grains pure white, ears a little larger than North Carolina, grows successfully with only half normal rainfall, and adapted to all soils in the Cotton Belt. The heavy root system makes it resistant to hot, dry weather. It is very prolific, bearing two to three ears to the stalk. We do not, however, advise early planting, but if conditions are such that you want to plant corn after July 1st this variety will give you more corn than any you can plant. Price, $\frac{1}{2}$ gal. 50c; 1 gal. 75c; 1 peck \$1.00, postpaid. Not prepaid, 1 peck, 75c; 1 bu. \$3.00.

The prices on Field Seeds are constantly changing. The prices quoted here are based on market prices when this catalog went to press. I will at all times give my customers the benefit of any decline in the market price.

Buchanan's White June

Mexican June

A Field of Long Staple
Cotton in Arkansas

Plant Cotton in 1922?

Yes, plant Cotton in 1922, in 1923, 1924, and every other year that you farm in the South. Why? Simply because there is no known country that can produce Cotton like the South. Cotton is the only plant that I know that will send down a tap root and get moisture and thrive when it rains the 4th day of May, and does not rain again until August, as it did in 1914. The whole world can raise Corn, Wheat and many other grains, but that same world depends on our Southland for 75% of its Cotton, and the many uses to which Cotton may be put to is increasing each year; as the population of the world increases, so does the number of people increase that consume Cotton, and those things that are made of Cotton.

I think it would be just as foolish for you to plant your entire farm in Cotton as it would be for me to write this entire catalogue about "Cotton Seed," for I think in either case the sheriff would hold an auction at our place of business for the benefit of our creditors before long, just as he has at many farms and many seed stores in the past two years (and I do not think he has finished yet), for I want you to know that there were just as many of us seedsmen that did foolish things during the past two years as there were farmers.

What variety to plant? I do not know—that question is for you to answer for yourself. REMEMBER, I AM ALWAYS READY TO HELP YOU ANSWER ANY QUESTIONS, if you will write me, but the best place to get this information is from YOUR Agent and your State Experimental Farms. Another thing, 1922 is no year for you to experiment. You pay taxes to keep up these Experimental Farms to do the experimenting. Find out what they recommend for your particular kind of land, decide on the variety of Seed you want, and get Pure Seed from a reliable source, and do not send your money away to unknown people for Cotton Seed because they advertise something with a big-sounding name for which they make great claims.

Our Farm Development Bureau, which is under the direction of Prof. E. R. Lloyd and C. W. Watson (two gentlemen who know their business, and in whom I have the most implicit faith) have sent out a letter calling your and my attention (as well as everyone in the Cotton States) to the fact that there is a big supply of Half and Half and other Short Cotton on the market which can hardly be sold at any price, as no one wants it, and you know, as well as I do, that if we want to sell a thing we must have something the other fellow wants.

The Boll Weevil—yes, he is with us, and is going to stay. YOU AND I WILL LEAVE SOME DAY, but the Boll Weevil will be here as long as the South raises Cotton, and you and I know that will be until "Gabriel blows that trumpet," and it would be foolish for us to try to raise Cotton in 1922 without using every effort known in fighting the Boll Weevil, for we will have him, mild winter or severe winter, but we can fight him just as the man who raises fruit fights the many insects which destroy his fruit, the wheat farmer fights the Hessian Fly, the onion grower fights the Onion Maggot, and so, on and on, I could mention hundreds. I know the Southern man is just as good a fighter as any of them when it is necessary, and, believe me, I think it will be necessary in 1922.

I have talked to a great many Planters, Cotton Buyers, Farm Demonstration Agents and Government men who have been studying the Boll Weevil for years, and from information gathered from these sources and my own experiences, we should begin our fight this year by planting PURE SEED and LESS ACRES of COTTON. PLANT EARLY, on the second bottom or hill land, FERTILIZE IT, WORK IT OFTEN and MATURE IT as QUICKLY as we can.

Again I Say Plant Cotton—Also Plenty Foodstuff

R.B.BUCHANAN **MEMPHIS, TENN.**

BUCK BRAND SEEDS AND FEEDS

Long Staple Cotton

EXPRESS 350 (Long Staple)—This variety of Cotton is going to be planted on our heavy or Delta lands more than any other in 1922. I draw this conclusion after gathering information from Experimental Stations, Farm Demonstration Agents, Planters, both large and small, and Cotton Buyers who have made a life study of Cotton. I believe this variety of Seed will be scarce this year. Express 350 is an improvement of the old original Express, and has been much improved as to earliness, being only a few days later than the small boll King types; the boll is larger, and it is much easier picked; percentage of lint has been increased from about 25% to about 32% to 34%, and the staple will pull 1 3/16 to 1 1/4 inches, and fiber is very strong and desirable. Price, 1 bu. (32 lbs.) \$2.50; 100 lbs. \$6.50. Write for prices on quantities.

Long Staple Cotton

HARTSVILLE No. 14—(Long Staple)—Originated in South Carolina about 1902. This type is open growing and rather light foliage; large round bolls that open wide and fluffy, making it much easier to pick than any other strains with more pointed bolls; it will turn out about 33% lint, and under good conditions the staple will run full 1 5/16 inches. Price, 1 bu. (32 lbs.) \$3.00; 100 lbs. \$7.00. Write for prices on quantities.

WEBBER No. 82 (Long Staple)—The origin of Webber Cotton goes back to 1907, when Dr. H. J. Webber (then with the United States Department of Agriculture and for whom this cotton was named) took a few seed from a particularly productive and healthy plant of Columbia Cotton growing in a field of that variety in Columbia, S. C. From these seed were produced twelve plants the next year. The fruitfulness, length and general character of the cotton was so striking that all of the seed of these twelve plants were increased in 1909. Two rows were planted in a variety test of twenty-four varieties, with the result that the Webber made more seed cotton than any other of the forty-six rows. These seed were increased the next year and this field formed the basis of our later breeding work with this variety. Year after year, we have carefully tested this cotton in variety tests against more than a hundred other varieties and strains with the result that Webber has stood at or near the top in yield and has surpassed in money value any cotton we have ever found.

Webber No. 82 is the most productive strain of staple cotton of this variety ever produced. It has very large bolls (60 bolls average to the pound), makes 1 3/8-inch staple under good conditions, has a much smaller seed than the parent type and is earlier, being intermediate in this respect between the original strain of Webber and the 49. The percentage of lint runs between 33 3/4 and 34 1/2. The yield is greater than the yield of the parent Webber by 10% or more. Planters, cotton buyers, farmers and cotton mills are all enthusiastic over this cotton, and it has found ready market this year at high prices. Price, 1 bu. (32 lbs.) \$2.50; 100-lb. bag \$6.00. Write for prices on larger quantities.

King's Improved

WEBBER 49 (Long Staple)—This strain of Webber Cotton has proven very satisfactory in boll weevil states because of its earliness of maturity, combined with its good length and excellent quality of fiber. In the breeding field Webber 49 has made above the average yield of a good quality of 1 1/4 to 1 5/16-in staple, and was nearly all open before the other cotton was half open. It has larger bolls, 65 making a pound of cotton. For several years this cotton has been tested and grown in several sections of boll weevil territory and the universal report is that Webber 49 is the best staple cotton of its length ever produced for boll weevil conditions. Its earliness and rapidity in maturing combine just the qualities that make it valuable under boll weevil conditions. Outside of boll weevil territory (if there is any) its earliness makes it especially profitable in short seasons when an early frost kills the top crop of late cottons. Price, 1 bu. (32 lbs.) \$2.50; 100-lb. bag \$6.00. Write for prices on larger quantities.

Medium Staple Cotton

known by many European spinners as "Texas Middling," and I class it with the 1 1/16 to 1 3/16 cottons grown under normal conditions. The staple of any cotton will vary with seasons and soils. It will turn out 36% lint at the gin. Price, 1 bu. (32 lbs.) \$2.50; 100 lbs. \$6.00. Write for prices on quantities.

ACALA No. 5 (Medium Staple)—This variety originated and gets its name from Acala (Southern) Mexico, and was first introduced into the United States in 1906. The work of acclimating and improving this variety has been carried on in Southern Texas since that time. Acala Cotton has given most satisfactory results in Texas, Mississippi and West Tennessee for several years, and in Oklahoma has proven as a large-bolled cotton earlier than Lone Star or Triumph, producing a

Medium Staple Cotton

LONE STAR (Medium Staple)—This variety originated and gets its name from the Lone Star State (Texas). Many sections of Texas, Oklahoma and Arkansas have proven to their satisfaction that this variety is best for them; many plantations of several thousand acres are planting their entire crops of Lone Star. One of the chief claims for this variety is that it is **Storm Proof**, which avoids much loss by cotton falling out in case of heavy beating rains or severe wind storms. Plant is low growing, spreading branches, allowing sunlight, which is one of the enemies of the boll weevil. Large bolls, averaging about 37 to 50 to the pound. I list this variety under medium staples. It is

Medium Staple Cotton—Continued

similar abundance of lint with a somewhat longer staple. Plant of medium height, with strong erect main stem. Bolls medium size (1 1/2 inches or longer), ovate or ovate-oblong, with a rather short, blunt point; 50 to 60 to the pound. Lint 1 1/16 to 1 3/16 inches, usually 1 1/8 full, with a good drag and extra strong; clear white without creamy lint. Percentage of lint 33 to 35%. Price, 1 bu. (32 lbs.) \$3.00; 100 lbs. \$7.00. Write for prices on quantities.

ROWDEN (Medium Staple)—This is the largest boll of the Big Boll varieties; it is another Texas product, and almost as much planted as Mebane Triumph. It has been very successful when planted on upland sandy soils. A large boll that is easy to pick, yet resists the effects of storms as well as most any variety. It has a lint yield of about 35 to 38 per cent, or a little less than Mebane's, but it has a little better staple, pulling a full 1 1/8 inches on strong soils; almost as early as Mebane's, averages 45 to 50 bolls to the pound. Price, 1 bu. (32 lbs.) \$2.50; 100 lbs. \$6.00. Write for prices on quantities.

MEBANE'S TRIUMPH (Medium Staple)—Originated in Texas several years ago and has been in tremendous demand wherever grown, recommended by the United States Agricultural Department. Lint long and fibrous, seeds medium size, green-white. Thirteen hundred pounds seed cotton make a 500-lb. bale. Has proven both storm and drouth resistant. Fruits to top of stalk and end of limbs, staple from 1 to 1 1/16-inch, and will yield 42 per cent lint at gin. Price, 1 bu. (32 lbs.) \$2.50; 100 lbs. \$6.00.

BUCK BRAND BIG BOLL (Medium Staple)—Every pound of our Seed Cotton is grown each year in North Carolina. A remarkably new cotton in many ways, similar to the Cleveland Big Boll; 55 to 60 bolls per pound. Very prolific. Medium size seed, with a covering of fuzzy, brownish lint. This cotton has been carefully selected and crossed, resulting in one of the best early prolific or big boll varieties. Is shy of foliage and easy to pick. Highly recommended for boll weevil territory. Average yield one and one-half to two bales per acre. Large per cent out middle of September. Boll very large. Staple 1 to 1 1/16-inch and will yield 38 to 40 per cent lint at gin. Price, 1 bu. (32 lbs.) \$2.50; 100 lbs. \$6.00. Write for prices on quantities.

WANNAMAKER CLEVELAND (Medium Staple)—Originated by Wannamaker Sons, in South Carolina, who have given the South a most wonderful cotton. It is undoubtedly the best type of cotton grown for both upland and bottoms when the boll weevil must be considered. Seeds are straight, brownish color, showing freedom from mixture. Bolls are large, plants uniform, foliage medium. The average percentage of lint is 36 to 38 per cent. It is one of the heaviest yielding cottons known. Staple 1 to 1 1/16-inch. Price, 1 bu. (32 lbs.) \$2.00; 100 lbs. \$5.50. Write for prices on quantities.

Short Staple Cotton

Short Staple Cotton

Crop for 32 to 39 cents a pound, and expect the 1919 crop to bring 50 to 52 cents a pound." Staple 1 to 1 1/16-inch, will yield 40 to 45 per cent lint. Price, 1 bu. (32 lbs.) \$2.00; 100-lb. bag, \$5.50. Write for prices on larger quantities.

MONEY MAKER (Short Staple)—Sometimes called Little Green Seed. Seed small to medium, mostly green, some green to white, some brown with a few naked black. An early cotton, the growing type of whose form is small like that of King's Improved, about one week later than King's, short-limbed, medium-sized boll, fruits from ground to top, shy of foliage, deep roots, resists drouth and storms well, and recommended especially for boll weevil states. Well known and universally liked everywhere it has been planted. We have obtained our seed stock for seven years from Mr. Wm. Tait, grown on his Arkansas River bottom farm in Monroe County, Arkansas.

Mr. Tait says; "I will recommend the Money Maker Cotton for both river bottom and clay soils, it is a 90 to 100-day cotton, and I ginned a 525-lb. bale from 1,350 lbs. of seed cotton, and sold my 1918

HALF AND HALF (Short Staple)—We do not know the originator of this cotton, but we do know that it will yield more cotton to the acre of ground than any variety known. This is a very short staple cotton and has been criticised for this reason, yet it continues to be one of the most sought after varieties each year by many farmers, because its big yield makes them more money than the better staple cottons. This cotton gets its name Half and Half from the fact that it turns out 42 to 47 per cent lint at the gin, making nearly half lint and half seed. Staple 7/8-inch. Price, 1 bu. (32 lbs.) \$2.00; 100 lbs. \$5.50. Write for prices on larger quantities.

KING'S IMPROVED (Short Staple)—Small stalk, spreading limbs, medium boll, very early and very prolific, blooms in 60 to 70 days, and ready to pick in 100 days. It is a very hardy plant and has many advantages over the big boll late-maturing varieties; it will produce more pounds to the acre and a larger percentage of lint than any other short staple cotton on the market. This variety was originated about 30 years ago by Mr. T. J. King, of Louisburg, North Carolina, where we get our stock of Planting Seed each year. It has very little foliage and consequently is well adapted to boll weevil conditions, letting in the sunshine, which is the weevil's worst enemy, and causing the cotton to mature early. Staple 1 to 1 1/16-inch, yielding 34 to 40 per cent lint. Price, 1 bu. (32 lbs.) \$2.00; 100-lb. sack, \$5.50. Write for prices on larger quantities.

R.B.BUCHANAN

MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Buchanan's Dependable Lawn Grass Mixtures

I have given the subject of Lawns much thought during the past few years, and after careful study and experiments with all grass seeds, know that I have a mixture listed below which will answer your purpose, regardless of the size space you have to cover.

My Buck Brand Lawn Grass Mixtures are used all over the South by all classes from the owners of small homes to the owners of large estates, also by Golf Clubs, City Parks and Cemeteries. Do not have your lawn sodded before talking or writing us about same, as sodding is not only expensive, but so often you get many wild grass seed with the sod which is expensive to eradicate.

QUANTITY TO SOW FOR LAWNS—You cannot sow too much; the more, the better; it means a quicker, more satisfactory and lasting result. We recommend, on new ground, for average mixtures, to sow as follows: One-half pound on 100 square feet (10x10); three pounds on 600 square feet (20x30); seven pounds on 1,500 square feet (30x50); twenty-five pounds on 7,000 square feet (70x100) one hundred pounds per acre, for best effects. A good rule is to figure 1/3 pound for each one hundred square feet. For renewing old lawns call to see us or write, giving full information regarding the present condition of your lawn.

Hints on Formation of Lawns

See that the ground is well prepared. Dig or plow grounds to the depth of 8 inches. Afterwards harrow or rake carefully, pulverize all lumps, and remove all large stones. If the soil is shallow, procure a supply of fine mold and spread over the surface to a depth of five inches. Soil may be enriched by bone meal or well-rotted manure wherever necessary, then rake level and roll the soil well to make a solid bottom. Scatter the seed evenly over the surface at the rate of 150 pounds to the acre (for Blue Grass), one pound to sixteen feet square. Rake seed in and roll, water regularly and carefully, as the soil is liable to dry out in the heat of the day, and if it does while the seed is germinating it will invariably perish. When the grass is three inches high it should be cut and rolled, and every week or so thereafter until the grass has become firm. Eradicate weeds whenever they appear, without disturbing the grass. Should bare spots appear, rake the surface and sow more seed. The roller should be used frequently during the season, and a dressing of lawn fertilizer once a year is necessary to the maintenance of a good lawn.

FERTILIZING—Nothing will give a lawn the rich, deep green velvety appearance so much admired like a liberal dressing of a good fertilizer. Our fertilizers are specially prepared with that end in view and we can strongly recommend them. They should be used at the rate of one and one-half or two pounds to 100 square feet.

BUCK BRAND PERMANENT LAWN GRASS SEED—This is by far the best mixture of grasses offered for the purpose of quickly producing a permanent lawn. It is prepared from our own formula, and is a careful blending of varieties adapted to producing the thick growth and velvety appearance so much sought after. Each variety of grass in its composition is there for a special purpose; some for making strong fibrous roots, which take hold upon the soil and keep the turf in place, others of a creeping nature quickly fill up any bare spots which may be caused by the taller sorts dying down; varieties which are useful for their color value, and also kinds that are able to withstand the beating down of excessive rains. Price, 1 lb. 60c; 5 lbs. \$2.60; 10 lbs. \$4.75, postpaid. Write for prices on quantities.

BUCK BRAND SHADED LAWN GRASS SEED—Shaded locations have often been found difficult to keep in grass. We have combined a mixture of grasses that will produce a perfect sward in the most densely shaded place. It must be borne in mind that too much shade creates sour soil, and to guard against this, apply crushed limestone (or land plaster where the former is not available). Price, 1 lb. 60c; 5 lbs. \$2.60; 10 lbs. \$4.75, postpaid. Write for prices on quantities.

BUCK BRAND GOLF COURSE MIXTURE—This mixture is composed of short-growing, deep-rooting varieties that resist wear. It retains its color well during the severe droughts. Fairways, to retain their permanency, should receive additional sowings during the season to replace any weak or worn-out spots. Sow about 100 lbs. per acre. Price, 1 lb. 60c; 5 lbs. \$2.60; 10 lbs. \$4.75, postpaid. Write for prices on quantities.

Miscellaneous Farm Seeds

The prices of Field Seeds are changing constantly and were we to quote definite prices on sack lots or more in this catalogue they would probably be incorrect before we receive your order. Send us a post card and immediately upon receipt of it we will send you our regular quotation card quoting the lowest prevailing prices on sack lots or more, which we will guarantee for a stated period.

Barley

BEARDLESS WINTER BARLEY—It makes a quick growing crop of most excellent and nutritious feed, either to use green or to cure as hay. Sow $1\frac{1}{2}$ to 2 bushels per acre, in spring only. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$2.00.

