

KANSAS FARMER

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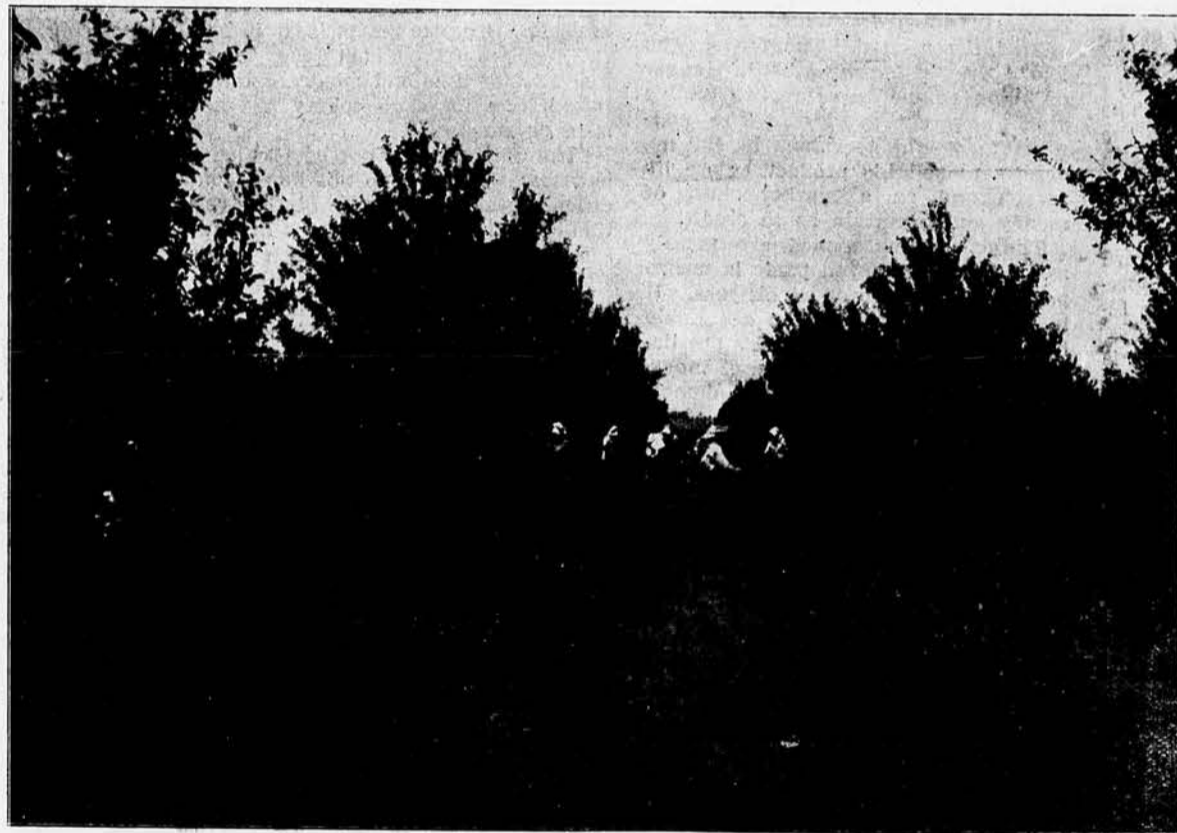
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The Horticulturist Is Optimistic

Horticulture has had many "ups and downs" in Kansas. The year 1907 was decidedly a "down." But the optimism of the horticulturist is never subdued. The greatest fruit failure in the experience of the State may turn out a blessing on account of starving the pests of the orchard. This blessing is enjoyed in anticipation by the fruit-

to plow up even his alfalfa and plant the ground to grapes and berries?

And the insects may not all have perished. Therefore, the prudent Kansas orchardist will see that the spraying apparatus is in good repair; he will post up on the latest developments on insecticides, fungicides, and other cides, as well as the



Berry-Picking in Shawnee County.

growers. True, a late frost may come again, and may blight fond hopes, but until it comes the true Kansas optimist will revel in a great fruit crop for 1908 and will have plans all perfected for judicious use of the proceeds.

Who knows but that every mature orchard will produce \$200 an acre? Who knows but that the crops of small fruits will make the farmer want

times and seasons when they should be used. The Kansas horticulturist has learned that it will never do to be caught off guard. This lesson has been well learned by the older men in the business. The younger generation, whose presence at the annual meetings becomes more noticeable each year, are a robust set. They have learned from the experience of the fathers, and from their own experi-

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ence, and many of them have the added advantage of a course of instruction at the Agricultural College.

Thus far the prospects for the 1908 season are most promising. The trees, vines, and plants went into the winter in vigorous condition and with abundance of buds well developed. The winter has been mild so that no harm has come to any kind of fruit, but not so warm as to bring forward the buds to a state to cause apprehension for such cold snaps as the future may hold.

Kansas as a fruit-growing State is only at the beginning.

TO MAKE DEPOSITORS SAFE, A MEASURE OF PUBLIC POLICY.

The present special session of the Kansas Legislature has before it several matters of great importance. But, among these the one that exceeds all others in possible bearing on the general welfare is the proposition to make absolutely safe the people's deposits in banks.

Several interests are concerned. There is the interest of the bankers, and the interest of depositors. But greater than both of these is the interest of producers.

The banker thinks he has learned how to take care of himself as most bankers did during the recent panic. But the experience of the great National Bank of Commerce at Kansas City proves that not only the small, the poorly managed, the speculating bank, but the great, the rich, the experienced, the conservative bank may be subjected to a run which it can neither resist nor endure, and may be compelled to close its doors, to the great detriment of the general public, of the bank's patrons, and of the bank's stockholders. Again, the patrons of banks were exceedingly considerate during the late panic. As never before they realized that rashness would precipitate greater trouble. This consideration on the part of their patrons enabled bankers to protect their reserves and thereby weather the storm as they could not have done had the public been more nervous.

As banking is conducted—and the custom of loaning all but about one-fourth of the deposits is not likely to be abandoned—it is impossible for a bank unaided to endure a persistent demand of its depositors for immediate payment of their money. That

such a run may occur at any time and without reasonable cause is the experience of the past. In ordinary times the prudently conducted bank can get help from its correspondents and is generally able to convince a large share of its depositors that there is no danger. In ordinary times there may be nothing worse than temporary inconvenience to the well managed bank and its patrons.

But in times of general panic banks are not able to help each other as in ordinary times. Depositors are liable to become insistent. They draw out their money as rapidly as possible, and place it in hiding. To meet these demands of depositors the banks are compelled to call in their loans as rapidly as possible and to decline to make new loans.

As modern industries are carried on a large part of the "working capital" is borrowed from the banks. Thus, the great packing industry has usually many millions borrowed. Manufacturers of woollens and cottons, manufacturers of agricultural implements and other machinery, merchants, grain-dealers, stock-feeders—almost every active, quick-turning industry depends largely on money borrowed at the bank.

When bank accommodations are refused and outstanding loans must be cashed one of the inevitable consequences is curtailment of industry in every line. This means reduction of earnings, followed by discharge of employees, stagnation.

One of the first effects last November was a reduction of nearly one-third in the price of hogs. Without the money, packers could not buy as formerly. The demand slackened. Farmers lost. Prices of cattle were similarly affected. Wheat and corn shared the decline. The feeder who had borrowed money was in danger of being compelled to realize on his stock at great sacrifice. The manufacturer might be ruined by the necessity to sell his product before its season and on a market short of money and uncertain as to credit.

The conditions named are merely samples. A prolonged panic is unsurpassed as a producer of distress. It is bad enough that banks are liable to failure, and that depositors are liable to lose, but the paralysis of industry, the enforced idleness, the demoralization of the working forces of society are more serious than these.

The question now of greatest importance is that of preventing the recurrence of financial disturbance.

The cause of the disturbance is not a reduction in the amount of money in the country, so that schemes for emergency increases in money are, at best, only palliatives. The fear of the depositor that he may suffer inconvenience in getting his money when he wants it, or that it may be lost, is the most potent cause of withdrawal and hoarding, with the attendant dangers and losses. True, some heavy capitalists who early converted much of their assets into currency which they locked up and thereby did much to start the panic which caused such enormous reductions in prices of property—and especially of corporation shares—were able at reduced cost to gain control of majorities of stocks which they had long sought. These have doubtless profited greatly by the disturbance which they started. But their efforts would have fallen far short of accomplishing their purpose without the help of the timid depositors whose instinct of self-preservation caused them to demand their deposits.

There is only one way to reassure these timid depositors, and that one way is to make their money so manifestly safe in the bank that they will have no fear of either loss or delay in obtaining it. Bank runs cause the trouble. Bank runs break the banks. Without a run no honestly and capably conducted bank need break. Without destruction of confidence there need be no bank runs.

But how shall the depositors be made safe and assured of safety?

Banks are semi-public institutions. The State and the Nation supervise

them as they do not supervise farms, factories, or stores. This is done for the public good. The State should go a step further and should take such steps as will make the depositor safe. It should so tax the deposits as to create a fund out of which it may promptly pay depositors in case of loss. This fund should be promptly renewed after every loss, by a special tax on deposits.

The details need not be complicated. The increase in deposits would many times make good the amount of the tax on the banks, so that the guaranty fund would practically be maintained out of the gratuitous loans of the people to the banks. But the people would be many times repaid by the security of depositors, and the certainty of uniform prosperity of industry.

The Legislature, now in session, has before it bills providing for such State guaranty. It will be well for every reader to write immediately to his Representative and the Senator from his district urging support of a State guaranty of deposits. These men are now at Topeka. Write them.

THE GREEN BUG SITUATION.

In a statement signed by T. J. Headlee, professor of entomology at the Kansas State Agricultural College, and S. J. Hunter, professor of entomology at the University of Kansas, the following is given as the situation on January 4, 1908:

"In response to a request for information as to the status of the 'green bug' in Kansas, we will say that as far as our knowledge goes it is present in two counties, and in destructive numbers in one field in each of these counties, where, during the fall and early winter, it has killed the wheat in spots. It exists scatteringly in other counties throughout the State. For want of time and money, detailed information for each county has not been obtained.

"The outcome can not be predicted because: (1) we do not know conditions over the whole State; (2) this being its first appearance in Kansas, no historical data exist upon which to base an opinion; (3) climatic influences, over which man has no control, exert an important part in hastening the rapid development and consequent spread of this insect. We do, however, know that the serious outbreak of last spring had its origin, under favorable weather conditions, in a comparatively small area of infestation, and we feel that in Kansas there is a possibility of serious damage to wheat and oats next season.

"In the matter of preventive measures we will be glad to cooperate with those interested in any way we can."

NEW FORESTER AT IOWA STATE COLLEGE.

At a recent meeting of the board of trustees of the Iowa State College, C. A. Scott, of the United States Forest Service, was elected to the chair of forestry to fill the vacancy caused by the resignation of Professor H. P. Baker, who accepted a position at the Pennsylvania State College. Mr. Scott is a Pottawatomie County, Kansas, man, a graduate of the Kansas State Agricultural College, and a student of the Yale College of Forestry. He has been continuously in the employment of the Government Forest Service since graduation, and during this period of seven years has gradually advanced through all stages of the work from that of student assistant to Forest Supervisor, which position he resigned to accept the chair of forestry at the Iowa State College.

His work has been largely confined to the Middle West and the Rocky Mountain States; hence he has the advantage of being familiar with the forestry conditions of the Upper Mississippi Valley. Since its origin he has had charge of the extensive forest nurseries and plantings of the Dismal River National Forest. During the past three years he has given a special course of lectures before the Nebraska University forestry students and during the winters has also rendered assistance as a lecturer at the

farmers' institutes of Nebraska. In 1906 he was elected to membership in the Society of American Foresters, a professional organization which is limited in its membership. His training, experience, strength of character, and personality make him one of the best men available for the position to which he has been elected at the Iowa State College.

DAMAGE BY POULTRY.

EDITOR KANSAS FARMER:—I rent a farm of plowed land and the man that lives just across the road has between 30 and 40 turkeys and they have been running on my crops since the crops began to ripen and in this way have destroyed a great deal for me. I have driven them off a great many times and I also told him about the trouble and he promised to keep them out, and settle for the damage. This was quite a while ago, and he has never said anything about settling.

Now what I want to know, is there any law that would make him settle for the damage and also keep fowls off of said land? I intend to farm the same land next year to corn.

Can I bring action against him and compel him to settle, and how will I proceed to bring action? I would just as soon he would turn that many hogs in my field as the turkeys.

BARNEY McCABE.

Anderson County.

The owner of any animal that in Kansas goes through, under, or over a lawful fence is liable for the damage done by such animal. The statutes specify "domestic" animals as creating the owner's liability. It must not be thought, however, that the owner or keeper of other than domestic animals is immune from legal responsibility. While the statutes of Kansas are silent as to other than domestic animals, the common law, which may well be called the law of common sense, makes the owner of other than domestic animals even more liable than the owner of tame beasts. Domestic animals are to some extent privileged. Others are kept at their owner's peril.

The Kansas Statutes, Chapter 40 of the General Statutes of 1868, as modified by subsequent acts, prescribe what shall be a lawful fence. It will be easily seen by anyone who reads these statutes that several kinds of fences are lawful in this State. Thus, an amendment to the law, enacted in 1883, provides that a barbed-wire fence containing three wires, properly placed, shall be a lawful fence where ever hogs are not allowed to run at large. Such a fence would probably excite a goat's derision; a chicken would not know it was there; and a turkey would give it slight consideration. But the owners of goats that should go through such a fence would be liable for all damages to his neighbor's crops.

Any person who reads the Kansas Statutes will fail to find poultry of any kind enumerated among the animals for whose trespass the owner is liable. Section 27 of Chapter 40 says,

"If any horse, mule or ass, or any meat cattle, hogs or sheep, or other domestic animals shall break into any inclosure and the owner or occupant thereof shall consider himself aggrieved thereby, such person may apply to the fence viewers of the township in which such enclosure may be situated, having first given at least one day's notice, in writing, to the owner or keeper of such trespassing animal, if known to him, or by leaving a written notice at the place of abode of such person, of his intruded application, and also of the time when the fence viewers will attend to examine the fence and investigate the subject of damages; and the said fence viewers shall forthwith repair to the place where such injury shall have been done, and there diligently examine the fence over which or through which such trespassing animal shall have broken or entered into any such inclosure."

The next section provides for the assessment of damages, etc.

The quibble whether turkeys are

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animals is not worth raising. All poultry and living creatures of every kind that any person may own or keep bring a liability to their owners quite as exacting as comes from the ownership of a horse or a cow or any other of the animals enumerated in the statute. The hog is the only animal on whose account there a special fence required.

The wording of the law has led some to assume that to create a liability for damage an animal must break down the fence. A proper interpretation of the law makes the owner liable if his animal enter and do damage in an enclosure protected by a lawful fence.

The editor does not advise this correspondent to rush off precipitately to the fence viewers and create a bill of costs and a lot of hard feelings. A better way will be to talk the matter over with the owner of the turkeys in neighborly way, and to consider with him this answer to the inquiry. Then let both be reasonable. No doubt both desire to obey the law, both want to do what is right. The law tells you what your rights are. Get together!

DIVISION FENCE.

EDITOR KANSAS FARMER:—A and B own adjoining farms with a hedge fence between them. Several years ago A and B divided this fence, A taking the south half and B the north half and each agreeing to keep his own in repair. A's pasture lays full length of this fence while B's pasture joins A's portion only. B keeps cutting posts out of his portion and A has had to keep B's portion brushed in order to keep his cattle and horses from eating and working holes through and getting into B's crops. A has trimmed one side of his portion and stretched three barbed wires and stapled them to the hedge, thereby making a good fence. A has asked B to fix his portion the same way, which he refuses to do. Can A compel B to do this?

We have no fence-viewers. How must A proceed to have fence-viewers appointed and the matter brought before them? Should not the county attorney take a hand in this? Should not B pay all expenses?

Sedgwick County. SUBSCRIBER.
There are fence-viewers in every organized township in Kansas. In the General Statutes of Kansas, Chap. 40, Art. 2, Sec. 5, it is provided that the trustee, clerk, and treasurer in each township in this State shall be fence-viewers in such township, any two of whom shall be authorized and empowered to act. Section 6 provides penalties for neglecting or refusing to act as fence-viewers when requested. Section 7 provides for compensation of the fence-viewers to be paid first by the party requiring the service. It is further provided that "all expense of the view shall be borne equally between the parties interested, except in case of a view to appraise damages for neglect or refusal to make or maintain a just proportion of a division fence, in which case the costs of the view shall be paid by the party in default, to be recovered as a part of the damages assessed."

An act of the Legislature passed in 1868, for the encouragement of planting hedges, makes a hedge a lawful fence from the time of planting, provided certain rather exacting conditions are fulfilled. These conditions are set out in sections 36, 37, 38, 39, and 40 of the fence law. If these conditions have not been complied with the hedge must fulfill the requirements of the general law which makes it obligatory for each party to partition fence to keep his portion in good repair. The duty of the fence-owner is to maintain "a good and sufficient fence" as mentioned in Sec. 28 of the fence law.

The county attorney is not required to perform any duty in cases like this. The proper course for A is to lead the fence law carefully; then talk the matter over with B, calling his attention to the considerations herein named, and to show him that A's animals go through B's portion of the fence, being enabled to do so on account of B's failure to maintain as "a good and sufficient fence," A can not be legally required to pay any



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of the damages that his animals may do. If B can not be induced to see his duty in the matter, A may apply to the fence-viewers as provided in Sec. 9 of the fence law. Sec. 11 makes it the duty of the fence-viewers to settle the controversy.

But where both parties know their rights and duties under the law there should be no need of calling in official help to determine so plain a matter. Get together.

KANSAS LAND OFFICES.

EDITOR KANSAS FARMER:—I saw an article in THE KANSAS FARMER of this fall which gave the land offices where a person could secure a claim.

Would these people be able to tell where I could buy land in the West? If not where could I secure information in this matter?

Can a person holding a claim relinquish his claim? Will you please give the address of the land offices?
Republic County. P. C. WHITLA.

There are three U. S. land offices in Kansas. Their locations are at Topeka, Garden City, and Wakeeney. The U. S. land offices are not authorities as to other than Government land in their several districts.

By addressing the Central Real Estate Dealers' Association, Topeka, Kans., any subscriber for THE KANSAS FARMER can obtain free of charge a directory of the real estate agents of Iowa, Kansas, Colorado, Texas, and New Mexico; also lists of special bargains offered in these States. The directory is now in press and will be ready for delivery by February 1. The first of the lists of bargains will be out by about the middle of the present month.

A person holding a claim can relinquish it, in which case it goes back to the government.

HAS A RAILROAD COMPANY A RIGHT TO TEAR UP ITS TRACK?

The Union Pacific Railroad has a short line of track between Colby, Thomas County, and Oakley, Logan County, about thirty miles long. Now there is some talk of tearing up this line and extending the Salina branch from Colby to Sharon Springs, Wallace County, doing away with the Colby and Oakley branch. What we want to know is, can they take up this track? If the track is taken up it will reduce the price of land along that branch.
Norton County. GEO. F. BLISS.

The right of a railroad to tear up its track will depend upon what the actual conditions of the road are and the

view that may be taken by the courts. In railroads the people have an interest, and where the railroad is about to tear up a track the people ought to begin an action in court to prevent them from tearing up the track, and if the road should be torn up, then commence a suit to compel them to restore the track and to operate its road. A railroad may be compelled through the courts to perform the public duties specifically and plainly imposed upon the company, and where the proper showing is made the courts will compel the railroad to operate its road, and for that purpose will compel the replacement of its track torn up in violation of its charter.

When a railroad is a losing concern the courts have a discretion and ordinarily will not compel a losing railroad to operate its trains and maintain its tracks. By "losing" is ordinarily meant a company that is insolvent, and its cars and tracks, etc., are in bad condition, and to order them to be restored is virtually to order a useless act to be done.

The people along the lines can answer when the road was built and what the counties or townships contributed.

G. F. GRATTAN,
Attorney for the Board of Railroad Commissioners.
Topeka, Kans.

LAND IN WALLACE COUNTY.

EDITOR KANSAS FARMER:—I am about to trade my 80 acres here for 320 acres in Wallace County, Kansas, near the State line.

1. Is rain abundant in that part of the State?
2. What is the principal production?
3. Is the land good alfalfa land?
4. Do they have many failures?
5. What is the nearest market?
6. What should land sell for in Wallace County, that is, unland and bottom-land?

7. Can the farmers raise corn, and what is average yield per acre?
Coffey County. ED. WILLIAMS.

1. The rainfall of Wallace County varies through a wide range. During the thirty-seven years for which the United States Weather Bureau has records for that county, the annual precipitation has varied from 7.45 inches average of the entire period is 16.88 for 1878, to 34 inches for 1880. The inches. This is less than half of the average annual precipitation in Coffey County, which is 38 inches. The sub-

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the telephone has an added value, because it affords the one method of rural communication not affected by road conditions. When snow or mud makes traveling difficult or impossible, a telephone in your house proves not only a means of social intercourse that does away with the old-time Winter loneliness of the farm, but also a means of transacting much of your business that would otherwise be neglected. To get the full value of a telephone, however, you must be able to depend upon it—and that means that you must have reliable apparatus and equipment. Therefore, buy and use only

ject of "Rainfall in Western Kansas" was ably presented in THE KANSAS FARMER of August 29, 1907, in a paper by P. C. Day, Assistant Chief Division of Meteorological Records, U. S. Department of Agriculture. Unfortunately we are unable to supply copies of THE KANSAS FARMER of that date.

2. Secretary Coburn's report for March, 1907, speaking of Wallace County, says: "Corn and barley are the principal grain crops. Winter and spring wheat, broomcorn, sorghum for forage or grain, millet and Hungarian, Kafir-corn, and alfalfa yield well. There are about 6,500 bearing fruit-trees. Cattle rank first in number and value of animals raised."

3. The official report above quoted gives the 1905 area of alfalfa in Wallace County as 2,109 acres and the product 4,626 tons.

4. The writer has no data of crop failures in Wallace County.

5. The Union Pacific Railroad passes through the county a little south of the center and connects with the markets of the world.

6. The Central Real Estate Dealers' Association of Topeka, Kans., reports that lands in Wallace County are selling at \$8 to \$15 per acre, with an occasional rough piece selling a slow as \$5 per acre.

7. Coburn's report for the 1906 crop gives data from which it appears that the average yield of winter wheat was 12 bushels per acre; of spring wheat, 11.22 bushels per acre; of corn 21 bushels per acre.

THE ALFALFA CLUB MEETING.

The regular monthly meeting of the Shawnee Alfalfa Club will be held at the rooms of the Commercial Club at 625 Kansas Avenue, on Saturday afternoon, January 25. The meeting will begin at 2 o'clock. The subject for discussion is Alfalfa Pests. Prof. W. T. Headlee and Prof. T. H. Scheffer of the Agricultural College will be present. Professor Headlee will give a lecture on Insect Pests on Alfalfa, and Professor Scheffer will discuss animal pests in general, but especially the gopher and his extermination.

As all farmers of this region are interested in corn-growing as well as alfalfa, the owners of the prize-winning corn shown at the late meeting of the Corn Breeders' Association at Manhattan, will bring their prize corn to this meeting for exhibition. It is also expected that some machinery valuable in the cultivation of alfalfa or in the destruction of its enemies will be on exhibition.

Secretary Graham calls attention to

the fact that the invitation is extended to everybody to be present and that no fees are charged for membership.

1908 DAIRY NUMBER.

THE KANSAS FARMER of February 20, 1908, will be our special dairy number for 1908, one of our series of twentieth century special editions.

Each of our specials has reference to some leading industry and is therefore preserved for ready reference throughout the year by many of those receiving copies. The dairy special will be of unusual value to advertisers who desire to reach all the people engaged in the dairy industry in the prosperous Southwest. It will pay to use liberal space in an impressive way. This 1908 dairy number will do good service for a whole year. Several thousand extra copies will be distributed by the State Dairy Association of Kansas, Missouri, and Nebraska.

We make no extra charge for advertising in this special. Reserve space at once and let us have your copy not later than February 14, 1908.

NUTRITIVE CONSTITUENTS OF MILO MAIZE.

EDITOR KANSAS FARMER:—Can you tell me the food contents of Milo maize; its nutritive ratio and its digestibility? If not, where can I have it analyzed? F. M. PAUL.

Haskell County.

The nutritive constituents of Milo maize have been determined by J. T. Willard, professor of chemistry at the Kansas Agricultural College. This grain is in the same family with Kafir-corn. The writer has seen no account of digestion experiments with Milo maize and can not therefore state its digestible nutrients. It may be interesting to compare it with Kafir-corn, whose digestible nutrients are given in Henry's "Feeds and Feeding."

Nutritive Constituents of Kafir-Corn and Milo Maize per 100 Pounds.

	Protein.	Carbo.	Fats.
Milo maize.	12.11	72.16	2.90
Kafir-corn.	9.90	74.90	3.00

Digestible Nutrients.

Kafir-corn.	7.80	57.10	2.70
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If it be assumed that the nutritive constituents of Milo maize have percentages of digestibility identical with those of Kafir-corn, we shall have the following figures for the digestible nutrients of Milo maize:

	Protein.	Carbo.	Fats.
Milo maize.	9.54	55.00	2.61

It will be noted that Professor Willard's analysis of Milo maize gives a very large protein content. The accuracy of the analysis is not questioned, but there is a possibility that the sample used was better than the grain as usually fed. But the showing for Milo maize is certainly good, indicating a feeding value equal to about 93 per cent of the average feeding value of equal weights of corn.

AUTOMOBILE LAW.

EDITOR KANSAS FARMER:—You printed the law controlling the running of automobiles on country roads some time ago, but I have misplaced the paper. Will you please print the law again and tell where it can be found in the statutes?

LEE L. SHEPHERD.

Cowley County.

The Kansas laws in relation to automobiles are contained in chapter 67 of the Laws of 1903. The act is too long for full insertion here. Its provisions require that:

Every automobile shall be provided with a suitable bell, horn, or other signal, and suitable brakes and lights.

The speed of an automobile must not be "greater than is reasonable and proper, having due regard to the traffic and use of the highway, or so as to endanger the life or limb of any person," and must never exceed twenty miles an hour on country roads, or ten miles an hour on a public street or highway in a thickly settled or business part of a city or town.

The person having control or charge of an automobile is required to exercise great care whenever approaching a vehicle drawn by a horse or horses, or other domestic animals,

or when approaching a horse that is ridden by any person, having regard for the safety of the person using the horse. If any horse or other domestic animal appears restive and frightened, the speed of the automobile must be reduced, and if possible the automobile must be turned to the right giving the road; and if requested by signal or otherwise by the person using the horse the person in charge of the automobile must stop his machine and keep it standing so long as may be necessary to allow such horses or other domestic animals to pass. This provision applies to automobiles going in either direction.

Any person failing to comply with the requirements of the act is guilty of a misdemeanor, and upon conviction is subject to a fine not exceeding one hundred dollars.

TREES ALONG THE ROAD.

EDITOR KANSAS FARMER:—Please state the law in regard to planting trees a few feet in the road from my line. The road along my farm is a sixty-foot road and in good shape. Last spring I planted an evergreen hedge three feet in from the line on my ground. This spring I thought of planting some fancy trees along on the outside of the evergreens, two feet in the right-of-way, but I was not sure whether I could do that. If I can, has any one a right to destroy them? FRANK E. JONES.

Sedgwick County.

The Kansas Statutes are silent on the matter of planting trees in the roadside. The public has an easement in the sixty-foot strip used as a highway, and may use it for passing and repassing at pleasure. The public has also the right to improve this strip to any extent that may be desirable for the purpose of making it a better highway. If the public needs the entire sixty feet for passing or for improvement of the road, the proper officer may remove any obstruction that shall in any way interfere with the use, or maintenance, or improvement of the highway. It is probably true, also, that any individual on finding a serious obstruction to his proper use of the highway might remove the same with impunity.

But trees planted for ornament along the edge of the highway and forming no obstruction to the free use of the road for purposes of travel or traffic ought to be welcomed and guarded by all citizens and protected by officials. It is difficult to conceive that any rightminded person would desire to damage or remove such contributors to the beauty of the landscape and the pleasure of passers.

Whether any one willfully or carelessly injuring or destroying such trees would incur legal liability for such trespass is another question. That he ought to be held to account will hardly be disputed by any person who loves trees and enjoys a beautiful landscape.

MILO MAIZE AND KAFIR-CORN.

EDITOR KANSAS FARMER:—Can you tell me through THE KANSAS FARMER where I can get the pure dwarf Milo maize? Also pure Kafir-corn? All of our maize here is badly mixed with sorghum and other grains.

I don't see any Kafir or maize in your advertisements so I write you.

B. F. MOORE.

Haskell County, Texas.

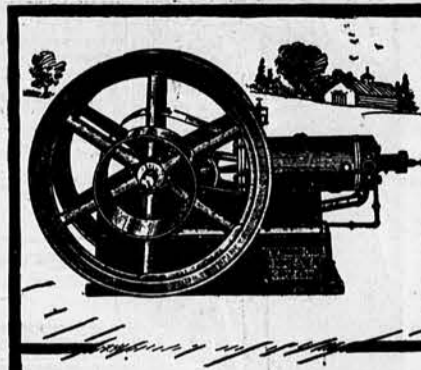
Persons who have seeds for sale will find it profitable to use a few lines in the "For Sale" column, if the amount in stock is not sufficient to warrant a larger advertisement.

KANSAS BOYS' CORN CONTEST.

Professor Miller, of Kansas State Agricultural College, makes the following preliminary announcement for the present year's corn contest:

Class B. Open to boys from 10 to 14 years of age, each boy to be given one quart of good seed corn by the county committee and to exhibit ten ears at the county institute next fall, and winners to receive cash or merchandise prizes.

Class A. Open to boys from 14 to 20 years of age, each boy to plant ten



FARMERS are getting over doing things the hard, slow way. The very general use of farm powers is an example.

As a matter of fact, the farmer has a great need of a reliable power as the mechanic.

Take the average barn for illustration. Locate one of the simple, dependable I. H. C. gasoline engines, such as is shown here, outside the barn door, or within the barn, for that matter, and what a world of hard labor it will save! You will have a power house on your farm.

It will shell the corn, grind feed, cut ensilage, turn the fanning mill, pump water, run the cream separator, elevate hay to the mow, and do a dozen other things.

The old way was to use the horses in a tread power or on a circular drive, to operate a complicated system of gear wheels.

The consequence was that most of the hard power jobs were hand jobs.

I. H. C. engines, being so simple, so efficient, so dependable, and furnishing abundant power at so little cost, have

INTERNATIONAL HARVESTER COMPANY OF AMERICA, CHICAGO, U. S. A. (Incorporated)

A Reliable Power as a Farm Help

established a new order of things. Any one who will carefully consider the matter must see that they are money makers and money savers.

They make short, easy, pleasant work of what always has been hard, slow work.

They save the farmer's strength, save him wages of hired men, save time, and enable him to do more work and make more money out of his farm than ever was possible before.

There is no doubt that on the average farm an I. H. C. gasoline engine will more than repay its first cost each year.

The nice adaptation of these engines to all farm duties is one of their most excellent features.

They are built in:—

VERTICAL, 2 and 3-Horse Power.

HORIZONTAL (Stationary and Portable), 4, 6, 8, 10, 12, 15 and 20-Horse Power.

TRACTION, 10, 12, 15 and 20 Horse Power.

AIR COOLED, 1-Horse Power.

Also sawing, spraying and pumping outfits.

There is an I. H. C. engine for every purpose.

It will be to your interest to investigate these dependable, efficient engines. Call on the International local agent and get catalogues and particulars, or write the home office.

ears of good seed corn (of his own raising or from elsewhere), to exhibit ten ears next fall at the county institute, and I recommend that these winners be given as prizes, free trips to the State Institute, December 28 to January 2.

Further information will be sent out about the first of February. Ask co-operation of your county school superintendent.

METHOD TO MOVE TENANT.

EDITOR KANSAS FARMER:—Will you please inform me as to the correct way of getting a tenant to move? I have written personally to him asking him to move April 1. Have I done right, or have I not? Some people claim this is not correct and that said person need not move.

Lincoln County. J. E. KINSEL.

The Kansas Statutes, chapter 55, provide as follows:

"Sec. 5. All tenancies from year to year may be terminated by at least thirty days' notice in writing, given to the tenant prior to the expiration of the year.

"Sec. 6. In case of tenants occupying and cultivating farms, the notice must fix the termination of the tenancy to take place on the first day of March."

A call has been issued for a Kansas cooperative business congress to be held at Salina beginning Thursday, March 9, 1908. The mutual telephone companies and the farmers' elevator companies are mentioned as having important interests to be represented.

If Mr. B. G. Doan will give THE KANSAS FARMER his postoffice address his request will be complied with and he will receive credit for the cash sent. Mr. Doan failed to give his postoffice in his recent letter.

Miscellany

The Sunflower State Good Enough.

EDITOR KANSAS FARMER:—My father moved to Kansas in 1843 and settled on this farm in the spring of 1858. He died in 1902 at the age of 83½ years, having lived with my mother sixty-three years. He was a missionary among the Kaws while they remained here and made frequent visits after their removal. My mother still lives on the old farm with me, her youngest son. She has been unable to walk for twelve years, but at present enjoys

good health for one confined to the chair for so long a time. I have purchased the "old farm" and am going to try to build up and pay for it.

I am trying the cow-pea and rotation plan, of which I see some benefit already. I was born the same year of the "grand old guard," within five rods of where I now sit. I have been to the Atlantic and Pacific and spent two years in Minnesota, but the old Sunflower State is good enough for me.

While I am much interested in farming and all kinds of stock-raising and am pleased with your paper, I must say that I am exceedingly pleased with the character of THE KANSAS FARMER and am delighted to give it to my children to read. The Home Department and Young Folks pages are good and my 10-year-old boy is as delighted to read it as I am.

Long live THE KANSAS FARMER! Lyon County. T. W. STANLEY.

The Useful Telephone on the Farm.

If all the predictions which have been made for the future are realized the farmer of a few years hence will live in surroundings which would hardly be recognized by the horny-handed son of toil who typified the agriculturist of an earlier day. Good roads, daily mail service at his own door, and the penetration of the rural districts by the ubiquitous trolley car, with its quick transportation service to the nearest town for himself and the products of his acres, have already worked sweeping changes in the life of the farmer in the more settled parts of the country. These forces, however, are all to be surpassed in their effects by the results to follow the general adoption of the telephone on the country's farms, according to forecasts of men connected with the telephone industry.

A telephone in every farmhouse and every rural dwelling is the goal which they see approaching within the comparatively near future, and with it an economizing of time and a bringing of the farm into touch with the city and with the neighboring communities which will save hundreds of millions of dollars and permanently raise the sum of the benefits and attractions of rural life. Then, instead of going in person and losing valuable time from the work of the farm, or waiting the slow process of letter, the farmer can transact business over the wires with the same dispatch as his brother in the city office. By the same means he can keep in touch with the fluctuations of prices in his markets and know when to sell and exactly how much he should receive for his crops.

His wife can order from the grocer, the butcher, and the baker every morning and have the goods delivered at her door. When expensive farm machinery breaks down, instead of a long wait, while the factory is communicated with for the new piece needed, a few minutes at the telephone will put the part wanted on the way to the farm. Most potent of all perhaps will be the revolution worked in the means and ease of social communication in the community, and the breaking up of the isolation and monotony of life which has driven so many boys and girls from the farm to the towns.

All this and more has happened where the telephone has made its way and it is fast making its way into every rural section in the country. Five years ago there were 267,000 rural tel-

unstability of many young men who are just starting out on their business career.

The more luxuriant pasturage is always in the field across the way, "I am not getting salary enough" or "my services do not meet with the proper appreciation on the part of the manager, the fruitage of seed sowing is too uncertain, and farm life is too dull" and the result is that he is looking for another "job." And this system is kept up in a vain pursuit of a better thing, seeming to forget that the things in this world "worth while" are (as a rule) hard to get and require honest and persistent effort to conquer.

We remember a little story in one of the school books that we used to have of a conversation between two boys. They met on a "wood pile," one of the boys was chopping wood while the other was sauntering carelessly and aimlessly about dreaming of the things he would like to have in the future. "Don't you hate splitting wood?" said he to his friend. "No I rather like it especially when I get hold of a tough old fellow. I like to conquer it," replied the industrious boy. "Well I don't like to split wood. I would like to sleep for the next ten years and then wake up and find my-



Hon. Geo. B. Ross, Alden, Kans., President Kansas State Swine Breeders' Association; Director and Superintendent of Swine at the Kansas State Fair; Member State Board of Agriculture and Breeder of Shorthorn Cattle and Poland-China Swine.

ephone subscribers in the country. To-day there are nearly a million and before many years it is predicted that there will be more than there are now in city and country combined. There are approximately 7,000,000 farms in the United States and most of them are destined to be reached by the telephone, in the expanding construction of local lines which is proceeding a pace through the efforts of the communities themselves and with the co-operation of the great Bell system which is devoting special attention to the development of farmers' telephones, selling its standard instruments for their equipment and connecting them with its own long-distance lines.

The Young Man and the Possibilities of the Future.

GEORGE E. COLE.

The pessimist may say that the young man of to-day has not the opportunity to rise to the heights of achievement that were afforded the young men of former times.

That the avenues of the world's activities are too crowded; and competition too keen, to admit of any great success in the race for recognition to the young man who has not a "pull" because of some uncle or other relative who has ascended to the management or "stands in" with the management of the corporation or concern with which he seeks employment.

But to the student of general conditions with a keener vision into the future development of things a more hopeful sign appears upon the horizon of destiny. And this is no false optimism when we say that there never was a time in the history of our country when a greater premium was placed upon competency than now.

The world wants young men who can do their work well, and the opportunities along all lines of industry are open to every one who has taken the pains to prepare for it.

One of the most formidable obstacles in the way of success is the unrest and

self a bank clerk or something like that." "I would like to be a bank clerk too and I expect to be one some day, but you see there are some things in this world that you have to work out, you can't sleep them out."

These boys chanced to meet years after, one of them a successful banker and the other a failure.

This little story may seem to have been written for children, but there are many of us grown-up folks who could profit by the consideration of its moral.

That time is the world's chief asset and that its employment to the highest possible good to ourselves and fellows is the supreme duty of man.

To the young man who recognizes that time is golden and possesses the metal to "stick to his bush" is success inevitable whether his lot lay in the busy "mart" of the city or in the sun-kissed fields of the farm.

Berryton Farmers' Institutes.

Two days, January 23 and 24 will be occupied by the Berryton Farmers' Institute, this year. The program follows:

Thursday afternoon session—Invocation, Dr. Taylor; Tuberculosis, Dr. F. L. DeWolf; Government meat inspector; The Hen Helper, Mrs. J. C. Banta; Paint and Painting, H. L. Whiting, Topeka; Good Roads, Mrs. W. A. Johnston, Topeka. Evening Session—The Cooking Box, Mrs. MacQuill; Do Evergreens Increase the Value of Farm Property? W. H. Coultis; Alfalfa, John R. Mulvane, Topeka; The Advantage of a Domestic Science Club to its Members, Mrs. N. J. Tevis; Solo, Miss Lucilla Cooper, Eudora; Quartet, Garlinghouse Bros., Topeka.

Thursday morning session—The Rural Telephone, B. F. Pankey, Topeka; Beef Cattle, Charles Sutton, Lawrence; Swine, L. L. Vrooman, Topeka.

Friday afternoon session—Our Past and Future, L. H. Greenwood, Topeka; Maintaining Fertility, Ex-Senator W. A. Harris, Lawrence; Something We Should Teach Our Children, Mrs. White, Topeka; Some Needed Legislation, (unless hindered by the Legislature), Hon. W. R. Stubbs, Lawrence; The Collier, Dean Kaye, Topeka.

Friday evening session—Bank Reserve Fund, Robert Stone, Topeka; The Blind School at Kansas City, Kansas, by a graduate of the School, Miss Laura Cooper, Eudora; In the Philippines, Clara Hamilton, Topeka; Resolution,

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A GOOD NEW YEAR RESOLUTION—USE THE LOFTIS SYSTEM. It enables you to buy beautiful and valuable articles, either for your own use or as gifts, without the outlay of much money. By giving credit and lowest prices, we make \$5 or \$10 do the work that \$50 does in a cash store. MAKE YOUR NEW YEAR SELECTIONS NOW from our New Year catalog and we will send them for your inspection. If you like them pay one-fifth on delivery; balance in 8 equal monthly amounts. Don't delay. Write today for our New Year Catalog.

