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KANSAS FARMER.

Established in 1863.

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BLOCKS OF TWO.

The regular subscription price for the KANSAS FARMER is one dollar a year. That it is worth the money is attested by the fact that thousands have for many years been paying the price and found it profitable. But the publishers have determined to make it possible to secure the paper at half price. While the subscription price will remain at one dollar a year, every old subscriber is authorized to send his own renewal for one year and one new subscription for one year with one dollar to pay for both. In like manner two new subscribers will be entered, both for one year, for one dollar. Address, Kansas Farmer Company, Topeka, Kans.

THE STATE FAIR AND EXPOSITION.

The fair season is again upon us. Beginning with the Missouri State Fair which is now being held at Sedalia, and followed in the Western circuit by the Iowa State Fair next week, Nebraska the week following, and Topeka and Hutchinson the succeeding week, there will be a month of interest to the farmer and stockman. In studying the great agricultural press it is noticeable this season that very little mention is made by the breeders as to what they have in store for the visitors at these fairs. In fact a number of breeders of show animals, without whom the show circuit would seem incomplete so long have they exhibited, have left the general public in doubt as to what they will show this year or indeed whether they will be represented in the showing at all. Another feature noticeable in the announcements for the forthcoming show season is the great number of fairs and the long season covered by them. This means that the public never wearies of rightly conducted fairs. It means that there are always abundance of exhibitors and of visitors to make any real fair a success. It means, let us hope, that the old-fashioned so-called "agricultural horse trot," with its cloud of gamblers, fakirs and other disreputable classes, and a minimum or total absence of anything pertaining to agriculture, has ceased to exist or is in rapid decadence. And finally, it means that the great State of Kansas should take rank among her sisters by having a great State Fair, maintained by the State as a home battle-ground where breeders can test their strength before venturing into other States and National shows with their herds. Instead of scattering her energies and attempting to show her resources in a series of district fairs which are dependent entirely upon private enterprise with the attendant uncertainty, she should concentrate her efforts in one great exposition which would show the resources of the State. The district fairs announced for Kansas this season will doubtless be of the best and are to be encouraged by lib-

eral patronage, but they should be but the preparatory schools which find their culmination in the great university of the State fair.

IS IT A FARMING COUNTRY?

In 1870 a few Germans settled along Walnut Creek, in Barton County. The next season considerable settlements were made in the vicinity of Great Bend. A man named Bissel had the temerity in 1872 to sow a few acres of wheat on top of the bluff between Walnut Creek and the Cheyenne Bottoms. It was easily seen from Great Bend, and when the young wheat plants came through the ground there were speculations as to whether "this will ever be a wheat country." The green of the wheat was presently discernable from Great Bend. Land agents gleefully pointed to it as indisputable evidence that "this is going to be a farming country." The wheat, to the great surprise of many and to the disappointment of those who "tied to the cattle business," lived through the winter. It grew vigorously during the next spring. It matured a fair crop. It was harvested. The shocks presented a pretty appearance on the hill. That wheat did much to settle the country.

But the towns wanted to be cattle towns and even the land agents belittled the importance of Bissel's demonstration.

Barton County is this year officially credited with having produced 5,004,305 bushels of wheat. Though surpassed in acreage, Barton County is far in the lead of Kansas counties in yield of wheat. Adjacent counties have produced crops of such magnitude as to confirm Barton County's claim of being the center of the wheat belt. It is a matter of small consequence whether this part of Kansas is or is not conceded to be a "farming community" while it can produce prodigious crops of wheat and such alfalfa as has for years gladdened the heart of the owner of "domestic" cattle.

THE PANAMA CANAL.

The proposed canal which it is hoped will some day join the Atlantic and the Pacific Oceans across the narrow strip of land connecting the two Americas is again brought to public notice. The people and Government of the United States have for many years been studying the problem of the construction of such a canal. Treaties with foreign nations have been negotiated and ratified. Commissions have reported on every phase of the subject. While these things were in progress a French company under the name of DeLesseps—builder of the great Suez ship canal—secured concessions, raised money, and began the construction of a canal at the most desirable point on the American Isthmus. The attention of this country was then directed to the project of making a canal of greater length through the Republic of Nicaragua and its big lake.

The French company had exhausted its resources after spending many millions of dollars. If the United States should make a canal at Nicaragua the French investment at Panama would become unsalable and valueless. The

French company, therefore, opened negotiations for the sale of its investment and franchises to the United States.

After duly investigating the matter this country contracted to buy out the French company at \$40,000,000, conditioned on the negotiation and ratification of a satisfactory treaty with Columbia, the country through whose territory the canal route lies. The treaty was negotiated and was ratified by the Senate of the United States.

This treaty has for some time been before the Columbia Senate. That body rejected it by unanimous vote a few days ago.

The United States of Colombia, whose sovereignty extends over the canal site, is a typical Spanish-American country. Rebellions and revolutions are not strangers to any of these nations. The French company has much influence in the portions of the country most interested in the canal. There need be no surprise if, fearing the loss of the \$40,000,000 Uncle Sam is to pay, French intrigue shall foment revolution in the region, making it necessary (?) for Uncle Sam to intervene by recognizing a new government at Panama, one with which a treaty may be easily made and ratified. In any case, some way will doubtless be found to construct the canal sooner or later, for it is needed by the commerce of the world and is liable at any time to be important in handling the Navy of the United States.

A KANSAS OIL TOWN.

The marvelous is ever present in Kansas. Where but a few years ago, corn, oats and prairie-grass were supposed to represent the limit of its possibilities, Kansas now furnishes almost everything that is needful for man's comfort. The stranger within her gates is astonished at the enormous wheat-fields and their yield at the west, while the south and east hold the equally marvelous but more mysterious oil- and gas-fields as another surprise. Even the schoolboys can remember the discovery of oil and gas in Kansas, but it requires a frequent visitor to keep pace with the growth of the region in which they are produced. An illustration may be found in the city of Chanute, which is the center of one of the newer oil districts. A few years ago this town was scarcely known outside of its own county. Now it is a city of some nine thousand people with all that this statement implies. It has nearly doubled its population within the last two years. It has all the rush and boom of a prosperous gold-mining camp with little of its disturbing elements. It is a "dry" town, and would-be jointists are given employment on the street paving which is going on at a rapid rate. Large and numerous business houses are being erected and the streets are in a constant state of disruption because of the paving and the vast quantities of building material that are being used. The fuel question here is in a most satisfactory condition and beyond the reach of the coal-barons. A personal visit to one of the oil-pumping stations adjacent to the town showed its possession of fifty-one

(Continued on page 873.)

Agricultural Matters.

REPLIES FROM THE AGRICULTURIST AT THE KANSAS EXPERIMENT STATION.

To Eradicate Artichokes and Elderberries.

We have about one acre of low bottom land. It is all grown up to artichokes and elderberries, and we would like to kill them out. If somebody could give us some good advice, we would be very thankful.

We would plow the patch, sow some sorghum in it, and let it stand for the cattle to eat next winter, but I have seen in your paper that it might be dangerous for the cattle. So we would like it if you could let us know what would be best to sow in it.

M. GUNTHER.

Pottawatomie County.

If the field contains many artichokes, I think it would be well to turn a herd of hogs in, and allow them to dig for the tubers. If the elder bushes are large and well established, it would be well to fasten a chain about the clumps of bushes and hitch on a team. By a little chopping on the roots with an ax, the brush could be easily taken out in this way. However, if the elder bushes are not large, I would not go to this trouble, but would cut the brush and plow and cultivate the ground.

I think cane would be a good crop to grow on this land to choke out these plants. If you do not wish to grow it, you might try any plant which will make a vigorous growth upon your soil. Buckwheat is usually considered to be a valuable crop for such purposes. Cow-peas or rye might also be sown.

V. M. SHOESMITH.

Alsike Clover on Wet Land.

We have some land that stays wet for a long time in the spring, and are thinking of sowing it to alsike clover. At what time should it be sown, and how many bushels to the acre?

Wilson County. APOLLO BROS.

Sow alsike clover as early in the spring as a proper seed-bed can be prepared. If the ground is plowed, it should be done this fall or very early in the spring, so that it will have time to settle and make a firm seed-bed. If you must sow soon after plowing, I would advise you to thoroughly pack the soil with the subsurface packer. If your soil is in good physical condition and is comparatively free from weed seeds, it would be just as well not to plow but to use the disk harrow and other surface tools in preparation for seeding. It is quite important to have a finely pulverized seed-bed near the surface. You might be able to get a good catch of alsike clover in the fall, if the season is favorable. The same precaution should be taken in preparing the seed-bed, as stated above.

I would advise sowing about eight pounds of alsike clover per acre.

V. M. SHOESMITH.

Grasses to Prevent Gullying.

Will you kindly inform me the best source of information on the subject of preventing washing or gullying of our slope land? Is there a book or bulletin published on the subject? What grasses are best adapted to prevent washing, and what time of year and what manner is best to sow? Will redtop or Bermuda grass accomplish the desired results if sowed carefully along the edges of the gullies and in the bottoms?

The past two years have been very hard on slope land, and I have some ditches now that can not be crossed, where two years ago there was none, and I begin to feel that it is time that something was done to fill up these ditches and grass them over, as well as to prevent further washing.

Morris County. A. R. WALLACE.

Mr. F. Lamson-Scribner has a paper on grasses and soil-binders in the Year-Book, U. S. Department of Agriculture, 1894. It may be that you can secure this book, or at least some literature on this subject, from the U. S. Department of Agriculture. I am not

able to give you any other satisfactory references.

Bermuda grass, June grass, redtop, quack-grass, and Japan clover (*Lespedeza striata*) have been recommended as the best soil-binding grasses. I would advise you to try one, or preferably all of the first three mentioned above. Quack-grass is a difficult grass to eradicate, and I would not advise sowing it near cultivated fields. Fill in the gullies a little and cultivate them in some way if possible, and thus prepare the seed-bed. If the gullies are so deep and so steep on the sides that it is not possible to use any implement upon them, you might sow the seed of some of these grasses and doubtless the rain would cover some of the seed, and if the conditions were favorable, you might be able to get a fair catch in this way. I would prefer sowing in the spring, and as early as possible, still there is considerable danger of the gullies being washed deeper if the stand of grass is not secured as soon as possible. Under these circumstances, I would try sowing in the fall.

V. M. SHOESMITH.

Pasture Questions.

Last spring I sowed five acres of my wheat to English blue-grass and got a good catch; I have just mowed the wheat stubble and weeds. The grass has not grown much but is about two inches high, green and healthy looking. I felt good over this until the professor said in some of his letters that it was not blue-grass at all but meadow-fescue and would last only a few years when it should be plowed up and run to some other crop for a year or two and then reseeded. This is a sad disappointment but I must have more pasture, so I am now preparing five acres for *Bromus inermis*, but yesterday I met a farmer friend at a cattle sale and speaking of pasture told him that I was going to have a pasture of brome-grass. He replied, "I wish you had mine and I had something better."

He then said, "I sowed a strip of brome-grass in my calf pasture and an equal strip of rye, and this spring a strip of oats. The calves ate the oats and rye all up but not one blade of brome-grass, so I mowed the brome-grass and put the hay in the barn for the work-horses, but they would not touch a spear of it. Now I will try to get them to lie down on it. Now this is my case, what have you to say?"

