

Hudson Horizontal System-A Vine at Different Stages, Showing the Method of Training-A, Pruned Vine in its Third Year-B, Vine in its Fourth Year-C, Unpruned Vine in Its Fourth Year.

growth, which in turn grow from buds

developed the previous season. All

pruning must, therefore, be based on

this characteristic of the plant. After

determining the system of pruning

best suited to the conditions, species

and variety the vine should be so

handled, during its early life, as to

develop a general framework of the

The pruning the first winter after

it to bear its full capacity. Under

such treatment the body of the plant

its fruiting capacity will increase cor-

of pruning and training used in this

country will find them illustrated and

described in Farmers' Bulletin No.

471, entitled "Grape Propagation,

Pruning and Training," which can be

had free on application to the depart-

FREE FROM LUMPS

Firmed and Fine Earth-Large

Clods Are Injurious.

*By DR. J. O. MORGAN, Professor of Agronomy, College Station, Texas.)

The reason why it is usually recom-

mended that soil in the garden be

deepened gradually is that the plow-

ing up of a large amount of dead, inert

subsoil at one operation results in

temporarily decreasing the producing

power of the land. This is especially

true if the soil in question is under-

subsoil. Such a soil should be plowed

in the fall and the practice should be

to plow from one to one and a half

inches deeper each year than was

practiced the preceding year until the

The presence of clods in the seed

bed, whether they be on the surface

or underneath the surface, is injuri-

ous because of the fact that they de-

crease the water supply for the crop.

Large lumps massed together under-

neath the surface have between them

large air spaces. Such a condition not

only allows the rain water to perco-

late to lower depths too rapidly, but

it admits too much surface air, which

rapidly dries out the lumps and robs

the seed bed of its moisture. The seed

bed should consist of well firmed and

fine earth if the roots or crops are

to penetrate it readily.

soil has been deepened sufficiently.

KEEP GARDEN SOIL

respondingly.

Poisonous Feed Should Be Hauled | Seedbed Should Consist of Well-

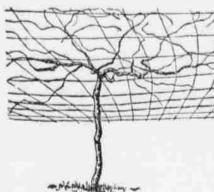
inches should be spoiled. Shortly lain with a plastic, impervious clay

type desired.

(From Weekly Letter, United States De- on shoots of the current season's partment of Agriculture.)

Fall or winter pruning of grape vines in the home garden, as well as on the commercial plantation, may be done at any time during mild weather while the vines are in a dormant condition. In general, the period from November to March gives the most satisfactory results, but the work should in all cases be done at least a week or ten days before the vines are likely to start into growth.

In the colder sections of the country, wherever varieties not hardy enough to withstand severe winters are grown, the vines must be artificially protected. Under such circumstances the vines should be pruned as soon as they become dormant. The system of pruning should be such as to easily admit of laying down the stalk and canes for next Beason's fruit production. The next step is to



Parrales System, Showing System of Training and the Arrangement of the Wires.

cover these parts with litter, leaves, or earth in such a way as to protect cafferent methods of pruning and them from severe or repeated freezing and thawing and to leave them so the several districts of the same councovered until just before the season try. Those interested in the methods for growth the following spring.

There are several species of grapes. each adapted to particular sections of the country, and each responds best to a particular method of culture, pruning and training.

The vine normally produces its fruit | ment.

HARMFUL TO STOCK

to Some Part of Field Out

of Cattle's Reach.

(By C. LARSON, South Dukota Experi-

The molds and bacteria which cause

silage to decay produce at times poi-

sonous by-products. The spoiled silage

should be hauled out to some place in

the field to which the cattle don't have

access. The spoiled silage results

from air entered near the surface,

which is natural, but not over a few

after filling the silo this top portion of

the silage becomes very hot, but ex-

treme heat is not common to silage a

The amount of spoiled silage may

be minimized by going into the silo

every day during the first week after

filling and tramping it down thor-

oughly. The silage settles during the

first week. If there is no extra

weight on top the silage will become

loose and open, admitting air near the

surface. This year the corn fodder

was more green than usual. It was

immature and contained a large per

cent of water. If the farmer was not

careful to tramp it down daily after

filling it may be seen why there ap-

pears to be more than the usual

FROM THE ORCHARD

Many Insects and Fungous Dis-

eases Can Be Destroyed Dur-

ing Cold Winter Months.