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Published monthly in Topeka by some of Kansas' brightest club women at 50 cents per year, may now be had with The Kansas Farmer, each for one full year, for only \$1.25. The Club Member is the only magazine of its kind published in Kansas. It is edited by and for club women. It is bright and interesting. Send one dollar and twenty-five cents and receive this Kansas woman's magazine and The Kansas Farmer, each for a whole year. Address

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FARMERS and ALL OTHERS who use kerosene, gasoline, lubricating oils and greases, WHY do you BUY at RETAIL when you can BUY at WHOLESAL, and SAVE THE MIDDLE MAN'S profit? Do you know it is the middle man who FORCES trust made goods on YOU? Do you know it is the merchant or middle man WHO FORCES POOR OILS ON YOU? Do you know WHY HE DOES IT? BECAUSE HE makes a larger PROFIT from these trust made oils and those who make poor slush goods than HE can make by handling GOOD honest GOODS.

The merchant and the middle man cares only for his profit; the larger his profit, the poorer oils he forces UPON YOU. DIRECT from the REFINER to the CONSUMER should be your motto. To the people of Kansas, see what we can save you. If your kerosene costs you now at your store 10c per gallon, we can save you from 20 per cent to 25 per cent. If it costs you 12c, we can save you 40 per cent to 45 per cent. If it costs you 15c, we can save you 70 per cent to 75 per cent. If it costs you 20c, we can save you 120 per cent to 125 per cent.

DO THESE FIGURES INTEREST YOU? Is not money saved as good as money earned? Do you wonder the merchant or middle man FIGHTS YOUR BETTERING YOUR CONDITION BY BUYING DIRECT FROM THE MANUFACTURER. NOT only do you save from 20 per cent to 125 per cent, but you get BETTER OIL than you ever used before. WE GUARANTEE IT TO GIVE SATISFACTION IN LAMPS OR INCUBATORS OR MONEY REFUNDED. REMEMBER we make axle grease, cup grease, harness oil, harvester oil, castor machine oil, cylinder oil, dynamo oil, red engine oil, cream separator oil, black oil, metal roof paint for bridges, or iron works, poultry disinfectant. WE CAN SAVE YOU FROM 50 per cent TO 200 per cent ON ALL THESE GOODS. You use them all. Do you want to save this profit for yourself, or do you want the middle man to have it. To those living in adjoining States, on a count of high interstate freight rates, WE CAN'T SAVE SO MUCH; but can SAVE SOME and give you the best goods YOU EVER USED.

We can furnish 30 gallon or 60 gallon galvanized iron tanks, with brass faucets, at manufacturer's cost. They will last a lifetime. IF NECESSARY, CLUB TOGETHER, buy direct from Refinery, get good goods, honest goods, and SAVE MIDDLE MAN'S PROFITS. Our Refinery is located on the Santa Fe Railroad. WE MAKE PROMPT SHIPMENT. Send for prices and further information. SAMPLE sent those who want to SAVE THE MIDDLE MAN'S PROFIT. YOURS FOR A SQUARE DEAL. HONEST GOODS AT HONEST PRICES. Address,

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Indorsed by more breeders. Has saved more hogs than any remedy on the market.

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HIGHLAND HERD DUROCS.

Green, Kans., June 15, 1906.

Have used Hoggette and gladly recommend it.—Grant Chapin.

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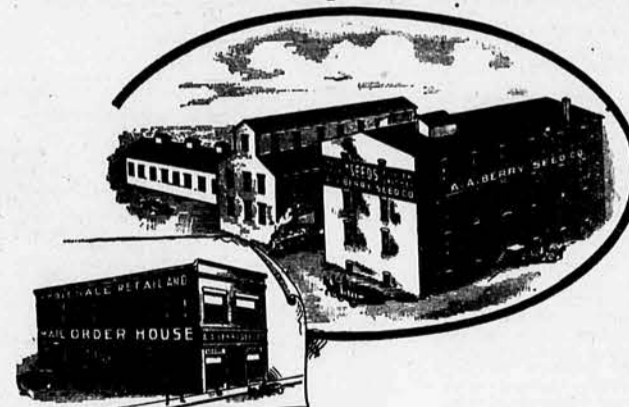
Write me, Henry Field, for seed information and for my interesting, reliable, instructive FREE SEED BOOK and Liberal Free Samples. All my reliable, guaranteed seed shipped subject to your approval. Send name to-day to HENRY FIELD SEED CO., Box 55, Shenandoah, Ia.

A Reputable Seed Company.

Our representative called on the A. A. Berry Seed Company, of Clarinda, Iowa, a few days ago and found them very prosperous and never were they in better position to serve their customers than this season.

The cut of their buildings show they are well prepared to handle all orders promptly and give each customer the best of service.

We found their large corn storage building full of choice seed stock, corn that was matured and of good germination. Their corn sorting equipment and methods of selecting seed corn can not be improved upon and one is well paid in spending a few minutes of their time seeing them at work sorting and grading their seed corn. We would advise our readers to be careful about selecting



their seed corn this season as much of it is of low germination. They also have an immense stock of field, grass seed and garden seed of all kind. They are giving special attention to pure seed this season and are very particular especially with their grass seeds.

Farmers can not be too particular about buying clover, alfalfa, and other grass seeds as it is much cheaper to pay a little more per bushel and receive seed that is free from noxious weeds than to buy seed which has not been re-cleaned. The price on clover will be somewhat higher this season owing to the scarcity, but there will be a large acreage sown as every farmer knows the value of clover for his land.

Their handsome 100-page descriptive catalogue of field, garden, and flower seeds is now ready for mailing and will be sent free to all inquirers. Their advertisements appear in another column.

Mention this paper when writing.

Miss Hooker, Miss Stone, Topeka; Recitations, Miss Clark and others; Instrumental Music, Calk Bros., and Mrs. Delts; Instrumental Music, Hayden Waters.

It is desired that those who attend the institute bring well filled baskets. The officers of the institute; President, John Peck; vice-president, Charles Kline; secretary, Mrs. W. F. Haverkott,

Field Notes

LIVE STOCK REPRESENTATIVES.

J. W. Johnson.....Kansas and Nebraska
L. K. Lewis.....Kansas and Oklahoma
Geo. E. Cole.....Missouri and Iowa

Coming Events.

January 29 and 30—Central Shorthorn Breeders' Association, St. Joseph, Mo.
February 11 and 12—Standard Poland-China Record Association, Institute and Animal Meeting.

Note the change in sale date of J. F. Chandler, Frankfort, Kans. Mr. Chandler will hold his sale on March 5, instead of February 6 as announced.

January 25 is the date of W. L. Vick's Duroc-Jersey bred-sow sale at Junction City, Kans. That is Saturday of this week. Bids may be sent to J. W. Johnson of THE KANSAS FARMER in care of Mr. Vick at Junction City.

One agent of THE KANSAS FARMER sent in a list of ninety names of new subscribers on Monday last and others are doing as well. Our subscription list is growing fast and getting big. Kansas farmers want THE KANSAS FARMER. Have you renewed your subscription?

THE KANSAS FARMER has received another letter containing money to which the writer failed to sign his name. The letter is dated at Wichita, Kans., and the remittance it contained was to cover the writer's subscription, but as no name was signed we are unable to give proper credit.

February 1 is the date of Thompson Bros., great Poland-China sale at Marysville, Kans. There is where you get your big, smooth Polands and this offering is above the average offering this firm has been making, and you know what they have been like in the past. Catalogues are now ready and will be mailed upon request. J. W. Johnson of this paper will be there and bids may be sent to him in Thompson Bros.' care at Marysville.

January 31 is the date of J. J. Ward's great Poland-China event at Bellville, Kans. On that date Mr. Ward will sell a draft of bred sows, among them some of the most fashionably bred in the world. They will be bred to boars of equally as great reputations, not only as show boars but as producers. You have time to secure his catalogue, which will be mailed you by return mail, and arrange to attend this great sale. Bids may be sent to J. W. Johnson, who will be in attendance.

R. F. Norton has just sold his farm adjoining the city on the northeast, known as Orchard Hill stock farm, to Louis Pfile of the Green neighborhood, and early in the spring he and his wife will start out on a health seeking trip to they know not just where. They think some of making an overland trip to Mexico, taking their time and enjoying themselves as best they may on the journey. They have worked hard here and whatever of reward they have is certainly justly theirs. The consideration in the deal was \$5,500. Their fine herd of Durocs will be dispersed at a sale in February.

W. C. Whitney, the Smith County breeder of Duroc-Jerseys located at Agra, Kans., has recently purchased Paul Jumbo, one of Ward Bros.' well-known herd boars and a show hog of reputation. At the Nebraska State Fair in 1906 he won fourth place and the first-prize winner at both the Republic County and Cloud County fairs the same season. He proved himself a splendid breeder for Ward Bros., and in fact he couldn't have held his job in their splendid herd if he had not been a producer of merit. Paul Jumbo is going to one of the splendid herds on the Rock Island and will be heard from again. The consideration was \$250. The date of Mr. Whitney's sale is February 19, at Agra, Kans., and a number of the sows that go in his sale will be bred to Paul Jumbo and sired by Lone Jack, the other great herd boar owned by Mr. Whitney.

J. H. Becker of Newton, Kans., is the owner of a nice bunch of Poland-Chinas that ought to prove attractive to the breeders in Kansas. His herd is headed by Emperor Chief 37840 by Empire Chief 30379 and out of Perfect Jewel 75240. Empire Chief headed the champion herd at the Iowa and Nebraska State Fairs where he was also a winner in class. He is a brother to 110 State fair winners all of whom were sired by Chief Tecumseh 3d. Another herd boar is Dandy Rex 42706 by Prince Proud by Proud Perfection 23799. His dam was Mabelle by U. S. Perfection Jr. 29547. Another one is Trouble Maker 2d. by Trouble Maker by Mischief Maker. Trouble Maker was bred by C. E. Hedges of Harrisonville, Mo., and is a full brother to Meddler. His dam was Lady One Price 2d. out of Chief Perfection Jr. This boar is a very promising young hog, with long body, heavy bone, fancy head and ears, and fine black coat. He carries himself proudly. Mr. Becker says that

FREE BOOK ABOUT "CANCER."

CANCEROL has proved its merits in the treatment of cancer. It is not in an experimental stage. Records of undisputed cures of cancer in nearly every part of the body are contained in Dr. Leach's new 100-page book. This book also tells the cause of cancer and instructs in the care of the patient; tell what to do in case of bleeding, pain, odor, etc. A valuable guide in the treatment of any case. A copy of this valuable book free to those interested. Address, Dr. L. T. LEACH, Box 125, Indianapolis, Indiana.

he has some very fine gilts that were sired by Dandy Rex and Empire Chief out of such sows as U. S. Model by Perfect Thickset and U. S. I Am. Block Bess by Bessie U. S.; Perfect Model by U. S. Pride, Minnie's Tecumseh and others. If you want some good ones go and see these, or write and you will be treated fairly.

On February 4, at Waterville, Kans., B. N. Welch, but known among his friends familiarly as "Bat" Welch, will sell a draft of Duroc-Jersey bred sows that are the profitable kind and have been properly grown and fed and are well bred and all-around desirable individuals. The offering numbers thirty-five head and consists of twenty-seven spring gilts, all sired by the \$500 Crimson Chief, the splendid boar which Mr. Welch sold this last fall for that amount. There will be eight tried sows and fall yearlings and the fall yearlings are also by this noted sire. The tried sows are all guaranteed to be good breeders and are really among the best things in Mr. Welch's herd and are going in because of their attractiveness. Among them are daughters of Chief's Wonder, who was a grandson of Ohio Chief on the sire's side and a grandson of old Higgins' Model on the dam's side. Everything is safe in service to Junior Ben, he by Junior Jim and a few to a splendid son of Red Raven, and a few to a good son of Field Marshall Jr. Mr. Welch is a young man who has been engaged in the Duroc-Jersey business for several years but this is his first sale. He is considered one of the very best hogmen in that part of the country, and there are some good hogmen in the vicinity of Waterville, Kans. His herd is located on his farm, which is about two miles west of town and where the sale will be held. J. W. Johnson, representing THE KANSAS FARMER, will be in attendance and bids may be sent to him in care of Mr. Welch. Catalogues are now ready and a postal card brings one.

In this issue of THE KANSAS FARMER will be found the advertisement of the Duroc-Jersey bred-sow sale which J. C. Logan of Onaga, Kans., will hold at Havensville, February 7. The herd is located at Havensville on Mr. Logan's farm about four miles from Onaga and about the same distance from Havensville where the sale is to be held because of the better facilities for selling. This is Mr. Logan's first sale but it is one of the very best offerings that will go through a sale ring this winter. Forty spring gilts and tried sows will be sold and for better individuality or richer breeding the prospective buyer of a few well-bred sows this winter need look no farther than Mr. Logan's offering February 7. The spring gilts are well grown out, smooth as a ribbon, and were sired by such noted sires as old Kant Be Beat, Crimson Wonder's Brother, Hunt's Improver, Wonder Mac, Crimson Model and King of Onaga. Among the attractions that we desire to call especial attention to are the "seven sisters" sired by old Crimson Wonder's Brother and out of a dam bought in Kirkpatrick & Wilson's sale at Lincoln, Nebr., last winter and sired by Jumbo's Chief he by Jumbo Red. The fine sow Crimson Girl by Crimson Wonder's Brother also goes in the sale as an attraction and is out of a daughter of old Miss Bob, the \$500 sow in the Kirkpatrick & Wilson herd at Lincoln. It is one of the very best offerings of Duroc-Jersey bred sows to be made this winter and is going to be in the best possible condition. Get his catalogue at once which gives full particulars as to how to get there and all other information about the sale that you will want to know. J. W. Johnson of THE KANSAS FARMER will be in attendance and will be pleased to handle any bids entrusted to his care. They should be sent in Mr. Logan's care to Havensville, Kans.

In this issue of THE KANSAS FARMER will be found the advertisement of W. T. Hammond, of Portis, Kans., one of the best-known breeders of the medium type of Poland-Chinas in the country. On February 8 he will hold a public sale of bred sows at the Agricultural College at Manhattan, Kans., and will sell fifty head of bred sows, twenty of which are tried sows, fourteen gilts, and sixteen spring gilts. The tried sows are some of the sows that have made the Hammond Polands famous in both Kansas and Nebraska.

and we might say in Missouri, because Mr. Hammond has won at the American Royal frequently and at the Nebraska State Fair and the Kansas State Fair, and in fact everywhere he has shown and it was the "blue" that he got most of the time. Every tried sow that will be offered in this sale will be offered with a positive guarantee that she is a breeder and the twenty head are in their prime and will prove money-makers for the purchasers. The fourteen fall gilts are the big, roomy kind and perfect types of brood sows. The sixteen spring gilts are the actual tops of his big crop of spring gilts the past season. Everything is bred for early farrow to S. P.'s Satir, Guy Hadley, Prince Perfection, and some to a splendid son of Guy's Hadley.

We have visited this herd recently and know of the quality of the offering and those who are looking for the medium-size type in the Poland-China will do well to keep this sale in view. Mr. Hammond has been making public sales for the past several years and we know of the splendid satisfaction his bred sows have given in the past, and the Poland-China breeder or farmer that is looking for a few bred sows should arrange to attend this sale. The sale will be held in the show pavilion at the college at Manhattan and those who attend from a distance should register at the Baltimore Hotel, where free accommodations will be furnished breeders. Free hacks will convey those who desire to attend the sale to the college. Mr. Hammond's catalogues are ready and you can have one for the asking. Address him at Portis, Kans., and at Manhattan, Kans., after the first of the month. Bids intended for J. W. Johnson of this paper should be sent to him at Manhattan, Kans., in care of Professor Kinzer.

Ward Bros., Republic, Kans., will hold their regular annual bred-sow sale at their farm, four miles south of Republic and six miles north of Scandia on February 10. We doubt if there is another firm of Duroc breeders in Kansas, or in the West for that matter, that is any better or more favorably known than is Ward Bros., of Republic. Their herd is up to the standard at all times and is kept in that condition by adding to it good, well-bred individuals from the best herds in the country every season. They have been ready at all times to pay almost any price in reason that would strengthen their herd at Republic.

HORSE OWNERS! USE COMBAULT'S CAUSTIC BALSAM.



A safe, speedy and positive cure. The safest, best BLISTER ever used. Removes all blemishes from horses. Impossible to produce scar or blotch. Send for circular. Special advice free.

THE LAWRENCE-WILLIAMS CO., Cleveland, Ohio.

But we want to tell you about the excellence of the offering which they are making at the farm February 10. The offering numbers forty head and is the very strongest they have ever made. Over twenty head will be tried sows. Among them will be such noted sows as Model Girl 2nd by old Higgins Model, Countess 2d by Improved 2d, Lady Crimson by Mendenhall's Challenger, and all the balance equally as well bred and every one guaranteed, and you know what that means if you buy of Wards, to be breeders and many of them, their very best tried sows. The spring gilts are very growthy and were sired by such boars as Model H, the grand old champion and sire of so much good stuff, Paul Jumbo, the great sire that they sold this fall to W. C. Whitney of Agra, Kans., for \$250, Wonder Mac, and one or two others. It is going to be one of the splendid Duroc-Jersey bred-sow offerings of the season and is deserving of liberal patronage for several reasons. Everything is safe to Model H, Paul Jumbo, Wonder Mac, Missouri Advance by Advance Banker. Everything is bred for March farrow and early April farrow. They have been very fortunate in being able to secure the services of Col. Luther, the great Iowa auctioneer who is coming to Kansas to conduct their sale. Write them to-day for a catalogue and look up their ad on another page and arrange to attend their sale.

Morgan's Hereford Sale.

To E. R. Morgan, of Blue Rapids, Kans., belongs the credit of having put the best-bred and best-conditioned lot of Hereford cattle in the sale ring that has been made by any individual breeder in late years. On January 8, at Capital Bluff Farm, Mr. Morgan made a sale which included the five bulls whose pictures are shown herewith. The local crowd in attendance was fairly good and the cattle sold well until



Irma's Keep On. Lord Primrose. Soldier Creek Columbus. March Onward 8th. Lord Primrose. March Onward 3d.

Some of the Good Ones in the E. R. Morgan Sale.

lic, and of all the breeders that have bought of them at their annual bred-sow sales we have yet to learn of an instance when the purchaser was not satisfied and made to feel that his business was appreciated. They believe in returning favors and if you have ever been a customer of theirs and the time comes when you are making a public sale you can depend on it the Wards will be on hand to do all they can for the success of your sale.

the buyers present had what they needed. Soldier Creek Columbus topped the sale at \$250. He was taken by F. Miller, St. Marys, Kans. Dorothy, a 2-year-old show heifer, topped the female sale at \$160 and found her new home with F. W. Tilley, of Irving, Kans. Below is listed a sale of animals bringing \$75 or more each:

FEMALES.
Primrose, S. W. Tilley, Irving.....\$125
Bright Dawn, Jas. H. Glenn, Man-



Lollita will be sold in the sale of R. M. Maupin, of Pattonsburg, Mo.

hattan.....	125
Armour Symmetry, A. Hukriede, Cleburne.....	100
Laburnum, Ed. Teburer, Cleburne.....	75
Lively, J. H. Glenn.....	75
Gay Duchess, Henry Kump, Cleburne.....	110
Emily, Henry Kump.....	100
Miss Donald, W. W. Wheeler, Harlan, Iowa.....	150
Dorothy, S. W. Tilley.....	160
Pearl Dauntless, L. A. Oberhelman, Winkler.....	80
Princess, J. O. Lobb, Clay Center, Neb.....	80
Antonia 2d.....	75
Nona, Pfitte Bros., Palmer, Kans.....	80
BULLS.	
Soldier Creek Columbus 4th, F. Miller, St. Marys.....	\$250
Lord Primrose, J. C. Nelson, Greenleaf.....	120
Irma's Keep On, J. H. Glenn.....	185
March Onward 8th, "Bill" Henn.....	90
March Onward 3d, J. O. Lobb.....	85
March Onward 6th, John Pugh, Cleburne.....	80
March Onward 1st, "Bill" Henn.....	75
Earl of Willowbrook 3d, W. W. Wheeler.....	75
Timothy, Henn.....	90
March Onward 11th, Henn.....	80
March Onward 5th, Henn.....	140
Ten Strike, Tom Murphy, Frankfort.....	85
Majestic 7th, Henn.....	85

Hedges' Dispersion Sale of Poland-Chinas.

On Thursday of last week Chas. E. Hedges, of Garden City, Mo., dispersed his entire herd of Poland-Chinas at his farm eight miles southeast of Harrisonville, Mo. The weather was somewhat cool but a goodly number of breeders and farmers from Missouri and Kansas were in attendance to participate in the auction. A comfortable place had been prepared by Mr. Hedges in which to hold the sale and the offering was in excellent condition. It was a good, snappy auction from start to finish, and while the prices realized may not have been quite so high as was expected it was a good, profitable sale.

We are sorry to note that this was a dispersion sale and that Mr. Hedges is retiring from the business with which he has been associated so long, but he has sold his farm and his duties call him to another field and we wish to extend to him our heartfelt wishes that success may crown his efforts in whatever duty he may assume.

The sale was conducted by Colonels Sparks, Burger, Snyder, Johnson, and Page, and the average on the entire offering was about \$32. Following is a list of some of the sales:

1. G. C. Longabaugh, Rich Hill, Mo.....	\$66.00
2. G. M. Hoadly, Sedalia, Mo.....	92.50
4. A. Voght, Olathe, Kans.....	52.00
5. Geo. Miller, Bluff City, Kans.....	45.00
6. E. E. Wellman, Norman, Ia.....	44.00
7. J. S. Belcher, Greenwood, Mo.....	37.00
8. G. C. Longabaugh.....	32.00
9. Lentz Bros., Atherton, Mo.....	27.50
18. C. G. Mills, Pleasant Hill, Mo.....	55.00
21. Misett Bros., Joplin, Mo.....	50.00
23. Geo. Ross, Alden, Kans.....	33.00
25. E. F. Garrett, Harrisonville, Mo.....	37.00
26. A. Voght.....	35.00
27. Lentz Bros.....	30.00
31. V. Kurzwell, Grandview, Mo.....	23.00
38. Mattes Bros.....	57.50
39. F. D. Fulkerson, Brimmon, Mo.....	30.00
41. V. Kurzwell.....	24.00
43. W. H. Christman, Greenridge, Mo.....	34.00
47. W. H. Landers, Kingsville, Mo.....	36.00
62. A. W. Holland, New London, Iowa.....	76.00
63. A. W. Holland.....	51.00

Chas. E. Tennant's Polands.

Charles E. Tennant, of New Hampton, Mo., will sell Poland-China bred sows at that place on February 5.

Mr. Tennant (or Charlie as he is familiarly called) has been breeding Poland-Chinas for some fifteen years and needs no introduction to the Poland-China men of this country. His father was a breeder before him of considerable extent and the early training that

Charlie received with him has eminently fitted him for the high place he now occupies in the breeding world.

His herd ranks with the very best in the business and nobody has him "busted" when it comes to developing and growing pigs. He knows a good hog when he sees it and possesses that faculty of getting the best possible results out of it. He is in the business

ing them at Lincoln, rural route 5. W. A. Kirkpatrick owned old Crimson Wonder and now owns Crimson Wonder's brother and the herd is rich throughout with the blood of this always popular family of Durocs.

A. Wilson, of Bethany (a suburb of Lincoln), is also one of the best-known and most popular breeders of Durocs in Nebraska. He sprang into promi-



We take pleasure in presenting our readers with the likeness of Mr. Robt. E. Maupin, the Poland-China breeder of Pattonsburg, Mo., who holds his next public sale of bred sows at his home city on February 6, at which time he will offer as good a lot of animals as will go through any sale ring this winter. These Polands are bred right and individually they are right.

Mr. Maupin is a business man of the highest order, and his herd was established along the strictest business lines, with a view to permanency and profit. No animal is allowed a place on this farm that does not come up to the standard in point of breeding and individual character.

He has held many sales in the past and all of them have been successes and judging from the draft he is fitting for the coming sale we feel warranted in predicting that it will outstrip any of his previous efforts in this direction. One of the noticeable features of the sales he has held heretofore (that we have attended) is the strict loyalty of his neighbors and the implicit confidence they have in him as a man of honor and integrity, and this appeals to us as an eloquent tribute to the high character of a worthy gentleman.

Watch these columns for a review of the offering which will appear in another issue of THE KANSAS FARMER.

because there is money in it, and he personally stands back of every hog that is shipped from his farm.

The brood sows on his farm are of a high quality and of the most fashionable breeding, and the offering of the coming sale will be strictly high class throughout.

We will have more to say for them in a later issue of this paper.

Two Nebraska Breeders.

One of the very best offerings of Duroc-Jersey bred sows to be made in Nebraska this winter, and there are many of them, is the offering of Kirkpatrick & Wilson, at Lincoln, February 12. The sale will be held at the Kirkpatrick farm, two miles north of Lincoln, and is easily reached by street car. Catalogues will be ready about February 1, and you can have them book you for one any time by address-

nence when he bought the great Morrison's Peach, which produced for him the great Lincoln Wonder, which is now owned by the firm of Kirkpatrick & Wilson. Morrison's Peach was sired by old Crimson Wonder and was out of the great Miss Bob, for which Mr. Kirkpatrick paid last winter \$500. Lincoln Wonder, the great yearling you have heard so much about is out of Morrison's Peach and was sired by Old Ohio Chief. Lincoln Wonder is said to be one of the very best yearling boars ever sired by Old Ohio Chief. He has already proven himself a great sire and some of the good things in their coming bred-sow sale will be by him and a major portion of it will be bred to him. These breeders of Durocs need no introduction to many Kansas breeders who have done business with them in the past, and if there is a firm of Duroc breeders in Nebraska that is popular with the Du-

Robber Hens

Over-fat and lazy fowls—always ready to eat, never ready to lay—take the profits out of your hen business. Put such by themselves, reduce the feed a few days, and then begin the use of Dr. Hess Poultry Pan-a-ce-a once a day. This course will soon turn robber hens into profit-paying fowls.

DR. HESS Poultry PAN-A-CE-A

is the prescription of Dr. Hess (M.D., D.V.S.) himself an expert poultryman, and was formulated with the express purpose of providing something to strengthen the fowls' digestion and compel the largest possible assimilation of nutriment. That it does this is the testimony of poultry men in all the United States and Canada. It holds bitter tonics, iron for the blood and cleansing nitrates to purify the system. Makes laying a habit and helps young chicks grow fast. It is also a great preventive of disease. Costs but a penny a day for 50 fowls.

Sold on a written guarantee.

1½ lbs. 25c.	} Except in Canada and extreme West and South
5 lbs. 60c.	
12 lbs. \$1.25	
25 lb. pack \$2.50	

Send 2c for Dr. Hess 48-page Poultry Book, free.

DR. HESS & CLARK,
Ashland, Ohio.

Instant Louse Killer Kills Lice.

roc breeders of Kansas it is Kirkpatrick & Wilson, of Lincoln, Neb. Their sale is February 12 and is the day following the two-days sales of Pearl H. Pagett and L. D. Pagett & Segrist at Beloit, Kans., February 10 and 11. Good connection can be made for Lincoln the evening of the 11th from Beloit and returning, those who attend can leave Lincoln at seven in the evening on the Rock Island and make good connections at Belleville for almost any direction. Watch for their advertisement and arrange to attend. Ask them to book you for a catalogue at once.

Fulkerson's Coming Poland-China Sale.

On February 7, Fred D. Fulkerson, of Brimmon, Mo., will hold his annual sale of Poland-China bred sows sired by many of the very best boars that are now doing service in the Poland-China ranks.

Mr. Fulkerson has visited some of the best herds in the country and purchased sows bred to great boars and it is the produce of these animals that make up the principal part of the offering.

If you are partial to good Poland-Chinas it will be worth your while to get in communication with him with reference to this offering.

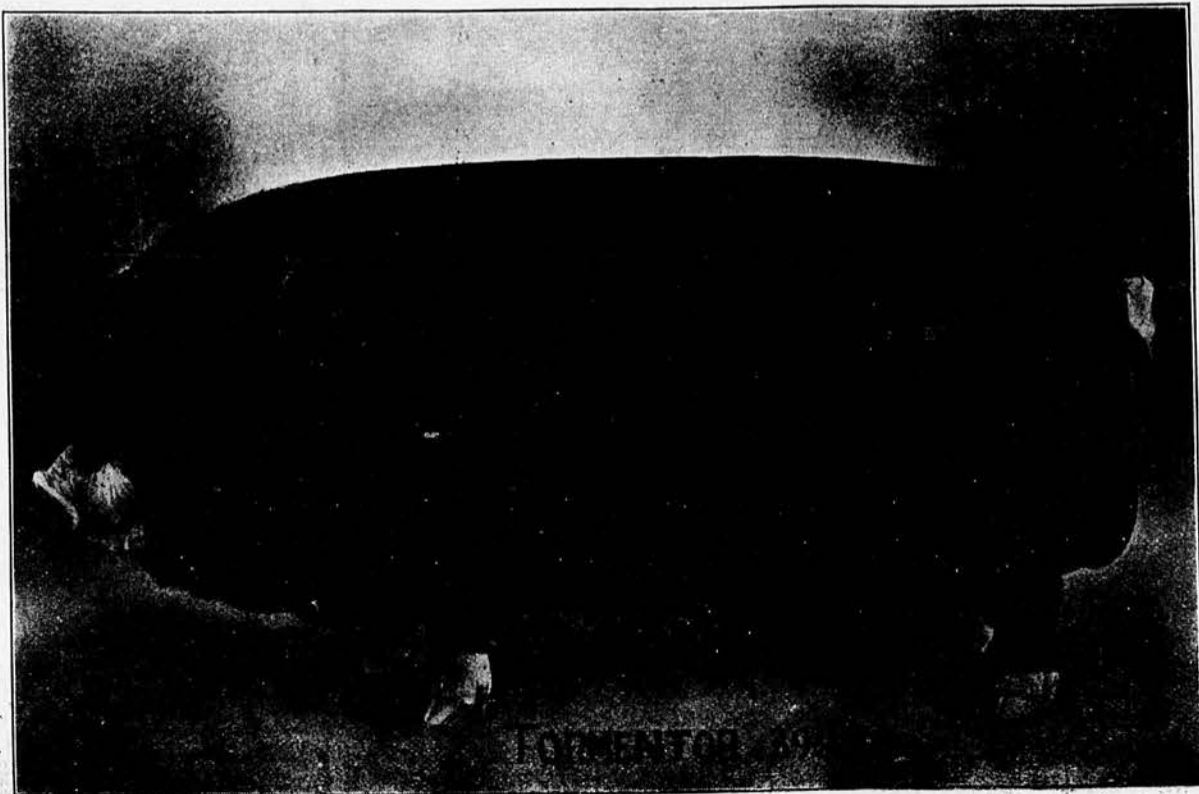
More will be said of this offering in another issue of THE KANSAS FARMER.

Duroc-Jersey Circuit Sales.

Three of the great Duroc-Jersey bred-sow sales of the season are to be held next Monday, January 27, with the J. E. Joines sale at Clyde, Kans. On that date Mr. Joines will sell a draft of only thirty from his well-known and popular herd, but they will make up in quality what they lack in numbers. It is probably the most select offering that Mr. Joines has ever made. Lilly Mac, one of the greatest brood sows in the West will be sold. She is a litter sister to Parker's Echo and a show sow. If you have not received his catalogue drop him a card for one. Be there or have your bids there is competent hands.

The day following this sale, which is Tuesday, January 28, Grant Chapin, of Green, Kans., sells at Manhattan. This sale is one of attraction all the way through. The twenty-five Model Chief Again Fall yearlings bred to one or the other of the great boars in this herd are everyone's attractions and you will realize it when you have seen them. But the tried sows are also real prizes and when you have looked the catalogue over carefully you will see that we are correct. Remember that these tried sows are sold with a positive guarantee that they are breeders and as to their worth you will see positive proof of that sale day as for instance when six tried sows are sold all out of Callahan's Choice, who will herself be sold in the sale.

The day following Mr. Chapin's sale will occur the regular annual sale of J. O. Hunt at Marysville, Kans., or rather at his farm which will be more easily reached from Blue Rapids, Kans., on the above date by those who go from Manhattan. Mr. Hunt will drive into the sale ring as select an offering of Duroc-Jersey bred sows as will go through a sale ring in Kansas this season. Those who have attended his bred-sow sales in the past know of the high quality to be found in Mr. Hunt's herd and his bred-sow offerings. His offering on this occasion numbers forty



Tormentor 892755 is one of the herd boars belonging to Chas. E. Tennant, of New Hampton, Mo., who will sell in the North Missouri Sale Circuit as per advertisement.

head and will consist of twenty-five tried sows and fall yearlings. The balance are big smooth early March gilts. They are the same kind that has made this herd famous everywhere and for further particulars about the breeding consult his catalogue and if you have not received it as yet drop him a card for one.

Remember that these are three of the important sales of the season and that almost 200 choice bred sows will be sold. Clyde can be reached easily Sunday night and Monday morning from almost any direction. Breeders should register at the Exchange hotel in Clyde as guests of Mr. Joines, and at Manhattan at the Gillett as Mr. Chapin's guests, and at Blue Rapids at the Waldo as guests of Mr. Hunt and those who go to Marysville at the Pacific House. J. W. Johnson, fieldman

well grown out, excellent in symmetry, fineness of finish, and in the best of condition. Better keep your eye on this date and arrange to be on hand when this sale comes off.

A more complete reading will be given this offering in another issue of this paper and in the meantime place your application for one of his catalogues that will tell you all about it.

The Ridgeview Berkshires.

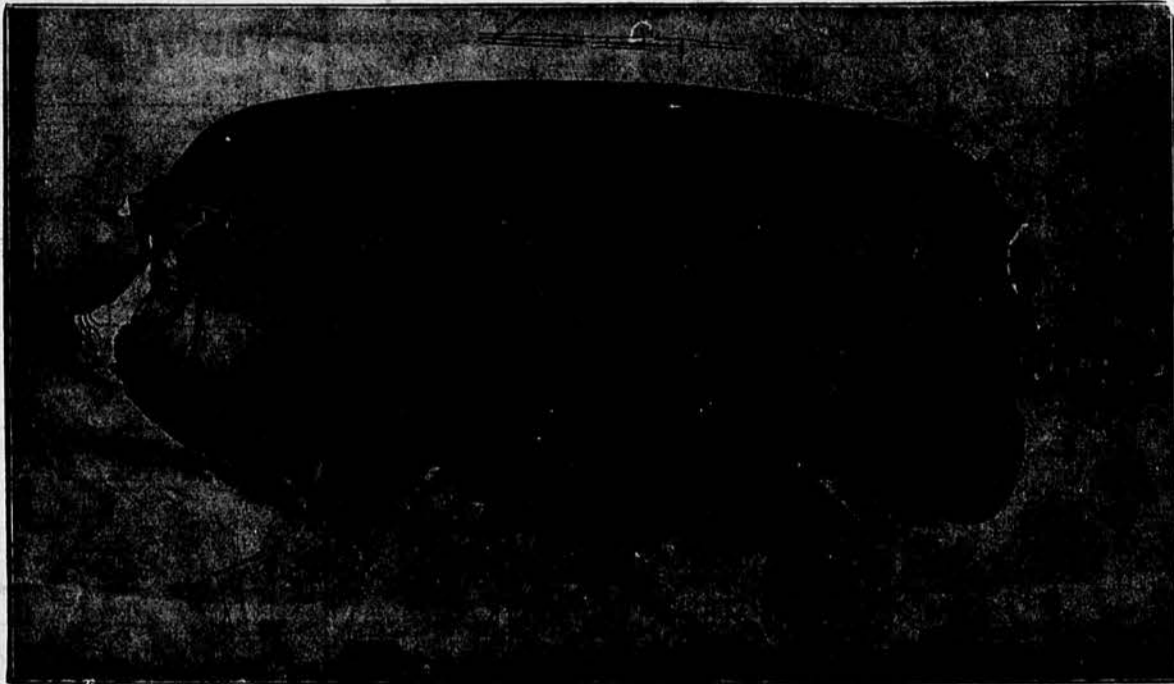
Among the oldest and best-known breeders of Berkshire swine in Kansas are the Manwarring Bros., of Lawrence. They have a plentiful supply of Black Robinhood blood and other famous strains and their stock is always in demand. In a recent letter they report the sale of a young boar to W. C. Jones, Delphos, Kans., and one boar and eight

there are but few sales where there are more mail bids in evidence than here.

Mr. Faulkner is a breeder of the strictest integrity and his honest and square dealing has won for him many friends who are always in the market for his stuff, but his success is not due alone to the fact that he endeavors to give his customers a square deal. He is breeding a class of hogs that go out and make good and this is the kind that is in public favor.

We are presenting in this issue an illustration of Budweiser, the King of Highview, that stands at the head of this famous herd.

Now, if you want some of the big-boned, spotted kind you had better get busy and get hold of one of the catalogues that will tell you all about them. They will be cheerfully mailed



Owned by Dr. Thomas, of St. Joseph, Mo., who will hold a bred-sow sale February 4.

for THE KANSAS FARMER is well acquainted with the different lines of breeding to be found in each of these herds and will appreciate your bids and handle them in a careful and conservative manner. Such letters should be addressed to Mr. Johnson in care of the breeder for whom the bids were intended. Remember, January 27, 28, and 29.

Dr. Thomas's Bred-Sow Sale.

February 4 is the date when Dr. Thomas, the Poland-China breeder of Top Notcher fame, will sell Poland-China bred sows, at St. Joseph, Mo. The name of Dr. Thomas is familiar to the Poland-China breeders of this and adjoining States and the announcement of his sale will no doubt elicit an interest in Poland-China circles.

Dr. Thomas has made a creditable record in the show ring for the last few years with the produce of his herd, and especially with the get of his herd boar, Top Notcher. It will be remembered that Top Notcher was the first prize aged boar at Iowa State Fair in 1906. This is one of the grand boars of the breed and is also a sire of prize-winners which is the best evidence of a great breeding boar.

There will be sows in this sale that are good enough to go in any herd of Poland-Chinas of the most scrutinizing selection and take their place in the front rank and make good.

They will come into the sale ring

gilt to Eli Roberts, Quinlan, Okla., in the last week. They say their hogs are in splendid health and they are anticipating a large crop of pigs for the spring sale. To those who would like to have some of the best Black Robinhood strain, they announce that they have four good June boars for sale that were sired by Forest King. The breeder and one of the owners both agree that Forest King, the present herd boar, is a better boar than Masterpiece and has more prizes won in the show ring to his credit. Write Manwarring Bros., Route 1, Lawrence, Kans., for information about these Berkshire swine.

Last Call for Faulkner's Sale.

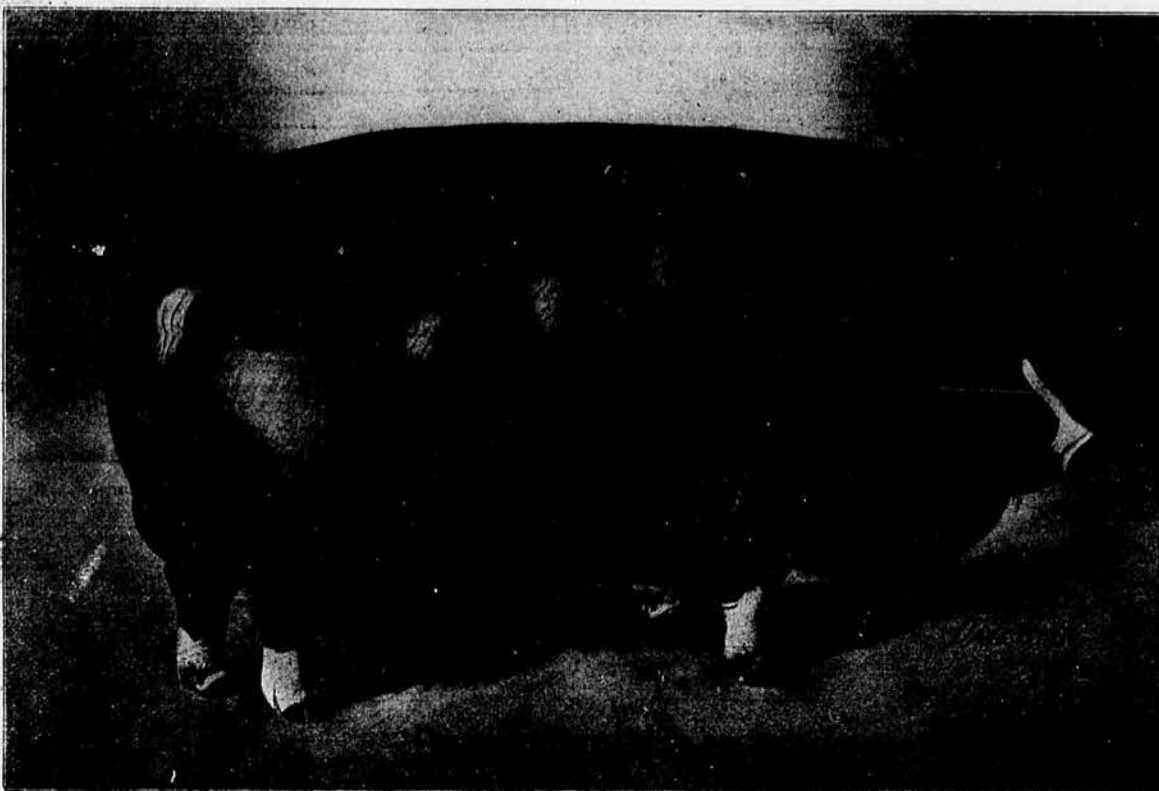
We want to again call the attention of our readers to the Budweiser-Brandwine bred-sow sale that will take place at Jamesport, Mo., January 30, the home of the big-boned, spotted kind, at which time H. L. Faulkner will offer at public auction forty head of this character of swine, sired by or bred to Budweiser and Brandwine. It is almost useless to go into an extended reading with reference to this good herd as there is scarcely a breeder or farmer in Missouri and Kansas who does not already know about them. They have been before the public for some time and their representatives are to be found on many of the best-regulated breeding farms in the two States. It has been our opportunity to attend several public sales from this farm and

you for the asking and it will pay you to just buy a ticket for Jamesport, Mo., and be on hand January 30.

