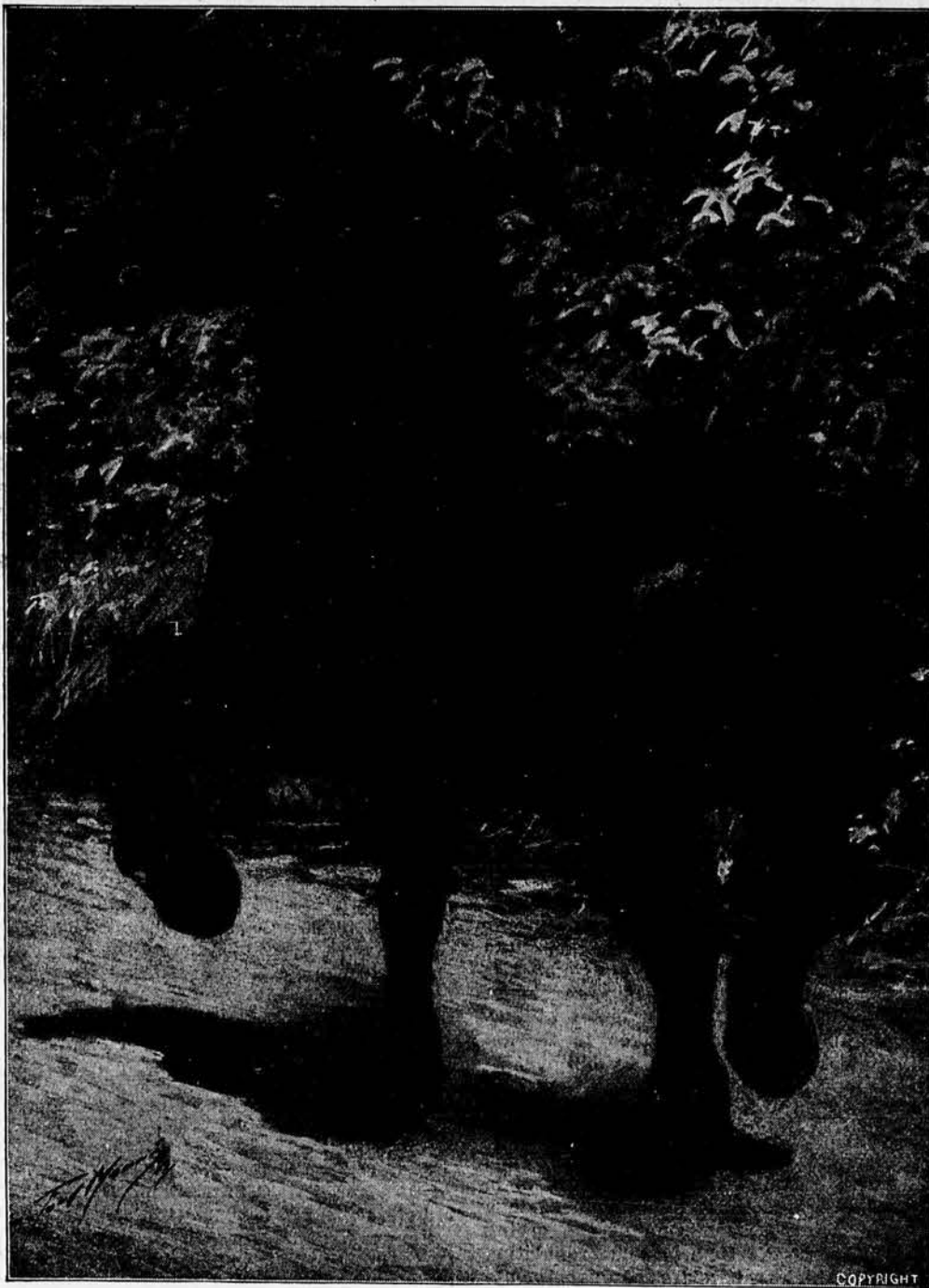


KANSAS FARMER

Volume XLV. Number 13

TOPEKA, KANSAS, MARCH 28, 1907

Established 1863. \$1 a Year



The illustrious Percheron stallion, Sans Peur (53063) 41324, bay brown, foaled March 1, 1901, and sold by McLaughlin Bros., of Kansas City, Columbus, and St. Paul, to Troutman & Stone, of Topeka, Kans., for use on their Silkville Farm at Silkville, Kans.

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WALL STREET DISTURBED.

There was a "furry" on Wall Street recently which has been repeated with variations down to this date. A good deal of preparation had been made for this event. Some of this preparation will probably never be known to the general public. This furry had no apparent effect in Kansas. If any Kansans were caught in the "squeeze" they had grit enough to keep still about it. But why should any sensible person ever be caught in a game like this, which is played entirely by the adversaries?

"High finance" is like this: A clique, having money enough to play the game extensively, obtains control of a large property, say a railroad. It is immediately given out that vast improvements and changes are to be made in the property. For this purpose the capital stock is increased and bonds are issued. The bonds are sold and produce ready money. Not infrequently the stock, or a considerable portion of it, is divided among the members of the clique in consideration of their valuable services in "high finance." Dividends are made out of moneys which by bookkeeping methods, got credited to the operating account. In many cases, however, dividends have been made from legitimate earnings. But it is easily seen that excess of earnings over expenses are not absolutely necessary to the making of dividends. With showings of good dividends the holders of the new issues of stock find it easy to sell to "the public." When the public has "absorbed" these shares the operators are ready for the next move. Should the public continue to hold these shares, this same public may be shrewd enough to vote the clique out of control, although such an "accident" is unlikely. Still it is desirable to own a safe majority of all voting stock. Usually the public has paid only "margins" on its stock, and the shares are still in the hands of Wall Street operators as security for the unpaid balance, and may be sold at any time when the market price has suffered a decline such as to seriously reduce the margins.

To cause a decline in prices of stocks various expedients are used. Scares about "hostile legislation," re-

ports of increased expenses and reduced earnings, predictions of coming financial panic are all potent. When such a scare comes the clique can usually intensify it by causing offers to sell the declining stock to be persistently made at constantly declining figures. Great skill is required to play the game successfully. When it succeeds the result is the "shaking out" of the timid holders who leave in the hands of the operators all the money they invested in the stocks.

The furry recently experienced and now on seems to have been the result of a combined effort of numerous cliques. They probably "cleaned up" a good many millions which had been invested by the "lambes."

There seems to have been a twofold object in producing this furry. The "interests" were greatly displeased with certain National legislation for their regulation. More especially were they displeased with the disposition of the President to have this legislation enforced. So, too, the States and State officials of several States had become "perniciously active" in certain directions. These facts were convenient for use in "hammering down" prices in Wall Street, and it was even suggested that the threatened panic might bring the President and other "disturbers" to their "senses."

It has been possible in times past for such furies to seriously affect the finances of the entire country. There has been great surprise at the narrow limits to which the results of the present disturbance are confined. The "object lesson" which was to have been given to "the country" seems to have been more impressed upon Wall Street than elsewhere.

The extent of the present depression in market prices of stocks is indeed great. The high prices of the leading stocks last September, the low prices of last Monday, and the declines in six months are here shown:

	High last Sept.	Low Mar. 25.	Decline
Atchafalpa.....	110 1/2	82 1/2	27 1/2
Amalgamated Cop.....	115 1/2	80 1/2	35 1/2
American Smelt.....	161	104 1/2	56 1/2
American Loco.....	77	55 1/2	21 1/2
B. & O.....	125 1/2	95 1/2	30 1/2
Canadian Pac.....	183	125 1/2	57 1/2
C. M. & St. Paul.....	199 1/2	137 1/2	62 1/2
Chi. & Northw'n.....	215 1/2	137 1/2	78 1/2
Erie.....	49 1/2	23 1/2	26 1/2
Great Northern.....	347	126	221
Louis. & Nash.....	177	108	69
Illinois Central.....	177	135	42
Mo. Pacific.....	100 1/2	68 1/2	32 1/2
N. Y. Central.....	146 1/2	112 1/2	34 1/2
Northern Pac.....	219	114 1/2	104 1/2
Pennsylvania.....	145 1/2	116 1/2	29 1/2
Reading.....	156 1/2	91 1/2	65 1/2
Southern Pac.....	97 1/2	72 1/2	25 1/2
Union Pacific.....	195 1/2	121 1/2	74 1/2
U. S. Steel, com.....	47 1/2	31 1/2	16 1/2
U. S. Steel, pfd.....	108	92	16

*December.

It is stated that the stocks and bonds of 120 railroads and industrial corporations which, last September, had a market value of eight billions of dollars have shrunk in market value to a little over six billions.

The actual properties, represented by these paper evidences of ownership and indebtedness, are all in existence to-day, and are overcrowded with patronage. Whoever invests in these "securities" takes chances in a gamblers' game. One of the crying needs of the time is some regulation by which this class of investments shall be made safe from spoliation so that these enterprises may be safely owned by persons having small or large savings to invest. This kind of regulation will avert much of the danger of artificially produced panics, which, when they succeed, bring disaster to millions of people who are innocent of participation in the pernicious manipulations which contribute to produce the financial disturbance.

Quite likely this kind of regulation will come after that affecting excessive charges and unjust discriminations, evils more easily traced than those resulting from the operations of the gamblers on the stock exchanges.

FISH FOR HIS LAKES.

EDITOR KANSAS FARMER:—I have a natural pond on my farm which the flood of 1903 left. It is fed by the river, and rises and falls when the river does. I would like to know, through your paper, the name and address of

the United States Fish Commissioner, as I want to get fish for my lake from him.
JERRY FITZPATRICK.

Pottawatomie County.
It will be better to communicate with Hon. D. W. Travis, Fish Warden of Kansas, whose address is Pratt, Kans., about supplies of fish for your lake. If Mr. Travis can not supply what you desire, he, better than anybody else, can put you in communication with the United States Fish Commission. If, however, you prefer to apply to the National authorities direct, address United States Fish Commission, Washington, D. C.

KANSAS CORN-JUDGING CONTEST.

The annual grain-judging contest for 1907 occurred March 13 in the grain-judging room in the agricultural building, Kansas State Agricultural College. This contest usually arouses a good deal of enthusiasm and keen competition among the students on the subject of corn, and this year was more than ordinarily close and interesting. Students in the various classes have been preparing for months, training their judgment and sharpening their powers of observation, making a close and critical study of the various leading types of seed-corn.

For instruction in this work the college is especially well provided. The grain-judging room in the agricultural hall easily accommodates one hundred and fifty students all judging separate samples at the same time. Every variety of corn common to the State is found here, with many samples of each of the leading varieties. Small grains of every variety are also on exhibition, both grains and plants, and about the walls are specimens of all the injurious weeds of Kansas. Nearly six hundred students will have taken work in corn- and grain-judging in this laboratory during the present college year. The value of this work alone in securing better seed and better crops for Kansas can not be over-estimated.

The judging contest is the culmination of the year's work. The fact that the team that represents the Kansas State Agricultural College at the International Live-Stock Show in Chicago next winter will be selected largely from the contestants in the present event lends additional interest to the affair. The scores this year were very close, and with few exceptions, high. The gentlemen furnishing the class, team, and individual prizes are to be congratulated on the competition which their generosity aroused. It is such encouragement as this that helps to strengthen and widen the work and influence of the Agricultural College. The results of the contest are as follows:

INTER-CLASS CONTEST FOR FIELDING TROPHY.

Second Term Short Course.—J. B. Campbell, J. R. Knappenberger, E. R. Miller, W. R. Linton, C. V. Broger, 4,109 points.

Junior Class Team.—R. W. Hull, H. A. Praeger, W. C. Anderson, D. K. Morris, C. M. Kiser, 4,022 points.

Senior Class Team.—H. A. Ireland, C. J. Gore, E. W. Cudney, B. C. Cope-land, Carl Miller, 3,910 points.

INDIVIDUAL CONTEST.

(Gold, Silver, and Bronze Medals.)

W. C. Anderson, 896, gold medal; J. E. Brock, 872, silver medal; J. B. Campbell, 868, bronze medal; R. W. Hull, 859, cash prize; J. R. Knappenberger, 833, place; C. J. Gore, 823, mention.

Twenty students contested in this contest. H. D. Scudder was judge.

The Fielding Trophy Cup (value \$100) is to be held by the class whose team work proves the best judges, the names of the individuals to be inscribed on the cup. This cup is presented to the college for competition each year by the G. T. Fielding Seed Company, Manhattan, Kans. The medals for the winners of the individ-

ONLY ONE "BROMO QUININE"

That is LAXATIVE BROMO QUININE. Similarly named remedies sometimes deceive. The first and original Cold Tablets in a WHITE PACKAGE with black and red lettering, and bears the signature of E. W. GROVE. 25c.

ual judging contest are presented by the following gentlemen:

J. T. Martin, Hanover, Kans., president of the Kansas Corn-Breeders' Association, breeder of Hildreth Yellow, Hammett White, and Hiawatha Yellow dent varieties of corn.

W. S. McAuley, Americus, Kans., member of the Kansas Corn-Breeders' Association, breeder of McAuley White Dent corn.

Mr. E. W. Young, Americus, Kans., member of the Kansas Corn-Breeders' Association, breeder of Silvermine corn.

Mr. J. G. Haney, manager of the Deming Ranch, Oswego, Kans., member of the Kansas Corn-Breeders' Association, breeder of Hildreth corn.

Mr. T. I. Furst, Peabody, Kans., member of the Kansas Corn-Breeders' Association, breeder of Hildreth corn and Furst's White Dent corn.

POWERS OF CEMETERY CORPORATION.

EDITOR KANSAS FARMER:—A cemetery chartered by the State of Kansas is managed by a board of nine directors, chosen by those interested in the cemetery. If through a mistake made in locating a grave, a person is buried in an alley, instead of on a lot, has the board of directors a right to have the body exhumed and buried on the lot against the wishes of the relatives of the deceased? The mistake was made when the ground was covered with snow.

Sumner County. W. L. MEUSER.

Among the powers of a corporation enumerated in section 1341, General Statutes of 1905, may be found the following:

"To make by-laws, not inconsistent with existing law, for the management of its property, the regulation of its affairs, and for the transfer of its stock." If the by-laws of the cemetery association do not authorize the directors to correct such a mistake as that described in the above inquiry they can be amended so as to authorize and direct such action. With such authority, the directors can proceed unless the opposition is strong enough to secure a repeal of the by-law containing the authorization. In most cases it would be unreasonable for the relatives to object to proper disinterment and removal of the body from the alley, where likely to be trodden upon by the public, to the lot dedicated to the burial of the deceased.

ONE HUNDRED BOURBON COUNTY FARMERS WILL PLANT PRIZE CORN.

C. F. Miller, of Fort Scott, who purchased the prize corn of the Kansas State Corn Show at Manhattan, will give fifty grains each to 100 Bourbon County farmers. He will also give one full ear of same variety, without cost, to those who are interested in scientific corn culture, and who will start a corn-breeding plot for raising their own improved corn, and who will give the same the necessary and proper attention.

A complete treatise on corn culture will also be furnished. Mr. Miller will ask each contestant to give report as to results, and to bring two ears of the prize corn to be exhibited at the Bourbon County Farmers' Institute in the fall. The prize corn is to be planted far enough away from other corn so as not to mix with the same, and to be planted in a square plot two grains in a hill, so that same can properly pollinize itself.

NEW LAWS IN THE INTEREST OF THE GRAND ARMY OF THE REPUBLIC.

Commander P. H. Coney, of the Kansas division of the Grand Army of the Republic, is pardonably elated at the success of his efforts to secure at the hands of the late Kansas Legislature, several enactments for the benefit of the veterans of the Civil War. Following is a summary of the laws prepared by Mr. Coney and now in force in Kansas:

1. An act making an appropriation to pay for storing and properly

paying the records, relics, etc., of individuals, etc., who fought in the war for the Union, in the Grand Army Museum, and to pay for publication of the reports of the Department of the Interior of the Grand Army of the Republic to the Governor.

2. An act relating to the appointment and employment of persons who served and have been honorably discharged from the Army and Navy of the United States in the War of the Rebellion, which amends and strengthens the old soldier preference laws previously enacted, so as to eliminate all discretion, and make it mandatory to appoint the honorably discharged soldier or sailor if he can fill the position.

3. An act authorizing cities and towns to raise and appropriate money to defray the expenses of the proper observance of May 30, commonly known as Memorial Day.

4. An act providing for the display of the United States flag on all the schoolhouses of the State during school hours, and to encourage patriotic exercises and instruction in all schools of the State, and providing how the same shall be done.

5. An act making the birthday of Abraham Lincoln, February 12, a legal holiday in Kansas.

6. An act to prevent the desecration of the 30th day of May, commonly known as Memorial Day, and providing heavy penalty for violation. This bill prohibits the holding of horse races, circuses, baseball games, or other sports or games on May 30.

7. An act providing for the burial of honorably discharged soldiers, sailors, and marines and their wives and widows by the counties in which death may occur. The persons named shall not be interred in any pauper's lot, and must in all cases have respectable and honorable funeral and interment.

8. By his efforts, Commander Coney and the anti-pass law so amended that it permits the railroads to give reduced rates "to members in good standing of the Grand Army of the Republic," so, if the comrades want allway reduced rates they must become members in good standing of the Grand Army of the Republic, for they are not members in good standing in the order, they can not get this privilege.

9. The Department Commander also prepared a Memorial and a bill for General J. W. F. Hughes, Adjutant General of Kansas, and had the same introduced in the House and Senate, providing for an appropriation to transcribe and copy, and preserve the military records of Kansas in the Adjutant General's office. An appropriation of \$5,000 was made. This will complete the work, but it will not be finished until nearly finished.

10. Commander Coney secured the defeat of the bill to place the Soldiers' Home, and Mother Bickerdike home, and other soldier institutions under civil service, which would have put veterans out of official service in these institutions.

DENATURED ALCOHOL.

At the last session of Congress the law relating to denatured alcohol was supplemented by another intended to make it practicable for the farmer to become a producer of denatured alcohol from refuse or other cheap material which would otherwise yield but little value. The supplemental act will go into effect September 1, 1907. The regulations for the prevention of fraud in the handling of alcohol are to be framed by the Commissioner of Internal Revenue. It is expected that some time will be consumed in considering these regulations.

Manufacturers of alcohol lamps, stoves, heaters, farm engines, and other alcohol-using apparatus are preparing to put these on the market. Dealers will do well to observe the advertising columns of THE KANSAS FARMER for announcements of these appliances when ready.

The average weight of cattle received at the Chicago market for 1906 was 1,000 pounds. This is 33 1/2 pounds below the average of the preceding six years.

The average weight of hogs was 226 pounds, which is 1 1/2 pounds above the average of the preceding six years. The average weight of sheep was 81 pounds, which is a little over two pounds below the six-year average.

BLOCKS OF TWO.

Every opportunity to do a favor to a friend or neighbor should be improved. The subscription price of THE KANSAS FARMER is \$1 per year. It is worth the money. But the publishers are extending the circulation rapidly by means of their blocks of two proposition. It is this:

Every old subscriber on sending his dollar for renewal is authorized to send the name and address of some one not now taking THE KANSAS FARMER and the dollar will pay for both subscriptions for one year. Address, The Kansas Farmer Company, Topeka, Kans.

Miscellany

Is the Climate of the Plains Changing?

Is it asking too much of your time for some advice on a subject which is of much importance to a great many farmers as well as myself?

Many of us young men have been taught, by the stories of old settlers, how before the Eastern plains of Kansas were settled, they were as dry and even more unaccustomed to rains than the western part of the State is at present, and has been for a few years past. The generally accepted theory of the average farmer and land agents is that as the hard, tough sod of the western part of the State is broken up, it opens a way for the water to come from below to the surface and then evaporate, which it has not done previous to the breaking of the sod, and that the air is supplied in this manner, from the inexhaustible underground currents of water, with moisture which falls again as rain.

That is a theory rehearsed by nearly all intelligent people interested in Western Kansas. Though discouraging, it seems to me that the law of capillary attraction directly denies this theory. Then we are told the planting of trees is a step toward increasing the rainfall of a country. Then again we are cited to the settling of Oklahoma as a cause of the tempering of the old-time hot winds which fifteen years ago "fried" Kansas is the July.

I feel confident that these beliefs have been active factors for encouraging many to move to Western Kansas and Eastern Colorado, and these same reasons will encourage many more to do likewise.

Now, I, as well as many others who are contemplating going West, am personally anxious to hear from you on the above subject. I shall also be very grateful for a few suggestions for a young man in about these circumstances: I have farmed on rented land in Marshall County, Kansas, since old enough to work. I have perhaps \$1,500, besides two teams and farming tools. Many young men are going to the western part of the State and buying land at from \$8 to \$30 per acre. I had intended to go to the western part of Kansas in the dry-farming lands, but remarks like Mr. Moore's (which I enclose herewith) makes one hesitate.

Might it be more advisable to buy land in the irrigation districts than where one can get so many more acres?

I am sure if you will give me your frank opinion and advice, you have my deepest gratitude.

SYLVESTER BARINGER.

Marshall County.

Clipping referred to follows:

"WILLIS L. MOORE SAYS CLIMATE IS NOT CHANGING IN THE WEST."

"For several years there has been a growing idea that the climate of the entire West is changing, that the winters are becoming warmer, that there is now more rain where there

was formerly not enough, and that there is now less rain where heretofore there had been too much. The record of the past five years bears out the conclusions. But scientific men concede nothing, maintaining that the weather goes by decades, there being dry periods and periods of a medium amount of precipitation. The same, they assert, applies to the heat and the cold.

"One of the most interesting discussions of this subject has just been brought to light in a letter written by Willis L. Moore, Chief United States Weather Bureau, to M. W. Cook, of Oxford, Iowa, in reply to a letter, the nature of which is explained in Mr. Moore's reply. The letter follows:

"Washington, D. C., Feb. 19, 1907. "Mr. M. W. Cook, Oxford, Iowa.

"Dear Sir:—I have to thank you for writing me a very interesting letter in regard to the change of climate in Iowa. If you had before you accurate data you would undoubtedly reach correct conclusions, as you show a very intelligent conception of the problems you were considering. Unfortunately, in one matter you make an error, namely, that the evaporation over the State of Iowa has much influence in causing the rain that falls over Iowa. On the contrary, it is the evaporation that takes place over the Gulf of Mexico and the South Atlantic Ocean and over the land areas south and southwest of Iowa that is the controlling factor in producing the rainfall in your State. Any change in bottom lands, due to drainage, as affecting the evaporation would be inappreciable in its effect on the rainfall or your climate. Furthermore, your early records which show seventy-four inches of rainfall in Iowa in a single year are erroneous. It is a difficult matter to get a proper catch of rainfall even by an expert. Your early records that show precipitation running from sixty to seventy-four inches annually are therefore defective. I am satisfied that no such amount of precipitation has fallen in Iowa in the past ten thousand years. However, your statements are interesting, as you take the position that the rainfall has actually decreased with the coming of civilization, while the general impression throughout the Mississippi and Missouri Valleys is that the rainfall has increased.

"We who are studying meteorological records know that there has been no appreciable change in the climate of any part of the United States within the period of authentic history. When there are several years of short rainfall people living in semi-arid regions get discouraged, claim that agriculture is a failure, and abandon their farms. Instead of doing so, they should ask the trained meteorologist how many years of drouth they will receive on an average in a given period, and make their preparations accordingly. Again, they should not consider their climate as changing when they have had several years of abundant rainfall, but should make their plans for a deficit that is sure to come—forewarned is forearmed.

"Speculators and land-boomers are largely responsible for the erroneous information that has been published in regard to certain regions, they claiming that the climate has permanently changed because during the past several years we have had an abundance of rainfall. But they are either mistaken or deliberately deceived. You are mistaken in your views that the breaking of the hard and compact soil of certain Western States has prevented the coming of hot winds. You must bear in mind that hot, scorching winds visited Missouri, Iowa, and Illinois long before the soil was broken, and that those hot, scorching winds have come just as frequently since these States were put under cultivation as they did before. You only need to go back a period of less than ten years to find the same withering heat sweeping over the whole central valley and eastern slope. The same hot winds

FILES CURED IN 6 TO 14 DAYS. FAZO OINTMENT is guaranteed to cure any case of Itching, Blind, Bleeding or Protruding Piles in 6 to 14 days or money refunded. 50c.

will come again. The people should not be deceived by false reasoning.

"WILLIS L. MOORE,

"Chief U. S. Weather Bureau."

I have made little study of climatology or weather conditions as related to crop-production. Mr. Moore is an authority on this subject, and I have no doubt that he has stated facts so far as records show. He may be somewhat mistaken, however, about the Gulf of Mexico and the South Atlantic Ocean furnishing all the water which falls as rain in this Western country. Every farmer is well aware that showers may be very local, the heaviest rains often following the river valleys and wooded sections of the country. This may not be true of the great general storms which sweep over the whole country, but it is more or less true of the local summer showers.

Again, I can hardly accept the conclusion that the "beliefs" and experiences of the people of this country are all theory. I believe many of these so-called theories are not all theory, but partial facts, at least in many cases based on actual facts. For instance, there is no question but that the settling up of the Western Plains Region has had an ameliorating effect on the climate. Perhaps the total rainfall during a year may not have changed much, and doubtless the average temperature for the several months and for the year is about as it used to be. However, there is little question but that the extremes of weather are not so great as formerly. The rain falls more often and in less quantities at a time; the wind blows perhaps as much in a year, but not with such violence at certain intervals; and the hot winds still blow, but tempered more than they used to be by the groves and large cultivated areas over which the air now passes, where formerly it passed only over burning, hot prairies.

The old theory was that the hot winds came from the Panhandle. However, we know now that a hot wind may blow off from a large stretch of prairie pasture lying just south of a field of corn or cultivated grain. Without question, however, the settling up of the Southwestern Plains Region and the breaking up of large tracts of prairie has had some effect in decreasing the severity of the hot, southwestern winds that blow over Kansas and Nebraska.

The people of this country should not lose sight of the fact, however, that although the climate may be somewhat changed by the local conditions, yet the general climate of the country is largely the result of great natural conditions and laws over which we have no control. We must expect that as the climate has been in the past, it will be again in the future, but affected more or less favorably by local conditions. The drouths may be less severe and their destructive effects less observed in the future than formerly. I believe it is a safe proposition in Western Kansas and Eastern Colorado to depend on irrigation rather than to trust too greatly in the profits of dry-land farming. At least Mr. Moore's suggestion is a good one that farmers of the West should make their plans during years of plentiful rainfall so as to safely pass through other years to follow when too little rain falls for the production of crops.

A. M. TEN EyOK.

Climatic Changes at Lawrence.

PROF. F. H. SNOW, KANSAS STATE UNIVERSITY.

Dr. Willis L. Moore, Chief of the United States Weather Bureau, has issued a pamphlet in reiteration of his statements before the Congressional committee regarding the subject of a change in climate in the region which includes the States of Kansas and Nebraska. Among these statements I note the following:

"We find right in the arid regions, that during a long period of observations, thirty, forty, or fifty years, the average rainfall of the first ten years is precisely the same as the average of the last."

Yet in the tabular statement which

concludes Dr. Moore's pamphlet, only the last thirty years are included, although the records of three of the stations named cover respectively forty-eight, thirty-nine, and forty-one years. I submit that a fair comparison of facts bearing upon so important a subject as the change of climate, should include the entire period of observation at Lawrence.

My own records at Lawrence cover a period of thirty-nine years, from 1868 to 1906. During the first ten years of this period, from 1868 to 1877, the average annual rainfall was 34.91 inches; during the last ten years, 1897 to 1906, it was 38.16 inches, giving an increase of 3.25 inches per annum. But a more satisfactory method of comparison is to divide the entire period of observation into two equal parts. The total rainfall at Lawrence for the first half of the thirty-nine years, from January 1, 1868, to July 1, 1887, was 672.81 inches, while during the second half of the period the total was 743.67 inches, giving an increase of 70.86 inches in the total precipitation.

This makes the average annual rainfall for the first half of the period 35.50 inches, while for the second half it is 38.134 inches, an increase of 3.64 inches, or more than 10 per cent. And this is the result, although the rainfall at Lawrence for the year 1906 was only 28.50 inches—more than eight inches below the average for the 38 preceding years. This notable deficiency for 1906 occurred in the eastern portion of the region west of the 95th meridian, in which region Dr. Moore says that the rainfall for 1906 was excessive in all that vast stretch of territory.

Notwithstanding the facts brought out by my own observations, which have been regularly forwarded to the Chief of the Weather Bureau at Washington, at the end of each month and year, Dr. Moore states that "the rainfall has neither increased nor diminished by amounts worthy of consideration." This statement, however, may be considered correct with regard to the western third of Kansas and Nebraska, as shown by the records of Lodge and North Platte; but it is not correct in regard to the eastern and central portions of those States, where the breaking and cultivation of the soil upon a large scale, and the great increase of forestation have combined to produce conditions favorable to an increased rainfall. In the western portions of Kansas and Nebraska, the conditions are practically the same to-day as they were in the eastern portions of those States when settlement first began.

EARLY HISTORY.

There never has been a better opportunity to test the question of the effect of the sudden human occupation of an agricultural region upon climatic conditions, that has been afforded in Eastern and Central Kansas and Nebraska during the last fifty years. Three millions of people now occupy this agricultural region, where fifty years ago the entire area was unplowed prairie. When I came to Kansas in 1866 to begin my life work as a member of the faculty of the State University, the only timber consisted of a narrow belt along each stream; and during the late autumn and winter, I often counted at night as many as fifty to seventy simultaneous prairie fires from my study windows in the university building on the summit of Mount Oread.

At that time by daylight, from the same point of view, every house in the city of Lawrence was plainly visible from foundation to roof; while at the present time the buildings, although greatly increased in number, are completely concealed from view by the foliage of the multitudinous shade-trees. The surrounding country also has been so changed in appearance by the growth of trees under human direction, as no longer to bear the remotest resemblance to the original prairie surface.

Not only has the rainfall increased, but the atmospheric humidity has also increased. The average relative humidity for the first half of the period of my observations was 68.76 per

cent, while during the second half it had risen to 73.21 per cent. When I came to Kansas in 1866, and for several years thereafter, no dew was deposited upon the grass until toward morning, and one could walk through the grass at any time before midnight without wetting one's shoes. Of late years, the dew generally begins to be deposited on the grass before the twilight is over, as in the Eastern States, thus corroborating the observed increase in the atmospheric humidity.

WIND VELOCITY.