BEARDED WINTER BARLEY—Best for fall sowing, in fact makes the finest winter pasture and should be more generally used. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$2.00.

Farmers' Free Bulletin No. 518, Winter Barley.

Broom Corn

DWARF OKLAHOMA—This variety grows only 3 or 4 feet high, and is much easier handled than the tall growing sorts.

Buckwheat

For a late summer crop Buckwheat is very desirable and profitable, especially in mountainous sections. It is easily grown, makes splendid flower food for bees and a large yield of grain, which can usually be sold for remunerative prices.

SILVER HULL—A prolific and favorite sort, making a fine quality flour. A superior variety in every way to the ordinary Buckwheat, which it has almost entirely superseded. Fifty lbs. to bushel. Sow 50 lbs. to acre. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

Seed Oats

Best Varieties for Southern Planters
32 lbs. to bu. Sow 1 to 2 bu. to acre.

APPLER OATS—Are equally well adapted for sowing both in the spring and fall, but when sown in spring should be sown before the middle of March. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

EARLY BURT OATS (90 Days)—Sow in February, March and April, 15 days earlier than any other spring oats, free from rust, healthy, and makes a remarkably good yield of clean, bright, heavy grain. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

CLAY OATS—Very similar to the Early Burt Oat in every way; for spring planting only. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

TENNESSEE TURF OATS—Often called Winter Turf because they stand the winter better than any other oat that you can sow in the fall. Sow at the rate of 2 bushels per acre. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

The bush is straight, smooth and of good quality. Plant 4 to 5 lbs. to acre. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

Farmers' Free Bulletin No. 768, Dwarf Broom Corn.

Seed Rye

RYE—This seed is sown in the fall only, beginning about September 1st and sowing up to December 15th. We handle the three following varieties: Abruzzi, Rosen and Common Rye, and will give you prices and any information you wish regarding Rye when you are ready to plant.

RUSSIAN SUNFLOWER—Plant in March, April and May, 6 pounds of seed to the acre, making rows $3\frac{1}{2}$ feet apart, dropping 2 seeds every 18 inches; cultivate like corn. 1 lb. 25c; 5 lbs. \$1.00, parcel post paid.

Seed Wheat

WHEAT—It is sown in the South only during the fall months, usually between Oct. 1 and Dec. 15. We always stock the following varieties: Tennessee Bearded, Red May, Blue Stem and Fultz (beardless varieties). As prices are constantly changing, we will ask you to write us when ready to purchase your seed wheat. Sixty lbs. to bushel. Sow 1 bushel to acre.

FULGHUM OATS—This oat has been very popular for six years. It is of the rust proof type, earlier than either Appler or Red Rust Proof, and a heavier yielder. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

TEXAS RED RUST PROOF—I do not hesitate to recommend this variety as being the best of all varieties for spring or fall seeded oats. It is very hardy, seldom winter kills and is especially recommended for fall planting in preference to other varieties by several of our foremost Agricultural Experiment Stations. This variety is very hardy, producing a medium tall, stiff straw and a heavy yield of grain or hay. The stock which we offer is exceptionally heavy, bright, re-cleaned and graded. Price, not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$1.50.

Red Rust Proof Oats

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Buchanan's Recleaned Cane Seed

The prices of Field Seeds are changing constantly and were we to quote definite prices on sack lots or more in this catalogue they would probably be incorrect before we receive your order. Send us a post card and immediately upon receipt of it we will send you our regular quotation card quoting the lowest prevailing prices on sack lots or more, which we will guarantee for a stated period.

Sorghum, or Sugar Cane

Sow broadcast for hay or roughness 1 bushel or 50 pounds per acre; for sorghum or grain, $\frac{1}{2}$ peck per acre, drilled, any time from April to August.

TEXAS SEEDED RIBBON CANE—This cane gets its name from being a variety that closely resembles the true Ribbon Cane raised from cuttings. It makes the finest kind of syrup. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

JAPANESE HONEY SYRUP CANE—The best of the canes for making syrup ever introduced. It is a big yielder and has found favor with everyone who has tried it. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

EARLY ORANGE SORGHUM—Largely used for hay and fodder. It is taller and has heavier stalks than the Early Amber, and is excellent for making syrup. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

EARLY AMBER SORGHUM—The earliest type in cultivation. Stalks tall and slim. Most suitable for hay, as it matures very quickly. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

RED TOP SORGHUM—Grown extensively in Middle Tennessee. Very sweet and one of the best for hay. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

Farmers' Free Bulletin No. 972, How to Use Sorghum Grain.

Kaffir Corn and Milo Maize

The great value of these crops has long been appreciated in the West, and are today grown on the largest scale in the Western States. They make a large growth of forage, and are also particularly valuable on account of their yield of grain, which makes most nutritious feed, both for feeding to all kinds of stock and to poultry.

Sow from April and May, 10 pounds of seed to the acre, in drills, and 1 bushel to the acre broadcast, excepting where stated otherwise.

WHITE KAFFIR CORN—The standard variety to grow both for forage and for making seed to feed to poultry and cattle. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

YELLOW MILO MAIZE—This makes a thick, succulent growth of forage, very nutritious and of splendid milk-producing qualities, and like sorghum, can be cut over two or three times where it is desired to cut for green forage. Also makes excellent ensilage, or can be cured same as other sorghums. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

FETERITA—A non-saccharine cane, a new forage crop for the South. Similar to Kaffir Corn in general habit, but grows a little taller and produces larger heads, standing erect, white seed and early maturity. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

Texas Seeded Ribbon Cane

TEOSINTE—A gigantic fodder plant, somewhat resembling corn, but with larger and broader leaves and sweeter stalks. It stools out enormously, growing a large number of stalks from each seed. It may be cut green all through the summer for cattle and horses, and also makes splendid dry fodder. Sow in May or June, two seeds in a hill, 3 to 4 feet apart each way. Price, 1 lb. 20c; 5 lbs. 85c; 10 lbs. \$1.50, postpaid.

Old-time Sorghum Making on an Arkansas Farm.

Buchanan's Early Velvet Beans

Early Velvet Beans

Plant Velvet Beans in Corn

Makes an Enormous Growth of Foliage; the Greatest Soil-Improving Crop Grown—at the Least Expense.

Every acre of upland or second bottom corn in the Cotton Belt ought to be planted in Velvet Beans at rate of about one peck (15 lbs.) per acre. This plan means more forage than cowpeas will make, plus six to ten bushels of beans, without decreasing the usual yield of corn. We do not advise planting in bottom land corn. The growth on bottom land would be so heavy as to break down the corn.

South of a line drawn east and west through Macon, Ga.; Montgomery, Ala., and Jackson, Miss., plant the beans between the stalks of corn (2 beans to each place) about one month after corn planting. North of that line plant at the same time with the corn. Our experiments have clearly demonstrated to us that in the northern half of the Cotton Belt the beans should be planted in the rows at corn planting time instead of later if best results are to be gotten from the crop.

Extra Early Velvet Bean

Our illustration from a photograph shows clusters of the Early Velvet grown in Mississippi, where the seed matured perfectly in four months. It has the strong growing characteristics of the old variety, a crop of which turned under was estimated to do the land more good than a ton of average guano per acre. Extra Early Velvet is the one best variety for the middle and northern section of the Cotton Belt, gathering nitrogen from the air like cowpeas, making two or three times as much growth and pods and adding a supply of vegetable matter to your soil that will show for years to come in your crop. Plant in rows 4 to 5 feet apart, dropping 2 seeds every 12 to 15 inches. Cultivate once or twice and then let them alone. They will take care of themselves and everything else on the land. Packet 10c; 1 lb. 25c; 2 lbs. 45c, postpaid. Not prepaid, 15 lbs. \$1.00; 60 lbs. \$3.50. Write for prices on quantities.

Osceola Velvet Bean

This is rapidly superseding older varieties. Its great value lies in its combination of extra earliness and its heavy crops of beans for feeding in place of grain. The vines are shorter, with less foliage. Most desirable where less vine growth is wanted. Packet, 10c; 1 lb. 25c; 2 lbs. 45c, postpaid. Not prepaid, 15 lbs. (pk.) \$1.00; 60 lbs. (bu.) \$3.50. Write for prices on quantities.

Write Department of Agriculture, Bureau of Publications, Washington, D. C., for Farmers' Free Bulletins mentioned through this catalogue.

The Soja or Soy Bean

A great drought-resisting forage crop, producing immense quantities of nutritious feed. besides being an Excellent soil improver.

The Cow Pea and Soy Bean are nearly related and have many points in common, but there are certain characteristics which make the Soy Bean distinct. Very few varieties make a vine, but are of upright growth, although if grown on rich soil there is a tendency to lodge. The Soy Bean produces a much larger crop of seed than the Cow Pea, and this crop is easier to harvest. It can be sown rather earlier than the Cow Pea, and if sown at the same time, matures its seed later.

This comparison is not made with any idea of detracting at all from the merits of the Cow Pea, but the plants being similar in some respects, as stated above, we wish to point out some of the marked differences in the two plants.

The plant is generally upright, branched, and grows from 1½ to 4 feet tall, according to variety and weather conditions. The plants are covered with fine hairs, whereas the Cow Pea is smooth and glossy. The pods are small and usually contain many beans. The seed is as valuable as that of the Cow Pea as to size, color and shape, but the Soy Bean ripens practically all its seed at one time. With so variable a plant it is but natural that many varieties are offered.

Amount of Seed Necessary—If sown in rows 2½ feet apart, it requires ½ bushel of seed per acre; and if drilled in or broadcasted, 1½ bushels per acre. Seed can be sown in May, June, or July, but does best if sown rather early, and the seed should be covered lightly, not over a couple of inches.

Soy Beans are a particularly valuable crop to plant for hogs, soil improving and forage, and they can be planted by themselves for either purpose and also in the corn rows, and the hogs turned in to feed on the beans after the corn is harvested. The Soy Beans contain more protein and fattening qualities than corn.

MAMMOTH YELLOW—There are probably 25 different varieties of Soy Beans, but for an all-purpose bean the Mammoth Yellow has proven far superior to any other variety for Southern planting. To grow for a crop of beans, they should be planted in drills 3 feet apart, at the rate of about half a bushel to the acre, and cultivated the same as corn. Price, packet, 10c; 1 lb. 25c; 2 lbs. 40c, postpaid. Not prepaid ¼ bu. \$1.25; 1 bu. \$3.50. Write for prices on quantities.

R.B. BUCHANAN **MEMPHIS, TENN.**

BUCK BRAND SEEDS AND FEEDS

Genuine Dwarf Essex Rape

The Most Valuable of all Quick-Growing Forage Crops. Ready to Pasture Within 50 to 60 Days from Time of Planting.

The seed which we offer is the genuine Dwarf Essex Rape, carefully re-cleaned and graded and grown especially for Seed purposes.

More Dwarf Essex Rape Seed was sown in this and adjoining states last year than ever before. More stock was pastured and marketed and a greater interest manifested in the production of live stock.

The importance of Dwarf Essex Rape as a forage and pasture plant is recognized by hundreds of live stock raisers who depend on it every year, sowing the seeds for a succession of crops from early spring up until late winter. The greatly increased demand for this seed from breeders of hogs, poultry and other live stock indicates in a marked degree the value retained in this plant as a summer, fall and winter forage or green food crop.

One of the Cheapest Forage Crops Produced.

Rape is possibly the cheapest of all forage crops to produce. Requires only eight pounds of seed to the acre and practically the same seed bed preparation as corn. Unlike corn and many other crops, Rape requires no cultivation from the time it is seeded until it is ready to pasture. It is ready to pasture in about sixty days after seeding, one acre affording excellent forage for ten to fifteen hogs or sheep. Rape can be sown alone or in combination with other grain and grass crops. Rape sown in combination with oats makes excellent forage, the oats being drilled in at the rate of one bushel per acre and the rape seed sown broadcast at the rate of five to six pounds per acre. Another good combination and one possibly used more extensively than all others is RAPE SEED, OATS and RED CLOVER. Rape Seed five to six pounds per acre, Oats one bushel and Red Clover eight pounds per acre. Red Clover and Rape sown broadcast and the Oats drilled in. Forage crops such as Rape seed are especially desirable land coverings for the winter months when the soil is subject to washing, the firmly rooted plants adding stability to the soil as well as producing considerable revenue from land that would otherwise stand idle throughout the winter months.

Practically a Year-Round Crop

Rape is practically a year-round crop. With successive planting, Rape forage can be obtained for almost twelve months of the year. Seeding can be done from April to October. Forage will be ready in late spring, growing luxuriantly throughout summer, fall and winter months and up until early spring. Rape can be sown to good advantage at the last plowing of corn, following oats or wheat and other summer crops. Idle acres can be made to produce liberally during the winter months when no other crops are being grown and the crop pastured until spring when the land can be used for other purposes.

Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, parcel post paid. Write for quotations when wanted in larger quantities.

Cow Peas and Field Beans

Cowpeas are especially valuable as a "catch crop" and there are millions upon millions of acres of land in the South that could be and should be planted in cowpeas every summer that lie idle or only work "half time" if we may so term it.

None who read this will dispute the very self-evident fact that a crop of cowpeas grown on land makes succeeding crops better, even if the cowpeas are cut for hay and practically all the crop removed.

Cowpeas can be planted almost any time from last frost

up to August 1st. They make a fine crop to follow oats, wheat or rye, either as a single crop or mixed with sorghum for hay.

In the corn fields at "laying by" time there is nothing better than cowpeas between the rows. They take nothing from the corn, and yet they add the most expensive fertilizing elements, nitrogen, to the soil for succeeding crops.

The cowpea has been aptly termed the "clover of the South," and nowhere in this wide world do good farmers attempt to build up and improve land without clover or some similar legume crop.

The prices on Cow Peas, Field Beans, and Edible Cow Peas are constantly changing, and it is impossible to quote prices on quantities when this catalogue is printed, but in season we will quote prices promptly upon receipt of your inquiry asking for same.

WHIPPOORWILL—A favorite, early, upright-growing variety, more largely used and sold than any other kind. Has brown speckled seed, which are easily gathered. Makes a good growth of vines, which can be easily cut and cured as dry forage. We recommend this where an early variety of good growth and height is desired. Price, qt. 35c; gal. 85c; peck \$1.25, postpaid.

THE CLAY—It is the most popular pea in the South. The plants are vigorous, usually seeding sparingly. Tall, erect, large green leaves. Pods are large and yellowish; seeds kidney shaped, medium size, cream color; medium to late in ripening. Price, qt. 35c; gal. 85c; peck \$1.25, postpaid.

MIXED COW-PEAS—The principal varieties in the Mixed Cow-Peas we offer are the Clay, Black, Wonderful, Whippoorwill and other Southern varieties. A great many Southern farmers prefer to sow Cow-Peas in mixture, as they grow thicker, producing a better crop of vines and forage than sowing single varieties alone. Where the crop is desired for soil-improving it is really an advantage to sow these mixed peas. Price, qt. 35c; gal. 85c; peck \$1.25, postpaid.

NEW ERA—An early maturing variety which has proved very popular and satisfactory. Upright growing, quick to mature, and is remarkably prolific of peas. Rather small vine which cures easily, making splendid dry forage. The seed are smaller in size than the ordinary cow peas, so that it does not require as many to seed an acre—from 3/4 to 1 bushel per acre will give ample seeding. Price, qt. 40c; gal. 90c; peck \$1.40, postpaid.

BLACK—This is the standard variety, and the one most largely grown in this immediate section. It is very prolific, makes a fine growth, both of vine and leaves, and a good yield of peas. It is a splendid land-improver, and most valuable as a forage crop, and makes an enormous yield of rich, nutritious feed. Price, qt. 40c; gal. 90c; peck \$1.50, postpaid.

RED RIPPER—Red-seeded; a most desirable and productive variety. Makes long running vines and a fair yield of peas. One of the medium late varieties. Very popular in sections where it is known. Price, qt. 40c; gal. 90c; peck \$1.50, postpaid.

Field Beans

WHITE KIDNEY—Easily grown. Plant and cultivate same as White Marrow Beans. A good, strong growing variety. It is much used for shelling when the pods turn yellow so the beans are well developed. Price, qt. 50c; gal. \$1.25; peck \$2.25, postpaid.

WHITE NAVY—Largely grown in many sections as a commercial bean. Vines are very prolific, producing a large quantity of shelled beans per acre. Cultivate same as Marrow Beans. Price, qt. 50c; gal. \$1.25; peck \$2.25, postpaid.

MEXICAN PINTO—This is a popular bean in Mexico, and should be grown more largely here. As a table bean it is excellent, both as a dry and green shelled bean. This bean has found great favor wherever tried, especially in Texas. Price, qt. 50c; gal. \$1.25; peck \$2.25, postpaid.

Edible Cow Peas

Makes Profitable Money Crops to Plant for Sale, Either Green or Dry

The varieties named below are not only valuable as forage and soil-improving crops, but the dried peas are readily salable during the winter, at much higher prices than ordinary cow-peas. The dried peas of the varieties named below are largely used all through the South and in other sections of the country as table peas during the winter, and the demand for them is constantly on the increase. To make a money crop, as well as to improve the soil at the same time, these varieties are most valuable and desirable.

CREAM CROWDER—This new pea is not only one of the earliest to mature, but is also one of the most prolific and best flavored table peas in our list. It is also excellent to use for a forage crop and soil improver, as it makes a large growth of vines. Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

RICE, OR CREAM—A favorite Southern variety. One of the earliest to mature, and yields enormously of shelled peas, which are valuable for use as dried peas during the winter. They are superior in flavor to Blackeye Peas, and somewhat similar in appearance to the Gallivant, or Lady Pea, but are larger in size. Both these and the Gallivant Peas are very popular wherever grown, and they are usually readily salable at higher prices than Blackeye Peas. Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

EXTRA EARLY BLACKEYE—These are ten days to two weeks earlier than the Large Blackeye, and a most valuable variety. They do not run as much as the Large Blackeye Pea, but grow more in bush shape and hold the peas up well off the ground, and the pods are very thick-set on the vine. Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

WHITE BROWN-EYED—A very desirable table pea and very much like our old-fashioned white black-eyed peas. Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

LARGE BLACKEYE—The Large Blackeye Peas are more prolific, better flavored, and bring a higher price than the ordinary Blackeye, and farmers will find it more profitable to plant these than the ordinary Blackeye; they make a more profitable crop to grow for picking the dry peas for sale in our markets during the winter. Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

GALLAVANT OR LADY—This is an old-fashioned pea, which is very popular in sections where it is known. The peas are small in size, of very fine flavor; superior in table qualities to the Blackeye Pea. It is very prolific, and a desirable variety to grow. It is known in some sections as "The Lady Pea." Price, pkt. 10c; pt. 20c; qt. 35c; 4 qts. \$1.25, postpaid.