Berry's Berkshires.

Admirers of the Berkshire hog will be interested in the announcement made by G. W. Berry, of Lawrence, Kans., who has made the breeding of Berkshires a study, and has earned a National reputation as a breeder of high-class swine. From the beginning of his experience G. W. Berry bred for the type of Berkshires that has lately proved the most popular. He insisted that the requirements of the up-to-date hog called for greater arch of back, stronger pasterns, and more finish in head and ears than was noticeable in the old English type. "Kansas Berkshires" of which an enthusiastic breeder said "Berry is the father," are the utility kind of hogs whose distinguishing characteristics are excellence of bone, substance, and easy fleshing qualities of the profitable hog on the farm and in the feed lot. He originated the popular Berkshire families, the Silver Tips, the Royal Emperors, and the Black Robinhoods.

For the past fifteen years G. W. Berry has bred his herd boars, introducing new blood occasionally through a sow of known ancestry. Of the sires used Black Robinhood ranks as one of the greatest sires in Berkshire history. Imperial Duke, the sire of Black Robinhoods. (Continued on page 118.)



Budweiser is chief herd boar in the herd of H. L. Faulkner, of Highview Farm, Jamesport, Mo., whose bred-sow sale will be held on January 30, 1908.

A BIG GARDEN

For 12 cents, Postpaid.

America's largest growers of flower, vegetable and farm seeds. In order to add 250,000 new customers to our list we offer for 12c, postpaid:

- | | |
|---|---------------|
| 1 pk. "Quick Quick" Carrot | 10c |
| 1 "Earliest Ripe Cabbage | 10c |
| 1 "Earliest Emerald Cucumber | 10c |
| 1 "La Crosse Market Lettuce | 10c |
| 1 "Early Dinner Onion | 10c |
| 1 "Strawberry Muskmelon | 10c |
| 1 "18 Day Radish | 10c |
| 1000 kernels gloriously beautiful flower seed | 15c |
| Total | \$1.00 |

Above is sufficient seed to grow 35 bus. of rarest vegetables and thousands of brilliant flowers, and all is mailed to you postpaid for 12c; or if you send 10c, we will add a package of Berliner Lavender Cautiflowers. Big catalog FREE. Most original seed and plant book published. Gladly mailed free to intending buyers.

John A. Salzer Seed Co.
La Crosse, Wis.

ALFALFA and Clover Seed, guaranteed pure. Our seed will pass all National and State tests. Sold subject to your test and approval. Samples free.
Henry Field Seed Co., Box 55, Shenandoah, Ia.

Choice Home Grown Seed Corn

Legal Tender Yellow Imp. Silver Mine White, \$1.25 per bushel shelled, soaked, f. o. b. cars Centralia, Mo. on oats 75 cents. O. Warrenburg, Route 4, Neosho, Kans.

TREES of all kinds AT WHOLESALE PRICE. Save agents commission of 40 per cent by ordering direct from us. Premium with each order free of from 1 to 4 trees: roses, shrubs or other stock. Stock Guaranteed first class. Certificate of inspection furnished. Don't delay, send for price list now. Address

WICHITA NURSERY, Wichita, Kans

New Seedling Gooseberry

Do you know about the **CARRIE**?

If not, why not? They are the Newest and Best, Mildew Proof, Amazingly Productive, Large Size, Practically Thornless. Write TODAY for full descriptive circular.

ELLIOT & REDPATH
1412 W. 47th St. Minneapolis, Minn.

SEED CORN

Pure-bred: Hildreth Yellow! Dent, the kind that wins premiums for yield and quality. Ask for prices and get Hauey's "How to Grow 100 Bushels Per Acre." Address

THE DEMING RANCH, Oswego, Kans.

CATALOGUE FREE SEEDS

Garden, Field and Flower Seeds of All Kinds. Merchants and planters write for special wholesale price list. THE HARNEDEN SEED CO. Kansas City, Mo.

The Sower Has No Second Chance

Good sense says make the most of the first.

FERRY'S SEEDS

have made and kept Ferry's Seed Business the largest in the world—merit tells. Ferry's Seed Annual for 1908 tells the whole Seed Story—sent FREE for the asking. Don't sow seeds till you get it. D. M. FERRY & CO., DETROIT, MICH.

BIG POULTRY PAPER FREE

Send us 10 cents (silver), to cover postage, and the names of five poultry raisers, and we will send you THE POULTRY GAZETTE an entire year free of charge. Stops when the time is out. Regular price 50 cents. Send today.

Searle Pub. Co., Clay Center, Neb.

The only fence perpetually tight. The crimp to the wire does it. Can't sag, bulge or loosen from the tie wires. Made of high carbon, crimped, spring steel wire. Never needs repairs. **SHIMER FARM FENCE** requires only half the usual number of posts. Agents for Warranted in every community to take orders for Shimer Fence. Permanent employment. Liberal profits. Write for proposition. Address nearest factory. Coffeyville-Shimer Wire Fence & Mfg. Co. Box 285, Coffeyville, Kan., or Spring Steel Fence & Wire Co., Box 285, Anderson, Ind.

THE RANGER REVOLVING BARBED WIRE THE ONLY ROTARY BARB MADE. DURABLE. STRETCHES. MOST EFFICIENT. **WRITE FOR CATALOG** WE HAVE FREE CIRCULARS FREE. KENT MFG. CO. KANSAS CITY, MO.

Proceedings of the Kansas State Horticultural Society

This number of THE KANSAS FARMER is given largely to the proceedings of the annual meeting of the Kansas State Horticultural Society. The papers and discussions were of a high order and can not fail to benefit all who read them. Lack of space makes it necessary to abridge several papers and to postpone others for future publication. It is hoped that the coming season will be kinder than the last in its rewards to the fruit-grower.

Vice-President's Report.

EDWIN SNYDER.

The horticultural history of 1907 is easily written. Never before "within the memory of the oldest inhabitant" has any year shown a total failure of all tree fruit.

The experience of the year emphasizes the fact of the great financial risk of special farming in this climate. It won't do to carry all your eggs in one basket. Diversified production is the only safe course for tillers of the soil. It is all right to have some one principal line upon which to bestow intelligent, persistent effort, but reserve lines materially from the main issue should be had in reserve to fall back upon if the main issue fails.

A SAFE COMBINATION.

I do not assume to give others advice as to what line or lines to take up with fruit-growing, but for my part I have found hogs, with alfalfa for pasture and hay, and mule-raising a good combination.

It fruit fails and hogs die of cholera, I still have the mules to fall back upon and they have never failed me yet. I have pastured my orchards with them this year; indeed, they are still running in the orchard much to their advantage and no detriment to the trees which they will not molest if they have plenty of range.

My orchards are mostly seeded to clover with some timothy. When I have a fruit crop of course I can not pasture with mules but I mow, allowing the grass and weeds to lay as they fall. I think it better than to undertake to cultivate, and much less expense of labor.

SHEEP.

I read that orchardists in the hilly regions of Ohio practise pasturing their bearing orchards with sheep to an advantage, as they consume the wormy and defective fruit as it falls as well as the inferior fruit which is usually produced upon the lower limbs. I think I will try this when I have another crop. I think they would be especially useful in seasons like 1906, when I had thousands of bushels to go waste and rot under the trees. However, I do not look for these conditions to occur again with me as a large canning factory is being built as Oskaloosa which we hope will be able to take care of the surplus fruit of the near by country.

MARKETING.

One-half of the commercial orchardists business is to economically produce crops of fruit, the other, and often quite as important a part, is to dispose of the same to the best advantage.

It requires skill and business ability of no mean order to get the real value out of a crop after it is grown. The gap between the producer and consumer is too wide. Where fruit-growing is a specialty as in parts of California, cooperative marketing has nearly solved the problem, and go betweens are not allowed to absorb the larger part of the producers profits. In this country where fruit-growing is a side line it is every man for him-

self and the "commission man" gets the hindmost.

My 1906 pear crop was large and of fine quality. I sold the down fruit at 25 cents per bushel in the orchard. I saw the same quality of fruit retailing at 15c per dozen in the city. The man who sells at wholesale and buys at retail, seems to be handed the hot end of the poker all the time.

LABOR.

One of the most serious problems confronting the commercial orchardist is to secure adequate labor at a price which will leave him any profit in the business.

Year by year it is growing worse. What the final end will be I do not attempt to predict, perhaps some philanthropist may yet invent a scheme of cooperation between labor and capital which may serve to render the two interests identical and harmonious. Up to this time my greatest annoyance has been to procure labor to handle fruit and to put up with the half-hearted, inefficient, profuncutory article I have been able to secure.

When all labor becomes unionized and I must submit to arbitrary dictation as to whom I may employ and as to wages I shall pay, bleating sheep and braying mules will be seen in all my orchards, whether the trees are barren or fruitful. In short I will quit the fruit business.

PARCELS POST.

A matter now before Congress that should receive the endorsement of all horticulturists is the parcels post.

Every one who has had occasion to order seeds, scions, or nursery stock by express has felt the heavy hand of the grinding monopolies, the express companies.

Nothing could be more absurd than the present arrangement for transporting parcels through the mail. There are some thirty different Nations whose citizens have postal privileges at the hands of our government, not granted to our own citizens; for instance, a citizen of London, England, can send me a four-pound parcel by mail, for 15 cents less than I can send the same package to my nearest neighbor by rural free delivery.

Every civilized Nation but ours has a parcels post by which parcels of 11 pounds or less are carried at a fraction of the cost of expressage. Express companies have thus far been successful in defeating legislation along this line. A note to our congressman and the United States Senators would help in securing this beneficial law.

FAITH IN THE FUTURE.

In conclusion I have faith in the future of commercial horticulture. The consumption of fruit is fast increasing, and the fruit-grower who has grit and persistence will win in the end. His success, in spite of occasional unfavorable seasons and conditions, will be finally assured. And beside the profession of horticulture should be regarded from a higher plane than a sordid one of mere mercenary gain. There is an esthetic feature which should not be overlooked, fine orchards adorn the landscape, beautify the farm, contribute to and cultivates higher tastes and ideals, lend a grateful diversity to an otherwise monotonous rural life, furnish an abiding place and refuge for our feathered friends, birds of song and birds of plumage, and in numberless ways contribute to the comforts and joys of life.

The difference between an optimist and pessimist is droll. The optimist sees the doughnut and the pessimist sees the hole. Let's be optimists, scatter sunshine, hope, and deeds of kindness along life's pathway; we will be better and the world happier therefor.

Let's all be optimists and hope that, as our orchards have had a vacation in 1907, they may be doubled in 1908.

Secretary's Report.

WALTER WELLHOUSE.

Your present secretary took charge of this office on July 1 of this year. Previously some time had been devoted to the equipment of our new quarters.

After every consistent effort had been made, by those most interested, to retain the rooms occupied so long on the ground floor of the State-house, and following the order of removal, attention was turned to fitting up the new quarters as best they could be for our purpose, with the means and influence available.

The executive council granted us rooms 6, 7, and 8 on the fourth floor, arches to connect these rooms were cut, walls tinted, new carpet and linoleum purchased and new book cases obtained. All members of the executive council helped or expressed a wish to help us; one member giving freely of his time to our assistance.

On July 1 the property of the society lay piled promiscuously on the floors of our new quarters, where it had been piled by the custodian of the State-house. The work of bringing order out of this confusion, the sorting and arranging of books and cleaning and placing of exhibits, fell mostly upon the secretary and the stenographer.

The overlooking of the sixteen hundred assessors rolls, verifying the county abstracts, correcting visible errors and compiling statistics took much time and correspondence.

A report of the yield of fruit for 1906 was compiled and sent to the principal newspapers of the State.

SHORT CROPS.

In July three hundred inquiries were sent out over the State asking for a report on the fruit crop harvested or in prospect. Replies showed almost an entire failure of apples, pears, peaches, plums, and cherries. Small fruits were better. Reports by congressional districts showed the following averages: First district reported grapes 27 per cent, blackberries 66 per cent, raspberries 48 per cent, and strawberries 45 per cent, of a full crop; second district grapes 40 per cent, blackberries 59 per cent, raspberries 54 per cent, and strawberries 28 per cent; third district, grapes 21 per cent, blackberries 36 per cent, raspberries 29 per cent, and strawberries 12 per cent; fourth district, grapes 27 per cent, blackberries 51 per cent, raspberries 43 per cent and strawberries 22 per cent; fifth district grapes 14 per cent, blackberries 29 per cent, raspberries 18 per cent and strawberries 13 per cent; sixth district, grapes 7 per cent, blackberries 6 per cent, raspberries 1 per cent and strawberries 16 per cent; seventh district, grapes 95 per cent, blackberries, raspberries and strawberries each 13 per cent; eighth district, grapes 37 per cent, blackberries 42 per cent, raspberries 12 per cent and strawberries 11 per cent. Nearly all reported trees and vines as doing well. A large and excellent fruit crop was promised until after the unfavorable weather in April and early May. Apple trees in the vicinity of Topeka were in full bloom on April 6, fully two weeks earlier than the average time for putting forth blossoms. On the nights of April 9, 12, 13, 14, 17, 30, and May 4, ice formed from one-eighth to one-half inch on still water. Snow, to the depth of 2.3 inches, fell on May 4. This season shows the most complete failure of tree fruits known since Kansas trees began bearing.

Card indexes have been made giving the names, address, and number of trees of nearly four thousand fruit-growers of the State. This has been done that grower and buyer might be more easily brought together, and to provide a mailing list for sending out information and inquiries.

An indexing and classifying of all information contained in reports, bul-

TREES THAT GROW
Apples 5c, Peach 5c, Plums 12c, Cherries 17c. Best quality, good bearers, grafted stock, not seedlings. Concord Grapes \$2.50 per 100, Forest Tree Seedlings \$1.00 per 1,000 up. We pay the freight.
GERMAN NURSERIES & SHEDS
We have a complete line of Vegetables, Flowers and Farm Seeds. Our large illustrated catalog free.
GERMAN NURSERIES
Box 25, BEATRICE, Neb.

FRUIT TREES CHEAP AS \$5 per 100
Freight Paid. Catalog Free
RELIANCE NURSERY, Box 286 Geneva, New York

HEALTHY TREES Honest in Quality. We pay Freight. Apple 5c, peach 5c, cherry 15c; budded and grafted. Concord grapes \$2.00 per 100. Forest seedlings \$1.00 per 1000. Nursery and seed catalog free.
GALBRAITH NURSERIES, Box 22 Fairbury, Neb.

TREES AT LOW PRICES
True to name. Free from disease.
30 Grafted Apple-trees for \$1.00.
25 Budded Peach-trees for \$1.00. 40 Concord Grape-vines for \$1.00. 25c due bill and catalog free.
Fairbury Nurseries, Box 1, Fairbury, Nebraska

STARK Nurseries Pay Cash Weekly AND WANT MORE SALESMEN EVERYWHERE. BEST CONTRACT, BEST OUTFIT, LARGEST NURSERIES—WITH AN 82-YEAR RECORD.
STARK BROS., LOUISIANA, MO.

SEED CORN. Reid's Yellow Dent, Boone County White, strictly select, pure-bred seed. Bred for purity and high yield. Send at once for circular giving methods of breeding, etc.
S. G. TRENT, Hiawatha, Kans.
Member of Kansas Corn Breeders' Association.

STRAWBERRIES
Millions of plants—100 VARIETIES. Best of the standard and new kinds. Healthy, Vigorous Plants, true to name, packed to carry anywhere at popular prices. Catalogue free.
W. F. ALLEN
41 Market St., Salisbury, Md.

TREES Trees, Vines, Shrubs, Evergreens, Etc., that Grow Hardly, vigorous, honest and best quality. Prices lowest. We deal direct. Our catalog our only salesman. It saves you commissions, hotel and livery bills. It's Free and tells you how to save money, get honest treatment and Honest Nursery Stock.

Address, **RATEKIN'S SEED HOUSE**, Nursery Dept. Shenandoah, Iowa

THE GREAT WORLD'S FAIR PRIZE-WINNING CORN
Send to the old reliable seed-corn breeder for your seed corn and other field seeds. **John D. Ziller, Hiawatha, Kans.** Also breeder of Poland-China hogs and Barred Plymouth Rocks. Send for catalog.

Reid's Yellow Dent

(MARTIN'S TYPE)
Winner of 1st prize at Pinedale, County, State Fair and State Corn Show; also gold medal winner at St. Louis and Portland, and winner of 1st prize at the National Corn Show at Chicago, 1907, in class E, Nebraska, and 2d prize and sweepstakes at the Kansas Corn Show, 1908. Write for prices.
Ed Flaharty, R. 2, Seneca, Kans.

BLIZZARD 6 BELT EVERGREENS
We grow them by the million. To prove they are healthy and vigorous we offer 6 fine Spruces 1 yr. old free to property owners. Mailing expense 1c, which need not. A postal will bring them. Catalogue free.
The Gardner Nursery Co., Box 22, Osgo, Iowa.

12 GRAPE-VINES 50c.
A GRAPE ARBOR
For 50c, cash with order (stamps will do) we will ship you, all charges paid, one dozen first-class grapevines as samples: 3 Concord, 2 Vines, 2 Catawba, 3 Niagara, 2 Moore's Early 1 Delaware.

If we get your order on or before Feb. 1, we will add free as a premium 1 Baby Rambler Rose (or your choice of roses).
IOWA NURSERY CO., DES MOINES, IOWA.

GOOD SEEDS THE BEST EVER GROWN

Prices lowest of all. Postage paid. A lot of extra packages given free with every order of seeds I fill. Send name and address for my FREE big catalog. Over 700 engravings of vegetables and flowers.
R. H. SHUMWAY, Rockford, Illinois

Gregory's SEEDS
Make your plantings successful by sowing good seed. Our flower and vegetable seeds are guaranteed fresh and pure, and are sold at reasonable prices. We supply farmers who plant by the hundred acres, down to collections for the kitchen garden. We have a number of new varieties that every farmer needs. Our new potato, "Big Crop," produced this season on our own farms at the rate of 88 bushels per acre. Our new catalog is an invaluable guide for all growers. It's free.
J. J. H. GREGORY & SON, MARLBOROUGH, MASS.

letins, and books of this office has been begun and will be finished in due time.

VISITING.

There has not been the time to attend as many horticultural meetings as desired. Some of the orchards and fruit-growers of the Arkansas River valley were visited. Trees were looking well, the growers were generally hopeful, but there was no fruit. Fruit trees appeared very thrifty and were full of promising fruit buds at Garden City under irrigation. It had been supposed that fruit trees under clean cultivation for any great length of time would use up the humus in the soil and become pale of leaf from lack of nitrogen; but it was not so here. The leaves on the trees that had had clean cultivation for fifteen years were of a very bright glossy green; showing that there was no dearth of tree food.

At the fairs attended the exhibit of Kansas apples was confined to a few plates, most of which were from the crop of last year. Some creditable collections of grapes were shown.

Since July 1 there have been sent out from this office over five thousand circulars, cards, reports, programs, and letters, besides information given out personally.

VINEGAR.

The matter of imitating cider vinegar was taken up with the chief State food inspector and information obtained to the effects that no misbranding of any vinegar would be allowed by that department. Later an order was promulgated forbidding the coloring of distilled vinegar, holding that it was illegal, in that it was done to imitate cider vinegar. Cider vinegar will now have a chance to be sold on its merits without competing with a cheap imitation. This vinegar has now advanced to a price at which it can be made at a profit by the orchardist, and the price of cider apples will, undoubtedly be increased by the demand that will thus be created for them.

SOME OLD MEMBERS.

S. T. Kelsey, of Saginaw, North Carolina, honored our office with his presence on December 2, Mr. Kelsey is the last surviving charter member of our society.

We announce the death of Prof. Elbridge Gale, at his home in Florida. Professor Gale was a member of this society for many years, and was its president from 1874 to 1886, twelve years. He was always an enthusiastic and efficient worker in the cause of horticulture.

GATHERING KNOWLEDGE.

Another milestone in our journey of progress has been reached—the time when we meet to learn each from the other what is known of horticulture, gleaned from personal experience and observation—to delve deeper, just a little perhaps, but yet deeper in to the knowledge that we desire so much to possess, into the laws and workings of nature, that we may grow more and better fruit, handsomer trees and shrubs, and lovelier flowers. One who is now high among the many of our countrymen who have gathered useful horticultural and agricultural knowledge from nearly all parts of the world, said to us, when first starting on his useful career, "if I can go just a little deeper into the secrets and methods of nature than any have hitherto gone, I will consider my life well spent in the search." And thus it is. We are trying to get more knowledge and more facts; and it is felt that no one should have the learning singly, but that to all should be imparted the knowledge possessed by each, therefore, let us ask questions and give our experience freely. Let us go back and cull the best from our combined experience in selection of soils and varieties, in planting, cultivating, pruning, spraying, packing, storing, and selling, and let the knowledge thus gained be applied carefully and thoughtfully.

The average horticulturist can not take the time and risk involved to plant and prove untried varieties however promising. But he can select

scions and buds from trees of standard varieties that have been carefully noted in previous years, and marked for their good qualities, as to form, vigor, and freedom from disease in tree, and size, color, productiveness, and quality of fruit. In this way no risk of loss is involved, but the chances are good for improvement; some have thought it better to build on fixed varieties than to trust to cross breeding. If there is not the time or inclination to do this grafting or budding perhaps our nurserymen could be induced to do it for us. One prominent fruit-grower of our State is doing this, and, with his pains-taking methods, is on the road to great success.

We have in mind an apple orchard which has borne crops almost continuously, producing in one season a crop that sold for two hundred dollars per acre, while a neighboring orchard, not more than a mile distant, which had been given equal care, has hardly paid for the planting. A member of our society reported at one of our meetings a single apple tree, from which had been sold seven successive crops for the sum of three hundred and twenty-eight dollars. The raising of a thousand such trees would be worth the effort of a life time, after paying well for care, fertilizing, spraying, and perhaps irrigating. It is true that safety does not lie in drawing conclusions from a single tree or from one orchard, but in the above our conditions that would pay for the closest investigation. Why is it that the one orchard produces so abundantly while the other, under apparently same conditions is a losing proposition? Why does one tree under favorable environments yield more than many under ordinary circumstances? Could we but have the factors which cause this difference of production and apply them, Kansas orchards would show a better average of fruitfulness. Are not these factors narrowed almost to soils and heredity in above cases?

PROBLEMS.

There are many bright men employed by the State and United States who are solving some of the perplexing problems for us, but there is much for them to accomplish yet that is beyond the ordinary fruit-grower. In the meantime let us stand shoulder to shoulder kindly helping each other, as best we may, over the difficult places.

There should be somehow and somewhere provided for testing promising seedling fruits. The Stayman wine-sap is fast becoming a favorite, both East and West; the Kansas raspberry is well and favorably known beyond our borders, and others are bringing success, but, undoubtedly, many have been dropped by the wayside and are out of the race through negligence or the inability of the propagator to prove and bring to the notice of the public their superior merits.

Necessarily most of us put fruit-growing on the basis of dollars and cents, but sometimes the stimulus of the enthusiastic theorist is needed to pull us out of the ruts into which we have fallen. You that have attended our meetings often, probably do not get many new facts at any one gathering, but one always goes home with a resolve to do more and better things. If these good resolutions were allowed to materialize more and better fruit would be the result.

How much has the vitality of the tree and fruit to do with resisting disease? Ben Davis is supposed to be immune from scab, yet we have seen it scab badly where the vigor of the tree was weakened. How much has the poor roots of the Missouri Pippin to do with the susceptibility of fruit and leaf to the attack of the scab fungus? The top working of the Missouri Pippin on trees with better roots, is being watched with interest. One man is planting his entire orchard to Northern Spy, expecting to top work with desirable varieties when his trees reach suitable age. It is his purpose to secure the best root system possible.

We know certainly that Kansas can raise fine fruit, and that our apples are

preferred in the markets over those from many other localities. We should use every effort to sustain our reputation as producers of good fruit.

Hedges and Trees versus Wire Fence in Western Kansas.

DR. G. BOHRER, RICE COUNTY.

During the early settling of the State, west of Topeka, the stars shone at night with the brilliancy of diamonds. Now, until we get out into the western third of the State, the atmosphere is hazy and the stars are seen through a mist of greater or less density, which is due to the plow and trees. Stirring the soil, so that a large share of the rain that falls enters the earth instead of running off, as soon as precipitated, while the trees check the spread and force of winds, thereby retarding evaporation, which is probably of greater importance in Kansas, than in most if not all other States of the Union.

THE SMALL WATER SURFACE.

Kansas water area is quite limited, only 384 square miles, so that there is a correspondingly small water surface, from which a rapid evaporation of moisture can take place. Just to what extent, this limited area of actual water surface may effect the amount of evaporation and precipitation of moisture within the State, there is no reliable method of determining. But that it has something to do with it, there is no doubt. I would suggest to every tiller of the soil the great importance of bringing into requisition every available means possible to aid in economizing the rainfall we get.

A HEDGE AS A FENCE.

But, in the presence of all the foregoing incontrovertible facts, we find persons disregarding them and declaring, that if they had a hedge around their farm or a row of trees around or through the same, they would destroy them and substitute wire fencing. Using the illogical and untenable argument, that trees and hedges require too much labor to keep them in proper condition, and that they injure crops by absorbing moisture, and injuring the ground far out into the field.

While this is true upon the one hand, the important fact upon the other hand must not be overlooked that a very large amount of very fertile land is sandy and will blow to the extent of serious injury to crops, in the absence of protection afforded by trees and hedges. This is also true of lands that are not classed as sandy to a great extent. Aside from this it is a well known fact that a large number of horses and cattle are killed annually by lightning along wire fences. In addition to this, many horses are killed outright by wire cuts, while thousands of others are permanently blemished by wire cuts, and rendered unsalable, except, at reduced prices. In fact, if an accurate report of such losses were placed before the public, with other agricultural reports published every two years, it would show a state of affairs that at present is overlooked or ignored, and would point to gross neglect of duty, by not at least having wire fences masked by a fringe of timber or a light hedge. In fact such a state of affairs in the light of reason and in behalf of human protection to domestic animals suggests legislative enactment against such unjustifiable neglect, amounting to actual cruelty to domestic animals. Aside from this, when such protection is once established, it brings with it, the natural conditions favoring the germination, growth and development of every kind of tree, shrub, vine and plant, that is of real worth to mankind; and in a degree far superior to the condition found by the pioneer settler on our bare prairies.

PROTECTION OF SHRUBS AND TREES.

Ornamental shrubs, blooming and fruit-bearing vines, together with every vegetable in common cultivation in our kitchen gardens and on our city truck patches, which at first afforded but little encouragement in the way of financial income, are under protection proving to be highly remunerative.

Try the New Red Majestic Tomato

The greatest vegetable novelty of the season. The largest, most productive and finest flavored. When we introduced the pink Majestic three years ago, it proved to be just what we claimed, and hundreds of customers reported fruits weighing 3 to 7 lbs. each, and crops of 100 to 147 lbs. grown on one plant. This new variety is fully equal to it in every respect but will be preferred by many on account of its bright red color. The seed is scarce this year and sells at 40 cents per packet of 100 seeds. We desire, however, to place our catalogue in the hands of everyone who has a garden and will send a trial packet of 25 seeds FREE if you will mention this paper. Also a copy of our large, beautifully illustrated catalogue. A postal card request is sufficient.

Iowa Seed Co., Des Moines, Ia.

SEED CORN

Boone Co. White and Hildreth Yellow Dent.

IMMENSE YIELD, HIGH QUALITY.

Our corn took 1st in County; 1st and 2d in Boys' County Contest; 4th and 6th in Boys' State Contest; 2d in Capper Contest; 2d at State Corn Show; 2d, 3d and 6th at National Corn Exposition; 1st and 2d in Yield-per-acre Contest, 1907. Best acre, 114 bushels, 49 lbs. corrected weight, which constitutes the record for Kansas. Best 10 acres, about 1100 bushels, field weight. All corn carefully tested for germination.

Carefully selected ears in crates, \$2.50 per bushel; 2d grade shelled, \$1.50 per bushel, f. o. b. at Leavenworth.

J. M. GILMAN & SONS, ROUTE 1, LEAVENWORTH, KANS.

GARDEN SEEDS FREE.

Two Packets for Trial.

We send two regular sized packets of our superior Garden Seed, your selection, and our Big 1908 Seed Manual absolutely free to all new inquiries. We are anxious to increase our number of customers is the reason we make this generous offer.

If you give our seeds a trial, we are confident you would be one of our customers. Write today for our 1908 Seed Catalogue.

A. A. BERRY SEED CO. Box 205 Clarinda Ia.

THE OZARK DUST SPRAYERS

Send for booklet on Sprays and Spraying free.

Haldeman Mfg. Co., Springfield, Mo.

PLANTS.

Strawberry plants—100, 35c; 1000, \$3.
Raspberries and Blackberries—100, 75c.
Evergreens, Norway Spruce, and Ponderosa Pine, 10c each.
Bulbs, Gladioluses—100, \$1.
Dahlias—5c and 10c each.
Hardy Perennial Plants, Paronies, red, pink and white—15c each.
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tive. The same is true of every fruit tree under cultivation in the State. In addition to this it is proper to state, that all of our field crops, which before trees and hedges were grown, were not only injured by high and unobstructed winds, but the seed that was sown or planted was often blown out of the ground and carried away. In fact nothing of value that grows upon the farm will succeed as well, without the protection of trees, as with them.

MOISTURE TAKEN BY ALFALFA.

Even alfalfa, which is probably the greatest drouth and wind resister of all the plants of value that grow upon our prairies, succeeds far better on our high lands when sheltered by trees, not by being grown among the trees, for in such cases a death struggle is the result; both trees and alfalfa grasping for moisture, and both suffering, until the trees as a rule perish for the want of moisture taken from them by the alfalfa.

As above stated alfalfa is a great drouth resister, but yields larger crops if well supplied by moisture. Trees on elevated lands retard evaporation and thus protect this as well as other crops. Trees and hedges will pay well for all its costs to plant and care for them. While the fire fence alone protects no crop by economizing the moisture we get by precipitation.

ALFALFA PROFITABLE.

Referring again to alfalfa; it is perhaps not out of place to state, that, it is with proper care, likely to prove one of the chief sources of income and profit to the State in the not far distant future. For the enormous acreage of wheat is from year to year costing more to harvest and market the same, so that it is becoming less profitable, besides, it will at no distant day prove to be a soil exhauster, while alfalfa is a fertilizer and affords by all odds the best known hay for dairy herd or almost any other stock wherever tested. It is perhaps the best honey-yielding plant west of the Mississippi River, if not in all the world. And that pure honey is the most wholesome sweet in use among mankind is not questioned by the masses of our people, who know anything about honey as a food in a state of absolute purity and free from glucose and other adulterations. This is required to be pure under our pure food law.

Then to view the farther development of our vast amount of uncultivated, but highly fertile lands, from whatever reasonable standpoint we may, the fact stands out most glaringly, that the future greatness of the State, as well as the interests of the sturdy, industrious, homeseeking pioneer, demands that shoddy and slovenly methods of agriculture, horticulture, floriculture, and farming, as well as other industrial pursuits of the State be abandoned.

WIRE FENCE NO PROTECTION.

For the wire fence unaided by trees or shrubs, can not possibly afford such protection as is indispensable to that high degree of agriculture, horticulture and other kindred pursuits that the interest of our rapidly increasing population demands, and which the high, fertile qualities of our uncultivated lands merit.

TREES RECOMMENDED FOR PUBLIC HIGHWAYS.

As to the kind of trees to plant, I would recommend trees of dwarf habit to be set along our public highways, and around fields of farm land. Osage orange, honey locust, Arizona pine, and red cedar will grow well on elevated lands; Russian mulberry will answer a good purpose on bottom or valley lands. Where land is not adopted to the production of field crops, walnut, hackberry, catalpa, basswood, box elder, Georgia poplar, and cottonwood should be planted. But to succeed in growing trees along the public highways, will not prove an easy task. The settler is located upon a farm destitute of timber should fence a pasture lot, in order that this stock may be kept entirely away from his orchard and trees of any and all kinds, that he may set out. And wherever a fence

is desired, start a row of trees adopted to the kind of land to be fenced in time, as already recommended. And if it is not meant to grow a stock proof hedge, let the rest be set three to six feet apart, then cultivate properly until the trees are large enough to bear a fence wire, either barbed or smooth; the latter would probably answer as good or a better purpose than a barbed wire. One or two wires stretched along such a hedge will, as a rule, turn horses and cattle quite well, and not nearly so many animals will sustain injury or be killed, either by lightning or wire cuts.

HEDGE A BENEFIT TO STOCK AND CROPS.

The hedge will prove of incalculable benefit as a windbreak, thus benefiting both stock and field crops. To all this let there be one good windmill set at work on every farm pumping water constantly or as nearly so as possible, and not permit any of it to be lost. Let it be applied to the garden, the trees, the vines, hedges and plants. Many hundreds of windmills so put to work will bring to the surface large quantities of water, all of which will not only benefit growing vegetation, where directly applied, but will contribute to the density of the atmosphere all over the country. But it will be said that all this will require much labor, which is true, but not nearly as much as was required to remove the timber from the fertile land of our eastern States. And let it also be understood, that it will be quite impossible to succeed in diversified farming in western Kansas without such protection as is herein recommended, as it was to raise field crops in the heavy forests of the East with all the timber on the ground.

These facts seem to be overlooked by very many people, and hedges and wind breaks are actually being destroyed. And while an occasional hedge or row of trees may have been grown where it is not best to have it, to destroy them and substitute wire fences, is an injurious step backwards and should be discouraged, and if necessary, prevent it by legislation. Let it be done.

And I will in conclusion hazard the prediction, that if such a course as I have outlined be adopted and strictly adhered to, one hundred years from now will find more than three millions of people permanently located with abundant means available for a comfortable support. In fact more so than is the case in a number of our Eastern States. For with such protection, aided by raising an immense amount of water by pumps, added to the natural annual rainfall, the agricultural, horticultural and stock-growing resources of the State, will be almost an absolute certainty, as to the yield of crops annually.

All this, let it be understood, is supported by strictly scientific tillage of the soil, which is very largely superior to that of many other States, for instance, let the Campbell system of farming be adopted, and the too common slipshod method of soil culture be dropped out of sight.

Now whether we will accept and adopt the best and wisest method of developing the resources of the State or not at once, it will be done in the near future. And when once in full force, Kansas will produce more bread stuff, more beef, more pork, more poultry, more butter, more cheese, more alfalfa, more honey and fruit than any other two States of this great republic.

The Care and Treatment of Orchards.

W. H. UNDERWOOD, HUTCHINSON.

I am very loth to lay down any specific treatment under this general heading as I have seen orchards this past fall in Arkansas, Idaho, Washington, and Oregon. Also in the Grand Junction district, and I must admit that the treatment that seems to be a success in one place, apparently, is



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an absolute failure in another district. In Washington they seem to raise as fine apples without irrigation as they do in other districts of the same State with irrigation. As far as the soil treatment is concerned I believe that the orchardist on heavy land must cultivate thoroughly. Our own treatment here in Reno County, on very sandy soil, at the foot of our sand hills, is to let the ground alone, after the orchard comes into bearing, mowing the sunflowers and grass and weeds two or three times through the season, allowing it to lay on the ground as a mulch. Up to the present time, this treatment has been all that could be desired, as we have raised very large and fancy crops the past three or four years, barring this one, or in other words, during the bearing period of this young orchard.

TOO MUCH CULTIVATION.

I believe that we made a mistake in growing our orchards in cultivating this light sandy soil too much. We kept the ground absolutely clean for the first seven or eight years of their growth, and we did not raise an apple,

except on a few Missouri Pippin trees. We had great big fine looking trees and they were very similar to a lilac bush, their having so much wood growth. We then awoke to the fact that we were raising wood instead of apples and that winter we cut out what I estimated was fifty per cent of the wood growth, and the following year we grew fruit buds on these trees. Since that, for the past five years, we have been gradually taking out wood and cutting them down so that they look a little more like trees in the West, that is, with three or four main branches instead of a dozen.

PRUNING.

As we thought this severe pruning would throw the trees out of balance and not give us the crops; we haven't taken out as much any one year as we wanted to, and we are still pruning out the heavy branches and expect to for the next two or three years. After that time we hope to have the trees in such shape that we can get along with simply rubbing off at pruning such water sprouts as develop.

I will state here that we have been

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rubbing off water sprouts and clipping them when they get older, for the past three years. On account of our orchard being large we have not been able to hire men enough to do this work in May and June when we wanted to and have had to continue it all through the season.

SPRAYING.

We started spraying in rather a haphazard and loose way four or five years ago and did not get down to business until two years back. Previous to that time most of our crop contained codling-moth and stings from different insects and there was not very much profit in the business as we sold poor fruit and you know the market is always glutted with that variety.

We are now spraying five or six times per year and since we have been spraying as often as this, and doing what we believe is right, we are raising fancy fruit only. Our No. 2's and culls are almost a thing of the past. For this fancy class of fruit there is always a market and we do not have to compete with anyone.

As we have very little fungus in this country we have only sprayed twice during the season with Bordeaux, adding the arsenate of lead to the mixture each time. The balance of the spraying has been done with arsenate of lead only and we have sprayed with Bordeaux as a preventive. This year we are just now preparing the spray with a double strength solution of copper sulfate, the first few open days we have, and we expect that this one spraying through the winter, which we can do at less expense and put it on stronger, will do for the season and that next spring we will only have to spray with the poison. This will relieve us of a great deal of work in mixing and the chances of scalding the leaves with the Bordeaux.

Anything that we can do to facilitate our getting over the orchards quickly in the spring and summer, we believe is that much gained as we want to get over the whole orchard in five or six days, so as to get the moth in the right stage, instead of waiting until they get into the apple.

We watch the development of the moth on a few trees near the house and as soon as we find twenty-five per cent of the moth have flown, we figure to spray in seven or eight days. My opinion at present is that the whole care and treatment of a bearing orchard can be summed up as follows:

If you have heavy ground, cultivate it, and whatever kind of ground you have, prune thoroughly and spray on time, and we think that with this treatment anyone will raise apples.

DISCUSSION.

President Taylor: That completes the program as it is printed. It is early yet, and it seems a misfortune to allow two such papers as those of Professor Burkett and Mr. Underwood to go without discussion. Brother Snyder, don't you want to say something on one or the other of these?

Mr. Snyder: I don't know that I am prepared to discuss either of these papers so that it would be particularly entertaining to anybody. I was a good deal struck with Mr. Underwood's—the point he made that orchards are frequently cultivated too much. I believe this is true, and that it is especially true of orchards that are on rolling ground. Too much cultivation results in their washing badly.

Grape Growing.

HON. C. A. MCNABB, OKLAHOMA CITY.

For some years I had twenty-two acres devoted to grape culture in Oklahoma. I have at the present time seven acres. Unfortunately Oklahoma City has grown so fast that it has encroached upon my domain, and necessitated the reducing of the acreage of my vineyard.

There are so many little details in connection with caring for the grapevine that are so apt to be discarded or overlooked by the average fruit-grower. These little details, these little minor actions now and then suggested themselves to me during my eighteen years experience in which time I have

devoted a good deal of study to grape culture. In fact, from my observation, I am led to believe that the man who makes a failure growing grapes makes it because he does not see the importance of the little details. I know of a few instances where people have observed the wonderful success of some one vineyard in a locality on a certain line, and they would naturally form the conclusion that it was possible for anybody to do the same thing, and would immediately proceed in their way to produce a like success, never for a moment taking cognizance of the little details in the work, which can be obtained only through years of experience. Consequence, failure.