In regard to the velocity of the wind, Dr. Moore in his hearing before the Congressional committee stated that he was quite certain that there had been no change in the general high velocity, for an altitude of fifty, sixty, or a hundred feet, although the trees would restrict the velocity of the wind near the ground. In his pamphlet just issued he states "an examination of the wind records in Kansas and Nebraska showed that the last fifteen years have not been quite so windy as the fifteen years previous, but it is not safe to assume that a permanent decrease in the wind velocity has taken place." My own records of the wind velocity began on July 1, 1872, when an excellent recording apparatus was installed upon the roof of the north dome of the main building of the University of Kansas, 105 feet above the ground, the ground itself being 250 feet above the broad valley of the Kansas River. This apparatus has been carefully kept in order under my personal direction during the entire thirty-four and a half years, and its results have been compared with, and corroborated by those of a standard anemometer of the signal service pattern, which for fifteen years was in operation at the same elevation. If we adopt the method of comparison used by Dr. Moore in his rainfall statistics, and divide the thirty-four years into ten-year sections, we have the following results:

The average annual wind run of the first ten years (1873-1882) was 138,062 miles; of the second ten years (1883-1892), 131,040 miles; of the third ten years (1893-1902), 122,012 miles; of the last four years (1903-1906), 100,212 miles. But as stated in regard to the rainfall, it seems to be a more satisfactory method of comparison to divide the entire period into two equal parts. By this method we find the average annual wind run of the first seventeen complete years (1873-1889) to be 134,389 miles, and of the second seventeen years (1890-1906), 119,252 miles. This gives an average reduction of 15,137 miles per annum for the second half of our period of observation as compared with the first half. Stated in another way, the average velocity of the wind for the last seventeen years was only 13.61 miles an hour, giving a reduction of nearly 12 per cent.

SAW CHANGE IN CLIMATE.

It thus appears that the observations of nearly forty years, made continuously by, and under the direction of the writer, indicate a gradual change in the climate at Lawrence, Kans. And as this locality presents a typical illustration of the climatic conditions of Eastern Kansas, it is safe to infer that the same changes are taking place over the entire region of which it forms a part. The rainfall and atmospheric humidity have increased, and the wind velocity has been in each case more than 10 per cent, while the increase in the atmospheric humidity has been more than 6 per cent. And these results are based not "upon the recollection of the oldest inhabitants," but upon the faithful records of actual observations.

Valuation of National Wealth by the Census Bureau.

The estimated values for 1900 do not show as great a percentage of increase for the decade 1890 to 1900 as is shown for the preceding decade. In contrast with the decade 1890 to 1900 the period 1900 to 1904 recorded an advance in National wealth which has no parallel in the history of the coun-

try except in the decade 1850 to 1860. This advance resulted from many causes, of which the reaction from the low prices of the depressed period 1893 to 1896 was undoubtedly one of the most potent.

ESTIMATES OF NATIONAL WEALTH: 1850 TO 1904.

1850.....	\$7,135,780,228
1860.....	16,159,616,068
1870 (currency values).....	30,068,518,507
1870 (gold values).....	24,054,814,806
1880.....	43,642,000,000
1890.....	65,037,091,197
1900.....	88,517,806,775
1904.....	107,104,192,410

In 1870 gold was at an average premium of 25 per cent above the value of paper money.

Omitting the decade 1860 to 1870—a period marked by lessened productivity due to the ravages of the Civil War and by a loss in values due to the emancipation of slaves—the annual increase of wealth per family has been quite uniform from 1850 to 1904. That increase for the decade 1850 to 1860 was \$180; for the twenty years 1870 to 1890, \$184; and from 1890 to 1904, \$182.

The estimates of wealth in the years 1900 and 1904 are as follows:

	1900.	1904.
Total.....	\$88,517,806,775	\$107,104,192,410
Real property and improvements taxed.....	46,324,839,234	55,510,228,057
Real property and improvements exempt.....	6,212,788,930	6,831,244,570
Live stock.....	3,306,473,278	4,073,791,736
Farm implements and machinery.....	749,775,970	844,989,868
Manufacturing machinery, tools, and implements.....	2,541,046,639	3,297,754,180
Gold and silver coin and bullion.....	1,677,379,825	1,998,603,303
Railroads and their equipment.....	9,035,732,000	11,244,762,000
Street railways, etc.....	1,576,197,160	2,219,966,600
Street railways.....	211,650,000	227,400,000
Telephone systems.....	400,324,000	585,840,000
Telephone systems.....	98,836,600	123,000,000
Pullman and private cars.....	537,849,478	846,489,804
Shipping and canals.....	267,752,468	275,000,000
Privately owned waterworks.....		
Privately owned central electric light and power stations.....	402,618,653	562,851,105
All other.....	1,455,069,322	1,899,379,652
Agricultural products.....	6,087,151,108	7,409,291,668
Manufactured products.....	424,970,592	495,543,685
Imported merchandise.....	326,851,517	408,068,787
Clothing and personal adornments.....	2,000,000,000	2,500,000,000
Furniture, carriages, and kindred property.....	4,880,000,000	5,750,000,000

Sugar Beets in Kansas.

Secretary F. D. Coburn, of the State Board of Agriculture, has filed with the Auditor of State certificates and affidavits of the 245 claimants for State bounty on sugar-beets grown in Kansas in 1906 and actually made into sugar. The year's beet-production aggregated 70,200 tons, or an increase of 715 per cent over the output of 1905, which was previously the greatest, and is 224 per cent more than the State's total production in the preceding years of its commercial beet-growing, beginning in 1901. Several growers who would have been entitled to bounty on the 1906 crop, however, failed to file claims, and the State appropriation of \$5,000 was apportioned on 69,000 tons, making an average of a fraction over 7.2 cents bounty per ton.

The phenomenal increase in total tonnage was of course largely owing to the building in 1906, at Garden City, of one of the most modern and perfectly equipped beet-sugar factories in the world, which contracted for and manufactured virtually the whole of the year's Kansas crop. In 1905 there were but 132 growers as against the 245 the following year. As in previous years Finney and Kearny Counties produced most of the beets grown in 1906, or over 69,400 tons, although Gray County raised 70 tons, Hamilton nearly 500 tons, and the three growers in Cheyenne County, in the extreme northwest corner of the State, raised 222 tons, which were shipped to a factory at Ames, Neb. The four counties first named, as is well known, are in the Arkansas River valley, in the southwest, and all the beets grown there, excepting those in Hamilton County, sold at Holly, Col., were delivered to the Garden City factory.

Finney County produced the larger part of the State's total, and the number of growers there was 133. Kearny County had 99 growers, Hamilton 6, Gray 4, and Cheyenne 3. The United States Sugar and Land Company, builder and owner of the sugar factory at Garden City, raised 11,077 tons, on which the bounty amounted to \$802.72. The largest production by an individual was 2,190 tons, on which the bounty was \$156.71. The smallest bounty to one grower was 57 cents.

State appropriation for bounty of

\$5,000 annually to encourage sugar-beet growing in Kansas and demonstrate their more or less extensive adaptability on commercial scale were first made by the legislature of 1901, for the years 1901 and 1902, and these yearly amounts have been continued since, until the last session, when bounty was no longer provided, as the previous appropriations had abundantly served their purposes and there was no longer necessity for encouragement by the State. The 1906 crop is doubtless the last one to receive State bounty. In the first four years the production was not so great but that growers received the maximum bounty of \$1 per ton. In 1903, however, the bounty, pro rated, amounted to only 58.1 cents per ton.

Great progress has been made since the experimental crop of 1901, and there is no longer question as to the adaptability of considerable portions of Kansas to the profitable production of sugar-beets. Immense reservoirs to store for irrigation the flood waters of the Arkansas River are being constructed, and one five miles in length

was completed early in the present year in Kearny County, twenty three miles west of Garden City, and it is expected to irrigate 100,000 acres, as it made possible by its capacity of 2,350,000,000 cubic feet of water. New canals and ditches are being provided, old ones repaired and put into service, and the whole irrigation system of the region greatly improved, the beet-growing territory is rapidly increasing in population, and that the situation is promising as to this industry is not only indicated by this fact but also in the large sums being invested in factories, irrigation projects, and lands. It is reported that the area contracted for beet-growing in 1907 is considerably increased over that of last year, when it aggregated 6,500 acres.

The United States Biological Survey has published a circular No. 55, which gives directions for the destruction of wolves and coyotes. Among other things, this bulletin says that by capturing the pups, more effectively and economically than in any other way, may the increase be prevented. Wolves usually have six to ten pups and coyotes have five to nine. Wolf pups are usually born from March 1 to April 15, and coyote pups usually in April and May. The pups remain in the dens until two or three months old. Now is the time to catch them.

Permanent Culverts for Highways (Continued from last week.)

If in any case it should be deemed advisable, as it may often be, to vary the height of the side wall from that used in the plans, in order to accommodate the culvert to a low bank or to obtain a waterway area intermediate between those given, this may be readily done. The quantities contained in the side walls and footings and in the end or wing walls would, of course, have to be recomputed for each special case, though the other quantities would remain the same. For use in this manner the computed quantities of the structure are given separately in table 4. The depth of the footings course used in the computations is that given in table 3. It is expected, of course, that in each culvert built

ing will be carried down to a firm foundation, which may be much deeper than that shown; or, if the culvert should be built on ledge rock or hard, weathered shale, no footing course at all would be required. In either case the estimates would have to be corrected to suit the particular conditions. It will be noted that all the estimates for footings are given separately.

SPAN OF CULVERT, IN FEET.	QUANTITY OF CONCRETE OR MASONRY IN BARREL OF CULVERT, CUBIC FEET:									
	3	4	5	6	8	10	12	14	16	20
In arch ring, per lineal ft.	4.5	5.1	6.9	9.0	14.0	20.0	27.0	35.2	44.1	65.5
In two side walls, per lineal ft.	3.6	3.3	2.5	2.2	1.7	1.3	1.0	.8	.7	.5
In total footing courses, per lineal ft.	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.7
In total culvert barrel, not including pavement, per lineal ft.	9.8	10.1	11.1	12.9	17.7	24.7	32.7	42.7	54.5	82.5
In pavement, per lineal ft.	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
In total culvert barrel, including pavement, per lineal ft.	11.0	11.3	12.3	14.1	18.9	25.9	33.9	43.9	55.7	83.7
QUANTITY OF CONCRETE OR MASONRY IN ENDS OF CULVERT, CUBIC FEET:										
In two end walls, above footing, including coping.	33	63	124	161	30	45	67	92	130	206
In four wing walls, above footing.	5	8	15	21	4	6	9	12	16	25
In footing under end or wing walls.	5	8	15	21	4	6	9	12	16	25
Total in end or wing walls, both ends.	13	79	139	182	38	57	85	114	152	256

the designs were drawn for use with standard cement concrete. If rubble masonry is used, certain slight modifications in the details of the design should be advisable, such as the omission of the chamfered edges on the top of the wing walls in steps formed of squared stones, instead of the surface.

The following suggestions relative to the construction work are deemed important:

The concrete made of one part Portland cement, 3 parts coarse sand, and 12 parts broken stone. If clean gravel is obtainable it may properly be substituted for the broken stone, but in case the amount of sand should be somewhat reduced. Call a bag of cement one cubic foot (or a barrel 4 feet) and then measure the other parts accordingly. Mix the sand and cement first, dry, of a uniform color, then add water and mix into a smooth, uniform mortar. Use hoes for this part of the mixing. Spread the mortar out on the platform and add the broken stone, which should have been previously drenched with water, and mix all together with shovel. Do this thoroughly, as the strength of concrete is dependent in an

important degree upon the care with which it is mixed. The amount of water used should be such that after this thorough mixing the concrete will quake when it is tamped in the form, but will not be sloppy.

Forms should be accurately set to the given dimensions and should be so strong and firmly braced that there will be no yielding under the weight of the wet concrete. In the segmental arch employed in the designs no lagging will be needed for the outside of the arch ring. Form should not be removed until the concrete has been in place for about a week.

In case rubble masonry is used, be sure that the stones in the side walls near the base are large, sound, and durable. The effect of freezing will be most severe at this point, and if a large number of individual stones here should go to pieces the whole structure might fall. By all means use cement mortar in which to lay the stones. Portland cement is much preferable to natural cement, and may be mixed in the proportion of 1 part cement to 3 parts sand or even 4 parts sand if the sand be of excellent quality. Natural cement, if used, should be mixed 1 part cement to 2 parts sand. If desirable, about one-fourth of the cement may be replaced by a little well-slaked lime paste, for the purpose of making the mortar less brash and more easily handled. If more than this is added the strength of the mortar will be materially decreased.

The cost per cubic foot of concrete and of rubble masonry of the kind indicated above will vary considerably with the distance that the stone and other materials have to be hauled, the price of cement, and other conditions that can scarcely be averaged. Ordinarily, however, rubble masonry will cost from 15 to 20 cents and concrete from 20 to 25 cents per cubic foot, the cost of forms being included.

A COMPARISON.

In table 5 are presented, for the purpose of comparison, certain data made up from the table preceding. In the first column are indicated the different sizes and forms of culverts discussed, stone box culverts being omitted on account of the uncertainty of their cost; in column 2 are given the number of acres which, under ordinary conditions in Eastern Kansas, these culverts will properly drain; column 3 gives the total cost of a culvert 30 feet long of the different sizes and types; and column 4 gives the cost of the culvert per acre drained by it.

Table 5.—Relative Cost of Various Forms and Sizes of Culverts.

For purposes of comparison, all culverts are assumed to be 30 feet long, between faces of end walls. End walls of pipe culverts assumed to cost 20 cents and arch culverts 25 cents per cubic foot.			
Form and size of Culvert	No. of acres Drained	Cost of 30 ft. Culvert	Cost per acre Drained
10-in. vitrified clay pipe.....	2	\$15	\$7.50
12-in. vitrified clay pipe.....	3	18	6.00
15-in. vitrified clay pipe.....	5	30	6.00
18-in. vitrified clay pipe.....	7	44	6.25
21-in. vitrified clay pipe.....	10	64	6.40
24-in. vitrified clay pipe.....	13	84	6.45
12 in. corrugated steel pipe.....	3	29	9.65
18-in. corrugated steel pipe.....	7	47	6.70
24-in. corrugated steel pipe.....	13	79	6.10
30-in. corrugated steel pipe.....	20	112	5.60
36-in. corrugated steel pipe.....	30	151	5.05
48-in. corrugated steel pipe.....	60	232	3.85
60-in. corrugated steel pipe.....	110	322	2.90
3-ft. arch culvert.....	28	92	3.30
4-ft. arch culvert.....	55	131	2.40
5-ft. arch culvert.....	100	186	1.85
6-ft. arch culvert.....	160	250	1.55
8-ft. arch culvert.....	325	400	1.25
10-ft. arch culvert.....	565	612	1.10
12-ft. arch culvert.....	875	861	1.00
14-ft. arch culvert.....	1250	1174	.95
16-ft. arch culvert.....	1690	1533	.85
18-ft. arch culvert.....	2250	1990	.90
20-ft. arch culvert.....	2920	2461	.85

A unit cost of 20 cents per cubic foot was assumed for the end walls of the pipe culverts and of 25 cents per cubic foot for the arch culverts. It will be noted that the cost per acre drained is very much less for the large culverts than for the smaller ones. Also that on the basis of the prices given a concrete or masonry arch culvert with a span even as small as 3 or 4 feet compares favorably in first cost with well-built pipe culverts of equal capacity, while for the larger spans the economic efficiency of the arch type is very decided.

If the products of the soil are converted into beef, milk, wool, pork, etc., by intelligently feeding them to good stock, the farmer will get the ultimate value which is contained in them.

College Appropriations.

The State Legislature has dealt kindly with the Agricultural College this session. The amounts appropriated are as follows:

	1908.	1909.
Current expenses.....	\$140,000	\$155,000
Domestic science building.....	70,000	.....
Veterinary building.....	70,000	.....
Engineering building.....	.....	80,000
Boilers and coal house.....	5,000	5,000
Library stacks.....	4,000	.....
Cement walks.....	4,000	.....
Farmers' institutes.....	5,500	6,000
Fire stokers.....	.....	3,000
Pipe machine.....	1,500	.....

Totals.....\$300,000 \$249,000

The following are the appropriations for the Fort Hays Branch Experiment Station of the Agricultural College:

	1908.	1909.
Current expenses.....	\$10,000	\$10,000
Roads and fences.....	2,000	2,000
Office and fire-proof vaults.....	.....	1,500
Steam plowing outfit.....	3,500	.....
Teams and equipment.....	2,000	1,000
Machinery.....	1,000	1,000
Pure-bred cattle and experiments.....	5,000	5,000
Building repairs.....	500	500
Superintendent's residence.....	3,000	.....
Cottages.....	1,000	1,000
Horticulture and forestry.....	2,000	2,000
Dam and water system (extensions).....	2,000	1,000

Totals.....\$32,000 \$25,000

These amounts, together with the regular income of the college, amounting to about \$65,000 per year, will place the institution in condition to do its work and to prepare for the reception of the rapidly increasing number of students that are coming to the great technical school of the State for their education. Besides the above appropriations, emergencies of \$1,000 for farmers' institutes and \$4,000 for barn at Fort Hays Branch Experiment Station, available in 1907, were passed.—Industrialist.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Broad tires on the wagon saves the turf.
Plow deep according to the character of the soil.
All fertilizers should be well mixed with the soil.
Concentrated foods should always be fed with those more bulky.
The feeding that produces a steady, speedy growth is the most profitable.
By feeding roughness on the farm, the fertility of the soil is increased.
Early maturity is not entirely with the breed, but any good stockman can

necessarily exhausted. The elements of fertility may be there in an unavailable form.

The production of lean meat is the natural growth of the animal, while the laying on of excessive fat is a cultivated tendency.

An excess of any kind of food fed to an animal, beyond its capacity of digestion and consequently perfect assimilation, is a waste.

The market value of food products fed to any animal that is to be eaten begins to decrease as soon as the animal arrives at maturity.

The better condition in which farm tools are kept the less effort is required on the part of teams and on the part of the workman.

A well-bred animal of any sort is a machine for utilizing raw products to the best possible advantage. It does this with less waste and consequently more profit than a scrub can.

Clover is the only crop which leaves the land better than it finds it. Even the ripening of its seeds tends to enrichment instead of impoverishment of the land.

Often through the season we gain or lose by the promptness with which we do our work. There is a best time in which to do every stroke of labor on the farm.

April Asthma Conquered to Stay Cured. No Hay Fever This Summer.

New York, March 27.—Previous experiments have proven conclusively that asthma can be cured permanently and hay fever prevented if a course of Toxico treatment is taken during the months of April and May. During these spring months the entire system is more susceptible to treatment than any other season of the year. Toxico is the new discovery which gives quick relief and is pleasant to take.

The Toxico Laboratory, 1269 Broadway, New York City, has generously offered to send a free sample of Toxico by mail to any sufferer who will send name and address.

Appendicitis Conquered.

Kansas City has a doctor who has found what the medical profession has been seeking to learn for many years, "The Uses of the Appendix Vermiform." This doctor, H. C. Carson, looks upon surgical operations that remove the appendix as a crime against nature. He has cured permanently every case of appendicitis that has been brought to him for treatment at his home, Twelfth and Washington Streets, Kansas City, Mo. He publishes a magazine which gives full details of this method of treatment and will send it to all who write him.

It Cures Fistula and Poll Evil.

The W. T. Dowling Manufacturing Company, of St. Marys, Kans., are manufacturing a remedy for the cure of fistula, poll evil, and lump-jawed cattle, which does the work, as the following letter received by them will show:

Belview, Kans., March 3, 1907.
"W. T. Dowling Mfg. Co., St. Marys, Kans. Dear Sirs:—The fistula on my horse is cured up in fine shape. I want to say that your fistula and poll evil cure is all right. Yours truly,
"S. W. HESSER."

This remedy is guaranteed to cure or money refunded. Those who have valuable animals suffering from the above diseases should write the Dowling Manufacturing Company at once.

Read their advertisement in this paper, and give their remedy a trial. When writing please mention THE KANSAS FARMER.

One of the wonders of the age lies in the extent to which concrete, and especially reinforced concrete is taking the place of timber in construction work of all kinds. There seems to be practically no limit to which reinforced concrete can be used, but we believe one of the most useful places that has been found for it is in the construction of fence-posts. These are now built for railroad and farm use in plain but very strong styles, and for ornamental fences for city residences, parks, cemeteries, and such like. The writer was a privileged visitor at the headquarters office of the Paragon Concrete Fence Post Company, 417 Portsmouth Building, Kansas City, Kans., and while there was shown the concrete fence-posts and the process of their manufacture for which this company is noted. Every fence-post is reinforced with cables of Bessemer steel laid in such a way that the post can not break under any strain. These posts are made symmetrical in form and of such texture that they do not chip off easily and can not rot off at the ground, nor are they affected by heat, frost, or moisture. A part of the business of this company is to organize and equip local companies, one of which has been established in Topeka and another one in Norton County within the last week. The writer was so well pleased with the posts manufactured by this company that he is planning to equip his suburban property with posts of this kind, on which he expects to mount poultry netting, woven wire fencing of different kinds according to location and the purpose of the fence. If you will notice their advertisement in another column and write them for particulars, you will be pleased with results.

ed. | lectures and grant diploma with degree.
The Detroit Veterinary Dental College, Detroit

ing have never been satisfactorily explained. In this discussion it is only necessary to consider facts. Through the application of the principles of the persistent, close in-and-in-breeding the individual loses in form, color, and size to all of which is added the misfortune of weakened vitality. In many individuals the chest is depressed and compressed, the ribs flattened, the quarters elongated, showing a decided returning and resemblance to the original. Close in-and-in-breeding in Berkshires develops pigs off in markings, spotted about the neck and legs, of ungainly form with thin quarters, long legs, weakened vitality, and loss of breeding power. In Poland-Chinas, it produces small, weakly, speckled, spotted, and striped litters. In Hereford and Shorthorn cattle it develops undersized, big-headed, peaked, ungainly, untidy scrubs. In some mysterious way the principle of selection appears overdone or handicapped, and heredity again leads the individual captive back to worse than the original scrub state.

The sire is of greatest importance because his influence affects the whole herd. History is replete with the names of distinguished sires, the milestones that mark epochs in the progress of the breeds. Every breeder of improved stock who ever achieved distinction and honor as a creative breeder, or in the show-yard, and every breeder who has achieved marked success can point with pride to one or more of the prominent sires he used.

The best blood flows in streams that trace to the fountain head. Individual excellence stands out in lines of prepotency. In Poland-Chinas, Tom Swin 2d and Chief Tecumseh 2d; in Berkshires, Longfellow and Black Robin Hood are examples of the force of prepotency, inasmuch that the services of each of those great sires resulted in improvement over the other accepted types of their respective breeds, and the best animals of today of either breed trace back to them through unbroken lines of impressive sires. Again in Poland-Chinas we have seen Chief Tecumseh, Chief I Know, Perfect I Know, Director, Mischief Maker, Meddler, Chief Perfection 2d, Grand Chief, L's Tecumseh, and the noted Expansion. In this connection it should be remembered that as a rule every great sire is a good dam. For example, Maspiece was sired by Black Robin Hood by Imperial Duke, by Longfellow's Model, by old Longfellow—a line of Berkshire sires of outstanding excellence, furnishing a striking example of the force of prepotency; yet the boar was from an excellent sow, respectively Duchess 221st, Black Girl, Silver Tips 29th, Lady Lee 7th, and imported Minnie Lee, each of whom among the best the breed has produced.

The principle holds true in every breed, and in Shorthorns we have the example of imported Baron Victor, Lahad, Gallant Knight, Lord May-Victorious, and the champion Maspiece the world, and beyond, resting like an impressive example of the force of prepotency in the imported Anxiety 4th, and his son, Don Carlos, and grandson, Beau Brummel, the numerous sons of the latter grand individual excellence.

More than a hundred years ago the Thoroughbred stallions were imported to America. When they were introduced two of them were so exhausted by the rocking of the vessel and sickness that they had to be taken on sleds to land, while the third horse, as he came ashore rearing on his hind feet, required a groom on either side tugging at the checks of the bridle to hold him in subjection; the blooded horse of this country the American trotter of metal and grace to-day owe their staying qualities to imported Messenger.

In founding a herd the breeder often makes the mistake of starting inferior stock, and after a trial is distanced by his competitors and finds he must take years of hard work to breed up, or gives up discouraged and disappointed. It is like the elder who ascended a mountain to

get a view of the country. Imagine a landscape of surpassing beauty, situated between great mountain ranges. From a certain mountain one can look down hundreds of feet, and can see over the most beautiful city, perhaps, in the world, and beyond, resting like a great mirror in the sunlight, is the lake, its bosom studded with islands. Around its border the valley spreads out for miles in stretches of green fields and blooming orchards that appear like immense bouquets, and from the farther shores of the lake rise other mountains thousands of feet high and covered with snow. It is related that a traveler desiring to obtain the view was told to go up to the summit of the mountain back of the city, and the whole landscape would unfold in all its variety of scenic beauty and grandeur. After several hours of wearisome walking, upon reaching the summit he discovered he had ascended the wrong mountain, and instead of the beautiful scenery which he had traveled so far to look upon, there arose up before him another mountain, higher than where he stood and obscuring the landscape beyond.

In this progressive age every professional and business occupation requires special training to insure any degree of success. It is required of a young man who expects to become a business man, and a merchant, or a banker, a lawyer, or a clergyman, that he be a student and have special training and preparation in the line of his chosen profession or occupation.

Our agricultural schools furnish instruction in stock-breeding, including the subject of market animals, their classification and market requirements, and the principles of breeding, breeds, and their standards of excellence, and stock-judging. Each subject is analyzed and every phase of the question discussed by large classes in attendance under competent instructors. These schools of instruction are within the reach of every young farmer and breeder.

This is a busy, progressive age. We have seen a man, combining good judgment and business methods, at one bound, in the short space of a year or two attain a position in the breeding world equal in prominence with that of the oldest and best-known breeder who has spent a lifetime in breeding up and building up by slow methods. This the energetic breeder can do. But this is a big country, and it will require patience of the new breeder to establish acquaintance and reputation. In establishing your herd have a purpose, adopt your type, breed good animals, start at the summit of individual excellence attained by the oldest and best breeder; select the cream of the breed for a foundation herd, and place at the head a sire that you can point to as the crowning sheaf, and by judicious advertising keep your herd and your name prominent before the public.

Stock-Judging at Manhattan.

EDITOR KANSAS FARMER:—The annual students' stock-judging contest was held at the Kansas Agricultural College, Monday, March 18, under the auspices of the Agricultural Association of the college, assisted by Prof. R. J. Kinzer of the animal husbandry department. Thirty students entered the various classes of cattle, horses, hogs, and sheep, competing for the prizes which were offered largely through the kindness of the breeders of the State. The following parties donated prizes as follows:

- Chas. E. Sutton, Lawrence, Kans., Berkshire pig; value \$25.
- Zenner Disinfectant Company, Detroit, Mich., bronze medal.
- C. M. Garver, Abilene, Kans., \$15.
- Clay Robinson Company, Kansas City, Mo., \$10.
- N. F. Shaw, Plainville, Kans., \$5.
- T. P. Babst & Sons, Auburn, Kans., \$5.
- John Baker, Strong City, Kans., \$5.
- J. F. Stodder, Burden, Kans., \$5.
- Mr. J. A. Milham won first place with a score of 543.42 out of a possible 600 points, thus securing the \$25 Berkshire offered by Mr. Sutton as a



The Famous Steer RUBY ZENOLEUM
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Owned and Fed by Nebraska Experiment Station

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No other animal dip and disinfectant has so many real uses about the cattle-barn and feed-lot. It is valuable to the farmer and stockman, the beef-grower and the dairyman. Zenoleum kills lice, cures mange and all skin diseases. Heals sores and wounds. Stops contagious abortion. Prevents calf-cholera and scours. Its use makes clean surroundings.

ZENOLEUM

Destroys disease germs and prevents contagion. One gallon goes a long way with the average herd. Perfectly healthy animals are better producers and make greater profits. Zenoleum keeps stock well.

Forty-two State Agricultural Colleges Recommend It.

AT ALL DEALERS—Small size, 25c; Quart, 50c; Half gallon, 90c; One gallon, \$1.50; Five gallons, \$6.25—or we will deliver one gallon or more, charges paid, to your station.

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If Zenoleum is not all we claim it is, or even what you think it ought to be, you can have your money back. No talk, no letters—just money.



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Blacklegoids

Simplest, Safest, Surest Vaccination for the prevention of

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NO DOSE TO MEASURE. NO LIQUID TO SPILL. NO STRING TO ROT.


Just a little pill to be placed under the skin of the animal by a single thrust of the instrument. You cannot afford to let your cattle die of blackleg when a few dollars spent on Blacklegoids will save them. Write for circular.

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O. Robinson & Co.,

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Developed on Stong's Stock Food.

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Stong's Stock Food promotes health and vigor, and will cure mange, scurf and worms in hogs, cattle and sheep. Is being used by some of the largest stock raisers in the country. Three days' feed for one cent. 33 lbs. \$5.00, 50 lbs. \$7.50, 100 lbs. \$15.00, f. o. b. St. Joseph, Mo.

Stong-Roats Mfg. Co., 201 N. 2d St., St. Joseph, Mo.

- sweepstakes prize. Ten prizes were awarded. A list of the winners follows in order of their rank:
1. J. A. Milham, Waverly.
 2. H. L. Popenoe, Topeka.
 3. B. C. Copeland, Idana.
 4. C. F. Blake, Glasco.
 5. W. T. McCall, Wakeeney.
 6. C. H. Alsbaugh, Lincolnville.
 7. C. J. Lindsay, Manhattan.
 8. G. P. Potter, Peabody.
 9. W. H. Wright, Antelope.
 10. A. H. Rose, New Cambria.
- These contests were originated by the Agricultural Association several years ago, and have been a great aid in arousing an interest in improved stock among the students of the Kansas State Agricultural College. Owning largely to the fact that the com-

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1907 model gasoline engines, all sizes. Highest class, simple engines made. Three months' trial will prove it. For general information and prices address,

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\$10.00 Sweep Feed Grinder.



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We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

CURRIE WIND MILL CO., Topeka, Kansas.

No More Blind Horses For Specific Ophthalmia Sore Eyes. BARRY Co, Iowa City, Ia. Have a cure.

test was unavoidably postponed until after most of the short-course students had returned home, there were not as many contestants as in some previous years, but the average excellence of the judging done was higher than usual, and the interest fully up to the standard. W. G. S.

Kaw Valley Breeders' Association.

The Kaw Valley Breeders' Association was organized March 15, 1907. The purpose as stated in the introductory to the by-laws is to systematize the breeding of horses and jacks. The officers for the first year are: President, Homer Boles, Randolph, Kans.; vice-president, A. M. Floersch, St. George, Kans.; secretary and treasurer, J. R. Lindsay, Manhattan, Kans.

Following are the by-laws with names of the charter members:

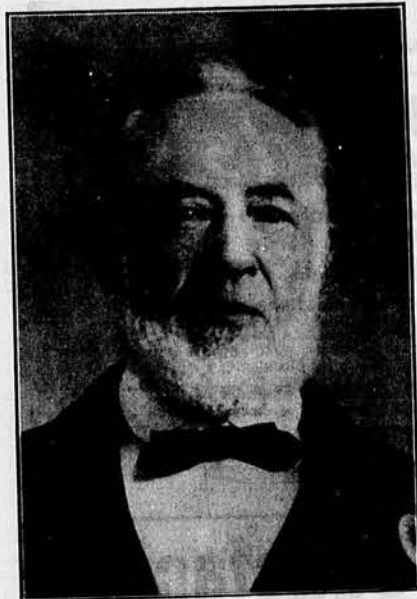
ARTICLE I.