the value of cleaning up the orchard

during winter. Many insects and fun-

gous diseases which would make trou-

ble the following "eason can be de-

stroyed in the cold months. First re-

move all trash and burn it, thereby de-

stroving the insects that are lying dor-

mant. Then remove from the orchard

all mummied fruits. Old, rotten

peaches, apples, pluris and other fruits,

whether on the tree or on the ground.

contain millions of spores which are

capable of spreading diseases to the

An order of work that is recommend-

ed by Clemson college is to prune the

orchard, clear it of all trash and then

plow thoroughly. Such a system will

ald materially in the production of a

perfect crop of fruit the following sea-

next crop of fruit.

son.-Clemson College.

amount of spoiled silage this year.

REMOVE ALL TRASH

foot or two below the surface.

SPOILED SILAGE IS



NO REMEDY FOR BLACKHEAD

Experts of Rhode Island Experiment Station Make Recommendations for Preventing Disease.

(By MILLIGAN C. KILPATRICK, Poul-try Department, Ohio State University) No remedy or satisfactory method of prevention of blackhead has been discovered, although the disease has been carefully studied for years. Doctors Cole and Hadley of the Rhode Island experiment station make the following recommendations:

1. Protect the yards and flocks which may have the good fortune to be uninfected with the blackhead or-



Bronze Turkeys Massachusetta

ganism by a thorough examination of all new stock whether turkeys, fowls, geese or other domestic birds.

2. Keep the turkeys on grounds which are as fresh as can be obtained and, above all, keep them isolated from fowls and other domestic

3. Keep every turkey in the flock under close observation in order to separate and at once isolate any bird which gives evidence of the disease. To facilitate such observations it is helpful to leg-band each individual and to record its weight from time to time.

4. If it is known that blackhead is present in any of the poultry, that yard and house should be kept free from sparrows, rats and mice, which are carriers of the organism which causes the disease.

5. In fattening turkeys for the market, increase the rations gradually. Overfeeding or a sudden increase in the ration will not cause blackhead, but frequently causes death of birds in which blackhead is present.

6. The bodies of all birds which have died of blackhead should be burned or buried immediately.

On most farms, it is out of the question to put into practice all of these recommendations, especially those in regard to the isolation of the flock. The general practice is to allow the turkeys to mingle with the other fowls. Unless these recommendations can be rather closely followed, however, it is not advisable to attempt to raise turkeys after the disease has once made its appear-The turkeys in your flock which do not appear to be infected may become chronic carriers of the disease. If it is necessary for you to rear turkeys next season on ground which has been occupied by fowls or by diseased turkeys, you are very likely to experience the same trouble.

MAKE FIGHT AGAINST MITES

Liberal Use of Lice Powder is Always

in Order-Dust Bath Is Essen-

tial to All Fowls.

powder is always in order.

ding the fowls of lice.

minate mites.

much fat.

The free use of an effective lice

A dust bath is very essential in rid-

In applying powder hold the fowl

by the feet, head down, and work the

The free use of kerosene on the

Whitewash is very effective against

Feed for Pullets.

shut off after the laying of a small

egg or two, take notice as to whether

you are feeding them enough. Pul-

lets must be fed heavily to keep up

regular laying in winter. After they

begin laying they seldom put on too

Make the Hens Scratch.

all grain should be scattered in litter

to keep them scratching for a living.

They will produce more eggs and keep

When fowls are kept in confinement,

If the pullets begin to lay and then

roosts and in the cracks will exter-

powder well down in the feathers.

PULVERIZED SOIL IS BETTER THAN CLODS

Plantfood Already in Ground Is More Accessible—Land Rendered More Fertile. Farmers do not, as a rule, realize

> Soil well pulverized before the crop s planted is much more productive than cloddy land or any land left with an uneven surface, because the plantfood already in the land is made more accessible and the little root feeders which literally fill the ground can better gather nourishment from both earth and air.

