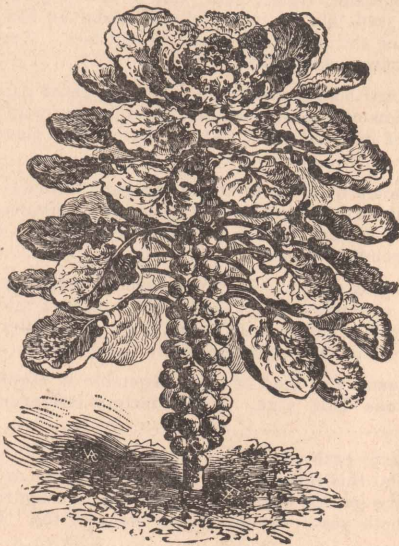


IDAHO AGRICULTURAL EXPERIMENT
STATION

The Farmer's Vegetable Garden



By
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Moscow, Idaho

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Digest.

In the spring of 1908 one half acre of the horticultural grounds of the Experiment Station at Moscow was selected for use as a "Farmer's Vegetable Garden." This area was maintained as such for two years. The object of maintaining a Farmer's Vegetable Garden at this station was to secure definite data on methods of culture, yield, cost of production and the advisability of maintaining such a garden on the farms of Idaho..... Page 3

The plan of a Farmer's Vegetable Garden must be carefully made if best results are expected. A farmer must plan his garden for highest possible returns at the minimum expenditure of time and labor. By judicious arrangement of the garden, a continuous supply of vegetables may be secured throughout the season..... Page 5

Careful judgment should be exercised in choosing garden seeds. Good seed must be true to name, viable, pure, and be of the greatest possible longevity. Buy the best seed that the most reliable seedsman has to offer and endeavor to secure superior and improved strains at all times. Seed should be ordered in ample time to secure a good choice..... Page 7

A well constructed hotbed should be found wherever gardening is practiced. In their construction one must consider the following points; (1) climate, (2) location, (3) kind of material used, (4) requirement of plants grown, (5) time the bed is made..... Page 7

Every effort should be made to utilize the garden space at all times. Succession and companion cropping can be practiced by knowing the requirements and habits of the plants used. This will insure the greatest variety of vegetables on the minimum amount of space..... Page 8

Begin cultivating as soon as the rows become well marked. Continue at frequent intervals throughout the season to preserve moisture. In irrigated regions, more cultivation and less irrigation may give better results. A crust should not be allowed to form upon the soil in the garden..... Page 9

Only a small quantity of seed of each vegetable is required to plant a farmer's garden of one half acre. Many factors influence the price of seed..... Page 9

A record was kept each year of all expense involved in planting and care of the farmers garden at this station. No items of expense or profits were omitted so that the cost of the garden could be determined. In figuring the cost of labor on the garden for both years, the prevailing wage of the "Palouse Country" is used..... Page 11

The majority of the farmers of Idaho are not receiving the largest possible returns and enjoyment from their home garden. This is apparent to anyone who is acquainted with the possibilities of yield and profits from judiciously tilling a small area. A continuous supply of vegetables is not secured on account of the supposed expense and time required in their production. A well arranged garden should be found on every farm in this state..... Pages 12-15

The value of the products from one half acre of garden in 1908 was \$82.19, and the net profits were \$57.41..... Page 16

The value of the products from one-half acre of garden in 1909 was \$98.38 and the profits were \$79.22..... Page 26

The Farmer's Vegetable Garden

One half acre of the horticultural grounds of this station was selected by Prof. J. R. Shinn in the spring of 1908 for use as a farmer's vegetable garden. This area was maintained for such a purpose for two years. The object of this work was to secure definite data on methods of culture, yield, cost of production, and the advisability of maintaining such a garden on the farms of Idaho. This garden was planned to give the greatest possible variety and continuous supply of vegetables as may be readily grown in the home garden and which are very frequently not grown on account of the supposed expense and time required in their production.

The garden was laid out in the form of a rectangle with rows running lengthwise,* in order to admit horse cultivation and to reduce the expense of labor to the minimum. The ground was worked as early as advisable in the spring and put in shape for seeding and planting by the most approved method of this region. No fertilizer was applied during the two years of the experiment.

Location.

This garden was located on the southwestern slope of one of the hills which comprise the station gardens and is typical of the average farm and garden land in this region. It is but a short distance to the market centre of Moscow so practically all the produce was delivered to the general market or retailed to parties coming to the garden. This area is so situated that it admits the earliest possible cultivation in spring. It is free from fall frosts until late in September.

The more desirable locations for vegetable gardens are to be found on the warm slopes of the rolling hills which comprise this country.

*See diagram p. 5.

These aspects are to the east, the south and southwest. In locating farmer's garden, care was taken to secure the best possible air and soil drainage, freedom from frost and average soil.

Soil.

While all vegetables are not adapted to the same kind of soil for their best production, the dark, rich, friable soil that is found in the Palouse region will grow satisfactorily those vegetables which are adapted for culture in a farmer's garden. The soil of this garden is friable, deep and retains moisture well when proper surface tillage is given. It washes considerably and puddles readily during severe rain storms. Its texture is exceptionally good and root crops have no difficulty in penetrating to the greatest possible depth. Irrigation is not necessary. No alkali is present to interfere with the growth of vegetables. Due to the physical nature of the soil, its management is comparatively easy. The cost of cultivation in this garden will probably be less than it would be in the case of heavier soils containing a large percentage of clay, or those under irrigation.

This area was plowed, harrowed, and made ready for planting by dragging with a common planker. This is usually all that is necessary to put the soil of this region in first class shape for gardening. Future cultivation is easily accomplished and not expensive. A dust mulch is easily secured after rains and this kind of mulch is effective in checking evaporation from the soil.

Account of the Garden for 1908.

The garden was made ready for planting by plowing, April 7th, harrowing and leveling April 8th. The soil worked well at this date. Planting of various vegetables was done as early as advisable. All perennials were planted on one side of the garden so they could remain for several years without interfering with the growing of annual plants. The plan of planting, vegetables used, with space allotted to each kind is given as follows:

Plan of the Farmer's Vegetable Garden, Season 1908.

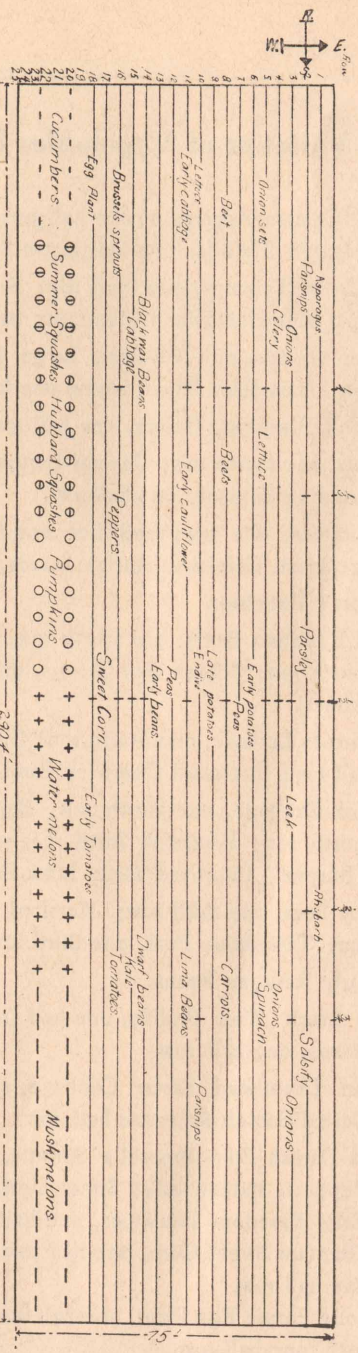


DIAGRAM OF FARMER'S VEGETABLE GARDEN '08.

Varieties of Vegetables Planted.

Row.

1. Conover's Colossal Asparagus, one-half row; Rhubarb, one-fourth row
Myatt's Victoria; one-fourth row St. Martin's.
2. Hollow Crown Parsnips, one-third row; Emerald Parsley, one-third
row; Sandwich Island Mammoth Salsify, one-third row.
3. Prizetaker Onions, one-half row; Large Rouen Leek, one-fourth
row; Australian Brown Onion one-fourth row.
4. Golden Self Blanching Celery, one half row; Onions, one-half row.
5. Onion sets, one-fourth row; Deacon Lettuce, one-fourth row; Long
Standing Spinach, one-half row.
6. Early Potatoes, one row; Radishes, one-fourth row each—French
Breakfast, Celestial, Scarlet Turnip, New White Icicle.
7. Peas, Nott's Excelsior.
8. Crosby's Egyptian Beets, one fourth row; Blood Red Beets one
fourth row; Golden Ball Carrots, one-half row.
9. Late Potatoes.
10. Grand Rapids Lettuce, one-fourth row; Giant Fringed Endive, one-
half row; Improved Guernsey Parsnips, one fourth row.
11. Early York Cabbage, one-fourth row; Best Early Cauliflower, one
fourth row; Fordhook Bush Lima Beans, one fourth row;
"Burpee" Improved Bush Lima Beans, one-fourth row.
12. Prosperity Peas, one-third row; Horsford Early Market, one-third
row; Telephone Peas, one third row.
13. Extra Early Refugee Beans.
14. Bismark Black Wax Prolific, one-half row; Dwarf Horticultural
Beans, one-half row.
15. American Drumhead Savoy Cabbage, one-half row; Tall Green
Curled Scotch Kale one-half row.
16. Burpee's Danish Prize Brussel's Sprouts, one-fourth row; Tabasco
Peppers, sixteen hills; Sweet Upright Pepper, twenty hills;
Early Freedom Tomatoes, one-half row.
17. Golden Bantam Sweet Corn, one-half row; Cory Early Sweet Corn,
one-half row.
18. Early Long Purple Egg Plant, one-half row; Spark's Earliana Toma-
toes, one-half row.