Section 1. The annual election of officers shall be held on the first Tuesday in February of each year at Manhattan, Kans.

ARTICLE II.

Section 1. The membership fee shall be one dollar (\$1) per annum, payable at the annual meeting.

Sec. 2. Owners of horses and jacks can become members of this association.



The late Henry Haub, of Whiting, Kan., who was the first white settler in Whiting Township, Jackson County, Kansas, and who died at his home last week. He was born in Germany and came to this country at an early age where he devoted himself to agriculture. At his death he owned 1,000 acres of Jackson County land, a fine herd of Shorthorns, and of Poland-Chinas.

tion on application to the secretary, payment of the regular fee, and subscribing to the by-laws of the association.

ARTICLE III.

Section 1. All members of this association owning or keeping horses and jacks will charge fee for the season only. Payment will be due at time of service.

Sec. 2. Any member violating section 1 of article 3 will be fined the sum of twenty-five dollars (\$25) for the first offense and double that amount for any subsequent offense.

ARTICLE IV.

Section 1. The undersigned charter members of this association hereby subscribe to the foregoing rules and by-laws.

In witness whereof they have hereunto subscribed their names:

Homer Boles, Randolph, Kans.; L. Bardwell, Manhattan, Kans.; A. S. Houghton, Manhattan, Kans.; W. B. McCormick, Manhattan, Kans.; John H. Peak, Manhattan, Kans.; Richard Meyer, Riley, Kans.; T. W. Goff, Randolph, Kans.; M. J. Glenn, Manhattan, Kans.; D. F. McGregor, Manhattan, Kans.; J. R. Lindsay, Manhattan, Kans.; A. M. Floersch, St. George, Kans.

Use every opportunity now before the spring work begins for hauling out manure and scattering it where it will do the most good. If left in the

barnyard through the summer much of its value will be lost.

Under What Conditions May Cotton-Seed-Meal, Oil-Meal, and Gluten-Meal be Fed with Profit?

(COPYRIGHT 1906, BY H. W. MUMFORD.)

It has been demonstrated to the satisfaction of the writer, that in fattening cattle where corn comprises the bulk of the ration, it pays to supplement it with some nitrogenous feed either concentrate or roughage. Cottonseed-meal, ground linseed-cake or oil-meal, and gluten-meal are among the most common nitrogenous concentrates, while alfalfa, clover, and cow-pea hay are nitrogenous roughages. Whether or not it will pay to buy nitrogenous concentrates where good clover or alfalfa hay is available depends upon the age of the cattle to be fed, the price of corn, and the price of cottonseed-meal, oil-meal, or some other available nitrogenous concentrate.

During the winter season of 1903-1904, the Illinois Experiment Station fed one car-load of 1-year-old choice feeding cattle on broken ear-corn and clover hay, and another car-load of cattle of the same age and grade on broken ear-corn, clover-hay, gluten-meal and oil-meal (pea-size ground linseed-cake). These cattle were fed for a six months' feeding period and were well finished at time of sale. Feeds were charged at the following prices:

	Per ton.
Ear-corn at 35c per bu., broken	
ear-corn at.....	\$10.20
Oil-meal (ground linseed-cake, pea-size).....	24.00
Gluten-meal.....	29.00
Clover hay.....	8.00

	Broken ear-corn and clover hay.	Broken ear-corn, gluten-meal and oil-meal and clover hay.
Average daily gain per steer in pounds (186 days).....	2.08	2.33
Pounds pork per steer made by hogs following.....	62.60	74.13
Pounds gain on steers per bushel corn fed.....	6.69	7.92
Pounds gain on steers and pigs per bushel corn fed.....	7.98*	9.06
Net cost of 1 pound gain on steers.....	\$0.059	0.067
Cost per hundredweight of feeders in feed-lot.....	\$4.53	4.53
Value per hundredweight when marketed.....	\$5.95	6.15
Net profit per steer, corn 35c, clover hay \$8 per ton. Gains.....	\$12.07	12.12
in pork credited at \$5 per cwt.....	\$5.68	5.36
Net profit per steer, corn 40c, clover hay \$10.....		

*With each bushel of corn fed in this lot there was an average of approximately 10 pounds of oil-meal or gluten-meal fed in addition to the corn which of course was not the case where corn was not supplemented with a nitrogenous concentrate.

By referring to the table it will be seen that the steers getting the oil-meal or gluten-meal made larger daily gains throughout the feeding period than did those that received only broken ear-corn and clover hay. This result usually follows such practice because the supplementing of corn with a palatable nitrogenous concentrate undoubtedly stimulates the appetite and increases the capacity of the animal for consuming to advantage large quantities of concentrates. This system of feeding is to be recommended therefore where the securing of a quick finish is of more consequence than the somewhat increased cost of the gains.

It has frequently been stated that better gains are secured on hogs following steers fed on corn supplemented with oil-meal than where it is not so supplemented. It is possible in the above statement, reference was made to cattle not fed a nitrogenous roughage such as clover hay. This test at any rate points to the conclusion that where corn is supplemented with both a nitrogenous concentrate and a nitrogenous roughage the hogs make smaller gains than where supplemented with clover hay only. This is as it should be, for if it is true, as is pretty clearly shown by a comparison of the pounds of beef made per bushel corn fed, that the supplementing of corn with the concentrated feeds used in this test increases the efficiency of corn for making beef, there must of necessity be less of the corn in the droppings of the steers for producing gains on the pigs. It is not probable that the pigs get much benefit from the undigested portion of these concentrated feeds especially where whole corn is fed.

A comparison of the cost of gains will bring out forcibly the point that the most efficient rations are not necessarily the most economical produc-

ers of gains. Notwithstanding the fact that the cattle receiving the oil-meal and gluten-meal were enough better finished to sell in the open market for 20c per hundredweight more than the ones getting corn as the only concentrate, a comparison of the relative profit indicates that with feeds at the prices named, it matters but little so far as visible profits are concerned whether or not the cattle feeder uses these nitrogenous feeds for feeding 2-year-old cattle for winter feeding. In the financial statements given no charge has been made for interest on investment in cattle, hogs, and equipment, or for labor required, nor are the cattle and hogs credited with any fertilizer produced. It should not be overlooked, however, that while in actual visible returns, one ration appears about as good as another, as a matter of fact the manure from the oil-meal or gluten-meal fed steers would be considerably more valuable than that from the steers fed corn only. The cost of gains look low and they are low only because corn is charged at the rate of 35c per bushel (a scarce commodity).

The question of the use of these supplementary feeds where clover, alfalfa or cow-pea hay is not available will be considered next.

About Gray Percherons.

EDITOR KANSAS FARMER:—I think when we see the 1907 importations of Percherons we will see more grays than we have for some seasons back. I can't help noticing some things as I go along through life. For instance, there was that load of twenty-one draft geldings that was sold a fort-

There is not one that will hold water. The old one about farmers not wanting gray horses because they turn white with age may be all right for the man who wants to breed horses solely for his own use, but few farmers can afford that sort of a luxury. Usually it pays best to breed that sort of an animal for which the best sort of a price can be obtained.

I believe it is all the same to the importers whether the buyers want black horses or grays. If the demand is for blacks they can leave the grays in France and vice versa. Turning their business over year by year they are in a position to provide exactly that which is demanded. However a predominating call for horses of one color naturally narrows the range of selection on the other side of the ocean and we get fewer of the best—that's all. Then when it comes to the matter of farmers going past a good gray horse to breed to a medium or inferior black, sense ends and idleness begins. This has been done far too often, and we all know it. The dark gray coat such as Etradegant wears is the favorite, and a good big gelding that is nearly white but deep in his rib, and fat, and fit to go to work will bring every dollar as much as a black of equal merit and sometimes more.

The Armour six-horse team of geldings that is going to England to be shown at the International Horse Show in London, the second week in June, are almost all light grays. Not one of the famous six, Jim and Henry in the wheel, Abe and Phil in the swing, and Dude and Mack in the lead ever was a dark gray. Abe departed from this life and a very dark gray took his place, but in a measure it spoiled the looks of the outfit. It will be remembered that old Jim has put it over the best they could lug over from Scotland and England three years out of the last four—and that is going some for the grays.

JAS. HOPE.

One of the pleasing surprises of the year is the rapid progress to the front ranks in incubator manufacturing of the only Kansas-made incubator, the Safety Hatch, made by the Clay Center Incubator Company, of Clay Center, Kans. Clay Center can be congratulated on its business enterprise in securing this successful line of manufacture to their city, and the loyal people of Clay County are coming nobly to the front with their support of their own factory. Many other Kansas people as well as those outside of the State from widely distant localities are helping spread the fame of Kansas-made incubators. The Safety Hatch Incubators are built very substantially and of the very best materials obtainable so that they are good for years of service. They are made simple and complete in every detail, and have a record of using less oil, and needing little care, and can be depended on to produce the best results. These things give them favor among old experienced incubator-users. The Biddy's Friend Brooders also made by this company are real brooders. They are built to heat with hot water, and on a plan different from any other made. These brooders are very simple to handle and cost very much less than others for fuel to operate them. The verdict of these experienced patrons are that more can be asked? The Clay Center Incubator people are known personally by us, and we can recommend them to you. They allow ninety days' free trial to each customer and agree to return the price to any one not satisfied after a fair trial. This is both fair and liberal, and unless their machines were good machines they could not stay in business very long. But the facts are they are getting ready to do a very extensive business the coming year, as all signs are it will be. Even such known hustlers as these people are to keep up with their business the coming season. We advise you to write to this firm for their literature and become acquainted with them, for they are going to stand in the very highest positions in this line as time rolls on. You would do us a favor to mention this paper as a personal friend, and we feel your commendation would not be misplaced. If you choose to try their machines, address the Clay Center Incubator Company, and don't forget their address is Clay Center, Kans.

There is surely some merit in the Dipolene advertised by the Marshall Oil Company, of Marshalltown, Iowa, or they would not be able to send out copies of so many genuine and un-elicited testimonials as they are now doing in book form to their friends and customers. These testimonials are from all parts of the country, and all of them commend Dipolene. If you drop them a card they will send you copies of these letters and of the pamphlet, which describes the Dipolene and its method of use, together with the results that are sure to be low.

night back in Chicago for an average of \$422.15, breaking all records for a load in that market. Of the twenty-one, sixteen were grays, three roans, and only two blacks. If the proportion had been reversed the price would not have been so large as it was, and that proposition I am willing to leave to any of the big buyers in any of the States. The more men I meet the more men I hear say, these days, that they wish the craze for blacks had not overspread the country quite so thickly. Now I am not saying that the black Percheron is not as good a horse as the gray, but I do know that the buyers will pay more for a gray gelding than they will for a black, and there is a good reason for that, too—merely that their best customers in the East and in Chicago want grays. It is mighty good business to give the fellow with the money whatever he wants to pay it for. It was a blessing that we had so many gray mares in the country when the craze for black hair overspread it.

What to my mind is a most forcible sign is this: I was talking with one of the largest importers, not long ago, and he told me that the inquiry for gray stallions was much greater this spring than it had been for some years past. More grays were exhibited this year in the aged Percheron classes than for some seasons back. Etradegant, McLaughlin Bros.' unbeaten champion, is a very choice dark gray, and at the International there were some other grays that seemed to suit the fancy of the on-lookers very well. At that show I talked with a great many men from different States and certainly there was no doubt about the return to popularity of the lighter colored coat. There is not much use in entering into the many specious reasons that have been advanced for the preference for the black Percheron over the gray.

grass may give as good results. However, I prefer Bromus inermis and alfalfa or a combination of the two grasses with alfalfa.

A. M. TENEYCK.

Alkali Land.

I have alkali land on which alfalfa does not grow very well. I would like to know how Australian Salt Bush would do on that land, how to prepare a seed-bed, and when to sow. Does it drown out as easily as alfalfa? Would Bromus inermis grow well on alkali land?

F. W. ARENSMAN.

Barton County.

I have had no experience in growing Australian Salt Bush and know very little about it. I doubt whether it is as well adapted for growing west of the mountains as in California and in the arid regions of the mountain States. I have never succeeded in getting a stand of salt bush. I have never tried growing it except by sowing in the field. In my judgment, salt bush would not grow on the land in question, since it is really a dry-land plant.

If the soil could be drained, doubtless it would grow alfalfa better than it will grow salt bush. The Bromus inermis may grow on such land, provided you can drain it, but if this is a low place into which the water drains, accumulating alkali, I doubt whether there is any crop which may be successfully grown on such soil. Doubtless if you could get the Bromus inermis or alfalfa started on this land it would grow there successfully. It would be advisable, however, to crop the land a few years with sorghum, Kafir-corn, or cultivated crops so as to remove some of the alkali before seeding to grass or alfalfa. However, thorough drainage of this land will be necessary in order to successfully grow any crop on it. For further information on Australian Salt Bush I refer you to bulletin No. 125 of the California Experiment Station, Berkeley, Cal., and to Farmers' Bulletin No. 108 of the United States Department of Agriculture, Washington, D. C. You may also secure bulletins from the United States Department on alkali soils and crops adapted for growing on such soil. A. M. TENEYCK.

Flax Questions.

Is flax a good crop to grow in Meade County, Kansas, on sod plowed this spring? About what time of the season should it be sown, and how much seed should be sown to the acre? Should flax be sown with a drill or sown broadcast and harrowed in? How much does flax generally yield, and about what time will it be ready to harvest?

What about spring wheat, is it a profitable crop in Meade County? What kind is best to raise, and how much should be sown per acre on newly plowed sod? EPHRAIM BASINGER.

Lake County, Illinois.

Flax is not grown very extensively in Western Kansas. In the Northwestern States flax is considered one of the best sod-land crops, and I know of no reason why the crop may not prove profitable in Western Kansas, especially on new land. However, it may be necessary to adapt flax to our climate before it will succeed as well in this State as it does in the Northwest. Possibly, also, we do not understand the methods best adapted for growing flax in this soil and climate.

The experiments at this station have given results favoring early seeding of flax. Namely, flax sown during the first part of April has given larger yields than flax sown in early May. The rule in the Northwestern States is to sow flax rather late in the spring after the small grains have been sown. However, it appears that, in this climate, flax should be sown almost as early as oats, barley, or spring wheat. It is best usually to sow about two to three pecks of flax-seed per acre. The seed may be sown with the grain drill or broadcasted and harrowed in, there being little preference between the two using the drill, however, not to sow the flax-seed too deep. At this station we have not been able to secure large

yields than ten to twelve bushels of seed per acre, and the average yield has been something less than this during the trials of the last four years. If flax is sown by the middle of April, it will be ready to harvest by July, or in about one hundred days.

The Durum spring wheat succeeds fairly well in Western Kansas and may be a crop which is better adapted for growing in Meade County than flax. Sow about a bushel of good seed-wheat per acre. It will pay to disk and harrow the sod well in preparing a seed-bed for sowing either flax or Durum wheat. Doubtless winter wheat, the hard, red Turkey or Russian type, is a more preferable crop to grow in Meade County than either the flax or Durum spring wheat. A. M. TENEYCK.

Alfalfa Seeding.

I have twenty acres of upland which I wish to get seeded to alfalfa this spring—ten acres in wheat, five acres in clover sod, and five in corn stubble. How shall I cultivate to get best results? Give me your opinion of what results I may expect.

Leavenworth County. S. J. RENZ.

It would be possible to seed the corn-stubble land to alfalfa this spring. I would advise to cut the stalks up with the stalk-cutter and disk and harrow the ground, sowing the alfalfa as soon as a proper seed-bed may be prepared. It would be possible also to sow the alfalfa in the wheat, harrowing the wheat to cover the seed. As a rule, however, it is not successfully recommended to sow alfalfa with a nurse crop. It is better to sow it alone. I would not advise the attempt to seed the clover sod to alfalfa this spring. Better plow and plant to corn this season, seeding the alfalfa a year from this spring, or it would be possible to grow some early-maturing crop on the clover sod, and after removing it, prepare a seed-bed by disking and harrowing, sowing the alfalfa this fall. It is almost impossible to prepare a proper seed-bed in the clover sod, for seeding alfalfa this spring. However, if you are determined to seed the whole twenty acres at once, I would advise to plow the clover land rather shallow just as soon as possible, packing the land well with a packer or roller and harrow it several times so as to pulverize and settle the soil. With hard work, and a favorable season, a stand of alfalfa may be secured on the clover land, by seeding this spring.

I have mailed you a copy of bulletin No. 134, giving further information regarding the seeding of alfalfa. A. M. TENEYCK.

Alfalfa in Missouri.

I have a farm of 200 acres situated in Platte County, Missouri, seventeen miles north of Kansas City and about three miles from the Missouri River. The ground is very rough and broken, and there is very little level surface on the whole farm. About one-half of it is under cultivation, however, and raises corn and wheat. The balance is covered with blue-grass, and has a great many large oak and walnut-trees on it.

I write to ask if such land as this would profitably raise alfalfa, and also whether or not potatoes could be grown on it successfully.

I do not know any peculiarity of the soil except that it is about the same as all bluff land along the Missouri River, and with one or two exceptions, is entirely free from rock and seems to sustain an excellent growth of blue-grass. It raises a fair crop of corn and wheat where the land has been tilled.

J. M. DAVIDSON.

Jackson County, Missouri.

I believe that if you can start the alfalfa on the land in question it will grow there successfully. You might have some difficulty in getting a stand, due to the fact that the cultivated land is likely to have been washed badly and may be in a poor state of fertility. A surface dressing of manure just previous to preparing the seed-bed for sowing the alfalfa will greatly improve the chances of

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FOUR FARM FAVORITES

Hay is one of the most valuable crops raised on the farm—one of the most necessary commodities grown. And it is getting to be more valuable each year.

To handle hay properly and with greatest profit the farmer should equip himself with the latest up-to-date hay tools. He will find the Dain Line offers him a choice of the best tools of their kind built.

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FOR THE HAY FARMER

less money the Dain New Idea Rake will just suit you. It's not cheap in the sense of being inferior—it's simpler and doesn't cost quite so much to make but it's a Dain and that means that it's the best of its kind built. Dain quality is never lowered in any machine we build, and you'll wonder how we can build so good for the money. The Dain Three Wheel Sweep Rake is a side hitch, folding rake, with hinged or flexible tongue; teeth are 8 ft. long carrying large loads. It is moderate priced with lots of new features that you will appreciate.

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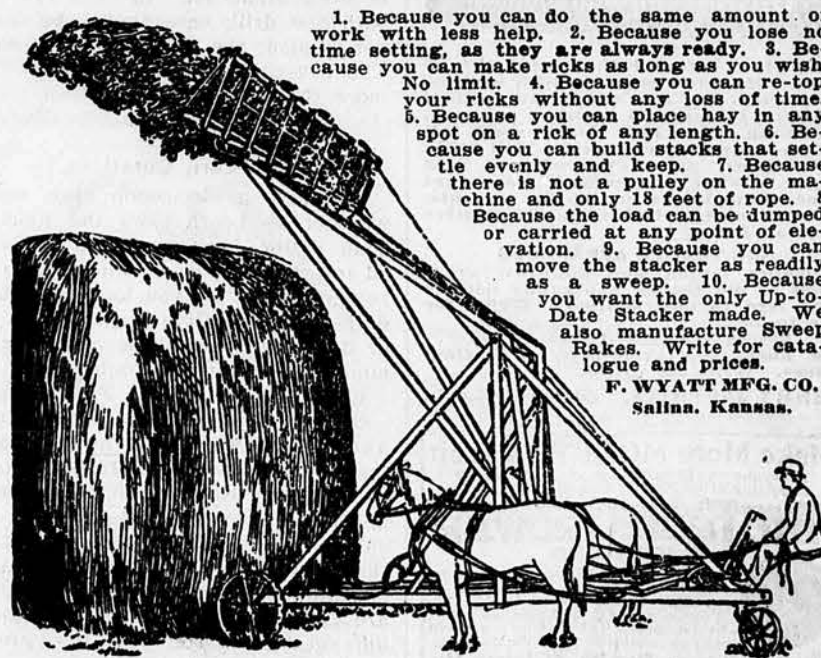
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manufactured, costing from \$25 for a hand scraper to \$150, or possibly more for a chain scraper, depending upon the kind and size of a machine.

After the brush is cured upon the slats in the shed, it is baled, a regular broomcorn baler being used for this purpose. The size of the bales are from 150 to 250 pounds, depending upon the size wanted in the market.

To properly equip for growing and handling broomcorn necessitates a considerable outlay of money, and it would not be advisable to undertake the growing of this crop in any quantity without the proper machinery, because of the work required to give it the proper care. Sometimes a local market will make it a profitable crop for growing upon a few acres.

There are some people who claim that the fodder is good feed for stock, also that the grain is valuable. This has not been the writer's experience. The seed must be removed while quite green, and good seed can not be removed while quite green and can not be saved on account of heating.

The fodder will not be eaten by stock when any other food is available, and when forced to eat it, stock do not thrive well upon it. When the broomcorn is left to ripen for seed, the quality of the straw is injured, and often it is economy to save the straw and let the other fellow grow the seed, providing he is careful in his selection for seed purpose. Some strains of different varieties are of such poor quality of brush that they should be discarded on account of large central stalks in the brush and the coarse curly brush.

If a farmer decides to grow broomcorn after the considerations of these points, and will go to the trouble to select and breed a small patch for his own seed, he will probably find the crop to be profitable.

M. D. SNODGRASS.

Alfalfa Seed-Bed.

I have eight acres that have been in English blue-grass for three years, with the exception of a strip about fifteen yards on one side and one end, which I seeded to alfalfa the same year to see if it would grow. It did fine. This ground was mostly plowed last fall and works up nice and loose. It has a good coat of manure all over it, and there is not much crab-grass or foxtail.

Do you think it advisable to sow alfalfa this spring; if so, what time would you sow and how would you prepare the ground? This is a black, gummy soil, eleven feet to water.

W. C. BRYANT.

Montgomery County.

The fall-plowed land with a dressing of manure on the surface should make an excellent seed-bed for sowing alfalfa this spring. I would advise to disk rather shallow and harrow enough to firm and pulverize the soil, leaving it mellow at the surface but not loosened to a depth of more than two or three inches. Sow the alfalfa as soon as you can prepare a suitable seed-bed. Have the ground well prepared and harrow lightly once, after seeding, provided the seed is sown broadcast. In case you sow with the drill, care should be taken not to plant the alfalfa-seed too deep. The covering should be shallow, not more than an inch or so deep.

A. M. TENEYCK.

Seed-Corn Questions.

We have a discussion here, as to whether seed-corn from the Shenandoah Valley, Iowa, would be acclimated for the first year. Please give us your opinion. Do you have any seed-corn for sale? Give prices if you do, or if not can you tell us of a reliable house near Franklin County?

Franklin County. R. F. McCANE.

Seed-corn from the Shenandoah Valley, in Iowa, would not be acclimated for growing in Franklin County, Kansas. However, it will depend much upon the season as to what results would be secured from planting the Iowa-grown corn. In a season of plentiful moisture supply, good results are apt to be secured, but in a more unfavorable season the Iowa-grown seed-corn is not apt to give so good

results as the home-grown Kansas seed-corn, of the same variety. This has been the experience of farmers, and the experiments of this station have given like results. As a rule, I do not recommend to introduce seed-corn from other States in large quantities. However, it may often be advisable to purchase well-bred seed-corn in other States and by growing it in Kansas, adapt it to our soil and climate. I have mailed you a list of corn-breeders, members of the Kansas Corn-Breeders' Association. The college supply of seed-corn is exhausted.

A. M. TENEYCK.

New-Sown Alfalfa.

I have a condition in new-sown alfalfa which I wish to lay before you, and get the benefit of your advice and experience.

Last fall I sold considerable alfalfa-seed, which was sown and on account of the dry weather came up late, but made a fair growth, the roots being from six to eight inches long.

In January we had a very heavy rain which thoroughly soaked the ground and was followed by a freeze, which raised the alfalfa about two inches; now it has bent over at the top of the ground but is showing some signs of life and is throwing out some shoots. Will it damp off at the ground and die, or will it have vitality to overcome the freeze and make a good stand?

T. LEE ADAMS.

Jackson County, Missouri.

I am unable to give a positive answer to your question. It will depend upon how badly the alfalfa has been injured by heaving, also the weather conditions during the early spring. With a warm, wet spring, the alfalfa may revive and make a good stand. With a dry, unfavorable spring, however, the young plants are apt to give up the little life which still remains in them. Doubtless you will find that the roots of these young plants have been broken off four to six inches below the surface of the ground. Alfalfa sown in the fall will usually make a root growth of three to four feet. The winter freezing and thawing of the soil breaks the roots, leaving the crowns of the young plants above the surface. It will depend somewhat upon how deep in the soil the roots were broken as to whether the alfalfa plants retain enough life to start again and also, as I have stated, upon the weather conditions during the early spring.

It is my general recommendation to reseed such fields unless the alfalfa shows a strong, renewed growth within two weeks, or by April 1. Doubtless some of the plants will live on every field, but a sufficient number may die so as to leave only a thin stand of alfalfa, and it will be better to reseed early this spring, perhaps destroying some of the old plants in preparing the ground for reseeding, rather than to leave the thin stand of alfalfa on the ground.

A. M. TENEYCK.

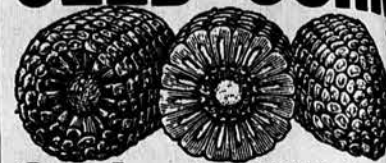
Horticulture

Growing Leguminous Crops for Orchard Fertilizers.

EDITOR KANSAS FARMER:—The growing of leguminous crops for orchard fertilizers should be more generally practised than at present. I have grown such crops in my orchard for the last seven years with good results.

The cow-pea is the more generally grown, and different methods of cultivation are practised. The common plan here in Southern Illinois is to plow the land, harrow it once or twice, and plant the seed with a wheat-drill or double row with a corn-planter. Sometimes the seed is sown broadcast on freshly plowed land and harrowed in, but I find there is always some of the seed lost by this method, in a dry time. I find that better results are obtained by a thorough preparation of the seed-bed than planting in rows about thirty inches apart and cultivating shallow, keeping

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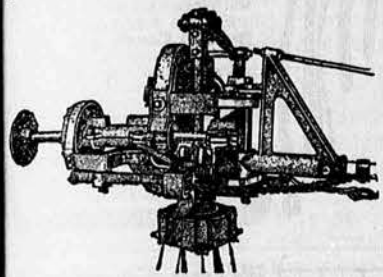
Sold ear or shelled. All graded, tested, proven—then guaranteed. No better at any price. Test it in your sprouting box. If you don't like it—fire it back. You'll get your money back double quick. "Guaranteed—pure" Clover seed. Garden seeds that will really grow. Catalogue and samples free. **HENRY FIELD, SEEDSMAN,** BOX 55, SHENANDOAH, IOWA.



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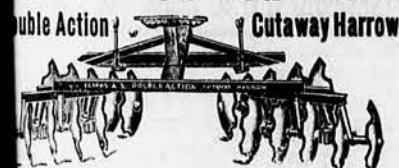
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the surface level, until the plants shade the ground. I find the difference in yield is more marked on poor land than on land well supplied with humus; even then the seed saved and the benefit to the soil of good cultivation is worth considering.

Planting this way, one bushel of seed will be sufficient for four acres. The seed should not be planted until the ground is in condition to germinate it without delay. The cow-pea is from a warm climate, and the seed will decay sooner than corn, in a cool, damp soil. In ground that has been settled by rain, the roots of plants are deprived more or less of the benefits derived from the air circulating through the surface soil. The air must penetrate the soil. It is essential to the best development of the plant, and to the life of the bacteria which collects the free nitrogen. For this and other reasons, land that crusts over or bakes after a rain should be cultivated before the crust forms, and the surface should be kept loose.

To obtain the most profitable results from a crop, it is advisable to pasture with hogs or sheep. The fertility removed by the stock amounts to little, in fact, the most valuable elements of fertility for the orchard are nearly all left by the stock. In case the crop can not be pastured and the vines are likely to interfere with harvesting a crop of fruit, I find that it is best to roll or break them down, in which shape they make a good winter mulch. Then the following spring they can be plowed under or worked into the soil with a disk harrow.

The soy-bean requires much the same management as the cow-pea. Its upright growth makes it a good crop to grow where the vines of the cow-pea are objectionable. One objection that I have to the soy-bean is that when ripe the seeds pop out from the effect of the hot sun. However, that matters little when used as a fertilizer. W. H. UNDERWOOD.
Johnson County, Illinois.

Spraying.

PROF. M. V. SLINGERLAND, CORNELL UNIVERSITY, NEW YORK.

Recent estimates indicate that the value of farm products now destroyed each year by insects in the United States aggregates the vast sum of \$700,000,000, or more than the yearly expenditures of the National Government. To this sum must be added the value of crops destroyed by fungous diseases, which would surely bring the total to at least a billion dollars. Thus one of the most serious problems that confront the American agriculturist is that of controlling the insect and fungous enemies of his crops. There are now nearly twice as many different kinds of insect pests in the country as in 1850, and three or four times as many as a century ago; the fungous enemies have also greatly increased. Furthermore, the outlook is far from encouraging, for all the old pests will doubtless continue their ravages indefinitely with their "up" and "down" periods at uncertain intervals. The American farmer will have the best plants and animals the world produces no matter whether he does thereby introduce such destructive pests as the San Jose scale from China. Thus the unbroken ranks of the insect and fungous enemies of a century ago will be constantly augmented by new kinds that are either disturbed by man in their wild haunts here (like the Colorado potato beetle), or that come in naturally from adjoining countries (like the cotton boll weevil from Mexico), or that commerce brings in from foreign lands (like the cattle horn-fly and over half of the other standard pests).

To offset this rather gloomy picture American farmers are now the best equipped of any in the world with insecticidal and fungicidal batteries, and they are waging the most scientific and successful fight against these minute foes. Many millions of dollars are being spent annually in America by National and State governments and by individuals in fighting insects



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How You Can Buy a Fine
\$35 Set Direct from the
Maker for \$24.00

SHIPPED ON APPROVAL

Why should you pay an extra profit on harness to the dealer or mail order house, when you can save at least one-third by buying direct from the maker?

I make 50 styles of good harness. My line is complete. Each set that leaves my shop is the product of workmen highly skilled in the harness maker's art, and guaranteed to be from the best oak tanned leather,—the only kind I use.

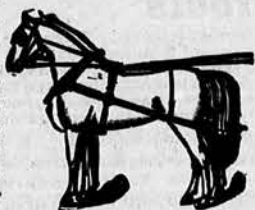
I save you 30 to 50%, because I sell direct,—no agents, salesmen, dealers or middlemen of any kind stand between you and my goods; you get better harness, a greater selection and the maker's guarantee of perfect satisfaction or your money back.

And you take no risk dealing with me, because my word is good, and the Company of which I am President, is responsible for any promises I make; look them up in the Commercial Agency books, or ask any bank or express Company where we are best known here in our home town.

