

FARM-FIELD AND GARDEN

THE ANNUAL HOTBED.

Rank the Most Important Item of Ex-

periments—Directions For Making It.

Few people who have a garden make

any attempt to secure vegetables earlier

than may be done by sowing seed out-

side after spring is far beyond advanced

to avoid frost. Occasionally some early

tomato or cabbage plants are grown in

a sunny kitchen window, but the range

of season and variety of garden prod-

ucts that can be had by the skillful use

of hotbeds or cold frames and sash

is really appreciated. Yet their use is

advisable as a means of profit, a

healthful addition to table resources

and a source of great interest and plea-

sure to any one who undertakes this

species of gardening. The deterring

factor is naturally the sash, which is ex-

ensive. While the sash can be bought

ready glazed at any sash or door factory

they can be homemade after the follow-

ing plan, originally given in one of

the bulletins of its horticultural depart-

ment.

The usual size of such sash is 6 by 3

feet, holding three rows of 10 by 12

inch glass, six lights to the row. Double

strength glass of "A" grade will be

found the most profitable to use in the

long run, as it does not break as readily

as the lighter and cheaper grades. The

best grade of sash is made from first

class southern cypress lumber, though

redwood or good white pine will answer

a good purpose. Stock 1 1/2 inches thick

when dressed gives the best weight.

Make the stiles 1/4 inches wide and the

rails 4 inches. No cross mottings are

used, but two bars 1 1/2 inches wide run

the length of the sash. These with the

stiles and top rail are rabbeted one-

quarter of an inch wide and one-half

an inch deep to receive the glass. The

glass laps like shingles, and the lowest

light projects over the lower rail, which

is only an inch thick. In pinning the

sash the holes should be bored from the

underside not quite through, so as not

to allow the leaking of water from

above. Through the middle of the stiles

and bars a five-sixteenths of an inch

stay rod is run just beneath the glass.

For the double purpose of preventing

spreading and the sagging of the bars.

If the lower portions of the stiles and

bars are chamfered away as much as

strength will allow, less light will be

obstructed by them.

The lights of glass should be firmly

set, with large points and a short brad

at each lower corner to keep them from

slipping down, and then well putted.

The sash should receive two coats of

coats of paint and be repainted as often

as needed.

One of these sash complete weighs 45

pounds, and it is believed that it will

last enough longer than a cheaply made

one to well repay the extra cost.

Preparing a Hotbed.

To make a stationary hotbed dig a

pit about 2 1/2 feet deep, about one foot

wide and about one foot above ground

at the back and three inches above

in front. The width and length vary

according to the number or size of

the sashes to be used, the sashes being

placed across, as in the case of the cold

frame, that the sashes may be moved to

give air. Into this pit place leaves or

litter to the depth of one foot and fer-

menting stable manure to the depth of

1 1/2 feet, this being trodden down quite

firmly and then covered with from three

to six inches of soil. Be sure that the

manure is trodden in firmly at the sides

and corners or it will sink unevenly.

PREPARATION OF FEEDS.

Experiments With Grain Cooked and

Raw as It Came From the Threshing

Machine—The Results.

Experiments have been conducted to

discover the relative value of grain when

steamed and fed warm as compared with

grain when fed raw and cold. The grain

in both cases was ground. The pigs on

the steamed grain increased in weight

more rapidly than those fed upon

the same grain raw and cold. The grain

used was a mixture of equal parts of

peas, barley and rye, ground and fed

mixed with water. When fed steamed

and warm 4.16 pounds of increase in live

weight; but when fed raw and cold 4.25

pounds of grain per pound of increase in

live weight were consumed. The follow-

ing are the conclusions from the experi-

ment, says the report of the Commis-

sioner of Agriculture:

1. There is no appreciable difference in

the number of pounds of grain required to

produce a pound of increase in the live

weight of swine, when it is fed steamed

and warm, as compared with when fed

raw and cold.