- 19-24 Burpee's Extra Early White Spine Cucumber, twelve hills; Early White Bush Summer Squash, ten hills; Hubbard Squash, twelve hills; Small Sugar Pumpkin, twelve hills; Cole's Early Watermelon, twenty-four hills; Fordhook Muskmelon, twenty-six hills.

NOTE:—Rows are three feet apart excepting the vine crops, which are six feet apart. For dimensions of garden see diagram p. 5.

Garden Seeds.

All seeds were purchased from W. Atlee Burpee & Company, Philadelphia, Pa. The catalogue prices of 1908 were paid. No seed was saved for sowing in 1909. The cost of seed used in 1909 is listed in the expense account for that year.

It is seldom wise for the farmer to grow his own seed. While seed growing is attracting much attention in this State, the busy farmer has not the time or space to grow seed in a garden, like under discussion. Careful judgment should be exercised in choosing garden seed.

Good seeds must be true to name, viable, pure, and be of the greatest possible longevity. Buy the best seeds that a reliable seedsman has to offer. Endeavor to secure the superior and improved strains at all times for in this way only can undesirable seeds be avoided. Buying cheap seed is poor economy.

Seeds should be ordered in ample time before planting to secure a good choice and receive them in due time.

Construction and Management of Hotbeds.

Construction.—In making a hotbed the gardener should be governed by (1) climate, (2) location, (3) kind of material used, (4) requirement of plants grown, (5) time the bed is made. A hotbed has artificial bottom heat while a cold frame does not. This heat may be supplied in a number of ways but the man on a farm will find stable manure from the horse stable the most satisfactory material for heating.

A common type of hotbed frame is shown in Fig. 10. It is six feet wide, twelve feet long with twelve and six inch sides respectively. The depth of the frame varies according to the plants to be grown. Two by three inch cross bars are placed at intervals to support sash and

give the frame firmness. If frames are to be used each year, it is advisable to make them of good two inch material with bolted parts so they can be readily taken apart and stored until needed. Standard hotbed sash are made three feet by six feet. Thus a twelve foot frame requires four sash.

Management.—The manure used should be made uniform in composition by forking it over several times before placing in the pit. Hotbeds which are intended to last for two months should have from two to three feet of manure. The longer the heat required the more manure should the bed contain.

A layer of coarse material is first placed in the bottom of the pit to keep the manure from coming in contact with the ground. When fermentation has developed sufficiently in the manure place it in the pit, tramping it firmly. A layer of leaf mold or some coarse material is then placed on top of the manure. Soil is then placed to a depth according to the requirement of plants to be grown. An average depth of soil is six inches. The temperature will rise quite high at first. Planting should not be done until it has fallen below 90 degrees Fahr.

Seeds may be sown directly in the soil or in small shallow boxes, commonly called "flats." The method of sowing the seed depends upon the operator and kind of seed. The frame will need ventilation on bright sunny days. The grower should watch the frame each day for it should be handled as local conditions require. Ventilation can easily be given by raising the sash a few inches. If possible avoid dull cold days for watering the plants. Lower the sash in time to retain ample heat throughout the night. Endeavor to maintain growing conditions in a hotbed at all times. This will require close attention to ventilation and watering. When plants are stunted in a hotbed the best results from them in the garden cannot be expected. In brief, the points to consider in management of a hotbed are: (1) maintaining proper heat, (2) ventilating, (3) watering, (4) hardening off, (5) transplanting.

Beginners are apt to start their plants too early in the season. Plants should be stocky, strong and vigorous when they leave the frame. If plants are poorly grown or growth retarded very little is gained by the use of a frame.

Succession Cropping.

Succession cropping was carefully practiced both years in the Farmer's Garden. As soon as one crop was gathered, another crop was

immediately planted. Table 2, p. 12, gives the approximate time each crop occupied the ground. By judicious management, three crops can be taken from the same ground in one season.

Every effort should be made to utilize the space in the garden at all times. By knowing the habits of the plants used, plantings can be made which will give the greatest variety of vegetables on the minimum amount of space.

Cultivating the Garden.

Cultivation was begun as soon as the rows became well marked. It was continued at frequent intervals throughout the season. Frequent cultivations are necessary to destroy weeds and maintain moisture. It aids materially in liberating plant food by breaking the soil in smaller particles. A crust should not be allowed to form on the soil in the garden.

It is assumed that a farmer would do the cultivation at odd times which would not interfere with the regular farm work.

For the culture of special crops, see appendix.

Seeds Used in Farmer's Garden, 1908.

1 oz.	Asparagus,	Conover's Colossal	. . . . .	\$ .10
1 qt.	Beans	Fordhook Bush Lima	. . . . .	.35
1 qt.	"	Burpees's Improved Bush Lima	. . . . .	.35
2 qts.	"	Extra Early Refugee	. . . . .	.50
1 qt.	"	Bismark Black Wax Prolific	. . . . .	.30
1 qt.	"	Dwarf Horticultural	. . . . .	.30
1 oz.	Beet	Crosby's Egyptian	. . . . .	.10
1 oz.	"	Blood Red	. . . . .	.10
1 pkt.	Cabbage	Early York	. . . . .	.10
1 pkt.	"	American Drumhead Savoy	. . . . .	.05
1 oz.	Carrot	Golden Ball	. . . . .	.10
1 pkt.	Cauliflower	Best Early	. . . . .	.10
1 pkt.	Celery	Golden Self Blanching	. . . . .	.10

1 pkt.	Sweet Corn	Cory Early	. . . . .	.10
1 pkt.	" "	Golden Bantam	. . . . .	.10
1 pkt.	Cucumber	Burpee's Extra Early White Spine	. . . . .	.10
1 pkt.	Egg Plant	Early Long Purple	. . . . .	.10
1 pkt.	Endive	Giant Fringed	. . . . .	.05
1 pkt.	Kale	Tall Green Curled Scotch	. . . . .	.05
1 pkt.	Leek	Large Rouen	. . . . .	.10
1 pkt.	Lettuce	Deacon	. . . . .	.05
1 pkt.	"	Grand Rapids	. . . . .	.05
1 pkt.	Muskmelon	Fordhook	. . . . .	.10
1 pkt.	Watermelon	Cole's Early	. . . . .	.10
1 pkt.	Onion	Prizetaker	. . . . .	.10
1 pkt.	"	Australian Brown	. . . . .	.15
2 qts.	" sets	. . . . .	. . . . .	.50
1 pkt.	Parsnips	Hollow Crown	. . . . .	.05
1 pkt.	"	Improved Guernsey	. . . . .	.05
1 pkt.	Parsley	Emerald	. . . . .	.05
1 qt.	Peas	Prosperity	. . . . .	.35
1 qt.	"	Nott's Excelsior	. . . . .	.35
1 qt.	"	Horsford's Early Market	. . . . .	.30
1 qt.	"	Telephone	. . . . .	.30
1 pkt.	Peppers	Tabasco	. . . . .	.05
1 pkt.	"	Sweet Upright	. . . . .	.05
½ bu.	Potatoes			
1 pkt.	Pumpkin	Small Sugar	. . . . .	.05
1 pkt.	Radish	French Breakfast	. . . . .	.05
1 pkt.	"	Celestial	. . . . .	.05
1 pkt.	"	Scarlet Turnip	. . . . .	.05
1 pkt.	"	New Icicle	. . . . .	.05
	Rhubarb	Myatt's Victoria, St. Martins.		
1 pkt.	Salsify	Sandwich Island Mammoth	. . . . .	.05
1 pkt.	Brussels Spts.	Burpee's Danish Prize	. . . . .	.05
1 pkt.	Squash	Early White Bush Summer	. . . . .	.10

1 pkt. Squash	Hubbard	.	.	.	.	.	.05
1 oz. Spinach	Long Standing	.	.	.	.	.	.05
1 pkt. Tomato	Spark's Earliana	.	.	.	.	.	.10
1 pkt. "	Early Freedom	.	.	.	.	.	.05
1 pkt. Turnip	Scarlet	.	.	.	.	.	.05
1 pkt. "	New Icicle	.	.	.	.	.	.05

Table 1.
Labor on Farmer's Garden, 1908, by Hours.

A summary of the labor account of the Farmer's Garden for 1908, is given in the following table :

	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	TOTAL
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.
TEAM WORK							
Plowing, Harrowing and Leveling,		4 $\frac{3}{4}$	$\frac{1}{4}$				5
Total team work,		4 $\frac{3}{4}$	$\frac{1}{4}$				5
WORK WITH ONE HORSE							
Cultivating,			3 $\frac{1}{4}$		$\frac{3}{4}$	$\frac{1}{2}$	4 $\frac{1}{2}$
Total one horse work,			3 $\frac{1}{4}$		$\frac{3}{4}$	$\frac{1}{2}$	4 $\frac{1}{2}$
HAND WORK							
Planting,		15	5 $\frac{1}{2}$	8 $\frac{1}{2}$			29
Cultivating,			2 $\frac{1}{4}$	9	2 $\frac{1}{4}$	1	14 $\frac{1}{2}$
Spraying,			$\frac{1}{4}$		1		1 $\frac{1}{4}$
Weeding,				4	1 $\frac{3}{4}$		5 $\frac{3}{4}$
Thinning and weeding				3	2		5
Total hand work,		15	8	24 $\frac{1}{2}$	7	1	55 $\frac{1}{2}$

Table 2.
Harvest of Farmer's Garden, 1908.