Now, about my "leader."—the \$35 set for \$24.00. The cut gives you a fair idea of it. This is a genuine bargain,—a splendidly made 1½ inch team harness, strong, stylish in appearance, and made of the very best grade oak tanned leather. And it is actually worth more today than it was when we made it up, because leather is advancing in price, as you know.

So, if you want this special harness value, please order promptly, as I shall probably not be able to advertise the set again at \$24.00. Just send me the money and the harness will go to you at once with the distinct understanding that I will refund the price and pay charges both ways, if you are not perfectly satisfied.

My big free Harness Book is full of money saving offers. Send for it and compare our prices, styles and qualities with what your dealer offers. Write me today. Address R. M. Knox, Pres., Western Harness & Supply Co., 891 Main Street, Waterloo, Iowa.



MORE CORN MONEY

INCREASE Your CORN PROFIT
By Planting Sorted Corn



No idle ground; no missing hills; big yield sure when you sort your seed with this machine.

It all depends upon the stand

We want to show you how you can make more money out of your next season's corn crop. All you have to do is to make sure of a perfect stand—get a uniform number of grains in every hill.

We manufacture the ONLY machine that will sort your seed corn so evenly that your planter must drop a given number of grains every time.

"Morecorn" Seed Sorter does the work. It was put through the most critical tests at Iowa, Illinois and other state fairs. Thousands of corn growers sorted seed with it so perfectly that an edge-drop planter dropped 99 per cent perfect three kernels at each drop.

If you can get your corn fields planted like that next year won't it give you the biggest crop of corn that you ever raised? You can do it if you sort your seed corn with the "Morecorn" sorter. It can be done no other way.

No planter has ever been, or ever will be made that can drop an even number of kernels at a drop without the kernels being uniform in size. You cannot get uniform kernels without sorting your corn.

Don't think of planting corn again without investigating the work of the "Morecorn." It will pay for itself twice over every year and last a lifetime if taken care of.

Let us tell you more about it. Write us today.

THE MONARCH SELF-FEEDER CO., Cedar Falls, Iowa.

THE AUTO-FEDAN HAY PRESS

3-Stroke Self Feed 2 Men Can Run It. Satisfaction Guaranteed



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and fungi, and in devising and testing new remedial measures. It is estimated that over eight million dollars is expended each year in spraying apple-trees for the codling-moth alone.

For centuries man has been fighting insect enemies. The Roman required the inhabitants of infested regions to destroy certain quantities of grasshoppers. In the Middle Ages the methods used for the destruction of insects were largely of a spiritual nature; priests sometimes marched around infested fields praying. It is only within the past quarter of a century that the modern, scientific methods of controlling insect and fungous enemies have been devised. Previously American farmers resorted to hand-work or to simple mechanical adaptations, such as bands for canker-worms and codling-moths. The word "insecticide" was unknown half a century ago, and according to the dictionaries when one kills an insect, he is an insecticide, he may use an insecticide, and he also commits an insecticide.

For half a century before 1875 the materials used by American farmers to kill insects consisted largely of soap, hellebore, lime, tobacco, sulfur, and salt. These were dusted, sprinkled, or syringed onto the plants. With the appearance and rapid march of the Colorado potato beetle across the country from 1860 to 1870 there came into use the poison, Paris green, when was destined to revolutionize spraying methods. In 1878 it was found that this poison spray effectively checked the codling-moth, and this gave a new impetus to the warfare against insects. It was nearly ten years later before sprays for fungous diseases were much used in America. Great strides have been made in the science of spraying during the past twenty years, and American farmers now have a very formidable array of materials and elaborate machinery for their application.

A good spraying outfit is now almost as necessary a part of the equipment of a farm as is the plow and cultivator. Many growers of fruits, potatoes, and garden crops now include spraying as one of the regular necessary farm practices to protect their crops from insect and fungous enemies. Machinery for the application of insecticides has developed from a bundle of twigs or a broom through syringes and ill-adapted pumps to a formidable array of powder guns and pumps, especially adapted to various conditions and crops. Insecticides and fungicides are now combined so that "two birds are hit with one stone." The small atomizers, bucket-pumps, and knapsack sprayers will be found useful on most farms for spraying small areas, isolated trees, house plants, or cattle. For several years barrel pumps were much used in all spraying operations, but now large tanks equipped with more powerful pumps in which the power is developed by horses, steam, or gasoline engines, by compressed-air or by carbonic-acid gas are mostly used in spraying large areas of orchards, vineyards, potatoes, and other crops. The horse-power pumps do satisfactory work on potatoes and similar low-field crops, and the addition of a small compressed-air tank greatly increases their efficiency, so that small orchard trees and vineyards can be sprayed successfully. The pumps using compressed-air for power do very effective spraying of all kinds, but the necessary outfit of several spray tanks and engine and an air-compressor are rather expensive. Steam spraying rigs are heavy, but are easily managed and furnish cheap and abundant power. Gasoline engines are lighter and are now being much used instead of steam power. The tanks of compressed carbonic acid furnish a fairly satisfactory, easily manipulated, but slightly more expensive power than engines.

Good nozzles are an essential part of spray pumps. The various modifications of the Vermorel type of nozzle are now most extensively used, often several of these nozzles being grouped at the end of a light rod attached to the spray hose. The man-

ufacturers of spraying apparatus are constantly improving and modifying their machines, so as to better adapt them to the practical needs of agriculturists.

Paris green is the standard poison spray for biting insects. It is used at the rate of one pound in one hundred gallons in orchards, except plum and peach, where only about half that amount is safe; on potatoes it is used twice as strong. More than two thousand tons of Paris green are now used annually in America. By boiling 1 pound of white arsenic, 2 pounds of sal soda in 4 quarts of water until dissolved and then slaking 2 pounds of stone lime with this solution and adding 2 gallons of water the cheapest stock poison mixture can be made. For general orchard spraying use about 1½ quarts of this stock poison to 40 gallons of water or Bordeaux mixture, and for potatoes double the dose. The arsenate of lead poison is now coming into general use; it adheres better to the foliage and can be used very strong with safety, thus making it especially useful against certain insects, like the elm-leaf beetle, codling-moth, plum curculio, rose-chaffer, and grape root-worm. It should be used about twice as strong as Paris green.

Sucking insects, like plant-lice, pear psylla, and the San Jose scale, usually must be fought with a different spray than biting insects and fungi. The most effective sprays for sucking insects are soaps, oils, and the lime-sulfur wash. Soaps make effective sprays for most sucking insects, but the less expensive oils and lime-sulfur wash are now used for the San Jose scale.

Bordeaux mixture has come to be the almost universal fungicide in this country. It is cheap and easily made on any farm and is very effective when properly used. In making this fungicide it is very essential that dilute and not concentrated mixtures of the copper sulfate and lime be poured together. If strong mixtures of these two substances are poured together, a coarse-grained Bordeaux mixture results, which will not stand up well, thus requiring constant agitation, and it may clog the nozzles.

To spray the most successfully requires skill, practice, and some knowledge of crops, and often require to be fought much energy and money is wasted every year in trying to kill sucking insects with poison sprays which they can not eat, or by disinterested laborers, who hurry through the more or less disagreeable job. The advent of the destructive San Jose scale into the Eastern United States is teaching the fruit-growers a valuable lesson in spraying. To control this pest successfully each tiny scale not larger than a pin's head must be hit hard with a powerful insecticide thrown through fine nozzles, so as to penetrate every crevice in the bark. This means much more thorough spraying than most orchardists have been doing for their insect and fungous enemies. It is not the quantity of material applied to a tree that makes a successful job of spraying; all that is necessary is to thoroughly cover the foliage and the bark with a very fine, misty spray, discontinuing the work when the spray begins to drip from the leaves. Every spray pump should have a steam-gauge attachment, so that a pressure of at least 80 or 100 pounds can be maintained. Successful spraying is a science and thus requires the services of faithful, trained men. Only the most thorough work with the best materials and machinery will accomplish the most paying results.

Usually each different crop presents a special problem in spraying, as different insects and fungi attack these crops, and often require to be fought with different materials at different times. Thus no general directions can be given for spraying all crops, but spray calendars are now available to farmers, which will quickly inform them on these points. A combination of Bordeaux mixture and a poison is the spray most commonly used on fruit farms and by potato-growers and it is almost a panacea for fungi and

Soft Harness
You can make your harness as soft as a glove and as tough as wire by using Eureka Harness Oil. You can lengthen its life—make it last twice as long as it ordinarily would.

EUREKA Harness Oil
makes old harness like new. Made of pure, heavy-bodied oil, especially prepared to withstand all weathers. For all axle troubles use Boston Coach Axle Oil. Better and more economical than castor oil. Will not gum or corrode. Lasting, reliable, satisfactory. Highest Award, World's Columbian Exposition. SOLD EVERYWHERE—ALL SIZES Made by Standard Oil Co. Incorporated

Wire Fence 29c
48-in. stock fence per rod only. Best high carbon coiled steel spring wire. Catalog of fences, tools and supplies FREE. Buy direct at wholesale. Write today. MASON FENCE CO. Box 62 Lansing, Mich.

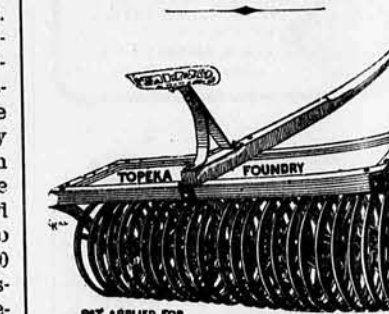
FENCE STRONGER MADE. Sold to the Farmer at Wholesale Prices. Fully warranted. Catalogue free. COILED SPRING FENCE CO. Box 265 Winchester, Indiana.

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HEAVIEST FENCE MADE. All No. 9 Steel Wire. Well galvanized. Fifty % more than most fences. 15 to 25¢ per rod delivered. We send free sample for larger sizes and test. Write for fence book of 15 styles. The Brown Fence & Wire Co., Cleveland, Ohio.

Stock & Poultry FENCE
Many styles and heights. Diamond or Square Mesh. Prices low. Sold direct. 30 days free trial, freight prepaid. Catalogue free. KITSelman Bros. Box 61, Muncie, Ind.

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Last a Lifetime. Manufactured by THE M. K. FENCE COMPANY. St. Joseph, Mo. Write For Free Circular

MOISTURE Should Be Saved



Our Sub Surface Packer

Is a moisture savings bank. Write for prices.

Topeka Foundry & Machine Co. 318-320-322 Jackson Street. TOPEKA, KANSAS. Patents developed. Ideas worked out.

hitting insects. Most spraying is done during the growing season, but such enemies as the San Jose scale and the leaf-curl must be fought while the plants are dormant. The lime-sulphur wash affords an effective spray for both these enemies when applied early in the spring before growth begins. With most orchard fruits it is advisable to make one application of the Bordeaux poison spray just before the blossoms open and repeat this as soon as the blossoms have dropped. Do not spray trees when in bloom, as honey-bees may be killed and thus prevented from doing their necessary work of carrying pollen from flower to flower, thus insuring the fruit-grower a crop. Furthermore, it is unnecessary to spray at this time, for all the insect and fungus enemies can be hit just as effectively either before or just after the blossoming period.

In many cases spraying acts as an insurance policy on the next year's crop. The fruit buds for the coming year's crop are formed late in the preceding season, and if the trees are kept healthy and vigorous by preventing the work of insects and fungi, naturally they can make better fruit buds for the next season's crop. This means that it will usually pay to spray every year, no matter whether the trees blossom and promise a crop or not. Spraying for insects and fungi differs in that the insects are killed by the spray, while the fungi are largely prevented from developing.

Spraying is a disagreeable job at the best, but it has come to be such a necessary factor in the production of growing crops that farmers should look upon it as they do upon plowing and cultivating. It will probably be a long time before a better and cheaper fungicide than Bordeaux mixture is discovered, and Paris green and similar insecticides will long remain standard sprays, yet new materials and concoctions are being tested constantly, and some of them, like the so-called misle-oils, are of much promise. There is still chance for improvement in spraying machinery as regards its strength, durability, and ease of operation. The time will probably never come, however, when the farmer can watch his crops being sprayed automatically. Effective work can be done on many farms with the present insecticidal and fungicidal batteries, and the whole secret of success rests with the man behind the gun. Given the best apparatus and most effective of materials and some men will not spray thoroughly and others fail to get paying results.

Advice to Buggy-Buyers.


In the interest of readers who may be thinking of buying a buggy this spring we direct attention to the vehicle line of the Marvin Smith Company, of Chicago.

Our readers pretty generally know this big manufacturing concern, and the Marvin Smith Company never fails to prove its ability to save buyers money on their plan of direct dealing. Certainly no better example can be given of this plan than the prices they make on their large and complete line of vehicles and harness as illustrated and described in the beautiful new catalogue they issue.

The wonder is that vehicles can be made and sold at such prices as are shown by this concern, and their prices, as a matter of fact, are ridiculously low, when the quality, style, and finish of their honestly made goods are taken into consideration. A question might arise as to whether their vehicles will stand and give the proper service that is naturally requested of them and the answer to these questions is that the Marvin Smith Company has been manufacturing and selling these same vehicles at the same prices and supplying a great many of the same customers for many years. The best proof that this information is correct is the fact that people everywhere have been putting their vehicles to use and have been giving them thorough tests, and last season the company's business increased over 67 per cent as compared with any previous year, and we learn that there is a large demand for their goods this spring, which is certainly a testimony to the marvellous value of the product of this large manufacturing concern. All their vehicles are sent on thirty days' trial, and the Marvin Smith Company has too good a reputation to hazard it by putting in anything not fully up to what they claim for it.

Their most popular selling vehicle is the "Chicago Special" buggy, which is certainly one of the greatest vehicles ever offered at the price they put upon it. It is a high-grade, first-class buggy, and the best vehicle they build in their great factory at Huntingburg, Ind. It is sold under a one-year guarantee and they claim that it is at least the equal of buggies regularly sold for twice the price asked for it. This particular buggy

TWO PIANOS! CASH! BIG PRIZES FREE!



FREE PIANO

CONDITIONS—50 cents pays for a year's subscription to **SUCCESSFUL FARMING** and one count; \$1.00 pays for two years and three counts and makes you eligible for the special \$50.00 prizes given to winners of its prizes if they have three counts. See below.

AWARDS will be made as follows—The person giving correct or nearest correct count will get first prize. Next nearest second, etc. **\$50 PRIZES**—We believe every body should have three counts so they can have one each side of what they think is correct to be more sure to hit it. To encourage this we will give \$50.00 extra to winners of 1st prizes if they have three counts. Remember if you have one count you get piano only, but if you have three counts you get \$50 extra.

TIME PRIZES—\$25.00 Extra. We feel early counters should be rewarded and we will give \$25.00 extra to the person winning piano if count is mailed by May 15th.

OUR RESPONSIBILITY—We are a responsible business house, and every prize must be paid and will be paid as stated. We refer to Iowa National Bank, Central State Bank, German Savings Bank, in fact any Bank, Express Company, business house or individual in Des Moines, as well as Dun or Bradstreet's Agency, or the publisher of this paper.

JUDGES—We have wholly disinterested judges to award prizes. Here is what they say:

TO WHOM IT MAY CONCERN: We have been asked by the publishers of **SUCCESSFUL FARMING** to act as judges in their contest and see that prizes are all awarded fairly. This we will gladly do guaranteeing each contestant absolute fair treatment. Signed—W. W. MORROW, Treasurer State of Iowa; HUGH BRENNAN, Judge District Court; Rev. A. J. WILLIAMS.

In case of tie we will write each person so tied asking them to make as few words as possible from the letters of the alphabet, using each letter of the alphabet twice and only twice, and no one word more than once, each letter left over counting as one word. To the one tied in the counting who gives in the fewest words as above will be awarded first prize. This practically eliminates all question of tie, but if there should by any possibility be a tie in this the prize will be divided equally between those so tying.

Subscription without counts is 35 cents per year, additional counts after you have three entered as per our terms in paragraph "condition" above may be entered at 25 cents each.

This contest is not to be confused with the guessing or estimating contests. Our contest is a test of skill in planning and counting and the best person wins. Nobody connected with our paper will be allowed to compete. Contest closes June 30, but get your counts in at once. See about time prize above.

Address all letters to SUCCESSFUL FARMING, 415 Tenth, St., Des Moines, Iowa.

CAN YOU COUNT THESE DOTS?

SUCCESSFUL FARMING WILL GIVE TO THOSE WHO CAN COUNT THE DOTS IN THE PIANO CORRECTLY ON NEAREST CORRECTLY. THE FOLLOWING LIST OF PRIZES: CAN YOU DO IT?

Two Elegant Pianos, one to a lady and one to a gentleman.

2nd. Two Hundred Dollars Cash.

3rd. One Hundred Dollars Cash.

4th. Fifty Dollars Cash.

5th. Twenty-five Dollars Cash.

Next 5. Ten Dollars Each.

Next 10. Five Dollars Each.

Next 25. Two Dollars Each.

CONDITIONS: 50 cents pays for one year and one count. \$1.00 pays for two years and three counts. You get \$50 extra if you have three counts. It will pay you to have three. See conditions below.

DON'T DELAY!

IF YOU WANT A PIANO OR OTHER PRIZES ENTER HERE SEND YOUR COUNTS AT ONCE

PRIZE WINNERS IN PAST CONTESTS

A Piano for \$1.00. Surely people may enter your contests knowing that they will receive fair treatment. How glad I was to win a piano for so small an amount and wholly unexpected. The paper alone is worth all I paid.

MRS. L. W. NOTT, Marion, Ia.

He Won a Piano. Refer people to me if they are honest. I get a piano for a prize and never heard of you until I answered your ad. Your paper is worth twice the subscription price.

W. C. ELLIOTT, Audubon, Iowa.

\$100.00 Prize. I got my \$100 and it was the easiest I ever earned. The dots are hard to count but I know the prizes go to those who win them fairly.

AMY E. BARNES, Van Horn, Iowa.

Won \$350 Cash. I won grand prize of \$350 Cash in last contest. I was much surprised. I want to vouch as to Successful Farming's fairness to any and every body.

JOHN A. GOODWIN, Richmond, Va.

\$50.00 for Canada. Way up here in Canada I won \$50. I never knew there was such a paper until I saw your ad. now I will never be without it again.

MISS E. FORNIE, Montane, Quebec.

Won a Piano. I received the elegant piano which I won in grand. I am recommending you to all my friends and you are at liberty to use my name as reference any time you wish.

ISAAC SHOTWELL, Rockland, Ohio.

OTHERS WHO HAVE WON:

Pianos—Myra A. Furman, Panola, Ill. E. L. Jones, 22 Cottage Ave., Ansonia, Conn. Mr. Libbie Greulich, St. Paul, Minn. W. S. Keever, 317 Freeman St., Cincinnati, O. J. Gemachlich, Kensington, Kan. Edith Hutchinson, Leonard, North Dakota.

\$100—Eva I. Buckner, Fredonia, Kas. C. S. Wyman, Vinton, Iowa. E. M. Hall, Montrose, Mo. J. W. Smith, Rome, Okla.

\$50—E. Irving Stayer, 225 E. Balt. Baltimore, Md. L. F. Stinson, Arcata, Calif. A. J. Parline, Altoona, Ia. Albert Peterson, Holdrege, Neb. Chas. McBride, Peoria, Ill. Joe Unser, Bellevue, O. Mrs. D. H. Stoner, Granger, Ia.

THESE ARE BUT A FEW OF MANY. WE COULD GIVE A LIST OF HUNDREDS. YOU MIGHT AS WELL BE A WINNER IF YOU GO AT IT AT ONCE.

Publisher SUCCESSFUL FARMING, 415 Tenth St., Des Moines, Iowa.

I enclose \$..... for subscription to **SUCCESSFUL FARMING**, and I wish to enter the..... (write ladies' or gents') Contest. If \$1.00 is paid send three counts; if only 50c is paid send ONLY ONE count. The extra \$50.00 go only to those having THREE or more counts entered.

My count is: (1)..... (2)..... (3).....

NAME.....

P. O. State.....

always proves to be a great advertisement for the company, and they are always shipping thousands of them out on approval every season, and their large and increasing business has been built up, to a great extent, by the service this sample buggy is giving their customers in all sections of the country.

The "Chicago Special" as well as the entire line of Marvin Smith Company vehicles and harness, is fully illustrated and described in the company's large 1907 combined vehicle and harness catalogue V152, which may be had on request. If you are interested in vehicles or harness of any kind, do not fail to send for it.

The Cost of Harness.

The constantly increasing prices of almost all kinds of manufactured products is not altogether without beneficial results, because it is attracting people's attention more and more to "direct buying."

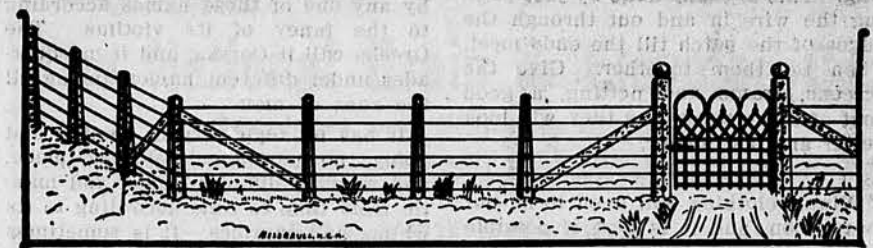
By "direct buying" we mean buying from the manufacturer thereby cutting the jobber, the wholesaler, the retailer, and all the other "alers" who just add a few dollars more to the price the consumer has to pay without giving you anything in return therefor.

A striking instance of the possibilities of buying direct is shown in harness-making. The leather trust is boosting the price of leather every season until now a set of harness if bought from the local dealer costs a person about \$35 and the local dealer will tell you that that is as low as he can sell it and get out on it.

Elsewhere in this issue will be found an advertisement of the Western Harness and Supply Company, Waterloo, Iowa, who offer to send to you direct for \$24 a set of harness made of the very best oak-tanned leather and in every way equal to or better than the harness you would pay \$35 for at your local dealer's.

Mr. R. M. Knox, who is perhaps known to many of our readers, is president of this company, and we have his word for it that every bit of leather put into harness made by his company is bought by him, and he knows just how good it is. In a recent statement he said:

"I have never tried to see how cheap I can make harness. I have always tried to see how good I can make it. My workmen understand this and we all work to accomplish the best results. Of course we do not make very



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There are from TWO TO THREE MILLION wood posts going to decay in each county. Make them of CONCRETE reinforced with steel cables and they will last FOREVER. Cost no greater than best wood posts. FIRE, nor the elements of time will not destroy. Protects stock against lightning. One county will build you a profitable business. We furnish equipment for a factory. Address

THE PARAGON CONCRETE FENCE POST CO., 417 Portsmouth Bldg., Kansas City, Kans.

STANDARD'S PROCESSED CRUDE OIL

Kills Lice and Cures Mange. There is no Remedy on the Market as Good for as Cheap. It not only kills all lice on cattle and hogs, but all mites, and on application does the work. Does not injure hair or skin. Can be used in vats or with brush. Also kills lice or mites on chickens. Put up in new 55-gallon barrels and sold for \$5 per barrel. I have used nearly all dips on the market, and I say to you, from experience, this oil is better and more effective than any of them. Why pay \$50 per barrel when you can get a better article for \$5? I also sell a heavy Pure Crude Oil as it comes from the well that is a good lubricating oil, 55 gallons for \$5.50; an excellent grease to keep plow-shares and cultivating-shovels from rusting. Try these oils and you will always use them. When ordering, state plainly whether you want the Processed Oil or the Pure Crude. Send remittance with order. C. A. STANNARD, Emporia, Kans., Sunny Slope Farm.

much on a set of harness at \$24, but we do make something, and by having a very large number of sales amounting to all that we are able to manufacture, we find no cause for complaint.

The Western Harness and Supply Company will deliver this set of harness to you at this price. In addition to this, this company makes fifty other styles of good harness and these are shown in their big harness book. If you are in the market for anything in the harness line, it will pay you to send for this book so as to compare price, quality, and style to what your dealer offers. At the same time, it is well to bear in mind that everything bought from Mr. Knox's company can be examined and if found not to be just as represented, you do not need to keep it.

A postal card request to the Western Harness and Supply Company, Waterloo, Iowa, will be sufficient to insure a prompt reply and attention to all your inquiries.

ASPINWALL

POTATO MACHINERY

GREATEST LABOR SAVERS

World's Largest Makers of Potato Machinery

CUTTERS, PLANTERS, SPRAYERS, DIGGERS, SORTERS.

WRITE FOR FREE BOOKLET "POTATO CULTURE"

ASPINWALL MFG. CO.

240 Babie St., Jackson Mich.

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Home Departments

CONDUCTED BY RUTH COWGILL.

Easter.

Christ the Lord is risen to-day,
Sons of men and angels say:
Raise your joys and triumphs high,
Sing, ye heavens, and earth reply.

Hail the Lord of earth and heaven!
Praise to Thee by both be given!
Thee we greet triumphant now!
Hail, the Resurrection Thou!
King of glory, Soul of bliss!
Everlasting Life is this,
Thee to know, Thy power to prove,
Thus to sing, and thus to love!

—Charles Wesley.

"A Stitch in Time Saves Nine."

The wear and tear of time necessitates a general going over of things once in a while in order to keep them looking respectable and to continue their usefulness. When nature is putting forth her freshness and beauty, and everything is so lovely outside, it inspires one with a feeling of general rejuvenation. One feels like turning the house inside out and making it clean and pretty with new paper and paint—discarding much of the old and worn furnishings and replacing them with new. But not many of us can have new, but we can do much to freshen and improve the appearance of what we have, and also make things last longer by taking the "stitch in time." It is a good plan when house-cleaning to have everything repaired. If there is a loose screw in a chair, or if a piece of the upholstery is worn or torn; if the plastering is broken, or wall paper off or soiled, or anything out of repair now is a good time to have it attended to. A bottle of good furniture polish will do wonders in the way of renewing the scratched and marred furniture. It is better than varnish for it cleans the furniture and is dry as soon as applied and looks better.

In just a little time now the flies will make their appearance, and it is well to not let them get a habit of coming to dine off our table. The screens ought to be put in good condition and ready to be put in. If the netting is fairly good except for some small poles they may be patched by placing a piece of netting over the place and sewing it on with a raveling of wire from the old piece of netting. This is easily done by just passing the wire in and out through the edges of the patch till the ends meet. Then tie them together. Give the screens, frame and netting, a good coat of black paint, and they will look better and last longer.

Winter clothing will need to be put away soon, and it is best if possible to put garments away in good repair. It is such a comfort to bring them out when again needed all ready to be used. Soiled places should be removed, thin places darned, and buttons replaced. Trousers may be re-seated by cutting out the worn place and carefully setting in a piece like them, and pressing the seam. Sweaters, stocking caps, mittens, and woolen underwear should be washed and stretched into shape, and after all breaks are darned carefully they should be folded and wrapped in newspaper, being sure to have it pinned together so that moth millers can not enter. Whether it is the smell of the printer's ink I do not know, but they do not disturb things wrapped in newspapers. If the eggs are already laid in the clothes, newspapers will not prevent their hatching into moths.

I read the other day how one woman utilized a couple of old blankets. They were worn in the middle, so she cut out the worn places and trimmed the edges straight. Then she took the two salvage edges and put them together by whipping them over and over as in making sheets. She made the blankets exactly the same size and placed one on top of the other and basted them together, covering them with pink lawn on both sides,

then tacking them with white yarn and edging them with a narrow pink ruffle. This would certainly be a good way to utilize old blankets, making a pretty as well as a useful cover. If one preferred it could be quilted on the machine. This same lady uses her fine tablecloths that have become too thin and worn in places to be fit for table covering for making small tablecloths and dollies. For the dollies she cuts them so as to take in the figure in the linen and fringes them, then outlines the figures with white luster cotton. Napkins may be cut from the best of it also.

Window shades that have become cracked and soiled from handling may be improved in appearance by taking them off the roller and turning them upside down and hemming the end that was tacked to the roller. They may be cleaned by first wiping them with a clean, dry cloth to take all the dust off, then using a clean, damp cloth to remove other soil.

La Grippe.

HENRY M. ROBY, M. D.

I wonder if any of my readers have the grippe, or know what it is, and if so, where and how they got it.

The wise ones are ready to tell us they know all about it—what it is and where it comes from, while those of us who are not so wise in our own estimation, are ready to confess that we know nothing about it, except its symptoms and the long list of disasters that follow in its wake.

It is older than history, more deadly than war and pestilence, more pervasive than smallpox and measles, and more mysterious than cancer and consumption.

From time to time it sweeps over the planet like the waters of Noah's flood, starting in one country and rolling on to another and another until the whole human race has been laid under tribute to its merciless demands.

In France and Germany it is known as Grippe; in the old Latin countries it is known as catarrhus-epidemicus; in Italy it is known as influenza; and in English speaking countries it goes by any one of these names according to the fancy of its victims. The Greeks call it Coryza, and it masquerades under different names among all the sons of men.

It has no regularity in coming and going, no permanent abiding place, and wears a different mask and mantle from time to time according to its whims and caprices. It is sometimes mild and modest in its behavior, and sometimes rude and malevolent.

In 1811, and again in 1403, it scourged the French people to a frazzle, closing churches and schools, and paralyzing commerce and courts, defying the throne and multiplying the cemeteries.

In the fifteenth century it swept like a whirlwind over all the Northern hemisphere, starting in Asia and raging through Africa, Spain, France, Germany, Sweden, and Russia. In Saxony it laid its grip on three-quarters of the population, and carried off an untold number of them. In the city of Rome it thrust nine thousand people into their graves at one whirl.

In the sixteenth century it trailed its black wings over all Europe, Britain, France, and Germany, and left its victims without number.

In the seventeenth century it made another great sweep over vast areas, starting in Germany, sweeping over all Europe, recolling upon Scotland, Switzerland, Flanders, and England, then leaped over the Atlantic and swept the whole of North America, from New England to Barbadoes, Mexico, and even Peru. In Vienna alone sixty thousand people fell sick in a month, and when it left England, France, Italy, and Holland, it dragged the plague in behind it to finish the slaughter of the innocents.

In the eighteenth century it made an excursion among the sons of Confucius. Starting in Canton, China, it danced the dance of death all over the Empire, trailed through the East Indies, and knocked with its bony hand on the doors of Moscow, St. Petersburg, and Tobolski. It then whisked back over the whole Eastern hemisphere, where one-half of all the population went shivering to their beds, while many who survived were overtaken by the cholera and finished up.

Then rising from the Northern hemisphere, like a huge vulture, it spread its black wings over India, China, Japan, Australia, and the Australasian countries, and went out to sea from the Cape of Good Hope.

And so, back and forth, round and round it has eddied and swept, danced and swirled like storms and tempests, all over the planet. And the end is not yet. Its victims are not counted, its graves are unnumbered, its damage untold, its history unwritten, its essence unguessed, and its end no prophet is crazy enough to predict.

Bacteriology has found no microbe to charge it to, meteorology rejects it as no child of hers, the weather bureau will not shake hands with it, neither winter nor summer, autumn nor springtime will admit any ties of consanguinity. The mountains denounce it, the seas scorn it, while the plains and valleys of the whole planet are obliged to endure it, and every old granny knows just how to cure it. But it will not stay cured.