GROW YOUR OWN VINES.

I am going to be brief, and I will begin with this statement with relation to grape culture. Grow your own vines. Now, I know the nurseryman is present, but I must say that it is much easier for you to grow your own vines, and also much more satisfactory than it is to purchase them from some unknown grower, and have them exposed from time to time with shipping, digging, delivering, hauling, and throwing down in the dooryard. Perhaps they will "heel those vines in" later on; and perhaps forget them for a day or two. Grow your own vines; it is easily done. The average grape cutting is from seven to nine inches long. It is made of wood grown the same season in which the cutting is made. It consists usually of three buds, cut off directly at the lower bud, leaving two others with a tip of a half inch, that you may more easily discern which is the top and which is the bottom end of it, and for the further purpose of enabling you to handle it without danger of breaking off the buds after they have swelled in the spring. Make enough of those cuttings, of the varieties you wish to grow, to enable you to select only the very choicest of those vines for your own planting, and throw the others away, or give them to some less fortunate neighbor.

THE SOIL.

The kind of ground that you should grow grapes on is a soil that is well drained, and has plenty of sand mixed with it. In no case would I advise the planting of grapes on a soil that has a tendency to hard-pan, nor ground that lies absolutely flat and has no surface drainage. That means a short-lived vineyard, shy of grapes, in most instances. The ordinary run of varieties you may plant eight by eight feet. This is the customary distance. There are varieties of shy-growing nature that may be profitably grown planting them six by eight feet. I am often asked the question: "How do you get Delawares to fruit for you?" The answer is, always thin, and prune them until you have almost no vines left. The Delaware, if you have noticed, has joints from 1½ to 2½ inches long. Now, if you leave a great quantity of buds on them to produce fruit you will produce a large quantity of inferior fruit and also a dead vine.

VARIETIES.

I shall not on this occasion go into anything like a talk on varieties. You claim your conditions here are different from those where I have had my experience in grape culture. To a large extent, perhaps, the same conditions would apply here that apply there. However, the grape is a peculiar fruit. It seems to thrive in one situation in a certain locality and perhaps in that same locality in a little different situation it will not be a success. These are things you must work out for yourselves. In preparing your plant for setting, it should be pruned root and top. Cut the top back to about two buds. If the nurseryman has done his duty, each vine has a strong root system. You should prune those back by simply clasping the vine and holding the roots in the hand, and with one or two motions of the pruning shears cut off to about six inches. Cut away the surplus top, because if not cut it will produce a straggling, irregular growth that will not be entirely satis-

factory. In preparing the holes for setting the vines, you should use just a little more judgment and not quite so much effort. I have seen men laboriously planting grape-vines who explained that they could get 50 planted in a single day, and vowing and declaring that they were going to dig big holes. And they would dig one big hole, throw in a lot of surface soil, and then carefully plant the vine. When planting the second vine they would consider it would not be necessary to have quite such a big hole, and so on.

HOW TO PLANT.

Now, why not use horse flesh to set your grapevines? Prepare your ground as you would for grain, harrow it down to a nice condition. Set your row of stakes. With a good steady team and a man with a good eye, you can throw a furrow each direction from those stakes, with a 14-inch plow and then follow that with the lister, and you have a trench in the neighborhood of 18 inches deep, if you have good grape soil—that is 18 inches from the level of the surface. That is a good depth for setting grapevines, 15 to 18 inches. The majority of our grape-vines are set too near the surface, and while we are sure we are never going to have winds again, nevertheless, they will blow just as long as time lasts, and if you have sandy soil, as you should have for grapes, it has a tendency to move the vines about sometimes. They should be set deep for another purpose, that you may better cultivate them without danger of damaging the roots, and for a still further purpose that you may get them down into the soil where there is always moisture to mature your fruit regardless of surface conditions. In setting plants in this furrow, I take about a No. 9 black wire and stretch it upon a lot of fence posts. The wire is just as long as my row of grapevines is going to be, and with an eight-foot pole I measure off the wire and at each 8 feet file a little notch to keep the strings from slipping, and then wrap three or four laps of string around so as to make a little tassel which will always be in evidence. At each eight-foot mark I set down a little stake, and I go on stretching that wire up solidly over the furrow. I push a peg into the ground at every tassel, then raise and move the wire to the next furrow. I now pull out the first peg, throw it into the next furrow with the wire, plant a vine in its place and repeat until the whole row is planted. This process is repeated with the next row and the next until the planting is finished. Thus every vine is set in its proper place, preferably on about a half shovelful of good deep earth, a sort of a mound. These roots will spread out and feed down. Now put about two spadefuls of earth on them and tramp it down, and go on. After a row or two has been planted hitch to your cultivator and fill the open furrow. That is a whole lot better than digging the holes by hand. There is nothing, to my notion, that looks nicer than a vineyard that checks up well in every direction.

HOW TO CULTIVATE.

The first year after you have done this planting it is only necessary that you should cultivate often and thoroughly, allowing the vines to grow just as they will. You need not have a trellis at that time. By not having a trellis you can cultivate both ways. However, the hoe should not be forgotten. The ground should be worked close up to the vine, keeping out all grass and weeds.

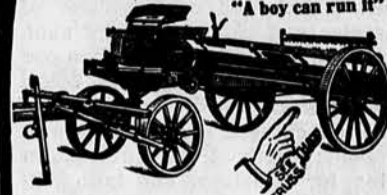
THE TRELLIS.

The following winter, or first dormant season after the vines have been planted, these vines should be cut back to three or four buds. At least a temporary trellis must be constructed. By temporary trellis, I mean that you may set a post to each six vines. A post should be set to each three vines finally, excepting the end post and the one next to it, which should be only 16 feet, or two vines apart. These growths are allowed to start, and a

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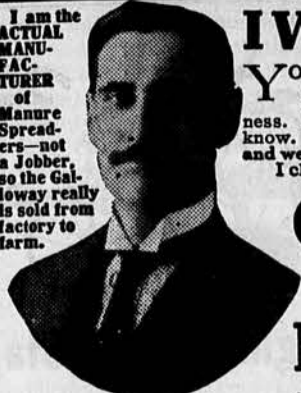
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pretty good plan is always to have on the temporary trellis one wire down pretty well, we will say 15 to 18 inches above the level of the earth. The object in having it low for this second year or first year trellis, is that you may be able to tie the crown shoot to the wire, and thus make sure that you are going to have one strong cane that season, with no danger of it being knocked off. Or you may allow two of them to grow if you prefer. My preference is for one. Now, remember you simply allow these vines to grow as they will, but do not forget that frequent and clean cultivation should be practised throughout the season.

PRUNING.

When the second dormant season arrives we prune up to one cane for bearing purposes for the next year, or the first year's crop, which should be a light crop. In the meantime, raise the trellis wire, and put it up not less than 30 inches from the ground, and tie the canes to it in such a way as to insure a straight trunk. Tie canes to lower wire only and use willows or heavy twine. We use rye straw for tying the young shoots to the middle and top wires of the trellis. This straw does not chafe the vines and lasts until the tendrils take hold of the wire. The straw should be cut into lengths of from five to six inches.

The average farmer falls down in attempting to grow a few grapevines. He does not seem to exercise, in the first place, practical judgment as to what the vine is able to stand nor how to prune it so as to make it an easy job for all time to come. The man who is successful in handling a vineyard, learns the grape-vine as he learns the members of his family. I had in my care something like 15,000 grape-vines, and I knew each one of those vines by name, and when I came to the pruning I could tell at a glance just what they needed; what to leave and what to cut; how many buds to leave; whether the vine had been perhaps overloaded a little bit; whether, considering the conditions the year before, it had had an easy job.

SPRAYING.

As to the question of spraying, there is no man in this country who can make a success of growing grapes without spraying, any more than a farmer can grow corn without the cultivator. Do not undertake it until you decide firmly and surely that you will provide yourself not only with a sprayer, but with a good sprayer, and when the time arrives for using it, that you will use it. It must be used in order to make it effective. You should spray your vineyard not less than six times and from that to ten times in a single season. I will not tell you what kind of a spray I use. That you can find from your experiment station.

MARKETING.

As to marketing your fruit, let me say on that line, if conditions are in Kansas what they were eighteen years ago, I am safe in saying that 90 per cent of the grapes that are picked in Kansas are marketed before they are ripe, and this is the case in Okla-

ma, and I think this is the case in nearly all our central or southern States also. Concords are often picked before they are ripe. A great many people get the notion in their heads that twenty-four hours after grapes turn black, or start to turn black, that they are ripe, and they pick them off without any further thought or consideration, and put them in any kind of an old box they may have, and drive into town and say, "How much will you give me for my grapes?" They offer half-cent a pound. What can he do? He can not take them to a good fruit stand. He has to take simply what the grocer offers, because grapes do not ripen one iota after they have been taken off. The sensible thing to do is to allow the fruit to thoroughly mature before it is gathered.

PICKING.

I have one man who has done my picking for eight years. One man does all my picking, and he never bruises a grape. Our packers go over the clusters, cluster by cluster, picking up by the stem, and if there is a green or damaged berry on that cluster it is picked off. For shipments we use the 8-pound basket altogether. Now, then, does it pay to put fruit up in the right kind of shape? For the past six years I have depended to some extent on a foreign market for my grapes. Now that entire market was just within the confines of Indian Territory and Oklahoma. I never shipped grapes but once into Kansas and once into Texas, for an experiment. I find my best market right at home. My plan is, say fifteen days before we begin picking grapes, I write to my customers, stating that on such and such a date we will begin picking grapes. The price will be so much f. o. b. Oklahoma City. Before we pick a grape we have every one sold in the vineyard.

VARIETIES.

Now, just a moment on varieties. I stated to you in the beginning the question of varieties is a thing you must settle, to a large extent, yourself. The Delaware is our best, decidedly so. It will make more money per crate with less work than any grape we grow. The Concord is our poorest, notwithstanding it the greatest in favor. I presume there are more Concords bearing in Oklahoma than all other varieties combined. I presume the same conditions apply to Kansas, yet I doubt not you will disagree with me if I say that the Concord is a most unsatisfactory grape. It is one of the hardest to grow, one of the most expensive to grow there is in the whole list, and yet you will insist upon growing it. Did you ever study the Concord grape in its nativity? The Concord belongs to that variety known as *Vitis labrusca*. Its natural home is north of the Carolinas and east of the Allegheny mountains. We have many grapes indigenous to the Southwest—their natural home. One that has so far shown the greatest promise yet has produced by way of hybrids, something that is of a perfectly satisfactory nature in the Southwest, is the *Vitis linsecumii*, or post-oak grape which grows in

Oklahoma, Texas, portions of Arkansas, part of Missouri, and I don't know but a little bit in Southeastern Kansas. The deep, penetrating root enables the vine to go through almost any spell of dry weather without the slightest injury. I had them growing in my vineyard right next to the Labruscas, Concord, and Niagara. If you could go up on some points two or three miles away where you could look down on that vineyard, you could tell which rows were *linsecumii*. Many hybrids of this species have been introduced by T. V. Munson, of Denison, Texas. To what extent they have been tried in Kansas, I do not know.

It is generally understood by growers in Oklahoma that the Delaware does not do well in Kansas. I do not know why it is unless you attempt to do too much. For your second year's crop you should have not over 35 to 50 buds. You will get just as many pounds of fruit with fewer buds as you will with too many buds. Each cluster will be perfect in itself.

PRUNING SUMMARIZED.

Before planting, the young vines should be pruned back to two or three buds, and the roots should be cut back to about six inches in length.

After one year the vines should again be cut back to three or four buds of the previous year's growth. When one or two shoots are long enough to tie to temporary trellis, break out all others.

After another year's growth, trim to a single straight cane, leaving it long enough to reach the lower permanent trellis wire and turn over about one foot. Rub out all buds except ten or twelve at the top, as they start in the spring. This will form the permanent trunk and head of vine.

The effort now is to retain that stalk or trunk and head of vine, which can be done by leaving two or three short spurs of two or three buds each at the head of the vine in all subsequent prunings. Each of these spurs will furnish a bearing cane or arm and a spur for the growing of next year's arm and spur. All arms and spurs are renewed annually.

DISCUSSION ON GRAPES FOLLOWING MR. MCNABB'S PAPER.

Mr. Fergus: I don't know whether the rest of the horticulturists are interested in grapes or not, but I am. I would like to know the varieties of Mr. Munson's grapes the gentleman has tested, the varieties he was pleased with, and the failures.

Mr. McNabb: I do not know that I can recall just now all the Munson varieties that I have tried. The Dr. Collyer, one of the Munson hybrids, did exceptionally well. This is a grape that I consider will take the place of the Concord very well. It has wonderful keeping and excellent shipping qualities. The only thing against it is its color; which is a dark copper shade, and it is covered with a silvery bloom when ripe. The American people have been accustomed to a black grape.

A Member: How is Moore's Early?

Mr. McNabb: Moore's Early is a good shipper. The quality is good. Not a very great improvement over the Concord. It ripens more evenly.

A Member: When do you prune the vines?

Mr. McNabb: Any time in the dormant period, from the first of December to the first of March.

Mr. Robison: You speak of a Post-Oak grape. Is that the bunch grape that grows over the greater portion of Texas?

Mr. McNabb: No, you have reference, I think, to the Mustang. The Post-Oak is a very heavy growing, or medium heavy-growing vine, and will grow upon the top of the highest dry hill. It produces beautiful clusters of grapes, equal in size to the Concord, and a very fair flavor and an extremely rich grape. Of course, you understand that any species of grape varies a whole lot in the varieties and also varies in the individual fruiting qualities, or in the character of the fruit, just as we have in the various varieties of the *Labrusca* or fox grape. The *Vitis linsecumii*, or Post Oak, varies in size from the little fox grape we used to get in the East to that of the Concord.

A Member: Is it listed in the catalogues?

Mr. McNabb: No, you will not find the native species listed under their species names.

A Member: Is the Herman Jaeger, a Post Oak?

Mr. McNabb: No, I don't think the Herman Jaeger is a Post Oak. [The Herman Jaeger is classed as a *linsecumii* or Post Oak grape in the catalogue of the American Pomological Society.—SECRETARY.] You can get all those Munson hybrids directly from Mr. Munson. The Brilliant is one of Mr. Munson's very best. The only objections we have to it is that it does not seem to produce quite as much foliage as it should to protect the fruit. The Long John is another I don't like. The R. W. was pretty fair. There is another one now that is quite a good fruiter.

A Member: What of the Carmen?

Mr. McNabb: The Carmen is very good. The Herman Yeager is very good. It has an extremely compact bunch.

Col. Robison: Is it not a fact that Mr. Munson considers it more valuable to produce those hybrids than to fruit the species itself?

Mr. McNabb: Oh, yes, certainly. The *Labrusca* roots spread out horizontally and do not penetrate deeply into the soil, while the *linsecumii* roots head right down.

A Member: Did you criticize the Concord as being hard to grow?

Mr. McNabb: Yes, sir.

A Member: Well, do you mean that to apply to your location or to our conditions in Kansas?

Mr. McNabb: If allowed to mature it will never get so ripe but what there are always some green grapes on it. I realize that there are many people who are wedded to the Concord grape, and if you ask them the reason why they could not tell you. The Concord grape has taken a place with the human family, especially with Americans that is going to take a very hard struggle to supplant.

A Member: I can tell you its results with me—we can not raise any other kind.

Mr. McNabb: The Dr. Collyer is an extremely rank growing vine, perfectly

hardy, and I am going to be what you might call extravagant in my statement. You can raise twenty times as much fruit on the Dr. Collyer as you can on the Concord on any vine West of the Mississippi.

A Member: Would the Dr. Collyer be hardy up here with us?

Mr. McNabb: Certainly.

A Member: Does the Delaware succeed well with you, and why can't we raise it here?

Mr. McNabb: Yes, and I believe you could grow it here if you went at it right. The Delaware is a delicate grape. Some in northern Texas tell us they could not do anything with the Delawares. Why shouldn't it do well both in northern Texas and Southern Kansas? I can not see any reason. There is a tendency to leave too much bearing wood, so that they over-bear.

A Member: There is one question I would like to ask you in regard to planting cuttings. First thing, after you cut your cuttings, do you try to get any root growth on them?

Mr. McNabb: I have made great quantities of grape cuttings, in fact, for some months I grew large quantities of grape cuttings for the nursery trade, that is, in a wholesale way. We always put them in what we call a cutting box, butts all one way. Each day those are buried butts up. Open a trench say about three feet wide or three and a half, just the spade depth, in sandy soil, with a south exposure, and set the bunches in with butts up, one against the other. Scatter fine, loose soil over it to work down between so there would be no air spaces of consequence. Dig trenches on either side so as to make sure no water will run in. We leave them in there until about the 10th of April.

A Member: Do you find the Delaware easy to start from cuttings?

Mr. McNabb: Very easy. It is not generally considered as easy to start them.

A Member: Do you run your trellis always North and South?

Mr. McNabb: Not always, but I like it best that way when conditions are right. I have one vineyard trellis running east and west. You should trellis opposite from the slope of the ground. If you trellis with the slope you will cultivate your vineyard rows so the soil will wash away. If you trellis at right angles with the slope it will always hold the moisture better.

A Member: What do you think of the Worden grape?

Mr. McNabb: It is a splendid grape, but difficult to grow. The Worden, you understand, is one of the very few that will not bear stamens, and consequently is not reliable. It is considered advantageous to plant other varieties at the same time in alternate rows.

A Member: I would like to ask the professor if those Japanese plums do well with him?

Mr. McNabb: Yes sir, they do.

A Member: Don't you think it is because it is a warm climate down there?

Mr. McNabb: Yes.

Commercial Gardening.

A. V. WILSON, MUNCIE.

Gardening has ceased to be one of the side issues of farming. Rapidly it has developed from small proportions to a business that involves immense capital to operate, and requires men of intelligence and stability to keep up with the demands made by the public for fresh, crisp, inviting vegetables.

To meet the demands of the various markets, growers and experiment stations have been stimulated to search for the choice varieties and best methods, in order to produce the desired results. This research has grafted into gardening a degree of pleasure that to the true lover of nature eliminates much of the drudgery heretofore connected with the business.

The successful grower of fruits lives very near to nature; and as the years roll by, his love for the tree and

the vine becomes deeper and more lasting. There is a fascination in watching the trees spring into life, bud, blossom, and produce fruit. There is the same attraction in planting the tiny seed of the vegetable, cultivating, and nursing it to produce in abundance.

Who, then, is better fitted to become the commercial gardeners of the world to-day than the commercial fruit-growers?

These two departments of horticulture go hand in hand, and it is the purpose of this paper to show that the two can and should be made one.

The fruit-grower this past season, who had land available for the growing of some one or more vegetable crops, found at the close of the season a balance on the profit side of the ledger. Whereas, had he depended wholly on his fruit crop, which in some cases was almost a total failure, he would have been compelled to have faced a disagreeable financial condition.

WHAT CROPS?

Naturally, if we include gardening in our operations we ask, what crops shall we grow? This, to be sure, depends mainly on one's location and markets. But if we will consider the general conditions, as they exist today, it will to a large extent answer the question.

The tendency for gardening is creating a demand for smaller farms. It follows, then, that farming will be more intensive. Growers will tend to produce less amounts and greater varieties. This being true, we may naturally expect that there will be an increase in the supply of such vegetables as peas, beans, radishes, lettuce, beets, cucumbers, and the like. On the other hand, on these small farms there will be a decrease in the acreage of such vegetables as potatoes, cabbage, tomatoes, sweet corn, horseradish, and vegetables of this character.

The last-named vegetables belong to what we may class as heavy and bulky. The former vegetables belong to what we may class as light, and are more easily handled. Under the light class we have vegetables that must be used almost wholly while fresh. Outside of peas and cucumbers they are but little converted into by-products.

Such vegetables must be handled with care and marketed quickly, and often they do not pay for the labor necessary to produce them. The demand for this class, during the summer season, often seems to move in waves, and prices fluctuate more readily, and the markets are easily overstocked.

Under the heavy class almost the opposite condition exists. The demand is by far more even and extends through the entire year.

Markets are not often overstocked for any length of time, and even when in this condition the stock can often be held until the market clears and losses are avoided.

The demand for vegetables under this class is increasing, both to be used while fresh and to be converted into by-products.

Still another important factor in growing vegetables of this class is that they can be transported to other sections to a better advantage and with a greater degree of safety than those under the lighter class.

With the fact before us that the small farmers will not devote their proportionate acreage to these heavy vegetables, but rather leave it to the growers who can plant more largely; also that such crops can be planted, cultivated, and harvested with less hand labor and thus be produced more economically, we must conclude that for the general crops it is to this class that the fruit-grower should devote his energy.

LOCATION AND PREPARATION.

Our attention now turns to that of location and preparation. As fruit-growers we have already learned to plant our fruit on the high elevations. This leaves the valleys or lowlands for our vegetables, and this is where they should be for the best results.

However, in selecting such land, good drainage should not be overlooked.

Vegetables are great feeders, and I do not believe that it is possible for any of us to get our ground too rich. We must fertilize if we expect to keep fertility and produce good crops. There is no fertilizer that will supply all our needs like good barnyard manure. During the past year we tried commercial fertilizers. In some cases we noted good results; in others we could not see that anything had been gained. The greatest results were noted on potatoes, the least on corn. While we believe that there is some value to commercial fertilizer, yet to be profitable we should know just what elements our soil needs and then supply it liberally.

We can not depend on commercial fertilizer alone. Humus must be supplied in some form, and if manure is not available in sufficient quantity, then some green manure crop must be grown and turned under.

Deep late fall or winter plowing for all garden truck is much better than spring plowing, for many reasons which I need not here enumerate.

Our rules for planting are about as follows: Plant potatoes deep, and just as early as the ground will permit. Extra early Adams corn will stand a good deal of rough weather. Plant early, but not too deep. Early cabbage will stand quite a freeze and almost any amount of frost. Use good, strong plants, and transplant in the field just as soon as the ground is dry enough to work.

Tomatoes are too tender to transplant until all danger of frost is past. Let the ground get good and warm; nothing is gained by transplanting tomatoes in ground that is cold. The idea that tomatoes do best on rather poor soil is a mistake. They will ripen a little earlier on such soil, but will not produce as many or as fine tomatoes as when grown on good, rich soil. If the soil is so rich that they are inclined to run to vine, be a little rough with them and so check their growth.

Up to the maturing of the crop the work has been easy and delightful. We are now confronted with the most difficult task of the whole business, that of disposing of the product. I am frank when I say that any of us can produce some kind of a crop, but very few seem to know how to prepare it for market and sell it to the best advantage. A poor salesman will more often cause a decline in the market prices than will overproduction.

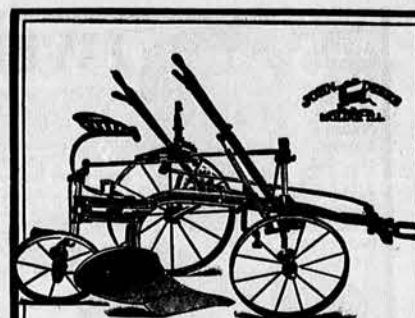
Remember this, that your reputation for the production of choice vegetables is just as vital as your reputation for fancy fruits. It is just as possible to receive an extra price for fancy, uniform size bushel of potatoes or basket of tomatoes as it is to get it for a box of fancy apples.

If you are located near a city where you can market your product from your wagon, you will find that if you prepare your vegetables with the same care that you do your fruits and be honest all the way down to the bottom of your basket, you will have a trade that no one can take from you, and your produce will bring a premium over the average market.

The same rule holds true if you are shipping to other markets. A package rightly packed is half sold, and is an invitation to buy another. It is always advisable, before planting your crop, to know to some extent where and how you will dispose of it. Make all preparations before the time of harvest. What might be a serious loss is often avoided by looking ahead.

To some a good outlet for their vegetables is found in the canning factory. While prices paid by these factories are not nearly so inviting as that received from other sources, yet there is some advantage in growing crops for them. If the factories are near at hand not much care will be needed in packing or handling the crop, the main point being to produce the greatest bulk at the least expense.

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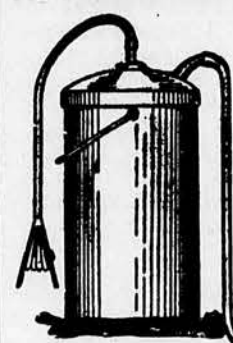
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age should be as large as possible, so that when the gathering comes it will require steady hauling to the factories. In this way the extra help can be fully employed. There then will be no loss of time or crops in having to stop and hunt for help when needed or take chances on getting them just when needed.

GARDENING UNDER GLASS.

Here we stop, but to me the most fascinating part of commercial gardening, that which requires the most skill and gives the most delightful and profitable employment during the winter months, is that of gardening under glass. In fact, no commercial plant is complete without a greenhouse to a greater or less extent. The West is behind in this department. While it is true that near the larger cities we will find plants of this kind, yet the production is confined largely to lettuce. Nearly all the other winter vegetables sold in the West come from Boston and other Eastern points. This need not be; our growers are just as expert as any in the East. But the drawback has been that there is not the demand here for these winter novelties that there is in the East, or even as far west as Chicago. Nor have our people been willing to pay the prices necessarily asked in order to make it profitable or justify the grower in the risk. Slowly these drawbacks are being overcome; we are finding that we have many points in our favor over our Eastern neighbors, the most important one being a greater per cent of sunshine, which counts for so much in successful winter gardening. When we awake to our possibilities, we will find that the North and West will prove profitable patrons. We need have no fear of the much advertised garden spots of the South. No doubt they are all right, but they are too far away to ever supply our Northern markets with fresh fancy winter vegetables such as we can produce here under glass.

The demand for such products is increasing and there need be no fear of overproduction in this line. With an increase in the supply will come more economical methods of production, which will compensate for any decrease in price. Now do not let us get into our minds, if we take up this department of the work, the idea that all we need to grow winter vegetables is a building covered with glass and heated and all of the cheapest possible, and that all we have to do is to plant and then harvest. Nothing of the kind. To begin with, this is going to be an expensive proposition, and if one is considering the building up of a commercial plant, it is best to begin on a small scale, for there is much to learn. No matter what is the size of your plant, build it as modern as if you were covering acres. Study greenhouse construction and management before you begin. It will save many mistakes; but experience will be your best teacher.

The more we know of this class of horticulture the more it will unfold to us its possibilities, and prove one of the delightful departments of our work.

WINTER RHUBARB.

I have said nothing of the crops we can grow during the winter. Let that be according to our fancy, except this one; we can all grow it with little expense; it needs no greenhouse, and but little artificial heat. I refer to pieplant or rhubarb.

Without going into all the details, a common dugout or cellar so arranged that an old stove can be set up for use on extreme cold days, and having the floor covered from six to eight inches deep with good, rich loam, without any manure, then set with the crowns taken from old plants dug late in the fall. This will produce successive pullings at very little expense of labor.

In conclusion, let me urge the fruit-growers to carefully investigate the possibilities of commercial gardening in Kansas. We are so located that when our crops mature we have good markets on all sides. We have not been supplying them. Points more

distant have been taking this business from us. Are we not, in this branch of horticulture, facing an open door of opportunity? Is it not for us to say, shall we enter?

Small Fruits.

GEO. W. HOLSINGER, ROSEDALE.

The past three or four years have, to the fruit-grower in our section of the State, been years of experience. We have encountered about every imaginable manner of discouragement that flesh is heir to, and have often been led to wonder if Shakespeare did not have us in mind when he talked through Hamlet of having "to bear the whips and scorn of time." Surely none of us can say that nature was not scornful a couple of nights last May.

We have had a splendid chance to find out that some things we have counted on will not do: important knowledge, albeit unprofitable and in some instances triflingly discouraging, if it can be said of the fruit-grower that he is ever discouraged. He is a type of man who indulges in the illusions of hope. Our president no doubt is just now indulging a thought concerning the Jonathan apples.

HOPE.

We talk of things being as free as air or sunlight. What nonsense! Why not speak rationally of things being as free as hope in the bosom of the fruit-grower? What matter if we have the hardest freeze on record one year, the drouth the next, then three or four rainy seasons in succession, and finally one of the coldest nights of winter in May, and that in the latter part of May? Does that destroy hope for us? Not so. We have hope for the largest crop of raspberries on record next year. And why not? The ground is clean, the patch is two years old, on new ground and in ideal condition. And why not hope for better things next year as we hope for brighter, better things in the beautiful unknown beyond? Hope is the stock in trade of the horticulturist, and the fruit-grower who does not indulge in its joys is likely to miss a source of real comfort in his calling.

MUST KNOW.

Success in small-fruit growing depends on knowing what will do and what will not do. Perhaps it is not unfortunate for us that we have never been able to set down rules absolutely governing conditions for success in our business. It may be a part of the Divine plan to make real men of us by having created conditions that we must master. And one nice thing about it is that if we can not command success, we can deserve it, which is worth more. However, it is so. Our rules are only general rules, and it has been proven time and again beyond a reasonable doubt that treatment of a certain kind for a fruit patch in one section of the State is not necessarily a practical way to handle the same variety in another section, to say nothing of different varieties, on different soil, under different conditions of wet and dry, and hot and cold.

If it could be demonstrated that a particular variety would do at least reasonably well under the same kind of treatment in the different sections of the State, we would still have to work out the rest of the problem that confronts the fruit-grower, namely, the variety to plant.

VARIETIES.

Fruit grown for local market where it is carefully handled and consumed within twenty-four hours after picking has usually different characteristics from the fruit which is expected to stand up for days and withstand the rough handling it receives in long distance shipments. Varieties that pay well on the local market are sometimes of little value for shipping.

It should be constantly borne in mind that papers read before this society treat generally with local conditions and are to be regarded as presenting particular results. Very few of us have the pleasure of observing

(Continued on page 108)

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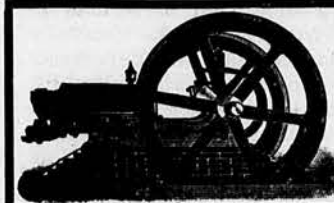
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CONTENTMENT.

Once on a time an old red hen
Went strutting around with pompous
clucks,
For she had little babies ten,
A part of which were tiny ducks.
"Tis very rare that hens," said she,
"Have baby ducks as well as chicks;
But I possess, as you can see,
Of chickens four and ducklings six!"

A season later, this old hen
Appeared, still cackling of her luck.
For, though she boasted babies ten,
Not one among them was a duck!
"Tis well," she murmured, brooding
o'er
The little chicks of fleecy down;
"My babies now will stay ashore,
And, consequently, can not drown!"

The following spring the old red hen
Clucked just as proudly as of yore,
But, lo! her babes were ducklings ten,
Instead of chickens as before!
"Tis better," said the old red hen,
"As she surveyed her waddling brood;
"A little water now and then
Will surely do my darlings good!"

But, oh, alas, how very sad!
When gentle spring rolled round
again,
The eggs eventuated bad,
And childless was the old red hen!
Yet patiently she bore her woe,
And still she wore a cheerful air,
And said, "Tis best these things are so,
For babies are a dreadful care!"

I half suspect that many men,
And many, many women, too,
Could learn a lesson from the hen
With foliage of vermilion hue.
She ne'er presumed to take offense
At any fate that might befall,
But meekly bowed to Providence,
She was contented—that was all!

—Eugene Field.

Some of the Best Things.

Since the beginning of the year business men have been casting up accounts, merchants have been invoicing goods and sifting their stock and making a place for new and better merchandise. It takes careful thought and wise consideration to do this so that there will be no loss but in the end will result in an increased trade and larger and better sales. So it is well for individuals to make an invoice, a general and thoughtful survey of self occasionally. What are the things to hold to, what to drop out that will make my life richer and more useful? This should be the searching question and can be answered only by a careful and prayerful inspection and retrospection of the inner life of the individual, and by the consideration of things that seem most worth while to him to retain. It is a perplexing question, but it is worth the time and trouble to consider it and settle it. To live haphazard, without purpose, is only half living, and to live from day to day pushed along by the circumstances and conditions as in a crowded thoroughfare with only one thought, to get through with it and out of it, is to make a failure of the real purpose of this life here in the world.

In casting about in our minds to see what is worth most to us, what we should hold to, we can be safe in deciding that things that are eternal are worth keeping and fostering. That part of us that lives on forever should have our first consideration, and whatever enriches and expands that part of us, or makes possible a better development of it, should be done. I am going to name good health among the first things to retain. A healthy soul and mind need a healthy body in which to grow and expand to good advantage. When Christ was on the earth He placed sin and disease on the same plane. It is a religious duty to be as well as you can for your own sake and for the sake of others. By proper living, eating, drinking, breathing, exercising, and thinking, a normal person may keep well. The thoughts exert a wonderful influence over the body. James Allen says: "There is no physician like cheerful thought for dispelling the ills of the body." It is sunshine and destroys many germs that breed disease, of the mind at least." Solomon discovered the virtue of cheerfulness and said, "A merry heart doeth good like a medicine."

Whatever else you drop from out

your lives cherish the affections of the heart—love and friendship. If you find that you have neglected them, that the heart is becoming chilled and numbed, set about at once to fan back into life the spark that is left until the whole heart is aglow. Hold to all that is true and real. Eschew all pretence and mere show. There is a gift that so few people possess that should be cultivated. It is that of finding in others the best there is in them, and of believing in them. It is not only good for us but helps others. Many a timid one has failed because no one trusted him. The gift of bringing out the best in others is a rare and beautiful one. A perfect trust in God, a trust that effaces all worry and fear, a confidence in the Divine care will insure a happy life.

"Finally, brethren, whatsoever things are true, whatsoever things are honorable, whatsoever things are just, whatsoever things are pure, whatsoever things are lovely, whatsoever things are of good report; if there be any virtue, and if there be any praise, think on these things."

The Feminine Martyr.

There are a certain number of human beings who seem to delight in being miserable; they always speak with the air of a martyr, and they act the part of a wet blanket wherever they go.

This individual, never happy unless miserable, so to say, is not confined to one sex, but the feminine variety is more intense in its effect upon others than is the case with the masculine kind. A depressing man is a creature from whom there is a way of escape, but a depressing woman permits of no escape. Her miserable influence is with you even when she herself is not; it wraps about you like a cloud, and makes you shiver.

The feminine martyr, the depressing woman, always speaks as if suffering from some personal slight at the hands of fate, and if you do not approach her with a profound belief in the justice of her complaints, she represents this gross neglect, or indifference, on your part. It is a sin to be cheerful when in her company. Ask her how she is in health, or how her general circumstances appear to be shaping, and you will discover that you have arrived at a very distressing moment, for she is ill, and the prospects for the immediate future are anything but bright. Question her still further, asking for details of the cause of ill-health, and you will receive a vague reply. She is ill all over, one might say; that is, she feels generally unwell, but has no specific malady.

That is a nice kind of woman to keep away from, as will be generally admitted; but consider this depressing specimen of our sex as a wife; if there is one thing which, more than any other, tends to happiness in married life, it is a cheerful wife. It is as much a woman's duty to please and make the home happy by being herself always cheerful, as it is for her not to develop into that slovenliness of manner and costume which causes a man to seek comfort in a club instead of in his own house.

A wife who cultivates a cheerful demeanor is a treasure. A husband, being a member of the stronger sex, and priding himself upon his fortitude, ought to play the role of comforter and inculcator of cheerfulness, but he does not often assume that character in the domestic drama. He expects to be comforted; that is his weakness. It may not be quite equitable to expect a wife to do it, but the more she tries the better it will be for both parties.

In any case, every woman should carefully guard against becoming an imaginary martyr, and talking in that melancholy strain that makes everybody anxious to get out of her company at the earliest moment. Experience of life teaches us that it is so

very easy to grow like that; hence the necessity for watchfulness.—New Zealand Dairyman.

Habit.

Habit, giant strong, stands at elbow of every human life, ready to model it for good or ill. To the better nature the higher man within us, habit says: "Command me to thy service and there shall be no hilltop of achievement which with my help you shall not be able to attain." Then with easy impartiality the massive giant, habit, turns to the lower nature, the baser man within us, saying: "Bid me serve thy dark passions and the sins thou lovest, and I shall bend you, break you, drag you down the dark abysses of character, till at last I bind you with the thongs of hell." The law of habit in reference to nerve and muscle is inexorable. You might as well try to trifle with the law of gravitation and attempt to stand in mid air as to dream that you can evade the iron grip of habit in the physical life. For good or ill, for beauty or deformity, for strength or weakness, habit is the master of the human body—so says the physiologist.

To break the grip of habit on the body, mind or soul is a Herculean task. What does it mean? I will tell you. It means a wrench of the man's whole nature. It means infinite patience and tremendous will power, if it ever means success. It means a fight by day and by night, a fight unto death. It means an intensity of struggle which few men have the strength of will to make. It means, finally, that for the many habit is destiny.—Rev. S. S. Estey, Ph. D., Topeka.

The A. B. C. of Health.

BY WILFRED T. GREENFELL, M. D.

(A catechism prepared for use in Newfoundland and Labrador schools.)

THE AIR.

Is fresh air good for me? I can not live without it.

Is air ever bad? Yes. It gets very poisonous.

What makes it poisonous? Every time any one breathes he throws poison into the air.

What are these poisons like? Some are poisonous gases, some like tiny poison seeds.

Will they hurt me? Yes. They will kill me in time.

How can I avoid these poisons? By always keeping in fresh air.

THE SUNSHINE.

Must I let in the sunshine? Yes—every bit I can let in.

Why must I let in the sunshine? Because nothing else cleans the room so well.

How does sunshine clean a room? It kills all the poison germs it falls upon.

Ought I to sit in the sunshine? Yes, I must always keep in it when I can.

Why must I do this? Because it will kill the poison germs in my blood.

THE WINDOW.

Must I open the window? Yes.

When must I open the window? All day and all night.

Will not the cold hurt me? Cold does not hurt anybody.

Why must I open the window? Because I can not grow strong unless I do.

Will not the drafts hurt me? I must arrange to avoid drafts as far as possible.

What good is it to open the window? It lets in the pure air to clean my blood.

WASHING.

Must I wash? Yes, as often as possible.

Why must I wash? Because a clean skin keeps me in good health.

Must I use cold water? Yes, every day.

Will it hurt me? Not at all. It will make me very strong.

How does it do that? It sends my blood flying round my body. What is the good of that? The blood carries food to every part of it, and washes away all the poisons out of it.

Is hot water good? It is better than none at all.

SPITTING.

Is it wrong to spit in the house?

A Most Valuable Agent.

The glycerine employed in Dr. Pierce's medicines greatly enhances the medicinal properties which it extracts from native medicinal roots and holds in solution much better than alcohol would. It also possesses medicinal properties of its own, being a valuable demulcent, nutritive, antiseptic and antiferment. It adds greatly to the efficacy of the Black Cherrybark, Bloodroot, Golden Seal root, Stone root and Queen's root, contained in "Golden Medical Discovery" in subduing chronic, or lingering coughs, bronchial, throat and lung affections, for all of which these agents are recommended by standard medical authorities.

In all cases where there is a wasting away of flesh, loss of appetite, with weak stomach, as in the early stages of consumption, there can be no doubt that glycerine acts as a valuable nutritive and aids the Golden Seal root, Stone root, Queen's root and Black Cherrybark in promoting digestion and building up the flesh and strength, controlling the cough and bringing about a healthy condition of the whole system. Of course, it must not be expected to work miracles. It will not cure consumption except in its earlier stages. It will cure very severe, obstinate, hang-on, chronic coughs, bronchial and laryngeal troubles, and chronic sore throat with hoarseness. In acute coughs it is not so effective. It is in the lingering hang-on coughs, or those of long standing, even when accompanied by bleeding from lungs, that it has performed its most marvelous cures.

Prof. Finley Ellingwood, M. D., of Bennett Med. College, Chicago, says of glycerine:

"In dyspepsia it serves an excellent purpose. Holding a fixed quantity of the peroxide of hydrogen in solution, it is one of the best manufactured products of the present time in its action upon enfeebled, disordered stomachs, especially if there is ulceration or catarrhal gastritis (catarrhal inflammation of stomach). It is a most efficient preparation. Glycerine will relieve many cases of pyrosis (heartburn) and excessive gastric (stomach) acidity."

"Golden Medical Discovery" enriches and purifies the blood curing blotches, pimples, eruptions, scrofulous swellings and old sores, or ulcers.

Send to Dr. R. V. Pierce, of Buffalo, N. Y., for free booklet telling all about the native medicinal roots composing this wonderful medicine. There is no alcohol in it.

Yes, and on the ground outside. It is dirty, and dangerous, and cruel.

Why? What harm does it do? It spreads the poison everywhere, and hurts everybody.

How does it do this? Spittle is full of poison germs.

How do the germs get at us? They get loose as soon as the spittle dries up, and then they fly about.