	Date of Planting.	Space Used Rows.	First Picking.	Condition for use.	Yield.	Retail Price.	Value of Crop.
ASPARAGUS:							
Con. Colossal.....	March 10	1/2	Sept. 21	after Sept. 21	213 bunches	65c doz.	\$11.54
RHUBARB:							
Myatt's Victoria.....	March 10	1/4	August 1	42 days	18 heads	1c lb.	.90
St. Martin's.....	" "	1/4	" "	42 days	17 heads	1c lb.	.85
CELERY:							
Golden Self Blanching..	March 16	1/2	Sept. 21	after Sept. 21	213 bunches	65c doz.	\$11.54
CABBAGE:							
Early York.....	March 19	1/4	August 1	42 days	18 heads	1c lb.	.90
American Drumhead	" 16	1/2	" "	42 days	17 heads	1c lb.	.85
Savoy.....	" 16	1/2	" "	42 days	17 heads	1c lb.	.85
SCOTCH KALE:							
Tall Green Curled.....	March 20	1/2	August 11	60 days	Supply	5c lb.	
PEPPERS:							
Tabasco.....	March 20	16 hills	Sept. 7	18 days	95 specimens	15c doz.	1.20
Sweet Upright.....	" "	20 hills	August 20	34 days	142 lbs.	2 1/2c lb.	3.55
TOMATOES:							
Earliana.....	March 10	1/2	August 20	34 days	142 lbs.	2 1/2c lb.	3.55
CUCUMBER:							
Burpee's Extra Early	March 21	12 hills	August 4	20 days	127 slicing	25c doz.	2.83
White Spine.....	" "	" "	" "	" "	pickling 100	" "	.25

SQUASH:									
Summer.....	March 21	10 hills	August 19	21 days	44 specimens	3c lb.	\$1.32		
Hubbard.....	" "	12 hills	Sept. 25	after Sept. 25	3 specimens	2c lb.	.72		
PUMPKIN:									
Small Sugar.....	March 21	12 hills	Sept. 25	after Sept. 25	110 specimens	2c lb.	6.60		
WATERMELON:									
Cole's Early.....	March 21	24 hills	Sept. 5	after Sept. 5	2 specimens	2 1-4c lb.	.50		
MUSKMELON:									
Fordhook.....	March 21	26 hills	Sept. 3	22 days	6 doz.	35c doz.	2.10		
EGG PLANT:									
Early Long Purple.....	March 20	1/2	Sept. 1	24 days	2 doz.	30c doz.	.60		
CAULIFLOWER:									
Best Early.....	March 16	1/4	July 22	29 days	11 heads	10c head	1.10		
SALSIFY:									
Sandwich Island Mammoth.....	March 10	1/8	Oct. 25	after October 25	25 doz.	10c doz.	2.50		
ONIONS:									
(green from sets)									
Prizetaker.....	March 10	1/4	June 1	60 days	13 1/2 doz.	5c doz.	.68		
Anstr. Brown.....	" "	1/4	" "	60 days	7 doz.	5c doz.	.35		
(from seed)									
Prizetaker.....	April 11	1/2	July 30	60 days	record lost.				
Anstr. Brown.....	" "	1/2	" "	" "	" "				
LETTUCE:									
Deacon.....	April 10	1/4	May 30	40 days	207 heads	7c lb.	3.38		
Grand Rapids.....	" "	1/4	July 8	32 days	136 heads	7c lb.	2.38		
SPINACH:									
Long Standing.....	April 10	1/2	June 9	21 days	129 heads	4c lb.	.50		

TABLE 2
HARVEST OF FARMER'S GARDEN, 1908.
(Continued.)

	Date of Planting.	Space used Rows.	First Picking.	Condition for use.	Yield.	Retail price.	Value of Crop.
POTATOES:							
Early.....	April 15	1	July 10	14 days	25 lbs.	1c lb.	.25
Late.....	" " 20	1	Sept. 30	after Sept. 30	450 lbs.	¾c lb.	3.38
RADISH:							
French Breakfast.....	Apr 10	¼	May 27	27 days	12¼ doz. bunches	30c per doz. bunches	3.68
Celestial.....	" " "	¼	July 1	25 days	6 doz. bunches	30c per doz. bunches	1.50
Scarlet Turnip.....	" " "	¼	June 15	20 days	16½ doz. bunches	30c per doz. bunches	4.95
Icicle.....	" " "	¼					
CARROT:							
Golden Ball.....	11	1½	June 29	after June 29	64 doz.	5c doz.	3.20
BET:							
Crosby's Egyptian.....	April 11	¼	July 8	after July 8	6½ doz.	10c doz.	.65
Blood Red.....	" " "	¼	Lost.				
PEAS:							
Telephone.....	April 11	⅓					
Horsford's Early Market.....	April 11	⅓	July 6	20 days	33 lbs.	5c lb.	1.65
Nott's Excelsior.....	" " "	1	July 6	18 days	85 lbs.	5c lb.	4.25
Prosperity.....	" " "	⅓	July 24	17 days	18 lbs.	5c lb.	.90
PARSNIPS:							
Hollow Crown.....	April 11	⅓	{ Records				
Improved Guernsey.....	" " "	¼	} lost.				

PARSLEY:								
Emerald.....	April 11	1 ³	July 25	after July 25	Supply.			
LEEK:								
Rouen.....	April 11	1 ⁴	June 12	20 days	12 ¹ / ₂ doz.	5c doz.		.63
ENDIVE:								
Giant Fringe.....	April 10	1 ²	July 8	15 days	145 heads	5c per head		7.25
SWEET CORN:								
Golden Bantam.....	May 20	1 ²	Sept. 7	after Sept. 7	28 ears	10c doz.		.24
Cory Early.....	" "	1 ²						
BEANS:								
Fordhook Bush Lima...	May 19	1 ⁴	failed					
Burpee's Imprv'd Lima...	" "	1 ⁴	" "					
Extra Early Refugee...	" "	1	July 31	14 days	50 ¹ / ₂ lbs.	6c lb.		3.03
Bismark Black Wax	" "							
Prolific.....	" "	1 ²	Rec. lost.					
Dwarf Horticultural....	" "	1 ²	Aug. 1	10 days	43 lbs.	6c lb.		2.58

Table 3.
Account Showing Profit of Farmer's Garden, 1908.

To team work—plowing, harrowing and leveling—five hours at \$4 per day	\$ 2.00
To work with one horse, 4½ hours at \$2.50 per day	1.13
To hand labor, to 55 1-2 hours at \$2.00 per day	11.10
To insecticides	1.00
To garden seeds	5.55
To raising plants	4.00
	\$24.78
Total expense	
Cr.	
Value of garden produce	\$82.19
	\$82.19
Total net profit	\$57.41

Plan of the Farmer's Garden, 1909.

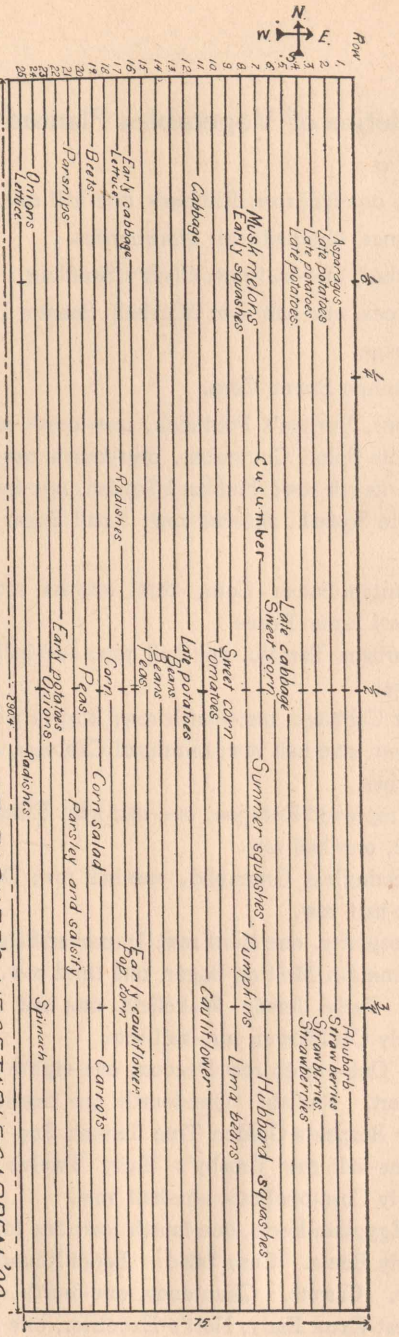


DIAGRAM OF FARMER'S VEGETABLE GARDEN '09.

Varieties of Vegetables Planted 1909.