Let me ask, can I sow Kentucky blue-grass and clover on my English blue-grass and expect any catch? I dare not disk it. I sowed a lot of white clover with the English blue-grass but don't see a leaf. Would red clover do better? Kentucky blue-grass will live through. I sowed some ten years ago. It has been pastured heavily but it spreads every year. Good in early spring and late fall but nothing when it is dry and hot.

Saline County. L. F. PARSONS.

If you have a good stand of English blue-grass (meadow-fescue) you do not need to feel disappointed, as you have a grass that you will be able to use to very good advantage. I do not understand your friend's experience with *Bromus inermis*, as it is quite contrary to our experience at the Experiment Station. Oats and rye when young make an excellent pasture which is relished very much by stock. Evidently the calves of which you spoke preferred it to *Bromus inermis*. We have been pasturing some young stock, ranging from 9 to 18 months of age on *Bromus inermis* this season. Although I can not say that these calves prefer the *Bromus inermis* to Kentucky blue-grass, or prairie-grass, yet they eat it with a relish.

We have also used *Bromus inermis* for hay and like it very much. We have fed it to horses and cattle of various ages and in all cases they have seemed to like it. Perhaps your friend allowed the grass to get too ripe before it was cut. If this was the case the grass would be less nutritious and less readily eaten by the stock than if cut at the proper time. I do not know of any grass which I would more readily recommend for your section of the State than *Bromus*

inermis. It is an excellent drouth-resister, shoots up early in the spring, has a good aftermath, and holds out well in the fall.

I would not advise sowing Kentucky blue-grass and clover in your English blue-grass if you have a good catch. It would be better to prepare another field and seed to *Bromus inermis* or to a mixture of grasses and clovers. It is well to have a large mixture for permanent pasture for several reasons. Some of the grasses will spring up especially early in the spring, others will grow during the summer and still others will hold out well in the fall. The different grasses take different proportions of the food elements from the soil so that a larger total yield is secured. Such a mixture is also able to withstand the extremes of wet and dry seasons much better than a single grass.

Legumes sown in such a mixture will act as host plants to the other grasses and secure a portion of their nitrogen from the air in the soil and by decomposition leave it in a form available for the other grasses. If some of the legumes or grasses die out you will still have other grasses left to provide pasture for a few years, or until you wish to plow it up and reseed.

I think a good mixture for Saline County would be *Bromus inermis*, orchard-grass, meadow-fescue, and red clover. If you wish you might also add Kentucky blue-grass.

V. M. SHOESMITH.

Experience with Mammoth Clover.

EDITOR KANSAS FARMER:—I am moved by the reply to John M. Hillmon to give you my experience with mammoth red clover. I have been raising it six years, with good success. I like to sow on fall or very early spring plowing that has been well packed, twelve or fifteen pounds of seed to the acre, with press drill. Sow as soon as danger from frost is past. Clip off weeds about the last of June. Cut first year (not too low) for hay in September. I never sow with nurse crop. When I want seed I cut for hay about June 15, when about one-half the heads are turning brown, and cut second crop for seed in September. First crop will have some seed but not as much as second crop, on account of lack of bees. You can get more seed from second crop than from first and be a cutting of hay ahead.

Mammoth clover will produce seed when the plant is two years old and then die; but if cut for hay before seed ripens it will sprout again from old stump. I am cutting my second crop of hay this year from stumps six years old. The old reliable KANSAS FARMER talks alfalfa before breakfast and after supper, and all the time. Now, please say a good word once in a while for red clover. My farm is both red and black upland, but the black land grows the finest hay.

Corn in this part of Wilson County is mostly just coming into roasting ears and is very fine. Hay is not yielding quite so well as last year.

Wilson County. WESLEY KNAUS.

Alfalfa Questions—Sheep for Weeds.

EDITOR KANSAS FARMER:—I have been considerably interested in the alfalfa discussion carried on in your paper. I have noticed a peculiar phenomenon in alfalfa this season. I had a small field of alfalfa between three and four acres sown in the spring two years ago. I began cutting my first crop after the continued wet weather, the latter half of June. I cut only three or four rounds when I had to quit for a week. Now it is grown up and is ready to mow again; will make a fair crop. But the peculiarity about it is that while the latter cutting is all right, the first strip around the whole field is dwarfed, having made almost no growth, is a sickly yellow color and crab-grass and foxtail have taken complete possession. Now, can any of the readers of the KANSAS FARMER tell why a few days earlier or later in cutting should have made such a marked difference? This field is a fairly good stand and produced two good crops of hay last year; is on upland of rather poor, or thin, clay loam.

A Wagon's Worth



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I do not know whether or not the soil has the alfalfa bacteria, but think it has, for the alfalfa generally in this part of the country is of good color and thrifty looking.

This piece of alfalfa was ready to cut two or three weeks before, but owing to the wet weather it was impossible to get on the ground.

What can be done to prevent the ravages of the web-worm? Two weeks ago the alfalfa was badly infested with them, a week later none could be found. They had eaten many of the leaves, and almost every stalk had one or more webs.

In last week's issue of the FARMER was a question from a Wilson County farmer about killing out the weeds in an old pasture. I think he can clear up his pasture and at the same time make a profit out of his weeds by putting in some sheep. Let the grass have a good start in the spring before turning in the sheep. They will then prefer the weeds and will eat the tender leaves and buds and in course of a year or two will practically clear up the pasture, providing you have enough sheep. Sheep like nearly every kind of weed and prefer them to grass.

C. J. REED.

Pottawatomie County.

Experience With Winter Oats.

EDITOR KANSAS FARMER:—In your issue of August 6 is an inquiry in regard to winter oats.

When I lived in Marion County I received a package of seed (one quart) from the Agricultural Department at Washington, and tried them several years. Very few, not more than one per cent I should say, survived the winter. I tried them till I had about two bushels, then gave it up.

I have heard since that they could have been acclimated by perseverance. If so, it would be a grand thing. They grew very rank, and in sufficient quantity would make the best of fall and winter pasture. The grain also was fine—far ahead of the common oats—in fact, it was almost as heavy as wheat. If they could be acclimated it would pay for many year's work.

Has the experiment station at Manhattan tested them? J. B. DOBBS.

Lima, Ohio.

Kansas Wheat and Corn.

The Kansas Board of Agriculture on August 13 issued a crop bulletin devoted especially to wheat and corn. It says:

Tabulated returns of assessors for each of the 105 counties in the State, save Wyandotte, show the total winter-wheat area this year to be 5,911,081 acres, and report from thrashers, millers, growers and others, indicate that the yield for the entire area sown will average slightly more than 15.2 bushels per acre, or a total for the State of 90,270,000 bushels, but of course these preliminary figures are subject to revision later in the year when thrashing is completed. As the ripening of the grain and harvest were somewhat delayed by the continuous cool, wet weather, thrashing likewise was begun much later than usual but is rapidly progressing now, although none has been done in many neighborhoods as yet, and reports of yields are quite variable. This year's total production is greater by 66 per cent, or 35,946,200 bushels, than that of 1902, and surpasses even the 1901 yield of 90,045,514 bushels, making the bulkiest crop in Kansas history. No State has ever even equaled the total Kansas wheat production of 1900, according

to the U. S. Department of Agriculture, and this year's yield is greater than that of 1900 by about 18 per cent, and 1901 was more by 17.5 per cent. In these three years Kansas raised winter wheat aggregating a total of 257,000,000 bushels, or an average of 85,970,000 bushels for each.

The growers' estimates indicate that the larger yields this year are being produced by the more westerly counties, and especially in the northwest quarter of the State, as well as by many of the so-called wheat-belt counties. It is also notable that several of the usually foremost wheat-producing counties, along with some of the more southeastern counties, are credited with comparatively small yields. The lowest average yields are 7, 7, 8, 8, 8, 8, in Cherokee, Labette, Montgomery, Chautauqua, Crawford and Wilson Counties respectively, and among the highest are Rush 21, Graham 21, Norton 21, Decatur 21 and Ness 20. One county (Barton) has slightly over 5,000,000 bushels, followed by, yet remotely, Rush with 3,879,040 and Sumner 3,486,780 bushels. Thirty-five counties each have one million or more bushels, produced 72,478,264 bushels, or 80.3 per cent, of the 1903 crop.

Of the 32 counties reporting increases in acreage over last year 30 lie west of the ninety-eighth meridian, Norton leading with a gain of 33,745 acres. Sumner, with 316,980 acres, again has the largest total wheat area of any county; Barton next with 270,503 acres, while Grant and Stanton report none.

The grain has been saved in good condition, and its quality is unanimously pronounced medium to extra good, even where average yields seem lowest—the whole crop being merchantable for milling. Late rains temporarily interrupted thrashing, but have put the ground in the best of condition for fall plowing.

According to assessors' returns this year's total area of corn is 6,521,193 acres, or less than the 1902 area by about 470,000 acres, or 6.7 per cent, and the general average condition for the State's entire area is 70. Counties reporting increases in their corn areas virtually are all east of the a line drawn southeast from the west boundary of Smith to Chautauqua County, and may suggest that the desire recently manifest in parts of this section to sow wheat is somewhat abating and that many of the counties in the property corn territory are again assuming more nearly normal corn areas. Six adjoining counties in the northern tier have the largest corn areas, as follows: Marshall 208,759 acres, Nemaha 206,015, Jewell 202,388, Washington 172,528, Republic 163,581 and Smith 158,293 acres.

Owing to the different sorts and plantings the prospects are widely variant, and in some communities the corn situation seems most complex. Recent timely abundance of moisture and favorable weather, however, have given impetus to its growth and healthy development, and greatly benefited all plantings. Where cultivation has been neglected, usually poorest conditions are found, and weeds have been most aggressive. Generally it is reported that early corn is safely advanced and that planted later is rapidly responding to the now favoring conditions—a large proportion promising well. Condition on all plantings in the flooded districts average 66, and the consensus of correspondents' reports in such territory rate the prospect for a good crop as "medium." It is noteworthy also that the highest conditions reported for corn are in the northwesterly counties, to-wit: Rooks 100, Mitchell 99, Rush 98, Jewell 95, Thomas 95, Lincoln 92, Osborne 91, Decatur 91, and Cloud, Lane, Scott, Cheyenne, Phillips and Smith each 90, while the least promising prospects seem to be in the counties constituting the western two-thirds of the southern third of the State.

The quantity of old corn found by assessors in farmers' hands March 1 was 45,679,264 bushels, against 7,724,942 in 1902.

Wheat on hand 4,686,473 bushels. On hand last year 9,664,595 bushels.