Buchanan's Vetch, Peanuts and Millet Seeds

Sand or Hairy Vetch

Vetch

SPRING VETCH—Better for spring sowing than the Winter Vetch. A nutritious and valuable forage and soil-improving crop. Large and quick growth. Sow 15 lbs. to the acre. Price, 1 lb. 35c; 5 lbs. \$1.50; 10 lbs. \$2.50, postpaid.

SAND OR HAIRY VETCH—One of the most valuable forage plants grown on a Southern farm, and from the increased demand this past year the farmers have found it out. It cannot be recommended too highly for planting in this country. Sow broadcast from 30 to 40 pounds per acre from July to November, with wheat, rye or oats, which will hold the vine from the ground, making the hay more valuable. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75. Farmers' Free Bulletin No. 515, Vetches.

Peanuts

Peanuts, a Fine Crop for Hogs and Hay

The growth and culture of Peanuts is too well understood by Southern farmers to be dwelt on here. One bushel of unshelled Peanuts will plant an acre having rows $3\frac{1}{2}$ feet apart.

SPANISH PEANUTS—This variety should be planted for forage and feeding purposes. Under most favorable conditions it will mature in ninety days. It is a small-podded variety, very productive, stems upright, foliage abundant and heavy; pods clustered about base of plant, usually two seeds in a pod, entirely filling pod; color of peas light brown; pods adhere well to plant in digging. This variety properly handled, will yield 60 bushels of peas and a ton of hay to the acre. This variety is also used exclusively for oil mill purposes. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

TENNESSEE RED—The finest large variety grown; similar to Spanish Peanuts, but the pods are much larger and longer, well adapted to all soils. The pods usually contain from three to four nuts, which are very rich and highly flavored. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

JUMBO OR MAMMOTH WHITE VIRGINIA—Large size pods; best variety for commercial use. Price, 1 lb. 25c; 5 lbs. \$1.00; 10 lbs. \$1.75, postpaid.

Tennessee Grown Golden Millet

(Formerly German Millet)

We have said considerable in the past about the importance of Southern grown seed being necessary for a successful crop of Golden Millet in the South. Golden Millet is an important and nutritious hay crop, largely grown throughout the South, relished by horses and cattle. Seed thickly, not less than one bushel per acre, any time from the middle of May through July, but not too early, because it does not grow off nicely until the soil and weather get warm. It matures in from six to eight weeks after seeding. Cut while in bloom, before the seed hardens in the head, as after that the hay quality decreases. There are two necessities for a successful crop of Golden Millet—first, rich or highly manured ground; second, Southern grown seed, that from Tennessee being the best. Price, 1 lb. 25c; 5 lbs. 75c; 15 lbs. \$1.50, postpaid. Not prepaid, $\frac{1}{4}$ bu. \$1.25; 1 bu. \$4.00.

GOLDEN OR GERMAN MILLET—This is one of the best hay crops for the South, the hay being of fine quality, ranking as high as Timothy. It is easily grown and cured, and matures very rapidly. It is best sown about April 15, on well prepared ground, and it should also be well fertilized to give best results. Results will be worth the expense of this preparation, as the yield will be greatly increased and the quality of the hay is very high. A common practice in some sections is to sow German Millet after truck crops which have been fertilized, and in this way it makes with little or no additional fertilizer. After potatoes, beans or tomatoes it does well, and it can be planted as late as July, and the crop will come off in plenty of time to get a fall crop of grain. Good seed is an important factor, and ours is the very best. If you have not grown this crop before, it certainly deserves a trial, and if directions are carried out, you will be pleased. Price, 1 lb. 15c; 5 lbs. 50c; 15 lbs. \$1.00, postpaid. Not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$2.50.

COMMON MILLET—The earliest of the commonly-grown varieties; very drouth resistant, and will give fair returns on poorer soils. Hay produced from this variety of Millet is not as coarse as some of the other Millets and feeders prefer it on this account. Price, 1 lb. 15c; 5 lbs. 50c; 15 lbs. \$1.00, postpaid. Not prepaid, $\frac{1}{4}$ bu. 75c; 1 bu. \$2.25.

Farmers' Free Bulletin
No. 431, The Peanut.

Tennessee Cultivated Millet

Buchanan's Flower Seeds

CULTURAL DIRECTIONS are printed on the packets. By following them almost any person will have fair success in the culture of flowers. While some seeds need special treatment, the following general rules will apply to all: Make the surface of the soil as fine, smooth and level as possible; do not plant when the ground is wet; cover each lot of seeds to a uniform depth, which should not be more than four or six times the diameter of the seed; press the soil firmly over the seed; plant in rows so that the starting plants can be seen easily, thin out the young plants to prevent crowding and keep entirely free from weeds. Never allow the seedlings to suffer from drouth.

Flowering Plants are Classed as Annuals, Biennials and Perennials

ANNUALS are those which mature, bloom and ripen seed the first year and then perish.

BIENNIALS do not generally flower the first season, and are in perfection only the second year.

PERENNIALS flower several years in succession. May bloom the first year if sown early.

HARDY ANNUALS, BIENNIALS AND PERENNIALS can be sown in the open ground early in the spring if desired, and Biennials and Perennials will not require any protection in winter. The blooming period of all classes may be greatly extended by picking off the flowers as soon as they fade.

HALF-HARDY ANNUALS, BIENNIALS AND PERENNIALS cannot be sown in the open ground until warm weather; they may be sown in the house, if desired, and afterward trans-

planted. The latter two need to be protected in winter, or carried until spring in cold frames or green houses.

In this list of flower seeds the following abbreviations are used to indicate the classification:

H. A.	Hardy Annuals
H. H. A.	Half-Hardy Annuals
T. A.	Tender Annuals
H. P.	Hardy Perennials
H. H. P.	Half-Hardy Perennials
H. B.	Hardy Biennials
H. H. B.	Half-Hardy Biennials
H. C.	Hardy Climber
G. S.	Greenhouse Shrub

Buchanan's Spencer Sweet Peas

Sow in January, February, March or April. Cover seed 2 to 4 inches, according to depth of your trench. The soil for Sweet Peas should be rich and deep, with plenty of well rotted manure in it. Heavy soils must be well worked and fertilized some time before sowing the seed. On high and dry soils they may be sown in drills from 4 to 6 inches deep, covered with an inch or two of soil pressed firmly, and the furrow filled in as the plants grow. When the seed is well above the ground, the little plants should be thinned out so as to be at least from 2 to 4 inches apart. It is a mistake to sow too thick, but it is well to allow for seeds which may rot in the

ground or be destroyed by cutworms. In low, damp soils the seed should only be planted an inch and a half or two inches deep, or they will rot during the process of germinating.

SPENCER MIXED SWEET PEAS—This special mixture of Spencer Sweet Peas is made from separate sorts, giving our customers the cream of the Spencers in all colors, including many of the latest varieties, as well as superb seedlings of exquisite colors and shades, which have not as yet been true enough to be introduced as new named sorts. The vigorous plants produce extremely large flowers, most beautifully waved and frilled on long, erect stems, an especially attractive mixture. Pkt. 10c; 1 oz. 20c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

BUCK BRAND MIXTURE—This mixture has been most carefully grown from selected stock seed, and it will afford a splendid variety of blooms of improved forms and in the widest possible range of desirable colors. Many of the most pleasing and brilliant colors are included. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 40c; ½ lb. 75c; 1 lb. \$1.25, parcel post paid.

BLANCHE BURPEE—A pure snowy white, cannot be surpassed in productiveness. The blossoms are very large and have a fine form. Pkt. 10c; 1 oz. 25c; 2 oz. 45c; ¼ lb. 90c; 1 lb. \$3.00, parcel post paid.

LOVELY—A beautiful waved pink of good substance, one of our best varieties. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 45c; 1 lb. \$1.25, parcel post paid.

FLORA NORTON—A beautiful self-colored light blue, large blossoms. Pkt. 10c; 1 oz. 30c; 2 oz. 50c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

SALOPIAN—The best pure red Grandiflora Sweet Pea with especially large wings. Pkt. 10c; 1 oz. 30c; 2 oz. 50c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

STANLEY—A deep purple of giant size and a good grower. Pkt. 10c; 1 oz. 30c; 2 oz. 50c; ¼ lb. 75c; 1 lb. \$2.50, parcel post paid.

Sweet Peas

Comet Aster

ANTIRRHINUM (Snap Dragon)—Beautiful spikes of gaily colored flowers. They are one of the best cut flowers which can be grown from seed, while for beds or borders they are a pleasure, being in flowers all the time if placed in a sunny position. Pkts. 5c and 10c.

ADONIS—Aestivalis—Flos Adonis—One Foot—Pretty little plant with feathery, fresh green foliage, dotted with innumerable small blood red flowers. Pkt. 5c.

AGERATUM—One of the best summer-blooming plants. They are rapid growers and constant bloomers. During the hot, dry summer months their bright flowers are produced in the greatest profusion of charming blue or white flowers. Pkt. 5c and 10c.

LITTLE GEM ALYSSUM—The finest white variety having large flowers. Very fragrant. Pkt. 5c; oz. 30c.

SWEET ALYSSUM—The regular type, strong grower, free bloomer. Pkt. 5c; oz. 25c.

AMARANTHUS, Mixed—H. A.—Brilliant foliage plant. Useful for bedding. Pkt. 5c.

AQUILEGIA (Columbine)—H. P.—Double. Finest mixed. Pkt. 10c.

Single—Finest mixed. Pkt. 10c.

ASTERS—This has become one of the most popular, beautiful and effective garden plants, growing from 10 to 24 inches high. Sow the seed early in the spring, under glass or in pots, in the house, and transplant into rich soil. Half-hardy annual.

Giant Comet Aster—Flowers of immense size, often 6 inches across. Long, wavy, twisted petals, gracefully formed into loose yet dense globe, resembling Chrysanthemums, 12 to 16 inches in height. Price, any of the following varieties, pkt. 10c:

Pure White	Light Blue
Clear Rose	Scarlet
Comet Asters, all colors, mixed.	

Aster, Peony Flowered—Large and double mixed. Pkt. 10c.

Aster, Victoria—Imbricated petals; large flowers. Pkt. 10c.

Aster, China, Mixed—Well known, hardy variety. Pkt. 5c.

Improved Branching—Large flowers; excellent for cutting. Pkt. 10c.

BACHELOR'S BUTTON—H. A.—Mixed colors. Pkt. 5c.

BALLOON VINE—T. A.—A rapid growing annual climber, with white flowers and inflated seed pods which look like small balloons. Succeeds best in warm soil; 10 feet. Pkt. 5c.

BALSAM APPLE AND PEAR—H. A.—Ornamental climbers, with pretty foliage and flowers followed by handsome fruit; which, when ripe, burst open, exposing the bright red seeds within; 10 feet high.

Balsamina (Balsam Apple)—Pkt. 5c.

Charantia (Balsam Pear)—Pkt. 5c.

BALSAM (Lady's Slipper)—H. H. A.—2 feet. Balsams love rich soil, hot sun and plenty of water. Very fine for bedding. Pkt. 5c.

BELLIS (English Daisy)—H. P.—It blooms from early spring to well on in the summer. Easily raised from seed, which may be sown any time from spring till August. For best results new plants should be raised from seed each year.

Double Mixed—A fine mixture containing all colors. Pkt. 10c.

BRACHYCOME (Iberidifolia)—Dwarf annuals, which bloom nearly all summer. Suitable for baskets and edgings. Mixed colors. Pkt. 5c.

CALENDULA (Pot Marigold)—H. A.—2 feet. Calendulas bloom all summer and thrive anywhere, especially in city gardens. The graceful, star-shaped flowers exhibit every shade of yellow from ivory to deep orange. Well adapted for cutting, being borne upon long stems.

Mixed—All the double sorts. Pkt. 5c.

CALLIOPSIS or COREOPSIS—Showy, beautiful, free-blooming plants, producing large, bright flowers of rich and charming colors throughout the entire summer. Mainly hardy annuals; 1 to 2 feet high. Best Mixed, Pkt. 5c.

CANARY BIRD VINE—H. A.—Grows to a height of 15 feet. Has beautiful foliage and yellow flowers. Pkt. 5c.

CANTERBURY BELL (Campanula Medium)—Handsome, hardy biennial of stately growth, rich color and profuse bloom. Has large bell-shaped flowers, are effective in various colors. Height 2 to 4 feet. Pkts. 5c and 10c.

CANDYTUFT—A dwarf annual of easiest culture; free-blooming, showy, and useful for beds, borders and edgings. Sow seeds where plants are to bloom, in rows 6 or 8 inches apart, thinning out to afford plenty of room, as they branch quite freely. Height 1 foot. Annual Sorts, mixed. Pkt. 5c.

CANNAS (Indian Shot)—These very attractive summer bedding plants can be grown readily from seed. The seed is extremely hard and should be soaked in warm water until swollen. Sow singly in small pots of sandy soil and set in a warm place, preferably a hotbed or sunny window. Set out in June where they are to flower.

Large-Flowering Mixed—All colors and shades. Pkt. 5c.

CARNATION—Although half-hardy perennials, they begin flowering in a few weeks from time of sowing. They are especially adapted for outdoor culture.

Margaret—Giant Mixed. Immense double flowers. Pkt. 10c.

CELOSIA (Cockscomb)—H. H. A.—1 foot. Of easy culture. Thrives in light soil. Fine border plants, in bloom from mid-summer until frost. When grown as large specimens they are of unrivaled beauty. For filling flower beds and borders these plants are now largely used during summer in city parks.

Tall Cockscomb—Mixed. Pkt. 5c.

Dwarf Cockscomb—mixed. Pkt. 5c.

CHRYSANTHEMUM—Very showy and easily grown, producing single and double flowers of various colors.

Daisy Shasta—Flowers snowy white with yellow center; freely produced on strong, wiry stems, about 2 feet in length. Perennial. Pkt. 10c.

Single Mixed—Fine for cutting and makes a pretty display in the garden. Pkt. 5c.

Double Mixed—Many colors, red, white, yellow, pink and rose. Pkt. 10c.

Snap Dragon (Antirrhinum)

R.B.BUCHANAN**MEMPHIS, TENN.** **BUCK BRAND SEEDS AND FEEDS**

CONVOLVULUS (Morning Glory). Major — (Tall growing Morning Glory.) Thrives anywhere. Showy flowers in a variety of colors. Sow where plants are to bloom. Mixed. Imp. Japanese, Mixed—Pkt. 5c.

COSMOS—H. H. A.—4 to 6 feet. One of the most beautiful and useful autumn-flowering plants. The plants have strong stems and delicate feathery foliage. The pretty flowers produced from September until frost are shades of rose, red, yellow and pure white. Excellent for cutting. Seed sown outside in May will flower by September.

COSMOS, Giant—Flowers measure from 4½ to 5 inches across, petals fringed, pinked, toothed and plain, and in colors from pure white through shades of pink and red to rich dark red. Hardy annual.

Giant Crimson, Pkt. 10c.

Giant White, Pkt. 10c.

Giant Pink, Pkt. 10c.

Giant Mixed, Pkt. 10c.

CORN FLOWER—The well known hardy annual, noted for its old-fashioned flowers. Mixed, all colors; hardy annual. Pkt. 5c.

Canterbury Bell

COBEA SCANDENS—Cup and Saucers vine; a climber of rapid growth; valuable for covering trellises, arbors, trunks of trees, etc.; large, bell-shaped purple flowers; half-hardy perennial. Pkt. 5c.

WILD CUCUMBER—It will reach a height of 30 feet in one season. It is thickly dotted over with pretty, white, fragrant flowers, followed by quantities of ornamental and prickly seed pods. Pkt. 5c.

CYPRESS VINE—H. A.—15 feet. Rapid growing climber; fine for trellis; star-like red and white flowers and feathery foliage. Pkt. 5c.

DAISY (Double Mixed)—A low growing spring flowering plant, a companion to the Pansy and Forget-Me-Nots. Pkt. 10c.

DAISY (White)—Flowers are snowy white, freely produced on long stems. Pkt. 10c.

DAHLIA—H. H. P.—3 to 5 feet. These grand flowers of the autumn, if the seed is sown in the early spring, will commence flowering by midsummer. Dig the tubers in fall and keep in sand in cellar.

Double Large Flowered—Pkt. 10c.

Single Mixed—Pkt. 5c.

DIANTHUS or **GARDEN PINKS**—A magnificent genus of plants, annuals and perennials, embracing some of the most popular flowers in cultivation and profusion of bloom. The Chinese and Japanese varieties bloom the first season, the same as hardy annuals; height 1 foot. The hardy perennial varieties are very fragrant and of easy culture for the garden or greenhouse.

Pink, Heddewigii — Double Japan Pink; mixed colors. Pkt. 10c.

Pink, China Single—Deeply fringed petals, mixed colors; hardy annual. Pkt. 5c.

Single and Double Annual Pinks—A blending by ourselves of all the annual varieties described above. Seed sown early will make a bed of blooming flowers by July or August. Pkt. 5c.

DELPHINUM (Hardy Perennial Larkspur)—Among the best plants for mixed borders. Perennial Larkspurs grow better than annual varieties; they should be planted further apart.

Single Mixed and Double Mixed—Pkt. 5c.

ESCHSCHOLTZIA (California Poppy)—A hardy free-flowering annual, growing about 15 inches high and producing quantities of single, poppy-shaped blooms in shades of yellow, orange and red. Flowers over a long period. Pkt. 5c.

FOXGLOVE (Digitalis)—Grows to the height of 3 or 4 feet, with dense spikes of brilliantly colored flowers which are terminal and half as long as height of plant. Colors, white, lavender and rose. A valuable flower in every perennial garden; does not usually blossom until the second year. Mixed colors. Pkt. 5c.

Pinks (Dianthus)

Cosmos

BUCK BRAND SEEDS AND FEEDS

Double Dahlia

FORGET-ME-NOT—A pretty little old-fashioned perennial, producing its flowers in early summer. Quite hardy once it is established. Pkt. 5c.

FOUR O'CLOCK (Marvel of Peru)—A handsome, free-flowering plant. They open their blossoms about 4 o'clock in the afternoon, hence their name. Hardy annuals; mixed varieties. Pkt. 5c.

GAILLARDIA (Blanket Flower)—H. A.—Remarkable for the profusion, size and brilliancy of their flowers. Continuing in bloom from early summer till November; excellent for beds, borders or for cutting; should be sown where they are to bloom; 1½ feet. Fine colors, mixed. Pkt. 5c.

GLOBE AMARANTH (Gomphrena)—Mixed colors; a desirable everlasting, valued for its handsome, globular heads of flowers which can be dried and used in winter bouquets. Pkt. 5c.

GODETIA—Sow in the open ground in the early spring. They are profuse and constant bloomers, and their delicate tints of crimson, rose-pink and white make them very attractive when in full bloom. Half dwarf varieties mixed. Pkt. 5c.