Housecleaning Helps.

For cleaning windows, nothing else is equal to clear vinegar. It gives a most brilliant polish. Rub it on with a soft cloth, dry with another, and polish with chamolis skin.

Paraffin oil, if applied with a soft cloth will fill in scratches in black walnut. It will also give a good polish to the wood.

To freshen a carpet, put a tablespoonful of ammonia into half a pailful of warm water and wipe the carpet with a cloth wrung out in it. The dust is thereby removed, the colors are brightened, and any insect lurking in it is speedily killed.

Any part of wall that is inclined to be damp may be made impervious to moisture by applying a varnish of one part shellac and two of naphtha. The disagreeable odor soon wears off.

In whitewashing this spring remember to add a little bluing to the white wash and it will be much whiter.

Salt or alum is splendid to add to the whitewash and makes it stick much better.

Use striped paper on low rooms, small floral effects in crooked rooms, and only pillar effects in very large halls. Drop ceiling effects are beautiful in large, lofty rooms, while borderless papers are effective in flat suites where the rooms are very small as a general thing. Varnished tile paper should be used in bath rooms, or the oilcloth covering, which is more expensive, yet lasts for many years.

Examine stored furniture as soon as it comes into the house, especially beds and bedding.

Formula for Piano Enamel.—Hard oil 1 ounce, golden oil 1 ounce, vinegar 1 ounce, boiled linseed-oil 1 ounce, turpentine 1 ounce.

For White Spots.—Saturate a cloth in wood alcohol and rub spots.

For Greasy Chairs.—Dip a wet cloth in a weak solution of ammonia and rub the greasy spots.

For Cleaning Clothes.—One part wood alcohol, 2 parts benzene, 3 parts acetone.

For Softening Leather.—Boil 1 pint linseed-oil and let it cool, then mix in ½ pint of vinegar.

It is only an error in judgment to make a mistake, but it shows infirmity of character to adhere to it when discovered.—Bovee.

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The Young Folks

Resurgam.

"I am thy master!"—so with scornful boast Death spake to Life. "Behold thy sub-jects bow Beneath my scepter! Lo! whose are these now Who erst were thine—this prone, mute, sightless host? Nor are these all. A few swift years, at most, And every breathing wight thou'st claimed the while Shall lay him down to swell the fun-eral pile, And in my triumph thou thyself be lost. Yea, thou and Love—mine enemies su-preme— Shall even be as these thou seest here Chained in the silent halls of endless night; Four dull, dread slumber broken by no gleam Of coming dawn; no morning shining clear; Taught but the worm and my corro-ding blight."

Life heard, nor answer made, but went his way To a lone tomb deep in a garden's shade Where One, his Lord, the spoiler's arm had laid, Love met him there, and there togeth-er they Colled from the door the heavy stone away, And entering sat them down with rev-erence meet— One at the head, the other at the feet; And when the mourners came at break of day Seeking the dead, two angels there they found Who bade them haste to spread the word abroad That He was risen whom Death could bind no more. Henceforward by the Christ, their Master, crowned, and clasped in hand, upon the hills of God Walk Life and Love together evermore.

Hence my strong hope, sure, steadfast, undismayed, The anchor of my soul which entereth in That within the veil. No waves of sin Or winds of doubt the frailest bark thus stayed An wreck or whelm. Secure and un-afraid Brave the moods of time's e'er-chang-ing sea. No death's o'erpower with seeming victory, No death must yield to Him, Who, dying, made my life imperishable and my love immortal. On, then, to the port I sail Which somewhere waits to greet my eager ken. He is the God of life Who reigns above, And by His word Whose word can nev-er fail, I know the glad truth—I shall rise again.

Ida M. Budd, in Youth's Companion.

The Way to Happiness.

C. M. SHELDON.

The very universe itself is made up of the same things constantly enacted. The earth turns in its course as it did from the time it came out of the hand of God. The grass grows as it did from the time it first spread its won-derful vitality over the face of the ground. The birds sing the same songs they have sung from the begin-ning of time. The trees bear their fruit and the field yields its grain af-

ter the same fashion. The forces of nature and of animal life repeat their processes indefinitely. The life of a man is a constant succession of the same repetitions. We can find in these things the joy of life or its bit-terness by the spirit which we take to them. The same habits of life have made character from the foundation of the world and will continue to do so. The fruits spring out of the same soil and will always do so. Daily obe-dience to the eternal commands of God's righteousness will result in hap-piness, in growth, and in power. Dis-obedience to these eternal principles will result in trouble, in bitterness of spirit, in loss. On the one hand stands life beckoning. On the other stands death menacing. It is for us to choose by our own will, assisted by the will of the heavenly Father, whether we shall get from these daily things the training for our spirits that shall make us grow up like angels, or become dwarfed and twisted and bent over like demons, and it is the atten-tion to these little things that makes the greatness and the sweetness of life possible.

When the disciples entered the tomb where Jesus had been laid, they found the napkin folded up, lying in a place by itself. This was proof that the grave had not been robbed of its tenant by enemies. Grave robbers do not stop to put things neatly and in order. Even He who had command over the powers of death, and who said, "I can lay down my life and I can take it up again," did not consid-er it in keeping with His character, as the Lord of the universe, to go out of that tomb and leave His grave clothes untidily scattered about; but He took time, even in that transcen-dent moment of His resurrection, to fold up neatly the napkin that had been about His head. If the Lord of all the earth who said, "All authority and all power has been given unto Me in heaven and upon earth," could take the time at such a moment, one of the greatest events in the history of the world, to attend to so small a thing as the folding of a napkin, how much more should we who are so far below Him in habits that make great-ness, pay attention to all the little things of life which make for the greatness of life. He who was not willing that the fragments should be lost when the five thousand were fed, is not willing that we should lose any possible power out of our lives by neg-lecting the things that are commonly thrown away. Let us learn of Him that there are no little things, but that all of life, which seems to us sometimes so small, may become great in the end because we have been faithful over a few things, and not forget what He said to him who had two talents—as each of us has—and live in expectation of hearing Him say to us also, after we have done our work here, "Well done, good and faithful servant. Thou has been faithful over a few things, I will make thee ruler over many things. Enter thou into the joy of thy Lord."

Easter Gifts.

There are many ways of making Easter gifts. The egg is symbolical of the day, and is the most common of all and most generally used. Eggs may be colored in all shades by the use of dyes sold in the stores. The packages sell for five cents. They may also be colored, as was the cus-tom before the dyes came into use, by wrapping them tightly in bright-colored calico that will fade and boil till the eggs are hard—about half an hour. Onion peel will also color them. They may be made shiny by rubbing a greasy cloth over them while hot.

If the dyes sold in the stores are used, they may first have mottoes written on them by using melted lard for ink, before putting them into the dyes. Egg shells may be emptied and made into pretty baskets, ornamented with water paints, or colored and sus-pended by colored zephyr yarn, lined with cotton, and filled with candy eggs. The shells may also be painted to look like faces, donned with funny caps, and mounted on a piece of crepe



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The Princess and the Egg.

There was once a prince, who, on Easter, presented a certain princess with an iron egg. She thought it a practical joke, and felt so insulted that she raised the egg high and dashed it to the floor. To her great surprise the force of the fall caused the egg to fly open, and on a beautiful lining of crystal lay a golden yolk. She took up the gold ball and opening it found that it contained a crown of rubies; this opened also, and there lay a betrothal ring of beautiful diamonds. The name of this ingenious prince or the time in which he lived is not known, neither do we know more about the German princess, but the iron egg is surely a reality, for it may be seen in the Museum of Berlin.—Selected.

A Thinking Cat.

"Which do you consider the more intelligent, dogs or cats?" asked one woman of another the other day, as they sat drinking tea in a studio. The first speaker was a painter.

"Dogs," replied the other promptly, whose accent betrayed her English nationality; "if you had ever seen a sheepdog trial in the north of England you wouldn't doubt it for a moment. Those dogs are all but human."

"Well, yes," admitted the other reluctantly; "I had forgotten 'Bob, Son of Battle.' You see we don't have dogs like that over here. But even then," she continued, rallying to the charge, "I should say that on the average, cats were more clever than dogs. They never imitate, and they reason things out for themselves, and that to my mind does indicate a higher degree of intelligence."

"I'll give you a proof," she added, as she got well under way. "Now, here's Sam," and she stroked the soft fur of a smoked Angora. "He began by being called Algernon Charles Swinburne, but somehow or other he didn't thrive under it, and the girl who lives with me said she was sure he would never grow up unless that name was removed—so now he is Sam, because he is a naturalized American. Perhaps it's hardly fair to take Sam as a specimen of the average intelligent cat," she continued, "because Sam is almost uncanny he's so cute. But I really think he would score even against your sheepdog, because what he does is all on his own initiative. He has never been trained."

"Well, what does this marvel do?"

"He thinks things out," replied the painter. "Some little while ago a girl who has a studio upstairs came and asked me to lend her Sam because there was a mouse about, which she wanted to destroy. I agreed on consideration that she would be sure not to let him out of the room. You see, down here near Madison avenue, I should be afraid of losing him if he got into the street. Well, the girl promised and took Sam off with her. About half an hour later she started out for the afternoon and carefully shut Sam into her studio, having previously closed the windows. She was gone about an hour, but whom should she meet, face to face, as she walked into the hall downstairs, but Sam!

"Hullo, Sam!" she said, "how on earth did you get here?"

"What did Sam say?" inquired the English woman with interest.

"Why Sam said nothing," replied the painter.

"That's one of the ways in which he's so cute, a dog will always give himself away. However, the girl meant to get at the bottom of this thing. She just couldn't imagine how that cat had managed to get out, because no one without a key can unfasten the door except from the inside. So she carried Sam upstairs with her again and shut the door as before. But this time she shut herself in, as well, to watch. For a long time she sat there very quiet, saying nothing. Then she saw Sam jump on a table, which happened to be standing close to the door and on a level with the handle, and sit and worry at that handle with

his paws until the door unlatched. Then she picked up Sam and came downstairs and told me all about it. She just loves to tell that story."—New York Mail.

The Little Ones

Waiting Patiently.

Tucked away beneath the ground, Little seeds and roots are found; Covered in the earth so deep; They have closed their eyes to sleep; Winter's sleet and winter's snow, Keep them snug and warm, you know. Thus protected, we are sure In their beds they'll be secure. 'Till the gentle voice of spring Shall a message to them bring: "Waken children of the earth! To you I come with joy and mirth. I come to make you all rejoice. Oh, hear the gladness of my voice! Leave now your little beds so low. Let every sprout and fiber grow!"

—Sophia C. Watson, in Farm Journal.

Two Robins.

The day was full of sunshine, and all the birds seemed to know it. They whistled, and sang, and trilled, as if they were trying to outsing one another.

I wandered on, my eyes keeping close watch for the shabby little figure I hoped to see. And then, just as I began to think he had forgotten, quite close at hand, an owl gave the most mournful hoot.

I jumped, for I was not expecting this, and how the little bird boy laughed at me as he came from his hiding place behind a big elm.

"Thought sure you'd forget," he said. "You know you said you would tell me about birds."

His freckled little face was flushed with the walk, and he looked up at me as if he feared I might even yet change my mind.

"I will," I said, "I will tell you anything I know, but I'm not very wise." "Why, didn't you go to the high school?" he asked.

"Yes," I said, "Well, didn't you graduate?" "Yes," I said, "but it was a good many years ago."

"That's just it," said the small boy. "Seems like you have had time enough to learn most everything."

"I can't stay but a half hour; can you tell me all you know about birds in a half hour? I want to know how many kinds there are in Kansas; then I want to know about the robin and bluebird and redbird and woodpecker and these teeny little brown ones that are so thick up here, and—"

"That will be more than we have time for," I interrupted.

"Well—go ahead, mam," he said, politely, as he seated himself on the log beside me, and pushed back his shabby cap.

"To begin with, there are over three hundred species of birds in Kansas." "Gee—whiz!" said the boy. "Not much chance of their getting lonesome, is there?"

"Well, there are a good many kinds of sling shots, too," I said.

"G'won," said the boy, briefly. "I want to know about the robin first, 'cause that's my name—Rob—Robin Marsh."

"Good," I said, "that name just suits you."

"The American robin lives in the eastern parts of the State, and it stays all winter. When cold weather comes he lives along the streams on the hackberries he finds there. His head is black, his lower eyelids and chin are white, and his throat is streaked with white. The outside of his wings and back are a brownish lead color. His breast and sides and the lining of his wings is a reddish shade. His song is not very long, but it is musical, and he is the first of the birds to tell us it's spring time."

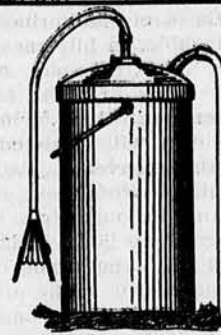
"Very early, he starts out to help the farmers, by hunting in the freshly plowed ground for cutworms, canker-worms, and other small things which hurt their grain. He saddles his nest across the branches of trees in hedges or outhouses, but never on the ground. The nest is made of twigs, stems, and grasses, plastered inside with mud. There are usually

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four eggs, and they are oval in shape and a greenish blue color.

"I have read that robins rave a common roosting-place in the woods, where they gather in great numbers. I should like to be there some morning, when they first wake up, wouldn't you?"

The boy nodded. "Seems like I never would shoot at another," he said, carelessly, as he sent a stone spinning wildly down the little ravine.

"No, I don't think you will," I answered, just as carelessly, for while I may not know much about birds, I do know something about small boys.

"Then there's the bluebird. I sometimes think I like him best of all. He is blue like his name, but of a little duller shade in winter. He can not sing as well as the robin, but his few notes are very sweet. He builds his nest in hollow trees and posts, and if a box is placed not too close to the house, he will often make a nest there. If a box is put up early in April, by May a bluebird will make a home there, unless a little wren gets there first."

"The nests are more delicate than that of the robin, for it is woven of fine twigs, or straw, grass, hair, and feathers. The eggs are greenish blue and there are four or five."

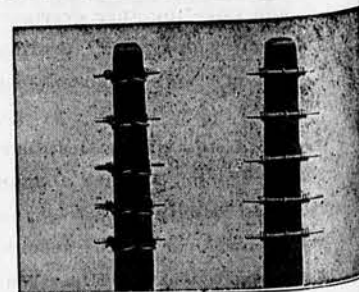
"I've got to go back now," said Robin. "But I'll see you again, sure." And he started off whistling across the pasture. But he had not gone far when he stopped quickly, turned back, and lifted his worn cap from his head. "Thank you," he called.

I nodded and waved my hand, and off he went again, whistling.

CEMENT STONE

Build your buildings with cement stone. We can sell you a "down face" outfit complete for \$30 F. O. B. Wichita. Write for particulars.

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the equal of any dollar corset made. The true foundation of the fit and style of a gown lies, not in the gown, but in the corset. The illustration is of the latest spring model. Notice the long, graceful lines, the tapering waist, the habit of the supporters front and side. This corset made in all sizes from 18 to 30. In ordering be sure to state size desired.

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Mail Order House of Kansas.

\$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 bought I would try a sample. I did, and they helped me wonderfully. My 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."
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Dr. Miles' Anti-Pain Pills are sold by your druggist, who will guarantee that the first package will benefit. If it does, he will return your money. Doses, 25 cents. Never sold in bulk.
Eli Lilly Medical Co., Elkhart, Ind.

Rogue River Valley, Ore.

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Our Club Roll.

Excelsior Club, Fortwin, Kansas, (1903).
Women's Literary Club, Osborne, Osborne County, (1903).
Women's Club, Logan, Phillips County (1903).
Domestic Science Club, Oaage, Oaage County (1903).
Ladies' Social Society No. 1, Minneapolis, (Ottawa County (1898).
Challaco Club, Highland Park, Shawnee County (1903).
Cultus Club, Phillipsburg, Phillips County (1903).
Literature Club, Ford, Ford County (1903).
Star Valley Women's Club, Iola, Allen County (1903).
West Side Forestry Club, Topeka, Shawnee County, Route 8 (1903).
Fortnight Club, Grant Township, Reno County (1903).
Progressive Society, Rosalia, Butler County (1903).
Pleasant Hour Club, Wakarusa Township, Douglas County (1903).
The Lady Farmer's Institute, Marysville, Marshall County (1903).
Women's Country Club, Anthony, Harper County.
Richardson Embroidery Club, Madison, Greenwood County (1903).
Frentis Reading Club, Cawker City, Mitchell County (1903).
Cosmos Club, Russell, Kansas.
The Sunflower Club, Perry, Jefferson County (1903).
Chaldean Club, Sterling, Rice County (1904).
Jewell Reading Club, Oaage County.
The Mutual Helpers, Madison, Kansas (1904).
West Side Study Club, Delphos (1903).
Domestic Science Club, Berryton, Shawnee County (1903).
Mutual Improvement Club, Vermillion, Marshall County (1903).
Ohio Club, Columbus, Kansas (1897).
Centralia Reading Circle, Nemaha County.
(All communications for the Club Department should be directed to Miss Ruth Cowgill, Editor Club Department.)

Program.

"A little nonsense now and then
Is relished by the best of men."

Roll Call—Jokes or funny incidents.
I. Reading, "Sonny's Christenin'."
II. Reading, "Labor Day."

At this especially busy time of the year a meeting devoted to a general good time and relaxation will be very proper. None perhaps will feel that they can take the time to prepare a paper, but all will be the better to drop work for a couple of hours for a social time. Just try it.

These selections, "Sonny's Christenin'," from "Sonny," by Ruth McHenry, and "Labor Day," from "Lovey Mary," by Alice Hegan Rice, will be enjoyable to listen to. Any other selections may be substituted if these are not easily obtained.

Life Not Death.

The General Federation Bulletin for March gives much space to an appeal, by Miss Alice J. Fletcher, chairman of the outlook committee of the General Federation, to club women to refrain from wearing aigrettes or plumes of the white heron. Mrs. Sara S. Platt Decker says: "The club women wear aigrettes and dead birds, not because they are cruel and heartless, nor because they are vain and selfish, but for the sole reason that they allow the milliners and hat-makers to do their thinking. Suppose we use our own mentality and taste for the next eighteen months, so that the record of the Boston biennial, as pertaining to head adornment will be one of life, not death."

The Woman's Country Club of Anthony.

This club meets once a month at the various homes of the members. The account of one of its sessions is here given. It met with its president, Mrs. Scott. Roll call was answered with quotations and followed by music, which is a part of every program. Current events were especially interesting and each member took part in the discussion of the different subjects. A short paper on "Economy in the Home," by Mrs. Simonson brought out a general discussion. Mrs. Nickam will select her subject for a paper or talk, as she prefers, for the April meeting. Mrs. SIMONSON, Sec.

In the Club column of last week's KANSAS FARMER was published one of the papers of the Woman's Country Club. I hope no one failed to read it. Time will not be wasted in its perusal. I hope other clubs will send their best papers written during the year.

MEN ADMIRE

a pretty face, a good figure, but sooner or later learn that the healthy, happy, contented woman is most of all to be admired.

Women troubled with fainting spells, irregularities, nervous irritability, backache, the "blues," and those dreadful dragging sensations, cannot hope to be happy or popular, and advancement in either home, business or social life is impossible.

The cause of these troubles, however, yields quickly to Lydia E. Pinkham's Vegetable Compound made from native roots and herbs. It acts at once upon the organ afflicted and the nerve centers, dispelling effectually all those distressing symptoms. No other medicine in the country has received such unqualified indorsement or has such a record of cures of female ills as has

Lydia E. Pinkham's Vegetable Compound

Miss Emma Runtzler, of 631 State St., Schenectady, N. Y., writes:—"For a long time I was troubled with a weakness which seemed to drain all my strength away. I had dull headaches, was nervous, irritable, and all worn out. Chancing to read one of your advertisements of a case similar to mine cured by Lydia E. Pinkham's Vegetable Compound, I decided to try it and I cannot express my gratitude for the benefit received. I am entirely well and feel like a new person."

Lydia E. Pinkham's Vegetable Compound is the most successful remedy for all forms of Female Complaints. Weak Back, Falling and Displacements, Inflammation and Ulceration, and is invaluable in preparing for childbirth and the Change of Life

Mrs. Pinkham's Standing Invitation to Women

Women suffering from any form of female weakness are invited to promptly communicate with Mrs. Pinkham, at Lynn, Mass. Her advice is free and always helpful.



MISS EMMA RUNTZLER

Grand Canyon Line

California CHICAGO

\$25

Colonist Excursions

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Free chair cars; tourist sleepers, small extra charge. Personally conducted parties tri-weekly.

A tourist booklet, with full information about the trip and trains, will be sent free on request. Valuable information about lands in our folders, "San Joaquin Valley," "Free U. S. Government Lands," and "The Earth."

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The Atchison, Topeka & Santa Fe Ry.,
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Barn Plans and Outbuildings

New, revised and greatly enlarged edition,
Modernized and brought up-to-date

EDITED BY EDWIN C. POWELL

A reliable guide to those intending to build new barns or to remodel old farm buildings for any and all purposes.

The proper and economical erection of barns and outbuildings requires far more forethought and planning than was ordinarily given to their construction. But with modern ideas, proper appreciation of sanitary conditions, and the use of labor-saving implements, a barn that twenty-five years ago was considered perfect would not meet present requirements.

Outline of Contents:

After an introductory chapter on the general rules to be observed in barn building, special chapters give detailed information and illustrations on

GENERAL FARM BARN
CATTLE BARN AND STABLES
DAIRY BARN
CATTLE SHEDS
SHEEP BARN AND SHEDS
PIGGERIES
POULTRY HOUSES
CARRIAGE HOUSES AND HORSE BARN
CORN HOUSES AND CRIBS
ICE HOUSES

ICE HOUSES AND COOL CHAMBERS
DAIRY HOUSES
CRANBERRY AND CHEESE FACTORIES
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DOG KENNELS
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BUILDINGS OF VARIOUS KINDS, ETC., ETC.

All descriptions and directions contained in this volume are given in so plain and clear a manner as to be readily understood by anyone. Every professional builder, and every person, be he farmer or otherwise, who intends to erect a farm building of any kind, can, in this book, secure a wealth of designs and plans for a very small sum.

With 375 illustrations, 5 x 7 inches, 404 pages.

Cloth, price, postpaid, \$1.00

THE KANSAS FARMER CO.
TOPEKA, KANSAS

Dairy Interests

Holstein-Friesian Cattle.

MALCOLM H. GARDNER, DELAVAN, WIS.,
SUPERINTENDENT ADVANCED REGISTRY
HOLSTEIN-FRIESIAN ASSOCIATION
OF AMERICA.
PART FIRST.

THE HOLSTEIN-FRIESIAN ASSOCIATION.

The cattle known in America as Holstein-Friesians belong to the short-horn, low-land race, native to the low-lying fertile lands of Europe, bordering on the North Sea, of which race, from the dairy standpoint, the Holstein-Friesian family is the most highly developed. These cattle might have been better named Friesian, since Friesland, and the neighboring provinces of Holland, is the central home from which this breed of cattle has been so widely disseminated over the old world, and from which some 10,000 head of foundation stock has been brought to America. The Friesian people are among the most conservative of the old Germanic race; still holding to, and speaking among themselves the old Friesian language, although also able to speak Dutch, the official language of Holland. They have been equally conservative in holding to their ancient industry of cattle-rearing, an occupation for which their low-lying lands are especially fitted, and, as the Roman historian Tacitus speaks of them nearly 1,900 years ago as cattle-breeders, paying a tribute in cattle and hides to the Roman Empire, so we find them to-day making dairy husbandry their main industry. Holding mainly to one occupation down through the centuries, and passing the business from father to son, it would be strange indeed if their breed of cattle did not reach a very high degree of development; so it is in no way surprising that we should find these Friesian dairymen possessed of a breed of cattle which, as an all-around dairy breed, is superior to any other breed known.

While in character the Holstein-Friesians are essentially a dairy breed and are so regarded in America, yet as an all-around dairy breed the matter of beef and veal must not be lost sight of, and in Holland these are very important points. There, few cattle are allowed to pass their seventh year; but before they pass out of their prime they are fattened and sold as beef. The late Prof. I. P. Roberts, in speaking of Holstein-Friesian beef, said: "I ate it for three weeks, and the English beef for two; and while not so fat as the Shorthorn, it was to my taste superior." The breed reaches full growth and maturity at about five years of age; reaching full height at between two and one-half and three years of age, and each year for the two following years adding about one and three-fourths inches in length, three-fourths of an inch in width of hips, and two inches in girth of chest. Mr. S. Hoxie, former superintendent of Holstein-Friesian Advanced Registry, states that the average measurements of cows upwards of five years of age received to entry in the fourth volume of the Advance Register were as follows: "Height at shoulders, 51.8 inches; height at hips, 53 inches; length of body, 64.9 inches; length of rump, 21.4 inches; width of hips, 21.9 inches; width at thurl, 19.6 inches; girth at smallest circumference of chest, 75.6 inches." He states that the average weight of these cows was 12,62 pounds, and that the average measurements are those of what might be deemed a typical animal of what is technically known as the milk-and-flesh form of the breed, the form that is most popular in America.

The first association of breeders of these cattle was formed in 1871, the first herd-book being published the following year. The present Holstein-Friesian Association was formed in 1885 by the union of two earlier associations, and is now the largest association of breeders of pure-bred dairy cattle in America. Frederick L. Houghton, Brattleboro, Vt., has long

been the able secretary of the association, and Wing R. Smith, Syracuse, N. Y., its trusted treasurer. Mr. S. Hoxie, the veteran superintendent of Advance Registry, retired last year on account of age and ill health, at which time he was succeeded by the writer. How many Holstein-Friesian cattle there are now living is unknown; but since the juncture of the two old associations in 1885, over 85,000 females and 42,000 males have been recorded. The Holstein-Friesian Advanced Register, based for entry upon individual merit, was established in 1885; 17 volumes having been published, containing entries of over 5,700 cows and 460 bulls. The age of any female is computed as that at the time of last calving or aborting, and the requirements for entry vary with the age; being not less than 7.2 pounds butter-fat in seven consecutive days for a heifer calving at just 2 years of age or younger, and increasing proportionately to not less than 12 pounds butter-fat for a cow calving at 5 years old, there being no increased requirements for increased age after a cow reaches the age of 5 years. Only bulls having four or more daughters which have been entered in the Advanced Register on official records of butter-fat are accepted for entry.

RECORDS MADE BY THE HOLSTEIN-FRIESIAN CATTLE.

The rules for the entry of cows in the Holstein-Friesian Advance Register are very stringent, being designed to place every Holstein-Friesian record beyond even a shadow of a doubt. Every milking during the period of test must be watched, weighed, sampled, and tested by a representative of some State agricultural college; and thus, because of resulting expense, the bulk of its records are for short periods, mainly for one week. It will be readily admitted that 18 pounds of butter-fat will make 21 pounds of the best of butter, or an average of three pounds butter per day when 18 pounds of fat is produced in seven consecutive days, and that very few cows other than Holstein-Friesian have ever, under strict rules, produced such an amount. The records of the Holstein-Friesian Advanced Register shows that 224 Holstein-Friesian cows have produced officially in excess of 18 pounds butter-fat; of which 82 cows have produced between 18 and 19 pounds; 64 cows between 19 and 20 pounds; 46 cows between 20 and 21 pounds; 15 cows between 21 and 22 pounds; 8 cows between 22 and 23 pounds; 6 cows between 23 and 24 pounds; 1 cow between 24 and 25 pounds; 1 cow between 25 and 26 pounds; and 1 cow over 27 pounds. It must be remembered that while many of these records were made by cows much under 5 years of age, there were a large number of records made by 2- and 3-year-old heifers which were, considering age, proportionately as large, yet fell short of the 18-pound limit required for this list.

As to the per cent of fat in average Holstein-Friesian milk, 1,545 cows and heifers of all ages entered in the seventeenth volume of the Holstein-Friesian Advanced Register, of which more than one-half were heifers, produced in seven consecutive days an average of 376.7 pounds milk containing 12.75 pounds butter-fat; showing an average of 3.39 per cent fat. There were 71 cows and heifers producing over 18 pounds butter-fat; and these cows average 540.9 pounds milk containing 19.758 pounds butter-fat, showing an average of 3.65 per cent fat. Eighty-three Holstein-Friesian cows and heifers have made thirty-day official records exceeding 72 pounds butter-fat, of which 24 made from 72 to 76 pounds; 27, from 76 to 80 pounds; 18, from 80 to 85 pounds; 9, from 85 to 90 pounds; 6, from 90 to 100 pounds; 1, from 100 to 110 pounds; and one made over 110 pounds of butter-fat.

A few Holstein-Friesian cows have been officially tested for longer periods; and one cow produced in 100 days over 284 pounds fat, while a heifer under 3 years of age produced over 227 pounds in the same length of time. At the World's Fair at St.

SHARPLES' BUSINESS DAIRYING FREE

Contains all the money-making points of dairying. Among the subjects treated you will find How to Feed, What to Feed, When to Feed, What Foods Produce Most Milk, How to Take Care of Milk-Producing Foods, How to Feed Silage, the Care of the Milch Cow, and many other profitable and practical suggestions that help swell the profits of the dairyman. With the book we will send additional information telling you how and why you can get the most out of you milk by using the

Sharples Tubular Cream Separator

We guarantee that with a Tubular you can get 50 per cent more cream over the old pan method of skimming, and 6 per cent over any other cream separator made. Sharples Separators get all the cream and the Tubular is the easiest running, easiest cared for, and easiest kept clean. There is just one tiny piece in the bowl, the milk can is low and handy, the bearings are self oiling. Write for the "Business Dairying" at once stating number of cows you keep. Ask for booklet D.165



Mr. S. L. Boyer, Venetia, Pa., says "The Tubular makes me \$25.00 yearly."

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Break Loose from the Creamery Trust

Farmers Organize to Manufacture and Market
Their Own Product

If you are tired of milking cows and getting small returns; if you want more money for your butter fat; if you want to be freed from the danger of combinations to keep down the price paid you; if you want to get the most for your cream, and to have a voice in its manufacture and sale, you will join the great movement for

CO-OPERATION

that is sweeping over the State like wildfire and become a member of the

Farmers Co-operative Creamery and Supply Co.

It is your only hope of getting your fair share of profits from your milk cows.

You do the hard work—you ought to reap the profit.

Organize! Cooperate! Control the manufacture and sale. That's the only way.

This movement will unite 5,000 cream producers in a purely cooperative movement.

The society—incorporated under the laws of Nebraska, has already purchased the immense plant, equipment, and business of the Harding Cream Co., of Omaha, with more than 3,000 patrons and a well-established trade.

So we start with a growing, paying business. No money need be

spent in experimenting or in pioneer work. Our plant has a capacity of 40,000 pounds of butter, 5,000 gallons of ice cream, 25 tons of ice per day, and a good market for every pound we produce.

Members of the association not only share in the profits of this entire business, but also have their butter-fat manufactured and marketed at actual cost.