The following table gives, by coun-

ties, the total yield of winter wheat as estimated by correspondents, and the acreage of corn in each:

Counties.	Wheat, bus.	Corn, Acres.
Allen	147,577	82,308
Anderson	36,688	90,920
Atchison	283,052	65,448
Barber	842,340	44,880
Barton	5,004,305	20,962
Bourbon	57,684	84,776
Brown	474,876	123,573
Butler	225,838	138,684
Chase	48,860	40,991
Chautauqua	119,544	60,451
Cherokee	316,820	73,843
Cheyenne	44,728	19,020
Clark	117,570	7,858
Clay	894,530	102,983
Cloud	1,478,886	81,233
Coffey	64,680	107,130
Comanche	227,836	9,580
Cowley	1,056,336	112,237
Crawford	234,304	92,089
Decatur	1,707,048	86,143
Dickinson	1,231,857	90,001
Doniphan	402,644	72,727
Douglas	335,426	71,696
Edwards	1,548,417	20,078
Elk	188,715	77,167
Ellis	2,953,632	5,888
Ellsworth	1,919,490	35,677
Finney	44,460	881
Ford	1,200,420	11,811
Franklin	61,328	95,514
Geary	225,848	40,287
Gove	665,689	9,678
Graham	1,706,452	28,666
Grant	155	155
Gray	178,770	2,055
Greeley	45	891
Greenwood	41,055	132,600
Hamilton	3,390	123
Harper	2,220,568	44,454
Harvey	987,899	60,720
Haskell	37,408	693
Hodgeman	573,478	6,315
Jackson	46,343	125,130
Jefferson	237,200	97,546
Jewell	749,952	202,388
Johnson	347,872	74,459
Kearny	4,140	387
Kingman	1,927,773	57,260
Kiowa	834,138	17,818
Labette	340,179	96,571
Lane	787,797	3,349
Leavenworth	454,720	58,943
Lincoln	1,876,284	47,665
Linn	83,205	102,724
Logan	362,808	4,172
Lyon	42,588	111,308
Marion	904,673	108,610
Marshall	605,040	208,757
McPherson	1,650,915	81,243
Meade	183,824	1,792
Miami	114,520	111,821
Mitchell	2,318,919	67,544
Montgomery	372,272	70,666
Morris	22,781	82,424
Morton	4,755	95
Nemaha	82,212	206,015
Neosho	240,804	93,040
Ness	1,761,620	8,817
Norton	1,767,234	92,462
Osage	36,751	127,917
Osborne	2,391,169	60,561
Ottawa	1,530,650	43,112
Pawnee	2,881,152	11,956
Phillips	1,650,496	108,093
Pottawatomie	71,461	127,758
Pratt	2,467,620	48,742
Rawlins	1,174,482	42,578
Reno	2,731,395	142,452
Republic	492,675	163,581
Rice	2,297,821	53,813
Riley	128,336	83,923
Rooks	2,410,344	31,120
Rush	3,879,040	10,541
Russell	2,554,097	19,597
Saline	1,297,200	53,149
Scott	112,689	2,407
Sedgwick	1,783,705	129,997
Seward	7,014	334
Shawnee	78,080	93,433
Sheridan	1,157,157	37,499
Sherman	45,253	12,263
Smith	1,380,451	158,293
Stafford	2,981,307	48,037
Stanton	65	65
Stevens	2,695	579
Sumner	3,486,780	70,944
Thomas	850,986	18,560
Trego	1,094,222	9,335
Wabunsee	137,745	97,698
Wallace	1,530	1,987
Washington	722,112	172,528
Wichita	91,836	3,908
Wilson	118,432	88,487
Woodson	51,156	56,679
Wyandotte	137,880	14,190

HOW SHOULD THE GROUND BE TREATED AFTER A CROP OF CLOVER OR WHEAT HAS BEEN TAKEN OFF?*

Keep Clover Growing Three-Fourths of the Time.
FIRST PREMIUM.

One way of treating ground after the wheat has been taken off is to let it lie undisturbed by stock or plow until next harvest, provided we get a catch of grass or clover. Of course, pick out rocks, clip the weeds, fill a ditch, or manure a thin point as need. Our main object in raising wheat is to prepare the ground for the clover or grass that follows.

If we fail to get the catch of clover, we simply go after it again. This is the practice of most farmers in this country that raise wheat. The treatment of corn ground after the crop is off is more varied. Some prepare at once and seed to wheat. Others let lie until spring, and seed to oats. The former is my choice. The ground is easily prepared for wheat, if the corn has been properly cultivated. We have demonstrated several times that as good a yield can be had from corn ground as from oat stubble, provided

*Prize experience papers from Indiana Farmer.

CORN STOVER SHREDED BY THE McCORMICK IS BETTER THAN HAY

HERE are many instances where corn stover has been scientifically tested and found to actually contain more nutriment than timothy hay. Stock relish the corn stover; then why not save this part of your crop, and feed your cattle; and, if need be, sell your hay.

B. L. Rees, Topeka, Kas., W. W. Weeks, Wichita, Kas.,
GENERAL AGENTS FOR McCORMICK MACHINES.

the wheat is sown at the same time.

The plan of wheat following corn has much to recommend it, especially on rolling ground that is apt to wash during the winter. The soil is kept filled with live roots which hold the elements that would be lost from the bare soil. The greatest trouble is getting the corn off in time. We cut and throw on a low-wheel wagon, and take outside the field, or set against a wire stretched in the field. Two wires stretched across the field will hold the whole field. The wheat may then be sown, and the corn can be taken off when dry with but little damage to the wheat. Some seasons the corn can be cured and moved off before sowing the wheat. Corn, wheat, and clover is my rotation. The clover stands two years, thus making a four-years' rotation. In the four years the ground is bare only a short time, and live clover roots fill the soil three years out of the four. Only from the time the sod is turned in the spring for corn until the seeding of the clover are the clover roots, with their nitrogen traps, out of the soil. This rotation will restore fertility rapidly, and is profitable, if the right kind of live stock is kept on the farm. The entire corn crop, as well as the clover hay, is fed and returned to the soil. This furnishes nearly enough manure to cover the corn ground each year, thus allowing the greater part of the farm to be manured once every four years. This rotation required the ground to be broken only once in four years.

Washington County, Ind. W. J.

Pasture as Little as Possible.
SECOND PREMIUM.

Presuming that the wheat ground has been seeded to clover, which I think should always be done, I would take the mower and cut the stubble as soon as possible after the wheat has been removed. Would cut a little higher than if cutting hay. If the wheat were tall enough, I would have cut the stubble somewhat high. This will make a fine mulch for the young clover, and protect it from the hot suns of latter July and August. The clipping of the clover will make it a stockier, hardier plant. Unless there is a large amount of shattered or down grain, I do not believe in pasturing the stubble field much. If the season be wet, and the young grass makes a

strong growth, as it did last year, light pasturing will not hurt.

If the weeds should come up, later in the season, I would mow again, cutting higher than before and being careful not to mow so late in the fall that the clover will not have time to get a good growth after mowing.

If the ground is to be reseeded to wheat, it should be plowed as soon after the removal of the wheat as practicable. Drag or roll the ground as fast as plowed. Harrow with a spike-tooth harrow, every ten days. A good time to do this is after a shower. In this way your ground will be in fine shape by seeding-time. If your stubble is to be left for corn, mow the weeds so they will not form seed.

A noted agricultural writer said, "Cover the ground, and it will cover you." Believing this, I think the corn-field should always be seeded, and I think it would be better if ensilage or stover were made of the entire corn crop and fed to good stock. But we have not yet reached that stage of agriculture in Indiana, and most of the corn-stalks are left in the field to be pastured. While I am inclined to think the dearest feed we get is our stalk pasture, yet, if we must pasture, we should do so only when the ground is frozen, or, if seeded, when it is well covered with snow. Much tramping in the mud will injure the soil many times the value of the feed obtained. As I said before, a much better plan is to save the stalks as ensilage or stover. A dry corn-stalk that has been standing in the wind, rain, and snow for two months after husking, affords little nutriment, and the stock must eat it more for pastime than for profit.

Carroll County, Ind. D. C. J.

Have Something Growing all the Time.
THIRD PREMIUM.

For farmers owning clay lands this subject is worthy of careful study. Preserving fertility depends much upon the care the land receives after these crops are removed. Perhaps the best plan is to follow with some growing crop. To maintain fertility and keep the ground from washing, clover after wheat is a good plan.

With favorable conditions it makes a good growth by winter, and while it protects the ground it stores some nitrogen in the soil. If manure is ap-

plled to clover sod, its roots take up the best part of it, and instead of being washed away it benefits both clover and soil.

If there is no growing crop, the ground should be noticed during the winter, and places liable to wash should be covered with straw or manure, especially where the land is broken, as it is here in the southern part of the State. Much fertility is lost neglecting this.

Corn ground should be sown to grain, and an effort made to get as good a sod as possible before cold weather. Several years ago we heard a man say that he wanted "every foot of ground covered with some growing crop during winter." Ground lying bare loses some fertility, and its mechanical condition is injured by becoming packed.

Rye is very useful for this purpose, and if not wanted for anything else is valuable to plow under. Its roots loosen and enliven the soil. Much of the corn ground here is sown to wheat and then clover. By sowing fertilizer with the wheat, good crops are obtained and the fertility of the land kept up. W. J.

Jefferson County, Ind.

Meadow-Fescue.

PRESS BULLETIN, KANSAS EXPERIMENT STATION.

Meadow-fescue, *Festuca elatior pratensis*, usually known by the name of "English blue-grass" in Kansas, was introduced from Europe, but is now widely cultivated in the United States, and has become thoroughly naturalized, being found wild in some localities on the roadsides and in pastures and meadows. There seems to be no good reason for calling it "English blue-grass," other than that the grass is grown largely in England as a meadow- and pasture-grass, supplying perhaps in a measure in that country the use which the Kentucky blue-grass has in the United States. Meadow-fescue is a tufted grass, more spreading in habit than orchard-grass but not so rank and rapid a grower. It attains its best development the second or third year after sowing. In some of its features it resembles Kentucky blue-grass, the leaves have a bluish tint and the stems are rather stiff and wiry, but the panicle, or head, is narrower or less open than that of the blue-grass. It flowers later than the blue-grass, but the blades start early in spring. The quantity of foliage is not great but the grass is rich in nutritive matter and well liked by stock, both as pasture and hay. It has generally been considered better for hay than for pasture because of its habit of growing in tufts, but in Kansas, in the localities where it is most successfully grown, it is considered an excellent pasture-grass. Quoting from a Kansas grower, J. S. Gilmore, Fredonia, Kans., in the Twelfth Biennial Report of the Kansas State Board of Agriculture: "It furnishes more pasture than any other of the tame grasses (not including alfalfa), comes early and lasts almost as late as any, and cattle thrive on it; it stands extreme cold and dry weather well; it restores and improves the soil and does not require, like most tame grasses, the best land on the farm for a start and prosperous growth."

Meadow-fescue is grown successfully in the area south of the Kansas River and extending westward from the Missouri line about a hundred miles. "The grass has been grown at this station (120 miles west of the Missouri line) since 1879." It winter-killed in the winter of 1885-'86 and apparently has suffered more than orchard-grass from drouth. As a pasture-grass, orchard-grass has stood better than meadow-fescue at this station and furnishes more and better pasture. When cut for hay, yields of one to one and one-half tons per acre have been secured.

"Meadow-fescue thrives best on the richest and heaviest soils, although it is grown principally on the slopes and uplands." In eastern Kansas it will do well on any land which will produce profitable corn crops.

In Kansas the grass is grown chiefly for its seed. Kansas is said to produce 75 per cent of the seed crop of

the United States. Johnson County leads in the production of seed. The seed finds a ready sale in the European countries, where it is sown for meadow and pasture. The price is regulated by the supply and the foreign demand and has ranged from 2 to 8 cents per pound. The largest seed crop produced in Kansas was harvested in 1896, and was estimated at 3,360,000 pounds. The yields of seed for the first three or four years after seeding average 6 to 12 bushels per acre (24 pounds per bushel), although yields of 15 to 20 bushels per acre have been reported. In from three to five years the grass makes a less vigorous growth and the yield of seed decreases. The practice is to break the sod at the end of the fourth year and rotate with corn and other crops for a few years before seeding down again.