2. On the average there is a gradual

and great increase in the quantity of

grain consumed for every pound of in-

crease in the live weight of swine, after

the second month of the fattening period,

and after the average live weight exceeds

100 pounds.

3. It is economical to market swine to

be slaughtered when they weigh about

180 pounds, live weight.

4. The consumption of feed per day is

greatest at or near the period of their

fattening, when the quantity of feed con-

sumed per pound of increase in weight is

smallest.

5. In feeding grain in the ground state

and in the whole or unground state, it

has been found that swine consumed

about ten per cent. more of the unground

grain per pound of increase in live

weight. The ten per cent. would pay for

the grinding; and in every case swine

fed on the ground grain have shown

stronger legs and better health generally.

6. It is economical to market swine to

be slaughtered when they weigh about

180 pounds, live weight.

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13. The consumption of feed per day is

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sumed per pound of increase in weight is

CAULIFLOWER CULTURE.

How to Make It Pay—First Sowing

in This Country.

There is a good profit in growing

cauliflowers for market if the conditions

are all right, but with the culture often

given them, they are not a reliable

crop. In growing cauliflowers for sale,

the first thing to be considered is a

market for these luxuries. The crop is

not a staple one, like some which are

considered necessities of life, and you

must find people who want them and

are able to buy them. In most large vil-

lages there is a sufficient number of peo-

ple who want them to make a market

for a few thousand heads. In some sea-

sons, and at some times in the year,

there is a good profit in growing them

to ship to dealers in the cities, but the

most money is made by retailing them

in villages where no one is growing

them and there is no competition.

It is not best to economize too much

in purchasing seeds. The higher priced

strains of white cauliflowers, where the

type has become established by careful

selection for several years, are more re-

liable in heading, and the whiter the

heads the better they will sell in the

market. The large pure white heads

with the leaves trimmed nicely around

them attract the eye, and people buy

them because they "look nice." The

Early Snowball is the standard with

many people and probably more exten-

sively grown than any other variety

and is usually very satisfactory. I make

the first sowing of the seed in a hotbed

in March. A little later I sow more

seeds in a cold frame, and sow at differ-

ent times in the open ground from

April until June. My plan is to have

only a small part of the crop mature at

one time, for the leaves will soon grow

through the heads if they are not mar-

ketted at the right time.

A deep, moist clay soil is the best

for cauliflowers, although good crops

can be grown on any good garden soil.

I cover the ground two or three inches

deep with stable manure and plow it

in. Then harrow and furrow two and

one-half feet apart. If I have well rot-

ted manure, I scatter it in the furrow

and mix it with the soil with the cul-

tivator, or, if the manure is not at

hand, I set the plants and in a few days

apply around them a little commercial

fertilizer, for the leaves will soon grow

through the heads if they are not mar-

ketted at the right time. The plants are

transplanted at different times from

May until June. Cauliflowers plants

which are transplanted in a hotbed

should not be set too early unless they

are well hardened, for they are more

easily injured by frosts than cabbage.

In addition to the foregoing sugges-

tions given in "Tick's Magazine" the

writer says that to insure success one

must have some means of irrigation. The

plants should not stop growing at any

time; hence the importance of irrigat-

ing them during a drought.

A Silo Door.

A Rural New Yorker correspondent

offers what he evidently finds a pretty

good plan for a silo door. Ours is be-

lieved and about 17 by 24 inches. I bored

a 5-16 inch hole in the center, drove a

three-eighths of an inch bolt from a

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WHEAT FROM RUSSIA.

Brought Here for the Benefit of Farmers

in This Country.

Prof. Mark A. Carlson has just re-

turned from Russia. He is confident that

some of the seeds he secured will prove

beneficial to farmers in this country. He

mentions a winter rye which is grown at

Ust-dielik, which is in about 60 degrees

north latitude. The climatic conditions

are similar to those of Labrador. It is

believed that this