Will you, as a cream-producer and a clear-headed business man, join with us in the movement for cooperation and control of our products? Why not reap our legitimate profits from our cream?

Why let them go to enrich a corporation or combination?

Why not be our own masters?

SEND FOR FULL PARTICULARS

Write to-day for prospectus of the company and full particulars of our plan for mutual help.

Find out why the combination paid on an average 5 and 6 cents more for butter-fat in Central Iowa than was paid in Nebraska and other States.

Find out how to keep your profits in your own pockets.

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The only horizontal vapor cooled gasoline engine in the world. Absolutely frost proof and cannot freeze.



(Patented May 15, 1906.)

The king of all gasoline engines. Our catalogue will tell you all about them, also our power and sweep feed grinders. Send to-day.

WATERLOO GASOLINE ENGINE CO.
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Clean Light Durable Guaranteed Waterproof Low in Price

WRITE TODAY FOR FREE BOOKLET DESCRIBING MANY KINDS OF WATERPROOF GARMENTS

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HIDES, TALLOW, GREASE, PELTS & FURS.

Quick Returns

If you want your shipments to bring you good money—money-making returns—returns that will give you satisfaction in every way, with full weight and fair selections, good prices and no delay, send your goods to us. **BIGGS & KOCH**, 1405 St. Louis Ave. Kansas City, Mo.

Don't Eat Glucose.



Use our Percolator (the family size) and with the simple use of granulated sugar and cold water, make the purest and best syrup in the world, at a much less cost than you are paying for glucose or corn syrup. Operation perfectly automatic. Syrup cannot sour or crystallize. No waste. Price \$2.50. Write for full information.

Ever-Ready Syrup Percolator Co.,
188 C. Monroe St. Chicago.
Agents wanted.

Established 1880.

Southward & Johnston

Dealers in—
Hides, Wool, Furs, Pelts.
WICHITA, KANS.

Branch houses—Lyons, Kans., Guthrie, Okla.

Shipping tags and price lists free on application. Write us, try us, and mention The Kansas Farmer.

Louis, where three Missouri Holstein-Friesian breeders pitted their individual herd against the pick of the Jersey world, one Holstein-Friesian cow produced over 282 pounds fat in 120 days, surpassing the foremost Jersey by over two pounds; and since then, a Holstein-Friesian cow has produced officially over 316 pounds fat in the same time. One Holstein-Friesian cow has produced over 453 pounds fat in 182½ days, while another, owned by the Michigan Agricultural College, produced over 721 pounds fat in one year. Prof. Oscar Erf, Kansas Agricultural College, writes me that one of their Holstein-Friesian cows has produced nearly 16,000 pounds of milk in one year, testing from 3.2 to 3.7 per cent fat, and that at the end of the year she was still giving from 25 to 30 pounds milk per day; while Prof. A. L. Haecker, Nebraska Agricultural College, states that a heifer calving at just past 3 years, has given in 39 weeks 15,063.9 pounds milk, containing 492.05 pounds butter-fat, and that she was still giving 45 pounds milk per day, with 13 weeks before her in which to complete the year's record. A heifer, calving at just past 3 years of age, in semi-official test under the rules of the Wisconsin Experiment Station, is said to have produced in a period of 365 days 13,213 pounds milk containing 584.8 pounds butter-fat. Many Holstein-Friesian cows have made very large private records; but it is not the practise of the Holstein-Friesian Association to report private records.

It has been asserted by some persons illy posted as to the facts, that while Holstein-Friesian cows did yield large quantities of milk, the milk was below standard in quality. Ten gallons of milk per day, by weight 84 pounds, might be considered as an amount so great that no cow could ever produce it; yet under the strictest official test 40 Holstein-Friesian cows have yielded in excess of 588 pounds in a period of seven consecutive days. This herd of 40 cows, of which some were not of full age, produced in a period of seven consecutive days 25,032.2 pounds milk containing 821.497 pounds butter-fat; thus showing an average of 3.28 per cent fat. The average for each cow was 625.8 pounds milk, containing 20.537 pounds butter-fat; equivalent to 89.4 pounds milk (over 10½ gallons) per day, and nearly 24 pounds of the best creamery butter per week. After such proofs of large production of both butter-fat and of milk, and showing that even in the largest yields of almost incredible amounts of milk the content of butter-fat was 10 per cent in excess of the usual legal requirements, further comment would seem unnecessary.

(To be continued.)

Complete Working Dairy on Wheels—First of Its Kind in This Country.

A campaign for the improvement of dairy farm methods is being carried on in Missouri. Two cars were run over more than 200 miles of railroad. One car contained a milking-machine operated by a two-horsepower gasoline engine, a modern cream-separator, complete pasteurizer and cooler, a Babcock test, and churn. Demonstrations in milking by machinery were given in every town where a meeting was held.

Milk-separating and testing was also shown to the many interested farmers and dairymen. The other car contained all kinds of tools and small machinery used on a dairy farm; also charts showing the comparative feeding value of our common feed stuffs. These charts were not of the ordinary kind. They were glass tubes an inch in diameter, sixteen inches long, fitted in a sound frame in sets of three. The first tube contained the feed, for example, wheat bran. The next tube contained a white substance to represent the carbohydrate and fat content of the wheat bran. The third tube contained a dark granular substance in proportion to represent the protein content of the feed. The protein and carbohydrate tubes were filled to a height to exactly illustrate the comparative amounts of each in the food shown. Twelve such feeds were on

Timely Warning Against "MAIL ORDER" CREAM SEPARATORS

The "Farm Implement News" of Chicago quotes the following good advice to dairy farmers from a lecture by Prof. C. E. Lee, of the University of Illinois State Experiment Station:

"I am not at liberty to give my preference, for I am not selling separators—if I were to name a separator manufacturer, either to you here in public or in private, I would lose my position—but there is one thing I desire to warn you farmers against and that is buying hand-separators from the 'mail order' houses. Don't do it—you will regret it. The machines do not give results and they do not last. Our department receives hundreds of inquiries as to 'What's the matter with my separator? It doesn't do this or it doesn't do that,' and I tell you, gentlemen, that in every instance when we ask them to name their separator it is a 'mail order' house machine and almost worthless when it was new."

Don't waste your money in a trashy separator, made "cheap" to sell "cheap," that is going to WASTE instead of SAVE for you EVERY TIME you put milk through it, and which would be VERY DEAR EVEN AS A GIFT.

DE LAVAL Cream Separators are NOT that kind. A DE LAVAL catalogue is to be had for the asking.

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Prompt deliveries of U. S. Separators from warehouses at Auburn, Me., Buffalo, N. Y., Toledo, O., Chicago, Ill., LaCrosse, Wis., Minneapolis, Minn., Sioux City, Ia., Kansas City, Mo., Omaha, Neb., San Francisco, Cal., Portland, Ore., Sherbrooke and Montreal, Que., Hamilton, Ont., Winnipeg, Man. and Calgary, Alta.

Address all letters to Bellows Falls, Vt. 439

exhibition and attracted much attention, as did also the two miniature silos, one, a home-made silo after the Gurler method, and the other a ready-made stave silo. The very high price of all feeds is forcing the farmers to build silos, raise more cow-peas, clover, and alfalfa, and in every way possible provide from their own farms everything necessary for successful farming.

Mr. P. P. Lewis, of Crescent, Mo., who has a dairy of about 100 cows and milks them by means of machinery, accompanied the train through a good portion of the trip and operated the milking-machine on exhibition. Many spectators seemed greatly disappointed because the cows did not jump and kick the machine all to pieces. They had come prepared to say, "I told you so," and did not get the chance.

Mr. B. H. Rawl, of South Carolina, now with the dairy division at Washington, accompanied the train something over a week and delivered many very useful and entertaining lectures on the necessity for diversified farming. His advice was sound because it came from a lifetime of experience in the business of which he was talking, and broad because he had the entire Southern States as a field for his training.

The Dairy Commissioner, as is his habit, did what good he could by explaining the various machines to the

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interested spectators and by discussing dairy farm methods. The campaign was planned by the State Dairy Commissioner of Missouri. The industrial department of the Missouri Pacific railroad made it possible for the plan to be carried out. Prof. Oscar Erf, of Kansas, suggested the idea of the milking-machine.

In the sixteen towns visited in Missouri, thousands of young men and boys became interested in the improvement of farm methods. The last two weeks of March will be spent in Southern Kansas with the same complete working dairy outfit and similar lecturers.

To Missouri belongs the honor of running the first complete working dairy train.

R. M. WASHBURN.

PLYMOUTH ROCKS.

BLUE BARRED ROCKS—Large, vigorous, farm raised stock, \$1.50 per 15; \$3 per 30; \$5 per 100. Minnie K. Clark, Route 9, Lawrence, Kans.

BARRED ROCK EGGS—\$1 per 15, \$5 per hundred. Mrs. R. L. Parker, Lincoln, Kans.

A BIG BARGAIN—Choice B. P. Rock females. "Bradley Bros." \$15 per dozen. H. A. Wattles, Agent Pacific Express, Bayneville, Kans.

BARRED PLYMOUTH ROCKS EXCLUSIVELY—Eggs \$1 per 15, \$1.50 per 30, \$4 per 100. T. B. Wilson, Route 7, Osage City, Kans.

MY BARRED PLYMOUTH ROCKS are the Bright's Watham's strain. Second prize cockerel, Wichita, Kans. 1907. Three grand yards. Cockerel and pullet mating; scores up to 98. Eggs \$1.50 per 15, \$7 per 100. Mrs. Jas. Pringle, Elmdale, Kans.

BUFF ROCKS EXCLUSIVELY—Farm range. Eggs, \$4 per 100; \$2.50 for 50, and 75 cents for 15. Mrs. W. Lovelace, Muscotah, Kans.

BARRED PLYMOUTH ROCKS as good as the best. Eggs 50 cents for 15. Write D. N. Hill, Route 8, Lyons, Kans.

FOR SALE—Pure-bred B. P. Rock eggs. 75 cents for 15 or \$3.50 per hundred. Hillcrest Fruit and Poultry Farm. Address A. C. Merritt, North Topeka, Route 4; Ind. Phone 4851.

30 WHITE PLYMOUTH ROCK EGGS FOR \$3—From prize-winning pens, line bred, large size and pure white. Also one M. B. gobbler for sale. I pay the express charges. J. C. Bostwick, Hoyt, Kans.

INCUBATOR EGGS from prize-winning White Rocks and White Wyandottes at \$5 per 100. W. L. Bates, Topeka, Kans.

175 CHOICE BARRED AND WHITE ROCKS—Hawkins and Bradley strains. Cockerels \$2 up, pullets \$1 up; eggs \$2 for 15, \$5 for 45. Chris Bearman, Route 9, Ottawa, Kans.

BUFF ROCKS—High scoring, vigorous, farm raised, bred for size and laying qualities. Eggs \$1 to \$2.50 per 15, \$5 per 100; circular free. Sunny Slope Poultry Farm, Box 406, Effingham, Kans.

BARRED ROCKS my specialty; a fine lot of cockerels from prize winners for sale reasonable. Peter Reber, Neosho Rapids, Kans.

Collego Hill Barred Rock and Scotch Collie Farm. Many first prize winners in Kansas and Oklahoma. 12 females scoring 91 to 94½ by McClave, Emery & Helmlock. Hens and eggs to order. Pedigreed Collies from imported prize winners. Fine young stock for sale. Mrs. J. T. Woodford & Son, 1600 E. Central, Wichita, Kans.

WHITE PLYMOUTH ROCKS.

Largest and whitest in the west. Line bred for heavy egg production; Kansas State Show '07 I won 1st cockerel, 2d pen, 3d, 4th hen; Anthony, '06 1st cockerel 96½, 1st pen 91½, 1st hen 95½, 1st pullet 96½. Write for egg prices. Chas. C. Fair, Sharon, Kans.

LINDAMOOD'S BARRED ROCKS will surely please you. High scoring prize-winners. Pens mated now. Send your orders early. No eggs after May 15. From pens \$2 per 15, from flock \$3 per 100. Send for circular. Long distance phone Walton. C. C. Lindamood, Walton, Kans.

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Pullet-mating pen headed by a 98½ point cockerel. Cockerel-mating headed by a 98 point cock. The females score from 90 to 98½. Barring extra strong. Eggs \$1.50 per 15, \$7.50 per 100. Mrs. Chas. Osborn, Eureka, Kans.

EGGS! EGGS!

I feel confident from the Steel Blue Barred Plymouth Rocks will be produced some prize-winning chicks for you, whether you wish them for show birds or on the farm. Let me have your order and the chicks will speak for themselves. It costs no more to raise fine birds than inferior ones, and the extra small expense of starting should not be considered for the results and satisfaction you would get out of this Famous Strain would overcome all. Try them. Write for catalogue, it's free. JOE B. MOORE, originator and breeder of the renowned Steel Blue Barred Plymouth Rocks, Mexico, Mo.

BUFF PLYMOUTH ROCK EGGS.

I have bred Buff Rocks exclusively for six years; have purchased eggs and birds from the best blood I could find in the west and now have as fine a lot of birds as I ever saw. I took both first and second on pen at the Republic County fair last fall. Eggs from 1st prize birds \$2.50 for 15, \$6 for 45, \$10 for 100. Eggs from 2d prize birds \$1.50 for 15, \$3.75 for 45, \$6 for 100. H. M. STEPHENS, Munden, Kans.

White Plymouth Rocks EXCLUSIVELY.

Good for Eggs. Good to Eat and Good to look at. W. P. Rocks hold the record for egg-laying over every other variety of fowls; eight pullets averaging 289 eggs each in one year. I have bred them exclusively for twelve years and have them scoring 94 to 96½, and as good as can be found anywhere. Eggs only \$2 per 15, \$5 per 45, and I prepay expressage to any express office in the United States. Yards at residence, adjoining Washburn College. Address THOMAS OWEN, Sta. B. Topeka, Kans.

BARRED PLYMOUTH ROCKS EXCLUSIVELY

EGGS \$3 per 15 | Get the Best
\$5 per 30 | Start Right
S. T. Divinia, R. 2, St. Joseph, Mo.

BLACK MINORCAS.

IMPORTED, S. C. BLACK MINORCAS—The world's greatest laying strain. Eggs \$1.50 per 15. Hens \$2. Circular 5 cents. Address George Kern, 817 Osage St., Leavenworth, Kans.

BRAHMAS.

LIGHT BRAHMAS.

Prize winners—two firsts, two seconds at State Poultry Show 1907. Cockerels \$2, eggs \$1.50. John Lichte, Route 1, Oatville, Kans.

Light Brahma Chickens

Choice pure bred cockerels for sale. Write or call on Chas. Foster & Son, Eldorado, Kas., Route 4

The Poultry Yard

CONDUCTED BY THOMAS OWEN.

Poultry Notes.

Fowls that are confined should be supplied with animal food of some kind to take the place of bugs and grasshoppers that they get when they are running at large. Nothing will start the hens to laying, or keep them laying, like cut green bone, about a pound a day to a dozen hens being right.

It may be a little early to talk of lice and mites, but an ounce of prevention is worth a pound of cure, and if you see that the fowls are free of lice now, you will not be bothered to death with them later on in the season.

Reports come in that eggs are not hatching very well. It is the same nearly every year at this time of the season. Those who use incubators blame it on the machine, and those who use hens for hatching blame it on the hens, but the cause must be found elsewhere. One great cause of infertility of eggs is that the hens have been too fat, and eggs from fat hens are known to be deficient in fertility. After twenty or thirty eggs have been laid, the hen gets down to proper condition, and the eggs henceforth are fertile. Another cause is the eggs are often from immature pullets. Some poultrymen make it a rule never to use the first forty eggs a pullet lays for hatching. Probably twenty would be sufficient to discard. By seeing that these two causes are rectified no further trouble from infertile eggs ought to be experienced.

At the South Carolina Experiment Station the past two seasons, several remedies have been tried for sore head. The best results were obtained from the following mixture: Chloro naphtholeum one part and lard four parts. Mix well and grease the whole head. If in an advanced stage, wash the head in warm water to remove the scabs before using.

We all know that plenty of exercise is good for chickens, but why it is so is not generally understood. Exercise creates a healthy appetite, develops bone and muscle, is invigorating, stimulates a healthy circulation, promotes digestion, keeps the mind and body occupied, and prevents the forming of bad habits, such as feather-pulling, egg-eating, comb-picking, etc.; keeps the body warm and in healthy action in winter, saves food, prevents gorging and the resultant evils, such as crop-bound, indigestion, and diarrhea; prevents birds from becoming overfat, makes eggs more fertile and productive of stronger chicks, and tends to prevent rheumatism and cramps in old fowls, and leg weakness in chicks. Exercise is a very good thing for both old and young chickens.

Reciprocity Between Farmer and Poultryman.

In this article I do not propose to preach exactly as I practise, for situated as I am, I would be a poor manager if I did.

I am a farmer poultryman, and with the exceptions of shell, grit, and other necessary prepared foods, that are so essential to success, I raise all my chicken feed. Being a farmer I know all his trials and difficulties; how a few bad days in the growing season gets him behind with his work. I also know how grateful most farmers are to the one who betriends them at those critical times. Being a poultryman I know how chicken-hearted they are.

The majority of poultrymen are as accommodating and willing to help one another and to help others when asked to do so as any other class of men, and it always seems to me they put a little more vim and try harder

WYANDOTTES.

WHITE WYANDOTTES—Prize-winners. Catalogue free. Ginetie & Ginetie, Florence, Kans.

WHITE WYANDOTTES ONLY—15 eggs \$1. H. F. Bruggemann, R. 2, Herington, Kans.

WYANDOTTES—Pure white. Young stock at \$1 each. L. E. Brown, Norton, Kans.

BROWN'S WHITE WYANDOTTES—Ahead of everything; stock for sale; eggs in season. I have the English Fox Terrier dogs. Write me for prices and particulars. J. H. Brown, Clay Center, Kans.

WHITE WYANDOTTES—Pen No. 1, score 94 to 96½ by Atherton. Eggs \$2 per 15. 100 others bred to lay high scoring eggs \$1 per 15; \$4 per 100. J. L. Moore, Eureka, Kans.

WHITE WYANDOTTES—White P. Rocks and Rose C. B. Minorcas. Wyandottes and W. P. Rock eggs, 15 for \$1; Minorca eggs, 15 for \$1.50. Eggs for hatching from high-class poultry. R. F. Meek, Hutchinson, Kans.

PARTRIDGE WYANDOTTES—Eggs for sale, 1 sitting 15 for \$2, 2 sittings \$3.50, and \$4.50 per 50. From best strains in Kansas. E. Holtzschue, Sabetha, Kans.

WHITE WYANDOTTE EGGS from choice matings; \$1.50 per fifteen. S. W. Artz, Larned, Kans.

WHITE WYANDOTTES—Good stock, splendid layers; eggs \$1 per 15. L. E. Brown, Norton, Kans.

Pure-Bred White Wyandotte cockerels, unscored, \$1 each. Emma Coppedge, Norcatur, Kans.

WHITE AND S. L. WYANDOTTES, and White Holland Turkeys. Only male stock for sale. Good birds at reasonable prices. Write R. Boyd Wallace, Stafford, Kans.

White Wyandotte Eggs per sitting \$1, or 100 for \$5. Mrs. E. F. Ney, Bonner Springs, Kas.

WHITE WYANDOTTE eggs \$1.50 for 15 from choice pens, \$5 per 100 from selected free range stock. Indian Runner duck eggs \$1.50 for 15; Mammoth White Holland turkey eggs \$1.50 for 9; White African guinea eggs \$1.50 for 17; a few pairs of guineas yet for sale. Order now. Mrs. L. D. Arnold, Enterprise, Kans.

The Great Winter Laying Strain of Silver and White Wyandottes and Buff Plymouth Rocks. Eggs \$1.50 per 15. Address D. A. Chacey, Leavenworth, Kans.

Hammer's White Wyandottes. Eggs from first pen \$2 per 15; from second pen \$1.50; from flock at large \$1 per 15; \$5 per 100. My strain is noted for eggs.

Lewis A. Hammer, Clearwater, Kans.

Silver Laced Wyandottes

We pay all express charges. Eggs from stock scoring from 90 to 98 points by Rhodes; \$2 for sitting of fifteen; choice farm range \$5 per hundred. Good hatch guaranteed or eggs replaced.

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NEOSHO POULTRY YARDS. Rose Comb R. I. Reds—Score from 90 to 94½ points. Seven years experience with this breed. Eggs for hatching. Prices reasonable. J. W. Swartz, Americus, Kans.

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ONE DOLLAR buys 15 eggs of either Rose Comb R. I. Reds or Barred Rocks from prize-winning stock at the college show. Mrs. A. J. Nicholson, Manhattan, Kans.

S. C. RHODE ISLAND REDS—Won at State Show, 1907, 1st, 2d, 4th. Eggs \$1.50 per 15, flock \$5 per 100. Mrs. D. A. Sheaks, Walton, Kans.

Rose Comb Rhode Island Red eggs for sale. Circular free. G. D. Willems, Inman, Kans.

R. C. R. I. Reds—Pure-bred cockerels for sale \$1 each. A. L. Scott, Route 1, Larned, Kans.

FOR SALE—Rose Comb Rhode Island Red chickens. High grade Red Polled bull calves. J. W. Poulton, Medora, Kans.

GOLDEN RULE FARM.

R. C. Rhode Island Reds. Won fourteen prizes on our Reds at the two great Kansas State Poultry Shows January 1906-7. No stock for sale. Eggs for hatching. Egg circular free. A. D. Willems, Minneola, Kans., (formerly of Inman, Kans.)

Rose Comb Rhode Island Reds PRIZE WINNERS

Eggs from select matings, average score 92 points. The second and third pullet and third hen at State Show 1906, and first cock and first, second and third pullet at Topeka 1907, are in these matings. Eggs, \$2 per 15. Pen No. 2, males score 91½ and 91 points. Select unscored females; eggs \$1.50 per 15. Utility pen, all good, pure stock; eggs, \$1 per 15. Special prices on large quantities. A few good cockerels yet for sale. LEON CARTER, Asherville, Kans.

The Talbott Poultry Farm

Breeders of the best in the world. Strain of Buff, Brown and White Leghorns, Barred Rocks and White Wyandottes. My birds have won at Chicago, Galesburg, Moline, Illinois, Fremont, Hebron and St. Joseph Poultry Shows of Nebraska, and they will win for you. 500 old birds for sale at \$1.50 each; 1,000 youngsters at \$1.00 and up.

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Markers White Plymouth Rocks

Our stock won more premiums and specials at Hutchinson State Fair, Great Bend, Salina, Poultry Show and Nickerson than any breeder in the west which is positive proof that they are

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Buy eggs from these birds, improve your flock and win the prizes at the coming shows. Sale and fertility guaranteed. Prices, \$1, \$2 and \$3 per 15; \$5, \$10 and \$15 per 100.

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LEGHORNS.

ROSE COMB BROWN LEGHORN EGGS FOR SALE. Bred for years from the best egg laying strain. Write for prices. Bertha Gresham, Rocklin, Kans.

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S. C. W. LEGHORN AND W. WYANDOTTE EGGS from high scoring stock. \$1 per 15; \$4 per 100. W. H. Turkey eggs, \$1.50 per 9. A. F. Hulse, R. 2, Maple Hill, Kans.

YOU WOULD WANT some of my eggs if you could see my flock of range S. C. B. Leghorns. Average score 93½ by Atherton. Eggs, \$1 per 15; \$4 per 100. J. D. Clark, Eureka, Kans.

ROSE COMB BROWN LEGHORNS. ALBINO BARRED ROCKS—Best selected and fresh eggs \$1 per 15, \$5 per 100. Leghorn cockerels \$1. Bertha Evans, Lyons, Kans.

S. C. BROWN LEGHORNS—Best laying strain in the west. Eggs for hatching, \$1 per 15. Special prices on large lots. L. H. Hastings, Route 1, Quincy, Kans.

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ROSE COMB BROWN LEGHORNS EXCLUSIVELY—Farm raised. Eggs \$1 per sitting of 15; \$5 per hundred \$3.50. Prompt shipment made. P. H. Mahon, Route 8, Clyde, Cloud Co., Kans.

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THEY LAY; THEY PAY—S. C. White Leghorns. My pen is of the finest in the west, bred by Van Natta's greatest World's Fair winners; eggs \$1.25 for fifteen, \$5 per hundred. E. Boltwood, R. 1, Ottawa, Kans.

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FOR SALE—Single Comb White Leghorn cockerels. Wyckoff laying strain. Price, 75 cents and \$1. Henry Martin, Newton, Kans.

ROSE COMB BROWN LEGHORNS EGGS, \$1.50 for 15, \$2.50, 100 for \$4. Mrs. John Holmby, Medora, Kans.

STANDARD-BRED SINGLE-COMB BROWN LEGHORNS—Headed by first prize pen at Chicago show 1903 and took six first prizes and first prize at Newton 1904. Eggs \$2 per 15. S. Perkins, 301 First street, Newton, Kans.

SINGLE-COMB WHITE LEGHORN cockerels \$1 each; two or more 80 cents each. Fine white pure, thoroughbred birds. Also a few Barred Plymouth Rocks, barred to the skin—fine, pure and vigorous; hens, cocks and pullets, \$1 each; two or more 80 cents each. All of our customers are very pleased. We will make reductions on large lots. Meadow Poultry Farm, Centerville, Illinois.

Buff Leghorns

Pure-bred eggs \$1.50 per 15, \$3.25 per 100. J. A. Reed, R. 3, Wakefield, Ia.

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Silver Sp. Hamburgs: 1 cockerel, 1, 2, 3, 4 pullets, pen, at great Wichita show. S. C. W. and Brown Leghorns; Black Minorcas; 15 eggs Blue Ribbon pen \$5, 2d best \$2; utility pens headed by high scoring males \$1.00; M. Bronze turkey eggs \$2 per 9, selected 50c each. Vira Bailey, Kinsley, Kans.

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S. C. W. Leghorn and Buff P. Rock eggs \$1 per 15. At Nickerson show 1907 (Helmick Judge) I won a cubator on highest scoring cock, cockerel, hen, pullet in Mediterranean class. On Rocks took 1 cock, 1, 2, 3 hen. Mrs. J. W. Cook, R. 3, Hutchinson, Kas.

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Won 15 prizes and silver cup at Kansas City, Mo. Poultry Show 1907. Birds and eggs for sale. Also B. P. Rock eggs, best strains. Send your orders to Eleanor Fruit and Poultry Farm, Centerville, Kans. A. Oberndorf, Proprietor.

Galva Poultry Yards

R. C. White Leghorns and White Wyandottes 30 prizes in 3 shows. Eggs \$1, \$1.50 and \$2 per sitting. J. Ditch, Galva, Kans.

Now is the Time to Get Your Eggs for Hatching

From W. S. Young, McPherson, Kans.

the old reliable breeder of Rose Comb and Single Comb White Leghorns and White Wyandottes, and their purity. The greatest egg-laying strain in the West.

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Black Langshan Eggs
—FROM HIGH SCORING FLOCK—
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Mrs. C. S. CROSS,
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ty birds are prize-winners. Choice cockerels and sets for sale; eggs \$1.50 and \$2. Satisfaction guaranteed.

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C. BUFF ORPINGTONS—Cook strain. Eggs, 15 for \$1.50. Fred and Eddie Stark, R. 7, Abilene, Kans.

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VOICE Buff Orpington and B. P. Rock cockerels and pups and bred bitches. Send for circular. B. Williams, Stella, Neb.

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excelled as layers both winter and summer on account of early maturity and quality of eggs. Weight, hens 6 to 7 lbs., cocks 7 to 8½ lbs. \$2 for 15. A. R. Almsworth, Newton, Kans.

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RE-BRED White Scotch Collie Puppies for C. Q. Smyth, Box 655, Ponca City, Okla.

Scotch Collies.

seven Collie puppies just old enough to ship. Your orders early, so you can get one of the ones.

Walnut Grove Farm, Emporia, Kans.

to excel in what they undertake than others do.

The man or woman who will succeed with poultry is not above any kind of honest work. He is not afraid to handle any kind of grain, or the best of all fertilizer (poultry droppings) any more than the farmer is.

Why can't these two that have so much in common get closer together? The farmer sells his grain at the elevators at about the same price per pound that the poultryman who buys in small quantities pays for screenings. That is very nice for the elevator man, but the whole wheat would be much better for the poultry.

Don't think for a minute that a full-sized grain of wheat is too large for a small chick to swallow. It will choose the largest and assimilate it all right, and two or three such grains will do more good to a little chick than a whole crop full of chaff and cockle that you get in screenings.

Go to your farmer friend if you have one; if not, now is the best time to hunt one up. Get him interested in you. Assist if you can in his harvest. Be reasonable with him. Make yourself essential to his happiness.

If you can get your grain from him at first cost, he can and will deliver as you have room for it. When he delivers your grain, show him your poultry. Be jolly, but talk chicken.

Tell him the truth and get him to try some of your stock. If they are suited to his needs, his neighbors will want some and you will find there is no one more willing to spend good money for what he needs than the farmer, and when you have converted and brought one farmer into the fold he will never willingly leave. There is a vast field and a grand opportunity for poultry missionary work among the farmers.

But the poultryman is too chicken-hearted to make a good missionary, and the farmer is too busy with other work to convert himself. So our only hope and only chance to accomplish this great and good work will be to get you editors to take it up. When you become interested, you always say the right thing, in the right way, and it seems to have much weight. If you can get the excellent journal you are printing in the hands of those unconverted farmers you would work wonders. If your subscribers, after they have read their Journal, would hand it to one of them it would help.

There are other subjects I would have preferred to write upon, but I think the most important question to poultrymen should be, how to get the farmer interested in pure-bred poultry. In well-bred horses, cattle, and sheep farmers are interested and will pay the price. Even the goat-breeder is having his innings. The fruit, implement, and book agents do a thriving business with the farmer. Why should not the poultry-fancier enter the vast field and help the farmer as well as himself?—Edward Davidson, in Successful Poultry Journal.

Only \$12.75 and we Pay the Freight.
This 230 Egg ROYAL INCUBATOR
the world's best hatcher. Don't pay more for poorer machines. Investigate our bargain offer, our bank guarantee and our free trial. It will pay you, then. Royal Incubator Co., Drawer 66 Des Moines, Ia.

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FOR SALE—160 acres in Russell County, all fenced and cross fenced. 40 acres good bottom alfalfa land, balance good pasture. Good water, 30 feet deep. Write T. R. Wilkerson, Lucas, Kans.

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80 acres—40 cultivated; 1 1/2 story house, stable, poultry house, smoke house; well, trees; price \$1500. 100 acres—110 cultivated; 4-room house; stable; fruit and shade trees; \$4000. 160 acres, some bottom, timber, good improvements, close to school; \$4800. 320 acres—100 cultivated; fair little improvements; \$6000. 640 acres—160 cultivated; new house; 1 1/2 mile of running water; price \$15 per acre. We have all kinds and sizes and would be pleased to send lists. Write to Minneapolis, Florence or Salina, Kansas, for lists.