PREPARING THE SEED-BED.

In pays to carefully prepare the seed-bed in sowing any kind of grass-seed, and the following suggestions will apply to alfalfa and other grasses as well as meadow-fescue. The ground should be plowed several weeks or months before seeding-time, and cultivated at intervals to clear it of weeds, conserve the soil-moisture and put the soil in the best possible condition to sprout the seed and start the young plants. The seed-bed should be finished with a level, mellow surface, but with a rather compact subsurface, in order that the seed may be evenly covered and come in close contact with the moist soil. The seed should not be covered more than an inch to an inch and a half deep.

It is possible to prepare an excellent seed-bed without plowing. Wheat or oat-stubble disked soon after harvest and disked and harrowed at intervals until September 1 makes a good seed-bed for fall sowing. For spring sowing, corn or Kafir-corn ground prepared by double-disking and leveled with a float or harrow is usually preferable to spring plowing.

If it is necessary to plow just before seeding, the ground should be firmed by the use of the subsurface packer, float, or roller. The disk harrow may be made to do the work of the subsurface packer in part by setting the disks rather straight and weighting the harrow.

SEEDING.

"The quantity of seed recommended to plant per acre varies from a peck to three pecks when producing seed is the main object, and from one bushel to three bushels when pasturing alone is sought." On a well-prepared seed-bed in a favorable season, a practical method is to sow broadcast and to harrow once lightly to cover the seed. Many favor drilling, and this is perhaps the surer method of getting a good catch in the average season. The danger in planting with the drill is in getting the seed too deep, but if the ground is level and not loosened too deeply, the depth of seeding can be properly regulated.

Many practice fall seeding with good success, but it is not advisable to seed in the fall unless there is sufficient moisture in the soil to sprout the seed at once and insure the early growth of the young plants. A good catch of grass is more apt to be secured by the average farmer in the average season from early spring seeding, because the natural conditions are favorable for the germination of the seed. On the other hand, "a fall start brings a seed-crop a year sooner and the grass gets dominant in advance of the weeds." There is slight danger of winter-killing if the grass starts well and the seed-bed was prepared with a moderately firm subsurface. With a deep, loose seed-bed, freezing and heaving out is much more apt to occur. Plant good, clean seed. The best seed is the cheapest to buy.

HARVESTING.

Meadow-fescue should be cut for hay soon after the blooms fall. It is ready to cut for seed as soon as the heads turn brown, before the seed begins to shatter. This occurs right after wheat harvest. The usual method is to harvest with a self-binder and shock the same as wheat or oats. The

crop may be stacked or thrashed out of the shock, with the ordinary separator. The seed is usually sold at once, or may be safely kept in dry bins or in sacks.

OTHER GRASSES VS. MEADOW-FESCUE.

The fact that meadow-fescue has proven to be a profitable crop when grown for seed has perhaps caused it to be valued more highly as a pasture and hay grass than it really deserves.

Although no good comparative tests have been recorded, yet the general use of the grass at this station has shown it to be inferior to orchard-grass, both as a hay and pasture-grass. It does fairly well for pasture when sown with orchard-grass, the two grasses making a better sod than does orchard-grass alone. For pasture, it is usual to sow about fifteen pounds each of orchard-grass and meadow-fescue with three or four pounds of red clover per acre.

Brome grass (*Bromus inermis*) has only been grown at this station in a field way for four years. It has been cut for hay and seed and is being used for pasture the present season. As far as it has been tried, it is far superior to meadow-fescue both as a hay and pasture-grass. It is more productive, more hardy, a better drouth-resister, thrives in wet weather, makes a better sod, stock eat it readily, and it is practically equal in feeding value to the meadow-fescue. I have little hesitation in recommending it for planting for all parts of the State as far west as Ellis County. It will doubtless thrive best in the northern counties of the State. At the Fort Hays Branch Station, Superintendent Haney reports a poor catch and crop from sowings made last fall. The spring sowings are much better. At this station both fall and spring sowings have succeeded well. *Bromus inermis* may be sown broadcast, on land prepared as described above, at the rate of eighteen to twenty pounds of good seed per acre. A. M. TENBYCK, Manhattan, Kans.

Deep Plowing.

M. M. Sherman, of Salina, Kans., in the Marquette Tribune, says he believes deep plowing is the solution of the dry-weather problem: "If the farmers generally would adopt a system of deep plowing it would solve the dry-weather problem. Deep plowing would bring larger and better crops. When the farmers adopt a system of deeper plowing than the most of them are now using, we shall not hear nearly so much reported damage to crops from dry weather. I always plow to a depth of from eight to nine inches and always raise good crops. The average depth is only four or five inches. This is not enough. Of course I do not mean to say that all farmers do shallow plowing, but the majority of them do. By stirring up the ground to a greater depth the farmer creates a reservoir for moisture. The broken ground then becomes a sponge and retains what water falls on it. The farmer who plows deeply for winter wheat places his ground in condition to hold all the moisture that falls during the winter and thus his wheat has plenty to draw from regardless of the amount of precipitation of spring. A rock will not hold water. On account of my deep plowing I don't have to worry about a dry April or May. Those who have plowed only to a depth of four inches may be hurt by dry weather. As an example of what deep plowing will do, I know a man who raised the average of his ground from 20 bushels to 48 of wheat. As it is now, 20 bushels is a good average yield of wheat. I believe that deep plowing would solve the dry-weather problem of the State if adopted generally."

Weeds.

The weed problem is one of the most serious which the successful farmer must meet. Farmers are or should be constantly at war with weeds. Those engaged in this warfare will find valuable points as to the kind, nature, and best methods of destroying weeds in a bulletin just issued by the Iowa Experiment Station at Ames. About half a hundred of our

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The safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or bluish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
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80 acres, fair house, two large barns, plenty water, fruit. Close Independence, 10 miles east of Kansas City. Worth \$125, can sell it for \$90. Geo. W. Webb, Independence, Mo.

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common weed pests are described and illustrated. Crab-grass, morning glory, Russian thistle, Canada thistle, wild barley, ragweeds, smartweeds, and foxtails are among the species listed. A considerable space is devoted to poisonous plants, among them cowbane, which claims a few victims almost every year. The bulletin contains eighty pages and sixty cuts. It is a popular edition of bulletin No. 70 of the station by L. H. Pammel, botanist, entitled "Some Weeds of Iowa," and may be had free upon application to Prof. C. F. Curtiss, director of the experiment station. It will be of interest to teachers and students as a means of becoming familiar with some of our common plants as well as a direct help to the farmer and gardener,

The Stock Interest.

THOROUGHBRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper.

- September 1, 1903—Horses and Jacks, L. M. Mounses & Son, Smithton, Mo.
- September 1 and 2, 1903—100 head of Herefords, at Hamline, Minn. C. R. Thomas, Secretary.
- September 3, 1903—Central Missouri Hereford Breeders' Association, Moberly, Mo.
- October 2, 1903—Poland-Chinas, J. R. Killough & Sons, Ottawa, Kans.
- October 6, 1903—A. E. Burligh, Kansas City, disperson sale Polled Durham.
- October 7 and 8, 1903—Combination sale of Poland-Chinas and Shorthorns. Poland-Chinas on the 7th, Shorthorns on the 8th. James P. Lahr, Sabetha, Kans., Manager.
- October 9, 1903—Sabetha Combination Sale Co., Sabetha, Duroc-Jerseys.
- October 3, 1903—John Cameron, Lebanon, Kans., Poland-China swine.
- October 12, 1903—C. O. Hoag, Centerville, Kans., Poland-China hogs.
- October 13, 1903—Shorthorns at Wellington, Kans. D. H. Robinson, Jamesport, Mo.
- October 14, 1903—A. G. Lamb, Eldorado, Poland-Chinas.
- October 15, 1903—Central Missouri Hereford Breeders' Association, at Salisbury, Mo. S. L. Brock, Secretary, Macon, Mo.
- October 16, 1903—W. S. Wilson, Manager, Shorthorns and Herefords, at Monroe City, Mo.
- October 19, 1903—Oak Grove, Mo., Poland-Chinas. E. B. Axline.
- October 19-24, 1903—American Royal, Kansas City, sale by Galloway Breeders' Association.
- October 21, 1903—American Aberdeen-Angus Breeders' Association sale at Kansas City. W. C. McGavock, Mt. Pulaski, Ill., manager.
- October 22, 1903—100 head of Herefords, at Kansas City, Mo. C. R. Thomas, Secretary.
- October 24, 1903—Newton Bros. Whiting, Kans., Duroc-Jersey swine.
- October 27, 1903—Duroc-Jerseys, Peter Blocher, Richland, Kans.
- October 30, 1903—Combination sale of Poland-Chinas, Clay Center, Kans. J. R. Johnson, manager.
- November 3, 1903—O. B. Smith & Son, Cuba, Kans., Poland-Chinas.
- November 5, 1903—Breeders Combination Sale, Westmoreland, Kans.
- November 9, 1903—Cooper County Shorthorn Breeders' Association sale at Bunceon, Mo. W. H. H. Stephens, Secretary.
- November 10-11, 1903—Marshall County Hereford breeders' annual sale at Blue Rapids, Kans.
- November 12, 1903—Parry Bros., Harris, Mo., Shorthorns.
- November 13, 1903—Central Missouri Hereford Breeders' Association, annual sale; S. L. Brock, Macon, Mo., Secretary.
- November 17, 18, 19, 1903—Armour Funkhouser, Herefords, at Kansas City, Mo.
- November 21, 1903—Henry W. Kuper and W. D. Elmore, Humboldt, Nebr., Shorthorns.
- December 2, 1903—American Galloway Breeders' Association sale, at International Exposition, Chicago.
- December 3, 1903—100 head of Herefords, at Chicago, Ill. C. R. Thomas, Secretary.
- December 4, 1903—American Aberdeen-Angus Breeders' Association sale at Chicago. W. C. McGavock, Mt. Pulaski, Ill., manager.
- December 10-11, 1903—Hereford cattle and Berkshire swine, Sunny Slope Farm, Emporia, Kans., C. A. Stannard, owner.
- December 15, 1903—Plainville Breeders' Association combination sale of cattle and swine, Plainville, Kans.
- February 4, 5, 6, 7, 1904—Percherons, Shorthorns, Herefords, and Poland-Chinas, at Wichita, Kans., J. C. Bobson, Towanda, Kans., Manager.

Experience With Rabies in Stock.

EDITOR KANSAS FARMER:—The KANSAS FARMER of August 6 contained an interesting article on rabies in stock by Professor Mayo, of Manhattan. As the writer had quite an experience with it some years ago, it may be of interest to your readers.

At that time I was in charge of a large ranch in Franklin County on which we were wintering about 300 head of cattle, 400 hogs, and 65 head of horses. One evening, returning late with twenty-two stock hogs that I had bought, I was informed by the men that a strange, vicious dog had passed up through the cattle and hogs just at feeding-time, snapping at everything in his way, and was last seen going off through the orchard. It was too late to do anything that night, but next morning we went on a hunt and finally found the dog, a miserable, long-haired cur, asleep in the horseshed, from which he was driven and shot.