Row

1. Asparagus, one-half row; Rhubarb, one-half row.
2. Late Potatoes, one-half row; Strawberries.
3. Late Potatoes, one-half row; Clark's Seedling.
4. Late Potatoes, one-half row; Marshall, Senator Dunlap.
5. Late Cabbage.
6. Golden Bantam Sweet Corn.
7. Muskmelons, Burpee's Fordhook, one-fourth row; Burpee's Early White Spine Cucumber, one-fourth row; Summer Squash, one-fourth row; Hubbard Squash, one-fourth row.
8. Early White Squash, one-half row; Small Sugar Pumpkin, one-half row.
9. Golden Bantam Sweet Corn, three-fourths row; one-fourth row Dwarf Lima Beans.
10. Spark's Earliana Tomato, one-half row; one-half row Chalk's Early Jewel.
11. Early York Cabbage, one-fourth row; Burpee's Dry Weather Cauliflower, one-half row; Surehead Cabbage, one-fourth row.
12. Late Potatoes.
13. Beans. Improved Refugee, one-half row; Extra Early Red Valentine, one-half row.
14. Burpee's Stringless Greenpod, one-half row; Dwarf Horticultural, one-half row.
15. Peas. Prosperity, one third row; Improved Senator, one third row; Mammoth Melting Sugar, one third row.
16. Cabbage. Early Jersey Wakefield, one half row; Burpee's Best Early Cauliflower, one-half row.
17. Lettuce. One-eighth row Deacon, one-eighth row Dwarf White Heart. Radish: One-fourth row Scarlet Turnip, one-half row Burpee's Golden Tom Thumb Pop Corn.
18. Corn. One-half row Crosby's Early Twelve Rowed, Burpee's Early Cosmopolitan, one-half row.
19. Crosby's Egyptian Beets, one-fourth row; one fourth row Edmond's Early Beets. Corn Salad. Large Round Leaved one-fourth row. Carrots. Chantenay, one-fourth.
20. Peas. Best Extra Early, Nott's Excelsior, one-half row each.

21. Parsnips. Improved Guernsey, one-half row; 20 feet Emerald Parsley. Remainder—Sandwich Island Mammoth Salsify.
22. Early Potatoes, one row.
23. Onion Seeds. One half row Giant Gibraltar, one-half row Red Wethersfield.
24. Onion Sets. One-fourth row Globe, Victoria Spinach, one-half row; one-fourth row Onion Sets.
25. Lettuce. One-sixth row Deacon, one-sixth row Dwarf White Heart. Radishes. One sixth row Rapid Red, one-sixth row French Breakfast, one-sixth row Scarlet Button.
One-sixth row, First in Market.

Seeds Used in Farmer's Garden, 1909.

1 pkt. Beans,	Dwarf Lima	\$.10
1 pkt. Beans,	Burpee's Stringless Green Pod . . . . .	.10
1 pkt. Beans,	Extra Early Red Valentine . . . . .	.10
1 pkt. Beans,	Improved Refugee . . . . .	.10
1 pkt. Beans,	Dwarf Horticultural . . . . .	.10
1 oz. Beet,	Edmond's Early . . . . .	.10
1 oz. Beet,	Crosby's Egyptian . . . . .	.10
1 pkt. Cabbage,	Burpee's All Head . . . . .	.10
1 pkt. Cabbage,	Early Jersey Wakefield . . . . .	.10
1 oz. Carrot,	Chantenay . . . . .	.10
1 pkt. Cauliflower,	Burpee's Dry Weather . . . . .	.15
1 pkt. Cauliflower,	Burpee's Best Early . . . . .	.15
1 pkt. Celery,	Golden Self Blanching . . . . .	.10
1 pkt. Corn Salad,	Large Round Leaved . . . . .	.05
1 pkt. Sweet Corn,	Golden Bantam . . . . .	.15
1 pkt. Sweet Corn,	Crosby's Early Twelve Rowed . . . . .	.10
1 pkt. Sweet Corn,	Crosby's Early Cosmopolitan . . . . .	.10
1 pkt. Pop Corn,	Burpee's Golden Tom Thumb . . . . .	.10
1 pkt. Cucumber,	Burpee's White Spine . . . . .	.05
1 pkt. Egg Plant,	Black Beauty . . . . .	.10
1 pkt. Endive,	Green Curled . . . . .	.05
1 pkt. Leek,	Long Mezieres . . . . .	.10
1 pkt. Lettuce,	Grand Rapids . . . . .	.05
1 pkt. Lettuce,	Deacon . . . . .	.05
1 pkt. Lettuce,	Burpee's Ice Berg . . . . .	.05

1 pkt. Lettuce,	Dwarf White Cos	.10
1 pkt. Muskmelon,	Burpee's Fordhook	.10
1 pkt. Onion,	Prizetaker	.10
1 pkt. Onion,	Red Wethersfield	.05
1 pkt. Onion,	Burpee's Giant Gibraltar	.10
1 oz. Parsley,	Emerald	.10
1 oz. Parsnip,	Improved Guernsey	.10
1 pkt. Peas,	Prosperity	.10
1 pkt. Peas,	Burpee's Best Extra Early	.10
1 pkt. Peas,	Nott's Excelsior	.15
1 pkt. Peas,	Improved Senator	.10
1 pkt. Peas,	Mammoth Melting Sugar	.10
1 pkt. Peppers,	Tabasco	.10
1 pkt. Peppers,	Sweet Upright	.10
1 oz. Pumpkin,	Small Sugar	.10
1 pkt. Radish,	Scarlet Button	.05
1 pkt. Radish,	Rapid Red	.05
1 pkt. Radish,	Scarlet Turnip	.05
1 pkt. Radish,	French Breakfast	.05
1 pkt. Salsify,	Sandwich Island Mammoth	.05
1 pkt. Spinach,	Victoria	.05
1 pkt. Squash,	Early White Bush	.05
1 pkt. Squash,	Hubbard	.05
1 pkt. Tomato,	Spark's Earliana	.10
1 pkt. Tomato,	Chalk's Early Jewel	.10
1 pkt. Tomato,	Stone	.10
1 pkt. Tomato,	Dwarf Champion	.10
1 pkt. Spearmint		.05

Table 4.
Labor on Farmer's Garden, 1909, by Hours.

A summary of the labor account of the Farmer's Garden for 1909, is given in the following table:

	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	TOTAL
	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	Hrs.	
TEAM WORK							
Plowing, Harrowing and leveling,	4¼	¼	1	1¾	2		
Total team work, . . .	4¼	¼	1	1¾	2		9¼
WORK WITH ONE HORSE							
Cultivating,			1¾	3½	2⅓		
Total one horse work, . .			1¾	3½	2⅓		7⅞
HAND WORK							
Planting,			12	3½			
Cultivating,							
Spraying,			½				
Weeding,				10		1⅓	
Thinning and weeding, Layering strawberry runners,					2		
					¾	½	
Total handwork,			12½	13½	2¾	1⅝	30⅞

**Table 5,
Harvest of Farmer's Garden, 1909.**

	Date of Planting.	Space Used. Rows.	First Picking.	Condition for use.	Yield.	Retail Price.	Value of Crop.
BEETS:							
Crosby's Egyptian.....	May 3	1/4	August 20	25 days	4 doz.	10c doz.	.40
Edmand's Early.....	" "	1/4	" "	20 days	4 doz.	10c doz.	.40
CORN SALAD:							
Large Round Leaved...	May 3	1/2	Lost.				
CARROTS:							
Chantenay.....	May 3	1/4	August 17	after August 17	66 doz.	5c doz.	3.30
LETTUCE:							
Dwarf White Heart.....	May 3	1/8	June 22	7 days	75 heads	7c lb.	1.80
Deacon.....	" "	1/8	" "	8 days	30 heads	7c lb.	.95
RADISH:							
Scarlet Button.....	May 3	1/6	June 2	6 days	Lost.		4.50
Scarlet Turnip.....	" "	1/6	" "	7 days	15 doz. bunches		3.30
Rapid Red.....	" "	1/6	" "	5 days	11 doz. bunches		3.00
French Breakfast.....	" "	1/6	" "	4 days	10 doz. bunches		1.80
First in Market.....	" "	1/6	June 22	3 days	6 doz. bunches		

PEAS:									
Best Extra Early.....	May 3	1/2	July 8	} 4 days 8 days 10 days 10 days	238 lbs.	5 c lb.	11.90		
Prosperity.....	" "	1/3	" "						
Improved Senator.....	" "	1/3	" "						
Mammoth Melting Sugar.....	" "	1/3	" "						
Nott's Excelsior.....	" "	1/2	" 18						
PARSNIP:									
Improved Guernsey.....	May 3	1/2	Nov. 4	after November 4	25 doz.	1 1/4 c lb	1.25		
PARSLEY:									
Emerald.....	May 3	20 feet	May 17	after May 17	Supply.				
POTATO:									
Early.....	May 4	1	August 7	12 days	486 lbs.	1 c lb.	4.86		
Late.....	May 15	1	October 21	after October 21	972 lbs.	3/4 c lb.	7.29		
POPCORN:									
Burpee's Golden Tom Thumb.....	May 25	1/2	August 21	after August 21	21 lbs.	6 c lb.	1.26		
CORN:									
Crosby's Early Twelve Rowed.....	May 25	1/2	August 25	8 days	15 doz.	10 c doz.	1.60		
Burpee's Early Cosmopolitan.....	" "	1/2	August 25	9 days	17 doz.	10 c doz.	1.70		
ONION SEEDS:									
Giant Gibraltar.....	May 3	1/2	Nov. 26	after Nov. 26	116 lbs.	1 1/4 c lb.	1.45		
Red Wethersfield.....	" "	1/2	" "	after Nov. 26	36 lbs.	1 1/4 c lb.	.45		

TABLE 5,
HARVEST OF FARMER'S GARDEN, 1909.
(Continued.)