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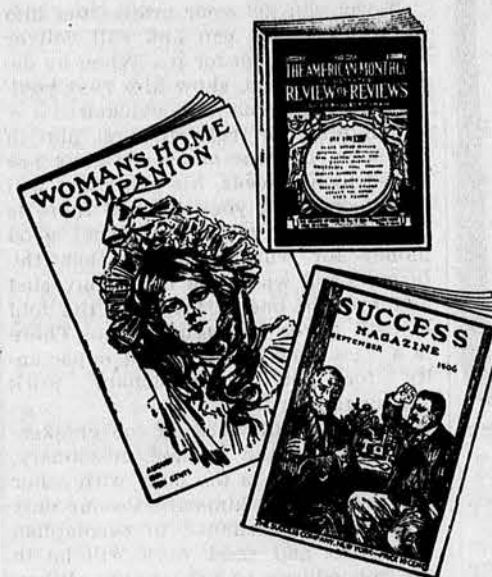
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The Veterinarian

We cordially invite our readers to consult us when they desire information in regard to sick or lame animals, and thus assist us in making this Department one of the most interesting features of The Kansas Farmer. Kindly give the age, color, and sex of the animal, stating symptoms accurately, and how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply all letters for this Department should give the full name of the owner, and should be addressed to the Veterinary Department of The Kansas Farmer, Topeka, Kansas, or to Dr. C. L. Barnes, Veterinary Department, Kansas State Agricultural College, Manhattan, Kansas. If in addition to having the letter answered in The Kansas Farmer, an immediate answer is desired by mail, kindly enclose a 2-cent stamp. Write across top of letter: "To be answered in Kansas Farmer."

Lame Mare.—I have a big fine bay mare, 17 years old, weighing about 1,700 pounds, that has been lame in the left front foot for three years. The trouble seems to be in the bowl of the hoof, as at times she gets very lame and the hoof cracks open at the top. It bleeds, inflammation passes out, and then she gets better. She has these lame spells four or five times a year. She stands as though the joint is out of socket. When she hasn't these lame spells one scarcely can notice that anything is wrong with her.

W. H. D.

Slater, Mo.
Answer.—I would advise you to poultice your horse's feet. If possible secure some white rock and poultice them until you get the foot thoroughly softened. It may take several days to do this. At the end of this time let me hear from you and I think I can prescribe further treatment.

Mare out of Condition.—I have a 11-year-old mare that eats well but makes water often while I am working her and very much at a time. She raised a colt last year and has not done very well since. She took a fever, in April which was common around here among the horses. At times she takes short breaths and has some fever when we work her.

H. C.

Rexford, Kans.
Answer.—Feed your mare the following: One ounce pulverized nuxvomica; 8 ounces pulverized buchu; 6 ounces pulverized gentian; ½ pound salt; 4 ounces sodium hyposulphite. Mix with 10 pounds of oil-meal giving a teaspoonful three times daily on ground feed.

Colts Leg Swelled.—I have a sucking colt that ran a piece of glass in his left hind foot at side of frog when the colt was about 4 weeks old. The glass was in the foot several days. The ankle between hoof and pastern swelled some but I thought it would be alright in a few days. But it kept swelling until the third or fourth day after the glass was removed, when it gathered and broke just above the hoof, nearly in the center of the heel. It seems that I can't get the colt's leg to heal and stay healed. Two places are still discharging small quantities of bloody pus.

R. A.

Esther, Okla.
Answer.—Open the parts freely that are discharging. I would think, from the symptoms, that a pocket has formed in the foot which keeps the foot discharging. If you will secure an ounce of hydrogen peroxide and use it freely in a 50 per cent solution, I think you will soon get the pus out of the foot permanently and your colt will make a rapid recovery.

Horse out of Condition.—I have a horse, 12 years old, which staggers and stumbles when he is moved. He leans to the left continually and keeps his head up. His neck appears swollen from chin down.

T. C.

Hominy, Okla.
Answer.—Bathe the swollen parts with hot water, three or four times daily, then have the following prescription filled: 2 ounces tincture of iodo-carmine; 2 ounces tincture of gentian. Give ½ ounce of this mixture in a pint of water once daily.

Caked Udder.—I have a 2-year-old heifer, weighing about 800 pounds, that has her first calf which is about six weeks old. The cow's udder is caked tight and hard. From one of the teats she doesn't give more than a small spoonful of milk. What would you advise me to do for her bag? I also have a bay horse that is lame

in the stifle joint. Has been that way a year now. Seems to be worse on the inside of the hind leg.

A. P.

Red Oak, Ia.

Answer.—I would advise you to use a poultice or linseed oil-meal poultice on your cow's bag and remove the inflammation. After that better use lard and camphor in the form of a camphor ointment, 2 ounce of camphor to ½ pounds of lard melted together.

Gathering on Colt's Leg.—A two-year-old colt was kicked on hind leg about six inches below the stifle. The place healed in a few days but there was a gathering which broke on the inside of the leg just above the hock. That has healed now but she keeps the leg drawn up under her and has no use of it.

L. B.

Pleasanton, Kans.

Answer.—It will be well to bathe the leg with hot water and keep hot poultices on it when you can't spend time to simply put hot water on the leg. Continue this until you see some relief. At night, when you can not longer bathe the leg, cover with a good warm blanket so that the animals will not take cold after you have been steaming the leg. We will be glad to hear from you again in case you do not get favorable results.

Mare has Tender Feet.—I have a sorrel mare, 11 years old, whose front feet grow very fast and the crack of the front heels that runs up from the frog keeps sore. When she stands in the stable she gets stiff in all her legs. It acts something like rheumatism. Kindly give remedy.

L. A. L.

Cozad, Nebr.

Answer.—Would advise you to use a cawker dressing shoe with boller plate to protect your animal's foot that is suffering from tenderness. Your blacksmith will understand the nature of the shoe.

Paralysis of Tongue and Lips.—I have an iron gray horse about 10 years old that cut her foot on the wire five weeks ago. On the outside, just above the hoof and rather deep, two tendons were cut. It was a bad sore with a great amount of corruption, and her leg was swollen to her body. The swelling has about all gone down and her foot is almost well. About two weeks ago something got wrong with her mouth. Her nose and lips are twisted to one side, her lower lips hang loose all the time and her tongue hangs out of her mouth. She seems to have a good appetite but cannot eat well although she manages to eat enough to keep her going. I have been giving her alfalfa hay, oats, and some corn. After she has eaten she will lay down for half or possibly all day if not made to get up, and her neck is stretched out as far as possible.

Mankato, Kans. C. H. S.

Answer.—I think that your animal has in addition to paralysis of the tongue, also paralysis of the lips. Paralysis of the lips can be more or less remedied by applying a stimulating liniment at the base of the ear on the affected side.

To Disinfect a Barn.—Will you give me some advice as to how to disinfect a barn where a bad case of distemper has been and what to use as a preventative for my horses when I move to a new place within a few days?

Jamestown, Kans. C. W. N.

Answer.—Would advise you to use 5 per cent Zenoleum to disinfect your barn where a bad case of distemper has been. It is best to use a spray pump and in addition to disinfecting the stalls and woodwork it is well to spray it all over the floor and in fact all of the interior of the barn.

Discharging Wound.—I have a 2-year-old colt, black, that either got stuck with a pitch fork or shot with a 22 caliber bullet on the inside of his left hind leg, just below the stifle joint. It swelled terribly at the time, and has been swollen badly ever since. He was very lame for about two months but can now walk on it a little. The swelling does not go down and there is a little discharge all the time. Small sacks of pus will form, then they will break and run. When it first happened I had it probed to see if there was anything in the hole but could not find anything. The hole was about two inches deep. I have

blistered it but it does not seem to do much good as it is so deep seated. Kindly advise me what treatment to use.

W. J. H.

Weston, Idaho.

Answer.—Secure from your druggist 4 ounces of Zenoleum and use a teaspoonful to a quart of water and inject in the wound daily.

Caked Udder.—I have a 7-year-old cow that is troubled with caked udder. Seems to be the front two quarters only. One teat at times contains clotted milk, but no blood, which comes out with difficulty when milked. She gives thirty pounds of milk a day and sometimes more. Feed her alfalfa at night and straw in the day and eight pounds of corn chop a day. When fed alfalfa only, it is worse. This morning she gave nineteen pounds of milk and this evening the udder was worse, and she gave not over fifteen. I bought her with other cows. The owner said she was troubled and subject to it though she would get over it after a time.

Woodbine, Kans. W. C. S.

Answer.—I would advise you to secure 2 ounces of gum camphor and place it in 8 ounces of lard. Melt together and apply to your cow's udder three times daily.

Mare Breaths Hard.—I have a valuable mare that had the distemper two years ago and left her wind in bad condition. When she is under a load her wind troubles her considerably. I would be pleased if you could inform me what to do to help her.

Coats, Kans. R. B.

Answer.—I think you ought to apply a stimulating liniment to the throat of your animal as I presume there is a thickening there that is causing the hard breathing. Use the liniment until it blisters, then stop using it for a few days and then begin again.

Bog Spavin.—Thrush.—Grease Heal. Will you kindly give me the best remedy for bog spavin, and can a bog spavin be cured? Also what is the best cure for thrush and grease heal.

H. R. B.

Turlock, Calif.

Answer.—For a bog spavin I find a truss put out by Houssman & Dunn of Chicago the best thing to cure. Thrush is best treated by using calomel, packed into the frog daily. Grease heal is best treated by using white lotion.

Probably Lump Jaw.—I have a half Jersey heifer calf, about 6 months old, that has a lump on its jaw. The lump is nearly as large as an egg and seems to be fast to the bone. I noticed it first about a week ago. I cut into the lump in two places and put into the openings cotton saturated with tincture of iodine. I have cured several cases where the lumps were not fastened to the bone by using this treatment but am afraid it will not cure this one.

C. B. B.

Buffalo, Kans.

Answer.—If you think your animal has lump jaw give one dram daily of potassium iodide in a pint of water as a drench.

Stiffed Horse.—I have a 6-year-old horse that has been lame in the stifle joint since last October. There is a hard enlargement in front of it. He does not show much lameness in walking but when trotting or galloping limps considerably. He usually stands resting his foot on his toe. I have blistered the joint several times and have thought that it gave relief, but only temporarily.

F. J.

Elk City, Kans.

Answer.—Continue using the fly blister over the stifle joint. Put on a severe fly blister that will be sufficient to cause a considerable swelling. Repeat the blister in three weeks. You had better leave the animal to itself and do not work him. Give him about three applications of the blister three weeks apart. Be sure and tie the animals short enough so that it can not reach the stifle, after you have put on the blister. Allow the blister to act for twenty-four hours, then wash off and grease.

Sore on Leg.—My 5-year-old bay gelding has a festering sore on right hind leg that discharges bloody water. I have used copersas, blood root, given

salts internally, and rubbed on liniment that took the hair off.

Elk City, Kans. SUBSCRIBER.

Answer.—Use the following dusting powder on the sore daily. One ounce of iodoform; two ounces of acetanilid; one and one-half ounce of tannic and one ounce of boracic acid.

Lame Mare.—I have a young mare that got a nail in her hind leg at the fetlock joint, two years ago. She is very lame when first starting out, but gradually gets almost over it. Her leg is enlarged about one-half its usual size.

F. K.

Louisburg, Kans.

Answer.—There is evidently a bone lameness starting from the nail that you describe, entering the fetlock joint. The enlargement of the leg is probably the growth of bone. Use a fly blister on the affected ankle, and if you have a competent veterinarian in your locality have the joint "fired" before applying the blister.

Out of Condition.—I have a 4-year-old black mare that I have just bought. I find she has been overworked. When I drive her very fast she breathes heavily and fast, but when she is driven in a walk she doesn't show any such signs. She eats well and seems to feel all right, and drives up as if there was nothing wrong with her, but pants very heavily.

C. W. O.

Farmington, Kans.

Answer.—Use a teaspoonful of Alkano in two ounces of water three times daily for at least a couple of weeks. Let me hear from you again.

Mare with Heaves.—Will you please tell me what to do for heaves? I would like to know how to cure them. I have a mare that has had them about three years. She is 13 years old and a bay.

L. J. B.

French Village, Mo.

Answer.—The best thing for you to do for your mare that has heaves is to give very little hay, and sprinkle all that you do give her.

C. L. BARNES.

The "old reliable" KANSAS FARMER is an efficient assistant on the farm.

The Apiary

Apiary.

Bees have wintered fairly well in all parts of Kansas, but the danger of loss from starvation, at the close of the three winter months has by no means past. In fact, during March and April bees often require not only a little stimulative feeding but in many cases the supply of honey has been consumed, and unless the beekeeper looks after this matter the bees will starve. During April and the fore part of May, fruit bloom will afford some honey, if the weather is not too cold for bees to be on the wing or too wet for the flowers to yield honey. To feed bees, a good grade of granulated sugar may be dissolved in water, say two pints of sugar to one pint of water. Let the water be luke warm and stir until the sugar is dissolved. In feeding this syrup, blow a little smoke into the hive through the entrance. Then open the hive, lift one or two empty combs out, lay them on their sides, and pour the syrup into the cells until filled. Then return them to the hives and close as soon as possible to prevent robbers from attacking the colony.

Hives should be gotten ready for swarming time now. Do not neglect this matter until the swarms begin to issue.

Different sorts of hives are made and offered for sale but none are superior to the standard ten-frame Teangstroth hive. It is by far the most common in use among our most expert and successful beekeepers. If beekeepers can persuade farmers not to cut their alfalfa until in full bloom it will be best for both. Alfalfa cut when just beginning to bloom does not cure near so readily, nor make as good a hay as it does when full grown. Nor does it afford near so much honey when cut too soon.

G. BOHREK.

Rice County,

Stock Interests

The T. K. Tomson & Sons Shorthorn Sale.

At Manhattan, Kans., on Thursday, March 21, T. K. Tomson & Sons, of Dover, Kans., held their first public sale of Shorthorns from the herd which has been made famous by Gallant Knight. The offering consisted of twenty-three females and fourteen bulls, and the sale was characterized by a wonderful evenness of prices which was equalled only by the evenness of the cattle. For many years the Tomsons have been conspicuous winners in the exhibition rings of the great Western fairs and of the American Royal and of the International, and their great herd-bull, Gallant Knight, stands high in the esteem of all lovers of good Shorthorns.

The sale cattle in this first annual sale were practically all of home breeding. Only a few head were sold that were not bred by the Tomsons themselves. They had the pleasure of securing an average price in this sale that was well high double that reached by recent sales in the same section of the State, and of having a sale in which but three animals sold for less than \$100.

The sale was conducted in the college sale pavilion, which is the best that can be afforded by that institution, but which is so dark and so inconveniently located that it served to strongly emphasize the need of the college for a suitable sale and judging pavilion such as was asked for at the last Legislature. A considerable number of pure-bred cattle sales have been held in this pavilion recently, but the Tomsons made the highest average ever made in a public sale in Manhattan.

The sale was conducted by Cols. Geo. P. Bellows, of Maryville, Mo., and L. R. Brady, of Manhattan, who make a very successful team in the sale ring, and who are among the auctioneers most rapidly gaining public favor. The top of the female sale was brought by Mary Belle, by Lord Mayor 12727, who went to Chris. Wilson, of Glasco, Kans., for \$280. The top of the bull sale was Bold Lavender by Gallant Knight, who sold to A. C. Geer, Waldo, Kans., for \$250. At the close of the sale Professor Kinzer of the animal husbandry department decided to offer one of their bull calves that was sired by Prince Pavonia, owned by C. S. Nevius, Chiles, Kans. This calf sold to Frank Fox, Wamego, Kans., for \$132.50. The twenty-three females in the sale brought \$3,785, an average of \$164.32. The fourteen bulls brought \$2,032.50, an average of \$145.18. The thirty-seven head brought \$5,817.50, an average of \$157.23.

One of the strongest bidders at the sale and one who carried away with him many of the best animals offered was H. M. Hill, of Lafontaine, Kans., who is one of the best-known Shorthorn breeders of the State, and especially of the southeastern portion where his cattle are best known. Another good bidder was Chris. Wilson, of Glasco, who showed a strong preference for Gallant Knight stuff.

The sales were as follows:

FEMALES.	
Harmony 17, H. M. Hill, Lafontaine.	\$260.00
Silence, Chris. Wilson, Glasco.	200.00
Doris, H. M. Hill.	185.00
Doris Archer, H. M. Hill.	105.00
Nuisance, Chris. Wilson.	175.00
10th Norwood Rose, G. H. Hasbrook, Clayton, Neb.	210.00
Myrtle, Chris. Wilson.	140.00
Jolly Maid, Chris. Wilson.	190.00
Lena, Chas. McClary, Beloit.	280.00
Elsie Richmond, E. B. Booker, Beloit.	135.00
Ruth Snyder, Chris. Wilson.	120.00
Rose Sterne 3d, Chris. Wilson.	105.00
Susan 4th, Chris. Wilson.	100.00
Miss Otis, Chris. Wilson.	140.00
Marian, G. H. Zuck.	195.00
Miss Edna, Chris. Wilson.	160.00
Ruth, E. B. Booker.	100.00
Mary Belle, Chris. Wilson.	280.00
Little Beauty, E. B. Booker.	195.00
Miss Lena, C. M. Garver & Son, Abilene.	190.00
Adella, Chris. Wilson.	125.00
Frances, Chris. Wilson.	105.00
Emma Richmond 3d, Chris. Wilson.	110.00
BULLS.	
Vice President 253922, A. H. Cooper, Natoma.	\$175.00
Gallant Victor, J. W. Lamb, Holton.	235.00
Bold Lavender, A. C. Geer, Waldo.	250.00
Lavender Knight, A. F. Huse, Manhattan.	185.00
Hardy Knight 264152, H. M. Hill, Chiles.	210.00
Goden Bloom, C. S. Nevius, News Boy 264154, Warren Watts, Clay Center.	125.00
Ruler, O. R. Thomas, Bala.	155.00
Ensign, Geo. Keefer, Manhattan.	100.00
Red Lord, Geo. Siefert, Tonganoxie.	67.50
Master Archer, H. M. Farrar, Astell.	75.00
Bright Knight, Jas. Rickson, Junction City.	160.00
Belmont, G. D. Stratton & Son, Walton.	105.00
Designor, H. M. Hill.	140.00
	60.00

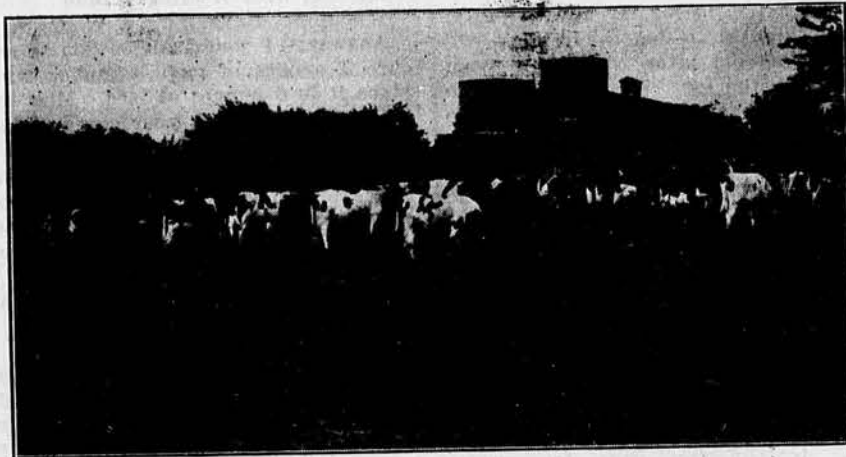
Guthrie's Berkshires.

T. F. Guthrie, of Saffordville, Kans., who owns the famous Guthrie Berkshires from among which Ivanhoe was taken to win the grand championship at the American Royal last fall, and who has more of Black Robinhood blood in his herd than any other now called to mind, makes a change in his advertisement this week in which he calls special attention to the fact that he has a very choice lot of young boars that were sired by Revelation 88906, Berryton Duke 72946, Lord Premier 50601, and Richard Masterpiece 96670. Of all the Black Robin Hoods, Revelation is the greatest, and will

probably weigh 1,000 pounds in the show ring this fall. Berryton Duke is the great son of Masterpiece, now at the head of Sunnyslope Herd at Emporia. Richard Masterpiece is the son of old Masterpiece, the greatest Berkshire boar that ever lived, and Lord Premier is almost equally widely known. In his recent sale Mr. Guthrie made an average of \$107 on his sows, and the boars are made of the same material. He has a number of Revelation pigs that are good enough for any company, and four sons of the great Lord Premier that are litter brothers to his prize-winning under-a-year pig, General Premier, that won at the Royal last year. He also has two extra good sons of Berryton Duke, a litter brother of Masterpiece, and a few by Richard Masterpiece, who is the best breeding son of the great hog. Revelation is said to be the best breeding Berkshire boar in existence to-day.

A Prize-Winning Percheron for Kansas.

On the first page of THE KANSAS FARMER this week will be found a picture of the Percheron stallion, Sans Pour (53063) 41831, which has just been purchased by Troutman & Stone, of Topeka, for their Silville farm. Sans Pour was foaled March 1, 1901. He was bred by M. Lebert, Canton of Droue, Department of Lyr et Cher. He was sired by Castelar (42638), dam



Some of the matrons in the fine herd of Holsteins owned by H. B. Cowles, Topeka, Kans. Photograph by The Kansas Farmer man.

Rigolette (49958), and traces to Brilliant 3d (2919). This horse has the approval of the French Government, and his great width, short legs, and very heavy bone give him in an extraordinary degree all the qualities sought for in a draft horse sire. Both his breeding and his individual merit are the best that could be found in France, and his immediate ancestors on both sides were the greatest prize-winners on each side of the Atlantic. His sire won first prize at the Paris Exposition. Sans Pour is unquestionably one of the best horses that was imported from France in 1905. He is of great size but very shapely and full of quality. We are not informed as to what price was paid by Troutman & Stone for this horse but understand that it was a long one. The new owners have decided to translate his name into English, and hereafter he will be known as Fearless.

Not only are the farmers in the vicinity of Silville to be congratulated on the acquisition of a horse of such quality in their neighborhood, but the whole State should feel proud that what is probably one of the best Percheron stallions to-day finds his home within her borders.

The Stock-Breeders' Annual.

The next edition of the Stock Breeders' Annual and Kansas Breeders' Directory will go to press in a few days. It will be issued hereafter biennially until we have a Legislature sufficiently wise and just to provide for its annual publication. At present the membership of the Kansas Improved Stock Breeders' Association numbers nearly one thousand members, and is able to get out an edition large enough for use of its members. Every breeder of pure-bred stock is eligible for membership at a cost of only \$1 per year. The 1906-7 Annual will contain the proceedings of the sixteenth and seventeenth annual meetings, also the Kansas Breeders' Directory, which will contain an alphabetically classified directory of all the members. Each breed of stock will have a separate classification.

This forthcoming biennial Stock-Breeders' Annual will constitute a veritable manual for the breeder and stock-raiser well worth a dollar to any one, and the advertisement each breeder receives in the Kansas Breeders' Directory is worth at least \$2, but the members receive it free. The price of this Annual is \$1, with special rates for quantity lots.

For further information, or membership blanks, address: Secretary H. A. Heath, 625 Jackson St., Topeka, Kans.

Capitol View Stock Ranch.

G. E. Clark, proprietor of the Capitol View Stock Ranch, Topeka, Kans., was the heaviest buyer of pure-bred Galloway cattle at the Dean Bartlett sale held at St. Marys, Kans., March 21. He bought sixty-three head of Mr. Bartlett's choicest young females. These added to his present holdings will give him one of the strongest Galloway herds in the West. It will be remembered that Mr. Clark purchased the Galloway bull, Meadowlawn Medallist, at the American Royal last fall. This great young bull was sired by imported Worthy 3d, and has made a wonderful record as a show bull. He has taken several championships and firsts at the leading cattle shows

and State fairs of the country, including the Minnesota State Fair, Missouri State Fair, and American Royal 1906, and is considered by competent judges to be one of the best Galloway bulls in the United States.

Mr. Clark is a careful breeder, and is developing one of the choicest herds of Galloways in the West.

Bartlett's Dispersion Sale.

The closing-out sale of Dean Bartlett, of St. Marys, Kans., was held as advertised. One hundred and twenty-seven head of pure-bred Galloway cattle and forty-two head of high-grade horses were sold. While the prices received were not high, everything considered, they were very satisfactory. Mr. Bartlett made no attempt to put his offering in show condition, so they passed through the sale ring in their "everyday clothes," just as they were kept on the ranch, not fat, but in good condition to go on and make good in the hands of their purchasers. The cattle were nearly all young, ranging from calves at foot to 3 years old. Only a few aged cows were sold. The horses were a mixed lot nearly all young, most of them being unbroken, and while the prices paid for them were profitable to Mr. Bartlett, they were good bargains for the buyers as well. The many friends of Mr. Bartlett regret to have him sell his ranch and go out of the business of raising

LUMBAGO AND SCIATICA



ST. JACOBS OIL

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Price 25c and 50c



START YOUR BOY RIGHT

Buy Him This \$1.00 Roosevelt

16 size, highly polished nickel watch, fitted with our latest American lever escapement movement, winds and sets in the back, is timed, tested, regulated and fully guaranteed for 1 year. Every watch warranted a correct time keeper. Sent prepaid for \$1.00. A. C. BLATZKE & BRO., 602 18th St., Milwaukee, Wis.

Well Drills and Drillers' Supplies

The best on the market. Manufactured by THATCHER & SONS, Stillwater, Oklahoma. Write for circulars and prices.

first-prize White Plymouth Rock cockerel at the Anthony, Kans., Fair, whose score was 98 1/2. This bird is owned by Chas. C. Fair, owner of the Blue Ribbon Stock Farm, on which is bred large, snow-white Plymouth Rocks and Poland-China hogs. Mr. Fair's advertisement appears in another column, and the demand for the class of White Plymouth Rocks that he is breeding has been very strong. Our readers will meet with fair treatment and prompt service from Mr. Fair.

J. F. Staadt, of Route 3, Ottawa, Kans., a breeder of Duroc-Jersey hogs and Shorthorn cattle, writes that he has sold all his bred sows that he can spare, and he is now offering fall pigs only. His herd of Durocs is headed by Long Wonder 21867, first prize winner at the Nebraska State Fair in 1904, and he expects to have some pigs by this great boar to sell soon. As it is his hog business has been good and his customers satisfied, and he is now shipping stock to breeders who have been annual purchasers of Durocs from him for several years. Many who patronized Mr. Staadt when he first began breeding Durocs are still his best customers. Notice the change in his advertisement, and write what you want.

On Wednesday, March 20, at City Center, Kans., C. W. Dingman, of that city, and J. J. Ward, of Belleville, held a joint sale of Poland-Chinas which was very satisfactory. In every way, and which was followed by a banquet given by the sellers at the Hotel Boham. Col. L. R. Brady, of Manhattan, who was one of the auctioneers in charge of the sale, acted as toastmaster very acceptably, and assigned the toasts and guided the speechmaking with a master hand. As the general average for the sale was nearly \$4, both the consignors and the purchasers were feeling good, and the banquet went off in the best possible manner. The toasts covered every phase of the sale and all united in voting honors to Messrs. Dingman and Ward for the success they had achieved.

There is no breed of cattle that is more popular with farmers who have used them for beef-production than the Aberdeen-Angus. The records of the Chicago and Kansas City stock yards show that the market-toppers are very uniformly Angus cattle or of Angus blood. Perhaps it is not generally known that Kansas has the largest herd of American-Bred Angus cattle in the United States. This herd is owned by Parker Parrish & Miller, of Hudson, Stafford County, and has long been prominent for the prizes it has won. The sales it has made, and the sensational purchases which have changed the blood lines from time to time. This herd has been headed by Hale Lad 30645, who is himself a prize-winner in numerous shows, including the International at Chicago. Hale Lad is ably assisted by Japan 1to 55383, who is the first and greatest son of Prince Ito since his importation. The herd numbers about 400 head, and from the great number the owners are always able to select animals with which they can appear successfully in the show rings of the great Western fairs and the National expositions, and they can also select almost any kind of animal with a line of breeding to suit the purchaser. If you want a bull that will bring you market-topping prices from your common cows, go to the best herd in the country and take your pick. If you want a bull that will

Gossip About Stock.

We will send THE KANSAS FARMER, the Woman's Home Companion for one year, and the Peerless Atlas of the World for only \$2. This is the best offer for the farmers' household, for the money, that we know of. Address, Kansas Farmer Company, Topeka, Kans.

Attention is called to the change in the advertisement of S. W. Artz, breeder of registered O. I. C. swine and Standard White Wyandottes at Larned, Kans. He writes that the O. I. C. pigs are arriving daily and that he has never had them do better. He also states that he has never had finer pigs and that he is better prepared than ever to furnish stock of top breeding and individual merit. He has recently added to his herd some of the best animals that money would buy. Write him for either pigs or poultry and he will treat you right.

In THE KANSAS FARMER of March 21 appeared a picture of White Ivory, the

ring you prize-winning calves from our pure-bred Angus cows, go to this same herd and be sure that you will be satisfied, because they have the animals you want and the prices are very reasonable.

Improving Their Herd.

A. and P. Smith, of Alma, Kans., who are regular advertisers in THE KANSAS FARMER, report a splendid trade in Poland-China swine, of which they are well-known breeders. In keeping with their established policy they are constantly improving their herd. They recently purchased from C. Dingman, of Clay Center, Kans., for the long price of \$1,000, one of the finest Perfection sows in the West. This sow has been bred to Meddler 2d, Frank Winn's great boar, for an April 1 litter. They also have eighteen sows of the best blood lines, bred to their good herd-boars, and are now getting some very fine pigs. They will be on the market with a rich offering this fall. Watch for their advertisement in THE KANSAS FARMER.

Globe Stock Dip.

We desire to call attention of our readers to the return of our old friends, the O. Robinson Company, of Kansas City, to the advertising columns of THE KANSAS FARMER. This company is one of the best known in the country, and the Globe Stock Dip and Stock Powder manufactured by them has always given such universal satisfaction that its sale has grown to be enormous. So many people desire to order their supplies of all kinds direct from the manufacturer that the Robinson people have decided to give their patrons the advantage of making their orders direct from the factory, and in their advertisement you will find prices quoted on Globe Dip in most any quantity. When you order from this house you are sure of getting a dip that has been tried out for many years and never found wanting. All that you have to do is to decide how much you want, look up the price, and then a check or money order for the amount, and they will ship it out to you the same day the order is received. Address all orders to O. Robinson & Co., 407 Grand Avenue, Kansas City, Mo.

Buy Stock Food Direct.

This week we are running the advertisement of the Stong Roats Stock Food Company, of St. Joseph, Mo., who are selling their product direct to the farmers. This stock food is being used regularly by a lot of farmers and feeders and they recommend it very highly. It is a good thing for every farmer to have a supply of this food on hand even if he does not feed it regularly, for there is always a time when the stock get out of condition and need a tonic just the same as the human family. Order a small sack of its feed now and try it, for we believe it will give you good satisfaction. Send all orders to Stong Roats Mfg. Company, 201 North Second Street, St. Joseph, Mo.