In a little over a week a strange malady appeared among the hogs and then among the cattle. The latter was so pronounced and in most cases devilish that we had little trouble in connecting their ailment with the cur dog. Fear and rage were the predominant features of the malady among the longer cattle a devilish viciousness manifested itself, not so much against their kind as against other animals and man. Their restlessness and bellowing would set the other cattle wild and when the malady had reached a certain stage the affected animal would bolt for the corral gate and smash it and away it would go with the whole herd after it over stone walls and through wire fences in a breakneck race that would



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International Stock Food Co., Minneapolis, Minn. ROCKPORT, KANSAS, Nov. 21, 1902.

DEAR SIR:—Your "International Stock Food" is all you claim for it. We have the nicest pigs and hogs that we ever had. Tested it on one old sow that was very poor from sucking pigs. She could hardly make a shadow. We took the pigs away and fed her "International Stock Food" in her feed and I do really believe that she put on 5 pounds of flesh per day.

We have thousands of similar testimonials and will pay you \$1000 cash to prove that they are not genuine and uncollected. We own "International Stock Food Farm," which is located 12 miles from Minneapolis and contains 650 acres. We feed "International Stock Food" every day to all of our World Champion Stallions, Dan Parcs 1:59 1/2, and Danross 2:00 1/2, to our York Stallions, Blood Horses, Cows, War Horses, Carries and Hogs. "INTERNATIONAL STOCK FOOD" FOR PIGS costs you ONE CENT and is prepared from roots, herbs, seeds, and barks and won the Highest Medal at Paris Exposition in 1900 as a High-Class vegetable, medicinal preparation to be fed to stock in small amounts as an addition to the regular feed. It is a Great Aid in Growing or Fattening stock because it increases the appetite and Aids Digestion and Assimilation so that each animal obtains more nutrition from the grain eaten. We positively guarantee that its use will make you extra money over the usual Plan of Growing and Fattening stock. "International Stock Food" can be fed in safety to Horses, Cattle, Sheep, Goats, Hogs, Cows, Calves, Lambs or Pigs. It is Absolutely Harmless even if taken into the Human System. You insist on selling medicinal ingredients with your own food at every meal. Salt is a stomach tonic and worm medicine, Pepper is a powerful stimulating tonic, Mustard is a remedy for dyspepsia, Vinegar is a diuretic. You eat these medicinal ingredients almost with every mouthful of your food, and it is proven that these medicines promote health and strength for people and improve their digestion. "International Stock Food" contains pure vegetable medicinal ingredients that are just as safe and as necessary as an addition to the regular feed of your stock if you desire to keep them in the best possible condition. "International Stock Food" Paper. It purifies the blood, stimulates and permanently strengthens the entire system so that disease is prevented or cured. "International Stock Food" is sold on a "Cash Guarantee" by Fifty Thousand Dealers throughout the World. Your Money will be Promptly Refunded in Any case of failure. It will make your Calves or Pigs grow Amazingly and has the largest sale in the World for keeping them healthy. Beware of the many cheap and inferior Imitations! No Chemist can separate all the Different powdered Roots, Herbs, Barks and Seeds that we use. Any One claiming to do so Must be an Ignoramus or a Falsifier.

WHAT PEOPLE SAY ABOUT THIS BOOK. INTERNATIONAL STOCK FOOD CO., ODESSA, MO. Dear Sir:—Your "International Stock Book" duly received, and it is the best thing of its class that I have ever seen. There is a volume of useful articles in it from start to finish. Respectfully, GEO. W. NULL.

A \$3000.00 STOCK BOOK FREE

IT CONTAINS 163 LARGE ENGRAVINGS OF HORSES, CATTLE, SHEEP, POULTRY, ETC. The Cover of this Book is a Beautiful Live Stock Picture. Printed in Six Brilliant Colors. Size of the book is 6 1/2 by 9 1/2 inches. It cost us \$3000 to have our Artists and Engravers make these Engravings. It describes common Diseases, and tells how to treat them. It also gives Descriptions, History and Illustrations of the Different Breeds of Horses, Cattle, Sheep, Goats, Hogs and Poultry. It contains Life Engravings of many very noted Animals, and also testimonials. The Editor of This Paper Will Tell You That You Ought to Have This Stock Book in Your Library for Reference. It Contains a Finely Illustrated Veterinary Department That Will Save You Hundreds of Dollars. WE WILL MAIL IT TO YOU ABSOLUTELY FREE, Postage Prepaid. We Will Pay You \$10.00 Cash if book is not as described. Write us at once, letter or postal card, and ANSWER THREE QUESTIONS: 1st.—Name This Paper. 2d.—How Much Stock Have You? 3d.—Largest Stock Food Factory in the World. Capital Paid in, \$1,000,000. 500,000 Feet of Space in Our New Factory. INTERNATIONAL STOCK FOOD CO., Minneapolis, Minn., U. S. A.

sometimes last for two miles, only be terminated by our overtaking and shooting the affected animal. These stampedes were terrors as it was dangerous to approach the crazy animal, as it was sure to charge the horse on sight and dangerous to shoot for fear of hitting some other animal.

This thing lasted about a month and in that time we lost 10 cattle, 55 hogs and the finest 3-year-old colt on the ranch, a mare perfect in appearance and disposition. Among the hogs lost was but one runt, the rest were fine, thrifty hogs, not quite ready for market, except some brood sows, and a fine Tom Corwin boar weighing over 500 and a thoroughbred Berkshire boar and sow.

The appearance of the mare was heartbreaking as she had knocked herself all to pieces in her struggles and rushes, putting out an eye, knocking out her teeth and splitting her lower jaw, besides cutting and bruising herself in innumerable places. As she went mad in the night, and we found her dead in the morning, no one saw her, but that she had attacked the other horses was evidenced by a number of them having lost pieces of skin.

As I stated, the evening the mad dog went through the stock, I had brought home twenty-two hogs; these were turned right in and ran with the hogs that went mad, yet not one of them was affected; we know this because the ranch hogs were all marked and the hogs we bought were not, and we had the twenty-two when the trouble ended. From this we believed that no hog, horned animal or horse could communicate the disease to its kind; this belief was strengthened by the fact that none of the horses injured by the mare ever showing any symptoms of rabies. Our theory was confirmed by the resident physician who said among animals only those born with eyes shut communicated the disease; and I still believe he was right, because if the hogs could have communicated the disease, we should have probably lost the whole herd.

A curious thing about the malady was, no matter how slight the symp-

tom of affection were, sooner or later the animal died; not one recovered.

As an experiment and an effort to relieve the terrible suffering of the Corwin boar, we got a quart of chloroform and saturating a large sponge, fastened it to the end of a stick; then we roped the boar and held the sponge to his nostrils; he would inhale for half a minute or so and then struggle to get away; we kept this up for quite a while but without any effect.

The hogs manifested no disposition to attack anyone, but would stand champing their teeth and frothing at the mouth and backing away from something which they seemed to fear, then suddenly would charge their imaginary enemy and begin again to back away. C. T. SEARS. Topeka, Kans., August 10, 1903.

A New Klondike.

Skunk farming is a malodorous memory. The Belgian hare is not driving poultry out of the market very fast or making many millionaires. The German carp long ago buried his nose in the mud of oblivion. But the day of wonders has not gone by. A new money-maker is now brought to light that beats these all hollow. The festive woodchuck or groundhog has been known to man since the settlement of America as a damager of meadows and pastures and a destroyer of growing crops. Barring the usefulness of his hide for "whang leather" (that cost to prepare more than it was worth) he has been regarded as no good, a pest to be hunted and destroyed. But it seems that we have been sitting in the darkness of ignorance with vast groundhog fortunes "wallering" in our back fields. For here comes a prophet from the East and tells us that groundhogs are good eating, their fur is valuable, they are prolific, 500 can be raised on an acre and sold for 50 cents apiece when fat—and above all they don't eat in winter and hence there is no need to sow and reap, make hay when the sun shines or hire laborers to attend to them! Think of a live-stock business in which the stock won't eat in win-

ter and returns \$250 per acre for its summer feed! It looks to the misguided man sweating in the fields to raise grain or make hay to stuff into 5-cent cattle, hogs or sheep as easy as the profession of snow-shoveling in Florida. What a rush there will be for breeding stock when this groundhog proposition is generally known! Notice to breeders: This paper reaches a vast number of farmers who will be pretty tired by fall, because they can't get help, and they will appreciate hibernating live stock.—National Stockman and Farmer.

Wounds on the Horse and How to Treat Them.

The West Virginia Agricultural College Experiment Station gives the following as a suitable treatment for the animal suffering from wounds:

Every wound or sore on the horse should be washed daily with an antiseptic solution. If this is done the wound will heal quicker than if left alone, and there will be no danger of the sore getting worse and finally causing the death of the animal.

The best antiseptic solutions are made from the coal-tar preparations, carbolic acid, etc. These may be mixed with water in the proportion of one to eight. If these are not handy, borax used in the water or sprinkled on the wound immediately after washing it is a very good antiseptic.

Wounds are made worse by germs which enter the sore and commence destroying the animal tissues. They increase very rapidly and unless an antiseptic is used they will often cause another disease which may end fatally, such as lock-jaw or tetanus. A valuable horse under my observation died of lock-jaw caused by a gravel. The gravel caused the foot to break at the heel, just above the hoof, and pus was discharged. The owner did not cleanse the wound with an antiseptic solution simply because other horses that had been graveled had got well without this extra trouble; consequently tetanic germs entered the sore and caused lockjaw which resulted in death.

It is always well to remember that

What Prof. Curtiss, Director of the Iowa Agricultural College, Says About Zenoleum Dip:

We have continued to use Zenoleum Dip as a disinfectant and dip for pigs and sheep on the College Farm during the past year, and we have been entirely pleased with its results. Yours very truly, C. F. CURTISS, Iowa State College, Ames, Iowa, January 20, 1903. Send for copies of "Zenoleum Veterinary Advisor," and "Piggy's Troubles" and see what others say about it. Books mailed free. Sample gallon of Zenoleum \$1.50, express prepaid, "The Great Coal Tar Carbolic Dip." ZENNER DISINFECTANT CO., 61 BATES STREET, DETROIT, MICHIGAN. Five gallons \$6.25, freight prepaid.

though a wound may get well without cleansing, it will get well much quicker if it is cleansed. And the man today who does not use antiseptics when needed, will sooner or later be reminded of what he should have done, when it is too late.

Percheron Association Meeting.

A meeting of the American Percheron Horse Breeders' and Importers' Association was held at the Great Northern Hotel, Chicago, on Saturday, August 8, in accordance with published call. President H. G. McMillan was in the chair and announced that the object of the meeting was to consider the advisability of increasing the number of directors from seven to eleven—the number being the full limit allowed by the laws of the State of Illinois. He expressed the belief that such course was advisable, and would tend to still further emphasize the fact that it is the purpose of the new organization to make itself truly representative of all interests and of all sections. The sentiment of the meeting was unanimous on this point, as a motion to enlarge the directory as proposed was passed without a dissenting voice. Messrs. F. H. Hagermasters, of Wisconsin, H. W. Avery, of Kansas, C. M. Jones, of Ohio, and G. W. Patterson, of Minnesota, were chosen to fill the positions thus created. The directors-elect were present in person and accepted the responsibility assigned them, each in turn expressing his hearty sympathy with the aims and object of the association.