	Date of Planting.	Space Used. Rows.	First Picking.	Condition for Use.	Yield.	Retail Price.	Value of Crop.
ONION SETS:							
Globe.....	May 3	1/4	June 15	60 days	10 doz.	5c doz.	.50
SALSIFY:							
Sandwich Island Mammoth.....	May 3	125 feet	Nov. 4	after Nov. 4	20 doz.	10c doz.	2.00
SPINACH:							
	May 3	1/2	Failed.				
BEANS:							
Improved Refugee.....	June 3	1/2	August 20				
Extra Early Red Valentine.....	June 3	1/2	August 10				
Burpee's Stringless Green Pod.....	June 2	1/2	August 12	20 days	160 lbs.	6c lb	9.60
Dwarf Horticultural.....	June 2	1/2	Failed.				
SWEET CORN:							
Golden Bantam.....	June 2	3/4	August 25	16 days	33 doz.	10c doz.	3.20
CABBAGE:							
Early Jersey Wakefield.....	June 10	1/2	July 30	35 days			
Sure Head.....	" "	1/4	" "	30 days			
Early York.....	" "	1/4	Lost.				
Late Cabbage.....	" "	1/2	Failed.				

CAULIFLOWER:									
Burpee's Dry Weather.	June 10	1/2	Failed.	25 days	33 heads	5c head	1.65		
Burpee's Best Early.....	" "	1/2	August 11						
BEAN:									
Dwarf Lima.....	June 5	1/4	Failed.						
TOMATO:									
Spark's Earliana.....	June 4	1/2	August 23	23 days	382 lbs.	2 1/2c lb.	9.55		
Chalk's Early Jewel.....	" "	1/2	August 30	28 days	40 lbs.	2 1/2c lb.	1.00		
STRAWBERRY:									
Marshal.....	May 20	15 hills	All						
Haverland.....	" "	15 hills	Blossoms						
Clark's Seedling.....	" "	30 hills	Removed						
Senator Dunlap.....	" "	30 hills							
MUSKMELON:									
Burpee's Fordhook.....	June 1	1/4	Sept. 21	28 days	4 doz.	35c doz.	1.40		
CUCUMBER:									
Burpee's White Spine..	June 1	1/4	August 7	20 days.	{ Slicing, 194	25c doz.	4.00		
					{ Pickling, 1243		2.50		
SQUASH:									
Hubbard.....	June 1	1/4	Oct. 8	after October 8	45 specimens	2 1/2c lb.	4.50		
Early White Summer....	" "	1/4	August 10	after August 10	125 specimens	3c lb.	1.86		
PUMPKIN:									
Small Sugar.....	June 1	1/2	October 9	after October 9	147 specimens	2c lb.	1.46		
RHUBARB:									
		15 hills	July 21	25 days	1 1/2 doz.	10c doz.	.15		

Table 6.

Account Showing Profit of Farmer's Garden, 1909.

To team work, $9\frac{1}{4}$ hours at \$4 per day	\$ 3 70
To work with one horse, $7\frac{1}{2}$ hours at \$2.50 pr day	1 90
To hand labor, $30\frac{7}{12}$ hours at \$2 per day	6 11
To insecticides	1 00
To garden seeds	4 70
To raising plants	1 75
	<hr/>
Total expense	\$19 16
	Cr.
Value of garden produce	\$98 38
	<hr/>
Total net profit	\$79 22

Cultural Suggestions on Farm Garden Crops With Recommended Varieties

Asparagus

Asparagus is a perennial plant and should be planted in the garden at one side where it will not interfere with general cultivation. Every Farmer's Garden should have its asparagus bed. It is one of the earliest plants in spring; a very heavy producer and responds readily to fertilization, warmth, and sunshine. While asparagus prefers the lighter, loamy soils, it will do well in almost any part of the State where gardening can be conducted. When once established, an asparagus bed is good from 14 to 20 years. It is, therefore, important that the initial preparation of the bed be thorough. Strong two year old roots can be secured from almost any reliable seedsman. These roots may be set either in fall or early spring according to local conditions and circumstances on the farm. When preparing the bed, furrow out the rows from six to eight inches deep, four to five feet apart, and set the plants in the bottom of the furrow 15 inches apart. Cover firmly with soil. A liberal supply of well rotted manure should be used in preparing the bed and may also be used as a top dressing. If the plants are set in the fall there should be considerable cutting the following spring. The young tender shoots should be cut from two to three inches under the soil. Do not injure the crown of the plant. The cutting season should last from one to two months. During this period all shoots should be removed. Cutting should cease when the plants become tough and stringy. Cultivation should then be given during the remainder of the season in order to secure a strong development of the plants which will insure a heavy crop for the following year. Cut and burn the tops when they begin to die. It is generally found advisable to give the bed a good top dressing of manure at this time which may be forked in early the following spring. Keep the bed clean at all times.

Conover's Colossal gave satisfaction in the Farmer's Garden at this Station.

VARIETIES

Conover's Colossal	.	.	.	Burpee
Barr Mammoth	.	.	.	Burpee
Columbian Mammoth White	.	.	.	Burpee

Beans

With the exception of the Limas most all beans do well in parts of Idaho where vegetables can be grown. Beans should be planted on warm, rich, deep, moist soil as soon as danger of frost in spring is over. By successive plantings a continuous supply may be secured from early summer to late fall. Later plantings of beans may be made in the garden in the space occupied previously by such plants as radish, lettuce, beets, etc. Beans are less stringy and consequently more tender when grown rapidly in a favorable spot. It is, therefore, important that they be given the best possible conditions. Beans should be planted in rows to permit horse cultivation. The gardener will have no difficulty in making a satisfactory choice of varieties as most seed houses carry a large assortment.

VARIETIES

Improved Prolific Black Wax	Thorburn
Extra Early Refugee	Burpee
Bismark Black Wax Prolific	Burpee
Dwarf Horticultural	Burpee
Stringless Green Pod	Burpee
Early Warwick.	Henderson

Beets

The garden beet gives best results in deep, cool, loamy soils. Seeds may be sown as early as the ground can be worked. They are sown in drills and thinned to 5 inches in a row. In the Farmer's Garden they should be sown in rows sufficiently far apart to admit horse cultivation. They can be secured any time during the year according to the way they are handled.

Beets for table use should be medium in size, tender, sweet and fine in texture. They should be grown rapidly to secure the desirable qualities. The large poorly grown specimens are not good for table use, in fact, the extra large specimens of most all vegetables are not as desirable as the medium, quickly grown ones. Beets can easily be held for winter use in the average cellar. Beets make a fine crop for successive planting. They can be sown as a companion or succession crop only where the climate is warm enough to grow more than one crop during the season. Beets planted thickly in the row can be thinned for greens before any damage is done. The long varieties

should be grown for winter use and the round varieties for early use. The varieties grown in the Farmer's Garden at this Station gave very satisfactory results.

VARIETIES

Eclipse	.	.	.	.	Thorburn
Edmund Blood Turnip	.	.	.	.	Thorburn
Crosby's Egyptian	.	.	.	.	Burpee
Blood Red	.	.	.	.	Burpee
Dreer Excelsior	.	.	.	.	Dreer

Brussels Sprouts

This plant deserves more attention than it usually receives in most gardens throughout the country. The little sprouts borne in great profusion in the axils of the leaves are a great delicacy and represent a choice dish of the cabbage family. They are cooked similar to cabbage. They are very hardy and may be left out until freezing weather begins. Light freezing does not injure this plant, and it is thought by many that freezing improves it. The plants may be started in the hot bed, and handled similar to cabbage. There are many varieties of Brussels sprouts but one will have no difficulty in securing a satisfactory variety as most all of them are desirable.

VARIETIES

Scrymger Giant	.	.	.	.	Farquhar
Long Island Improved	.	.	.	.	Burpee

Cabbage

In most sections of Idaho, cabbage can be started under glass or in a hot bed about the first of February, and transplanted to the garden for early cabbage. They should be transplanted when the seedlings show the third leaf. Grow them rapidly, harden off, and transplant to the open ground as soon as weather permits in spring. Nothing but strong, stocky, well grown plants should be set. Most members of the cabbage family are easily handled. Cabbage should be set on a rich and moist section of the garden. It delights in a cool, deep, moist soil. Give cabbage plenty of room by putting the rows four feet apart, and one and a half to two feet in the row. The early varieties require less space than the late flat types. The early crop may be followed by late beans, spinach, beets, etc., if so desired. The cabbage

plant should be left in the ground until the head has fully developed, if the maximum yield is desired. They may be left in the ground until late in fall. Cabbage can very easily be stored for winter use. The plants are pulled and the heads placed in a trench with the roots upward and covered with a sufficient mulch of coarse material and earth to prevent severe freezing. Cabbage can be successfully stored in a good cellar if one can be secured. It may be expected to do well where gardening can be successfully conducted. There are a large number of varieties to choose from.