GOURDS—A tribe of climbers with curiously shaped and colored fruit. Being of rapid growth they are fine to cover old fences, trellises, stumps, etc. Tender annual; 10 to 20 feet high. Pkt. 5c.

Nest Egg Gourd—Pkt. 5c.

Dipper Gourd—Pkt. 5c.

Orange Gourd—Pkt. 5c.

Dish Rag or Luffa—Pkt. 5c.

Ornamental Gourd—Pkt. 5c.

Calabash Pipe Gourd—Pkt. 10c. Sugar Trough—Pkt. 5c.

Gourds—Small, ornamental sorts; mixed. Pkt. 5c.

HYACINTH, or JACK BEAN—A rapid growing annual climber; mixed; all colors. Pkt. 5c; oz. 20c.

HELIANTHUS (Sunflower)—H. A.—3 to 6 feet. The state flower of Kansas. Of easiest culture. Suitable for backgrounds, screens and to plant among shrubbery. In bloom from June until frost.

Multiflorus—Forms a dwarf plant. Each branch carries double golden yellow flowers. Pkt. 5c.

HELIOTROPE—Always popular on account of its delightful fragrance. The seed is rather slow in starting and had best be sown in boxes or in a hotbed. While it is a perennial, it will not stand any frost and is therefore started afresh each year, unless one cares to remove the plants to the house before frost comes. Can be started from cuttings.

Mixed Colors—Pkt. 10c.

HOLLYHOCK (Double, Mixed Colors)—Our seeds have been saved from the finest and largest double flowers only, and will produce flowers extremely double and in the best, brightest and most charming colors. Sow in April, May or June for next year's blooming. Pkt. 10c. Single mixed colors, pkt. 10c. Double pink, pkt., 10c.

Hollyhock, Double, White—Purest white; double flowers. Hardy perennial. Pkt. 10c.

Hollyhock, Double, Red—Finest scarlet and red. Hardy perennial. Pkt. 10c.

HUMULUS (Japanese Hop Plant)—H. A.—Climber; 12 feet. Grows very rapidly. Has dense leaves; is valuable for covering trellis or porch. Pkt. 5c.

HELICHRYSUM (Straw Flower)—Bright, attractive summer blooming annual, of free growth, producing in abundance large double red, white, yellow flowers. Mammoth mixed. Pkt. 5c.

IVY—A climbing vine used mostly on brick walls and brick buildings. Pkt. 10c.

ICE PLANT—A simple trailing plant. Covered with watery vesicles resembling pieces of ice. Suitable for hanging baskets. Pkt. 10c.

JOB'S TEARS—A.—2 feet. Broad corn-like leaves and hardy, shiny seeds. Pkt. 5c.

KOCHIA (Tricophila)—H. H. A.—2 to 3 feet. Makes a pyramidal-shaped, cypress-like bush with feathery light green foliage, deepening until it becomes a lovely crimson hue about September. Excellent for hedges along garden walks. Pkt. 5c.

LOBELIA—Lobelias require rich soil and plenty of water. The annual varieties, 4 to 6 inches, are extensively used for edging, baskets and urns. Mixed. Pkt. 5c.

LINUM—A most persistent bloomer, producing scarlet flowers about the size of a quarter. Pkt. 5c.

MARIGOLD (Tagetes)—H. H. A.—2 to 3 feet. Blooms continuously all summer. They succeed best in a light soil exposed to the sun. A fine garden plant.

Double African Varieties—The African Marigolds produce very large flowers on tall stems. Plant in borders or among shrubbery. All shades of yellow. Pkt. 5c.

French Dwarf Double Mixed—Pkt. 5c.

MIGNONETTE (Sweet)—H. A.—12 to 18 inches. If successive sowings are made, its fragrant, modest-colored flowers may be gathered outdoors until November. Sow in pots or boxes under glass in February or March, and thin or pot off the seedlings to make good plants for bedding out in April. Sow outdoors in rows about April 1, and again regularly at intervals of about three weeks till August. Pkt. 5c.

Mignonette

MIGNONETTE (Matchett Perfection Bismarck)—The red flowers are larger than those of other sorts. The spikes are very dense. Its foliage is crinkled while its odor is delicious. Pkt. 5c.

MOON FLOWERS—Tall growing annual climber, related to the family of Morning Glories; have dense foliage; they are useful to cover trellis work, verandas, etc. Plant seeds out of doors when warm weather sets in. Soak them first.

White Hybrid—Its large white flowers expand in the evening and remain open until the following day. Pkt. 10c.

Blue—Pkt. 10c.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Nasturtium

NASTURTIIUMS—No other annual will produce such a lavish profusion for so long a time with the same outlay of time and labor. The maximum of bloom is produced in thin soils, and never flags through the hottest weather.

Nasturtiums, Tall Mixed—A brilliant, effective mixture. Pkt. 5c; 1 oz. 15c; 2 oz. 25c; ¼ lb. 50c; 1 lb. \$1.50, parcel post paid.

Dwarf Mixed—In this will be found varieties of both light and dark colored foliage. Pkt. 5c; 1 oz. 20c; 2 oz. 35c; ¼ lb. 60c; 1 lb. \$2.00, parcel post paid.

NIGELLA (Love in a Mist)—H. A.—A compact free-flowering plant, with finely cut foliage, curious looking flowers and seedpods; of easy culture. A lovely variety with cornflower-blue blossoms; splendid for cutting. Pkt. 10c.

PORTULACA—Select the hottest, sunniest place for this little plant. Sometimes called "Rose Moss." Forms masses of delicate green foliage covered with bright colored flowers somewhat resembling small roses.

Portulaca, Fine Single, Mixed—A great variety, mixed; tender annual. Pkt. 5c.

Portulaca, Double, Mixed—A large proportion will come very double; tender annual. Pkt. 10c.

PANSIES—Pansies thrive best in a cool, moist but well-drained soil, enriched with well-rotted barnyard manure or fine-ground bone. Seeds sown in spring in a partially shaded situation will produce fine plants for autumn flowering. The finest blooms are to be obtained, however, by sowing in July or August, giving the plants protection during winter; when they will bloom profusely in the spring and summer.

Pansy, Giant Trimardeau—A beautiful class; compact growers, with enormous flowers; finest mixed. Pkt. 15c.

Buck Brand, Mixed—This includes not only seeds of Giant Pansies, but also those of several new large-flowered sorts, with highly colored blooms. Pkt. 10c.

Choice Mixed—A good mixture in proper proportion of colors and varieties. Pkt. 5c.

PHLOX DRUMMONDI, Mixed (Flame Flower)—The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds. From June to October they maintain an endless display of brilliant and varied-colored flowers. The plants grow about one foot high. Sow in the open ground about May. Pkt. 5c.

Phlox, Fireball—Scarlet, superb when in full bloom; hardy annual. Pkt. 10c.

Phlox, Snowball—Purest white flowers; hardy annual. Pkt. 10c.

PETUNIAS—H. H. A.—6 inches. From early summer to late fall they are loaded with flowers; heat, rain or drouth do not affect them. The bedding sorts can be sown in the open ground in May and will be in bloom by midsummer.

Petunia, Giants of California—A large-flowering strain with fringed and ruffled flowers of rich velvety colors and deep yellow throats. Pkt. 15c.

Petunia (Mixed Colors)—The regular type of Petunias in assorted colors. Pkt. 5c.

Petunia (Dwarf)—For flower boxes. Pkt. 10c.

POPPIES (Papaver)—H. A.—2 to 3 feet. Annual sorts should be sown in a loamy soil where they are to bloom, as they do not take kindly to transplanting.

Poppy, Oriental, Mixed—Grand, large double flowers, in every color; magnificent in form. Pkt. 10c.

Poppy—Shirley mixed. This magnificent strain of Poppy, with its delicate shades, ranging from a pure glistening white through the shades of pink and rose to the brightest scarlet and carmine-red. The darker shades frequently being margined with white. Some of the petals are of silky texture, others look like tissue paper. Pkt. 5c.

Tulip Poppy—Dazzling scarlet flowers, 3 inches across, resembling the Gessneriana Tulip. Pkt. 5c; ½ oz. 15c.

Poppy, Peony Flowered—Enormous size; perfectly double; always admired; mixed; annual. Pkt. 5c.

Poppy, Carnation—Double; mixed; superb; from many varieties; 2 feet; annual. Pkt. 5c.

RICINUS (Castor Bean)—H. H. A.—6 to 10 feet. Ornamental plants with palm-like foliage and showy fruits. Fine for center plants in beds of Cannas, etc., giving to the garden magnificent sub-tropical effects; even a single plant forms a pyramid of leaves.

Ricinus—Finest mixed. Pkt. 5c.

SWEET WILLIAM—Old-time hardy perennials with dense heads of many colored flowers. Very showy and satisfactory. Easily grown.

Sweet William, Single—Handsome colored flowers; mixed; hardy perennial. Pkt. 5c.

Sweet William, Double—Finest double flowers; hardy perennial. Pkt. 10c.

Pansies

BUCK BRAND FLOWER SEED COLLECTION

For 25c we will send you, postpaid to any P. O. in the U. S., the following 12 packets of flower seed:

Alyssum, Sweet
Pink, Mixed
Morning Glory, Mixed
Petunia, Mixed
Candytuft, Mixed
Four O'Clock, Mixed

Sweet Peas, Mixed
Nasturtiums, Tall
Phlox, Mixed
Cosmos, Mixed
Gourds, Mixed
Pansy, Mixed

12 5c Size Packets, postpaid, for 25 cents.

SALVIA SPLENDENS—(Scarlet Sage) — These handsome bedding plants, of which there are a number of different strains, produce large, long spikes of flowers well thrown up above the foliage. A hedge or bed of Salvias is a blaze of color during late summer and fall. Pkt. 15c.

SALPIGLOSSIS (Painted Tongue)—H. A.—This is one of the greatest favorites among annuals, partly because of its easy culture, but principally for its beautiful, almost orchid-like flowers, which it produces from early summer until late fall. Seed should be sown early in spring in a hotbed or window and transplanted when weather is settled, or directly out of doors after danger of frost. Finest mixed; all colors. Pkt. 10c.

SCARLET RUNNER VINE—Annual; 15 feet. This bean produces a rapid growing vine and makes clusters of showy scarlet bloom. Pkt. 5c.

SCHIZANTHUS (Butterfly or Fringed Flower)—This is one of the airiest and daintiest flowers imaginable, especially adapted to bordering beds of taller flowers and those of a heavier growth. A splendid mixture of the regular type. Pkt. 5c.

SENSITIVE PLANT—One of the most remarkable and interesting plants in cultivation; the leaves, when touched, instantly fold up. Pkt. 5c.

SWEET ROCKET—Grows 2 to 3 feet high, bears spikes of showy, fragrant flowers, all colors, mixed; hardy perennial. Pkt. 5c.

STOCKS (Gilliflower)—Stocks are hardy annuals, indispensable in every garden. There are both summer and winter blooming varieties. For either bedding or pot culture they are desirable. Average height of plants 1½ feet.

Dwarf Ten Weeks—Mixed. Pkt. 10c.

Giant Perfection (Cut-and-Come-Again)—Mixed. Pkt. 10c.

THUMBERGIA (Black-eyed Susan)—H. A.—Beautiful, rapid growing annual climbers, preferring a warm, sunny situation; used extensively in hanging baskets, vases, low fences, etc., very pretty flowers in buff, white, orange, etc., with dark eyes; mixed colors. Pkt. 5c.

Double Poppy

VERBENA—Hybrid Mammoth. This Verbena produces magnificent flowers in a wide range of colors. The blooms are frequently larger than a silver quarter. The colors are rich and varied, embracing all the bright shades. Pkt. 10c.

Verbena—Choice mixed; embraces all colors. Pkt. 5c.

Verbena—Deep purple. Pkt. 10c.

Verbena—Bright crimson. Pkt. 10c.

Verbena—Pure white. Pkt. 10c.

Verbena—Pink. Pkt. 10c.

Verbena—Yellow. Pkt. 10c.

WALLFLOWER—Very conspicuous in beds or borders, and are very useful in making bouquets. They are deliciously fragrant; single, mixed; half-hardy perennial. Pkt. 5c.

Vinca (Periwinkle)—Ornamental, very free flowering bedding plants, easily grown from seed and adapted to the entire South. Mixed colors. Pkt. 10c.

ZINNIA—A half-hardy annual, growing from 1 to 2 feet high. The colors are in great variety and very bright. Probably no flower has such an assortment of shades, tints and colors, and no bedding plant is more effective for a brilliant show. Sow in boxes early and transplant.

Zinnia (Choice Double Mixed)—A fine mixture of colors. The petals are curled and the flowers large and attractive. Pkt. 5c; oz. 40c.

Zinnia—Double orange. Pkt. 10c.

Zinnia (Fancy Large Flowering Mixed)—A magnificent form of this most useful annual, with a wonderful range of brilliant colors. Pkt. 10c.

Zinnia—Fancy large white. Pkt. 10c.

Zinnia—Fancy deep purple. Pkt. 10c.

Zinnia—Fancy bright pink. Pkt. 10c.

Zinnia—Fancy deep crimson. Pkt. 10c.

Zinnia—Fancy clear yellow. Pkt. 10c.

Zinnia—Curled and crested. Pkt. 10c.

Zinnias

Ten Reasons Why Every School Child Should Have a Garden

- 1—The child's garden makes the family living more economical.
- 2—The child's idle time is turned into earning.
- 3—Many school children are in the psychological period where gardening as play forms regular habits of work.
- 4—The child's garden usually puts idle land to work.
- 5—The child's garden teaches the value of money and good business habits.
- 6—Gardening is the best kind of nature study.

- 7—Every child's garden makes some back yard or vacant lot better looking and more healthful.
- 8—Interest in a garden keeps children from truancy and perhaps from juvenile court offenses.
- 9—Child gardeners develop civic pride and civic beauty and become good citizens.
- 10—Many a child will be able to attend school longer because the saving on living cost to its family through garden products will keep it in school.

BUCHANAN'S

IMPORTED FLOWERING BULBS FOR SPRING AND AUTUMN PLANTING

Gladiolus

Within recent years American hybridizers have produced some of the very best Gladiolus, being noted for their strong, free growth, free-flowering qualities, purity of color and their ability to produce satisfactory results in our climate even under the most ordinary conditions, and whether wanted for show in the garden or for cutting, the sorts offered under this head now hold the premier place in their respective colors, and are offered at prices so reasonable, considering their high grade, that they should be planted in quantity wherever summer flowers are wanted.

America—Conceded to be one of the finest varieties for cutting or bedding ever sent out; color a beautiful soft flesh-pink; orchid-like in its coloring and texture. Each 10c; doz. 60c, postpaid.

Mrs. Francis King—A striking shade of light scarlet or flame color; one of the most effective. Each 10c; doz. 60c, postpaid.

Augusta—Lovely white with blue anthers. Each 10c; doz. 60c, postpaid.

Baron Hulot—Rich deep violet blue. Each 15c; doz. \$1.00, postpaid.

Mixed—Each 5c; doz. 50c, postpaid. If express, deduct 10c doz.

Peonies

They have become indispensable in every garden. They are all hardy and admirably suited to our Southern climate, growing in almost all situations, and even flourishing under shade trees.

Red, Pink, White—Each 35c; parcel post paid. By express, each 25c; doz. \$2.50.

Tube Rose

Armstrong Ever-Blooming, (Single)—Each 10c; doz. 75c, postpaid.

Double Pearl—Each 10c; doz. 75c, postpaid. By express, 65c per doz.

Cannas

No other bedding plant will give the same uniform good results in our varied and trying climate. They do well in all sections of the country and stand pre-eminently at the head of the list, succeeding in any sunny position in any kind of soil, but responding quickly to liberal treatment. For best results the beds should be spaded two feet deep and a generous amount of well-decayed manure of any kind thoroughly incorporated, and at all times supplying water freely. For best effect plant in large masses of one color, setting out the plants two feet apart.

KING HUMBERT

Scarlet Flowers, Bronze Leaves—Greatest Favorite Today

This remarkable "Gold Medal" Canna has been the sensation of the past eight years. It is a cross between the Orchid-flowering and the French or Crozy type, combining the best features of both, the large flowers of one with the free blooming character of the other, and the handsome broad, tropical foliage; 5 feet. Each 15c; doz. \$1.25, postpaid. By express, \$1.10 per doz.

HUNGARIA (3½ Feet). The Best Pink Canna

Very compact, almost dwarf and of a very luxuriant growth. Leaves bluish-green, never burn; trusses of enormous size, borne well above the foliage. Each 20c; doz. \$1.75, postpaid. By express, \$1.60 per doz.

VENUS (Rose Pink)—With green foliage, 3½ feet. Price, each 15c; doz. \$1.25, postpaid. By express, doz. \$1.10.

FLORENCE VAUGHAN (Yellow)—Height, 3½ feet. Price, each 15c; doz. \$1.25, postpaid. By express, doz. \$1.10.

Dahlias

Spade or plow the ground to a depth of about 8 inches. As a fertilizer use either well-rotted Stable Manure or better still, Sheep Manure, which should be well mixed with the soil. When the soil is properly prepared, dig a hole, 6 inches deep, in which to plant the Dahlias. The bulbs should be LAID DOWN FLAT and covered to depth of 4 inches. Every Dahlia should have from 2½ to 3 feet space and at least 4 feet between the rows.

Double Pink
Double Yellow
Double Purple
Double Striped
Double Scarlet
Double White
Price, any shade,
each 25c; doz.
\$2.00, postpaid.
By express, ea.
20c; doz. \$1.50.

Caladium Bulbs

**Caladium
Esulentum
(Elephant's Ears)**
Effective as a
single plant on
a lawn or in
groups; also
useful for decorative
effect
near streams or
ponds. Large
bulbs, by parcel
post, each 15c;
doz. \$1.50. By
express, not pre-
paid, each 10c;
doz. \$1.25.

Mammoth—
Each 25c; doz.
\$2.50, postpaid.

Single Hyacinth

By express, each 20c; doz. \$1.25.

General Instructions for Planting

WATER CULTURE.—This method of flowering bulbs is always interesting. Narcissus and Sacred Lilies may all be grown in glass bowls partly filled with pebbles and sand. Change the water occasionally in order to keep it pure and fresh. After rooting place the vases in a light, cool room until the foliage is well developed, after which they may be put in a light, sunny window, soon after which the flowers will appear.

OUTDOOR PLANTING.—For bulbs to bloom in late winter and early spring they should be planted from October 1 to January 1. Our personal preference is November 15 to December 15. Plant in deep, rich soil or one that has been well fertilized with well rotted manure, cow manure being preferable if obtainable. Do not, under any circumstances, use fresh manure so that it comes in contact with the bulbs, as it is injurious. Set the bulbs (except the small bulbs, such as Crocus) so that the crown of the bulb is 3 to 4 inches below the surface of the soil. After planting the soil should be firmed. Just before cold weather starts cover the beds with a heavy coating of coarse manure, leaves or trash. This coating should be 4 to 6 inches thick and should remain on until the weather moderates in the spring. Remove it then and the bulbs will come quickly.