What do the germs do to us? They go down with our breath and eat up our lungs.

Must I never spit? Never, except into a piece of rag or paper, which I must burn at once.

WOUNDS.

Can I always stop bleeding? Yes, by tying the pipe that is leaking, or by binding a hard plug tightly enough over or above the bleeding point.

Is there an easier way? Yes, by tying a binding round nearer my body, and twisting it tight with a stick.

Must I put anything on the cut? Friar's balsam, or very hot water will help to stop bleeding.

Must I cover over the wound? Never cover it quite up—only pull the edges together by strips of plaster.

Why must I not cover it up? Because there is danger of keeping in poisons.

What else can I do? Always wash it well with water that has been boiled, and open it again at once, if there is any matter in it, with a sharp knife-blade which has been boiled.

Help Save One Mother's Girl.

Whose girl goes wrong? Some mother's—perhaps living, perhaps dead—but always hers.

Why do girls go wrong? Sometimes through ignorance, often through ambition, oftenest through deception.

How many girls go wrong? Thousands every year. To-day there are fully six thousand in the seventy-one Florence Crittenton Homes trying to gain courage to face a frowning world (fallen women usually get a chilling reception) and to learn some occupation which will help them to be self-supporting. This is about the average number always within the Mission walls, and yet the faces change almost daily.

The pages of the Florence Crittenton Magazine tell of these unfortunate women and girls, their needs and what you can do to help their helpers. Not all can be mission workers, but all can help those who are. Though no one whom you know, or for whom you are responsible, has thus fallen by the wayside, let us urge you to open your hearts to the desperate needs of these strangers who are so needy.

Please send one dollar for a year's subscription to the Florence Crittenton Magazine. Address A. W. Elliott, Circulation Manager, Atlanta, Ga.

The Young Folks

OL' PICKETT'S NELL.

Feel more 'an ever like a fool
Sense Pickett's Nell came back from
school.
She onct wuz twelve 'nd me eighteen
(Nd better friends you never seen);
But now—oh, my!
She's dressed so fine, 'nd growed so
tall.
'Nd l'arnin'—she jes knows it all.
She's eighteen now, but I'm so slow
I'm whar I wuz six years ago.
Six years! Waal, waal! doan't seem
a week.
Sence we rode Dolly to th' creek,
'Nd fetched th' cattle home at night,
Her hangin' to my jacket tight,
But now—oh, my!
She rides in Pickett's new coopay
Jes like she'd be'n brung up that way,
'Nd lookin' lika a reg'lar queen—
Th' mostest like I ever seen.

She uster tease, 'nd tease, 'nd tease
Me fer to take her on my knees;
Then tired me out 'ith Margey Daw,
'Nd laffin tell me throat wuz raw.
But now—oh, my!
She sets up this way—kinder proud,
'Nd never noways laughs out loud.
You w'dn't hardly thing that she
Hed ever see-sawed on my knee.

'Nd, sometimes, ef at noon I'd choose
To find a shady place 'nd snooze,
I'd wake with burdocks in my hair
'Nd elderberries in my ear.
But now—oh, my!
Somebody said ('twuz yesterday):
'Let's hev some fun w'ile Ned's away;
Let's turn his jacket inside out!'—
But Nell—she'd jes turn red 'nd pout.

'Nd onct when I wuz dreamin' like,
A-throwin' akerns in th' dike,
She put her arms clean round my head,
'Nd whispered soft, "I like you, Ned."
But now—oh, my!
She curteseyed so stiff 'nd grand,
'Nd never onct held out her hand,
'Nd called me "Mister Edward!" Laws!
Thet ain't my name 'nd never wuz.

'Nd them 'at knowed 'er years ago
Jes laughed to see 'er put on so.
Coz it wuz often talked, 'nd said,
'Nell Pickett's jes out out fer Ned."
But now—oh, my!
She held her purty hed so high,
'Nd skasely saw me goin' by—
I w'dn't dast (afore last night)
A-purposely come near her sight.

Last night!—Ez I wuz startin' out
To git the cows, I heerd a shout;
'Nd sure ez ghosts, she wuz thar,
A-settin' on ol' Pickett's mar';
'Nd then—oh, my!
She said she'd crier fer all th' week
To take th' ol' ride to th' creek;
Then talked about ol' times, 'nd said,
"Them days wuz happy, wa'n't they,
Ned?"

Th' folks wuz talkin' ev'rywhars
'Bout her a-puttin' on sech airs,
'Nd seemed t' me like they wuz right,
A-fore the cows come home last night.
But now—oh, my!
—Mather Dean Kimball.

An Old Game.

ANNA DEMING GRAY.

"Tell us something new," said
Brown Eyes with nose pressed flat
against the library window.

"You must have had some plays
when you were little, and we want
something that we never even heard
of before." Blue Eyes clasped her
hands about her knees, and gazed out
at the dreary drip, drip, drip of the
rain that fell with insistant monotone.

I looked at t' two disconsolate
faces, and laughed. "It's more gloomy
in here than outside," I said, "with
two such faces. I'll see if I can dispel
the gloom. What did I play when I
was little? Was I ever little? What
did I play?" And then a picture came
before me: A big wood fire in an old-
fashioned fireplace. The backlog all
aglow; a long, wide room almost dark
in the corners; a rag carpet on the
floor; the firelight gleaming on the
brass dog-irons; the time called "twi-
light" in Kentucky; an old man with
white hair and merry twinkling eyes;
two boys and two girls on the floor in
front of him, watching the pictures in
the coals; a little to the side a small
colored boy, lying flat on his stomach,
his head to the fire, and an old Web-
ster's spelling book open before him,
while he drones in an undertone,—"d
—double o, ah, doah—d—double o, ah,
doah. Do curtinly seem like dis is a
powerful hyard lesson."

"Come children, let's play fist-stalk,
and Charley, you keep at that speller
until you learn those six words, you've
worked at them three nights now."

We get up on our knees beside
grandfather's chair, and place our
fists, one on top of the other, on his
knee.

"Fist stalk, take it off, or I'll knock
it off," he says. "Take it off," says
the child. And so the game goes on.

the same question and answer until
only one small fist is left.

"Fist stalk, take it off, or I'll knock
it off." "Then knock it off," answers
the child.

"What have you there?" asks the
leader. "Bread and cheese," is the
answer. "Where's my share?" "The
mouse ate it." "Where's the mouse?"
"The cat caught it." "Where's the
cat?" "The dog chased it." "Where's
the dog?" "The man whipped him."
"Where's the man?" "The ox gored
him." "Where's the ox?" "The
butcher killed him." "Where's the
butcher?" "The rope hung him."
"Where's the rope?" "The knife cut
it." "Where's the knife?" "The ham-
mer broke it." "Where's the ham-
mer?" "Behind the church door
cracking chestnuts, and the first one
who speaks or laughs out loud, shall
have two pinches, and a little red box
on his cheek."

How hard we used to try to keep
from being the first one to speak or
laugh. The small black boy fairly
rolls over with glee and excitement,
and the spelling book is forgotten.
Foolish? Yes. Perhaps; but I know
a time when it seemed quite exciting
and altogether delightful. The gas
twinkles away in the tiny grate, and
the picture fades out. The rain drips,
drips outside, and I begin telling the
game to two little modern children,
who will probably think that it is al-
most too foolish to be funny. But
looking back across the sober years, I
know better.

The Little Ones

POPPING THE CORN.

This is the way we drop the corn,
Drop the corn to pop the corn;
Shower the tiny lumps of gold,
All that our heaping hands can hold;
Listen awhile, and, blithe and bold—
Hip, hop! Pop corn!

This is the way we shake the corn,
Shake the corn to wake the corn;
Rattle the pan and then behold!
Where are the tiny lumps of gold?
Pretty wee white lumps in the fold!
Tip-top pop corn!

—Congregationalist.

Janie's Left Hand.

Janie was left-handed, and so was
grandma, and so had been great-
grandma; but mama wasn't—so she
didn't understand how one felt
about it.

One day, as Janie sat in her little
chair in the bay window, sewing on a
quilt for her dollies' bed, she looked
up at grandma, who was sewing, too,
but beside the little table near the fire.
And grandma held her needle in her
right hand! "Why, grandma, I thought
you were left-handed, and now you
are sewing with your right hand!"
said Janie, surprised.

Grandma laughed, and patted the lit-
tle curly head—for Janie had come
close to grandma's chair.

"I'll tell you, if you wish, how that
happens," said she, in what Baby Carl
calls the "story voice."

Janie said, "Oh, yes, please," and
brought her little chair, and grandma
began.

"When I was about ten years old I
went to a little party one afternoon,
and all the girls had their sewing.
I had some apron-strings to hem—three
pairs of them. You know we didn't
have sewing-machines then, and every
little girl had to help with the family
sewing.

"We were all sitting quietly sewing,
when Charity Johnson, who always
loved a joke, began laughing at me
because I held my needle in my left
hand. Her teasing was hard to bear,
for about all the charity that girl had
was in her name, and she loved to
tease.

"I wouldn't be seen sewing with
my left hand," she said, mockingly.
"The other girls took it up, and I
soon lost my temper and began to
cry."

Grandma paused, and Janie said,
"Yes," expectantly. You see Janie
had the same kind of temper, as well
as the same name, grandma had when
she was a little girl.

"So then," grandma went on, "I

jumped up and ran home. No one was
there but father, and he petted and
soothed me, and after a while I felt
better.

"Then I took my work and went and
sat up in the branches of a big, up-
rooted tree that lay just in the edge
of the woods, at the foot of the hill.
It was a favorite spot, and I always
felt like a better girl when I was
there. Someway it seemed a different
world altogether. Well, I sat there
and thought things over, and after a
while I made up my mind to one
thing: I would learn to sew with my
right hand."

Here Janie drew a long breath.
How often she had wished that she
could learn to use her right hand as
the other girls did.

"Well," continued grandma, "that
was a long afternoon, but it was gone
before my task was done. I would
sew a few stitches, rip them out, cry,
and begin again. But at last I was
satisfied, and finished up my ties, car-
ried them into the house and laid
them in father's lap.

"With my right hand," I said proud-
ly. And from that day I sewed with
my right hand; but it was several
years later before I learned to write
with anything but my left."

Janie went away thoughtful, and
when grandma looked up, the little
girl was sewing with her right hand.
—Ruth West Bisbee, in Club Member.

Club Department

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Program—Kansas Day.

Responses—Noted Kansans.

1. The Days of Sod Houses.
2. Kansas Colleges.
3. Kansas Literature.
4. Reading.

The admission of Kansas as a State
January 29, makes this an appropriate
program. In response to rollcall men-
tion a prominent Kansan, man or wo-
man.

1. This topic will comprise the early
history of Kansas and the contrast
with Kansas of to-day will be interest-
ing.

2. The educational advantages of
Kansas are great and the number and
excellency of its colleges are surpris-
ing.

3. Every one should know something
of the literature of his own State if it
has any, and Kansas is noted for its
literature both in quality and quantity.

4. Something from Wm. Allen White
or one of Whittier's poems on Kansas
may be read.

Prentiss Reading Club.

The Prentiss Reading Club adjourns
through the summer months, but holds



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its meetings on alternate Thursdays
from September to May. There have
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tions this year, but we are not discour-
aged. We are doing our third year's
reading in the Chautauqua Course, and
find it very helpful and instructive.
This year, being American Year, is es-
pecially interesting to us. We have
held a number of social gatherings
during the season which have been
much enjoyed. Our officers are elect-
ed for the next year at the last meet-
ing held in the spring, and a program
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ing of three members. This commit-
tee meets before the first meeting in
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Two or three copies of the yearbook
are made and these are passed among
the members and each one makes a
copy for herself. In this way we
have a yearbook with no expense and
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With a Traveling Library this

winter, as we have had for four previous years. Our husbands enjoy the books as much as we do. We apportion the expense among the members and the cost is very slight for any one. All club expenses are met in this way.

We are always glad to hear from other clubs through the columns of the Club Department, and especially glad to hear of the organization of new clubs, since we know what a benefit the country club is to the country woman.

Mrs. S. Q. ADAMS.
Mitchell County.

Small Fruits.

(Continued from page 103)

methods and conditions outside of our county, and so when I tell you that our experience is thus and so, it should mean to you that I am reporting on a local condition that does not necessarily fit into your case.

In presenting thoughts for a meeting of this kind, representing so many different conditions, we should be careful and not jump at conclusions. Above all, we should not take one season's results as a basis from which to judge the merits or demerits of a type or variety, for a single season may be exceptionally favorable or exceptionally unfavorable, and conclusions thus obtained may be erroneous and quite frequently they are.

REQUIRES LABOR.

The cultivation of small fruits generally is a tedious and laborious job at best, and must ever be so because of the great amount of manual labor necessary. To neglect for any reason even for a short time in the growing season is often disastrous, for the cost of cleaning out is not only greater but the smothering effect often materially injures the plant. Sometimes, as in the strawberries, great injury is done by having to pull weeds, the strawberry plant coming out with the weeds, or being loosened in the ground. The old adage, "a stitch in time saves nine," expresses it pretty well, but it often happens that we can not take the stitch; at least it is so with us. For what with the multiplied work of warm summer, the picking season, and the men going off to the harvest field, we never yet have had a season that something was not neglected. And I might add, there was never anything neglected that we were not sorry for it. If there were no injury from neglect, it would be still cheaper to keep the ground free from weeds. It costs as much to clear out the weeds as the necessary cultivation, if applied at the right time.

Some kinds of fruit are not easily kept in good condition, particularly late in the season when cultivation must necessarily be stopped. Raspberries, blackberries, dewberries, and the like spread to such an extent that the passageways between the rows are closed and if cultivation is continued it is likely to work more or less injury to the growing wood. If the ground is kept clean, we have no assurance that morning-glories and like growing weeds will not come on after cultivation must necessarily stop.

COVER CROP.

Sometimes, as on hilly ground, a light cover crop is desirable to prevent washing. But if there is much trash on the ground there is great danger from fire, and we who live along the railroad and near large cities where there are lots of trespassers know something of this great danger.

ROTATION.

Field mice and rabbits like nothing better than a raspberry patch that has been allowed to grow to foxtail and crab-grass. So everything seems to be in favor of clean cultivation where it is possible to give it. We hear a great deal of talk about rotation of crops for cereals and general farm products. I believe it is coming to be as necessary for the fruit-grower to rotate his crops as it is for the grain-grower. The grain farmer rotates because of soil exhaustion; the fruit-grower to get rid of insects and fungus. We can not expect to rotate

fruit as often as grain, but it is my opinion that when a field of berries begins to run down the best thing is to plant another field somewhere else and plant that ground to another kind of fruit. The raspberry, for instance, usually ripens good crops until seven or eight years old; they seldom do well after that. For some reason, either from continued cultivation or from the crown growing upward, or from the washing away of the soil, the crowns after a few years are all pushed out above the surface of the ground and have a generally unhealthy appearance. Then, too, old patches suffer more from fungus diseases and are generally unprofitable.

With blackberries the same thing is true, and fields where rust develops usually have to be abandoned in a few years and planted to something else. Gooseberries are short-lived at the best, and when the gooseberry begins to fall there is little hope for it. Strawberry plants that have fruited do not send out new plants readily and after two or three years become so infested with insects of various kinds as to be entirely unsatisfactory.

And so experience of the past few years plainly indicates that rotation is coming to be very necessary in order to get away, partially at least, from insects and fungi.

There is one serious drawback to rotation; all small fruits are not suited to the same kinds of ground. The raspberries delight in a rich, black soil, while blackberries prefer a clay subsoil with a sandy loam top. And since this is true the individual will be at the painful necessity of working out his own scheme of rotation to suit his own soil, elevation, and drainage conditions. We have come to find also that elevation is a very important factor, not only in small-fruit growing, but in fruit-growing generally.

FROST.

The fruit bud at blooming time is very susceptible to frost injury and there are no successful methods of guarding against it. When it is possible, fruit should occupy the high ground, which often escapes a frost that seriously injures the fruit on adjacent lower ground.

It sometimes happens that a belt of standing timber across the lower end of a draw will cause the damming up of the cold air producing a frost on the hillside while lower altitudes are not affected.

VARIETIES.

As to varieties to plant, it is a pretty hard matter to advise another, as there are so many varying conditions to be met.

At present we are planting Warfield, Dunlap, Aroma, and Marie strawberries; Kansas and Cumberland raspberries; and of the reds, Loudon, Thwack, Miller, and Cardinal; of the blackberries, Snyder, Eldorado, Kenoyer, Mersereau, and Early Harvest; all seem to be profitable sorts. The Houghton gooseberry is the only one we have tried that is of much value to us. However, it is only fair to say that we have only tried two or three kinds. Downings are still in great demand, so I suppose some people are making money growing the Downing. Of the currants, Red Dutch, Cherry, Red Cross, and North Star all seem to be more or less popular. We have quit growing all kinds of currants; other things are more profitable for us.

Fungi.

LUMINA C. R. SMYTH, PH. D., TOPEKA.

The title of my paper as it appears in your program is appallingly vast in its scope, and to do justice to it would require far more time than has been allotted to me. The endeavor to save space in the printing of the program shortened the title but lengthened the subject and renders it difficult to condense it to a brief paper.

GENERAL CHARACTERISTICS.

It was my intention to give a short outline of fungi in general, dwelling particularly upon those forms that are of most interest to the horticulturist, placing more stress upon the life his-

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tories and parasitic habits of some of the common and pernicious forms than upon the prevention and remedies, though I do not intend to omit that phase of the subject entirely. It is an acknowledged fact that vast injury is done annually to plants of great economic importance by the attacks of these lower plant organisms. It has been demonstrated that there are, in most cases at least, efficient methods of keeping these diseases in check. But it is certainly true that to fight them most successfully we must know something about our enemies, so that we may recognize them, the vulnerable points at which they are likely to seek to gain a foothold, and the character of the injuries they inflict. The human physician studies anatomy, bacteriology, and materia medica before he attempts to treat his patients; so the plant pathologist studies botany, mycology, and fungicides before he ventures to prescribe for ailing plants. It is true that there are various methods of learning to doctor sick plants that would not be tolerated in the medical profession, since the life of a plant is not held very sacred and neglect and mistakes are not rated as criminal when plants are under treatment; but even so it is far more profitable and effective to know what the causes of the difficulties are, what are the best remedies to use in each case, and when is the best time to apply the remedy. The plant pathologist needs the cooperation of the intelligent horticulturist to do his most effective work just as the human physician finds the intelligent parent or trained nurse his most helpful, nay indispensable assistant in caring for his patient. So we see that present methods require the horticulturist to know something about fungi and their method of injuring plants; and public sentiment among us is coming to hold that it is no more right for a person to harbor in ignorance a diseased and disease-spreading tree than it is to harbor a person having the smallpox, without making an effort to protect the public from infection.

The fungi constitute one of the great groups of the lower plants. Their relationship comes nearest to what we know commonly as the "pond scums" or algae. They are separated from the algae on account of their lack of green coloring matter. Scientific study has discovered that plants having this green coloring matter, chlorophyll, when exposed to sunlight and growing in soil or solution

having a slight percentage of iron have the power to take carbon dioxide from the air, water and some of the nitrogenous compounds from the soil, and combine them into the complex food substances, starches, sugars, fats, oils, and albumins. This process of food construction is called "photosynthesis" and is possessed only by organisms having chlorophyll or its equivalent. Since the fungi have no green color they can not manufacture their own food and must get it from some source already prepared. If they obtain it from living organisms they are called parasitic, while those that subsist on decaying organic matter are called saprophytic. It seems probable that the fungi had the power to manufacture their food at some time but the habit of feeding on other organic matter produced degeneration which in time renders an organism or an individual absolutely dependent.

ROBBERS.

Owing to their feeding habits, then, we do not find in the fungi those organs intended for the preparation of food but instead we find organs for drawing the cell sap from the host plant. The entire fungus may even live within the body of its host, pushing its fine, thread-like mycelium among and into the cells of the plant upon which it feeds. Those which live more on the exterior send beneath the surface specialized threads called "haustoria" to absorb nourishment for the rest of the fungus. Not many of the fungi have specialized organs for storing food, but depend upon the continued life of their host or upon their own great reproductive facilities. For it is an interesting fact that in spite of the injury which the host suffers, the presence of the parasite often stimulates excessive growth. There are some forms that do possess storage organs and these are interesting and peculiar.

REPRODUCTION.

But the part of the fungus that is most highly specialized and most conspicuous is that devoted to the maintenance of the race, the reproductive portion. However concealed the growth may have been, underground or within the body of the host the fruiting portion is more or less exposed in order that the spores may be widely disseminated. Fungi reproduce by means of spores, not seeds. There is a technical distinction; spores and seeds are not analogous and the terms are not synonymous.

A spore is a single reproductive cell formed externally in a cavity or sac which is able to germinate directly to form a new individual. A seed is an embryo plant enclosed within an ovule and surrounded by integuments. The seed is an exceedingly complex structure and involves the further development of an internally formed spore.

The spores of fungi differ from each other in a great variety of ways. The methods by which they are produced are not all alike. The organs on which they are borne vary greatly in complexity. But the spores and their methods of production and the peculiarity of the fruiting bodies are so characteristic that the classification of fungi is almost entirely based upon these characters.

APPEAR UNDER MANY FORMS.

It is not an easy matter to classify the fungi. The reasons are too numerous to give here but one is our imperfect knowledge of the complete life histories. It not infrequently has happened that one stage of the fungus was all that was known when the plant was first described and named. That stage would be placed with one group and a later stage would not be recognized as belonging to the same fungus.

The best examples of this might be found in the case of "cedar apples" and rust on apple leaves; or the rust on barberry and wheat rust. And it was a long time before the mummied peaches that hung on the trees through the winter were known to be the storage bodies that gave rise to the spores of brown rot. When the life history seemed incomplete or the facts were unknown such fungous plants were grouped "Fungi imperfecti" and pigeonholed. Now they are being sorted out of chaos, linked together, and properly placed with those that are similar. And it is a constant source of interest to learn the different stages of the same plant and the various hosts upon which a single species may live.

SPORE FORMATION.

The simplest method of spore formation is by the constriction of specialized threads called "hyphae." Spores may arise by this method either singly or in chains. More elaborate forms have their spores enclosed in special sacs and still others have them borne on stalks in the folds of special fruiting bodies. In some forms the spores are motile; these are necessarily aquatic or moisture-loving fungi. Others are dependent upon other agencies for distribution. Sometimes the spores are formed after the union of two elements and we speak of this union as conjugation, the uniting elements are called gametes. This process of spore production is not always known but it is by no means unusual. In fact, some suspect that it always occurs before certain spores can be formed. Those spores resulting after conjugation are called sexual spores, those which are not preceded by union of gametes are non-sexual.

When a spore is shed and the conditions are right, it germinates. Some require a period of rest first, others wait for more moisture, and still others require higher temperature. Many will germinate at almost freezing temperature; others find about 25° C., 77° F., most favorable; and some require the temperature of the alimentary canal of some bird or animal. Heat above boiling destroys their vitality. Oxygen is always necessary. If the spore is unfortunate enough to sprout too far from a possible host the growth soon dies. If it is properly situated the young hyphae enter through a pore of the leaf or a break in the plant tissue and the growth continues within the host's body. Or the hyphae send little rhizoid-like threads called haustoria into the tissue of the host to draw the nourishment while the remainder of the growth proceeds externally.

GROUPS.

The lowest fungi (Phycomycetes) are mainly aquatic in habit. The white rust of the mustard family, however, requires merely moist conditions at

certain periods. The threads of the mycelium or vegetative portion of the algal fungi have no partition walls during the time of spore production. The fungi of this group most menacing to gardeners are: the damping-off fungus, so destructive to young seedlings; potato blight; dry rot of stored vegetables, especially all of the potato family; the downy mildews (almost every family of plants has some downy mildew); the white rust of the mustard family; the black molds, which are the bane of the housewife when they attack bread, cake, and pastry.

The black molds are mainly saprophytic but are interesting because in them we find incipient parasitism. Having a well-cultivated taste for canned fruits they are now developing an appetite for fresh fruit, and have been found attacking ripe fruit through minute wounds and even through thin skins. Some of the black molds are of economic importance because of their ability to convert starch into sugar, and then another fungus, yeast, is used to change the sugar into alcohol. If alcohol had no other use aside from that of a beverage I should scarcely dare mention the above fact in Kansas.

The sac-fungi (Ascomycetes) produce their spores in sacs. These vary in shape and size but the number of spores enclosed is always definite. The formation of these sacs is always preceded by conjugation. Many of the so-called "fungi imperfecti" have been found to belong to this group, and among the well known sac-fungi we include: leaf curl; plum pockets; green and blue molds and their allies; powdery mildews; ergots; strangling fungi; black knot; cup fungi; the edible morels and their allies; and truffles.

The third group of fungi are the stalk-bearing fungi (Basidiomycetes). To this group belong the rusts; trembling fungi; club, coral, and pore fungi; "mushrooms and toadstools" or gill fungi; puff-balls; earth-stars or geasters; birds-nest fungi; and carrion fungi.

In this group the spores are borne externally at the end of special stalks produced by the hyphae. In the highest of these the hyphae are compacted together to form an elaborate fruiting body. The rusts have the basidia or stalked spore cells arising directly from the winter spores.

BENEFICIAL FUNGI.

Now I do not desire to give the impression that all fungi are to be considered harmful. Some, like yeast, are almost indispensable; and many are of great importance. Their work of hastening disintegration of waste and decaying material is of great benefit. Some are of value as food and are classed among the delicacies of the table and the gathering and preparation for market of these forms has become a recognized industry. Many times, too, innocent fungi busied at their work of using up dead tissue are accused of doing the damage that has already been done by some other organism.

SOME DESTRUCTIVE SORTS.

The soft rots belong to the algal fungi and attack almost any kind of ripe fruit. They are especially injurious under damp conditions. Although they are aided in entering the fruit by injuries to the skin they can enter thin-skinned fruits easily.

The brown rot is a very different matter. This belongs to the sac fungi. This rot (*Sclerotinia fructigena* (P. Sclrt.) is especially destructive to peaches in States where they are grown. It will attack almost any stone fruit and even apples, though rarely. It begins to show its work as soon as the fruit ripens, and while it may confine its attack to ripe fruit alone it also is known to injure rather green fruit and to extend even to the young twigs, leaves, and opening flowers. Its appearance is marked by brown spots that rapidly spread in size and become very soft, and are finally covered by a soft brown powder. These powdery spots are masses of summer spores ready to be scattered

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"Discovery" is not so good for acute coughs arising from sudden colds, nor must it be expected to cure consumption in its advanced stages—no medicine will do that—but for all the obstinate hang-on, or chronic coughs, which, if neglected, or badly treated, lead up to consumption, it is the best medicine that can be taken.

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to other fruits, germinate at once, attack the tissue, and swing around a brief cycle of existence. Injury to the skin of fruits by insects and other agencies hastens the damage, which is terribly swift anyway.

While connected with the Ohio State Agricultural Experiment Station, at Wooster, Ohio, I assisted in some tests to determine how long it took to infect with summer spores of brown rot. When spores were placed on fruit free from blemishes by means of a camel's hair brush the fruit was badly spotted at the end of forty-eight hours. Fruit that was infected by pricking with a needle that had been brushed over decayed fruit was entirely worthless at the end of two days. Peaches that are infected with spores of brown rot are in decidedly bad shape two days after shipment.

In the summer of 1906 my husband sent several baskets of choice Elbertas to Denver, Col., which had been carefully hand picked and were still firm and free from rot, but had been infected with brown rot by wind-blown spores. When they reached their destination over half of them

were badly rotted, especially those in the bottom of the basket where ventilation was not good.

MUMMIES.

For a long time only the summer spores of brown rot were known. Finally it was noticed that many of the fruits that were badly decayed did not drop off but dried and clung to the trees all winter. These were named "mummies" and eventually it was discovered that these mummies were storage stages of the brown rot. When warm spring days come these develop a layer of sacs on the surface and in these sacs are borne spores that germinate, attack the fruit and give rise to our well-known summer spores. The removal of all these mummies from the trees and their destruction, together with portions of affected branches as well as the debris beneath the tree is necessary to reduce the injury in the following year.

I know of a small orchard so badly infected with fruit rot that the odor from the infected trees was positively sickening. Later in the year (1906) I was talking with the owner of the place and told him of the connection

of the mummied fruit with the rot and advised him to remove all mummies from the tree. His face expressed incredulity but for politeness he removed those he could reach from the ground easily. Others were left and some are still clinging in their effort to carry infection over through a year without any fruit.

SOME BAD ONES.

Black knot (*Plowrightia morbosa* (Schw) Sacc.) which has been so destructive to plum and cherry, is one of the sac-fungi. The knotted portions of the stem and leaf are storage bodies. Many States have found it necessary to compel the complete destruction of infested trees, and severe pruning of the diseased portions is an absolute necessity; as the hyphae penetrate the tissues far beyond the portions where the knots are evident. The entire hyphal body, called mycelium, lives within the bark, ruptures it, and causes the underlying wood to become swollen and soft. It feeds on this tissue, and eventually forms a dense mass of mycelium on the outside of the branch. This is yellowish-brown at first, and gives rise to numerous summer spores. In the fall this mass becomes blackened and within it are formed pear-shaped capsules which are lined with a layer of elongated sacs each containing eight spores. These capsules open by a terminal pore from which the spores escape after the sacs burst in the spring. Pruning of the knotted portions and persistent spraying with Bordeaux at the time of germination of the spores are usually effective.

Plum-pockets and leaf-curl are both caused by sac-fungi. Pockets are also formed on cherries. Fruit suffering from this latter disease becomes abnormally enlarged, turns yellow, then gray from the coating of spore sacs that cover the outer portion. The entire fruit becomes soft; there is no pit formed. The spore sacs are elongated and each contains eight spores. These spores may germinate and affect a new host directly. The mycelium lives within the host year after year when once it gains admission, and it is not safe to use grafts or buds from trees which are once infected. If done in time, severe pruning of the portions known to be dis-

eased may save the tree and the rest of the orchard from the infection.

MILDEWS.

The powdery mildews are sac-fungi that do not live within the body of the host but can be seen on the surface of the leaves as a white, moldy covering. The summer spores are produced in enormous numbers. They are pinched off in rows from the end of the hyphae and their abundance makes a dust-like covering to the leaf that gives name to the group. In the fall minute spheres are formed which become yellow and finally dark brown or black. These are sac capsules and contain one or more sacs of two, four, or eight spores each. These capsules have no regular aperture or method of opening, but they often possess elaborately shaped appendages that may be branched or coiled at the tip and which form a sort of crown.

All the powdery mildews, when seen through the microscope, are marvelous in beauty because of the reticulations of the capsule or perithecium, and the gracefulness of the thread-like appendages.

Although they live externally, these powdery mildews are often serious parasites because of the injury they do to the leaves. They are found on a great variety of hosts, such as the following: A few grasses, cucumber, cultivated pea, vetch, and crowfoot, grapevines, willow, elm, cherry and plum, apple, etc., lilac, strawberry, hops, gooseberry, and roses.

Some special inquiry has been made concerning the mildew so prevalent on roses. This is one of the downy mildews, *Sphaerotheca pannosa*. It is a serious disease on the crimson rambler and renders the plant very unsightly. The leaves are covered with a fine white coat and finally become distorted and stunted. The summer spores are in chains at the end of erect hyphal threads and spread rapidly to the young shoots. Toward late summer or early fall there appear dark sooty particles. These are sac capsules. Each capsule contains one eight-spored sac. The capsule does not open until spring. The spores then germinate by sending out a slender tube from which the new mycelium and sucking haustoria develop. The summer spores are most to be dreaded as they spread the infection much the fastest. Flowers of sulfur dusted on the leaves will kill the mycelium and the summer spores. Florists paint their steam pipes with a mixture of oil and sulfur. Potassium sulfide, or an ammonical solution of copper carbonate is also used as a spray. Outdoor spraying can be done with Bordeaux; but the sediment on the leaves is not much prettier than the mildew.

APPLE SCAB.

By far the most serious disease of the apple is known as apple scab, *Venturia pomi* (Fr.) Wint. This is another of the sac fungi and has more than one kind of spores. The fungi first makes its appearance on the leaves in early summer. It produces circular spots of a light gray color which spread and combine. They turn olive green and later, black. These portions of the leaf are covered with a layer of upright threads which give rise to the summer spores. These hasten the spread of the disease to unaffected portions and to other trees. Badly affected leaves are often distorted and shed; and so many other leaves are prevented from functioning normally that the vitality of the tree is seriously impaired. Cold damp summers seem especially conducive to the spread of the disease. The spots are not confined to the leaves alone but extend to both stem and fruit. The fruit spots are dark brown to black with a whitish rim, and are quite scabby in appearance. They are not over half an inch in diameter and are more abundant toward the blossom end. The value of the fruit is always lessened for the market if any of these are present and in many instances the fruits are deformed, dwarfed and even drop from the trees while still young. Affected portions gap open and allow



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spores of soft rot to gain a foothold. The winter spores are two-celled, eight two-celled spores being formed in each sac. The sacs are enclosed in a capsule borne in the tissue of the leaf.

BORDEAUX.

Various recommendations have been made to subdue the disease. Spraying with Bordeaux has been found effective when combined with proper care as to the cleanliness of the orchard. A winter spraying of copper sulfate followed by Bordeaux just before and just after blossoming with three or four later sprayings at intervals of two or three weeks depending on the rainfall and coolness of the season have been found of great benefit. Orchards where the trees are well spaced, properly pruned, and the ground beneath kept cultivated or at least free from accumulated debris of diseased leaves are not likely to be seriously attacked unless one is unfortunately close to a slovenly neighbor. Those of you who are careful in the care of your own orchards may also appreciate laws compelling your neighbor to keep his premises free from infectious things.

CEDAR APPLES.

Among diseases that may do considerable injury to apple orchards are the rusts, *Gymnosporangium* species. These form large, somewhat swollen yellow spots with beaklike projections on the under surface of the leaf. If extensive in their development, they cause great loss of foliage and considerable injury to the tree. These spots with their beaklike projections and yellow summer spores are the cluster cup stage of a rust that passes part of its life on the red cedar. Nearly every one is familiar with the "cedar apple" as it is commonly called, and many know that it is related to apple leaf rust well enough to refrain from planting red cedar as a protection to a young orchard from wind. In dry weather these cedar apples are not noticeable; but during the warm spring rains they produce gelatinous stalks of a vivid orange on the surface of the dark brown excrescences, and these are where the winter spores are to be found. This is an excellent example of a fungus that divides its life between two widely different hosts. There are several spe-

cies of *Gymnosporangium* that effect apples and cedar and other trees of the juniper type.

RUSTS.

Wheat rusts, *Puccinia graminis* and *P. Coronata* are examples of rusts that live on two hosts, the former passing its cluster cup and pycnidia stages on barberry and the latter on buckthorn, while the uredo and teleuto spores are on wheat. There are also other wheat rusts that pass their cluster cup stage on native grasses. It is also rather definitely shown that it is possible for a rusts to omit one of these stages of spores and to continue for a long period without producing the winter spores bringing forth generation after generation of summer spores under open weather conditions.

The rusts seem to have the greatest variety of hosts for the single species of parasite and the largest number of different spores. As many as five distinct kinds of spores are produced in the life history of some of the rusts. And if some required two hosts and pass different stages on each, others may live on a great many different plants equally well during all stages.

The majority of the stalked fungi, *Basidiomycetes* are earth-loving or wood inhabiting saprophytes. Aside from the rusts and smuts, which are the most destructive disease-producing members of the entire group the timber and timber tree diseases rank as almost the only other undesirables. As food producers the stalked fungi rank high since they include all of the edible mushrooms, pore, club, and tooth fungi as well as the puff balls. Many of the shelf fungi are wrongfully accused of injuring trees. In the great majority of cases the carelessness of man, in hitching horses where they can injure the bark of a tree, or neglecting to apply preventives to unavoidable wounds has been the opening wedge for a fungus that could not have made an attack unaided.

You see, doubtless, the length to which my paper might extend if I attempted to mention all of the more common injurious forms. It is a subject which never loses interest; for the more one learns the more he desires to learn about them. There are

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other disease-producing species which are of more importance to the forester, to the farmer, to the florist, than to the horticulturist, but I have endeavored to confine myself to those most in jurious to fruit and fruit trees.

The Strawberry from Planting to Fruitage.

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PRELIMINARY PARLEY.

The strawberry gives more satisfaction to planters and consumers than any other berry fruit raised on American soil.

There are more points of excellence in the strawberry than in any of the berry fruits. There is a greater area of land in the United States devoted to strawberry culture than there is in all the nations of Europe. The strawberry is being grown successfully from Maine to Oregon, and from Lake Superior to the Gulf of Mexico and Florida.

Some varieties are more prolific than others in certain localities, but the commercial grower can grow them on top of the mountains, in the valley, or out on the plains of Kansas.

SOIL FOR STRAWBERRIES.

The strawberry will adapt itself to a great variety of soil and location. Different varieties require somewhat different conditions of climate and location. To make success more sure, we must have good soil, and that well prepared for receiving the plants. The preparation of the soil should have a beginning the year previous to planting, by the cultivation of some garden vegetables or crops, such as beans, cabbage, Irish or sweet potatoes, turnips or tomatoes. Where these crops have been thoroughly cultivated and kept clean, there is no place about the farm that will equal it, for all soils are kept alive and active by much stirring and clean culture. After these crops have been gathered, the land should be plowed as late in the fall or early in the winter season, before hard freezing. The following spring make the surface level by the harrow and a leveler.

PLANTING THE BERRY PATCH.

The most successful berry-growers plant as early in the spring as possible, and the roots of the plants should be clipped or shortened. For commercial growing, set in rows from 3½ to 4 feet and 18 to 20 inches apart, in rows. For setting plants I have always used a garden trowel and a line to make the rows perfectly straight. Many planters, however, use a spade for opening the soil, and a boy, with a bucket, carrying the plants, and placing the plant back of the spade, which is thrust in the soil at an angle of forty-five degrees. The plant is held by the boy until the spade presses the plant firmly in the soil with his foot. Some berry men claim that is the fastest way of planting; but I have never succeeded as well with the spade as with the trowel. Some large strawberry-growers have machine planters moved by horse power that plant five or six acres a day.

CULTIVATION.

At the beginning one should work around the plants very tenderly with a light steel rake, after which use a hoe to clip the young weed growth. The second cultivation should be done with a light fourteen-tooth cultivator. This is the best implement for thoroughly pulverizing the soil into fine particles. By using this implement every ten days, and also by stirring soon after hard, beating rains, the soil can be kept in fine shape throughout the season. This cultivator can be worked so closely to the plants that but few weeds will be left for the hand-weeder. When the young runners start out to set themselves in the soil, the mark made by the outer tooth or outside of the cultivator, beside the row, leaves a fine place for the young plants to establish themselves in well-pulverized soil. Then, by the next cultivation, there will be another lot of runners ready to fall into line an inch or two from the last ones set. By thus training the runners the rows gradually widen until the rows are

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from sixteen to twenty-four inches wide.

In case of long spells of wet weather, weed growth may become so strong that the pulverizing cultivator can not destroy them. Then the five-tooth Plantet cultivator must be used to destroy the weeds, so that the pulverizer can be used thereafter. Weeds that appear among the young plants that are taking root, will have to be destroyed by hand weeding. It requires careful attention from planting to the last of September to get well-balanced rows of plants for fruitage the second year after planting.

WINTER PROTECTION.

The importance of mulching is well understood by all commercial berry-men. All young berry fields of one season's growth should be well covered with the first bottom prairie hay or wheat straw that is free from chaff. The strawberry is a thirsty plant when loaded with berries, and during dry spring seasons a good pile of straw kept near the berry patch to fill the spaces between the rows will greatly assist the crop to better fruitage.

SOME POINTS ON POLLENIZING.

Pistillate or imperfect variety will vary in size and product when pollenized by different staminate varieties, so if a fine berry is desired, pollenize with a firm variety. If size is desired, pollenize with a large berry. In fact, whatever peculiarity you wish to transmit to pistillate, seek it in a perfect sort to pollenize it.

DO STRAWBERRIES DETERIORATE OR RUN OUT?

Some varieties wear out by being planted on poor, thin, poorly prepared soil, followed by slack moisture. The strawberry will also soon deteriorate if kept in the same field, when the new plantings are set where old beds have fruited two or three years. There should be an interval of at least three years (and five is better) before using the soil for strawberries. During this three or five years' rest, the ground should be sowed to red clover, cowpeas, or manured and devoted to garden truck under thorough tillage.

OUR IDEALS.