Land thoroughly plowed and thoroughly pulverized before planting is not only rendered more fertile from a natural standpoint, but is in far better condition to receive whatever artificial fertilizing one may wish to apply.

Mistake in Feeding.

A worse mistake than high protein feeding, is not feeding enough of any-

Elderly Lady Wise With the Wisdom of Years.

She Had "Sized Up" Flo Bliss, and Subsequent Events Showed That She Was Right in the Estimate Made.

"A per ty for your thoughts, little girl! Could an old aunt understand?" "You aren't an 'old aunt'," Peggy retorted. "You shan't be called names even by yourself!"

Aunt Alicia smiled. Peggy did not guess that it was because it was so like Peggy to think of the other person rather than of herself.

'We'll waive the question of age. Of course, I know that I'm not old, but it seems to be private information unsuspected by the world. But if I'm not old, certainly I can't be sidetracked by a kitten like you!"

Peggy laughed, then grew sober. 'It's such a foolish thing," she confessed, "I was just wishing that I was bright, and could entertain a crowd, like Flo Bliss, instead of being a mouse of a thing without a particle of brilliancy anywhere about me There, now, you know. Aren't you ashamed of me?"

"Not a bit," Aunt Alicia responded; not one little bit, Peggy, child. It's human-we all wish it. And it isn't ah impossibility; it's only a problem, which is a very different thing. Don't envy Flo, dear; she lives in a house of one room. Just make your house as big as you can, and the talk will take care of itself by and by."

"A house of one room!" Peggy repeated, bewildered.

Aunt Allcia kissed the puzzled face. How could I possibly acquire a reputation for wisdom if I didn't speak in enigmas sometimes?" she responded lightly. "How about your Hull House book? Did you like it?"

"Oh, didn't I like it!" Peggy cried. drawing a long breath. "It makes you want to know a thousand things, Aunt world to be living in!"

"Don't let anyone or anything ever persuade you that it isn't, Peggy,' Aunt Alicia replied, and "'Deed I won't!" Pegg: responded.

Peggy went home soon after that, and it was nearly five years before she visited Aunt Alicia again. Most of the old set were still in Evanston, although a few, Flo Bliss among them, had married.

Aunt Alicia watched and waited. One day it came. "Aunt Alicia-" with Peggy's quaint,

half-shy hesitation. "Peggy?"

"What has changed Flo Bliss so? She used to be so bright, and nowwhy, she can't talk at all except personalities. And they are simply personalities, not real, or fine, or interesting things about people."

"Nothing has changed Flo," Aunt Alicia replied. "But-why-Aunt Alicia, who do you

mean? She never used to be dull!" "What did she talk about five years

ago? to think back. "Why-I don't know. I guess it was the same kind of thing on the football team." then, only it seemed so different. She -Aunt Alicia Benedict Gordon-is that what you meant by living in a house of one room? I used to wonder,

Not the Same. "Time is money, you know."

and wonder, and you never would

tell."-Youth's Companion.

"I suppose that's why Jiggers thinks he's doing his friends a favor when he spends the evenings with them."

BETTER THAN A BAROMETER

As Reliable Weather Prophet, Old Ram Fully Justified Confidence Put in Him by His Owner.

In the Countryside Magazine, Miss Margaret Woodward tells how a farm er's barometer proved its effectiveness as a weather predictor, and confounded science. Every New England farmer, she says, knows that cattle and sheep are trustworthy weather prophets.

There is a story of a party of scientific men who were making observations on a ledge near which was a flock of sheep. The professors settled a great many questions relating to natural science to their own satisfaction. As they wished to make another trip to the ledge the next day, the weather became a matter of interest to them. One of their number studied the barometer carefully, and announced to the waiting group that tomorrow's weather would be fine.

Thereupon the old farmer who was within hearing distance remarked with a genuine Yankee drawl, "I dunno haow you fellers air so cock-sure about the weather tomorrow, but if that old ram yonder keeps his rump to the wind'ard, it's jest bound to rain."

And rain it did, much to the discomfiture of the professors.-Youth's Com-

At Least He Was Honest.