Hyacinths

The Hyacinth is so well and favorably known that it is unnecessary to give any detailed description of its broad, upright spike or truss, usually thickly set with bell-shaped flowers of beautiful, wax-like texture. It succeeds well in the house and garden, adorning both the varied colors and delicious fragrance of its showy flowers.

Gertrude—Pink Forcing. **L'Innocence**—White Forcing.
Each 15c; doz. \$1.50, parcel post paid. Not post paid, doz. \$1.25

Named Single Bedding

L'Innocence—Pure white. **Grand Maitre**—Deep sky-blue
Gertrude—Rose pink. **La Victoire**—Brilliant scarlet.
Each 10c; doz. \$1.00, parcel post paid. Not postpaid, 90c.

Crocus, Giant-Flowering

Crocuses, among the first flowers to bloom in the early spring, are always the admiration of everyone, especially when planted amid the grass in lawns, their bright flowers producing a fine contrast.

Yellow Blue White Striped
Doz. 25c; per 100, \$1.00, parcel post paid. Not postpaid, doz. 20c; per 100, 90c.

Giant Darwin Tulips

For the herbaceous border, massed in clumps along the edge of shrubbery, or as cut flowers for vases, these are conceded to be the superior of all the Tulips.

The maddening craze for the Darwin Tulip is not due to fad or popular fancy, but rather to an awakened sense of appreciation of their majestic beauty. The rich, bright colors of the blooms, their somber tones, their many pale and more lovely colors produced on strong, gigantic stems from 2 to 3 feet.

Clara Butt—Rose, salmon tinted.
Reverend Ewbank—Blue-violet.
Inglescombe, Yellow—Glossy canary yellow.
Pride of Haarlem—Brilliant deep salmon rose.
Keizerskroon—Scarlet with broad yellow edge.

Doz. 60c, parcel post paid. Not postpaid, doz. 50c.

Chinese Sacred Lily

A species of Polyanthus Narcissus introduced from China. The bulbs are large, measuring 8 to 10 inches in circumference, and throw up from 5 to 10 flower spikes, bearing clusters of large, perfect, waxy white blossoms, with yellow center; of a most delicious fragrance. These may be grown in pots, but are most successful when cultivated in water, the same as in China. In order to get best results it is advisable to cut two or three slits half an inch deep up and down the sides of the bulbs. Each, 20c; doz., \$1.75, parcel post paid.

Narcissus or Daffodils

These are among the most charming of our spring flowers, defying, in their earliness, the rough winds of April to grace our lawns and borders. Plant them in masses or have a few pans in your window garden, but, by all means, **grow some.**

Daffodils may be treated as advised for hyacinths; they are not particular as to soil, and will thrive for a number of years in ordinary soil. They are, with few exceptions, suitable for naturalizing, and while preferring partial shade, will thrive in full sun exposure. They are very desirable for pot culture, three to five bulbs in a 5 or 6-inch pot producing an attractive group. By planting one or more varieties in succession, such a display may be enjoyed throughout the first three months of the year.

Emperor—Large, rich yellow trumpet, primrose perianth; fine for cutting. Doz., \$1.00, postpaid.

Empress—Very large and beautiful white perianth, rich yellow trumpet. Doz., \$1.00, postpaid.

Paperwhite Narcissus

This is the most satisfactory flower that can be grown in the house for winter blooming. They will bloom in water and rocks from six to eight weeks from time of planting, and are superior to Chinese Lilies.

The water requires changing occasionally to keep it pure. Do not add cold water; see that it is slightly warm. Planted any time in September or October and they can be easily brought into flower by Christmas. They can also be planted any time in January in glass bowls and will bloom in six weeks. Doz., 60c, parcel post paid. Not postpaid, doz., 50c.

Hardy Poetaz Narcissus

Laurens Koster—White with yellow eye, blooms with many flowers to stem. Each, 10c; doz. 60c, parcel post paid. Not postpaid, each, 5c; doz., 50c.

Depth at Which Bulbs Should Be Planted

BUCHANAN'S

SELECTED AND OFFICIALLY INSPECTED

FRUIT TREES AND SMALL FRUITS

Fruit and Shade Trees, Berries, Grape Vines and Shrubs

IMPORTANT.—Unpack and examine all packages on arrival, and if roots are dry, give a good soaking with water. Never let trees lie about with their roots exposed to the air. If several have to be planted, open a trench and "heel in" the roots, and then plant at your leisure.

Our booklet giving directions for planting and spraying trees is free to customers. Write for a copy today.

No orders accepted unless they amount to \$1.00 or more.

Terms are strictly cash, F. O. B. nursery. We do not send out trees or plants C. O. D. under any conditions.

At prices given, all Trees and Plants must go by express at purchaser's expense, excepting where noted otherwise.

Orders for Trees will be filled as soon as weather permits. It usually requires eight to ten days to get the stock from our nursery. Remember, we will give your order attention at the earliest possible moment.

Our trees are first class, superior to any stock that has been raised in this section. We represent one of the largest and most reliable nurseries in the South.

Set out small Trees. They are more certain to grow and will bear fruit just as early as any larger or older Tree. It is a mistake to reset any Tree older than three years.

Winesap Apple

Apples

Prices—First Class, 2 year, 3½ ft. and up, each, 75c; 10 for \$7.00. Write for prices on quantities.

Summer Apples

Early Harvest—Yellow; medium to large size; fine flavor. A sure and abundant bearer. The most profitable early Apple in this section. Ripens ten days later than Red Astrachan.

Carolina Red June—Well known throughout the South. Medium size, oblong; deep red. Middle of June to end of July.

Horse (Yellow Horse)—Large, greenish yellow, acid, a good bearer. Widely known throughout the South. July and August.

Hackworth—A native of Morgan county, Alabama, 20 miles south of Huntsville. Tree a very strong grower, adapted to a wide range of soils and elevations. Fruit medium to large, of good appearance and quality. Begins ripening in July and continues through August.

Hyslop Crab—Large size for a crab. Rich dark red with thick blue bloom. Tree vigorous in growth. Produces its fruit in clusters.

Fall and Winter Apples

Stayman Winesap—A seedling of Winesap, but a stronger grower and better adapted to thin soils; much like Winesap in size and appearance, but of better quality.

Mammoth Blacktwig (Paragon)—From Lincoln county, Ten-

nessee; very large; dark red; yellow flesh. Good keeper and always a good seller; productive.

Winesap—One of the most dependable late Apples for the general South. Small to medium size; fine, dark red; flesh crisp. An excellent keeper.

Delicious—A very popular Apple in the West and Northwest. Very large, oblong; color rich crimson shaded to yellow; fine grain, juicy; a fine keeper and shipper. Not yet thoroughly tried out in the South, but very promising.

Yates—A small Apple, but one of the surest croppers, heaviest bearers and best keepers. Dark red with white dots; flesh yellow, crisp and good.

Pears

The Pear very justly ranks as one of the most delicious fruits of modern times. It has been placed first by nearly all growers. Our collection of varieties consists of the most approved sorts in cultivation. Plant 18 to 25 feet apart.

Prices—First Class, 2 year, 4 ft. and up, each, 90c; per 10, \$9.00.

Summer Pears

Early Harvest—Large, yellow with red cheek. One of the earliest; best of its season. Tree a strong grower.

Bartlett—Probably the best known of all Pears; large size, full of juice, fine flavor; the leading table variety.

Seckel—This little Pear is the standard for flavor. Yellowish russet with red cheek; very juicy and melting. Tree is of slow growth and never attains great size. August.

Autumn and Winter Pears

Garber—Same type as Kieffer, ripening a little earlier. Very productive; large size. One of the most profitable because of its canning and preserving value. Tree very hardy and a strong grower.

Kieffer—Large to very large; yellow with vermilion cheek; brittle flesh; quality usually poor; greatly improved if ripened in dark, cool room. Matures in September, lasts well into October. Prolific; begins bearing early—the third or fourth year. Tree one of the strongest growers.

Farmers' Free Bulletin No. 482, "Pear and How to Grow It."

Apricots and Nectarines

Uncertain generally throughout the South. If you wish to experiment, plant a tree or two where they are well protected by buildings, if possible.

Prices—First Class, 3½-ft. and up, each, \$1.00; 10 for \$9.50.

Write for prices on quantities.

Varieties of Apricots—Early Golden, Wilson.

Varieties of Nectarines—Red Roman, New White.

Cherries

Plant 18 to 25 Feet Apart
Prices—First Class, 3½ ft. and up, each \$1.00; per 10, \$9.00.

The reason for so much disappointment to the planters of Cherry trees in the South, in so many long-looked-for but never-appearing crops of fruit, is that the varieties planted are often absolutely worthless for our section of country. We know by test that for general Southern planting the list of varieties should be reduced to not more than six; and for elevation under a thousand feet above sea level we would recommend but two varieties—Early Richmond and Large Montmorency.

Early Richmond—Medium size; light red; acid. Profitable here. Ripens last of May.

Large Montmorency—Sour. The best Cherry for general planting. Very productive. Large size, rich red; follows Early Richmond. Tree a strong grower and a sure bearer in this section.

Compass Cherry-Plum—A cross between the Sand Cherry and the Miner Plum. Fruit about one inch in diameter; bright red; when fully ripe, a dark rich red. For canning and pre-

serving this is a most valuable addition to our list of fruits for the South. Remarkable in that it bears heavily the second or third year.

You can't go wrong if you plant Early Richmond and Large Montmorency on either high or low ground, but always remember that Cherry trees will not thrive where there is stagnant moisture. Select a location that is well drained.

The types below are fairly successful on high elevations, but worthless in most localities in the South.

Black Tartarian (Sweet)—Large, purplish black; pleasant flavor.

Governor Wood (Sweet)—Good size; clear, light red; tender and juicy. A customer on Mission Ridge, near Chattanooga, reports this variety as successful there.

Mulberries

Plant 25 feet apart each way. A very valuable fruit for poultry and hogs. The fruiting period is of long duration, lasting two to three months. Should be planted in every hog pasture and chicken yard. Trees come into bearing very young.

Prices—Each, \$1.00; 6 for \$5.00; 10 for \$9.00.

Black English—Tree a very strong grower; foliage fine; berry large, black, ripens ahead of Hicks; hardy and prolific.

Hicks' Everbearing—Follows Black English and continues in bearing for weeks; berry is black, produced abundantly, but not as large as Black English. For sections bordering the Potomac or Ohio Rivers either Downing or New American should be planted, as they are hardier than the two described above. For the general South we recommend Black English and Hicks.

Quinces

Plant 12 feet apart each way. Require a deep, rich soil, clean cultivation, and should be sprayed for best results.

Prices—First Class, young trees, 3 to 4 feet, \$1.00 each; 10 for \$9.00.

Champion—Fruit averages larger than Orange and more oval in shape. A late keeper.

Orange—Fruit of good size; bright yellow; excellent flavor. An old standard sort.

Plums

Plant 15 to 20 feet apart.

Price—First Grade, 4-ft. and up, each 90c; 10 for \$9.50.

Burbank—Similar in all characteristics to Abundance, except that it is more globular. Of cherry-red color, mottled with yellow.

Red June, or Red Nagate—Of medium size, pointed; thick skin of purplish red color; flesh yellow, solid, rather coarse grained, juicy; very prolific. Matures about the middle of June.

Wickson—A plum of large size and distinct, pointed shape. Of high quality, very firm, yellow flesh; pit small; dark crimson-purple when matured. Because it blooms so early it is often killed by late frosts in this section. Ripens last of July.

Wild Goose—Chickasaw type. The best of this type. Large fruit of oblong shape; skin bright vermilion, covered with blue bloom; richly acid. One of the oldest and best known of the native American Plums. Ripens end of June.

Shropshire Damson—European type. Of larger size than the old Blue Damson. Dark purple; good quality. In great demand for preserving. August.

Japan Persimmons

These are all right for the lower South, but not successful this far North. These improved sorts produce fruit three to five times the size of the common native Persimmon. Allow the fruit to hang on the trees until just before frost is expected. Place in a cool, dark room until matured.

Trees should be well cultivated and well fertilized for the first two years, after which they should be plowed during the winter and the orchard sowed with cow peas, no cultivation being done during the growing period. If peas and grass get too high, they may be mowed and used for hay or as a mulch. Fertilizer should be applied in March.

Prices—First Class, 1 year, 3 feet and up, each \$1.00; 10 for \$9.50.

Okame—Large; skin orange-yellow, changing to brilliant carmine, with delicate bloom and waxy, semi-transparent appearance; light, clear flesh when ripe; light brown center around seed, of which it has several; loses astringency as soon as it begins to ripen; fine quality; strong bearer. The most beautiful of them all.

Tane Nashi—Very large; skin bright red when fully matured; flesh yellow; seedless; quality very fine. Perhaps the most highly esteemed of the light-fleshed kinds. Tree is vigorous and bears well.

Farmers' Free Bulletin No. 685, "The Native Persimmon."

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

PEACHES

The ease with which Peach Trees may be grown, their comparative freedom from disease, the short season before they become productive, with the immense demand for fruit and facility with which it may be shipped into distant markets, make Peach growing in favorable localities extremely profitable. To secure healthy, vigorous and fruitful trees, the ground must be kept clean and mellow. Proper cultivation, yearly pruning and careful spraying are absolutely necessary to produce fancy peaches.

The best soil for the Peach is moderately rich, somewhat sandy loam, but will succeed in almost any soil, except a heavy wet clay. We call particular attention to this reduced list of varieties of Peaches, every one of which can be planted with safety in the South. The varieties are listed in order of their ripening, and the list, though small, is so complete that it covers the ripening season thoroughly. They are the best of their particular class and season.

Peaches

Plant 18 to 25 feet apart each way.

Prices—First Class, 2 year, 3½ ft. and up, each, 75c; 10 for \$7.00.

FREESTONE

Arp Beauty—The earliest fleshed Peach of high quality; firm, juicy, excellent flavor.

Mayflower—The earliest and one of the very best early Peaches. Fruit round, entirely covered with red; blooms late; very hardy. A native of North Carolina, a good shipper and its high color and fine appearance make it the most profitable early Peach, as it always brings top prices. Last of May.

Carman—Large, resembling Elberta; skin tough, creamy white, with deep blush; flesh creamy white, tinged with red; good flavor. A good shipper. Middle of June.

Early Belle or Hiley—A Georgia Peach, supposed to be a cross between Belle of Georgia and Early Tillotson. Large; creamy white, highly colored cheek. One of the profitable commercial varieties of Georgia and now being extensively planted.

Belle of Georgia—Very large, white skin, attractive red cheek; flesh white, firm; the standard of excellence of all Peaches in quality; freestone. It is one of the best market varieties of its season.

Elberta—Known wherever Peaches are eaten. Of Georgia origin, remarkable for its size; firm, yellow flesh and tough skin, making it one of the best shipping Peaches; yellow, slightly over-spread with red; fine red cheek. Middle of July.

J. H. Hale—No Peach has had such strong commendation for superiority and productiveness as has this, which bears the name of America's greatest Peach grower, who discovered it. Larger than Elberta, of better flavor and quality; it ripens in the South a few days later, and is a perfect yellow-meated. Fine shipper.

Krummel October—A very large, beautiful Peach, ripening about two weeks later than Salway. Yellow flesh; rich yellow skin with dark carmine cheek. Always finds a good market.

CLINGSTONE

Chinese Cling—Very large; yellowish white, mottled with carmine; flesh white, red at tip; a very juicy Peach. Clingstone. End of July.

Blood Cling, or Indian Blood—Large; dark claret with deep red veins; flesh deep red; middle to last of August.

Farmers' Free Bulletin No. 918, "Growing Peaches, Varieties, etc."

PRIVET HEDGE PLANTS

California Privet—Two-year, 30 to 36 in.; 25, \$2.75; 100, \$10.00.

Amoor Privet—Two-year, 30 to 36 in.; 25, \$3.00; 100, \$11.00.

SHADE TREES

5 to 6 ft., 75c each; 8 to 10 ft., \$1.00 each.

Lombardy Poplar	Red Elm	Tulip Tree
Silver Maple	Judas or Red Bud	Weeping Willow
Norway Maple	Maiden Hair	

ORNAMENTAL SHRUBS

Two-year, 18 in. to 3 ft., 50c each.

Althea	Butterfly Bush	Spirea, V. H.	Deutzia
Coral Berry	Forsythia	Calycanthus	Lilac—Purple
	Lilac—White	Syringa	

Following, 75c Each.

Japan Snowball	Hydrangea, A. G.	Hydrangea, Oak Leaf	
Lilac—Persian	Weigelas	Crepe Myrtle	Spirea, Thunberg

CONIFEROUS EVERGREENS BROAD-LEAVED EVERGREENS

For lack of space we do not quote. If interested write for information and prices.

VINES—Two-year, 50c Each

Honeysuckle—Hall's Japanese	Scarlet Trumpet
Kudzu Vine	Boston Ivy

VINES—Two-year, 75c Each

Wistaria—White and Purple	Andre—Violet red
Clematis, Henryii—Creamy White	Jackmanii—Purple

Figs

Plant 12 to 18 Feet Apart

The Fig is, without question, firmly established as a remunerative and pleasant farm crop, and the profits from the Fig are by no means confined to large plantings. A small door-yard orchard of a few trees will add many dollars to the home income. One of the greatest advantages of the Fig for small farmers is that trees are inexpensive and easy to plant, requiring only a very limited investment in establishing an orchard.

Increased planting of Fig trees are being made each year in Florida and all southern portions of the Gulf States, including a large area in Texas. This increase is due to the profitable canning and preserving of this fruit.

Prices—First Class, 2 year, each, 75c; 10 for \$7.00.

Brown Turkey—Medium to large in size; pear shaped. Flesh white with amber shading. Color a coppery tinted brown. High quality, productive and adapted to a wide range of territory on account of its hardiness.

Celestial (or Celeste)—Light violet in color; very prolific, excellent quality. Hardest of all, and one of the best canning and preserving sorts.

Brown Turkey Figs

Raspberries, Blackberries, Dewberries

The bush fruits have long been neglected from a commercial standpoint because they have grown wild in nearly every locality and comparatively little attention has been given them. Many who have attempted to grow them have not been very successful because they failed to study the demands of the plants and the markets. But today we have evidence on every hand that the conscientious grower of these berries can reap a large profit from his labors. The wild varieties have been replaced by improved strains that appeal to the public and the demand for them is rapidly increasing because consumers appreciate their dietetic value as well as their delightful and delicious flavor.

These three berries have a great deal in common and attention is called to the features that are different. One will note that the following factors are emphasized for each variety—the importance of selecting proper varieties and buying good, healthy plants; proper planting and frequent and thorough cultivation; careful and timely pruning; adequate and judicious use of high grade fertilizers.