The ideals of many berry-growers are still in the shadows. The perfect strawberry is not yet in sight. The ideals of a few berry-men are great size, and others, large product, and yet others, superior flavor. But all these requisites will hardly be found combined in any one variety. In all my forty-two years' life among the strawberries, I have never seen a very large strawberry, that in a commercial sense was a profit-bearer, neither had they any superiority in taste, but as a rule were in ferior when compared with or tested by a smaller variety. A desire for higher ideals keeps a small army of experimenters in the field planting seeds, fertilizing with the best sort of berries, with an intense desire to reach results surpassing all previous productions. Yet, with all of the anxiety that goes with the originators, they have not been able to very much exceed the chance seedlings found by the wayside.

WAYSIDE SEEDLINGS.

The famous old Wilson Albany, that was for more than thirty years the foremost strawberry for commercial traffic, East and West, was a chance seedling. The well-known Crescent was a founding by a berryman of Con-

necticut. So was the Warfield, Bissell, Buback Mickels, Early Bederwood, Aroma, Haverland, and Splendid. The Jessie Timbrel, Saunders, Edgar, Queen, Greenville, Crawford, Sample, Dayton, Marshall, Wm. Belt, and others that I can not recall, were the product of experimenters. There is not one of the above list that is as productive as the Splendid, Warfield, Bissell, or Parker Earl, and several of the above varieties are not grown for commercial traffic. The Jessie and one or two others are catalogued by the nurserymen.

The Beverly Saunders and Marshall and Dayton are rarely found in the berryman's catalogue. So, after more than forty years' experience in strawberry history and commercial berry-growing, my conclusion is that the wayside or chance seedling has done more profitable fruitage than any sort introduced by experimental experts. But I would not throw a straw in the way of the man who desires to produce the ideal; he is in pursuit of a more perfect variety, whether he finds it or not, and he will make some interesting discoveries that may somewhat satisfy the wants of the commercial grower and the seeker after exquisite taste in strawberry fruitage.

FRUITAGE.

About the tenth of April, the berry patch planted last year should have the attention of the planter. The straw must be removed from the rows of plants into the spaces between the rows to keep the ground moist in case of spring drouth, and berries from being soiled by showers of rain during the season ripening. Should any weeds come up in the rows they must be removed by hand pulling, so that berries will not be overworked by the berry-pickers.

Now, about the last of April, the bees will be out in the berry patch seeking food among the blossoms for manufacturing honey. They scarcely get the credit for the work they do the berryman. They are our chief pollenizers. One bee will pollenize 10,000 blossoms in a day, hence, the berry-grower should encourage bee-keeping, not far from his berry patch if he does not keep them himself.

The fruitage of the strawberry season is to the writer the happiest season of all the year. All nature is in a fresh, renewed state of life. The sweet singing birds from the forest of the Southland will come in flocks as hungry as wolves, and sing you a few songs and steal a few of the first berries that ripen.

The children, too, just out of school, will be seeking the nearby berry patch to appease their thirst for the health-restoring fruit. Sickly, careworn people of the cities, too, seek the market places for the early fruits to

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satisfy the mouth and renew their youth. And the berry-planter may get his reward for the labor and money expended in growing one of the most appetizing, soul-satisfying fruits that is grown on American soil.

The fruit-growers of Kansas have much for which to feel proud, and little to regret in the story of strawberry and orchard fruitage. Now strawberries are grown in almost every county in the State.

It required more energy and courage for a man to succeed with fruit in Kansas in the early years of Kansas history than it does now. Then, fruit culture was an experiment. Many of the early settlers failed in their first efforts and returned East. Others continued the experiment until they were rewarded with profitable crops of apples and berry fruits. Owing to adverse climatic conditions, Kansas and Missouri have suffered untold losses in orchard and berry fruits. The grudge that the weather has had against us, we trust will not continue next year, and that we will have a crop of all sorts of fruits that will be a source of joy and profit.

DISCUSSION.

A Member: How many years do you calculate your strawberry patch will last profitably?

Mr. Smith: Three years; this year the third crop paid me better than if I had plowed it up and planted it again; but as a rule two crops reach the limit of profitability. The reason this third crop proved remunerative was that we had two frosts down there in our country, and these plants have not had their vitality weakened because they have not borne a big crop.

Mr. Gilmore: I would like to inquire whether you grow in the hedgerow system, single or double, or the hill system?

Mr. Smith: The hedgerow, the hedgerow every time.

A Member: Narrow or wide?

Mr. Smith: I have had the best success with the wide. Suppose you have a frost, you know the wide row stands it better than a narrow row.

Mr. Gilmore: I am about to set a new plantation of berries on ground which had not been plowed until last spring. Could I reasonably expect a fair crop of fruit from that or will it grow largely to vine?

Mr. Smith: What kind of a crop have you grown on that land?

Mr. Gilmore: It has simply been sown to blue-grass, and has grown sweet corn, and the corn has been kept clean.

Mr. Smith: Is the blue-grass all dead?

Mr. Gilmore: Nothing there now but the naked ground.

Mr. Smith: Did you break it this fall?

Mr. Gilmore: No, sir.

Mr. Smith: It ought to be broken now, this morning. That would be much better. If the ground had been pulverized half a dozen times it would have been all the better.

Mr. Gilmore: This is very rich ground, and I have feared that it would go more to foliage than to fruit.

Mr. Smith: Well, it is according to variety. I have never had any too much foliage on any ground I ever worked. I once put two or three wagon loads of guano, pigeon manure, on my strawberry patch. I put it on too thick, and that was the only year I ever had more foliage than fruit.

Mr. Gilmore: There is one question more I would like to ask. Is it necessary to fertilize the Gandy with some other variety?

Mr. Smith: The Gandy is a perfect variety.

Mr. Gilmore: The Gandy has been considered a perfect bloomer, yet my experience has been that a large per cent of the Gandy bloom is smooth, and the result is my crops of Gandy have been limited. I see that some plant-growers advocate the planting of other varieties like the Aroma or Downing, or some other variety equally successful, with the Gandy.

Mr. Smith: That is something worth studying. I myself have wondered why the Gandy did not bear better. The Gandy is a pollinizer. The

old Glendale is the best pollinizer I ever used, and it would pay to plant Glendale simply for that purpose. I have always grown the Gandy, but I have never been profited much by it.

Mr. Gilmore: We will name varieties and can then perhaps work out the points. For instance, in fertilizing the Bubach, it being a late berry, would it not be wise to fertilize with the Senator Dunlap on one side and something like the Aroma or Drummond on the other side? In that way we catch the early bloom on the Dunlap and the late bloom of the Aroma or Drummond.

Mr. Smith: You might plant say a pistillate on one side and different fertilizers on the other. I plant mine three pistillates and three staminate.

A Member: You mean by that that you plant three of one kind and three of another?

Mr. Smith: Three rows of Crescents and then three rows of Splendid.

Mr. Fergus: Do you want birds?

Mr. Smith: Birds? Yes, I want some song birds; some mocking birds.

Mr. Lux: Which is the most profitable, the staminate or pistillate varieties, in your experience?

Mr. Smith: The last few years the Dunlap and the Splendid, both being staminate varieties, have been the most remunerative. The Splendid has been the greatest profit-bearer I have had for the last ten years. It is not quite as productive as the Crescent and Warfield.

A Member: I want to ask as an amateur, what would you plant in a small patch for permanent use?

Mr. Smith: I would plant Splendid, Warfield, and Dunlap. It is best to let the plants of the Warfield grow thickly.

Mr. Dixon: I ought to add a little to that list of strawberries, that is a few suitable early ones, something like Gandy or August Luther.

A Member: How about Aroma?

Mr. Dixon: The Aroma did not do well with me; Aroma will not do well on heavy, rich soil. It will do better on upland. Mr. Smith wanted to know in regard to our machine for planting.

It has been in common use with gardeners. You can do better work with it than can be done with the average men you hire to plant strawberries. It takes three good men to run the machine, and if you have the right kind of a man on the seat, you will get a much better job done than you can do by hand; you can get the plants set in better shape and get them in quickly, and they are not exposed to the atmosphere any length of time. I am a great believer in machinery. An important piece of machinery for handling newly planted strawberry fields this last season was the packer. I do not believe we would have had a stand of plants if it had not been for the packer. The ground dried out and froze two or three inches deep, until the plants died. This roller is about the greatest tool we ever used, and under such conditions as we had last spring it was an absolute necessity, and it is useful for preparing soil at any time. Of course, I realize that the grower of two or three acres can not afford a thousand dollars for machinery.

A Member: What kind of cultivators do you use?

Mr. Dixon: We use a double cultivator with seven shovels on a side, and if rows are planted with the machine an even width, we cultivate anywhere and anything. The planting machine is made adjustable so that the rows can be planted at different widths.

A Member: What kind of a tooth has the cultivator?

Mr. Dixon: You can use the little cultivators in certain circumstances. Always cultivate two rows at a time. Cabbage and tomato plants can be cultivated with the double-row cultivator.

Mr. Crow: How long is a patch profitable with you?

Mr. Dixon: Take a plant like the Gandy, and they will get better for three or four years.

Mr. Crow: What if you lived in a locality where the Gandy would not do well?

RHODE ISLAND REDS.

NEOSHO POULTRY YARDS—Rose Comb R. I. Reds; 7 years experience with this breed. A few cockerels for sale. White Angora rabbits for sale; prices reasonable. J. W. Swartz, Americus, Kans.

S. C. RHODE ISLAND REDS, EXCLUSIVELY—Won all firsts at State Fair. Good cockerels cheap. Belle Taylor, Haven, Kans.

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PURE-BRED R. C. RHODE ISLAND RED cockerels of true Tripp-Maconber stock, for sale, \$3 each, f. o. b. Olathe, three for \$8. Eggs in season. Mrs. G. T. Goode, Olathe, Kans.

PURE-BRED R. C. Rhode Island Red cockerels at reasonable prices. A. L. Scott, R. 1, Larned, Kans.

FOR SALE—Rose Comb Rhode Island Red cockerels; Duroc-Jersey hogs; one registered Red Polled bull. I. W. Poulton, Medora, Kans.

BLACK LANGSHANS.

PURE BLACK Langshans and Rose Comb Brown Leghorns. One dollar each. Mary McCaul, Elk City, Kans.

BLACK LANGSHANS—Extra fine. Cockerels \$1.50, pullets \$1. Mrs. Geo. W. King, Solomon, Kans.

BLACK LANGSHANS FOR SALE—Fine farm-raised stock. Also Toulouse geese. Write for prices. G. H. Hudey, Route 2, Maple Hill, Kans.

PURE-BRED WHITE LANGSHANS for sale. Hens \$1.25, pullets \$1 each; also a few Silver Spangled Hamburg cockerels. Mrs. John Cooke, Greeley, Kans.

CORNISH INDIANS.

FOR SALE—Jumbo strain Cornish Indian. A few cockerels. Eggs in season. L. C. Horst, Newton, Kas.

HAMBURGS.

CHOICE COCKERELS—S. Sp. Hamburgs, S. C. Brown and White Leghorns. One extra fine M. B. turkey tom. Write Vira Bailey, Kinsley, Kans.

BRAHMAS.

LIGHT BRAHMAS—None better east or west. Pens of 4 hens, 1 cockerel, average better than 90 points. \$10 per. Cockerels to head your flocks. Write J. T. Edson, Schaller, Iowa.

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Choice pure-bred cockerels for sale.

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FOR SALE—Mammoth Bronze turkeys. Young toms \$5, hens \$3. Of the famous R. A. Owen strain. None better. Geo. R. Carpenter, Route 2, Shelbyville, Ky.

FOR SALE—Mammoth Bronze turkeys for breeding. E. J. Little, Route 3, Holton, Kans.

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SCOTCH COLLIES—Pups and young dogs from the best blood in Scotland and America now for sale. All of my brood bitches and stud dogs are registered, well trained and natural workers. Emporia Kennels, Emporia, Kans. W. H. Richards.

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Some men never will toe the line until they feel the heel.

Mr. Dixon: I would throw it aside. Its bounty of gay fruitage nestling amid some varieties will not do well under irrigation. An irrigation country requires entirely different varieties from ours. In Colorado they are partial to the Glen Mary. Last year it did fine, but it must have the best of cultivation, and be planted on the very best kind of soil. It won't stand any kind of slighting at all. There is another good variety, and that is the Arnout. It was introduced two or three years ago it is a very large variety. The Craig, introduced with a great boom, has not proved profitable with me. It will not stand the climatic changes we have had the last few years. The plant is tender when you transplant it. The Wealthy is tender if transplanted. I will take the Excelsior for a market variety, but, if you would put all the sugar you had on one berry you couldn't get it sweet.

Mr. Kenoyer: I would like to ask in regard to the Gandy being a pollinizer. With us, where we have no bees, the Gandy never does well set in a block by itself. Several years ago I saw something was wrong, and I planted three rows of Gandy with three rows of some late variety which was a good pollinizer; this proved a remedy for the defect. The Aroma is a good variety to plant with the Gandy.

A Member: Have you bees?

Mr. Kenoyer: They do not last a year with us.

Mr. Dixon: Mentioning bees, Mr. President, a man lives across the road from our place, and I suppose he has 100 to 200 stand of bees. I have walked across my strawberry field when they were in full bloom and never saw a bee. Many and many a time I have not seen a bee in that field, when crossing it.

Mr. Smith: I was going to speak of bees. I think bees a great help. I never raised a bee but I have seen bees in my patch.

Mr. Blair: I want to say a word for the bees. It may not be generally known, but honey is not secreted at all times of the day in all plants, and some plants are particular as to the hour. Then consider the conditions of the season, dews, and rains, winds, and hot sunshine. The bee seldom goes into the patch for gathering nectar until about 8 or 9 o'clock. They do not start out in the wet if they can help it. Now, it is very possible that Mr. Dixon's statement is right that he never saw those bees there. He may have been out at high noon, but I will guarantee if he makes his observations more often, he will find the time that the bees are at work on his strawberry patch. We surely need those bees to pollinize our berry plants.

Mr. Snyder: No doubt about it.

Mr. Barnes: I did not happen to be here at the time the strawberry matter was up. If there is anything I am in earnest about, it is the strawberry. I used to pick strawberries till my back ached when I was a boy. I brought some strawberry plants to Kansas. These plants were unfortunate. We started from Illinois with 250 in a lunch basket. After we settled on the land our lines were changed and the plants were transplanted twice, and when we got through there was about twenty-five plants. That was in 1871. In 1873 I picked strawberries from this little patch. Not being used to handling strawberries in the market, I sold them as best I could. I got \$63 worth off this little patch besides feeding a large family and some of the neighbors with strawberries.

Cherries.

A. B. SMITH, TOPEKA.

This subject could be elaborated as broad as the world is wide. We are not ambitious, however, at this time, therefore we will confine our remarks more especially to our own country, and most particularly to our own locality.

The cherry belongs to the family of stone fruits. It is a prolific bearer where conditions are favorable, and twice a year it invites pleasant comment to all who behold its wealth of snowy beauty in spring time, or later

a foliage of the richest green.

Cherries are divided into two distinct types, both as to tree and to fruit. We may safely treat them as the sweets and the sours. The tree of the sweet is habituated to a compact, erect growth, somewhat subject to disease and early mortality. The tree of the sours are low-headed and spreading. Certain varieties of this sort are good bearers and bear fruit from twenty to thirty years. Sweets are much sought after by birds as well as by people, with a result that much of the fruit has been claimed by bills presented and collected promptly in spite of protest. Sweets are not generally cultivated in large blocks in the Mississippi Valley. They are confined to door-yards and by-places about the home, while the sours are raised to some extent, commercially, in New Jersey, New York, Pennsylvania, Michigan, Ohio, Indiana, Kansas, and Nebraska. The tree grows to mammoth proportions in some parts of Europe and on our Eastern coast in the latitude of Maryland. The Japanese cluster some pretty sentiments about the cherry. What they are I can not tell—"the lid is on."

Mazzards (inferior seedlings) are found to be the best stock for both sweets and sours in the East where moisture is more in evidence. In the West the Hahaleb stock is preferred, although in the choice of the West there is some sacrifice results in root system, union, and longevity of tree. The Hardy Mahaleb seems better fitted for the drier and more strenuous life of the plains.

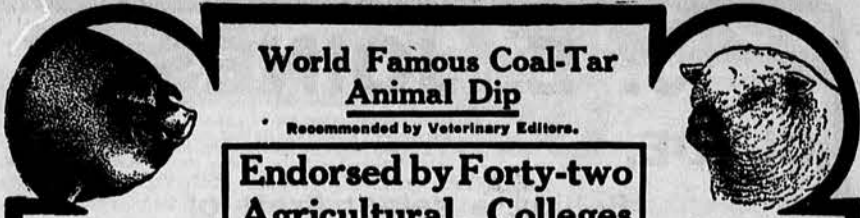
Formerly the Morellos were in great demand, but of late years the Early Richmond has become the most widely favored, while the Montmorency or Late Richmond probably stands the second in choice.

Insects are not seriously troublesome to either tree or fruit, locally speaking. The curculio puts on his crescent-shaped stamp now and then, but this is a circumstance that pertains more especially to the Morellos. It is a curious fact that such stone fruits as the plum, apricot, peach, and Morello cherry, about in the order named, should be punctured so relentlessly, while the Early Richmond and the Montmorency should escape, almost without harm. The only thing I have found to contend with that called for the suspicion of disease is a disposition towards what is known as brown rot. This occurs only when the weather is wet or sultry and the cherries are hanging on the trees after they have become fully ripe.

Cherries are expensive and are not adapted to a distant market. Perhaps this is the reason they are not raised more extensively on the Pacific coast where they grow in certain limited areas with most gratifying success. Cherries do not thrive well beyond a certain limit of latitude, either North or South. The States we have already named, in connection, will favor the presumption that Kansas is well located in this respect. An ideal condition for growing cherries for profit would probably be:

A climate where the spring times were marked with abundant sunshine and sufficient moisture; the latter parts of summer and falls dry; the soil good; the land so situated as to be always free from water clog; cultivation during the month of April and May only; selected scions of the varieties, early Richmond and Montmorency, with a ratio of five of the former to one of the latter; scions placed on non-sprouting stock; trees set twenty-five feet apart each way, planted never as deep as the crown; 500 to 1,000 trees adjacent to a good-sized town with railroads reaching other nearby towns; a party in charge who is thoroughly interested, having five years of patience, then, plenty of good step-ladders, and girls and women to use them. Results: Satisfaction every year except 1907 and its duplicates, barring cyclones and a future that refuses to give up her secrets.

When writing The Kansas Farmer do not fail to give your full name and postoffice address.



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The Townsend Automatic Trap Nest

Awarded first premium Kansas State Fair, 1906-07. Invaluable to poultry raisers. The hen, on going in, closes the gate behind her, shutting out all other fowls. At any time she wants out for food or exercise, she can easily release herself. By simply lowering a latch, it is converted into a "Trap Nest" that is absolutely reliable. These nests are manufactured under our own patent. Write us for information and testimonials from users. **AGENTS WANTED.** Address

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\$7.15 Buys the Best 120-EGG Incubator ever made

Freight Prepaid East of Rockies

Double cases all over; best copper tank; nursery; self-regulating. Best 100 chick hot-water brooder, \$4.35. Both ordered together, \$11.00. Satisfaction guaranteed. No machines at any price are better. Write for our book today or send price now and save waiting.

Belle City Incubator Co., Box 18, Racine, Wis.



Hatch Chickens by Steam with the EXCELSIOR INCUBATOR OR WOODEN HEN

Simple, perfect, self-regulating. Hatch every fertile egg. Lowest priced first-class hatcheries made.

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profits are greatest for the man who markets his chickens early. Do not be satisfied with old, easy going methods. Get the best equipment—produce the best and make the most money. Write for our new book "Incubator Why?" telling why our machines turn 90 percent of the eggs into chickens and why we can do better for you on prices. Please say whether interested in beginners' outfit or large machines.

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J. E. JOINES, CLYDE, - - - KANS.

Selling a select draft of

DUROC-JERSEY BRED SOWS

In town and in comfortable quarters

MONDAY, JANUARY 27

My sale is the first in the circuit in which Grant Chapin, of Green, Kans., and J. O. Hunt, of Marysville, sell the 28th and 29th respectively. Mr. Chapin sells at Manhattan the day following my sale and those desiring to attend can leave on an early morning train and arrive there in time for breakfast. My offering on the above date of 25 tried sows and fall yearlings and five spring gilts will not disappoint the most exacting. While the offering is not a large one in point of numbers it is one that I have selected with considerable effort and price. There will be 5 daughters of Parker Mac, the grand old sire of Parker's Echo, and numberless others of merit; there will also be 3 granddaughters of Crimson Wonder, 2 own daughters of old Kant Be Beat, 2 by Chief Orion, 4 by Auction Boy 3d, 3 granddaughters of Improver 2d, 2 granddaughters of old Higgins' Model, and others of good breeding. They will be bred for early farrow to 7 different herd boars. A large per cent of Parker's Echo, the first and sweepstakes at both Belleville and Concordia this season. Others to Bell's Chief 2d and Kant Be Beat's Best. Among the best things I am offering is a very fancy gilt sired by Nebraska Wonder and bred to G. C.'s Col. Also a daughter of the great Kant Be Beat and safe in service to King of Cols. 2d. One spring gilt sired by Ohio Major and out of a litter sister to Morrison's Peach. Breeders are requested to register at the Exchange Hotel in Clyde as my guests. Send for a catalogue which is now ready.

J. E. Joines, - - Clyde, Kans.

Auctioneers: T. C. Callahan, John Brennan; J. W. Johnson, Fieldman.

John O. Hunt's Annual DUROC BRED SOW SALE

Marysville, Kans., Wed., Jan. 29

The sale will be held at the farm as usual, which is four miles south of Marysville and six miles north of Blue Rapids. It's the day following Grant Chapin's sale at Manhattan and breeders can leave there at 6.40 in the morning and arrive at Blue Rapids in plenty of time to drive to the farm in time for the sale.

My offering of forty bred sows on the above date I believe to be the best offering of bred sows I have ever made and the records show that I have made some good ones. Twenty-five of the offering are tried sows and fall yearlings. Fifteen extra big, smooth March gilts complete the offering. If you have been pleased with my offerings in the past I don't know what you will say of this one. Attractions that I might mention are the fall yearlings by Hunt's Model, three March gilts sired by old Kant Be Beat, and one of them out of the great Village Pride and the other two out of an outstanding sow I bought in Nebraska last winter.

The 15 March gilts are mostly by Hunt's Improver, a great young boar sired by Hogate's Model, the first and sweepstakes aged boar at Lincoln in 1906. A major portion of the offering is bred to Bell's Chief 2d he by Bell's Chief. Some are bred to Red Lad. Breeders will be taken to and from the farm free of charge from either Marysville or Blue Rapids. Drop me a card with your address and receive my catalogue which is now ready. Address

J. O. Hunt, - - Marysville, Kans.

Auctioneer, T. C. Callahan. J. W. Johnson, Fieldman.

WARD'S TRIED SOW AND YEARLING SALE

Belleville, Kan., Friday, Jan. 31Sale to be held at farm,
3½ miles south of town.

This offering is composed of the cream of my herd augmented by the very best that I could find, and bred to the greatest quartet of boars ever combined in one sale: Meddler 2d—Sire of more champions than any other hog the world ever saw at his age, and sire of the highest priced selling animals. Voter—the Illinois champion of 1907, and of which John Cotta says: "Unquestionably the best hog ever shown at the Illinois State Fair." The Breeders Special—the \$4,000 son of Meddler 2d, and the world's famous Darkness and out of the highest priced litter in the world, for the number sold (5 animals, \$12,000). Old King Skybo—all Kansas breeders know him, and to know him is to love him and want his get.

The offering includes 3 by Corrector, 5 by Corrector 2d, 2 by Meddler, Keep On, Kemp's Perfection, Chief Perfection 2d, Perfect Challenger, Grand Chief, Perfect Perfection, Skybo, Mischief Maker, Perfection E. L., Convincer, Sunflower Perfection, Kelley's Perfection, Proud Perfection, Cute Special, B. B. Perfection, Lucifer, and others.

DAMS OF OFFERING—Simply Grand, dam of old Grand Chief; Perfect Beauty, dam of Corrector 2d; Beauty Perfection, dam of Chief Ina 3d, Pet 3d, Black Model, Queen Wonder, and others of equal note.

SPECIAL ATTRACTIONS: Laughing Eyes—the \$300 open gilt, a full sister to Corrector 2d. She is safe to the Breeders Special. Babe Adams—the \$1,530 gilt, safe to Meddler 2d. Beatrix—by Skybo, safe to the Breeders Special. Grandeur—by Skybo, and a half sister to Grand Chief. She also is safe to the Breeders Special. Perfect Lady 4th—half sister to Hulda's Idea, bred as above. Parlson Model—safe to Voter. And 34 other good ones.

Of the sows in this offering 8 will be safe to the world famous Meddler 2d; 2 to the champion Voter; balance to our young Meddler-Darkness boar, the Breeders Special, with a few to old King Skybo.

Send mail bids to either auctioneers or fieldmen, in my care. Breeders, stop at Rock Island House. Write for catalogue.

J. J. Ward, - - Belleville, Kans.

Auctioneers: Correll, Burger, Brennan, J. W. Johnson, Fieldman.

—At the Agricultural College— MANHATTAN, KANSAS

Grant Chapin, of Green, Kans.,
sells his climax offering of

DUROC-JERSEYS

The offering consists of 50 tried sows and
fall yearlings. The date is**TUESDAY, JANUARY 28**and the sale will be held in the show
pavilion at the college.

The 50 head of fall yearlings from which the 25 that go in this sale have been selected, most of them by Model Chief Again, have been the talk of the season by those who have seen them. They are the actual reserves of the 50 head and go in this sale every one of them an attraction. The balance of the offering, 25 tried sows, represent the very best Duroc families in existence. They are in the prime of their usefulness and not a one offered should fail to prove a money maker for the purchaser. Among them will be found the great brood sow, Callahan's Choice, a full sister to the noted Village Pride. Six of her daughters, tried sows, are also in the sale. Another is Chapin's Rule by Golden Rule and out of a Kant Be Beat dam. May's Daughter, a half sister to Red Raven, Miss Jackson by Pilot Wonder 2d and several good ones by the splendid breeding boar, Ohio Major by Kant Be Beat.

Free entertainment for visiting breeders at the best hotel in the city. Come early and look over the college which is the finest in the world and the most successfully managed. For a catalogue address Grant Chapin, Green, Kans. All mail after January 20 should go to Mr. Chapin at Manhattan in care of Professor Kinzer.

Auctioneers: T. C. Callahan, Judd McGowan, L. R. Brady, Jas. T. McCulloch. Send bids to J. W. Johnson in care of Professor Kinzer, Manhattan, Kans.

J. O. Hunt's sale at Marysville the day following.

Grant Chapin, - - Green, Kansas

(Continued from page 96.)

hood, was one of the best, as was, also, Herryton Duke, a litter brother of Masterpiece. The following named boars have been prominent prize-winners, and all of them excepting one, Longfellow's Model, were bred by G. W. Berry: Black Robinhood that defeated every boar he ever met in class, in herd, in breeders' ring with four of his get and for grand championship; Royal Champion, awarded grand champion all breeds competing Kansas State Fair 1890; Longfellow's Model, grand champion Kansas City, 1891, and Kansas State Fair 1893; Onward 2d, grand champion Kansas State Fair 1894; Major Lee, junior champion Kansas State Fair 1893, and grand champion Kansas and Texas State Fairs 1896; British Champion Jr., grand champion Kansas State Fair 1896; Winner Lee, grand champion Texas State Fair 1896; Masterpiece, the greatest boar the breed has ever produced, and the sensation of the swine exhibit at the World's Fair, St. Louis, 1904; and O. H. F. Sensation, winner of more prizes at State fairs in 1906 than were ever won by any other boar in one year, the winner of first prize in his class, in herd, and championship at no less than seven State fairs; and the dams of this boar for seven generations were also bred by G. W. Berry. For two years at the State fair, G. W. Berry was awarded every first and second prize for which he made entry in classes, in herds, in breeders' ring, and all championships; a record never equaled by any other breeder. G. W. Berry disposes of most of his Berkshire while they are young, a method that is cheaper to the purchaser; and breeding stock can be grown more satisfactorily on the farm where it is to be kept. His prices are quite reasonable. Look up the advertisement in another column, and when writing for further information, please mention THE KANSAS FARMER.

Oerly's Coming Sale.

February 10 will record an important event in Poland-China history when F. F. Oerly, of Oregon, Mo., will drive through the sale ring sixty head of Poland-China sows as rich in breeding and grand in point of individual merit as are to be found anywhere beneath the circle of the sun. He says that this is to be the effort of his breeding career, and when we take a review of the offering that he has selected for this occasion we feel warranted in saying that never before in his experience as a breeder has he offered the public such an array of sows of outstanding merit as will claim the attention of the breeders on February 10. Neither time nor expense have been spared in bringing together this grand lot. They come from all quarters of the corn belt and from the most illustrious herds of the Poland-China world.

It will be remembered that Mr. Oerly recently purchased Impudence to stand at the head of his herd, and with this far-famed hog and the excellent lot of brood sows that are to be found on this farm we predict for him a brilliant future in the breeding business.

There will be about ten head of the best things of the offering bred to this hog. Fifteen will be bred to Meddler Maker and seven to Meddler 2d.

N. L. Planalp will consign about ten head to the sale. Below we give a partial list of the offering:

Purity by Meddler out of a Corrector dam, bred to Meddler 2d; Sister Martha by Prince Alert, bred to Meddler 2d; Josephine by Phenomenon, bred to Meddler 2d; Busy Bee by Corrector 2d and out of Beauty Perfection, bred to Meddler Maker; Loretta by Mischief Maker, bred to Meddler 2d.

In another issue of this paper we will give you further information with reference to this great offering, and in the meantime it will be well for you to get in correspondence with Mr. Oerly, and get your name on his mailing list for if you are a lover of the best in Poland-Chinas you will be interested in this sale. Kindly mention THE KANSAS FARMER when writing.

Klondyke Durocs.

G. E. Newton, of Whiting, Kans., has made a change of his advertisement in THE KANSAS FARMER and is offering for sale at panic prices thirty fancy bred gilts, out of good dams and by such sires as Chief Model 47935, a 700-pound 2-year-old son of Hunt's Model, Prover 63589, one of Improver 2d best yearling sows, and Sam Advance 63587, a fine grandson of Proud Advance, who was twice a first prize winner at the Iowa State Fair.

The writer has inspected Mr. Newton's herd and these gilts are a choice lot with size, bone, and finish, and he is offering them at the remarkably low figure of \$15.50 to \$18.50. This is one of the greatest opportunities that we know of to get pure-bred sows, bred for spring farrow, at such prices.

Money invested in bred sows at that price is sure to bring returns of several hundred per cent inside the next twelve months, for animals for breeding purposes are sure to be much higher.

Write Mr. Newton at once about these or you will be too late, and if you order from him you will get a square deal.

Fuller Sells Durocs February 11.

N. J. Fuller, the well-known Duroc breeder of Garnett, Kans., announces in this issue of THE KANSAS FARMER that he will hold a bred-sow sale Tuesday, February 11. His offering will consist of thirty-three head, ten proven sows, three extra fall gilts, and twenty choice, well-grown spring gilts. These carry some of the best blood lines of the breed and are by such sires as Chief Orion, a World's Fair winner, and a grandson of the great Orion; Hunt's Model, also a World's Fair winner; Lincoln Wonder, first at the Nebraska State Fair 1907; Proud Advance Jr. by Proud Advance, who was twice a first prize winner at the Iowa State Fair; and Tip Top Notcher Jr., a good son of the World's Fair champion, Tip Top Notcher.

About half of his offering will be

bred to Fuller's Ohio Chief, one of the best breeding sons of the great Ohio Chief, and out of Miss Bob, the mother of some of the highest-priced as well as some of the greatest breeding animals known to the breed. The rest will be safe in service to F's Kant Be Beat, by the champion and prize-winner Kant Be Beat; and Proud Advance Jr., a good son of Proud Advance.

A more extended description of Mr. Fuller's offering, together with display advertising, will appear in THE KANSAS FARMER of January 30 and February 6. Watch for this and in the meantime get your name on the list for a catalogue and arrange to attend this sale.

Pilot 66765.

"Mr. J. F. Staadt, Ottawa, Kans. Dear Sir:—Pilot came all O. K., but was very tired and gaunt. He took things sensibly, and was himself in a short time. We think him the best herd boar we ever owned, and we have had good ones. Everybody who sees him calls him a 'crackerjack.' Do you know what that means? Here it means something too good to beat. We have brought him into good company, as I told you we would. We have another splendid herd boar and an excellent bunch of gilts. If we can not go out and get plenty of the blue ribbons next year with Pilot and his get out of some of our fine gilts, then I miss my guess and will say 'there is no use to mate good ones.' But I know we will have the goods. Pilot is doing fine and we intend to keep him at it. Barring unforeseen accident we feel confident of the results.

"Success to you with your Duros. Hope you will be able to produce another Pilot soon. Thanking you for the gentlemanly treatment received while at your place and for the prompt manner in which you have acted toward us, we beg to remain, Very respectfully yours, J. C. STRONG & SON."

This young boar is one of the best the breed affords and from all indications he will make as good a hog as Mr. Staadt has ever bred. He was sired by the great one thousand pound Long Wonder 21867 and his dam was Arion Maid 109430 by Arion 22587, winner at the Iowa and Nebraska State Fair in 1903, 1904, and 1905. Pilot is sure to be heard from in the future and will undoubtedly make his mark in the show ring.

Draft Stallions at Living Prices.

The firm of Watson, Woods Bros. & Kelly Co., of Lincoln, Neb., has on hand a number of very choice imported draft stallions of the Percheron and English Shire breeds and will make attractive prices to buyers. In their December sale they did not sell as many head as was the intention or expectation and for this reason they have in their barns more horses than they can care for satisfactorily. They do not sell through salesmen but invite buyers to come direct to their barns where they will make prices that are not equaled anywhere in the State, quality considered. Of course "loud" advertising costs money and it is bound to attract unsuspecting ones to the barns of the horseman who conducts his business in that way, but when it comes to having the horses and making right prices that is quite a different thing. This firm tries to conduct their business on a safe and sane basis. They talk sense in their advertising and literature and when you go to their barns to buy a horse you are treated with the courtesy and respect that befits a gentleman. They make no claims that they can not verify. Their horses are selected abroad by that incomparable judge, Joseph Watson, and while he does not claim to select all show horses he does select a class of young stallions that invariably grow out into good, useful stallions for the purchasers of them. They are not hog fat when imported and in the barns of this company are fed in such a way as to insure usefulness. That is why this firm can afford to make such a liberal guarantee on their stallions. And their guarantee is made to fit the conditions. If a horse does not come up to it they do not try to palm off on the buyer some worthless horse in his place—they simply make a settlement that is satisfactory to the purchaser. Truly they are a good firm to patronize if you want a horse. Write them and mention this paper.

Peacock's Sale Postponed.

W. R. Peacock, Sedgwick, Kans., announces the postponement of his bred-sow sale, which was advertised in THE KANSAS FARMER last week. The new date for the sale has not been definitely fixed as yet, but will be announced in due time in these columns. Mr. Peacock's Poland-Chinas have become famous both for their breeding and quality and his winnings in the show ring have been large. His herd is headed by Klever's Perfection 32855, a half brother to Klever's Thicket. The second herd boar is Mischief Maker I Know 33855, a three-fourths brother to Meddler. The third herd boar is C's Corrector 90711A by Corrector 33379A. No wonder he has good hogs for sale!

The Salina Show.

The Golden Belt Poultry Show, which was held at Salina this last week, was the best in the history of the association, being composed of between 600 and 700 high-class birds, most of which were shipped direct from the State and other shows. C. A. Emory, the poultry judge, made the statement that the class of poultry entered was nearly equal to that of the State show and was of exceptional high class. The association is to be congratulated on the fact that from a small show with no exceptional class of birds it has risen in so short a time to be one of the best in the State and has among its entries some of the top-notchers in the poultry line. Of the different classes the American had about as good as display as could be desired, there being some especially good entries of Barred Rocks and White Wyandottes. The Leghorns also made a good showing.

CYPHERS


INCUBATORS & BROODERS

Write for our Great Free Catalog of 212 pages which contains so many letters from poultrymen that you probably will see the pictures of someone you know—and illustrations of their poultry yards, duck farms, brooding houses, etc., all with names and addresses.

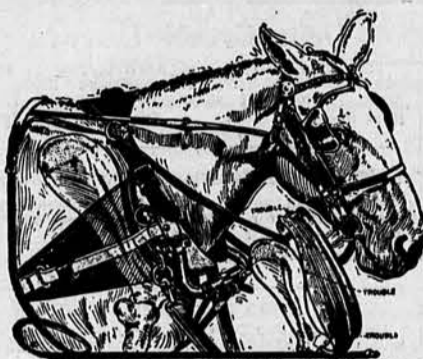
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Our Free Book is the best authority for you to read as it contains proof after using Cyphers machines, told by Beginners, Experts and Agricultural Experiment Stations. Write to nearest address for this Free Book.

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**GUARANTEED
BEST HATCHER**



ness, Double set for \$21.50. Let us hear
HUMANE HORSE COLLAR CO.,

SORE NECKS OR SHOULDERS

Are impossible if you use the "Whipple" Humane Horse Collar. Insist on having your new harness equipped with them. Five thousand farmers bought them last season and not one will again purchase an old-style collar. Dealers not selling them may try to talk you out of purchasing Humane Collars; they want to sell their old-style collars and can never sell you sweat pads nor gall cures if you use the Humane Collar—a good reason why you should have them. We ship on fifteen days' trial. One collar fits every horse or mule. Before you buy another collar write for price and testimonials. Recommended by all Veterinary Surgeons and State Experimental Farms. We can also sell you an Emergency Harness from you.

1921 So. 13th St. OMAHA, NEB.

the S. C. Brown and C. S. Whites leading their class. The other classes entered were smaller but all made a good showing and have established a record that the Golden Belt will find it hard to beat or even reach again.

The pet stock and pigeon exhibits this year have also made a giant stride in advance of the former ones, and they formed one of the pleasant and attractive parts of the show. The pigeon exhibit is an exceptionally fine one; and many were shipped direct from the State Show at Topeka. Among the other pets was a pen of very fine Collie pups which seemed to attract more than their share of the attention of the large attendance which the show enjoyed.

The management of the show was greatly hampered by the sudden illness of its secretary, Sam E. Hoover, and one of its lecturers, R. V. Hicks, of Topeka, but despite this fact it held a very good show and had some interesting numbers on its program of lectures.

A Paying Farm Proposition.

One of the best-paying farm propositions an ambitious man can take hold of is cattle-feeding either for market or for milk.

Now that agricultural science has given us an insight into the actual principles which lie at the foundation of the business, it is a mere matter of applying them in daily practice to get good profit for ourselves. Feeding cornmeal, or any combination of feeds, won't necessarily make beef or produce milk. Your steer or cow has got to digest and use its ration or the manure heap will be the richer and you the poorer. In other words, the simple act of feeding doesn't always produce results.

Here is where farm science comes to the rescue. The new idea of feeding tells us first of all, that the steer or cow is like a machine, and that the feed each gets is raw material which we wish to turn into flesh, fat or milk. Now if your steer or cow, as machines, don't work properly, a greater or less percentage of your feed is bound to be wasted. That is, animal digestion must be absolutely right if the greatest gain is to be made.

But it's impossible to keep the stomach and intestines working right when they are constantly forced beyond natural limitations and is what every feeder of live stock is doing when feeding for market or for milk.

From which it follows that anything capable of continuing the digestive function in healthy activity during the weeks or months in which the fattening process is going on, will solve the problem to the feeder's satisfaction.

Experiment has proved conclusively that a preparation containing true tonic elements, blood builders and nitrates (which are well known as cleansing the system) is an actual necessity in the cattle business. In fact, the greatest success is impossible without it. Just as well expect to preserve your own health and stuff with rich food for a period of months as to expect your stall-fed steer or cow to do so.

The "food tonic" idea has come to stay in the cattle-feeding business—success depends on it. Your animals must be "toned up" and strengthened by these mild elements which great medical writers, like Professors Winslow, Quitman, and Finley Dun, recommend as beneficial. Give it to the horses; it will make them fitter and more salable. Lambs grow faster, swine fat quicker—indeed all live stock profit depends upon this tonic.

You Need Trees.

Every reader of this paper should plant trees, for the orchard or for shade and ornamentation. Our advertisers have the best. The Wichita Nursery, Wichita, Kans., supply all kinds at wholesale price beside give a premium with each order free. Send for a price list and say that THE KANSAS FARMER advised it.

Our Advertisers Get Results.