President McMillan made a clear and forceful statement of the causes leading up to the organization of the association. He stated that it was a disgrace to the breeders and owners of Percheron horses that they had for so long possessed no organization, the old one having been abandoned many years ago. He stated that the fact that there had been no stud book printed since 1898, was a reproach to the entire industry. This was especially true from the fact that the book that was published in 1898 probably did not bring down Percheron records much later than 1896, so that at the present time we are anywhere from six to eight years behind in the publication of the pedigrees of imported and home-bred Percherons. This state of affairs was all the more humiliating for the reason that the period in question had witnessed the most active trade ever enjoyed by the owners of Percheron stock. It was probable that from \$8,000 to \$12,000 per annum had been collected from Percheron breeders during these years and still there was no stud book forthcoming. He considered that this was so utterly inexcusable that it was high time that all friends of the breed desiring prompt and accurate publication of the records cooperate actively in the organization of an association which would carefully safeguard and promptly dispatch the business connected with the public records of the breed.

Judge Longenecker, of Chicago, outlined briefly the situation as respects the injunction proceedings that had been brought from time to time to restrain the association from doing business. He stated that those who were seeking to delay the progress of the work in hand had thus far been beaten at every turn, and, in his judgment, the association had nothing to fear whatever from the legal point of view. The editor of the Gazette in answer to a call expressed his confidence in the complete success of this movement for putting Percheron records upon a satisfactory basis. He deplored as much as anyone else any dissension within the Percheron ranks, but there are times when evils can not be effectually remedied except by open revolt. He had been familiar with the Percheron trade in America for a quarter of a century and it was his individual judgment that the organization of the new association was not only fully justified but was absolutely necessary in order to place Percheron registration in this country upon an equality with that of other breeds of live stock. The new association was bound to succeed because it was in the right. Those who had identified themselves with it were contending for a principle and

not for private gain. They had behind them the great moral influence of the United States Department of Agriculture, representative agricultural newspapers, the management of the International Exposition and the best public sentiment generally. Misrepresentation, villification and litigation might for a time retard the full growth and progress of the new organization but in the long run the right was bound to prevail. Opposition was to be expected. Intrenched personal interests had been touched. Everything that could mislead the public in this matter had been done by those who felt the drawing of the halter of a deserved fate. This is not a question, however, of conserving personal interests but of rectifying an evil of long standing. He congratulated the promoters of the association upon their having preserved throughout the entire controversy an attitude of dignity and fairness towards all. In the end he was certain that such a course would commend itself to all thinking men, especially when contrasted with the methods by which the organization had been opposed.

Brief addresses were made by different members from various sections, all pledging cordial support to the association and the officers were requested to proceed as rapidly as possible with the preparation of pedigrees for the first volume of the stud book. Secretary Stubblefield thought that the volume could be issued within a year. Pedigrees were coming in rapidly and

the draft-horse. He can also be made to earn his own keep after he is 2 years old, and his education can be completed on the farm; thus the farmer who breeds him can secure his real market value. In the case of the coach-horse or the saddle-horse the middleman who educates him usually reaps a much greater profit than the man who produced him. This is not true of the draft-horse.

Some of the essential points to be considered in selecting a draft-horse are good feet and legs, plenty of weight, a well-developed body, and good style and action. A draft-horse without good feet is worthless on any market; hence good feet are the first essential. The hoofs should be large, round and wide at the heel. They should have width, but not be too deep or shallow. The horn should be of good quality, as indicated by its denseness. The wall must be strong and not inclined to be flat. The legs should be well set under the body and possess plenty of substance, as indicated by the quality and amount of bone and the development of the muscle on the forearms and gaskins. Weight is an essential point. A draft-horse should weigh from 1,800 pounds upward—the more the better, provided it is combined with quality and good feet and legs. The body should be deep, wide and strongly coupled, as indicated by shortness of back and the muscling of the loin. Good action is essential, as indicated by the length



the list of members is steadily growing. The work of perfecting an organization and publishing a stud-book is now where it belongs—in the hands of the breeders and importers themselves—free from all domination or dictation from any source whatsoever. For membership, pedigree blanks, etc., apply to George W. Stubblefield, secretary, Bloomington, Ill.—Breeders Gazette.

Horses for Market and Breeding Purposes.

Under existing conditions there are at least four distinct classes of horses which most farmers can profitably raise. The first and most important is the heavy draft horse, next the carriage or coach horse, then the roadster, and the saddle horses. There is a market for other classes of horses at the present time, but none of them commands high prices and most of them are the misfits which are bound to appear from time to time in the effort to produce horses of the first four classes mentioned.

The heavy draft-horse is one of the most profitable classes of horses that the farmer can breed. The draft-colt can be bred with less risk and liability to accident than those of the lighter classes. This is partially due to the fact that the draft-bred colt is usually a quieter animal than those of the lighter classes, and thus less liable to injure itself through spirited exercises or playfulness. Furthermore, small bunches and blemishes which detract so seriously from the value of the harness-horse or the saddle-horse are not considered to be so objectionable in

of stride, quickness of step and straightaway movements.

Next in importance to the draft-horse is the carriage horse. Some men who are naturally adapted to educating and training horses can produce carriage horses much more profitably than draft-horses. Horses of this class possessing the desired conformation, style, action and speed command high prices and are always in great demand. Perhaps at the present time there is a greater demand for good horses of this class at high prices than for any other of the other distinct market types. This is due to two things—prosperous times in towns and cities have made it possible for many business men to keep such horses for pleasure driving, and few of them are produced, owing to the fact that most farmers have been following wrong methods in trying to breed such horses.

The ideal carriage or coach-horse is an animal of high excellence of form, style, action, speed and education. He must be of good size, standing from 15.3 to 16.2 hands high and weighing in the neighborhood of 1,200 pounds and upward. He must be endowed with much style, as indicated by a clean-cut head, gracefully carried on a lengthy, well-arched neck, which must blend nicely with the shoulders and back so as to present an elegant contour. He must possess smoothness of back, loin and hindquarters, which must not be too drooping. The tail should be well carried and full haired. He must have free, easy, high and attractive action of both knees and hocks. In addition to high action he



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If you will write and say what stock you have—how many head of each, what stock food you have used—and mention this paper. This book is a comprehensive treatise on the care of all live stock, based on the scientific knowledge and attainments of the eminent veterinarian, Dr. Hess (M. D., D. V. S.); written in popular language; commended and used by veterinarians everywhere. Get it and become a master of all stock diseases. Write to-day, to
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must move in a straight line, as neither padding nor rolling of the front feet is admissible. He must not go wide behind, nor yet close enough to interfere. Action is an essential point and must receive due consideration in the carriage or coach-horse. Speed a few years ago was not regarded as being necessary. At the present time, however, it is much in demand and adds materially to the market value of this class of horses. Good feet and legs are essential points to be sought for in producing such a horse. Extremely high knee and hock action is hard on the feet and legs. The duration of the period of usefulness in the carriage-horse will be increased or shortened by the conformation of the legs and the size and construction of the feet. The pastern should be sloping, so as to do away with direct concussion, which is so hard on the inner parts of the foot. The foot should be large, round, with a well-developed frog and good width of heel.

Another class of horses in good demand at the present time is the gentleman's driving horse, or more commonly known as the roadster. A good and valuable roadster should not be considered as necessarily a race-horse. Few race-horses ever make satisfactory roadsters. The roadster should be of fair size, 15½ to 16 hands high, of good and graceful conformation, good color, stylish looking, a free driver, capable of traveling from twelve to fifteen miles an hour. He must have good action, not especially high, but long, straight and regular. He may either trot or pace.

The saddle-horse is always in good demand. The real high-class thoroughbred possesses more quality than any other breed of horses. He is clean-cut, impressive, breezy looking in every respect. His progeny are seldom lacking in quality and ambition. Horses of this class are often called combination animals, being useful as a saddle or harness-horse.—Extracts from an address by Hon. James Wilson, Secretary of Agriculture.

Discrimination in Taxes Against Registered Stock.

EDITOR KANSAS FARMER:—It was with much interest that I read your article on the first page of last week's issue in regard to the policy of taxing registered animals at a higher rate than scrubs.

As a whole I can agree with you, but when you say that there is no warrant in law for so doing you are surely wrong. The law says explicitly that all property shall be assessed at its full cash value. Now, if registered stock is worth, say, \$100, and scrubs \$40, there is but one thing for the assessor to do and that is assess the registered at two and one-half times that of the scrub.

That such a policy is suicidal there is no doubt. But is it not a fact that our whole system of taxation is suicidal? Is it more suicidal to tax a man heavily for improving his stock than to tax a man for improving and beautifying his home?

Is it not suicidal to tax a man twice as much as you do the speculator just because the man builds fences, digs wells, plants orchards, builds houses, barns, etc., while the speculator has

no earthly use for his farm but to blackmail some man who wants a home?

Why not get down to common-sense and stop taxing men who do something?

Is there anything very difficult about it? There is but one great obstacle in the way and that is ignorance. Just so long as the farmer is fool enough to believe that by taxing the merchant he is making the merchant pay that tax we will have our present iniquitous tax laws.

Does the farmer stop to think that he pays the merchant's taxes indirectly in higher prices for the goods he buys? No! Does he realize that when the manufacturer is taxed, he, the farmer, pays it in enhanced prices? Not he! So what is the use, Mr. Editor, of railing against one little suicidal policy when our whole taxing policy is suicidal?

Why not show up the whole iniquitous system? Exempt personal property from taxation and the State of Kansas will have more and better personal property. Exempt all improvements and you will soon have more and better improvements. Tax the speculator who holds his land out of use just as much as you do the industrious farmer who holds like valuable land and you encourage improvements by inducing the speculator to put his land to use. In short, stop taxing thrift, industry and enterprise, and raise your taxes from special privileges alone and you will double the wages of every working farmer and laborer in Kansas. Factories will spring up all over the State giving work to thousands who now seek work often in vain. This question is of vastly more importance to the people of the State of Kansas than who is to be President of the United States or Senator from this State.

Lyon County. S. C. BIXLER.

The Macy Sale.

The second modern combination sale of Poland-Chinas at Macy, Ind., July 28, 29, and 30, broke all previous records. It even eclipsed the sale held at the same place on June 16 and 17. More hogs were sold during the three days than were ever disposed of at one sale before in the world, the aggregate reached the highest, the highest price for both male and female was paid, and most high prices were realized. The average of the sale, including the high-priced boars, also was the largest ever made. The sale had attracted the attention of the world and breeders were present from all over the country. Some half dozen States were represented besides Indiana, and all the largest and best-known breeders were either present in person or were represented by agent or letter. A number of the animals went outside the State to homes of note, as the accompanying sale list will indicate. Many had traveled a distance of nearly three hundred miles to witness the sale of this grand consignment of prize-winning hogs, all of which were contributed by Indiana breeders. The consignors numbered seventeen and furnished a total offering of 233 animals.