The fact that these berries have grown wild in our communities from time immemorial is sufficient proof that they are adapted to our land and that Nature has put her stamp of approval upon them and recommends them to us.

St. Regis Raspberries

Raspberries

Plant in rows 5 to 6 feet apart, 2 to 4 feet in the row. Cut the tops off within a few inches of the ground when planted. After the fruit season, cut out all the old wood which bore the last crop of fruit. Pinch the vigorous young shoots several times during the summer. They will then grow stout enough to stand without staking.

Prices—Each, 15c; 6 for 90c; 10 for \$1.00; 100 for \$8.00, postpaid. By express, 100 for \$7.00; 500 for \$30.00. Write for prices on larger quantities.

St. Regis Everbearing—One of the greatest raspberries ever introduced. Plants of the St. Regis put out in the fall or early April gave ripe berries on the 20th of June. For four weeks thereafter the yield was heavy and the canes continued to produce ripe fruit without intermission until late October. The berries were large and beautiful, firm and full flavored, to the very last. The St. Regis is the only raspberry, as far as known, that is practically sure to produce a crop of fruit the season planted.

Cuthbert—Fruit large, red, of excellent quality, yield very prolific; ripens middle of May, and continues for several weeks.

Cumberland (Black Cap)—The best black; large size; good quality, and produces abundantly over a long season.

Farmers' Free Bulletin No. 887, "Raspberry Culture."

Dewberries

One of the most profitable fruits for general culture. The crop follows the strawberry season closely, and fills the gap between strawberries and blackberries.

The Dewberry, or trailing blackberry, should be trained to a stake, or it can be worked regularly on a small trellis. It should be planted in rows about six feet apart and four feet apart in the row. When the cane or vine has made a growth of five or six feet, it should be cut back. Otherwise treat the same as you would raspberries.

Prices—Each, 15c; 6 for 90c; 10 for \$1.00; 100 for \$8.00, postpaid. By express, 100 for \$7.00; 500 for \$30.00. Write for prices on larger quantities.

Austin's Improved—Of Texas origin. Very large fruit; enormously productive; a strong, vigorous grower. The best variety for the South.

Farmers' Free Bulletin No. 728, "Dewberry Culture."

Currants and Gooseberries

Neither of these fruits like our long, hot summers. A few plants for the garden will pay usually, but we do not recommend large plantings. Plant where partially shaded.

Prices—Each, 50c; 6 for \$2.50; 1 doz. for \$4.50.

Wilder Currant—Red. **Houghton Gooseberry**—Red.

Farmers' Free Bulletin No. 1024, "Currants and Gooseberries."

Blackberries

Improved Blackberries are of greater size, sweeter and of finer flavor than the wild sorts. The ripening seasons follows the strawberry a week or ten days, and the fruit finds a ready market at good prices. Plant in rows, 6 to 8 feet apart, setting the plants 3 feet apart in the row. After the crop is gathered, cut out and burn the old canes. When the young canes are about 2 feet high, pinch out the tips; this will make them branch, increasing the next year's crop.

The growing of this very delicious and healthful fruit is attended with so little trouble and expense that every garden, however small, should have at least 50 plants. For cooking purposes they are unsurpassed, and will yield a dark wine of excellent quality.

Prices—Each, 15c; 6 for 90c; 10 for \$1.00; 100 for \$8.00, postpaid. By express, 100 for \$7.00; 500 for \$30.00. Write for prices on larger quantities.

Early Harvest—Medium size; firm; productive.

Eldorado—Very large sweet, rich, sparkling black fruit. Vigorous grower, large foliage, free from rust. One of the best market sorts; very productive.

Snyder—Medium size, very hardy; an old, well-known sort.

Farmers' Free Bulletin No. 643, "Blackberry Culture."

Early Harvest Blackberries

Buchanan's Grape Vines

Concord
Grapes

The large number of varieties of Grapes now grown throughout the United States and the special adaptation of certain varieties to soil and climate bring this delicious and wholesome fruit within the reach of every one who has control of a well-drained piece of land exposed to the sun. The selection of varieties adapted to local conditions, thorough cultivation, liberal and judicious fertilization, and spraying at the right time and with the right spray material, will make Grape growing profitable in at least a large portion of every State in the Union.

The first requisite is the selection of a variety that will thrive in the soil selected for the vineyard and at the same time is adapted to the uses to which the fruit is to be put. Grapes must have a well-drained soil, but are not so exacting as to the exposure given them as some other fruits. Thorough and deep preparation is necessary to a well-developed vine and to good yields of good fruit.

Grapes must have support for training the vines, and single stakes or trellises may be used. For the Scuppernong and other varieties of this type arbors are usually employed to support the vines, though trellises have proven very satisfactory when the proper pruning is given for this type.

Pruning for the bunch varieties must be severe as compared with other fruits, and after the second or third year from three-fourths to nine-tenths of the new wood must be removed.

An essential to good crops of Grapes that is too often neglected is cultivation. Grapes demand good cultivation and frequent cultivation. The destruction of weeds is not the only object of cultivation—moisture must be conserved, for Grapes demand an enormous quantity of water regularly supplied throughout the summer. Spraying must be done in time to ward off diseases and insects, and especially the former. Each vineyardist should be thoroughly posted concerning the various pests that attack the Grape, and use in season the spray that is specific for them.

Grapes require fertilization for their best yields and highest qualities. A Grape fertilizer should contain 8 per cent of phosphoric acid, 3 to 5 per cent of nitrogen and 4 to 8 per cent of potash, and from 400 to 800 pounds should be applied annually per acre. Half the amount to be applied should go down as soon as growth begins in the spring and the remainder when the Grapes have reached about two-thirds or three-fourths their full size. The fertilizer may be put down on either side of the rows with a fertilizer distributor or may be applied broadcast and cultivated into the soil.

We list one each of Black, Red and White—the best for the entire South.

Grapes

Plant 8 to 10 feet apart. Your back porch, fences around the garden and the chicken yard, any unsightly outhouses can all be utilized as supports for Grapevines. There is no fruit that returns greater dividends in satisfaction. They do not necessarily require a rich soil. Keep the ground well stirred about them, working in a good heavy mulching of leaves, leaf mold or well-rotted stable manure once or twice a year.

We list one each of black, red and white, the best for the entire South.

Prices—All varieties, First Class, 2 year, well-rooted vines, each 35c; 6 for \$1.85; 1 doz. \$3.50.

Concord—Bunch and berry large, blue-black; flesh sweet, tender; quality high. One of the best known and most popular sorts.

Lutie—A native of Davidson County, Tennessee. Vine a distinct grower; berry large, dark red; peculiar and most agreeable flavor. Productive and desirable.

Niagara—The best white market Grape. A good shipper, having a tough though rather thin skin. Bunch medium to large, berry large. Pale yellow with whitish bloom when fully ripe.

Farmers' Free Bulletin No. 471, "Grape Propagation, Pruning and Training."

SCUPPERNONG OR MUSCADINE TYPE

A distinct type of native southern Grape. The vine is a very strong grower, remarkably free from disease and insects, maturing its fruit fully without decay. The fruit is produced in small clusters.

If the Scuppernong type of grapes were produced in sufficient quantity to supply the Southern markets during their season of August, September and October, there would be very little demand for any of the bunch grapes in competition with them. All Southern people know and love these grapes best of all. We recommend them highly for Southern markets.

Do not plant one single Scuppernong vine, but always two or more; better still, two or more varieties. Single vines, often, do not fruit for lack of pollenization.

Prices—First Class Vines, each 60c; 6 for \$3.00; 1 doz. \$5.00. Bunches are small, consisting usually of six to ten large berries; bronze-colored when fully matured. Flesh is pulpy, with a peculiar musky flavor.

James—Produces the largest fruit of the Muscadine type. The berries are black, juicy and sweet, and often measure 1 inch or more in diameter.

Thomas—Medium size, round, dark wine color when fully ripe. Regarded by many growers as the best for table use of the Scuppernong type. Highest in sugar content.

Farmers' Free Bulletin No. 709, "Muscadine Grapes."

Lady Corneille
Strawberries

Strawberry Culture

An Increasing Demand Crop—The strawberry is the first fruit that reaches the market in the spring, and is universally popular and eagerly sought. The popularity of this delicious spring fruit has never waned, and each season brings an increasing demand, and this demand is each year better satisfied. A better system of distribution, better transportation facilities, the constant improvement in the qualities of the market varieties, and a better understanding of the business of strawberry growing, make the early strawberry a profitable crop in at least one section of nearly every State in the Union. Soon after the midwinter Florida berries start North, very nearly every important railroad leading northward carries its car or trainloads of this harbinger of spring.

THE SOIL AND ITS PREPARATION

A Profitable Crop—A knowledge of the requirements of the strawberry, involving the selection of the varieties, the treatment of the soil and the judicious use of commercial fertilizers will make this crop a profitable one under wide variations in soil and climate. Few, if any, crops in the United States have a wider area of adaptability if the proper cultural treatment is practiced. They thrive on soils in which lime, clay or sand predominate, and it would be difficult to find a farm of any considerable area upon which at least a few acres of strawberries could not be grown with profit if a market were in reach.

Thorough Drainage Essential—Good drainage is necessary for profitable strawberry culture and especially for the early crop. Thorough drainage is essential to earliness. Tile-drained lands are better than those with natural drainage. A light sandy loam is considered ideal. The light clay loams are practically as good if varieties of special adaptation are depended upon. While heavier soils will produce most excellent berries in abundance, the crop matures later on such soils. A heavy soil with a northern exposure may ripen its berries a week or ten days later than a light sandy loam, with a southeastern exposure. Advantage may be taken of this and the period of marketing prolonged.

Water Important—Strawberries require large amounts of water, and clover or cowpeas plowed down some time before the plants are set will give the soil the power to take up and hold larger quantities of water.

Judicious Use of Fertilizers—The commercial fertilizers giving the best results will vary on different soils, and a knowledge of the demands of a specific soil is necessary to the judicious use of commercial fertilizers. On very nearly all of the strawberry soils a complete fertilizer is needed, or one con-

taining all three of the fertilizing elements—phosphoric acid, nitrogen and potash. For soils classed as clays, from 1,000 to 1,500 or even 2,000 pounds of fertilizer, analyzing 8 per cent phosphoric acid, 3 per cent nitrogen and 8 per cent potash, may be used. On the lighter sand soil, use the same analysis of phosphoric acid and nitrogen and 10 or 12 per cent of potash.

Plant in February, March, April and November on good ground, deeply worked and well manured. Set in rows $3\frac{1}{2}$ feet apart, 15 inches in rows, for field culture; 15 inches each way for garden. Cultivate clean, mulch late in the fall and uncover early in the spring. Remove mulch after fruiting and spade in a light dressing of manure.

Prices—Any of the following varieties, 25 for 40c; 50 for 75c; 100 for \$1.00, postpaid. By express, 500 for \$3.00; 1000 for \$4.50. Write for special prices on quantities. We can furnish any quantity.

New Strawberry, Lady Corneille—A wonderful new strawberry from Louisiana, ripens with Klondyke, but continues in bearing longer; berries large, rich, glossy red, slightly long, uniform in size and shape; rich, juicy, sweet and delicious. The plant is vigorous, with dark green, glossy leaves, and stands drouth better than any other variety. Lady Corneille is a better berry than Klondyke for shipping, being larger, darker in color, and carries well in transit. Flowers perfect, therefore will produce crop when planted alone.

Klondyke Strawberry—A Southern berry, one of the best; color dark red, and good size. Flowers perfect.

Grandy Strawberry—The best late variety; produces large, even, dark crimson fruit; a splendid shipper.

Aroma Strawberry—Very large, late maturing, berries solid, deep red, uniform in size; does well in this section. Perfect blooming.

Lady Thompson Strawberry—Well known standard variety for home use; fruits large, slightly pointed, light red, but very sweet; perfect blooming.

Excelsior—A standard extra early variety that succeeds everywhere. Firm, brilliantly colored. Fine table berry when perfectly ripe.

EVERBEARING STRAWBERRIES

Of this type the Progressive is, we think, best for general Southern planting. An abundant bearer, producing its fruit over a long period; quality good, firm, good size and shape. **Prices**—25 for 75c; 50 for \$1.25; 100 for \$2.00, postpaid. By express, 500 for \$7.50; 1000 for \$10.00. Write for prices on quantities.

Farmers' Free Bulletin No. 1026, "Strawberry Culture."

Buchanan's Spray Pumps

After many years' handling many makes of Sprayers, I have reduced my stock to only ten separate kinds, and have one to fit your needs.

On this page I list a Sprayer to fit every need from the largest orchard to the smallest flower garden.

You cannot be successful with orchard, truck farm, poultry yard, vegetable garden or flower garden without you study the use of Spray Pumps and Insecticides to fight the many and various insects and plant diseases that you have to contend with. I will send you a FREE book on spraying if you will write for same.

IDEAL PORTABLE SPRAYER (30)—A strong, durable wheelbarrow Sprayer. The Ideal is well designed and will develop a higher pressure than any other wheelbarrow Sprayer. Particularly desirable for whitewashing and very practical for spraying medium-sized orchards or vineyards. Price, each \$32.00.

IDEAL PORTABLE SPRAYER (31)—This is identically the same outfit as the No. 30 Ideal described above, but it is equipped with the pressure tank and gauge.

Air Tank—Boiler iron, all joints welded, tested to 275 pounds pressure, 10 inches in diameter, 24 inches long, braced to frame with channel iron; pressure gauge reading to 200 pounds. Shipping weight, crated, 130 pounds. Price, each \$43.75.

Ideal Portable Sprayer Without Air Tank (30)

PERFECTION SPRAYER (110G, 110B)—For potato spraying, whitewash, disinfectants, cold water paints, etc. A High Pressure Sprayer, "with the pressure." Prices;

110G, Galvanized Tank, each.....\$ 7.00

110B, Brass Tank, each..... 10.00

Perfection Sprayer (110G)

THE HUDSON BARREL PUMP is adapted for any work requiring a high-pressure outfit. It may be used in the orchard and vineyard, in the truck garden, potato, onion or melon field, in the stock barn, cattle pen or chicken house, or for general work around the house and yard. It is strong and durable, and will easily maintain a working pressure of 200 lbs.

Cylinder is seamless brass. Valves are bronze balls in brass cages, protected from sediment by a brass wire screen. Agitator is swinging type, driven by each stroke of the plunger.

Air chamber is high carbon steel, of ample capacity to maintain a uniform high pressure at the nozzle.

No. 4—Pump only. Shipping weight, 40 pounds. Each \$18.50.

No. 4A—Pump with 15 feet of ½-inch spary hose and Ideal angle spray nozzle. Shipping weight, 45 pounds. Each \$24.50.

No. 4B—Pump complete with hose and nozzle, mounted in heavy welded steel barrel. Shipping weight, 115 pounds. Each \$37.00.

The Hudson Barrel Pump

HUDSON JUNIOR (140G)—A good Sprayer; same as No. 110G, only smaller. Price, each \$5.00.

THE EASY SPRAYER (120G)—A Compressed Air Sprayer, made especially for the man desiring a Sprayer larger than the hand atomizer and not as large as the regular compressed air types. Tank of galvanized iron or brass, 5½ inches in diameter, 8 inches long, capacity, one gallon.

No. 120G Galvanized Tank, price, each.....\$4.00

Continuous Sprayer (7212)

CONTINUOUS SPRAYER (7212)—The most practical Continuous Sprayer made. All working parts are of brass; two nozzle tips, one straight and one up-shoot.

Pump—1¼ inches in diameter, 14 inches long.

Tank—4 inches in diameter, 4½ inches long; holds 1 quart; length over all, 18 inches.

Price, each.....\$.85

Midget Sprayer (202)

MIDGET SPRAY (202)—A small, well-made Sprayer for general purposes, and especially adapted for use in and about the home. Will handle all kinds of liquids satisfactorily.

Price, Quart Size, each.....\$.50

Price, Pint Size, each..... .30

Buchanan's Dependable Insecticides

Spraying has now become to be an established part of the work of all farming—cotton growing, truck gardening, fruit growing, vegetable gardening and flower gardening.

Spray! Spray! Spray!—spray for insects and for fungus diseases. I believe in spraying, for I have tried and proven it. It is just as much a necessity as fertilizing and good cultivation.

Success is dependent upon the exercise of proper judgment in making applications. Know the enemy to be destroyed; know the remedies that are most effective, and finally apply them at the proper season. Be prompt, thorough and persistent.

Directions for applying the different preparations are printed on the packages.

Poisonous insecticides and liquids of any kind are not permitted in the mails, so all packages of poisons, no matter how small, must be sent by express or freight.

For fungus disease, use at all times Bordeaux Mixture. For lice and sucking insects and aphids, use Nicotine Solution. For caterpillars, use Arsenate of Lead. For mildew, use Lime Sulphur and Hammond's Grape Dust. For cutworms, use Cutworm Food. For tomato worms, apply Slug Shot. For potato bugs, use Bug Death and Arsenate of Lead or Tuber Tonic. For San Jose dormant spraying, use Lime Sulphur.

DRY OR POWDERED LIME SULPHUR—This new preparation is taking the place of the liquid formula. Besides, it doesn't spoil. You can use as you want same, and then you also don't have to pay freight on water. Fourteen pounds Powdered Lime Sulphur will make 50 gallons of spray material. Full directions come with every package. Price, 1-lb. pkg. 30c; 5-lb. pkg. \$1.35; 10-lb. \$2.25; 25-lb. \$3.50. By parcel post, 1-lb. pkg. 40c; 5-lb. pkg. \$1.50.

LIME SULPHUR SOLUTION—The liquid form is the standard form recognized by the Department of Agriculture, Experiment Stations and large orchardists. Easily mixed, 10 gallons water to 1 gallon solution. 1 qt. 50c; gal. \$1.25; 5 gal. \$4.00. Cannot be mailed.

CUTWORM FOOD—Simple, easy to use; a sure dose for eradication of all cutworms. 1-lb. 30c; 5 lb. \$1.25, not mailable.

I repeat! Spraying is just as important and necessary as good cultivation or fertilization.

PARIS GREEN—A deadly poison for man or beast. Handle very carefully. Price, ¼ lb. 20c; ½ lb. 30c; 1 lb. 50c; 5 lb. \$3.00, cannot be mailed.

DRY POWDERED ARSENATE OF CALCIUM—Contains the maximum amount of arsenic oxide which can safely be combined with calcium so as to produce a quick acting, adhesive and economical insecticide. It has relatively the quick killing action of Paris Green, but adheres to the leaf for a longer time than does Paris Green. It is white in color and therefore it is easier to insure proper and uniform distribution. Due to the thorough chemical combination of the elements entering into the manufacture of Arsenate of Calcium, we produce a powder which insures maximum results at a minimum cost. Arsenate of Calcium is lower in cost than Arsenate of Lead, and very much less expensive than Paris Green. 1 lb. 40c; 5 lb. \$1.75, cannot be mailed. Write for quantity prices.