Mr. and Mrs. Henry Shrader, breeders of Duroc-Jersey swine and fine poultry, of Oneida, Kans., write: "Please find check to pay for our advertisement. We had good results from our advertisement during the past three years. We are entirely sold out at present, will take another adver-

\$5,000 Reward

Will be paid to any person who can find one atom of opium, chloral, morphine, cocaine, ether, chloroform, heroin, alpha and beta eucaine, cannabis indica, or chloral hydrate or any of their derivatives, in any of Dr. Miles' Remedies. This applies to goods in original packages, unopened, and not tampered with. Certain unscrupulous persons are making false statements about these remedies.

"I have been troubled with a terrible headache for the last ten years; the doctors could do me no good. I saw Dr. Miles' Anti-Pain Pills advertised in the Sunday magazine, so I thought I would try a sample. I did so, and they helped me wonderfully. I had headache so badly I could hardly see to work, so I sent to the drug store and got a box. In a couple of hours I was all right, it was the first medicine to do me any good."

A. A. ILLIG, Philadelphia, Pa.

Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it fails, he will return your money. 25 doses, 25 cents. Never sold in bulk.

Miles Medical Co., Elkhart, Ind

DEATH TO DYSPEPSIA



NEWTON'S HEAVE AND COUGH CURE

A VETERINARY SPECIFIC

15 YEARS SALE. One to two cans will cure Heaves. \$1.00 per can. Of dealers, or express prepaid. Send for booklet. The Newton Remedy Co., Toledo, O.

THE ROYAL HOTEL, Lincoln, Neb.

Modern, fire proof, only American Plan Hotel in the city. Centrally located, 15th and O sts.

tisement in your paper. Yours for success."

H. N. Holdeman, Artesian Valley Stock Farm, Meade, Kans.: "You may discontinue for the present my advertisement for Holstein bull for sale. Have had twelve inquiries and think he is now sold to C. R. Campbell, Atlanta, Kans. It pays to advertise if we have things to sell. We must let people know what we have."

Garden City Alfalfa.

The firm of McBeth & Kinnison, of Garden City, Kans., have become famous through their great operations of Kansas grown alfalfa, which they believe to be the purest and best on earth. Their exhibit of alfalfa seed received the highest award at the World's Fair at St. Louis, Mo. Alfalfa is their specialty. They can supply carload orders or less, also cane or millet seed. Write for catalogue and mention THE KANSAS FARMER.

When writing THE KANSAS FARMER be sure and give your full name and business address.

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DUROC-JERSEYS

DUROC-JERSEY

Bred Sow Sale, Tuesday, Feb. 18, '08

JNO. W. JONES & SON, Concordia, Kans.

BLUE VALLEY HERD REGISTERED DUROC-JERSEYS

Breeders of high-class, pure-bred Durocs. Leading strains of Duroc families represented in our herd. All correspondence given immediate attention; and, young stock, for sale at all times. See us at "American Royal."

WATTS & DUNLAP.

Martin City, Mo.

MADURA DUROCS.

BROOD SOWS—Some fine brood sows bred to Major, Roosevelt and Miller's Nebraska Wonder, h by Nebraska Wonder.

IRED J. MILLER, Wakefield, Kan.

VOICE REGISTERED Durocs, P. C. and O eggs; Shorthorn, Jersey and Galloway cattle; 40 ee poultry and pet stock at farmers' prices; for catalog, A. Madsen & Sons, Atwood, Ka.

OAK GROVE HERD OF DUROCS

Herd headed by Choice Goods H. 36471 by Hunt Medel and Corroctor's Model 34831. I have for sale a few choice males of spring and fall farrow that will be priced worth the money.

SHERMAN REEDY, Hanover, Kans.

HILLSIDE DUROCS AND HEREFORDS

Choice boars ready for service. Bred gilts and fall pigs, both sexes. Mc's Pride III, Oom Paul V, and Crimson Knight 42379 in service. 8 good Anxiety bred Hereford bull calves. Prices to correspond with the times. W. A. Wood, Elm Dale, Kans.

PEERLESS STOCK FARM

DUROC-JERSEY HOGS

FOR SALE.

R. G. Sollenberger, Woodston, Kans.

PIGS SHIPPED ON APPROVAL

200 head of Durocs, all ages, representing the blood of Combination, Valley Chief, and a son of Kant-Be-Beat.

T. L. Livingston, Burchard, Neb.

Silver Lake Durocs.

Fifty fall pigs will be priced right, either sex. Bred gilts will be priced right on mail orders. Bred sow sale Feb. 19. Boars in service, Lone Jack 30291, Jaul Jumbo 42209.

W. C. Whitney, Agra, Kans.

B. N. WELCH,

Breeder of DUROC-JERSEYS. Crimson Chief 49609 heads my herd. Young stock for sale.

Waterville, Kansas.

DUROCS: 100 early spring pigs, the best I ever raised. Improver, Top Notcher, Sensation and Gold Finch blood lines. Call or write.

J. U. HOWE, Route 8, Wichita, Kans.

EUREKA MANOR HERD OF DUROC-JERSEYS.

Choice breeding stock; the best I ever raised. Fall and spring boars, fall and spring gilts, and tried sows, bred or open. Prices the lowest, quality and breeding the best. Herd headed by Eureka Tip Top 43641 sired by the great World's Fair grand champion Tip Top Notcher 20729 and Olathe Chief 61629 by Ohio Chief 8727, the world's champion. Write your wants or call and inspect my herd.

J. F. ENSOR, Olathe, Kans.

SPECIAL!

I have a car of long yearling bulls, a car of bull calves, a car of yearling heifers and a car of heifer calves for sale. These cattle are all in good growing condition and are mostly reds. They were sired mostly by Baron Ury 2d 124970, Bold Knight 179034 and Headlight 2d 243605.

C. W. TAYLOR, R. 2., Enterprise, Kans.

Wall Street

Might have taken you "in had I not come to your rescue with a few sows carrying the blood lines of Kruger, Buddy K, Tip Top Notcher, Crimson Wonder and Ohio Chief, bred for early farrow to Secret Prince 68211, A. B. Top Notcher 47323, Big Chief's Prince 68213, Top Notcher Model and Billy K., Jr. Write me your wants.

G. W. COLWELL, R. 2, Summerfield, Kans.

Klondyke Durocs

80 choice bred gilts, sired by Chief Model 47985, a 700 pound, 2-year-old son of Hunt's Model 20177; Prover 63589, one of Improver 2d 13365 best yearling sows; Sam Advance 63687, a fine grandson of Proud Advance 23549. Prices \$15.50 to \$18.50. Write me now.

G. E. Newton, Whiting, Kans.

Ralph Harris Farm Duroc-Jersey Herd

Kansas Advancer 67427 and Crimson Advancer 67425 at head. At the American Royal, 1907, with 3 entries, we took reserve grand champion sow; champion sow under 12 months; 1st and 2d sows under 12 months, and 2d in junior yearling sows. We look for excellent pigs by our new herd boars.

RALPH HARRIS, Prop. B. W. WHITE, Mgr. WILLIAMSTOWN, KANS. Farm station, Buck Creek, on the U. P. 45 miles west of Kansas City.

K. & N. Herd Royally Bred Duroc-Jersey Swine

Have a few gilts that I will sell at reasonable prices, bred for April farrow. Also a few fall boars of September, 1906, farrow. Write for prices and descriptions.

R. L. WILSON, Chester, Neb.

DUROC-JERSEYS

Deer Creek Durocs

100 pigs of March and April farrow by sons of Ohio Chief, Tip Notcher and Kant Be Beat. Ready for shipment after July 1.

Bert Finch, Prairie View, Kans.

Fairview Herds Durocs and Red Polled

Some good young boars by Crimson Challenger 4377 for sale. No females or Red Polled cattle for sale now.

J. B. Davis, Fairview, Brown County, Kans.

CRIMSON HERD OF DUROCS.

Herd boars, Red Perfection by Leona's Chief, Allean Gold Dust by Parker Mc., and Red Pathfinder by American Royal. Iowa Girl still farrowing good litters. The best blood lines of the breed with size and quality combined. Spring pigs for sale. J. W. Reld, Fortis, Kans.

ATTENTION

Hog raisers of every kind. Had you forgotten that this is just the time to buy that male pig to head your herd? Well it is a fact and you had better get in line and come to the Rosebud and get something fine. Rosebud Stock Farm, Rathbun & Rathbun, Prop., Downs, Kans.

Elk Valley Durocs

Herd headed by Doty Boy 32278, a son of the champions Goldfinch and Dotie. My sows are by prize-winning boars. Choice pigs of both sexes for sale.

M. Wesley, Bancroft, Kans.

CUMMINGS & SONS DUROCS

100 topy pigs of early March farrow, by Lincoln Top, Junior Jim, Tip Top Notcher Jr., Kants Model, Beautiful Joe and our herd boar OH HOW GOOD, second prize-winner at Nebraska State Fair. Sale in October; write or visit.

W. H. Cummings & Son, Tecumseh, Neb.

DUROCS are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47385, Red Top 32241, Fancy Chief 24923 and other noted sires. Correspondence invited. Visitors coming to Junction City and phoning me will be called for. W. L. VICK, Junction City, Kans.

CHASE COUNTY HERD OF DUROCS.

Golden Chieftain, a grandson of Ohio Chief 8727-A. Harter's Choice, a granddaughter of Crimson Wonder and first and grand champion sow at St. Joseph, 1907, and others of the best breeding. Young stock for sale at all times. J. H. Gayer, Route 1, Cottonwood Falls, Kans.

Stadt's Durocs

A fine line of sows and gilts bred to Long Wonder, Nelson's Model, and a son of Kant-beat, at public sale prices less expenses. Also 2 or 3 good spring boars at panic prices if taken soon.

J. F. STAADT, Ottawa, Kans.

Lamb's

HELD OF DUROCS is built along the most fashionable blood lines and is noted for the individuality of its make-up. 50 fine pigs sired by the great Hanley, Lincoln Top, Buddy L by Buddy K IV, Crimson Jim, Ambition and other great sires. We invite correspondence with prospective buyers.

Elmer Lamb, Tecumseh, Nebr.

Timber City Durocs

Fall and spring boars by You Bet 31111, Doty Wonder 41839, Geneva Chief 3049, Rose Top Notcher 54059, and others. Sows bred to the above boars for sale. Over 400 head in herd. Write your wants.

SAMUELSON BROS.,

Bala, Kans. and Cleburn, Kans.

Elk Creek Durocs

One 2-year-old boar by Improver 2d and out of Nebraska Bell. Also one yearling boar by Old Surprise, (a son of prize-winners) at living prices. 100 pigs of early spring farrow by Kant Be Beats Best, and Bell's Chief 2d, ready for shipment after July 1.

J. E. JOINES, Clyde, Kans.

ROSE LAWN Duroc-Jerseys

I have several high-grade Lincoln rams for sale.

L. L. Vrooman, Rose Lawn Place, WOODRIDGE, KANSAS

Capital Herd Duroc-Jerseys.

Young boars and gilts for sale from such sires as Missouri Goldfinch, Long Wonder and Parker Boy, with excellent breeding on dam's side. All are good thrifty pigs. Call or write.

J. S. White & Son, R. 8, Topeka, Kans.

DUROC-JERSEYS

Gold Standard Durocs

10 extra spring boars, and 40 choice gilts open, or bred to a good son of Kant Be Beat at panic prices.

Chas. Dorr, R. 6, Osage City, Kans.

PLEASANT VIEW DUROCS

70 early pigs by Quality King 59831, Orion Boy 42337, and W's Top Notcher 59838. Also some choice tried sows at farmers prices. Thos. Watkinson, Blaine, Kans.

PRAIRIE QUEEN DUROCS

70 early springs that are tops, by the great Kant Be Beat, Alex Heir, and Wilkes Echo, out of daughters of Ohio Chief and Village Pride, and other good ones. G. H. Hamaker, Prairie View, Kans.

Orchard Hill Herd Duroc-Jerseys

A few good spring boars yet for sale.

Dispersion sale February 23.

R. F. NORTON, Clay-Center, Kans.

FOUR-MILE HERD DUROCS

Choice fall boars by Orion Jr. 31497, and Ohio Chief 2d 41197. 50 spring boars, growthy, heavy bone, good feet, nice color; sired by the above named males, and E's Kant Be Beat 57563, Crimson Chief 31283, Rose Top Notcher 54059, You Bet 31111, Tip Top Notcher 27273, and other noted sires. Sows of the best and leading families. Write or visit herd. Visitors met at trains.

E. H. Erickson, R. 1, Olsburg, Kans.

Otatop Herd Duroc-Jersey Swine

Composed of nothing but prize-winning blood. Pigs for sale of either sex.

JOHN W. TAYLOR,

Edwardsville, Kansas

Haith's DUROCS

Herd headed by Lincoln Top, sweepsakes boar at Nebraska State Fair, 1907, assisted by Haith's Cant Be Beat, Haith's Hanley, Jim's Wonder, Wonder Again. A few good sows bred to these boars for spring farrow. Will breed a few sows to Lincoln Top, \$100 service fee. Sale date, January 29.

W. H. HAITH,

Route No. 1, Vesta, Neb.

Grant Chapin's Durocs

FOR SALE—Some very choice young boars of April and May farrow sired by Model Chief Again and out of my best producing sows. Some of them herd headers.

Bred sow sale January 23, at the Agricultural College, Manhattan, Kans.

Grant Chapin, Green, Kans.

POLAND-CHINAS

FAIRVIEW STOCK FARM

BRED SOW SALE—45 head of high grade Poland-Chinas—40 choice bred sows and gilts, 5 extra good boars; at Fredonia, February 29. Send for catalog.

A. K. SELLER, 2, FREDONIA, KANS.

BOARS, BOARS.

Choice spring males at right prices, by Grand Chief, Masterpiece, Nonpareil, Choice Chief, E. L. 2d, and other noted sires. Call on or write.

THOS. COLLINS, R. 4, Lincoln, Kans.

Stalder's Poland-Chinas

I have pigs for sale from the leading strains of the country. Prices reasonable. Write for full particulars.

O. W. Stalder, Salem, Neb.

Erie Gas Light Herd POLAND-CHINAS.

Headed by Sunshine Chief 2d by Chief Sunshine 2d, dam Queen Perfection, Margarette C, Mayflower, Ideal Sunshine 2d and other great sows in herd. Stock for sale. J. K. MAHAFFEY, Erie, Kans.

JOHN BOLLIN,

Route 5, Leavenworth, Kans.

Breeds and Sells Poland-Chinas

The State and World's Fair winning boar Nemo L's Dude and The Piquet in service. Read sows and sowpigs for sale.

SUNNY SLOPE POLANDS

A number of spring pigs, either sex, the farmers' kind, at bottom prices. Gilts will be sold bred or open. Also a litter of Scotch Collie pups, the great watch and cattle dog.

W. T. HAMMOND, Fortis, Kans.

POLAND-CHINAS. 307-bred sows and gilts by Dandy Rex, Emperor Chief, Black Boy, and bred to Dandy Rex and Trouble Maker 2d. Prices reasonable.

J. H. BECKER, Newton, Kans.

CEDAR GROVE HERD

Of pure-bred POLAND-CHINA HOGS

We will have some bargains this season to offer the public. J. A. HEBREW, Stockton, Kans. Mention Kansas Farmer when you write.

Maple Valley Herd Poland-Chinas

50 fine spring pigs sired by On The Line, Col. Mills by Chief Perfection 2d, Prince Darkness, Dispatcher, Grand Perfection, On Time, and other great sires. Write me for prices and breeding.

C. P. BROWN, Whiting, Kans.

POLAND-CHINAS

A. M. Jordan Alma, Kans.

POLAND-CHINAS of modern breeding. "Advance" (by Chief Perfection 2d) and "Grand Mischief" in service.

SIGLER'S

Our Poland-Chinas are rich in breeding and individuality. Our prices are right and we respectfully invite correspondence with prospective buyers.

A. E. SIGLER, Pickrell, Nebr.

The Useful Type of Poland-Chinas

Herd headed by Pillate Chief 43566 by Johnson's Chief 35774, and Major King 43664 by Major M. 31537, a 1000-pound hog.

E. D. Morris, Bern, Kansas

ESBON HERD OF POLAND-CHINAS

I am pricing spring pigs at \$15 to \$25, either sex. Bred gilts \$20 to \$25. Tried sows bred \$40, sows bred to Speculator 43625, or Tedy Expansion sent for record. W. C. TOPPLIFF, Ebson, Kans.

POLAND-CHINAS. SHORTHORNS.

A few thrifty young bulls and boars of the best breeding from champion and prize-winning families. Prices reasonable for quick sales.

R. M. BUCK, Route 2, Eskridge, Kansas

Somerheim Farm Poland-Chinas and Holsteins

For ready sale at a bargain, the herd boar, Capital Prince 45129, by Prince Darkness. Can use him no longer. Also several early spring boars that will make lusty herd-headers and a number of richly-bred gilts. James B. Zinn, Box 348, Topeka, Kans.

Young Boars For Sale

Chief Enterprise at head of herd.

Am offering 35 head of spring boars sired by Chief Enterprise. Heavy boned, growthy, thick fleshed, and in splendid condition. THIS STUFF WILL BE PRICED RIGHT. Write me for further information.

Isaac Tyson, Mound City, Mo.

WELCOME HERD POLAND CHINAS

Headed by the \$1,000 TOM LIPTON. Sows in herd—Springtime by Meddler 2d, a \$710 gilt bred to Perfect Challenger; Cherry Blossom by Perfection E. L., a \$310 gilt bred to S. P.'s Perfection; Elegance by Corroctor, a \$180 sow bred to Meddler 2d; Maxie by Chief Perfection 2d, a \$365 gilt bred to Meddler 2d. Stock for sale at all times. Write us or come and visit herd. JOSEPH M. BAUER, Elmo, Kans.

E. L. Keep On Poland-Chinas.

Pigs by the world's record breaker, E. L.'s Keep On, Meddler 2d, Perfect Challenger, Masticator, On Time, Maximus, Highland Chief Jr., Polman's Meddler, Skybo, Grand Perfection by Grand Chief; and out of sows by Meddler, Chief Perfection 2d, Perfect U. S. by Perfect I Know, Keep On Perfection by Keep On, Sir Darkness by Chief Perfection 2d, Cecil by Mischief Maker, Conviner by Chief Perfection 2d, Philanthropist by Expansion Lamp-lighter, Big Boy by Perfect U. S., Peace Maker by Mischief Maker, and Sunflower Perfection. Herd in care of J. R. Smith. Address all communications to Dr. B. P. Smith, Longford, Kans.

A. B. GARRISON Summerfield Kansas

Breeder of Poland-Chinas

That Win

where size, bone and quality are the chief requirements. 110 early pigs by Prince Yon Tall, my 1000-pound show boar, and Gold Medal, a grandson of Expansion. Write for description and prices.

CHESTER-WHITES



O. I. C. SWINE

For Sale—August and September pigs, either sex. Their breeding is of the best. Also White Tail, a grandson of Expansion. Write for description and prices.

Wyandotte, Write your wants. S. W. ANTZ, Laredo, Nebr.

Andrew Carnegie Herd O. I. C.'s

Proven sows bred for fall farrow. Also 50 early pigs ready for shipment after July 15. Prices reasonable.

W. S. Godlove, Onaga, Kansas

O. I. C. The World's Best Swine

Spring pigs for sale, singly, in pairs or trios; properly mated and sired by Norway Chief, our first and sweepstakes, and other good boars. Write for our free booklet. Some snaps for first orders. Address THE FISHER LIVE-STOCK COMPANY Hastings, Nebraska

POLLED DURHAMS

Polled Durhams FOR SALE

Double Standard Polled Durhams. Choice young bulls sired by Kansas Boy X 2585, brother to first prize winner, last two years. Write or come and see stock.

D. C. VanNice, Richland, Kans.

BERKSHIRES**Berkshires**

Of both sexes for sale. Herd headed by Imported Baron Compton 89196.
W. J. GRIST, Osawatie, Kans.

Ridgeview Berkshires**—FOR SALE—**

One aged and one yearling boar and spring pigs of both sexes.

MANWARING BROS.,
Route 1, Lawrence, Kansas

GEO. W. BERRY,**High-Class Berkshires**

R. F. D. No. 4, Lawrence, Kansas

Breeder of MASTERPIECE, head of the superb Masterpiece family; also BLACK ROBINHOOD, head of the great Black Robinhood family.

For Sale—Show pigs and herd headers, fall of 1907 farrow. Choice boars and gilts at moderate prices.

Knollwood Berkshires

Headed by Pacific Duke 56691, dam Marjorie 37491 by Baron Duke 23d 50000 a son of Baron Lee 4th, the sire of Lord Premier and Duchess 120th 28675, grand dam of Premier Longfellow. Stock of all ages for sale. All stock guaranteed as represented.

E. W. MELVILLE, Eudora, Kans.

**BOX ELDER HERD
BERKSHIRES**

Special price on 150 to 200 pound boars for 15 days only. One-fifth off the regular price. These pigs are by Master's Longfellow 90354 and Legal 86271.

C. G. NASH, ESKRIDGE, KANS.

Guthrie Ranch Berkshires.

The Guthrie Ranch Berkshire herd, headed by Berrington Duke, assisted by his prize-winning son, Revelation, and his half-brother, Baron Duke. Size, bone and quality for the farmer; style and finish for the breeder. A few extra good boars and over one hundred fall pigs to choose from.

T. F. GUTHRIE, Strong City, Kansas.

Pawnee County Berkshires.

Stock from the best families known to the breed. Breeding second to no herd in America. Stock of all ages and both sexes. Pigs not akin.

T. J. CONGDON,
Pawnee City, Neb.

King's Berkshires

Have weight, quality and constitution developed by rustling for the best pork producing food on earth, alfalfa and blue-grass, supplemented with a light ration of grain and mill-feed. They are bred right and best of all are priced right. Write for anything in Berkshires to

E. D. KING, Burlington, Kans.

ABERDEEN-ANGUS**Allendale Stock Farm**

Pure-bred Aberdeen-Angus cattle. All leading families represented. A few good herd bulls for sale.

W. A. HOLT, - Savannah, Mo.

HOTEL KUPPER

11th and McGee St.

Kansas City, Missouri



One of the newest and most centrally located hotel in the city. Absolutely modern in every detail. European Plan, \$1 per day and up

SHORTHORNS**New York Valley Herds of Shorthorn Cattle and Berkshire Hogs.**

No hogs for sale at present but will sell some extra fine Scotch-topped bulls and heifers from 8 to 18 months old. Come and see my stock and be convinced. J. T. Bayer, Yates Center Kans.

Scotch Topped Bull.

FOR SALE OR TRADE—My 4-year-old herd bull, Maude Duke of Wildwood 218428; has scale and quality, is a good individual and a sure breeder. Also choice Duroc spring gilts for sale.

T. J. DAVIS, Nickerson, Kans.

SELDEN STOCK FARM

Scotch and Scotch-topped Shorthorns from such families as Young Mary, White Rose, Secrete, Arabella, Lady of Athol, Dulcibella, Young Phillis, Wiley, etc. Young stock of both sexes for sale. Prices reasonable. HOADLEY & SIGMUND, Selden, Kans.

Shorthorns and Poland-Chinas

FOR SALE—7 bulls from 8 to 18 months old (6 of these are straight Scotch), a few pure Scotch and Scotch-topped heifers from 8 months to 2 years old. These are by our pure Scotch bull, Cruickshank Clipper, and out of our best cows. Also some toppy spring boars, and a few choice gilts bred for spring farrow. Prices reasonable. Farm adjoins depot. Call on or write

GEO. B. ROSS & SONS, Alden, Kans.

WESTLAWN SHORTHORNS

A few extra choice bulls, 8 to 18 months old, by my straight Scotch bull, Lankland of Orange and out of heavy milking dams. Prices reasonable.

E. B. GRANT, R. 9, Emporia, Kans.

Prospect Farm Shorthorns

The oldest Shorthorn breeders in Kansas. The largest herd of Cruickshanks in Kansas. Herd headed by Violet Prince 145647 and Orange Commander 220590. Young stock of both sexes and some cows for sale. Quality and prices right.

H. W. McAFEE,
Bell Phone 59-2, Topeka, Kans.

HEREFORDS**Maplewood Herefords**

The great 2,400 pound Dale Duplicate 2d, Chief herd bull, son of the great Columbus. High-class stock for sale.

A. JOHNSON, - Clearwater, Kans.

Vermilion Hereford Co., VERMILION KANSAS

Boatman 59011 and Lord Albert 181547 head of herd. Choice young stock of both sexes for sale.

E. E. WOODMAN, Vermilion, Ks.

STAR BREEDING FARM**Herefords and Durocs.**

Judge Spencer 97224, a prize-winner at the American Royal in 1906, heads Hereford herd. Hanley Lad 4823 by Hanley 42345, heads Durocs. For sale, choice stock of both breeds, any age or either sex, at rock bottom prices.

SAM'L DRYBREAD, Elk City, Kans.

**HIGH-CLASS MODERN
HEREFORDS.**

The great Protocol 2d 91715, Printer 66684, Beau Beauty 192335 and Beau Brummel 10th 167719, head of herd. Choice young stock of both sexes for sale.

Hazford Place,
Robt. H. Hazlett, Eldorado, Kans.

HOLSTEIN-FRIESIANS**Holstein Bull**

8 months old sired by Jessie Forbes' Tritonia Duke, whose dam has A. R. O. record, 24.58 pounds of butter in 7 days. His dam a highly bred heifer sure to make a good record. A splendid individual, choice-bred and registered. Write for particulars.

EAST SIDE DAIRY FARM,
F. J. Searle, Prop. - Oskaloosa, Kans.

THE LILAC FARM.

We have a fine lot of bull calves sired by Lilac Preterje Sir De Kol, 1st prize bull Topeka State Fair, 1905, which we are offering for sale at a very reasonable price. The Lilac Farm, Hughes & Jones, Proprietors, Route 2, Topeka, Kans.

HOLSTEIN BULL CALVES

from large producing dams. You can increase your profits 50 per cent with this class of stock. Address

H. B. COWLES, 625 Kansas Ave., Topeka, Kas.

Somerheim Farm

Holsteins and Poland-Chinas
For Sale—30 yearling Holstein heifers, just ready for work. Make heavy, rich milkers. Prices will be reasonable. I have the best herd of dairy cattle in Kansas. James B. Zinn, Box 348, Topeka, Kans

Live stock advertising in The Kansas Farmer brings results to the advertiser.

RED POLLS

COBURN HERD OF RED POLLED CATTLE
Herd now numbers 115 head. Young bulls for sale.
GEO. COBURN & SON,
Route 1, Ponca, Kans.

Foster's Red Polls.

Some choice young bulls and heifers, also a few good cows for sale. Prices reasonable.
Chas. Foster & Son, Eldorado, Kans.

**RED POLLED CATTLE AND
POLAND-CHINA SWINE**

Best of breeding. Write or come and see.
CHAS. MORRISON & SON, Route 2, Phillipsburg, Kans.

GALLOWAYS**CAPITAL VIEW GALLOWAYS**

Over 200 head. Extra lot of young bulls by Imp Ballie of Lockside 23524, Lost Boy of Platte 12633, and Tip Top 22260.

G. E. CLARK,
2301 Van Buren Street, Topeka, Kans

JERSEYS**Linscott's Jerseys**

Established 1878. Registered in A. J. C. C. "MY herd has outgrown the carrying capacity of my farm and to reduce it in numbers, offer for sale any animal, with a very few exceptions, in the herd for from \$25 to \$125. Remember this if from the largest and oldest herd of registered Jerseys in Kansas. Young stuff both sexes for sale at all times. Correspondence and inspection invited. R. J. Linscott, Holton, Kans.

AUCTIONEERS**JAS. W. SPARKS**

Live Stock Auctioneer
MARSHALL, MISSOURI
Twenty years selling all breeds.

E. E. POTTER, Sterling, Kansas,
Live Stock Auctioneer.

Pure-bred stock sales a specialty. Best of references. Write, wire or phone for terms and dates at my expense.

John Daum Nortonville, Kan.**Live Stock Auctioneer**

Fine stock a specialty. Large acquaintance among stock breeders. Sales made anywhere. Working and booked for best breeders in the State. Write or wire for dates.

Jas. T. McCulloch,**Live - Stock - Auctioneer**

Clay Center, Kansas.

I am making a study of your herd and best interests from a public sale standpoint. I am conducting sales for many of the best breeders in Northern Kansas and want to make your next sale. Selling pure-bred live stock at auction is my business.

Col. T. E. Gordon,**Live-Stock Auctioneer**

Waterville, - Kansas

References—Those for whom I have sold

**EDUCATION IS ESSENTIAL IN
EVERY LINE.**

I have the natural qualifications for an auctioneer and have had the benefit of a term of training in the American Auction School located at Chillicothe, Mo., which school provides a thorough course not only in practical auctioneering but also stock judging and other things that very successful auctioneers should know. My terms are reasonable for good service.

W. C. CURPHEY, Abilene, Kansas

THOS. E. DEEM**Live-Stock Auctioneer**

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Am now booked for sales of the leading breeds of pure-bred live-stock. Write me before arranging a date.

AUCTIONEER**C. M. CREWS**

23 East 6th St. TOPEKA, KANSAS

Both Phones 780. Live Stock Sales a Specialty. Correspondence regarding pure-bred sales invited. References—Shawnee Breeders' Association and The Kansas Farmer.

JAS. W. SPARKS**Live Stock Auctioneer**

Marshall, Mo.

Sales of pedigree stock a specialty. Sixteen years selling for America's best breeders.

HORSES AND MULES**OAKLAWN FARM**

HEADQUARTERS FOR

PERCHERONS**BELGIANS****FRENCH COACHES****POINTERS FOR BUYERS**

Our sales last six months nearly twice those of any similar period in our history. Animals purchased here and shown by their then owners won more championships and first prizes than all purchased elsewhere and similarly shown.

Constant importations. Next one due February 5, 1908. Best animals, lowest prices, safest guarantee. 42 years of honorable business methods. Write immediately to

DUNHAM & FLETCHER
WAYNE, DU PAGE COUNTY, ILLINOIS

For Sale.

5 big jacks from 3 to 5 years old, 15 to 16 hands, all good ones; also 4 Percheron stallions, two 2 years old, weighing over 1800 pounds each at 20 months old and will weigh a ton at 3 years old. Is that the kind you want?

JOE FOX, Greeley, Anderson Co., Kans.
(On Mo. Pac. Ry.)

Percheron Horses

Stock for sale. Come and see us or write your wants.

F. H. Schrepel, Ellinwood, Kas.

Jacks, Jennets, Stallions

30 black jacks of good ages, heavy boned and up to 16 hands high; 38 jennets; stock nearly all of my own raising and acclimated. Also several draft stallions and one saddle stallion for sale. Prices reasonable.

PHILLIP WALKER, Moline, Elk Co., Kans.

JACKS.

I have the largest line of big, first-class, imported and Home-bred Jacks in the world. Mules are getting higher and in greater demand than ever. If horses get higher, mules will get higher still, just the same. Raise mules. If you do not like mules, remember I stand in the front rank with the finest line of extra big imported Percherons, Belgians and American-bred ton stallions, at lower prices than you can find them anywhere. All stock guaranteed 65 per cent breeders. W. L. DeCLOW, Cedar Rapids Jack Farm, Cedar Rapids, Iowa.

FOR SALE

12 jacks, all black and all my own raising and breaking. Also five stallions. Barns three blocks north of depot. For particulars see or write

F. W. POOS, - Potter, Kans.

**JACKS, JENNETS, SADDLE HORSES,
TROTTER AND PACING STALLIONS,
Poland-China and Tamworth Hogs**

We are the largest breeders and importers of Jacks in America and have large stock of saddle stallions and mares, trotting and pacing stallions. Our catalogue is the finest ever issued by any Jack breeder.

J. F. COOK & CO., Lexington, Ky.
Branch Barn, Greenville, Texas.

PIKE COUNTY JACK FARM.

Largest Importer and breeder of Mammoth Jacks in the United States. Every stall in my barns has a big Mammoth Jack, 15 to 17 hands high, 1,000 to 1,800 lbs., that I will sell on one and two years time to responsible parties. If my Jacks are not just as I represent them I will pay all rail road expenses.

LUKE M. EMERSON, Bowling Green, Mo.

THE BROWN FARM

Horses—Cattle—Swine—Poultry.

Silkwood 12324, in stud, race record 2:07; Guideless, record 2:074; sire of two in 2:10 and of eleven with records better than 2:35. Fee, \$25 to insure. Pasture and feed reasonable. Registered Shorthorns and Jerseys. Large strains. Several Jersey bulls for sale. O. L. C. Swine. Choice boars and gilts for sale. R. I. Red chickens, both rose and single comb. Eggs \$1 per 14, \$5 per 100. Correspondence, inspection and patronage solicited.

T. O. BROWN, Prop., Reading, Kans.

AUCTIONEERS**R. L. HARRIMAN**

Live Stock Auctioneer

BUNCETON, MISSOURI

Class
Kansas

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

The State Poultry Show.

The State Poultry Show, held in Topeka, January 6 to 11, was the largest show ever held in the State and the quality of the fowls exhibited keeps getting better and better. This year the best birds of Kansas, Missouri, Nebraska, and Oklahoma were present for the final roundup and trial for supremacy. There were close to 2,500 fowls and 800 pigeons, some of the latter coming from Canada. While the show was the largest in numbers ever held here, it also made a record for celerity in having the awards made. The judging was all done by 3 p. m. on Wednesday and the awards all made and the winning cards tacked to the coops Wednesday evening. This is a record to be proud of and was never before accomplished by so large a show in so short a time.

The Plymouth Rocks still keep at the head of the procession in popularity, there being 198 of the Barred variety, 127 of the White, and 113 Buffs. The next in numbers were the Rhode Island Reds, there being 118 of the Single Comb variety and 89 of the Rose Comb.

The Wyandotte class was well represented in variety, there being Silver, Golden, White, Buff, Partridge, Columbian, and Silver Pencilled, seven varieties of Wyandottes. There was an especially large number of Partridge and Columbian, considering that they are both comparatively new breeds.

The Leghorns also were well represented, the Single Comb Brown being the greatest in number, with the Single Comb White following them closely. There were quite a number of Black Leghorns, a variety not often seen in the show rooms of the West.

Silver Spangled Hamburgs, the prettiest fowl of all, were quite numerous and attracted a great deal of attention.

S. C. Buff Orpingtons were quite a large class and of excellent quality. Some new varieties of Orpingtons were on exhibition for the first time here, namely, Silver Spangled Orpingtons, White Orpingtons, Rose Comb Buff Orpingtons, and Diamond Jubilee Orpingtons. The latter attracted great attention for this was the first time they were ever seen in the West. This is a new breed of Orpingtons that originated at the

Kokomo Woman Gives Fortune

To Help Women Who Suffer.

In the past few years Mrs. Cora B. Miller has spent \$125,000.00 in giving medical treatment to afflicted women. Some time ago we announced in the columns of this paper that she would send free treatment to every woman who suffered from female disease or piles.

More than a million women have accepted this generous offer, and as Mrs. Miller is still receiving requests from thousands of women from all parts of the world, who have not yet used the remedy, she has decided to continue the offer for awhile longer, at least.

This is the simple, mild, and harmless preparation that has cured so many women in the privacy of their own homes after doctors and other remedies failed.

It is especially prepared for the speedy and permanent cure of leucorrhea or whitish discharges, ulceration, displacements or falling of the womb, profuse, scanty or painful periods, uterine or ovarian tumors or growths; also pains in the head, back, and bowels, bearing down feelings, nervousness, creeping feeling up the spine, melancholy, desire to cry, hot flashes, weariness and piles from any cause, or no matter of how long standing.

Every woman sufferer, unable to find relief, who will write Mrs. Miller now, without delay, will receive by mail free of charge a 50-cent box of this simple home remedy, also a book with explanatory illustrations showing why women suffer and how they can easily cure themselves at home without the aid of a physician.

Don't suffer another day, but write at once to Mrs. Cora B. Miller, Box 9889, Kokomo, Indiana.

time of the Queen of England's Diamond Jubilee, hence the name.

The ever-popular variety of Light Brahmas were out in goodly numbers and of excellent quality. Buff Cochins were not many in numbers but the quality was extra good. Black Langshans were out in force and of a high degree of merit. Some American Dominiques were on hand and were interesting as showing the original breed from whence came the Barred Plymouth Rocks. There were a great variety of Bantams of all shapes and colors. Mammoth Bronze turkeys were of excellent quality. There were also a number of varieties of geese and ducks. It was a very even show, with a sprinkling of nearly all the popular varieties.

The awards of the regular classes were given in last week's FARMER to which the following specials should be added:

Reno County won the first prize of \$20 for county showing the greatest number of birds scoring 90 points and over, with 229 birds; Nemaha County the second prize of \$15, with 161; Leavenworth County the third prize of \$10, with 115; and Sedgwick County the fourth prize of \$5, with 112 birds.

For largest display of one variety by one exhibitor Mr. F. W. Boutwell, Topeka, won first prize of \$20, with 57 S. C. Brown Leghorns; Tucker & Fowler, Topeka, won the second prize of \$15, with 54 Black Langshans; G. R. Davis, Valley Center, Kans., won the third prize of \$10, with 34 W. P. Rocks, and Mr. R. B. Steele, Topeka, won the fourth prize of \$5, with 27 S. C. R. I. Reds.

The special prize for best display in American class was won by G. R. Davis, Valley Center, Kans. The special prize for best display in Mediterranean class was won by Otis H. Crow, Hutchinson, Kans. The special prize for best display in Asiatic class was won by Tucker & Fowler, Topeka.

Best exhibit of parti-colored fowls, F. W. Boutwell, Topeka.

Best exhibit solid-colored birds, Tucker & Fowler, Topeka.

Best pen shown by exhibitor for first time at State Show, Alice J. Lamb, Manhattan.

Highest scoring bird in show room, Alice J. Lamb, Manhattan, Kans., a White Leghorn pullet scoring 96.

Neatest and most attractive coop, Geo. F. Mueller, St. John, Kans.

Best cockerel in American, Asiatic, Mediterranean, or English class, H. P. Swerdfefer, Wichita.

Best display Buff Cochins Bantams, C. H. & G. S. Wickham, Anthony, Kans.

Whitest bird in show room, Bridgman & York, Forest City, Mo.

Pen of birds from longest distance, A. F. Snodgrass, Purcell, Okla.

For best dozen white eggs, J. E. Freeman, Topeka, Kans.

For best dozen brown eggs, H. M. Palmer, Florence, Kans.

For best packed sitting of eggs, H. A. Sibley, Lawrence, Kans.

Five dollars in gold was offered for the best packed sitting of eggs and there were quite a number of entries, with all kinds of boxes and baskets, but a plain splint basket with the eggs packed in excelsior took the first premium.

There was a larger attendance of poultry-breeders at the annual meeting than at any previous gathering and the report of the secretary-treasurer showed a large increase in membership and a substantial balance in the treasury. The following gentlemen were elected managers for the ensuing year: Prof. L. L. Dyche, Lawrence; H. J. Freeman, Wichita; W. A. Doolittle, Sabetha; Dr. C. A. Branch, Herlington; C. C. Lindamood, Walton; Harry C. Wright, E. W. Rankin, W. H. Maxwell, and Thomas Owen, Topeka. The board of managers met after the meeting and elected the following officers: President, L. L. Dyche, Lawrence; vice-president, H. J. Freeman, Wichita; Supt. C. C. Lindamood, Walton; secretary-treasurer, Thos. Owen, Topeka.

A resolution was offered and carried unanimously, thanking Senator

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisement for short time will be inserted in this column without display for 10 cents per line of seven words or less per week. Initials or a number counted as one word. No order accepted for less than \$1.00.

SEEDS AND PLANTS.

WE ARE IN THE MARKET for red clover, timothy, alfalfa, millet and other seeds. If any to offer please write us. The Barteldes Seed Co., Lawrence, Kans.

FOR SALE—Kerosene seed oats, pure-bred stock. For a sure crop of oats sow my pure Kerosene, rust proof, grown from selected stock in Nebraska. Price \$1 per bushel. Reclined bars 15¢ each. Samples free. Jerry Mika, R. 5, Friend, Nebr.

SEED CORN—Hildreth and Kansas Sunflower Highest yielding varieties at Kansas Agricultural College. See circular 12 by Prof. T. W. Fick. Write me for prices. J. J. McFar, Treasurer Kansas Corn Breeders Association, Manhattan, Kans.

SEED CORN—C. E. Hildreth, Altamont, Kans. Originator, breeder and grower of Hildreth Yellow Dent corn. First prize at fairs and corn shows. "1903 to 1906 the Hildreth has produced the largest average yields at Experiment Station."

FREE—Our big illustrated Farm and Garden Seed catalog is now ready. It's mailed free to all who are interested in the crops they grow. Address: Rakekin's Seed House, Shenandoah, Iowa.

WANTED—Seed sweet corn. Barteldes Seed Co. Lawrence, Kans.