New Advertisers This Week.

W. Paine, Ford County land.
H. C. Carson, appendicitis.
Budeh, Callahan engine.
Long-Roats Mfg. Co., stock food.
Farmers' Handy Wagon Co., wagons.
C. S. Cross, B. Langhans.
Robinson & Co., Globe Stock Food.
J. Kern, Black Minorcas.
J. Thorne, Shorthorn bulls.
McKormer Gall Cure Co., gall cure.
Mrs. Fay Finkle, Silver Spangled Ham-burgs.
C. Blatzek, Roosevelt watch.
Holland Engine Co., engines.
Laser Mfg. Co., rebuilt engines, etc.

Grain Markets.

Kansas City, Mo., March 25, 1907. The speculative market to-day lacked activity. Trading was light all day and the fluctuations were within a very narrow range. The day started steady and rather firm under continued dry and warm weather. But after the weather predictions were posted announcing rains and colder weather for the next twenty-four hours the market once became weak and trading very cautious. The bulls and the bears got on the fence and stayed there the rest of the time. Liverpool came in a little lower at the close and the visible supply in the United States and Canada increased last week over 400,000 bushels. May opened the day steady, then sold up $\frac{1}{2}$ ¢, then under $\frac{1}{2}$ ¢, then lost $\frac{1}{2}$ ¢, and finished $\frac{1}{2}$ ¢ lower than on Saturday. July at the same time declined $\frac{1}{2}$ ¢. Corn was quiet but sold up better than wheat. There was a decrease in the visible supply last week of 500,000 bushels, and some buying by shorts. May closed the same as Saturday and July advanced $\frac{1}{2}$ ¢. Kansas City futures to-day:

WHEAT.	CORN.
May 69% July 70% Sept. 71%	May 40% July 41% Sept. 42%

Store: Wheat, 3,751,000 bushels; corn, 566,700 bushels; oats, 37,300 bushels; rye, 10,000 bushels.

Receipts—Receipts past forty-eight hours, 170 cars; shipments, 57 cars; receipts same time last year, 31 cars; shipments, 25 cars. Inspections Saturday, 95 cars. The market for cash to-day was much the same as on Friday. All good milling wheat was in very good demand and steady. Low grades, however, were dull and weak. The receipts and buyers disappointed against them. The visible supply in the United States and Canada increased last week 419,000 bushels. Liverpool came in $\frac{1}{2}$ ¢ lower at the close and the world's shipments were much heavier than estimated. The primary receipts were 904,000 bushels against 827,000 bushels the day last year; shipments 209,000 bushels. Export clearances from the four Atlantic ports, 273,000 bushels. In Chicago, May closed $\frac{1}{2}$ ¢ lower than on Friday, and here the same option

lost $\frac{1}{2}$ ¢. By sample on track here at Kansas City: No. 2 hard, 1 car Turkey 74c, 2 cars Turkey 72c, 1 car dark 72c, 6 cars 71 $\frac{1}{2}$ ¢, 4 cars 71c, 6 cars 70 $\frac{1}{2}$ ¢. No. 3 hard, 2 cars 72 $\frac{1}{2}$ ¢, 4 cars Turkey 72c, 2 cars 70 $\frac{1}{2}$ ¢, 1 car like sample 70c, 1 car like sample 67c. No. 4 hard, 1 car 68c, 3 cars 67c, 1 car 66 $\frac{1}{2}$ ¢, 1 car 65 $\frac{1}{2}$ ¢, 4 cars 65c, 4 cars 64c, 1 car 62 $\frac{1}{2}$ ¢, 1 car 62c, 4 cars 61c, 4 cars 60c, 2 cars 58 $\frac{1}{2}$ ¢, 4 cars 57c. Rejected hard, 1 car 62c, 1 car 57 $\frac{1}{2}$ ¢, 1 car 57c, 9 cars 56c, 1 car 52 $\frac{1}{2}$ ¢, 1 car 52c. No. grade, 1 car live weevil, 59c. No. 2 red, 1 car 75c, 3 cars 74 $\frac{1}{2}$ ¢. No. 3 red, nominally 67 $\frac{1}{2}$ ¢. No. 4 red, nominally 60 $\frac{1}{2}$ ¢, 1 car 65c. Rejected red, 1 car 60c. No. 2 mixed wheat, 1 car 71c. No. 3 mixed, 1 car 69c. No. 4 mixed, 4 cars white, 62c. No. 2 white spring, nominally 70 $\frac{1}{2}$ ¢. No. 2 durum, 2 cars 67 $\frac{1}{2}$ ¢.

Corn.—Receipts past forty-eight hours, 130 cars; shipments, 39 cars; receipts same time last year, 16 cars; shipments, 15 cars; inspections Saturday, 50 cars. The market to-day showed very good life, but prices were again lower, most sales showing a decline of $\frac{1}{2}$ ¢. The receipts were the largest for some time, which enabled buyers to successfully squeeze prices. Home dealers and order men both wanted supplies, but at the same time bid lower under the influence of the freer offerings. The visible supply in the United States and Canada decreased last week 492,000 bushels. But this had no influence upon price-making. Liverpool came in $\frac{1}{2}$ ¢ lower at the close. The primary receipts were 993,000 bushels, against 602,000 bushels the same day last year; shipments, 535,000 bushels. Export clearances from the four Atlantic ports, 786,000 bushels. In Chicago, May closed $\frac{1}{2}$ ¢ higher than Saturday, while here the same option finished unchanged. By sample on track here at Kansas City: No. 2 mixed, 2 cars 41c, 6 cars 40 $\frac{1}{2}$ ¢, 1 car 40c, 1 car 40 $\frac{1}{2}$ ¢; No. 3 mixed, 2 cars 38 $\frac{1}{2}$ ¢, 1 car 38c, 1 car 37c, 1 car 37 $\frac{1}{2}$ ¢, 1 car 37 $\frac{1}{2}$ ¢, 1 car 37c; no grade 40c, 11 cars 39 $\frac{1}{2}$ ¢, 8 cars 39 $\frac{1}{2}$ ¢; No. 4 mixed, 2 cars 37 $\frac{1}{2}$ ¢, 1 car 37c; no grade 2 cars 33c, 1 car 32c; ear corn, 1 car 41c; No. 2 yellow, 1 car 41c; No. 3 yellow, 10 cars 40 $\frac{1}{2}$ ¢; No. 4 yellow, 5 cars 39c, 1 car 35 $\frac{1}{2}$ ¢; No. 2 white, 1 car 42 $\frac{1}{2}$ ¢; No. 3 white, 1 car 42c, 5 cars 41 $\frac{1}{2}$ ¢, 5 cars 41 $\frac{1}{2}$ ¢, 10 cars 41 $\frac{1}{2}$ ¢; No. 4 white, 3 cars 40c.

Oats.—Receipts past forty-eight hours, 21 cars; shipments, 23 cars; receipts same time last year, 7 cars; shipments, 14 cars; inspections Saturday, 11 cars. A very good market was had for this grain to-day and values were steady. The receipts were the best for several days. But they were all wanted. Home dealers and order men were both buying and the tables were cleared without trouble. The visible supply in the United States and Canada decreased last week 561,000 bushels. This helped to encourage buyers and offset the weakening influence of the decline in corn. In Chicago, May closed the same as Saturday, while here there was nothing doing in a speculative way. By sample on track here at Kansas City: No. 2 mixed, nominally 40 $\frac{1}{2}$ ¢, 1 car 40 $\frac{1}{2}$ ¢; No. 3 mixed, nominally 40 $\frac{1}{2}$ ¢, 1 car 40 $\frac{1}{2}$ ¢; No. 4 mixed, nominally 39 $\frac{1}{2}$ ¢, 1 car 39 $\frac{1}{2}$ ¢; No. 2 white, 3 cars 42 $\frac{1}{2}$ ¢, 2 cars 42c, 1 car color 42c, 2 cars color 41 $\frac{1}{2}$ ¢; No. 3 white, nominally 41 $\frac{1}{2}$ ¢, 1 car 41 $\frac{1}{2}$ ¢, 3 cars 41 $\frac{1}{2}$ ¢, 4 cars color 41 $\frac{1}{2}$ ¢; No. 4 white, nominally 40 $\frac{1}{2}$ ¢.

Rye.—Receipts past forty-eight hours 2 cars; shipments, 1 car; receipts same time last year, none; shipments, 1 car; inspections Saturday, 1 car. There was a fair demand to-day, but values were lower. By sample on track here at Kansas City: No. 2, 2 cars 62c; No. 3, nominally 60 $\frac{1}{2}$ ¢.

Barley.—No. 3, 2 cars 54 $\frac{1}{2}$ ¢ and 3 cars 54c.

Flour.—Steady but slow sale. Quotations: Hard winter patents, \$3.70 @ 3.90; straight, \$3.40 @ 3.60; clears, \$2.85 @ 3.25; soft patents, \$3.85 @ 4.15; straights, \$3 @ 3.20; clears, \$3 @ 3.10.

Cornmeal.—Dull and weak. Quoted at 94c per cwt., sacked.

Corn Chop.—Weak and slow sale. Quoted at 81c per cwt., sacked.

Flaxseed.—Receipts, none; same time last year, none. Unchanged, at \$1.12, upon the basis of pure.

Bran.—Slow and lower. Mixed, 92 $\frac{1}{2}$ ¢ @ 93c per cwt., sacked; straight bran, 92c; shorts, 94¢ @ 96c per cwt., sacked.

Cottonseed-Meal.—At all points in Kansas and Missouri, taking Kansas City rates, \$25.50 per ton in carlots.

Castor Beans.—In carlots, \$1.35 per bushel.

Ground Oil-Cake.—Carlots, \$27; 2,000-pound lots, \$28; 1,000-pound lots, \$14.50; 100-pound lots, \$1.50.

Seeds.—Timothy, \$3 @ 4 per cwt.; red clover, \$8 @ 12 per cwt.; alfalfa, \$9 @ 12 per cwt.; cane, 90¢ @ 1.02 per cwt.; Kafir-corn, 75¢ @ 79¢ per cwt.; millet, German, \$1.15 @ 1.20 per cwt.; common, \$1.05 @ 1.10 per cwt.

Broomcorn.—Quotations: Choice green, self-working, \$80; good green, self-working, \$75; slightly self-working, \$70; red tipped, self-working, \$60; common self-working, \$50.

Kansas City Live-Stock Market.

Kansas City, Mo., March 25, 1907. Last week closed with heavy beef steers dull, and 15¢ @ 20¢ lower for the week, medium weights 5¢ @ 15¢ lower, while steers under 1,250 pounds remained steady and in strong demand. Cows, heifers, and butcher stuff generally sold stronger toward the close of the week, stockers and feeders not much changed. The supply is 13,000 head to-day, market steady on heifers, calves, and the best country grades, other cattle 5¢ @ 10¢ lower. Hot weather is responsible for the slump in demand for heavy steers, and a break of 1¢ @ 3¢ per pound in hide values last week and declining markets for fat and other by-products were other bad features. Apparently there remains a large percentage of fed cattle yet to be marketed in the near future, and little prospects are held out for any gain in prices at present. Receipts for March so far show a substantial increase over same period last March, although March last year held the record for that month in cattle receipts here.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small want or special advertisements 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.

CATTLE.

YOUNG ABERDEEN-ANGUS CATTLE for sale at bargain prices, especially bulls of serviceable age. T. R. Culver, Garnett, Kans.

FOR SALE—5 registered Shorthorn bulls from 17 to 19 months old, of high Scotch breeding; bulls in fine condition. John J. Thorne, Kinsley, Kans.

FOR Red Polled bulls or heifers, write to Otto Young, Utica, Ness County, Kans.

WANTED—Angus cows or heifers, two car loads or more; also two bulls of same breed. These cattle must be good grade and in healthy condition. Can use a few pure-breds. Address: Langley Ranch, Morland, Graham Co., Kans.

BULLS FOR SALE—4 Cruickshank-topped Shorthorn bulls. Would trade one for herd bull or exchange all for Ford County land. W. P. Burnett, St. John, Kans.

DOUBLE-STANDARD POLLED DURHAM BULLS—Extra good quality, well bred, good color. Address C. M. Albright, Overbrook, Kans.

FOR SALE—Bull calves from prize-winning Holstein cows. Good ones and cheap to early buyers. Hughes & Jones, Route 2, Topeka, Kans.

SPECIAL SALE—5 straight Cruickshank Shorthorn bulls for sale at bargain prices for quality. H. W. McAfee, Topeka, Kans.

ABERDEEN-ANGUS CATTLE and Percheron horses. Stock for sale. Garret Hurst, breeder, Peck, Sedgewick County, Kansas.

POULTRY.

COLLIE PUPPIES—Two litters richly bred, eligible to register. Parents are workers. Pedigree with each sale. M. S. Kohl, Benton, Kans.

RINGLET BARRED P. ROCK EGGS—\$1 per sitting of 15; \$4 per 100. Mrs. R. Kingham, Route 3, Smith Center, Kans.

S. C. BROWN LEGHORNS—3 first premiums at three shows the past season. Eggs \$1 per 15. Cedar Hill Poultry Farm, S. M. McHarg, Wakita, Grant County, Okla.

BARRED P. ROCKS EXCLUSIVELY—Superior winter-laying strain, voted for size and quality. Eighteen years careful breeding. Eggs \$1 per 15; \$1.75 per 30. E. J. Evans, R. 4, Fort Scott, Kans.

Choice steers are extremely scarce to-day, bulk of sales going at \$4.75 @ 5.25, with prime steers worth \$5.75 @ 6.25. Spring, like weather always shifts the demand to lighter cuts of beef, favoring heifers and yearlings most. Cows sell at \$2.75 @ 4.50, heifers \$3.75 @ 5.25, yearlings last week up to \$5.40. Veal calves sell at \$6 @ 7, heavy calves \$3.50 @ 4.50, bulls \$3.25 @ 4.25, stockers \$3.75 @ 4.90, feeders \$4.60 @ 5.20.

Although hog prices are going down rapidly and regularly, and the run is liberal, there does not seem to be any panic among shippers to get in before the bottom is reached. The quality averages as good as could be desired any time. Conservative traders look for a check in the decline when \$6 is reached, and not much before that time. Run is 9,000 to-day, market 10c lower, late sales sometimes worse than that, top \$6.15, bulk of sales \$6.05 @ 6.15. Heavy hogs are now 2 $\frac{1}{2}$ ¢ @ 5c below medium and light weights.

Run of sheep and lambs is 13,000 to-day, market steady. The market declined 10¢ @ 20¢ last week, due mainly to mean markets elsewhere, as the supply was moderate here, at 37,000 head. Top lambs to-day sold at \$7.80, other sales at \$7.65, against \$7.75 @ 7.85 last Monday. Wethers are worth \$5.60 @ 6, yearlings \$6.15 @ 6.70, ewes \$5.35 @ \$5.60. J. A. RICKART.

South St. Joseph Live-Stock Market.

South St. Joseph, Mo., March 25, 1907. While the conditions of trade on the closing days of last week were not such as to call out liberal receipts for the first days of this week, the opening market found no diminution compared with a week ago. Condition of the beef market is not such as to stand this heavy run of cattle without further depression in prices. The demand here to-day was slow with steers selling generally weak to 10c lower, and everything in the cow and heifers line 10¢ @ 15¢ lower. Offerings included some of the best steers that have been sold on this market within the last several weeks, well-finished, heavy beefs on choice order, selling at \$5.75 @ 6, but the bulk of offerings were of the light to medium weights, and fair to good qualities selling in a range of \$4.75 @ 5.40, with common light killers going at \$4.25 @ 4.60. The market for stock cattle was sympathetic with trade in fat steers, and prices were generally around a dime lower.

The market for hogs was also liberally supplied at all points, and there was a continued movement in the downward movement of prices that has been noted now for the past two weeks. Local prices were 7 $\frac{1}{2}$ ¢ @ 10c lower than the close of last week, while Chicago reported 10¢ @ 15¢ lower market. The demand was quite active at these declines, and supply was bought up at an early hour of the day. It is considered in trade circles that the talk of a railroad strike affecting all Western roads has already begun to have some effect in forcing prices towards a lower level, as packers do not care to carry big stocks of meats with the country paralyzed with labor disturbances. The bulk of hogs here to-day sold at \$6.07 $\frac{1}{2}$ ¢ @ 6.10, with tops making \$6.12 $\frac{1}{2}$ ¢.

The receipts of sheep and lambs were quite liberal at this point, but the total in sight at leading markets was only moderate. The demand proved very good and sales of lambs were unevenly strong to 15c higher, with light weights making \$7.85, and a good class of heavier weights at \$7.60 @ 7.80. The market for ewes was about steady with \$5.40 @ 5.50 taking the bulk. WARRICK.

HORSES AND MULES.

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 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.

WANTED A PONY—From 4 to 6 years old. Write giving full description and price to Richard S. Righter, 1220 Fillmore St., Topeka, Kans.

FOR SALE—One imported Belgian stallion, one Canadian Coach stallion, one Mammoth black jack and two Mammoth Jennets. Mrs. L. R. Walbridge, Williamstown, Kans.

FOR SALE—A good 4-year-old jack, black with white points, 14 $\frac{1}{2}$ hands high. Has been tried and is a good performer and sure. G. A. Reinhardt, Silver Lake, Kans.

FOR SALE—Eleven head of jacks and stallions. Jacks Kentucky and Tennessee bred. Big ones. Two draft stallions. One registered saddle stallion. Farm 8 miles north of Concordia, Kans. Chas. Griffin, Hydal, Kans.

FOUR big young jacks for sale. Address Geo. Siders, Bayard, Allen Co., Kans.

TWO JACKS FOR SALE—3 and 4 years old. Missouri bred. Address S. C. Hedrick, Tecumseh, Kans.

FOR SALE—At reasonable prices, Black Imported Percheron stallions. E. N. Woodbury, Cawker City, Kans.

FOR SALE—One black team, 6 and 7 years old, weight 2800 pounds. Mr. and Mrs. Henry Schrader, Wauneta, Kans.

SWINE.

FOR SALE—Forty Duroc sows and gilts, bred for March and April farrow. Also sows with litters. R. O. Stewart, Alden, Kans.

FOR SALE—Poland-China bred gilts, also 4 extra July boars. Have a number of Holstein milk cows and springers. Address Jas. B. Zinn, Box 348, Topeka, Kans.

FOR SALE—Poland-China herd boar, O. K. Perfection 34254 by Black O. K. and out Ideal Perfection 4th 70321. He is a great sire, in fine condition. Price \$40. Address C. W. Merriam, Allysedale Farm, Topeka, Kans.

SEEDS AND PLANTS.

SEND ONE DOLLAR and receive, prepaid, 100 plants of new strawberry. Finest home garden berry ever produced. C. F. Garrett, R. 1, Brookport, Ill.

Boone County White

The largest yielding variety of white corn. Prize-winning strain. Every ear tested for growing; all failing to start 100 per cent rejected. Write for prices and particulars. J. M. Gilman, Leavenworth, Kans.

FOR PRICE LIST of the latest and best in strawberry, raspberry and blackberry plants send to Wm. Brown & Sons, Route 9, Lawrence, Kans.

FOR SALE—Re-cleaned Macaroni seed-wheat, Kubanka, sacked at \$1.25 per bushel. Two bushels sacked \$2.25. B. C. Unruh, Pawnee Rock, Kans.

Trees At bargain prices. List now ready tells all about our cleaning-up sale of choice trees. Send for it to-day. Easterly Nursery Co., Cleveland, Tenn.

SEED SWEET POTATOES—Buy direct from grower and get first class stock, also field selected seed, Hildreth Yellow Dent corn. Second year in Summer County. Seventy bushels, ear and shelled. Write for prices. W. A. Schreier & Sons, Argonia, Kans.

Pedigreed Corn BOONE COUNTY WHITE. Selected ears, \$2 per bushel, crated. Address Edwin Taylor, Edwardsville, Kans.

JUST OUT—Our New Seed Catalogue for 1907. Complete from cover to cover. Latest and best novelties in vegetables and flowers. Free copy for the asking. Send for it now and tell your neighbors also. The Barteldes Seed Co., Lawrence, Kans.

SWEETSTAKES CORN at both the Kansas State Fair and the Kansas State Corn Show was grown and exhibited by W. R. Hildreth, Altamont, Kans., who has the same kind for sale for seed.

WANTED—Alfalfa, Red Clover, Timothy, Millet, Cane seed and other field and grass seeds; also popcorn. If any to offer please correspond with us. The Barteldes Seed Co., 804 Mass. St., Lawrence, Kans.

REAL ESTATE.

An Excellent Investment.

320 acres, all but 80 being river bottom land; only 3 miles from a thriving business town on the Santa Fe in Sedgewick County. 200 acres of growing wheat, about 150 of which goes to purchaser. All but about 10 acres can be cultivated, that being cut off one corner by the Neenecah River; however, it is covered with good heavy grass. Located in an excellent farming community. This must be sold quickly and is a decided bargain at \$9000. THE NELSON REAL ESTATE CO., 137 N. Main, Wichita, Kans.

MISCELLANEOUS.

FOR SALE—Special bargains in rebuilt engines and separators. They will make you money. Write us quick before they are all sold. The Geiser Manufacturing Co., 1410 Union Ave., Kansas City, Mo.

GASOLINE ENGINE—8 and 15 horse power Calahan Engine cheap. Guaranteed. L. Bender, 1300 West 11th St., Kansas City, Mo.

ATTENTION—Farmers and Dairy-men! Increase your income by learning to make three pounds of good butter from one pound. No fake. No drugs used. Formula, \$1. Chas. McGee, Leavenworth, Kans.

WANTED—A secondhand traction engine, not less than 16 horse power. Dr. W. E. Barker Chanute, Kans.

OSAGE FENCE POSTS for sale; 2000 seasoned, 1000 just cut. W. E. Barnes, Vinland, Kans.

HONEY—For Kansas, Missouri and Oklahoma. Two 5-gallon cans, 120 pounds net—Amber \$5.40; whitest \$6. Also small cans. Comb honey in one pound sections 12 $\frac{1}{2}$ ¢. Write for price list. Nothing but genuine bees honey. Reference Kansas Farmer Co. Address Cheek & Wallinger, Props, Arkansas Valley Apiaries, Los Animas, Colo.

WANTED—Non-union moulders. Call or write Topeka Foundry, 315 Jackson St., Topeka, Kans.

LEGAL.

FRED C. SLATER, Lawyer, Topeka, Kansas. Collections made in all parts of the country. Advice given on matters by mail. Inheritances collected and estates liquidated.

DUROC-JERSEYS**Woodlawn**

We have just 10 head of spring boars left for sale and we are going to make very LOW prices for the next 30 days to close them out. They are sired by Fancy Chief 24923, the great show boar FANCY TOPNOTCHER 49539, first in class at Kansas State Fair and by PRINCE WONDER 42455. They have the size and are sure to suit you.

JNO. W. JONES & SON,

D. M. TROTT Abilene, Kans., famous Duroc Jerseys and Poland-Chinas.

SUNFLOWER HERD DUROC-JERSEY SWINE

Booking orders only for future delivery.

SAMUEL BOSTON, Smith Center, Kans.

DUROC-JERSEYS—Large-boned and long-bodied kind. Bred gilts and fall pigs, either sex. Prices reasonable.
E. S. COWEE, Route 2, Scranton, Kans.

CRIMSON WONDER HERD. All bred gilts sold out. Have a few Crimson Wonder boars left for sale yet. Will have some fine weanlings to sell by May, sired by Missouri's Wonder King, Com. Paul 3d, Crimson Challenger, Crimson Wonder. Mr. and Mrs. Henry Shrader, Wauneta, Kans.

Pigs Shipped on Approval.

200 head of Durocs, all ages, representing the blood of Combination, Valley Chief, and a son of Kant-Be-Best.
T. L. LIVINGSTON, Burchard, Neb.

Orchard Hill Herd of Duroc-Jerseys

Tried sows and gilts for sale bred to that great sire, Norton's Top Notcher by Tip Top Notcher. Also some good males. Send for private sale catalogue.
R. F. NORTON & SON, Clay Center, Kans.

DUROC-JERSEYS.

Everything of breeding age sold. We have some of the finest pigs of the breed and they will please you. Write to
Buchanan Stock Farm, Sedalia, Mo.

Peerless Stock Farm

DUROC-JERSEY HOGS
20 bred gilts, and fall pigs of both sexes for sale.
R. G. Sollenberger, Woodston, Kansas

McFARLAND BROS.,

Breeders of Champion and Grand Champion Duroc-Jersey swine. Winners at World's Fair, American Royal and State Fairs. Stock of all ages for sale
Route 1 Sedalia, Mo.

Fairview Herds Durocs and Red Polled

My herd bull, Expansion, for sale. No swine for sale now. Spring sale, February 13, 1907.

J. B. Davis, Fairview, Brown County, Kans.

Egypt Valley Durocs.

Herd headed by Egypt Lad 24023. Stock always for sale. Choice fall boars and gilts, reasonable. Also six fine gilts, bred to Lora's Lad, to farrow in April; will also sell some tried sows. Write for prices and particulars.
H. W. STEINMEYER, Volland, Kans.

Vick's Durocs are bred for usefulness. Choice young stock for sale by such great boars as Vick's Improver 47885, 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 Kansas

K. & N. Herd of Royally Bred Duroc-Jersey Swine

I have a few gilts that I will sell at reasonable prices bred for April farrow. Also a few fall boars of September, '06 farrow. Write for prices and description.

R. L. WILSON, Chester, Neb.

Lone Star Durocs

We will have over 50 fine boars for sale this fall, representing the best blood lines in the country. Orders booked after July 1, and shipments will be made to responsible parties on approval.

J. L. WILLIAMS,

Bellaire, Kansas

Otatop Herd Duroc-Jerseys

Herd composed of best blood in the west. Headed by Otatop Notcher, out of Tip Top Notcher, who weighed 1120 pounds at 18 months, and sold for \$5,000. Fall pigs for sale at reasonable prices.

JOHN W. TAYLOR,

Edwardsville, Kansas

Ward Brothers Republic, Kans.

Spring Durocs for sale sired by Model H 37967, the best son of the great Higgins Model; also Shake-spear 3d, and other noted sires; also some fall boars that will be a credit to any herd. Write for prices.

COUNTY LINE HERD OF DUROCS.

For ready sale, September and October pigs, both sexes, carrying blood of Jumbo Jr., Second Surprise, Climax and Joe; also one 2-year-old bred sow.

O. N. Wilson, Silver Lake, Kans.

DUROC-JERSEYS**Home of The Famous Fancy Herd**

Registered

DUROC-JERSEY SWINE

Concordia, Kansas

UNGLES' HOGGERS

The great preventive and cure for HOG CHOLERA. Indorsed by more good breeders than any other remedy. We also put out a Dip at \$1 per gallon, in 5 and 10 gallon cans. Freight prepaid. Guaranteed as good as any Dip on the market or money refunded. Address

UNGLES HOGGETT CO.

Lincoln, Nebraska

STAADT'S DUROCS.

FOR SALE—Young boars by Long Wonder 21867 that are extra good ones.

J. F. Staadt, Ottawa, Kans.

Oak Grove Herd of Durocs

Herd headed by Choice Goods H. 30471 by Hunt's Model, and Corrector'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.

Duroc's

47601. There are some herd headers in this lot. They are good ones and the prices are right.

GRANT CHAPIN, Green, Kansas

POLAND-CHINAS

Kansas Herd of Poland-Chinas has Kansas Perfection 41844, and W. B. C. Leghorn cockerels for sale. F. P. Maguire, Route 4, Hutchinson, Kans.

POLAND-CHINA GILTS

of last fall's farrow, at \$15 per head. Bred Plymouth Rock eggs cheap. Stock first-class every way. Address

M. C. Vansell, Muscotah, Kans.

ELM GLEN FARM POLAND-CHINAS.

Size, breed, character and fashionable breeding. Stock all ages for sale.

WM. KNOX, South Haven, Kans.

REPUBLIC COUNTY HERD OF POLANDS

The big-boned, quick-maturing type. A nice lot of crackerjack boars for sale, the useful kind. Also a few 250 pound gilts, bred for April and May farrow. Breeding up-to-date. Write O. B. Smith & Son, Cuba, Kans., and mention The Kansas Farmer.

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.

Dawley's

Poland-Chinas are a distinct type of their own. Herd headers for sale sired by E. L. 2d, Spellbinder, Grand Chief, Sunflower Perfection, On and On, Keep On, Nonpareil and other noted sires. Prices moderate and satisfaction guaranteed.

FRANK DAWLEY,

Waldo, Kansas

Maple Valley Stock Farm

The grand breeder Mo. Chip 2d is at the head of my Poland-China herd. My foundation stock is the best that money can buy and I guarantee my stock. One herd boar and a few choice May boars for sale. Correspondence solicited and visitors always welcome. Breed sow sale February 26, 1907.

C. P. BROWN, Route 2, Whiting, Kans.

Shady Lane Stock Farm.

The home of the western champion, Peerless Perfection 2d 38864. On January 22, 1907, will sell 50 fancy bred sows, bred to Peerless Perfection 2d 38864, Grand Perfection 77899 and Corrector Chief 38663, at my farm.

HARRY E. LUNT, Burden, Kans.

Yukon Polands

Spring pigs for sale sired by the great boar, Perfection Tucumseh 27989 S., and out of sows of equal breeding. Also a few choice ones by a son of Medler. Write me for full particulars.

J. B. MYERS,

Canton, Kansas

JOHN BOLLIN,

Route 5, Leavenworth, Kans.

Breeds and Sells Popular Poland-Chinas

The State and World's Fair winning boars Nemo L's Dude and The Picket in service. Bred sows and serviceable boars for sale.

POLAND-CHINAS**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.

The Useful Type of Poland-Chinas

Herd headed by Pilate Chief 43565 by Johnson's Chief 35774, and Major King 43564 by Major M. 31527, a 1000-pound hog.

E. D. Morris, Bern, Kansas

Square Deal Herd--Poland-Chinas

Herd boars: Calder's Chief by Garver's Choice, and Calder's Grand Chip by Grand Perfection 37480 out of Mo. Chip dam. Address

Wm. D. Calder, Prop., Bancroft, Kans.

Decatur County Herd Up-to-date Poland-Chinas

A choice lot of summer and fall pigs of both sexes are now offered; just the kind that the farmer selects, heavy boned, long bodied, plenty of finish. Prices reasonable; write your wants.

R. H. WEIR, Route 3, Oberlin, Kans.

CHESTER-WHITES**CEDAR LAWN BERKSHIRES**

My sows are sired by Elma Prime 64778, and Berryton Duke 72946. Boar at head of herd, Joutist Topper 76277.

Wm. McAdam, Netawaka, Kans.

Eagle Stock Farm.

Breeder of O. I. C. hogs. Young stock for sale. See or write me.

A. W. TEEVES, Prop. - - - Inman, Kans.

O. I. C. SWINE

Short, wide faced, big boned, quick maturing type. Spring pigs properly mated for sale. Write me your wants.
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World's Fair**Improved Chester-Whites**

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