SLUG SHOT, Hammond's Non-poisonous; a splendid powder for general use. 1 lb. 20c; 5 lb. 60c; 10 lb. \$1.00; 25 lb. \$2.25; 100 lb. \$8.00. By parcel post, 1 lb. 30c; 5 lb. 75c; 10 lb. \$1.25.

DRY ARSENATE OF LEAD—Does not burn the foliage, absolutely safe to use, kills every insect that eats it, superior in every way to Paris Green, as it does not burn or scald the foliage; can be used dry as a powder or as a solution in water. Price, ½ lb. 25c; 1 lb. \$45c; 5 lb. \$2.00, cannot be mailed. Write for quantity prices.

TUBER TONIC—A new preparation from Sherwin-Williams Co., especially made to kill potato beetle and at the same time acts as a tonic to the plant. Price, 1 lb. 60c; 5 lb. \$2.75; 10 lb. \$5.00; 25 lb. \$11.00, cannot be mailed.

TOBACCO DUST—For lice and other insects on all vegetable and flower plants. Price, 1 lb. 25c; 5 lb. 60c, postpaid. By express, 5 lb. 40c; 25 lb. \$1.25; 100 lb. \$4.00.

BUG DEATH—A new powder that effectually takes the place of Paris Green and other dangerous and poisonous insecticides. Absolutely safe to use, as it contains no poison whatever. Send for circulars. 1 lb. 35c; 3 lb. 75c; 5 lb. \$1.00; 12½ lb. \$2.00, postpaid. Not prepaid, 1 lb. 25c; 3 lb. 65c; 5 lb. 85c; 12½ lb. \$1.50; 100 lb. \$10.00.

Pat. Mar. 16 & Nov. 9, 1897

NICOTINE SOLUTION—When properly diluted and used according to directions, it is the most effective agent against the sucking insects. Price, 1-oz. bottle 30c; 1 pt. \$2.50, cannot be mailed.

Spray your Orchard, your Garden, your Flowers.

POWDERED OR DRY BORDO—The perfect dry Bordeaux mixture, all ready to be mixed, as you need it, with water. Kept dry, will last for years. Full directions on every package how to use it. Price, 1 lb. 45c; 5 lb. \$2.00; 10 lb. \$3.50; 25 lb. \$7.50; 50 lb. \$11.50, cannot be mailed.

HAMMOND'S GRAPE DUST—Keep off blight and other fungus disease. 1 lb. carton 30c; 5 lb. \$1.00. By parcel post, 1 lb. 35c; 5 lb. \$1.20.

SPRAY, SPRAY, SPRAY!

SULPHO TOBACCO SOAP—Will keep off and kill all insects on plants and trees. 3-oz. cake 15c; 8 oz. 35c. By parcel post, 10c extra.

Buchanan's Selected Poultry and Stock Remedies

There is just as much "humbug" about Stock and Poultry remedies as there is about many Patent Medicines, and I therefore list only the reliable remedies which I have used with my own stock and poultry and found to be as represented.

I list Pratt's Food and Remedies because they have been made and sold for more than 40 years, and are sold to you under a guarantee to do exactly what they claim for them or your money refunded.

I have a 96-page book published by Pratt Food Co. on Stock and Poultry diseases, which I will mail you FREE if you will write for it. This book is worth more to a farmer, stock or poultry raiser than many which you would pay \$1.50 for. Get it and read it. It's free!

Pratts Poultry and Stock Remedies

Pratt's Poultry Regulator	\$.25; by parcel post \$.35
Pratt's Poultry Regulator	.50; by parcel post .65
Pratt's Poultry Regulator	1.10; by parcel post 1.35
Pratt's Poultry Regulator, 12-lb. pls.	1.75; by parcel post 2.00
Pratt's Roup Remedy	.25; by parcel post .30
Pratt's Cholera Remedy.....	.25; by parcel post .30
Pratt's Gape Remedy	.25; by parcel post .30
Pratt's Sorehead Remedy	.25; by parcel post .30
Pratt's White Diarrhea Cure.....	.25; by parcel post .30
Pratt's Lice Powder	.10; by parcel post .15
Pratt's Lice Powder	.25; by parcel post .30
Pratt's Animal Regulator.....	.25; by parcel post .35
Pratt's Animal Regulator	.50; by parcel post .60
Pratt's Animal Regulator	1.10; by parcel post 1.35
Pratt's Head Lice Ointment	.25; by parcel post .30
Pratt's Worm Powder	.50; by parcel post .60
Pratt's Hog Cholera Specific.....	.50; by parcel post .60
Pratt's Hog Worm Powder	.50; by parcel post .60
Pratt's Animal Regulator, 25-lb. pail	\$4.10; cannot be mailed
Pratt's Lice Liquid, 1-qt.	.40; cannot be mailed
Pratt's Lice Liquid, 1-gal	1.25; cannot be mailed
Pratt's Disinfectant, 1-qt.	.60; cannot be mailed
Pratt's Disinfectant, 2-qt.	1.05; cannot be mailed

The Chick That's Never Sick

The always-well, ever-growing chick is not a thing too good to be true. Thousands of poultrymen have learned that it is possible, barring accidents, to raise almost the entire hatch by the simple expedient of feeding them Pratt's Baby Chick Food. It is a complete ration for baby chicks, providing growth and preventing disease. It makes bone and muscle and saves chicks from leg weakness and digestive troubles. It has been appropriately called "baby chick life insurance."

Pratt's Baby Chick Food consists of the hearts of the finest grains and cereals, and has very little fiber. Being about 75 per cent mechanically pre-digested, it is readily assimilated. It is not expensive—one cent's worth being enough for one chick for three weeks. Many poultrymen continue feeding it for five to seven weeks.

Price—2½-lb. pkg. 35c; 6-lb. pkg 60c, postpaid. Write for prices on quantities.

The Feeny Duster

This is a simple, inexpensive duster for use around the vegetable and flower garden, can also be used on small potato patches.

See page 73 for the various materials used with the Feeny Duster.

Price each, \$1.00

Postpaid, \$1.25

R.B.BUCHANAN

BUCK BRAND SEEDS

TENN.

Poultry Tonic

Contains Charcoal, Cayenne Pepper, Copperas, Glauber's Salt, Epsom Salts, Fenugreek, Salt, Anise, Quassia, Bicarbonate of Soda, Sulphur, Salt Petre, Carbonate of Lime and Iron Oxide.

Contains Sulphur, Carbonized Peat, Charcoal, Quassia, Sulphur, Gentian, Pure Chloride of Magnesia, Epsom Salts.

For all stock. Destroys worms in Hogs, Sheep, Horses and Cattle. Simply put Sal-Vet in the animals' troughs, or give it to them in their food. Send for circulars.

5-lb. package	\$.60; by parcel post \$.75
15-lb. package	1.50; by parcel post 1.80
50-lb. pail	4.00; cannot be mailed
100-lb. keg	6.75; cannot be mailed
200-lb. barrel	12.00
300-lb. barrel	16.00

POULTRY TONIC—Just mix with the mash or ground feed and see your hens lay more, look better and keep healthier. If your dealer does not sell it, don't be satisfied to accept something "just as good." Send us the price; we'll send it to you direct.

1½-lb. pkg.	\$.25; postpaid \$.35	12½-lb pail	\$1.25; postpaid \$1.40
3½-lb. pkg.	.50; postpaid \$.60	25 -lb. pail	2.25; postpaid 2.50

Lice Powder

Lice irritate, prevent growth, retard laying. Lice-free hens are contented, keep healthy, grow faster and lay more. You can get rid of the irritating, profit-destroying lice. Proof? Hold the bird over a sheet of white paper. Apply Sal-Vet Brand Lice Powder. Sift well among the feathers; work it down to the skin. See how quickly the lice will fall off—dead. Price, 1 lb. 25c; postpaid 35c.

Sal-Vet Brand Cow Remedy

is prepared especially for milk cows; it is easily fed with the ration; effective in action—an aid long looked for and one upon which you can depend. 1½lb. pkg. 50c; postpaid 60c.

Hens that don't lay, don't pay. Neither do fowls that don't fatten. You can get more profit from your poultry—not the old way, but by mixing Sal-Vet Brand Poultry Tonic with the ration fed. You can make your hens lay more eggs, keep them in fine, healthy condition, prevent diseases, and insure greater profits from the flock, with less loss from sickness, by feeding Sal-Vet.

Buck Brand

Mixed Bird Seed

It is mixed fresh by use as sold, and nothing goes into this mixture but the best, cleanest Canary Seed and Bird Rape from South America and Millet from Kansas, that can be bought. Price, 1 lb. 20c; 2 lbs. 35c; 5 lbs. 80c; 10 lbs. \$1.50, postpaid. By Express not prepaid, 25 lbs. \$3.25; 50 lbs. \$6.00; 100 lbs. \$11. I send these Seed all over the South by parcel post and express.

Don-Sung

Makes Hens Lay More Eggs

DON SUNG (Chinese for egg laying)—Is given in the feed and doesn't force or rush the hen in any way; in fact, it makes her healthier. It is a new scientific discovery for hens, that merely stimulates the egg organs, making her strong and vigorous and as a result she lays regularly in any season. Try a box, we guarantee it. Ask for circulars. Price, per box, 52c; large size, \$1.04; postage 5c extra.

Avicol

AVICOL—A safe and effective remedy in tablet form for White Diarrhea, Cholera, etc., in small and large grown fowls. Avicol is now being used by thousands of successful poultry raisers the world over. Write for circulars. Price, 26c, 52c; and \$1.04 per pkg. Postage 5c extra.

Philadelphia Bird Food

These are all especially prepared for birds, and are of the very best quality. Our stocks are complete at all times, so your order can be filled promptly.

Phil. Bird Manna—The best tonic for Canaries; keeps them in good condition; helps moulting. Each, 16c; by parcel post, 21c.

Phil. Silver Gravel	pt. box 10c; parcel post 20c
Phil. Red Gravel	pt. box 10c; parcel post 20c
Phil. Bird Bitters	bottle 26c; parcel post 31c
Phil. Bird Mite Exterminator	box 26c; parcel post 31c
Phil. Bird Moulting Pepper	box 26c; parcel post 31c
Phil. Bird Nestling Food	box 26c; parcel post 31c
Phil. Bird Nestling Hair	box 10c; parcel post 15c
Canary Seed, plain	1 lb. 30c; parcel post 40c
Canary Seed, mixed	1 lb. 25c; parcel post 35c
Hemp Seed	1 lb. 20c; parcel post 30c
Millet Seed	1 lb. 10c; parcel post 20c
Rape Seed	1 lb. 20c; parcel post 30c
Sunflower Seed	1 lb. 30c; parcel post 50c
Cuttle Fish Bone	each 10c; parcel post 15c

Dr. Hess' Poultry Remedies

Dr. Hess' Poultry Panacea, small...	\$.32; by parcel post \$.42
Dr. Hess' Poultry Panacea, medium.	.78; by parcel post .93
Dr. Hess' Poultry Panacea, large...	1.56; by parcel post 1.86

Spratt's Dog Cakes

Spratt's Dog Cakes, 2-lb. box....	\$.40; by parcel post \$.50
Spratt's Dog Cakes, 4-lb. box....	.80; by parcel post .90
Spratt's Dog Cakes, 10-lb. bag....	1.75; by parcel post 1.90
Spratt's Dog Cakes, 50-lb. box....	7.75; cannot be mailed
Spratt's Dog Cakes, 100-lb. box....	15.00; cannot be mailed
Spratt's Puppy Cakes, box	.40; by parcel post .50

BUCK

BUCHANAN'S

BUCK BRAND MIXED STOCK AND POULTRY FEEDS

I respectfully direct your attention to a full line of mixed feeds, a feed for every purpose, that you will find listed below. I have had more than twenty years' experience in the hay and grain business in Memphis and know feeds. I will not put out under my brand anything but high-grade feed. You know

the effect on your stock and poultry of feeding clean, digestible high protein feed. You will find this in each of these feeds. I have handled them for years always the same, the best I know how to make. Cheaper than feeds that sell for less.

SUGAR FEED—This cow or horse feed is manufactured under our supervision and is the best and most substantial feed that we can make.

HOG MASH—A choice selection of mill feeds, ground peanuts and alfalfa—no waste or trash. Contains all necessary elements for a balanced ration. It is getting results.

SCRATCH FEED—We manufacture this chicken feed and know exactly what goes into it. Some of the largest poultry raisers in the state use only Buck Brand Scratch Feed. Send for a sack.

RABBIT MASH—We began making this feed less than a year ago by a formula furnished by a breeder of long experience. We keep in touch with the best breeders and improve the feed wherever possible.

PIGEON FEED—Without cracked corn, shell or grit. In view of the increase of the pigeon raising, we have prepared a special feed, which after a careful study and trial, we believe will give the most satisfactory results.

OYSTER SHELL—Oyster shell is absolutely a necessity to a laying hen. It furnishes the lime to make the egg shell, it will surprise you the amount that your chickens will eat. It is very cheap and is well worth the money. 10 lbs. 40c, postpaid; 100 lbs. \$1.25, freight.

CHARCOAL—Nothing equals it as a disease preventative. Made in 3 sizes—coarse for hens; medium for pigeons; fine for baby chicks. Price 2 lb. carton 15c; 25 lb. \$1.50; 50 lb. \$2.50; 100 lb. \$4.50. By parcel post 2 lb. carton 25c.

DARLING'S MEAT SCRAPS—For success with poultry it is absolutely necessary to give them plenty of animal food in the winter, to take the place of insects, etc., which they get during the summer. Feed mixed with meal or bran, at the rate of $\frac{1}{4}$ lb. of beef scraps per day to a dozen hens. 3 lb. 25c; 25 lb. \$1.50; 50 lb. \$2.75; 100 lb. \$5.00. By parcel post, 3 lb. 35c.

LAYING MASH—We make this feed today just the same as the first lot sold twelve years ago. We will always make it the same, regardless of the cost of the various ingredients.

CHICK FEED—We have been manufacturing this feed for a number of years. It is the best possible mixture that we know of that will produce rapid growth in baby chicks. For all chicks under six weeks of age.

PRATT'S BABY CHICK FEED—A superlative mixed feed for Baby Chicks. Contains only such grains that are easily digested. This is one of the most scientifically mixed baby chick feeds on the market. $2\frac{1}{2}$ lb. pkg. 25c; $5\frac{3}{4}$ lb. pkg. 50c. By parcel post, $2\frac{1}{2}$ lb. pkg. 35c; $5\frac{3}{4}$ lb. pkg. 60c; 14 lb. bag. \$1.70, parcel post paid, not past Third Zone.

CONKEY'S BUTTERMILK STARTING FOOD FOR CHICKS—A ready-prepared food for Baby Chicks, Turkeys, Ducks, Guineas, etc. Feed according to directions. You will raise 90 per cent of those hatched. It is a special starting feed and will avoid much trouble in raising the flock. By parcel post, $2\frac{1}{2}$ lb. 35c; 6 lb. 60c.

BLATCHFORD'S CALF MEAL—The perfect milk substitute; contains all the elements for pushing calves to maturity; easily digested, prevents scouring. Full directions with every bag. 25 lb. \$1.75, postpaid.

RED CROSS PIGEON GRIT—Especially for pigeons. A tonic and grit combined. Pigeon fanciers say it's the best preparation of its kind. 5 lb. 25c; 50 lb. \$1.75; 100 lb. \$3.00. By parcel post, 5 lb. 40c, not past 3rd zone.

MICA GRIT—This grit should be fed in hoppers or boxes. Grit is very necessary to keep poultry in a good healthy condition. We can furnish 2 sizes, for hens and for baby chicks. By freight, 10 lb. 25c; by parcel post, 45c.

BONE MEAL—This is especially valuable for poultry as an egg maker and prevents leg weakness in young chicks. Mix it in their feed. We can furnish the coarse for hens and the fine grade for chicks. By freight, 3 lb. 25c; by parcel post, 35c.

MAKE YOUR FARM OR CITY HOME WORTH MORE MONEY BY PLANTING TREES AND SHRUBS.

Hudson Wheelbarrow Grass Seeder

The Hudson Wheelbarrow Grass Seeder will sow Clover, Timothy, Alfalfa, Orchard Grass, Red Top, Blue Grass, etc. The hopper is carried close to the ground, permitting its use during windy weather. It has a chain feed, making it positive and uniform in its distribution. Wheel 32 inches high, light and rigid. Frame and hopper made from selected material.

No. 10 Single Hopper Seeder, 14-foot. Weight, 47 pounds. Price, each...\$12.50

No. 12 Double Hopper Seeder, 14-foot. Weight, 55 pounds. Price, each... 15.00

Cahoon Broadcast Seeder

The standard broadcast seeder and one of the best. Sows all kinds of grain, Clover, Timothy, etc. In operation sows 4 to 5 acres an hour at a common walk. Distributes seed uniformly in one-fifth the time required by hand. Circular on request.

Price each \$4.75. Postpaid \$5.00

Cyclone Broadcast Seeder

Thousands of these are in use with perfect success. Adapted to all kinds of grain and heavy grass and clover seeds.

Price \$2.00. Postpaid \$2.25

Hudson Garden Plow

A counterbalanced plow with a 24-inch high wheel, made of the very best material and most careful workmanship. It is a good, strong tool which can be used in the largest gardens; is very popular and the best of its kind. Tool equipment consists of landside plow, sweep, double-pointed shovel and cultivating attachment. This latter is equipped with five teeth, but any of them are easily removed so that combinations of 2, 3 or 4 can also be made. Weight, 26 pounds.

No. 240 Price, each.....\$5.50

Hand Cultivator

Has 4-foot high grade handle, 3 detachable steel prongs, and weighs only 2 pounds. Cultivates between very narrow rows. Price, each 60c.

Midget Weeder

Designed for cultivating gardens, flowers, small shrubbery, etc., where close hand work is required. Has 9-inch handle. Weight, 12 ounces. Price, each 50c.

THE LIGHTNING HORN SEEDER—A splendid little tool, simple and easy to operate. Will sow any fine seed like clover, lespedeza, timothy, alfalfa and grasses. Holding the tube downward, wind won't blow seed away. We know this Seeder to be good. Price, \$1.25; by parcel post, \$1.35.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Buchanan's High-Grade Fertilizers

COMMERCIAL FERTILIZERS—Are used more and more each year and if you want quick early vegetable crops, or if you wish your land to do its best with Corn, Cotton, Clovers and Grasses during these times of high prices on every article the farmer can raise, you must use commercial fertilizers. In selecting a fertilizer to carry in stock, my first idea naturally was to handle a high grade article that would show results. Something that I could ship direct to the farmer and get repeat orders.