VARIETIES

Extra Early Express	.	.	.	.	Burpee
Early Jersey Wakefield	.	.	.	.	Burpee
Early Winigstadt	.	.	.	.	Burpee
Surehead	.	.	.	.	Burpee
American Drumhead Savoy	.	.	.	.	Henderson

Carrot

Carrots do well on most any garden land but they prefer a moist, deep, loamy, friable soil. The gardener should try to grow the carrot quickly in order to secure tender, sweet, uniform specimens. Avoid hard, dry, crusty soil. Seeds may be sown in rows by using a hand drill. Have the rows wide enough to admit horse cultivation. When the plants have grown three to four inches high, thinning should be done, leaving only the larger plants in the row from four to six inches apart. The seed should be thickly sown for many may not germinate. Carrots should be sown early, as the crop, especially the late varieties, requires a long season. The Carrot, like most all root crops, responds readily to frequent cultivation. Only the table varieties should be grown in a home garden. By judicious choice of varieties, carrots may be enjoyed for a long season. The late varieties can be left in the ground until freezing weather begins when they should be dug and stored in the cellar or buried in the field similar to cabbage.

VARIETIES

Carentan	.	.	.	.	Thorburn
Golden Ball	.	.	.	.	Burpee
Chantenay	.	.	.	.	Burpee
Danvers Half Long	.	.	.	.	Burpee
Henderson Intermediate	.	.	.	.	Henderson

Cauliflower

The general requirements of the cauliflower are practically the same as for the cabbage. It delights in a moist, cool, deep, loamy soil, and responds readily to frequent cultivation. It thrives best in cool and moist summers. One should endeavor to secure fresh seed each year. It can be sown in a hot bed and handled similar to the cabbage plant. To secure the most delicious specimens of cauliflower, it is essential that the plant be grown rapidly and the leaves tied or broken in such a manner to inclose the head to secure complete blanching and crispness. There are a large number of varieties to choose from. The gardener should learn by testing under his own conditions which are the most desirable for him to grow. There are many sections of Northern Idaho well adapted for growing choice cauliflower. It should be grown quickly in order to secure sweet, tender heads. Set it in rows wide enough to admit horse cultivation and from 25 to 30 inches in the row.

VARIETIES

Best Early	.	.	.	.	Burpee
Burpee's Dry Weather	.	.	.	.	Burpee
Extra Early Snowball	.	.	.	.	Henderson
Gilt Edge	.	.	.	.	Thorburn

Celery

This plant delights in a moist, deep, cool soil. Well drained swamp or low lands are especially adapted to the culture of celery. However, most any good garden soil where moisture can be secured and with the proper handling celery can be raised. There are not many sections in Idaho where celery will do its best without irrigation. Sow the seed in a hot bed or flats in the greenhouse about the first of April and transplant once or twice before setting in a permanent place. Celery seed is small, rather difficult to germinate, and fresh seed should be obtained each year. Especial care should be given to the kind of soil used in germinating celery seed. Such factors as light, air, and watering should be carefully looked after. The seed should be very lightly covered. Usually the seed bed or flats in which the seed is germinating should be partially shaded in order to prevent excessive evaporation and baking of the soil. Avoid excessive watering while the plants are in the propagating bed. See that the ground for celery is deeply plowed, fertilized and put in the best condition before setting the

plants. Celery delights in liberal applications of manure. There are several methods of planting celery but for planting in a farmer's garden it should be placed in rows far enough apart for horse cultivation. The ground may be furrowed out and the plants set in the bottom of the trench six to eight inches apart. As the plant develops, the soil should be drawn around to secure proper blanching. The plants may be severely cut back when transplanting to the field. Banking with earth should be done several times during the growing period, care being taken to hold the tops of each plant together in such a way that earth will not be placed in the heart of the plant. Frequent and copious waterings are essential to secure a tender, sweet, crisp growth of celery. Celery may be enjoyed from early winter till the following spring. It can be successfully kept by standing the plants upright in a few inches of soil in the cellar or may be stored in the field by covering with boards and sufficient soil to prevent severe freezing.

VARIETIES

Golden Self Blanching	.	.	.	Burpee
White Plume	.	.	.	Burpee
Boston Market	.	.	.	Burpee

Corn

The handling of this plant is so well known that it needs no further comment here. A succession can easily be had by frequent plantings or by using varieties which mature at different periods. By planting corn in rows wide enough for horse cultivation, a crop may be secured with very little attention other than frequent cultivation. Corn should be planted on warm, early soil, especially in the northern half of the State. There are many varieties of sweet corn. For table use, those varieties should be chosen which mature quickly, contain a large percentage of sugar, and are tender. Corn should not be planted until the ground is well warmed in spring. Plenty of seed should be used as the weaker plants and suckers can be removed.

VARIETIES

Cory Early	.	.	.	Burpee
Golden Bantam	.	.	.	Burpee
Manhattan	.	.	.	Thorburn
Early Marblehead	.	.	.	Thorburn
Early Minnesota	.	.	.	Thorburn

Cucumber

Cucumbers may be sown in hills as soon as the ground is sufficiently warm in spring. They delight in a friable rich soil and frequent cultivation. By keeping the fruit from maturing, larger yields may be secured. By the use of the hot bed or forcing hills, early plants may be obtained. If plants are grown in the hot bed and transplanted, they should be carefully "hardened off" before transferred to the garden. Hills may be set 4 by 6 ft. or 6 by 6 ft. as the space permits. Careful preparation of the soil in each hill should be given. It is often found advantageous to dig the hole two feet across and one foot deep, incorporating a liberal supply of horse manure. Do not plant the seed directly in a bed of manure. Plant the seeds about one and one-half inches deep. Firm the soil lightly after planting. Cucumbers should be planted level and not on mounds as sometimes practiced. See that no more than four plants grow to each hill. While picking cucumbers do not injure the vines, as such injury lessens the yield materially. Remove the cucumbers by using a sharp knife. Cucumbers for slicing purposes should be grown rapidly, medium in size, and well filled at both ends. Selections from the White Spine type are very desirable.

VARIETIES

Extra Early White Spine	.	.	.	Burpee
Cumberland	.	.	.	Thorburn
Thorburn 1896 Pickler	.	.	.	Thorburn
Fordhook Pickling	.	.	.	Burpee
Improved White Spine	.	.	.	Thorburn

Egg Plant

The culture of Egg plant is quite similar to that of the tomato. For further details of culture see Tomato.

VARIETIES

Black Beauty	.	.	.	Burpee
Early Long Purple	.	.	.	Burpee
Early Dwarf Purple	.	.	.	Thorburn

Kale

This plant is a member of the cabbage family. It deserves more attention and should be planted more frequently in the garden. It makes an excellent plant for furnishing a liberal supply of greens during

the fall, winter and spring. It is quite hardy. It should be grown and handled like cabbage in every respect. Kale will stand the winter nicely and is thought by some that the quality is improved by freezing. It can be successfully grown where cabbage does well. It is very easily grown.

VARIETIES

Tall Green Curled Scotch	.	.	Burpee
Dwarf German	.	.	Burpee
Curled Dwarf Green Scotch	.	.	Thorburn

Leek

The culture of this vegetable is practically the same as for the onion. The flavor is not so strong. It usually requires the entire season to mature, but may be used green like onions. It does not form a bulb like the onion. By planting leek in an open furrow, gradual filling may be practiced which will secure a greater blanched portion than by planting on the level like onions. Leek deserves to be more generally planted in the garden.

VARIETIES

Large Rouen	.	.	Thorburn
Long Mezieres	.	.	Burpee

Lettuce

For best success with lettuce the soil should be in fine condition. This plant responds readily to fertilization. The best plants may be obtained by sowing the seed in a hotbed and transplanting once before transferring to the field. This method will insure a continuous growth of crisp, succulent plants. The growth should never be checked as it makes tough, bitter lettuce. Frequent cultivation should be given. A large amount of moisture is desired throughout the season. The many varieties of lettuce may be divided into two classes—Cabbage or Head lettuce and Cos or Romaine. If one cares to plant Cos varieties they should see that the outer leaves are frequently tied up in order to blanch the inner leaves. This lettuce is highly recommended and deserves more attention in Western gardens. It is a great delicacy when well grown but very undesirable when proper care is not given.

VARIETIES

Deacon	Burpee
Grand Rapids	Burpee
Denver Market	Burpee
All Heart	Dreer
Triannon Cos or Romaine	Burpee

Muskmelon and Watermelon

The culture of these plants is essentially the same as for cucumber except they require more room. By choice of varieties a very fine selection of both may be secured. Full particulars in regard to raising Muskmelon will be found in a later publication from this Station.

VARIETIES

Fordhook	Burpee
Netted Gem or Rocky Ford	Burpee

VARIETIES

Kleckley Sweets	Burpee
Cole's Early	Burpee
Fordhook Early	Burpee

Onion

By judicious planting, a fine supply of onions may be secured throughout the season. Seed may be sown in drills in spring as early as the ground can be worked. If one desires, onion sets may be planted, for early green onions. The onion is essentially a surface feeder. It should be grown in rich, friable soil with plenty of plant food near the surface. Frequent and shallow cultivation is essential to preserve moisture until the onion begins to mature. The bulbs should not be allowed to stand closer than 5 to 6 inches in the row if best results are expected. If the bulbs are not maturing in time to be harvested in fall before inclement weather begins, the tops should be bent over to hasten maturity. See that the onions are well matured and dried before storing for winter use. Data on onion culture will be found in a later bulletin from this Station. There are many varieties of onions. One will have no difficulty in choosing varieties adapted to local conditions and personal preferences.