CATTLE

WANTED TO BUY—A young Guernsey bull or bull calf. C. P. Felch, London, Kans.

JERSEY CATTLE, WHITE ROCK CHICKENS—cheap for such blood, beauty and profit. Jas. S. Taylor, Route 1, Iola, Kans.

FOR SALE CHEAP—Choice registered Holstein bull, 4 years old; quiet and gentle. As we must change bulls some one will get a bargain in this fine animal. Also 2 choice grade bull calves. Van Leeuwen & Roe, Route 1, Centerville, Kans.

FOR SALE—Four registered Shorthorn bulls, 1 and 2 years. Address E. D. Haney, Courtland, Kans.

REGISTERED Holstein-Friesian bull for sale; 3 years old. J. E. Huey, R. 6, Sta. A, Topeka, Kans.

FOR SALE—28 head of registered Aberdeen-Angus cattle. These are the good kind, and are mostly cows and heifers. I am changing my business and these cattle will be sold at bargain prices. Call on or write Frank Wasson, Clearwater, Kans.

FOR Red Polled bulls or heifers, write to Otto Young, Utica, Ness County, Kansas.

SPECIAL SALE—5 straight Crookshank Shorthorn bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

E. F. Porter, of Montgomery County, for his efforts in favor of our appropriation before the Legislature, and he was made a life member of the Kansas State Poultry Association.

A complete man should need no auxiliaries to his personal presence. Whoever looked on him would consent to his will, being certified that his aims were generous and universal. The reason why men do not obey us, is because they see the mud at the bottom of our eye.—Emerson.

If we say sadly to ourselves, "There is no music in a rest," let us not forget "there is the making of music in it." The making of music is often a slow and painful process in this life. How patiently God works to teach us! How long He waits for us to learn the lesson!—John Ruskin.

Grain in Kansas City.

Kansas City, Mo., Jan. 20, 1908. Receipts of wheat in Kansas City today were 359 cars; Saturday's inspections were 171 cars. Shipments, 58 cars; a year ago, 43 cars. Prices were irregular, $\frac{1}{4}$ ¢ lower to $\frac{1}{4}$ ¢ higher, changing with futures and closing firm. The sales were: Hard Wheat—No. 2, 2 cars 99 $\frac{1}{4}$ ¢, 10 cars 99¢, 14 cars 98 $\frac{1}{4}$ ¢, 2 cars 98 $\frac{1}{4}$ ¢, 8 cars 98¢, 1 car 97 $\frac{1}{4}$ ¢, 10 cars 97 $\frac{1}{4}$ ¢, 13 cars 97¢, 13 cars 96 $\frac{1}{4}$ ¢, No. 3, 17 cars 98¢, 5 cars 97 $\frac{1}{4}$ ¢, 4 cars 97¢, 3 cars 96 $\frac{1}{4}$ ¢, 3 cars 96 $\frac{1}{4}$ ¢, 23 cars 96¢, No. 4, 1 car 98¢, 1 car 97 $\frac{1}{4}$ ¢, 1 car 96¢, 14 cars 95 $\frac{1}{4}$ ¢, 8 cars 95¢, 1 bulkhead car 95¢, 3 cars 94 $\frac{1}{4}$ ¢, 3 cars 94¢, 2 cars 93¢, rejected, 1 car 90¢, 3 cars 88¢, 1 car 86¢. Soft Wheat—No. 2 red, 1 car \$1, 2 cars 99 $\frac{1}{4}$ ¢, 1 car 99¢, No. 3 red, 3 cars 98¢, 2 cars 97 $\frac{1}{4}$ ¢, 2 cars 97¢, 1 car like sample 97¢, 3 cars 96¢, 1 car like sample 95 $\frac{1}{4}$ ¢, No. 4 red, 1 car 96¢, 1 car 95 $\frac{1}{4}$ ¢, Durum Wheat—No. 2, nominally 84 $\frac{1}{2}$ ¢@85¢.

Receipts of corn were 84 cars; Saturday's inspections were 21 cars. Shipments, 38 cars; a year ago, 77 cars. Prices were unchanged to $\frac{1}{4}$ ¢ higher. The sales were: No. 2 white, 3 cars 53 $\frac{1}{4}$ ¢, No. 3 white, 11 cars 53 $\frac{1}{4}$ ¢, No. 2 white, 1 car 52 $\frac{1}{4}$ ¢, No. 2 mixed, 1 car 53 $\frac{1}{4}$ ¢, 6 cars 53¢, No. 3 mixed, 3 cars 53¢, 12 cars 53¢, No. 2 yellow, 1 car 53 $\frac{1}{4}$ ¢, No. 3 yellow, 7 cars 53 $\frac{1}{4}$ ¢, 1 car 11¢ sample 53 $\frac{1}{4}$ ¢.

Receipts of oats were 20 cars; Saturday's inspections were 21 cars. Shipments, 10 cars; a year ago, 27 cars. Prices were unchanged to $\frac{1}{4}$ ¢ lower. The sales were: No. 2 white, 1 car 50¢, 4 cars 49¢, 6 cars 48 $\frac{1}{4}$ ¢, 5 cars color 48 $\frac{1}{4}$ ¢, No. 2 mixed, nominally 48 $\frac{1}{4}$ ¢@49¢, No. 3 mixed, 3 cars like sample 48¢, nominally 47 $\frac{1}{4}$ ¢@48¢.

Barley was quoted at 74¢@78¢; rye, 75¢@80¢; flaxseed, \$1.03@1.05; kafir-corn, \$7@9¢ per cwt.; bran, \$1.02@1.03 per cwt.; shorts, \$1.01@1.03 per cwt.; ppm

HORSES AND MULES.

FOR SALE OR TRADE for good Jennets, a few good draft mares. Give full description and price in first letter. H. T. Hineman, Dighton, Kans.

FOR SALE—13 Jacks and Jennets, 13. Unlucky number! First buyer gets a bargain to break the hoodoo. Don't write, come quick. Also 2 draft stallions. J. C. Strong, Moran, Kans.

JACKS FOR SALE—Missouri, Kentucky, Tennessee and native bred Jacks; the big kind. Charles Giffin, Rydal, Kans.

FOR SALE OR TRADE—Standard bred road stallion and one imported English Shire, weight, a ton. Box 431, Canton, Kans.

I WANT TO BUY—A good big young Jack. Send full description to William Tomb, Wichita, Kans.

FOR SALE—One registered black Jack, 16 hands high; one 1600 pound stallion. Both animals are fine individuals and have the best of reputations. Going away for my health. Offered cheap now. Thos. Hill, Bancroft, Kans.

FOR SALE—My stallions, Jacks, brood mares and colts. R. E. Cowdry, 112 Quincy St., Topeka, Kans.

PERCHERON STALLION FOR SALE—Owing to circumstances I am forced to sell my 7-year-old registered Percheron stallion. He is sound, kind, big, has a fine action and is a perfect show horse. Will fully guarantee him. Terms: Cash, approved notes, or will trade for cattle. J. B. Weldon, Eureka, Kans.

TWO JACKS FOR SALE—3 and 4 years old, Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

FOR SALE—One black team, 6 and 7 years old, weight 2600 pounds. Mr. and Mrs. Henry Schrader, Wainola, Kans.

SWINE.

I OFFER for quick private sale, 10 head Duroc-Jersey bred gilts at a bargain. Write for prices and breeding. Chester Thomas, Waterville, Kans.

15 DUROC-JERSEY bred gilts and 5 tried sows bred to a son of Kant-Be Beat and a grandson of Tip Top Notcher. Also 20 Single Comb Brown Leghorn cockerels. A. G. Dorr, Osage City, Kans.

KANSAS HERD OF POLAND-CHINAS—I have lost my health and will sell my entire herd of 40 head for \$400. F. P. Maguire, Hutchinson, Kans.

FOR big boned, registered Berkshires at \$5 to \$10, write Chas. Morrison, Osage City, Kans.

FOR SALE—Duroc-Jersey pigs, both sexes. March and April farrow, by Flander 4580. Raised for usefulness. Farmers prices; pedigree furnished. Also R. I. Red cockerels. Ben Warren, Maple Hill, Kans.

TWO HERD BOARS FOR SALE—Joe Cannon by Red Raven and out of Faust's Pride, a Kant-Be Beat sow, and Colossal by Golden Rule, the boar at the head of Watt & Faust herd. Grant Chapin, Green, Kans.

POULTRY.

ROSE COMB White Leghorn cockerels, \$2 each. Eggs in season. C. W. Howard, Stamford, Nebr.

PURE BRED Rose Comb Brown Le horn cockerels for sale. Eggs for hatching. Write for prices. Mrs. John Holzhay, Bendena, Doniphan Co., Kans.

SILVER WYANDOTTES EXCLUSIVELY—Winning birds and special sixteen years. Fine cockerels for sale from State Show first prize mating. Mrs. J. W. Gause, Emporia, Kans.

SCORED COCKERELS—One R. C. R. I. Red, score 91 $\frac{1}{2}$; \$1.50. Two Buff Orpingtons score 90 $\frac{1}{2}$ and 93 $\frac{1}{2}$; \$1.50, \$2. With score card by Judge Atherton. Mrs. Lizzie B. Griffith, R. 3, Emporia, Kans.

CLOSING OUT SALE of Bearman's White Rocks at bargain prices. 35 Barred Rock cockerels, \$2 to \$5; America's best strain females, \$1.50 to \$2. Eggs \$2 per 15; \$5 per 45. Write soon. Chris Bearman, Ottawa, Kan.

INDIAN RUNNER DUCKS and S. C. Rhode Island Red cockerels for sale. E. E. Janzen, Route 3, Geneseo, Kans.

FOR SALE—An extra fine bunch of young M. B. turkeys from stock scored up to 96 points. I look 1st cock, 1st cockerel, 1st and 2d hen, 1st and 2d pullet, 1st and 2d pen at central Kansas Poultry show at Newton, Kans., this fall. Extra prices on young stock up to February 15. Eggs in season \$4 per 11. G. W. Perkins, Route 4, Newton, Kans.

MISCELLANEOUS.

EVERLASTING FENCE POSTS, any soft wood; receipt 25¢. M. Trego, Woodward, Okla.

FOR SALE—Northern potatoes, 75 cents per bu. Write for prices on seed potatoes. W. H. Long, 404 E. 4th st., Topeka, Kans.

VETERINARY SURGEON AND DENTIST WANTS LOCATION—I would like to hear from some one who can tell me of a good opening in Kansas town of 1000 population or more. Want to locate permanent. Address Lock Box 24, Buffalo, Kans.

SELL TOBACCO AND CIGARS locally or traveling; salary or commission; full time or sideline; good pay; promotion; experience unnecessary. Address Morotock Tobacco Works, Box C 49, Danville, Va.

WANTED—A car of hedge posts, delivered on Santa Fe. Write J. C. Hume, Route 3, Council Grove, Kans.

EQUIPMENT for the manufacture of Concrete Fence Posts. Territory assigned. Agents wanted. Address The Paragon Concrete Fence Post Co., 622 Minnesota Ave., Kansas City, Kans.

WANTED—By experienced agricultural college graduate, a position as manager of an up-to-date dairy farm. Preferably in Kansas or Colorado. E. E. Greenough, Manhattan, Kans.

WANTED—A second-hand traction engine, not less than 16 horse power. Dr. W. D. Barker, Chanute, Kans.

RURAL BOOKS—Send for descriptive list of books for farmers, gardeners, florists, architects, stock raisers, fruit growers, artisans, housekeepers and sportsmen. Send free. Address The Kansas Farmer Company, Topeka, Kans.

chop, \$1.03@1.06 per cwt.; millet seed, \$1@1.10 per cwt.; clover seed, \$1@1.15 per cwt.

The range of prices for grain in Kansas City for future delivery and the close to-day, together with the close Saturday, were as follows:

	Open.	High.	Low.	to-day.	Sat.
WHEAT.					
May	97 $\frac{1}{4}$ -97	98 $\frac{1}{4}$	97	98	97 $\frac{1}{2}$
July	91-90 $\frac{1}{2}$	91 $\frac{1}{2}$	90 $\frac{1}{2}$	91 $\frac{1}{2}$	90 $\frac{1}{2}$
CORN.					
May	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$
July	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$	54 $\frac{1}{2}$

REAL ESTATE

REAL ESTATE

SPECIAL

Six quarter sections 20 miles from Topeka, 1 mile from good railroad town. All in wild meadow. This is the last of a large ranch. It can be had for \$25.00 per acre.

Ind. Telephone 1847. L. E. ANDERSON & CO, Topeka, Kans. 800 N. Kansas Ave.

Marshall County Farms

200 ACRES—

90 acres in cultivation, 40 acres of which is bottom; 70 acres good pasture; 40 acres fine timber. Large 6-room house, dist. rm., well and windmill. Good outbuildings. 6 acres hog tight; plenty of fruit; 40 acres in wheat; 2 1/2 miles from town of 700 population. Price \$35 per acre.

F. NEWSON,
Blue Rapids,
Kansas.

800 ACRE stock ranch for sale or trade. Has two sets of improvements and two orchards. Mr. and Mrs. Henry Shrader, R. 1, Box 6, Wauneta, Kans.

148 ACRES in Johnson County; new improvements, near school and city; quick possession; price right. Half cash, balance 5 per cent. G. Scott, Edgerton, Kans.

QUARTER SECTION of fine land in Sherman County, close to Goodland, to trade for part horses, cattle or mules. T. J. Kennedy, Osawkee, Kans.

FOR SALE—800 acres corn and wheat land, dark sandy soil, 5 miles of Greensburg—a county seat on main line of Rock Island. Joins school. 40 acres cultivated, about 300 in wheat leased at 1/2 and 3/4 delivered; 2-room house, stable, cow shed, granary, chicken house, well and windmill, the best water in the state at 25 feet; a lot of fencing. Price \$20 per acre. Don't write, but come quick. Edgar B. Corse, owner, Greensburg, Kans.

TO HOMESSEKERS—Young men desiring to enter rich Government lands at low altitudes near high priced markets are invited to address J. C. Kennedy, C. E., Rhyolite, Nevada.

80 acres, 55 cultivated, 10 meadow, balance pasture. Good 6-room frame house, stable for 8 horses, orchard and all kinds of fruit. 2 good wells, one mile to school, 4 to Emporia. \$4000. Hurley & Jennings, Emporia, Kans.

Eighty acres, Anderson County, three-fourths of a mile from Amlot. Four-room house, barn for ten head of stock, good soil location and water. Price, \$3,500. B. F. Fridley, Amlot, Kans.

\$250 WILL BUY 80 acres; Christian County, Southeast Missouri. Perfect title; terms \$10 monthly. W. M. B. Williams, Mt. Vernon, Ill.

HOME IN MANHATTAN.

480 acres, farm land, wild meadow, and pasture; improved, watered; 12 miles out, 3 miles to shipping station; price \$20 per acre. 160 acres—90 acres best river bottom, balance pasture; improved; \$7,000. 240-acre finely improved prairie farm for \$10,000. 320-acre best natural pasture for \$5,000. Over 40 farms in this vicinity. Lists in more than twenty Kansas counties. Best large stock farm and ranch list in the west. Over 75 city properties. Large suburban and rooming-house list. Good exchange list. Manhattan city properties, including livery and harness business and hotel, for land. Write today. New state map for 10 cents in stamps. MANHATTAN REALTY CO., 304 Poyntz Ave., Manhattan, Kans.

Farm Bargains in East Kansas

Write for new land list describing farms that are offered at bargain prices. Corn, wheat, clover and alfalfa land.

MANFIELD BROS., Garnett, Kans.

MISSOURI FARMS FOR SALE

Everman has a farm for every man. Write for description and price list.

John W. Everman, Gallatin, Mo.

R U LOOKING



For a bargain? I have these direct from the owners, and they will pay your expenses if not found as represented. In Kan., Mo., Okla., Nebr., Colo. and Tex., 397 farms, 78 ranches, 61 stocks of goods, also lumber yards, hotels, mills, elevators, phone plants, horses, cattle, etc. I have some splendid farms and ranches to exchange for rentals and merchandise. When you wish to buy, sell or exchange, I would like to hear from or see you.

FRANK GEE, Lawrence, Kans.

200-BARREL FLOUR MILL

Located in Eastern Kansas. Cost over \$30,000. Equipped with modern machinery, in perfect order. This property is clear. Will exchange for good land, assume encumbrance, or pay cash difference.

—Address—

S. B. Rohrer, Shawnee Fire Bldg., Topeka, Kans.

Norton County Alfalfa and Corn Farms.

We sell Norton County lands where wheat, corn and alfalfa grow in abundance. Write us for list of farms, and full particulars.

LOWE & BOWERS, Almena, Kans.

NOW IS THE TIME TO GET A HOME IN SUNNY COLORADO

They are coming here by the hundreds for health, happiness, homesteads and low priced lands. I locate homesteaders and sell land, in this, the most healthful climate in the United States. Elevation 3500 feet; better for lung troubles than higher altitudes. This is the coming wheat producing country of the middle west; one crop pays for the land twice over. Come over the Mo. Pac. Ry. and get off at Sheridan Lake, 14 miles west of the Kansas line and let me show you. S. B. Smith, Sheridan Lake, Colo.

A Cheap Wheat Farm in Stanton Co., Kans.

160 acres level as a floor. Deep, black soil, ready for the plow. In German settlement south part of the county. Price only \$800.

ALBERT E. KING,
McPherson, Kans.

LEGAL.

First published in Kansas Farmer January 16, 1907
Publication Notice

In the District Court of Shawnee County, State of Kansas.

Marium Carleton, Plaintiff, vs. George H. Carleton, Defendant. No. 24784.

To George H. Carleton, the above named defendant. You are hereby notified that as defendant, you have been sued by the above named Marium Carleton as the plaintiff and that said action is now pending in the District Court of Shawnee County, State of Kansas, and that the petition is now on file in the office of the Clerk of the District Court aforesaid; and you are further notified that unless you plead, answer or demur to said petition on or before the Twenty-Seventh (27th) day of February, A. D. 1908, or the matters and things set forth in the petition of plaintiff, together with the proofs offered, will be taken as true, and a judgment and decree will be rendered and taken against you annulling the bonds of matrimony and marriage heretofore existing between yourself and said plaintiff, on the grounds of extreme cruelty and gross neglect of duty, and restoration of former name of Marium Derry be decreed to plaintiff, and for costs and such other relief as she may be entitled to.

MARIUM CARLETON, Plaintiff.
By P. H. CONY and F. P. COCHRAN,
Her Attorneys.

Attest: R. L. THOMAS,
[SEAL] Clerk.

Notice of Final Settlement.

The State of Kansas, Shawnee County, ss. In the Probate Court in and for said County. In the matter of the estate of Edward Zuercher. Creditors and all other persons interested in the aforesaid estate, are hereby notified that I shall apply to the Probate Court in and for said County, sitting at the Court House in the City of Topeka, Shawnee County, Kansas, on the 24th day of February, A. D. 1908, for a full and final settlement of said estate.

Dated December 19, A. D. 1907.

S. J. CRUMBINE, Administrator
of the estate of Edward Zuercher, deceased.

(First published in Kansas Farmer, December 26, 1907.)

Sheriff's Sale.

Case No. 24687.

In the District Court of Shawnee County, State of Kansas. James Durkin, Plaintiff, vs. J. E. Tierney and Alice Bates, Defendants.

By virtue of an Order of Sale issued to me, out of said District Court, in the above-entitled action, I will, on Monday, the 27th day of January, A. D. 1908, at 10 o'clock a. m., of said day, at the east front door of the Court House in the City of Topeka, in the County of Shawnee, in the State of Kansas, offer at public sale, and sell to the highest and best bidder, for cash in hand, all the following described real estate, to wit: Lots numbered 1, 3, 5, 7, 9, 11, 13, and 15 on Third Street in Block 21, also Lots numbered 1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29 and 31 on Third Street in Block 22. Also Lots numbered 2, 4, 6, 8, 10, 12, 14 and 16 on Gordon Street in Block 21. Also Lots numbered 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28, 30 and 32 on Gordon Street in Block 22. All of the aforesaid lots are recorded in plat of Blocks 21 and 22, North Park Addition to the City of Topeka, lying and situate in the County of Shawnee in the State of Kansas.

The above-described real estate is taken as the property of said defendants, and is directed by said order of sale to be sold, and will be sold without appraisalment, to satisfy said order of sale.

J. M. WILKINSON,
Sheriff of Shawnee County, Kansas.

By JONATHAN D. NORTON,
Under Sheriff.

M. T. CAMPBELL, Attorney.

Stray List

For Week Ending January 2.

Lyon County—Jno. E. Martin, Clerk. STEER—Taken up by Sarah J. Weaver in Emporia tp., one 3-year-old dark red steer, square crop on left ear; valued at \$35.

For Week Ending January 23.

Stanton County—James Herrick, Clerk. HORSES—Taken up by William D. Berg in Pana tp., December 2 1907, two horses described as follows: One bay horse, about 10 years old, weight 900 lbs., 15 (with half circle underneath) on left thigh, saddle marks on withers; valued at \$30. One sorrel horse about 10 years old, weight about 900 lbs., star in face, white hind legs half way to hocks, valued at \$30.

HENRY W. ROBY, M. D.
SURGEON.
730 Kansas Ave. Topeka, Kans.

FRANK IAMS'

"Peaches and Cream" stallion and mares are best investments for deposits, you have in "banks" and can't draw out. Waits me around again Willie," then buy a stallion and two mares of Iams. They will make us 40 per cent and we will know where our money is. Iams will accept our certificate of deposit drafts, certified checks or bankable notes. Iams and his winners and sons of winners "stir up the animals." He hypnotizes the buyers with a "horse show" of bargains. Owing to bad crops, Iams' cash, his 26 years experience, he is selling more and better horses than ever. "Willie," buy an "Iams stallion" this fall, save \$300 and get choice of

200 Percherons, Belgians and Coachers 200

Two to six years old, wt. 1700 to 2550 lbs., 90 per cent black boys, 50 per cent tan stallions. All registered and approved. Mamma, Iams is a hot advertiser, but he has "the goods." He sells "toppers" at \$1000 and \$1500, so good they need not be "peddled" or put on the "auction block" to be sold. He has on his selling clothes, they fit all buyers. No men with money or bankable notes get away from Iams. He buys, owns and sells more stallions than any man in the U. S., saves thousands of dollars to stallion buyers. He is not in the stallion trust. Iams places 1,000 or \$1,500 insurance.

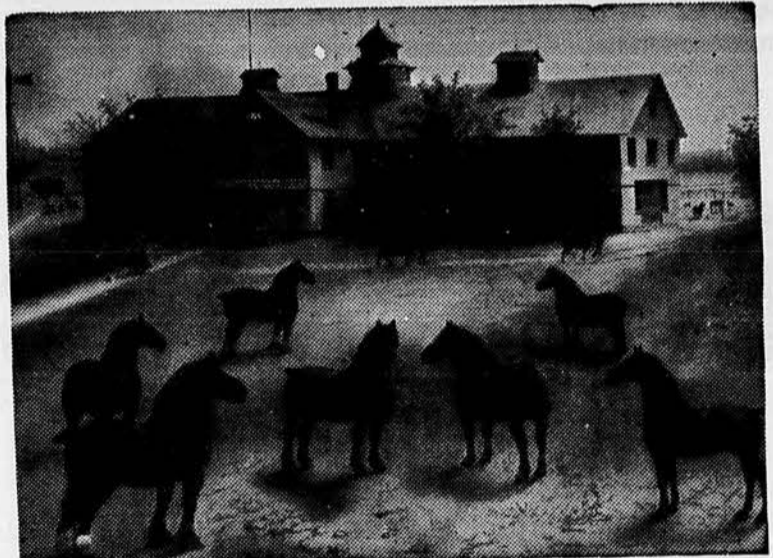


\$1,000—SAVED AT IAMS'—\$1,000

Ikey, what a rich graft these "sleek stallion salesman" are working on the honest farmer, selling fourth-rate stallions at \$2,000 and \$5,000! Iams sells "top-notchers" so good, big and cheap that they do not need to be peddled to be sold. Mr. Buyer, see Iams' stallion yourself. Take no "gold brick stallion salesman's word." Iams has "the goods" you read about. His establishment is worth going 2,000 miles to see. Iams makes competitors "holler." He is knocking "high prices out of Xmas tree. Iams saws wads, "butts in," sells more stallions each year. He makes every statement good. Georgie, dear, buy a stallion of Iams. His 1,300 stallions are much better than our neighbors paid those Ohio men \$4,000 for. Then I can wear diamonds. Iams speaks the languages, buys direct from breeders, pays no buyers, salesmen or interpreters, has not two to ten men as partners to divide profits with. Iams guarantees to sell a better stallion at \$1,000 to \$1,500 than are sold to stock companies for \$2,500 to \$5,000 by slick salesmen, or pay you \$500 for your trouble, you the judge. Iams pays horses freight and buyer's fare; gives 60 per cent breeding guarantee. Write for eye-opener and greatest horse catalogue on earth.

References—St. Paul State bank and Citizen's National bank.

ST. PAUL, NEB.



Just returned home with a grand lot of European stallions—Percherons, Belgians, Shires and German Coach. In all of our 21 years importing we have never landed a better lot; big, strong, massive fellows, heavy bone, good actors and sound as gold dollars; ages, 2, 3, and 4 years old. As to prices, there is no concern in the United States can sell an honest, all sound and all right stallion for less money than we can. Come and see us and examine our stallions.

When you arrive in Lincoln, take the State Farm or Interurban street car. Inquire for Sullivan's barns. If impossible to come at once, write us for further information concerning our stallions.

THE LINCOLN IMPORTING HORSE COMPANY,
A. L. SULLIVAN, Mgr. LINCOLN, NEB.



Robison's Percheron Sale

Seventh annual sale, Wichita, Kas., February 18, 1908.—40 mares, 20 stallions. Catalogs ready January 15.

J. W. & J. C. ROBISON, Towanda, Kans.



FRANK WASSON,

Importer and Breeder of

Percheron and Shire Horses

Stallions of age and quality to suit any buyer that wants a good money maker. Prices right and terms easy. Write for particulars today or come and look them over.

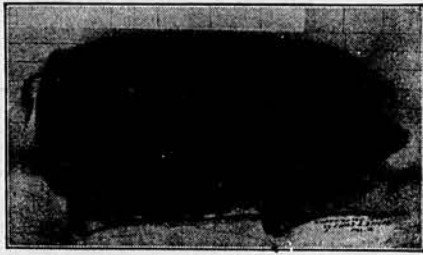
FRANK WASSON, Clearwater, Kansas

35 Duroc 35

BRED SOWS and GILTS

At Auction
FEBRUARY 4, '08 AT WATERVILLE, KANS.

A carefully selected offering, including 8 tried sows and fall yearlings. The spring gilts are all of very early farrow and very growthy. The spring and fall gilts are by the \$500 Crimson Chief 49609. He is conceded to be one of the great boars of the breed. The tried sows are such as have been purchased with great care from the leading herds of the territory and are granddaughters of such sires as Kansas Wonder, and Van's Perfection. There are daughters of Chief's Wonder, grandson of Ohio Chief and Higgins' Model. Everything will be bred for early



farrow to Jr. Ben 49683 by Jr. Jim and out of a litter sister to Nebraska Wonder. A few bred to a son of Red Raven. Also a son of Field Marshall Jr. We are not putting up a big offering, preferring to build up our business by selling only the good ones. The rest go to market. This is our first public sale, but we are in the business in earnest and it is our desire to cooperate with breeders that believe in breeding the best and selling them at their value, leaving out the hot air.

B. N. WELCH, .: WATERVILLE, KANS.

T. E. Gordon, Auctioneer. J. W. Johnson, Fieldman.

J. C. LOGAN'S

Bred Sows

AT AUCTION

The sale will be held at **HAVENSVILLE, KANS.**, which is the next station on the L. K. & W. east of Onaga.

Sale under cover and in comfortable quarters. Free entertainment at any hotel in town. **THE DATE IS**

Friday, February 7.

The offering numbers 40 head and your attention is called to the fashionable and up-to-date breeding that it contains. The spring gilts are big and smooth as a ribbon, well grown out and were sired by the following noted sires: Old Kant Be Beat, Crimson Wonder's Brother, Hunt's Improver, Wonder Mac, Crimson Model and old King of Onaga. "THE SEVEN SISTERS" that go in the sale are seven spring gilts sired by Crimson Wonder's Brother and out of Goldie K., the great sow bought in Kirkpatrick & Wilson's sale at Lincoln last winter. You will have to see them to appreciate them. The splendid brood sow, Crimson Girl, also goes in the sale. She was sired by Crimson Wonder's Brother and is a granddaughter of old Miss Bob. A dandy gilt by Nebraska Wonder and out of a Kansas Wonder dam also goes in and a number of others that are decidedly good. Get his catalogue which you can have by return mail by sending him your address. It gives you the breeding in detail and if you are interested in fancy breeding you want it.

L. R. Brady will conduct the sale and will be assisted by Chas. Currie and John Newman. J. W. Johnson of The Kansas Farmer will be in attendance and will handle bids intrusted to him.

For a catalogue address,

J. C. LOGAN, Onaga, Kans.

Hammond's Poland-China

Bred Sow Sale

At the Agricultural College,
Manhattan, Kan., Saturday, Feb. 8

The sale will be held in the judging pavilion at the college and everyone will be made comfortable.

My offering of the above date numbers 50 head and 20 of them are tried sows of real merit and 14 are big, smooth fall gilts that are the kind, I think, that you are looking for.

No better offering of tried sows will be made this winter, and among them will be such sows as Beauty's Surprise 100436 by Choice Perfection dam, Surprise I Am 2d. No. 2 in the catalogue is Silk Finish by Guy's Price and out of Old Portis Queen. Another is a valuable sow by old Highland Chief Jr.

The 16 spring gilts are the actual tops of my big crop of early spring pigs. Four will be bred to Guy Hadley and the rest to S. P.'s Satir, a great son of S. P.'s Perfection, Prince Perfection by Grand Perfection and he by Grand Chief; and some to a splendid son of Guy Hadley. Mostly bred for early farrows.

For full information about this offering drop me a card and receive my catalogue by return mail.

W. T. HAMMOND, .: Portis, Kans.

Auctioneer, L. R. Brady. Fieldman, J. W. Johnson.

HOLSTEIN-FRESIANS AT AUCTION

At South Omaha, Neb., Tuesday, February 11, '08

50 head of registered cattle, consisting of 30 cows and heifers milking or soon fresh; 12 heifers and heifer calves; 8 bulls and bull calves. Breeding and individuality the best. Send for catalog.

Auctioneer,
 Col. B. N. Kelley

Henry C. Glissman, Sta. B., Omaha, Neb.

JACK AND JENNET SALE

At my farm 1 mile south of Blackburn, Okla., January 10, '08.

5 head of Mammoth Jacks and 13 head of Mammoth Jennets, 10 of which are bred to Mammoth Jacks. 6 of the above jennets are bred to James Jefferson. 6 years old, a Mammoth Jack, 16 hands high, black, with white points, weight 1,100 pounds.

4 are bred to Bismark, 8 years old, black with white points, 15 hands high, weight 1,000 pounds.

Cronje is a brown jack, coming 3 years and is 15 hands high.

1 fine yearling jack, black in color, and one jack colt, just weaned.

The above jacks and jennets are all genuine Mammoth stock, extra large and good colors.

Write and come to the great sale.

HENRY D. C. POOS, Owner, .: Blackburn, Okla.

Jas. W. Teter, Clerk, Eli Tatro, Auctioneer.

Watson, Woods Bros. & Kelly Company,

Lincoln, Nebraska

PERCHERONS — SHIRES — BELGIANS

Low prices and good horses talk with more reason than big ads. We do business on our own money, pay no interest, no salaries. Our expense is so small compared with the number of horses we import that we are enabled to sell a better horse for \$1000 than other importers ask \$1200 to \$1400 for. We give a 60 per cent guarantee and furnish life insurance if desired.

The Blossom House

Kansas City, Mo.

Opposite Union Depot. Everything first-class. Cafe in connection. Cars for the Stock Yards, the up town business and residence parts of the city and for Kansas City, Kansas, pass the door. Solid comfort at moderate prices. A trial will please you.

Advertisers in the
Kansas Farmer
 Get Results
Are You One of Them?

DISPERSION SALE

OF

SHORTHORN CATTLE**Superior, Neb., Friday, January 31****42 Cows and Heifers, 20 Bulls, All Registered****14 head of Pure Scotch Orange Blossoms, Lovelys, Mary Ann of Lancaster and others.**

Balance choicely bred and Scotch topped: These cattle have been selected and bred at great expense from the best blood and cattle in the Shorthorn records. 30 head are heavy with calf or will have calves at foot sale day, by the renowned Cruickshank bull Chief Lavender 139145 and Queen's Choice 253125, a Scotch grandson of the great champion, Choice Goods. They with a large number of their get in this sale. My misfortune is your opportunity. These are the kind that produce beef, milk and butter at minimum cost. This is a bargain day and the time to buy. A share of stock and herd books of the American Shorthorn Breeders' Association offered at close of sale.

Terms, cash, or up to twelve months time on bankable paper at 8 per cent.

Sale begins at 12 o'clock. Free lunch at sale barns. For catalogues address the owner,

ROBERT GUTHRIE,

2611 Y Street,

LINCOLN, NEB.

Or Guthrie & Company, Superior, Neb.

Z. S. Brandon, Auctioneer. Wm. L. Wilson, Clerk.

Cottingham & Son's**12th Annual Sale of Horses and Shorthorn Cattle, at****McPherson, Kans., February, 4-5, '08****Horses****Feb. 4, '08**

Consisting of single and double drivers, draft farm horses and brood mares, all good ages, well bred, high class stuff. Most of road horses sired by standard-bred stallion, Golden Morgan 3426. Draft mares bred to one of our Percheron stallions.

Shorthorns**Feb. 5, '08**

Including 26 cows and heifers, 14 bulls ranging from 8 months to 2 years old, 5 calves at foot, cows all bred to the Scotch bull, Scottish Secret 231954, sired by Imp. Collynie 135022. The bulls and heifers are out of Scottish Secret and Roan Boy 195879, almost a pure Scotch bull. These are good individuals in good breeding condition.

Send for catalogue to-day.

W. H. COTTINGHAM & SONS,**McPherson, Kansas**

Auctioneers: Col. W. C. Curphey, Col. E. E. Potter, Col. J. L. Seitz.

L. K. Lewis, Fieldman.

Big Smooth Polands**AT AUCTION.**

Thompson Bros., of Marysville, Kans., will sell on

FEBRUARY 1, AT MARYSVILLE,

a draft of bred sows that are remarkable for the great amount of quality and finish combined with immense size.

The offering numbers 15 yearling tried sows and 25 choice spring gilts. Most of the spring gilts are by Big Hutch and the balance are bred to him. Everything bred to Big Hutch and Captain Hutch. Thompson Bros. are among the best known breeders of big, smooth Polands in the West and the popularity of their herd and their accomplishments in the show ring are well known. Their offering of bred sows on the above date, as stated above, is remarkable for the size of the sows and gilts offered coupled with as much quality and finish as is found in the smaller type. If you want Polands with more size without sacrificing smoothness this is your opportunity.

For a catalogue which is now ready address

Thompson Bros., Marysville, Kans.

T. C. Callahan, Auctioneer. Send bids to J. W. Johnson in their care.

Budweiser- Brandywine**BRED SOW SALE****Jamesport, Mo., Thursday, Jan. 30****40—Poland-China Sows and Gilts—40****THE USEFUL KIND.**

Bred to my big boned spotted boars. If you are a lover of the BIG KIND, THE SPOTTED KIND, THE PROLIFIC KIND, get a sow bred to that kind. Every sow in this sale will be a money maker for you.

Sale in Town Under Cover.

Write for a catalogue that tells all about the BIG SPOTTED KIND. If you can not attend in person mail bids may be sent to Geo. E. Cole, in my care, who will represent The Kansas Farmer at this sale.

H. L. FAULKNER,**Box K.****Jamesport, Mo.**

Auctioneers: Cols. Wells, Shepherd, and Williams.

THE NORTH MISSOURI SALE CIRCUIT

Dr. Thomas Sells Strictly High Class Poland-China Bred Sows at St Joseph, Mo., Tuesday, February 4, 1908.

35 Head Poland-China Sows—Queens of the Breed 35

Sired by Impudence, Corrector 2d, Mischief Maker, Top Notcher, and other boars of outstanding merit. Bred to Top Notcher by E. L. Perfection, Nebraska Special by Impudence, and Perfect Meddler by Meddler. Nebraska Special stood second at the Nebraska State Fair this fall, and first and champion at St. Joseph, winning over the hog that stood first at Lincoln. He is one of the coming hogs of the breed, and a litter by him are sure to be money makers.

ATTRACTIONS.—Three by Impudence, out of a Perfection E. L. dam; five by Keep Sake; three by Corrector 2d; one by Mischief Maker; four yearling sows by Top Notcher that are particularly fancy. This stuff will be in the very best of condition. Individually they are good enough to go anywhere. Their breeding is irreproachable. Send for a descriptive catalogue that will tell you all about them, and arrange to be on hand sale day. Mail bids sent to Geo. E. Cole, of The Kansas Farmer, in my care will receive careful attention.

R. W. THOMAS, = = St. Joseph, Mo.

Tennant's Superb Offering of Poland-China Bred Sows, at New Hampton, Mo., Wednesday, February 5, 1908.

50—Grandly Bred Poland-China Sows—50

Sired by Perfection E. L., On and On, Impudence, Exception, Chief Perfection 2d, Goldfinder, Keep On and Top Notcher. Bred to Flying Fox by Spellbinder, and Othello by Chief Perfection 2d.

ATTRACTIONS.—3 by Perfection E. L. out of Evalyn by Perfect I Know 2d, 1 by On and On out of Chief's 2d Lady by Chief Perfection 2d, 1 by Impudence out of U. S. E. L. by Perfection E. L., 1 by Meddler 2d, 1 by Chief Perfection 2d, and 1 by Keep On. There will also be included in the offering 24 yearling sows by Tormentor by Meddler bred to Flying Fox and Othello.

This will be an excellent opportunity to obtain sows as richly bred as are to be found in any auction ring this winter and bred to as good boars as are in service in the Poland-China ranks. Catalogues are now ready and will be mailed you on application to

CHARLES E. TENNANT, New Hampton, Mo.

Col. Jas. W. Sparks, Col. J. Klaas, Col. P. B. Wilkerson, Auctioneers. Send mail bids to Geo. E. Cole, of The Kansas Farmer, in my care.

Maupin's Great Sale of Poland-China Bred Sows at Pattonsburg, Mo., Thursday, February 6, 1908.

50—Richly Bred Poland-China Sows—50

Sired by such boars as Chief Perfection 2d, Grand Perfection, Meddler, Spellbinder, Keep Sake, Keep On, Perfection E. L., and other famous boars, and out of dams equally as well bred. Bred to Mo's Meddler by Meddler, Herpicide by On the Dot, Oxygen by On and On, and Carbon by Chief Perfection 2d.

ATTRACTIONS.—Portia by Meddler out of a Corrector dam, Fay by Meddler, Miss Spell by Spellbinder, Winsomeness by Keep Sake, Bessie Beauty by Chief Perfection 2d, Bessie Keep On by Keep On, Vena by Perfection E. L., and Marigold by Chief Perfection 2d.

Sale will be held in town in comfortable quarters, and every arrangement will be made for your comfort during your stay. Send for my illustrated catalogue.

R. E. MAUPIN, = = Pattonsburg, Mo.

Col. Jas. W. Sparks and others, Auctioneers. Mail bids may be sent to Geo. E. Cole, representing The Kansas Farmer at this sale.

Fulkerson's Grand Sale of Poland-China Bred Sows--The Best Yet. At Brimson, Mo., Friday, February 7, 1908.

50 Head of Good Ones-45 Bred Sows and Gilts, 5 Boars-50

By such noted sires as Chief Perfection 2d, Meddler, Impudence, Keep On, Chief Sunshine 2d, On and On, U. S. Corrector 2d, Meddlesome and Sporting Imp., and bred to the three great young boars, Sporting Imp., about the best son of the mighty Impudence, that recently sold for \$10,000; Meddlesome, one of the best sons of the World's Fair champion, Meddler; and U. S. Corrector 2d, a good son of Corrector 2d, sire of the highest litter ever sold. Arrange to attend this sale and buy one of these good sows. They will surely make you money. They are bred high enough to suit the most exacting breeder and will be in the best of condition. Sale held under cover. Send for one of my catalogues.

F. D. FULKERSON, = = Brimson, Mo.

Col. F. J. Zaun, Col. S. G. Garnand, Auctioneers. Send mail bids to Geo. E. Cole, who will represent The Kansas Farmer, at this sale.