The prices given below are net cash and F. O. B. Memphis. Special prices on car lots and larger quantities delivered at your depot will be given on application.

PLANT FOOD IS THE BASIS OF FERTILITY

Plants use thirteen chemical elements in making their growth. Ten of these are usually present in sufficient quantity. Nitrogen, phosphorus and potassium are those most frequently lacking. These three elements, in natural combination with others, make up those substances which are commonly spoken of as ammonia, phosphoric acid and potash, and must be available. No matter how much plant food a fertilizer may contain, its value to a growing crop can be determined only by the availability of such plant food—that is, it must be in a condition to be readily assimilated by the plant. The percentage of plant food advertised in our fertilizer is guaranteed available and ready for plant assimilation.

Acid Phosphate

Acid Phosphate is recommended for all Legume, Grain and Grass Crops, and for applying to all land deficient in Phosphoric Acid. Beneficial results follow the addition of it to barn-yard manure, all manure being high in ammonia, but low in phosphoric acid. Prices, 100 lb. \$2.25; 200 lb. \$4.00; 1000 lb. \$19.00. Write for prices on larger quantities.

BUCHANAN'S TRUCK FERTILIZER—Analysis: Nitrogen 3 to 4 per cent; Available Phosphoric Acid, 8 to 10 per cent; Potash 4 per cent.

Vegetables of a leafy nature require an ample supply of nitrogen to give them that quick growth on which their quality largely depends; others, like beans and peas, demand, in addition, phosphoric acid to develop and produce their pods and seeds. Our Vegetable Fertilizer is prepared for all garden crops. 5 lb. 35c; 10 lb. 65c, post paid. Per 100 lb. \$3.00; per ton \$55.00. Freight or Express. Write for prices in larger quantities. Apply 1 lb. for each 15 square feet.

BUCHANAN'S COTTON, GRAIN AND GRASS GROWER—Available Phosphoric Acid, 10 per cent; Nitrogen, 1.65 per cent; Potash, 2 per cent. This brand is prepared especially for grain and grass crops and contains the plant foods in proper proportions to start a vigorous growth on which the results of the crop largely depend, and sufficient to feed the crop till maturity. It is quick in its action and lasting in its results. Apply 300 to 400 lbs. to the acre when drilled with the seeds; if broadcasted, apply before seeding and harrow in seeds and fertilizer at the same time. Price, per 100 lbs. \$2.50; per ton \$43.00.

V-C DIXIE SPECIAL WITHOUT POTASH—Available Phosphoric Acid, 9 per cent; Nitrogen, 3 per cent. This brand, running much higher in Nitrogen, though somewhat lower in Phosphoric Acid, is especially well balanced and should be used on uplands and clay soils where a larger and more vigorous plant growth is needed. Apply at the rate of 300 to 400 pounds to the acre at time of planting, or if applied from 7 to 10 days before planting better results should be obtained. Fertilizers should always be placed from 1 to 3 inches under the seed or thoroughly mixed with the soil before planting seed. Price, per 100 lbs. \$2.50; per ton, \$45.00.

LAND PLASTER—It has quite a variety of uses. It has the property of combining with the potash in the soil and making it available as plant food. It should be mixed with all stable and barn-yard manures, as it combines with the ammonia that might otherwise be lost, and "fixes" it in the form of sulphate of ammonia, in which form it is taken up by the plant as needed. When mixed at the rate of 50 lbs. plaster to 1 lb. Paris Green it helps to distribute the insecticide more uniformly. Price per 200 lb. bag, \$2.25.

GROUND LIMESTONE—Use ground limestone on all sour or acid soils, especially on your Alfalfa, Red Clover and Grasses, ask your County Agent and if there is none in your County, write us. Sow broadcast, then plow or disc harrow in, using 2000 to 4000 pounds on each acre of land about two weeks before sowing seed. Price, 100 lb. \$1.00. Write us for carload prices.

STANDARD BONE MEAL—A first-class fertilizer for general use, giving not only immediate effects, but also lasting and beneficial results. It is steamed bone, not quite as high in analysis as our Pure Animal Bone, but is an excellent fertilizer, and has given the very best results and satisfaction to our customers wherever used. While it can be used to advantage upon all crops, it is especially recommended for grain and grass and clover crops. Price, per 100 lb. \$3.75.

NITRATE OF SODA—The most readily available form in which nitrogen can be had. Largely used for forcing vegetables, strawberries, etc., for applying to grass fields after each cutting, producing a strong healthy growth and wonderfully increasing the yield. Apply 150 lbs. per acre. Price, 10 lb. 75c, postpaid; per 100 lb. \$4.00. Freight or Express. Write for prices on larger quantities.

V-C PLANT FOOD

For Flowers-Lawns-Gardens

Like human beings, plants need three foods—first, Nitrogen to give a quick start and keep the plant growing, to make luxuriant green foliage; then Phosphoric Acid and Potash, with which the plants build their stems and give color to their blossoms. V-C Plant Food supplies all three requirements. Gives shrubbery a rich green color, evidence of even healthy growth. Flower beds bloom more prolifically. Window boxes bloom earlier and longer. Makes the vegetable garden yield more. Especially valuable as a top dressing for lawns. Put up in handy sifter-top cans and convenient size bags. One pound contains sufficient Plant Food for one application for 100 average plants or enough for 50 square feet. Prices—1-lb can 25c; 2-lb. can 45c; 5-lb bag 75c; 10-lb bag, \$1.25; 25-lb. bag \$2.50. Postpaid, 1 lb. 30c; 2 lb. 50c; 5 lb. 85c; 10 lb. \$1.40.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Diamond Egg Carrier

Diamond Egg Carrier

Something new, in a class by itself; box has cushions on all sides, impossible to break eggs. This is the strongest and safest egg shipping box on the market.

15-egg size	\$.30; 12 for \$3.00.	By parcel post, each	\$.40
30-egg size	.50; 12 for 5.00.	By parcel post, each	.60
50-egg size	.75; 12 for 8.00.	By parcel post, each	.85
100-egg size	1.50; 12 for 15.50.	By parcel post, each	1.65
12-egg size	.30; 12 for 3.00.	By parcel post, each	.40
24-egg size	.45; 12 for 4.50.	By parcel post, each	.55
48-egg size	.70; 12 for 7.00.	By parcel post, each	.85
60-egg size	.90; 12 for 9.00.	By parcel post, each	1.05

Improved Drop Bottom Fountain

Star Fountain Holder

This is one of the best sanitary Fountains offered today for the poultry man at a moderate price. Made in four sizes. 2-qt. 85c; 1-gal. \$1.25; 2-gal. \$1.65; 4-gal. \$2.50. By parcel post, 20c each extra.

Star Jar Fountain and Feeder

No parts to come unsoldered. Leaking impossible. Will fit pint, quart or half-gallon Mason jar. Convenient, cheap and sanitary. One size only. No. 32, each 20c; 6 for \$1.00. By parcel post, each 25c; 6 for \$1.15.

Carbola

The Disinfectant that paints. Carbola is infinitely superior to lime, which loses what slight disinfectant qualities it ever had by slacking when exposed to the air. It is very much better than kalsomine or whitewash, because it paints just as clean and bright a white, but will not chip, scale or peel off—no matter how many coats are applied. It may be used on either stone, brick, wood, metal or cement, and can be put on over a whitewashed or painted surface. Can be applied with either sprayer or brush. Price, trial pkg., post paid, 45c; by express, 25c; 10-lb. pkg., by express, \$1.00.

Moe's Round Baby Chick Feeder

Moe's Round Baby Chick Feeder

The most convenient and commodious feeder on the market. Can also be used for water. Manufactured in two sizes. No. 11, Small size\$.25; by parcel post \$.35
No. 12, Large size35; by parcel post .45

Leg Bands

Champion Leg Bands—This aluminum band is made in one piece, adjustable to fit any fowl. Held by double lock; it is impossible for them to lose off. Numbered from 1 to 400. Price, doz. 15c; 25 for 25c; 100 for 75c, parcel post paid.

Colored Spiral Leg Bands—Made in many different colors—red, green, blue, yellow, pink, white, etc. Slip on just like a key ring; no tools required. Will not come off; fowls cannot lose or remove them. Made in all sizes. State for what breed you want the bands.

12 for	\$.20; parcel post	\$.25
25 for	.35; parcel post	.40
50 for	.60; parcel post	.65
100 for	1.00; parcel post	1.10

Hand Corn Planter

Colored Celluloid Spiral Leg Bands

Hand Corn Planters

A time and labor saving implement for replanting poor stands or for planting Peas or Beans in corn rows. Acme Rotary, 1-hand, adjustable rotary style plate, each \$3.00. Acme Slide, 2-hand, each \$2.00.

Has no equal as wholesale destroyer. One rat spreads deadly effect to other rats. Die out-doors. Harmless to all other animals and human beings. Odorless and tasteless. Keep bottle out of bright daylight and use only according to directions. Price, 75c; postpaid, \$1.00.

STIM-U-PLANT

The better grades of commercial fertilizers do not contain more than 3 to 5 per cent of Nitrogen, 6 to 10 per cent Phosphoric Acid and 3 to 5 per cent Potash. The fertilizer ingredients in commercial fertilizer are for the most part in a relatively slow acting form, while in Stim-U-plant they are water soluble, which causes them to become immediately available to the plants. Carton of 15 tablets, 25c, postpaid.

I WILL MAIL YOU ALL THE ORDER BLANKS AND RETURN ENVELOPES YOU NEED—WRITE FOR THEM.

R.B.BUCHANAN MEMPHIS, TENN.

BUCK BRAND SEEDS AND FEEDS

Mulford Cultures

FOR LEGUMES

IS INOCULATION ADVISABLE?

The reports of the United States Department of Agriculture and various State Agricultural Experiment Stations show that the value of legumes, both as food and as green manure crops, and the importance of inoculating them with the proper nitrogen-fixing bacteria, has been fully established. The inoculation may best be accomplished by the use of pure cultures (Mulford Inoculating Cultures) to treat either the seeds of legumes or the soil. Another method is to transport and spread soil on which the desired crop has previously grown, but this method is objectionable because of the danger of introducing harmful weeds or plant diseases, and because it is usually inconvenient and expensive. It has been shown that there are different strains of the nitrogen-fixing bacteria, and that one strain will more readily form nodules on the roots of one variety of legume, to which the strain is accustomed, than on another, thus explaining why most soils are not naturally suitable to the growth of these important and valuable crops, and why inoculation is advisable.

WHAT MULFORD CULTURES ARE

MULFORD INOCULATING CULTURES contain pure, tested strains of active, nitrogen-fixing bacteria, grown on specially prepared media (a jelly-like mass), and are furnished in flint glass bottles with rubber stoppers. They have recently been improved by adding a new ingredient to the culture medium, changing the color of the cultures to black, encouraging a more prolific growth of the bacteria, increasing the virulence or activity of the bacteria and prolonging the life of the culture.

LEGUMES

The legumes are the pod-bearing plants, of which beans, peas, alfalfa, clover, vetch, etc., are the better known. They are the only plants, as a class, that can assimilate the nitrogen of the air as a part of their food (which action is entirely due to the association of nitrogen-fixing bacteria), thereby stimulating their own growth and greatly enriching the soil in the valuable element nitrogen when they decay. For these reasons, the legumes have recently come into greater agricultural prominence, and, as most of the varieties are of high food value, their more extensive cultivation is assured. The legumes differ from other plants, or non-legumes, chiefly in that the legumes, when grown under suitable soil conditions, have on their roots a number of tubercles or nodules, which are caused by the activities of the nitrogen-fixing bacteria. The bacteria in these nodules have the property of fixing or assimilating nitrogen from the air and of converting it into nitrate form suitable and available as food for the plants.

HOW MULFORD CULTURES ARE USED

MULFORD CULTURES FOR LEGUMES are very easy to use, no special knowledge, no experience and no special implements being required. It is only necessary to add water to the bottle (which is intentionally only about one-fourth filled); shake well, and then dampen with this mixture the seeds or soil, which will not interfere with planting.

Garden Size ($\frac{1}{4}$ Acre) \$.50
1-Acre Size 1.50
5-Acre ("A Dollar per Acre") 5.00

LARGER CROPS in FIELD and GARDEN if you use

Alfalfa, clovers, soybeans, vetches, peas, beans, cowpeas, peanuts and other legumes should always be inoculated with Nitratin. The lack of necessary bacteria in the soil is often the cause of a poor legume crop—a weak start—or a total failure.

A Great Price Reduction NITRAGIN Costs Less

Nitratin now comes in Bushel sizes instead of acre sizes. This means that it costs you less per acre than inferior imitations. If you sow 12 pounds of seed to the acre it will only cost you 20 cents for your Nitratin. It means that

Your Dollars Goes Further With NITRAGIN

Nitratin is an old, reliable inoculator. At the low price of 20 to 33 cents per acre you cannot afford to sow legumes without it. Nitratin is put up in the modern ventilated package; in a rich, soil-like packing medium. The contents are always fresh, living bacteria to feed your plants. Easy to use.

EVERY GARDEN NEEDS NITRAGIN

New Garden Culture for Peas and Beans, See Below

Bushel size	\$1.00	Mailed 8 cents extra.
(Any legume crop)		
Half Bushel size	.55	Mailed 5 cents extra.
(Any legume crop)		
Garden size, Beans	.15	Mailed 2 cents extra.
Garden size, Peas	.15	Mailed 2 cents extra.
Garden size, Sweet Peas ..	.15	Mailed 2 cents extra.

State What Crop You Want It For
YOUR DEALER HAS NITRAGIN FOR YOU

BUCHANAN'S SPECIAL QUOTATION SHEET

R. B. BUCHANAN, Seedman, Memphis, Tenn.

Dear Sir:—I would like to have you name me your lowest price on the list of seed I give you below. Please quote your best prices, and also let me know whether in your opinion the seed should be sent by Freight or Express, and also about what the cost of delivery will be. It is distinctly understood that in asking for this special quotation I am under no obligation to purchase same, and this is entirely for my own information as to prices and Freight or Express rates.

[illegible]

PLEASE WRITE PLAINLY IN THE BLANK SPACES BELOW.

Your name.....

I am on the Railroad

P.O.

My Express Office is.....

County.....R. F. D.....

The name of the nearest Freight Station is

State.....Date.....

Please Do Not Write In This Space.

Please Do Not Write In This Space.

ORDER BLANK OF **R. B. BUCHANAN** MEMPHIS

R. B. BUCHANAN, Memphis, Tenn.

Date _____

PLEASE DO NOT WRITE
IN THIS SPACE

Dear Sir:—I am enclosing \$_____for the following Seed to be

Date Received _____

sent by _____
(State here if wanted by Mail, Express or Freight)

Our Order No. _____

Name _____
(Ladies will please put the prefix MISS or MRS.)

Mark Zone No. Here

P. O.

Route.

Box

County.

Amount Received

**Express or
Freight Office**

State

\$

While I exercise the greatest care to have all Seeds or Plants pure and reliable, I give no warranty, express or implied, as to the description, quality, productiveness or any other matter of any seeds I send out, and I will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, he must notify me at once, and I will give instructions for disposition of goods.

All contracts for Vegetable Plants, Nursery Stock and Sweet Potato Slips are subject to providential hindrance or other causes beyond my control.

Your money's worth or your money back. This is part of my guarantee. It is mutually agreed and understood that the seed ordered of me may be returned any time within 5 days upon receipt of same, if not satisfactory. The money paid for them will be refunded, and I cannot in any way warrant the crop, as it is dependent on so many conditions beyond my control.

Have I your permission to substitute equal or better in nearest variety I can supply if out of variety ordered?.....Answer (.....)

If I can give you better service by shipping prepaid express instead of price postpaid, may I do so?.....Answer (.....)

Don't bother about what the express or freight charges will cost on small packets, ounces and pounds of garden seed, for I pay all express and mail charges for garden seed listed in my catalogue in these quantities.

[illegible]

TEAR OFF THIS SHEET ALONG THIS LINE

If you get more than one Catalogue please hand it to some friend. All members of one family should order goods under the name of the head of the family. Remember, in sending orders to always sign the name of the head of the family in the same way, that he would in signing a check at the bank. Do not sign your name one time as John Jones and the next time as J. Jones or Mrs. J. Jones. The letter "J." might stand for James or Joseph. Often your Postmaster is confused in delivering mail to the right party on this account, and we of course want you to receive your orders and mail without any unnecessary delay.

15 Packages of Garden Seed

—and—

The Weekly Commercial Appeal

Twelve Months
for Only 65c

*The Seed Offered Below Are of the Very Best and
Will Be Sent Postpaid:*

One Paper of Early Beets	One Paper of Cucumbers
One Paper of Late Beets	One Paper of Long Radish
One Paper of Early Cabbage	One Paper of Round Radish
One Paper of Collard	One Paper of Tomato
One Paper of Lettuce	One Paper of Squash
One Paper of Watermelon	One Paper of Okra
One Paper of Mustard	One Paper of Cantaloupe
	One Paper of Turnips

Gentlemen:—Enclosed find 65 cents for The Weekly Commercial Appeal for 12 months and 15 packages of Garden Seed as per your offer.

Name

P. O.

R. F. D. State

R. B. Buchanan will mail seed; The Commercial Appeal will send you paper. Make full remittance to *THE WEEKLY COMMERCIAL APPEAL, Memphis, Tenn.*

My Buck Brand Garden Seed Collection is known to many thousands of customers all over the South for I have been mailing them for twelve years.

I do not hesitate to say to you that this collection of fifteen regular five-cent packets which we mail to any address in the United States upon receipt of thirty-five cents in coin or stamps, is sold to you at this low price simply to advertise our Buck Brand Garden Seeds, for we fill these packets with the same high grade seeds that we use to fill all of our catalogue orders, also our Market Gardeners' trade.

This collection of seeds contain one packet each of the following varieties: Round Radish, Cucumber, Okra, Squash, Muskmelon, Long Radish, Mustard, Collards, Watermelon, Early Cabbage, Turnip, Lettuce, Late Cabbage, Table Beets — Enough seed to make a nice garden for any average family.

R.B. BUCHANAN
BUCK BRAND TESTED SEEDS
18 S. FRONT ST. MEMPHIS, TENN.

1922
PLANT

BUCK BRAND SEEDS

BUCHANAN'S
EARLY SURPRISE
GARDEN CORN
See page 13

BUCHANAN'S
BUCK BRAND
TOMATOES
See page 26

BUCHANAN'S
EARLY ALASKA
PEAS
See page 22

BUCHANAN'S
MARKET GARDENER
BEET
See page 9

STECHER CO. ROCHESTER, N.Y.

R.B. BUCHANAN

BUCK BRAND TESTED SEEDS

18 S. FRONT ST.

MEMPHIS, TENN.