He was an honest little coon, but due to a lack of sanitary precaution his honesty was without benefit to the good woman who succored him. He was dirty, ingratiating and hungry when he appeared at her door. He asked for something to eat.

"I will give you something," she said, "but you must do a little work to earn it."

The little darky said he was willing to work. So she prepared a huge sandwich and told him to go out and pick worms off the tobacco. A bit to her surprise he did not eat the sandwich at once, but slipped it inside his dirty little shirt, and started for the tobacco field. Half an hour later he returned. It was a torrid day and his face was shiny with perspiration. Grimly he reached inside his shirt and drew Alicia. Oh, isn't it an interesting forth his sandwich untouched by his white teeth, but much the worse for dirt, perspiration and pressure.

> "Missus," he said, "the wuhk is too hahd foh me. Take back yoh sandwich."-Louisville Times.

> > Misreading.

Rev. George R. Lunn, the new socialist mayor of Schenectady, was congratulated on his election.

"The people have confidence in the honesty of my party's policy," he said. "Our opponents tried to put our principles in a false light, but the people couldn't be fooled. They knew that the opposition's animadversions on our principles were as misleading as the bachelor's description of his sister's new baby.

"Asked to describe this new arrival, the bachelor replied:

"'Um! Very small features, cleanshaven, red-faced and a very hard drinker.

His Place.

"I don't know what you will do with my boy in your school. I am Peggy wrinkled her forehead, trying sorry to say he is a chronic kicker."

Preparedness.

"Well, Johnny, did you make any sister. good resolutions for the New Year?" "Yes, mother. I resolved to take boxing lessons so I can learn to lick do you care for?" that boy next door."

Love is a disease that most girls catch as often as they are exposed.

The world is full of illusions.

Your

is to your Stomach, as this important organ controls your health, your strength and general happiness.

For any Stomach or Bowel weakness try

Stomach Bitters

"Jack proposed three times before accepted him.'

"To whom, dear?"

PREPAREDNESS 1

To Fortify The System Against Orip when Grip is prevalent LAXATIVE BROMO QUININE should be taken, as this combination of Quinine with other ingredients, destroys germs, acts as a Tonic and Lazative and thus keeps the system in condition to withstand Colds, Grip and Influenza. There is only one "BROMO QUININE." E. W. GROVE'S signature on box. \$50.

Something New.

gage on it."

"I hear Brown has bought a house. s it a new one?" "No, but it has a brand new mort-

Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it

Signature of Charly Telebert. In Use for Over 30 Years.

Children Cry for Fletcher's Castoria

Why He Was Quiet. "What did he have to say for him-

"Nothing. His wife was with him." -Judge.

Art Talk.

"Why do you paint pictures that nooody can understand?" we asked. "I'll tell you," replied the artist, "Y used to paint the other kind, and people understood them so darned well that they wouldn't buy them."

No Laughing Matter.

"I suppose you read the newspapers to keep informed of world events?" "Yes, for the most part," answered the thoughtful man. "But ocasionally read them for the sake of a good "How is that?"

"I find a great deal of unconscious numor in those diplomatic notes."

Innocent Merriment.

The following conversation was overheard between two of Dr. Anna "Just what we want. We'll put him | Howard Shaw's little nieces, who were seriously discussing votes for women. "I sha'n't tell the girls at school that I'm a suffragist," confided the older

> "I don't mind if they know I'm one," burst out the smaller girl. "What

"Because they will all laugh at me,"

her sister admitted. "Why, don't you know," came the solemn reply, 'that people have been laughing at Aunt Anna for hundreds

and hundreds of years.'

A Food Fact to Remember

Seventeen years ago a food was originated that combined the entire nourishment of the field grains - wheat and barley - with ease of digestion, delicious taste and other qualities of worth designed to fill a widespread human need.

Grape-Nuts

has no near competitor among cereal foods in form or nutritive value, nor has it had from the start.

Grape-Nuts on the Breakfast Menu builds and maintains body, brain and nerves as no other food does. Ready to eat, economical, appetizing.

> "There's a Reason" JOIN THE THINKERS' CLUB

Grocers everywhere sell Grape-Nuts.

Today that food -