VARIETIES

Oregon Yellow Danvers	Spokane Seed Co.
Red Wetherfield	Burpee
White Portugal	Burpee
Philadelphia Silverskin	Burpee
White Queen (Fine for Pickling)	Thorburn

Parsnip

Parsnips, like other root crops, require a deep, loose soil in order to develop a long, smooth and shapely root. Seed may be sown in drills where the plants are intended to grow and covered with three-fourths of an inch of soil. Sow the seed rather thickly and thin plants to 4 inches in the row. Parsnips require the entire season for their full development. They may be dug in late fall, topped and stored similar to carrots. They may be also left in the ground over winter. The hollow crown varieties are not as desirable for leaving in the ground as those with a smooth shoulder. If the roots are to remain in the ground over winter, it is advisable to give them a light mulch of coarse strawy material.

VARIETIES

Hollow Crown	Burpee
Improved Guernsey	Burpee
Early Short Round	Burpee

Parsley

A few specimens of this plant should be found in every garden. It is not difficult to grow and is very productive. A large amount of tender foliage may be gathered for garnishing throughout the year.

VARIETIES

Emerald	Burpee
Extra Curled	Thorburn

Peas

The first sowing of peas should be made very early. By a judicious choice of varieties and succession planting, peas may be enjoyed for a long period each year. Their culture is not difficult. For the Farmer's Garden it is seldom wise to use tall growing varieties which require staking. A liberal supply of seed should be sown about three inches deep. One will have no difficulty in choosing varieties and

there is a large list carried by most seed houses. The essential thing for the home gardener to bear in mind is to have a succession of peas throughout the season which do best under his climatic conditions. This may be secured by several plantings or by planting early, medium and late varieties.

VARIETIES

Early varieties—Nott's Excelsior	Burpee
Mid-season varieties—Prosperity, American Wonder and Horseford's Market Garden	Burpee

Potatoes

The Irish potato is here mentioned only as a garden crop. It is usually not well to take the space except for early varieties. The main crop is generally grown on other sections of the farm. By plowing the ground as soon as it is fit to work in spring, tubers may be had about the time the first crop of peas are harvested. If one is anxious to have extra early potatoes, seed may be sprouted in shallow boxes. These sprouts are carefully preserved and transplanted to the ground with a liberal portion of seed attached. Choose smooth, medium size uniform tubers which are typical of the variety. Always pay attention to the selection of an ideal type when securing potatoes for seed. A great deal can be accomplished in maintaining or improving the potato by securing superior strains through selection.

VARIETIES

Suitable varieties of the Potato can be found on the farms of Idaho. The following are good: Early Rose, Carman No. 3, Early Ohio and Rural New Yorker.

Pumpkin

In many ways the culture of the pumpkin is the same as that for the cucumber. There may be several plantings in order to have them at different periods throughout the season. The hills should be at least 8 to 10 feet apart for best development. Sometimes their maturity may be hastened by pinching off the ends of the vines. Some of the sugar pumpkins are very choice and should be planted more generally.

VARIETIES

Small Sugar	Thorburn, Burpee
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Radish

The radish like other root crops delights in a moist, rich friable soil. They should be grown rapidly without a check. Several plantings should be made in order to secure choice radishes for a long period of time. Seed is sown in drills as soon as the ground can be worked in spring. The radish is a fine crop for succession planting. The varieties used in the Farmer's Garden at this station gave very satisfactory results.

VARIETIES

Early Round Varieties:

French Breakfast	-	-	-	Burpee
Scarlet Turnip	-	-	-	Burpee

Long Varieties:

Icicle	-	-	-	Burpee
White Vienna	-	-	-	Burpee

Salsify

This is a most excellent plant when well grown. It is commonly spoken of as vegetable oyster. The culture of this plant does not differ from that of other root crops like carrot or parsnip. (See fig. 5.)

VARIETIES

Sandwich Island Mammoth	-	-	-	Burpee
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Spinach

This plant is highly prized as a pot herb. It is very easily grown. Spinach grows rapidly and several crops may be secured during the season. The culture of this plant is practically the same as for lettuce. It makes a fine companion or succession crop.

VARIETIES

Long Standing	-	-	-	Burpee
Victoria	-	-	-	Burpee
Curled Leaf Savoy	-	-	-	Thorburn

Squash

For details of culture see cucumber or pumpkin.

VARIETIES

Summer Varieties:

Early White Scallop	-	-	-	Thorburn
Early White Bush	-	-	-	Burpee

Winter Varieties:

Hubbard	-	-	-	Burpee
Bay State	-	-	-	Thorburn

Tomato

It is essential to have the tomato plants grown in a hotbed or greenhouse in order to secure large, strong, stalky plants. The tomato is susceptible to early and late frosts which shorten its growing period materially. The plant should be as large as possible when transplanted to the field. Endeavor to lift each plant without loosing the soil or molesting the roots. If they are carefully handled while being transferred to the field, they should not receive a check to their growth. Fruits may be ripened early by training the vines to one or two stems and supporting them by means of a stake or trellis. The most serious drawbacks to tomato culture are frosts, droughts and various blights. The tomato has been trained in various ways to secure maximum yields and earliness. Probably the most satisfactory way for the handling in the Farmer's Garden is to plant them in rows 5 feet apart, 4 feet in the row, and tie them to a stake. Side shoots should be removed. The tomato delights in frequent cultivation.

VARIETIES

Spark's Earliana	-	-	-	Livingston
New Stone	-	-	-	Livingston
Atlantic Prize	-	-	-	Thorburn

Some Useful Garden Literature

Farmer's Bulletins

These may be obtained free by addressing the Secretary of Agriculture, Washington, D. C. The following is a list of Farmer's Bulletins of interest to a home gardener :

- No. 35 Potato Culture.
- No. 39 Onion Culture.
- No. 61 Asparagus Culture.
- No. 62 Marketing Farm Produce.
- No. 68 The Black Rot of the Cabbage.
- No. 76 Tomato Growing.
- No. 91 Potato Diseases and Their Treatment.
- No. 94 The Vegetable Garden.
- No. 121 Beans, Peas and Other Legumes as Food.
- No. 138 Irrigation in Field and Garden.
- No. 148 Celery Culture.
- No. 203 Canned Fruits, Preserves and Jellies.
- No. 220 Tomatoes.
- No. 231 Spraying for Cucumber and Melon Diseases.
- No. 254 Cucumbers.
- No. 255 The Home Vegetable Garden.
- No. 256 Preparation of Vegetables for the Table.
- No. 263 Practical Information for Beginners in Irrigation.
- No. 282 Celery.
- No. 289 Beans.
- No. 295 Potatoes and Other Root Crops as Food.
- No. 354 Onion Culture.

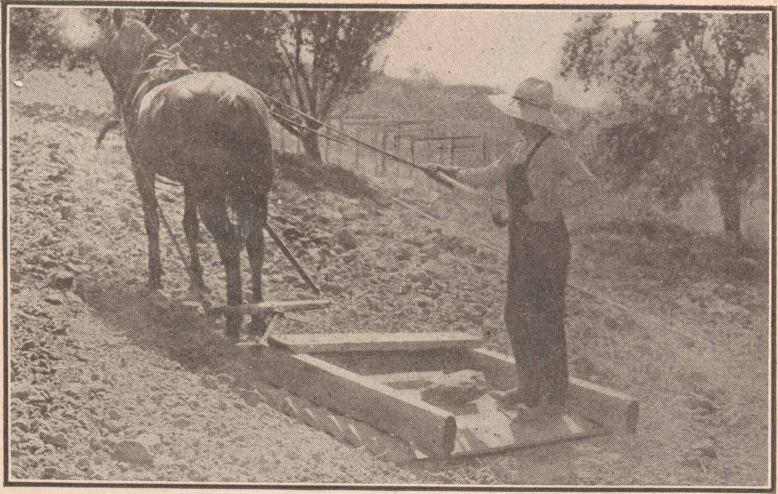


FIG. 1—ONE HORSE PLANKER

A useful implement in preparing garden soil. (Photo by C. C. Vincent),

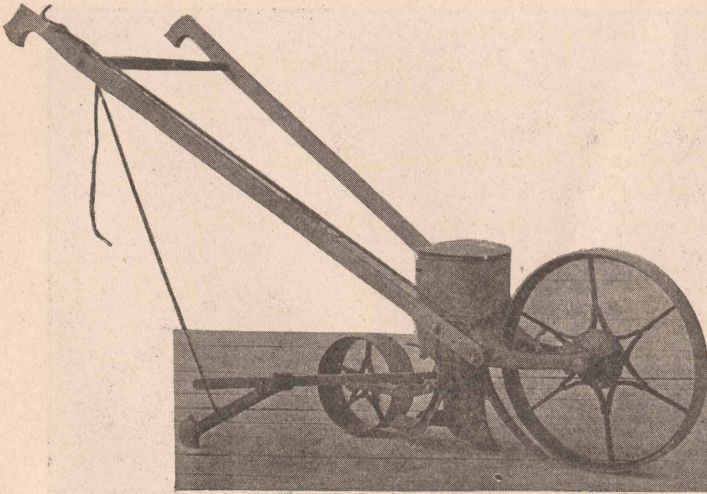


FIG 2—PLANET JUNIOR SEED DRILL

This implement makes planting easy, but sometimes impractical when sowing short rows. (Photo by C. C. Vincent)