The principal features of the sale were found in the sale of the two great boars, Chief Perfection 2d and Top Chief. Half interest in both these sires were owned jointly by Lukens & Fites and their half was sold as before advertised, being divided into ten shares each of the former owners retaining an equal share or breeding interest. Not a little interest centered in the sale of the eight shares of these noted sires. The sale proposition under which each share sold is as follows: Payment of each share to be divided into four single payments, to wit:

1. Note for one-fourth of each purchased share due in three months, and \$100 for each service for all over three sows bred after date of first payment to apply on payment of second note (no conditions).
2. Note for one-fourth of each purchased share due in six months, services over three to be counted at \$100 each in settlement of note. Further services at \$100 each to apply on payment of third note.
3. Note for one-fourth of each purchased share due in nine months, services after settlement of second note to apply on note at \$100 each. Further services at \$100 each to apply on payment of fourth note.
4. Note for one-fourth of each purchase share due in twelve months, services after settlement of third note to apply on note at \$100 each.
5. Any owner of any share must pay notes on the above conditions whether he breeds his quota of sows or not.

Chief Perfection 2d stands as the greatest son of Chief Perfection, being a sweepstakes winner and having sired the best prize-winners of modern times. He is the sire of Majestic Perfection, T. R.'s Perfection, Perfect Perfection, Morning Sun, Perfection Sunshine, Perfection's Likeness, and Chief's Climax. The unsold half interest in Chief Perfection 2d is owned by Ed Ware, of Douglass, Ill. The eight shares of the Lukens & Fites half went in the following order:

King Bros., Gilead, Ind.	\$2,000
Barber & Jones, Angola, Ind.	2,000
H. M. Whistler, Logansport, Ind.	2,000
J. F. Keppler, South Whitley, Ind.	1,500
Geo. M. Lukens, Disko, Ind.	1,575
Castleman & Shipley	1,500
W. W. Wilkinson & Son, Cynthia, Ind.	1,900
M. A. McDonald, West Lebanon, Ind.	1,625

The eight shares sold for \$13,850; an average of \$1,731.25 per share. At this rate, counting Mr. Ware's half interest, the value of the boar stands at \$34,625.

Top Chief, by Big Chief Tecumseh 2d, was owned by O. W. Maddock, St. Joseph, Ill., an Lukens & Fites. The half interest offered in shares sold to the following men:

King Bros.	\$1,200
Beck & Sanders, Rochester, Ind.	1,000
J. F. Keppler	1,000
Gto. M. Lukens	925
Mahlon McNutt, Roann, Ind.	1,275
Frank Grogg, Roann, Ind.	1,325
L. W. Witter, Silver Lake, Ind.	1,275
Travis Stock Farm, Lafayette, Ind.	1,030

The eight shares sold for \$9,030; an average of \$1,128.75, making the value of the boar \$22,575.

It will be seen that the conditions under which the breeding shares of each boar sold were liberal and that the terms make such a sale very acceptable to both buyer and seller. With such an arrangement each purchaser is practically certain of the value of his money as the animals are made to pay out upon the service of the sows which each share-holder is entitled to breed. In case of death or failure to breed the owners are insured, for each pay their share only as they receive the use and value of the sires.

The top selling sow of the sale is found in Arizona, a daughter of We Know and Old Maud, consigned by Frank Fites. The price paid for her was \$2,100 by the Standard Stock Co., of Logansport, Ind. Mr. Fites made the following proposition before her sale: If allowed to have the choice pig from her litter after weaning time the purchaser would receive one-half of the cost of the sow. The sow is guaranteed to raise six pigs, if not a discount of \$100 to be allowed on each pig less than that number; also a free service by Chief McKinley. Mr. Lukens offered to buy the sow and take her after she raises her litter, paying \$200 for her immediately. If the buyer did not wish to sell the sow he further offered to give a free service to Chief Perfection 2d for the choice pig from such a litter. A free service to Keep On or T R's Perfection was also offered by Cotta & Jacobsen if the purchaser should so wish. Free services were offered to Top Chief, Majestic Perfection, Chief McKinley 1st, Tecumseh Sunshine, Majestic Perfection 2d, and Amber's Sunshine on the same conditions.

The second high priced sow was Maid of Honor by American Chief and out of Waxa Chief, consigned by Linc Lukens. This sow was a prize-winner and was followed by a fine litter of pigs by T R's Perfection. She went to the herd of M. A. McDonald, at West Lebanon, at the long price of \$1,150. Other choice females went at \$1,110, \$1,050, \$1,000, \$875, \$775, \$750, \$690, and \$500, while the great majority stood around \$250 or \$300. The 233 animals sold brought a little less than \$30,000, making a total average of over \$300, counting the sale of the eight breeding interests of each high-priced boar. The sows alone made an average of over \$200.

After reading such a report as the above, which we clip from an exchange, one can not help wondering at the fascination which breeding has for the breeders. As shown in our "Gossip About Stock" column, two of our advertisers own swine that are closely related to some of the high-priced stock sold in this sale. One sow, by Winning Sunshine sold for \$250. Five open gilts, by Business Sunshine, sold for \$720, and others of Business Sunshine get sold nearly as high. Mr. J. R. Young, Richards, Mo., owns a full litter-sister of Business Sunshine. Dietrich & Spaulding, Richmond, Kans., have a herd-boar that is a half-brother to U C Perfection which sold so high at this sale.

Horses at the American Royal.

Editor Kansas Farmer:—At a meeting of prominent horse-breeders here last week, plans for a draft-horse exhibit at the American Royal Live Stock Show were definitely outlined, and the breeding-horse show is now an assured fact. Col. O. P. Updegraff, of Topeka, Kans., was chosen to superintend the horse division of the Royal. He announced the following assistants to help him in attending to entry work and details of the different breed exhibits: Robert Burgess, Shires; M. W. Woods, Clydesdales; J. Crouch, German Coachers; William McLaughlin, French Coachers; J. C. Robison, Percherons.

Local mule men have become interested in the Royal, and through the efforts of Dug Cottingham, all the mule firms operating at the yards subscribed a total of \$200 to be offered in mule prizes. These premiums will be for pairs and single mules, first prizes amounting to \$50, a much larger premium than is offered at the average State fair. It is expected that about 500 horses and 100 mules will be exhibited at the Royal this year.

Premiums for the horse and mule division will aggregate nearly \$2,000. In addition to the prizes already announced by the Telegram, the Percheron Association has appropriated \$550 for gold and silver medals for herd exhibits. It is expected that the other horse breeds competing will do the same. A sale of breeding stock and perhaps of high-class road horses will be held on Friday of the week of the show. Stock will be stabled in the upper part of the big horse commission barn where there are stall accommodations for 1,000 horses. The show will be held in the big trying-out lot to the east of the horse barn where the Royal used to hold forth along in 1900. There will be no entrance fees for entering horses in the show, but all stock must be recorded or accepted for record in their various breeds.

The classification of premiums is as follows:

PERCHERONS.

- Class 1—Stallion 4 years or over, first, \$50; second, \$25; third, V. H. C.
- Class 2—Stallion, 3 years and under 4, first, \$40; second, \$20; third, V. H. C.
- Class 3—Stallion, 2 years and under 3, first, \$40; second, \$20; third, V. H. C.
- Class 4—Mare, 4 years or over, first, \$40; second, \$20; third, V. H. C.
- Class 5—Mare, 3 years and under 4, first, \$25; second, \$10; third, V. H. C.
- Class 6—Mare, 2 years and under 3, first, \$20; second, \$10; third, V. H. C.
- Class 7—Champion stallion—Diploma. (Must have competed in classes 1, 2, or 3.)
- Class 8—Champion mare—Diploma. (Must have competed in classes 4, 5, or 6.)

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- Class 11—Stallion, 2 years and under 3, first, \$40; second, \$20; third, V. H. C.
- Class 12—Mare, 4 years or over, first, \$40; second, \$20; third, V. H. C.
- Class 13—Mare, 3 years and under 4, first, \$25; second, \$10; third, V. H. C.
- Class 14—Mare, 2 years and under 3, first, \$20; second, \$10; third, V. H. C.
- Class 15—Champion stallion—Diploma. (Must have competed in classes 9, 10, or 11.)
- Class 16—Champion mare—Diploma. (Must have competed in classes 12, 13, or 14.)

FRENCH COACH HORSES.

- Class 17—Stallion, 4 years or over, first, \$40; second, \$20; third, V. H. C.
- Class 18—Stallion, under 4 years, first, \$40; second, \$20; third, V. H. C.
- Class 19—Mare, 4 years or over, first, \$20; second, \$10; third, V. H. C.
- Class 20—Mare, under 4 years, first \$20; second, \$10; third, V. H. C.

GERMAN COACH HORSES.

- Class 21—Stallion, 4 years or over, first, \$40; second, \$20; third, V. H. C.
- Class 22—Stallion, under 4 years, first, \$40; second, \$20; third, V. H. C.
- Class 23—Mare, 4 years or over, first, \$20; second, \$10; third, V. H. C.
- Class 24—Mare, under 4 years, first, \$20; second, \$10; third, V. H. C.
- Class 25—Champion coach stallion, any breed—Diploma.
- Class 26—Champion coach mare, any breed—Diploma.

MULES.

- Class 27—Best mule, 4 years or over, first, \$35; second, \$15; third, V. H. C.
 - Class 28—Best pair mules, 3 years or over, first, \$50; second, \$25; third, V. H. C.
 - Class 29—Sweepstakes, best mule any age, first, \$50; second, \$25; third, V. H. C.
 - Special prizes offered by the American Percheron Horse Breeders' Association, for Percheron horses:
 - Class 30—Best stallion, any age, \$100 gold medal.
 - Class 31—Best mare, any age, \$100 gold medal.
 - Class 32—Best group of five stallions, \$100 gold medal.
 - Class 33—Best group of three mares, \$100 gold medal.
 - Class 34—Best group four animals, get of one sire, \$50 silver medal.
 - Class 35—Best brood mare and two or more of her produce; mare to count 50 per cent and produce 50 per cent; \$50 silver medal.
 - Class 36—Best herd Percheron horses, consisting of stallion, any age, and four mares, any age, \$50 silver medal.
- For further information or entry blanks address O. P. Updegraff, Manager, Topeka, Kans.

JOHN M. HAZLETON, Kansas City, Mo.

Durocs at the American Royal.

The managing committee of the Duroc-Jersey department of the swine division of this year's American Royal Live Stock Show, which will be held at Kansas City October 19-24, has issued its regulations and premium list, a copy of which has been received by W. H. Weeks, general agent of the Stock Yards Company. The committee is composed of O. W. Brown, Newton, Iowa, superintendent; Robert J. Evans, El Paso, Ill., secretary of the National Duroc-Jersey Record Association; C. C. Keil, Ladora, Iowa; Aaron Jones, Jr., South Bend, Ind.; J. B. Davis, Fairview, Kans.; H. B. Loudon, Clay Center, Neb.; and J. C. Woodburn, Maryland, Md. The committee makes the following announcement:

"The preliminary arrangements com-

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For Man, Beast or Fowl.

Highly concentrated; to be diluted as required. Quickly cures sores, cuts, galls, sore mouth or teats, grease heel, scratches, mange, eczema; all skin diseases; kills lice, fleas, bed bugs, mites, screw worms, warbles, etc.