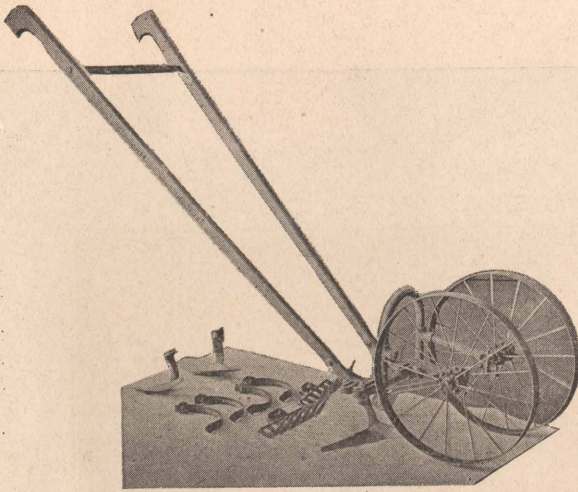


FIG. 3—WHEEL HOE

A wheel hoe is indispensable to a busy farmer in the management of his garden. (Photo by C. C. Vincent)

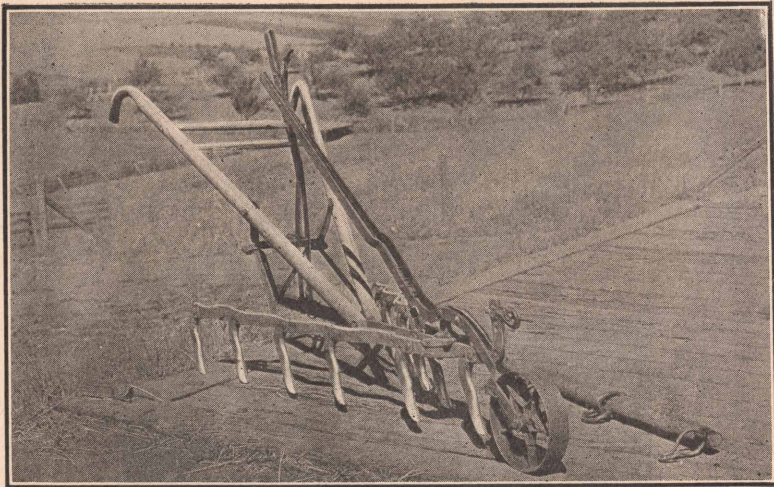


FIG. 4—NARROW TOOTH CULTIVATOR

An excellent implement to use frequently in the garden. (Photo by C. C. Vincent)



FIG. 5—SALSIFY

Branching of the root is a result of unfavorable soil and climatic conditions. Plants like these are absolutely valueless. Not grown in the Farmer's Garden at this station. (Photo by C. C. Vincent)

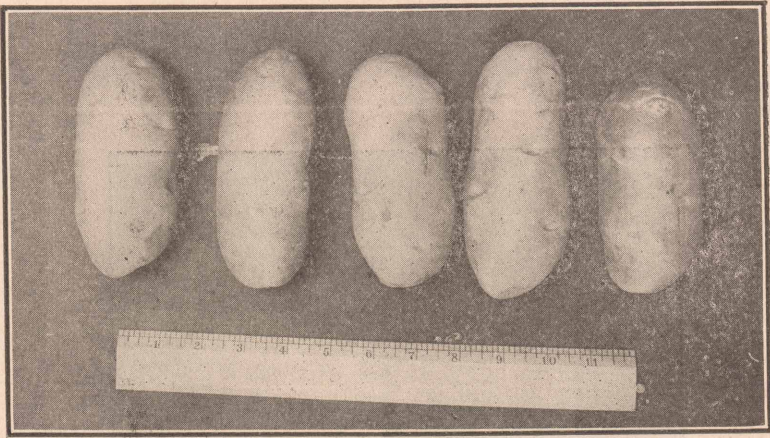


FIG. 6—POTATOES

Grown in Farmer's Garden, 1909. Note uniformity, size, smoothness and shape. Tendency of this variety is to grow too long.

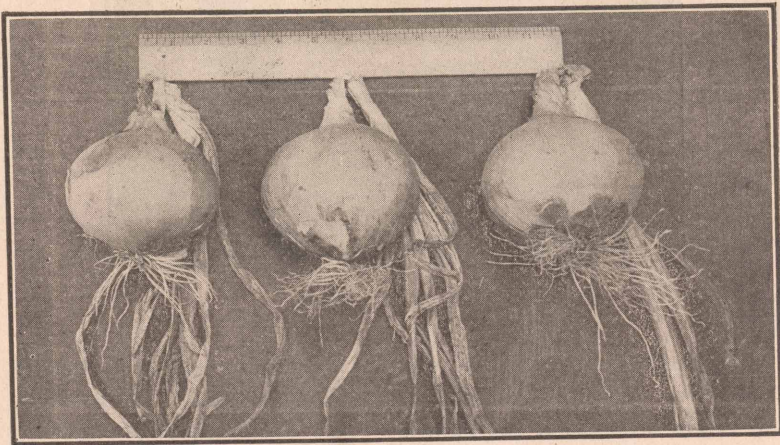


FIG. 7—ONIONS

Onions like these can be easily grown in Idaho. From Farmer's Garden, 1909.



FIG. 8—TABLE BEETS

They should be smooth, uniform, medium size, and quickly grown.

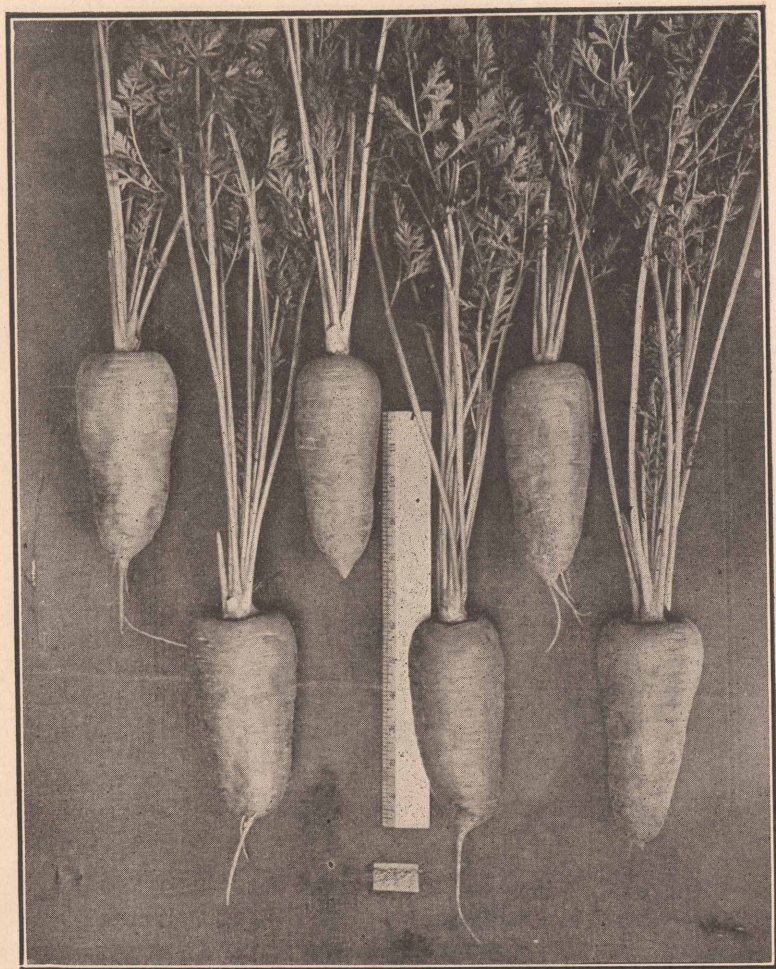
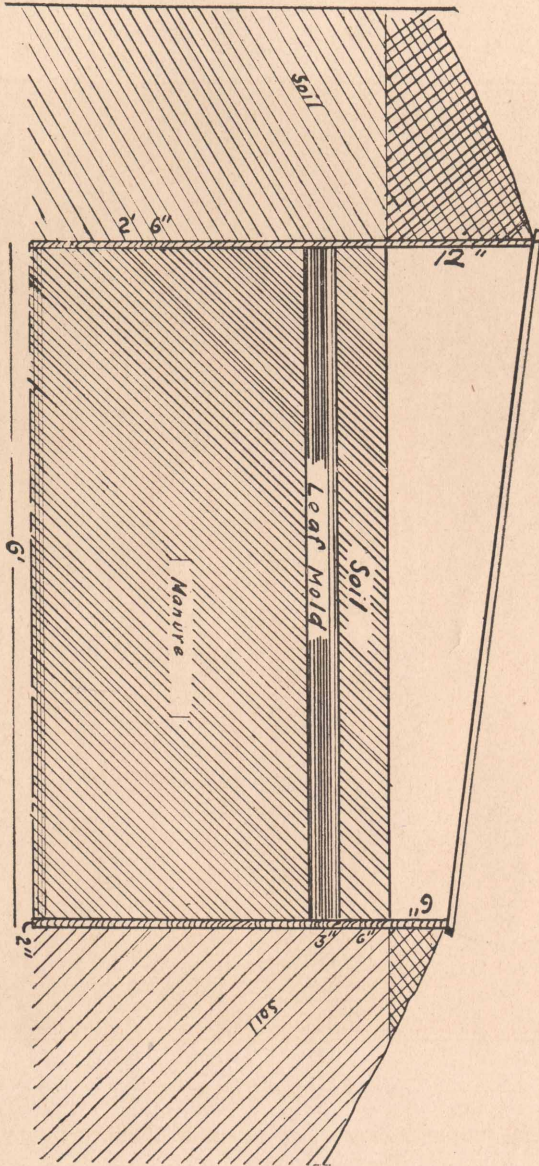


FIG. 9—CARROTS

A liberal supply of carrots can be easily obtained in any garden.

FIG. 10—CROSS SECTION OF HOT BED



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