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pled for the National Show of Duroc-Jerseys in connection with the American Royal Live-Stock Show at Kansas City, assures it to be an event of unusual importance in the history of the breed. The cash premiums provided are much larger than at any of the State fairs, and while the money consideration is secondary in importance it will no doubt be an additional inducement to exhibitors. The Royal Show has been extensively advertised for several years, and the success of our show last year on very short notice is proof that breeders of Duroc-Jerseys are alive to the advantages to be gained by attending this great stock contest. The display of cattle, horses, sheep, and other breeds of swine will attract large numbers of prospective purchasers and no breeder interested in the increased revenue from his investment in Duroc-Jerseys can afford to neglect this opportunity of assisting in making a good showing along with other breeds. We, as managing committee, urge you to do all that is possible to make it a great success.

- The prizes in the Duroc-Jersey department will be awarded by Aaron Jones, Jr., J. B. Davis, and H. B. Loudon, members of the managing committee. The prize list is as follows:
1. Boar 2 years or over, first, \$20; second \$10; third \$7.
 2. Boar 12 months and under 24 months, first \$15; second \$8; third \$6.
 3. Boar 6 months and under 12 months, first \$12; second \$9; third \$5.
 4. Boar under 6 months, first \$10; second \$7; third \$5.
 5. Sow 2 years or over, first \$20; second \$10; third \$5.
 6. Sow 12 months and under 24 months, first \$15; second \$10; third \$4.
 7. Sow 6 months and under 12 months, first \$12; second \$9; third \$5.
 8. Sow under 6 months, first \$10; second \$7; third \$5.

CHAMPIONS.

9. Championship boar any age, first \$20.
 10. Championship sow any age, first \$20.
- HERD PREMIUMS.**
11. Boar and three sows over 12 months, first \$20; second \$10; third \$5.
 12. Boar and three sows under 12 months, first \$20; second \$10; third \$5.
 13. Four pigs under 6 months, produce of same sow, first \$15; second \$9; third \$4.
 14. Four swine, get of same boar, bred by exhibitor, first \$15; second \$9; third \$4.

The Young Folks.

Conducted by Ruth Cowgill.

TURN ABOUT.

The horse and the dog had tamed a man and fastened him to a fence; Said the horse to the dog, "For the life of me I don't see a bit of sense in letting him have the thumbs that grow at the sides of his hands, do you?" And the dog looked solemn and shook his head, and said, "I'm a goat if I do."

The poor man groaned and tried to get loose, and sadly he begged them: "Stay!

"You will rob me of things for which I have use by cutting my thumbs away!

You will spoil my looks, you will cause me pain! Ah, why would you treat me so?

As I am God made me, and He knows best! Oh, masters, pray let me go!"

The dog laughed out and the horse replied, "Oh, the cutting won't hurt! You see,

We'll have a hot iron to clap right on, as you did in your docking of me! God gave you your thumbs and all, but still the Creator, you know, may fall

To do the artistic thing, as He did in furnishing me with a tail!"

So they bound the man and cut off his thumbs, and were deaf to his pitiful cries,

And they seared the stumps and they viewed their work through happy and dazzled eyes.

"How trim he appears," the horse exclaimed, "since his awkward thumbs are gone!

For the life of me I can not see why the Lord ever put them on!"

"Still it seems to me," the dog replied, "that there's something else to do; His ears look rather long to me, and how do they look to you?"

The man cried out, "Oh, spare my ears! God fashioned them as you see, And if you apply your knife to them you'll surely disfigure me!"

"But you didn't disfigure me, you know," the dog decisively said.

"When you bound me fast and trimmed my ears down close to the top of my head!"

So they let him moan and they let him groan while they cropped his ears away.

And they praised his looks when they let him up, and proud indeed were they!

But that was years and years ago, in an unenlightened age!

Such things are ended now, you know; we have reached a higher stage!

The ears and thumbs God gave to man are his to keep and wear.

And the cruel horse and dog look on and never appear to care.

—Ex.

Our Pilgrimage.

One of the interesting sights to one who feels a pride in our own State House, is the Capitol here. I leave the descriptions of it to my companion, in whose veins flows the blood of the early patriots, and who is proud that she can sign herself "A Kansas Farmer's Daughter."

"In those Old Colony times When we lived under the King"—our thoughtful forefathers chose a very high hill near the ocean and built thereon a beacon—a tall mast with spikes driven in it for steps, and at the top an iron skillet containing materials for firing. That it was never used for its primary purpose—alarming the country—during the well-nigh two centuries that it and its successors occupied the peak of the knoll at the top of "Beacon Hill," did not prevent its bestowing its name upon the hill and to the eminently aristocratic street which borders Boston Common on the west.

During the years from 1811 to 1823 the mound upon which the beacon had stood was cut away, for which all sight-seers have reason to be thankful. All the scant supply of breath left from breasting the steep ascent from Park Street subway station to Beacon street is necessary to bring one to the present top of the Hill.

But all weariness is forgotten when one once enters Doric Hall of the Massachusetts State House. It stirs one's patriotic soul to read the inscriptions on the old brass cannon taken at Concord Bridge! They stand now, quietly enough, their long silent mouths turned upward,—each holding a large cannon ball. A fine statue of Washington stands at the back of this room between the two entrances into the rooms beyond.

In the grand stair-case hall is a large painting of "James Otis making his famous argument against the Writs of Assistance." I was sure that I agreed with him, before I was quite certain which Revolutionary hero he was and what his argument was about. The

fire and enthusiasm of his face and attitude are enough to convince any one.

His hearers' faces testify eloquently enough to the power of his words. The despondent expressions of some say, "It must come to that, but how will it end?" Others sit looking into the future with the glow of a noble purpose roused to fullest action by the speaker; and still others, with a look of quiet consecration—renunciation—if God will!

In Memorial Hall which comes next, within little glass-enclosed alcoves, lighted by cunningly concealed electric lights, stand the old battle flags! Stained and tattered and torn, some of them dropping to pieces with age, but so eloquent of the courage and devotion of the men who bore them, that the tears one will not shed burn one's eyelids—and the printed notices, "Honor the Flag," seem a bit of officiousness.

In the dome above are four great paintings which appeal most strongly to American hearts. The first moved me more deeply, I think, than anything I have yet seen here. It is only a group of Pilgrims gathered on the deck of the Mayflower, but the high devotion which has brought them to this waste of rocks and trees and leaping waves, "that God's name might be glorified," shines forth from the picture and cries shame upon us, unworthy that we are, to reap the fruits for which they toiled. One can not live so irresponsibly, so unthinkingly, after seeing it. So true it is that—

"Whenever a noble deed is wrought, Whene'er is spoken a noble thought, Our hearts, in glad surprise, To higher levels rise."

After that the really fine pictures of "John Elliot Preaching to the Indians," "The Battle of Concord Bridge," and "The Return of the Old Battle Flags," seemed at best, only worthy to be placed near it.

A KANSAS FARMER'S DAUGHTER.

A Girl I Know.

In a small country town of northern Wisconsin there lives a girl I wish you all might know. Her name is Lucy White. When she was younger she longed to do great things. She loved music and her ambition was to study and become a famous singer, a singer whose songs should cheer and inspire men and women to higher things.

But a great loss and sorrow came to Lucy early in her young life—the death of her gentle mother. Lucy's older sister, Margaret, tried to fill the mother's place, and watched over her most devotedly. Hard times came, without the mother's careful management, and, try as they might, it seemed impossible to lay aside anything for Lucy's musical education.

Then the father married again, a widow with a little flock of her own. The new mother was not unkind, but she was very busy with her own children. Besides, she was of a practical turn of mind, and could not be expected to understand the sensitive, idealistic child with longings and aspirations so different from any she had ever felt or could feel. She frowned at the idea of wasting money on music lessons, and told Lucy she had much better be learning how to sew.

Margaret, feeling that she was no longer needed in her father's house, married the young minister who had patiently waited for her since before her mother's death. Lucy was indeed lonely now. Her heart sank within her. Margaret saw how unhappy she was, and took her to the new home in the northern part of Wisconsin, where Margaret's husband was pastor of a little village congregation.

But children came to brighten the home of the young pastor and his wife. Money was not plentiful in the little household, and Lucy would not let her brother-in-law sacrifice his own family to help her. By taking care of a neighbor's children she earned enough money to take some lessons in stenography and typewriting. An old friend of her father's offered her a position in Cleveland as soon as she should be able to undertake the work. There she hoped to study hard in the evenings at her music, and so advance a little.

We see her working bravely on in

Cleveland, denying herself most of the pleasures that young girls take as a matter of course. It was not always easy, in fact, it was often very hard, but she shut her eyes to the allurements about her, and tried to think only of the goal ahead. Thus she worked steadily on, eschewing parties and theaters, pretty dresses, and tempting bonbons. One more year now and she would have money enough put aside to go to Boston and study. Her music teacher encouraged her, and promised to make all arrangements for her convenience there with acquaintances of his.

Then one spring day when her spirits were high because of the happy hopes throbbing in her heart, came a telegram calling her to her sister's bedside. Lucy lost no time in packing her trunk and taking the next train for Sparta. She found her sister stricken with neuralgia of the heart, and the doctor gave no hope. Lucy, overwhelmed with grief, said to herself that her sister should not die, not if love and unceasing care could save her. But all the tenderness in the world could not keep the death angel away. One sad, never-to-be-forgotten morning Lucy saw the sun rise with a great ache in her heart. The children came to her bewailing their desolation. She must put away the indulgence of her own sorrow, and attend to their needs. She never wavered in what she immediately saw to be her duty. Her sister had been as a mother to her; now she would repay that debt by being a mother to these little ones left motherless.

Relinquished without a moment's hesitation were the long-cherished days that she had planned to devote to music. Instead, she consecrated her time and herself to the study of the human needs of her little nephews and niece. And in the days that followed she found her greatest solace from the dull ache and tug at her heart in the love of these little children.

And dear little people they are, whom I shall introduce to you this minute. First comes Paul, almost twelve now, the worry of his dear Auntie's life. A heedless, thoughtless boy, boy every inch of him, but a boy true-hearted and loyal, who promises great things for the future.

Next comes Mildred, aged nine, a shy, reserved little maiden, very undemonstrative, but quick of comprehension—few things escaping her bright, observing eyes. She has a will of her own, but is a good friend to anyone who takes the trouble to understand her.

Richard, just seven, is a regular little happy-go-lucky, singing from morning till night, and always ready to do anything desired of him. His aunt hopes to see her musical hopes and ambitions realized in him. Her only fear is that he will let the music all out of his energetic little body before he is ten. She gives him lessons with greatest care, that will some day be fittingly rewarded, I am sure. He and Mildred are inseparable companions.

Then last, but not least, is Teddy, the baby, the dearest, chubbiest, little fellow that one could see in a long day's journey. He keeps Aunt Lucy busy, when she is not otherwise employed in keeping him out of mischief.

Though Lucy ever keeps up a brave heart, there come moments when she feels her girlhood slipping away from her, and she asks herself, sadly, what has she accomplished? What has she done with her life? She who had dreamed of stirring the great world to higher things by the magic of her voice! Buried away in this little country village, unheard and unknown—how different from the life she had planned! Daily doing and redoing the most commonplace of petty tasks, tasks that would be drudgery were it not that she did them for those she loves.

Her life of devotion and self-sacrifice have taught me a lesson, while its trials have broadened and deepened her own beautiful, unselfish nature. It is to her I turn for consolation and soothing words of wisdom when weary of this world's disappointments and the exactions of self-seeking humanity. Lucy White has found something in

her little corner of the world that many go far to seek, and that some never find—she has found the better part. When I beg to know of her the secret of the blessed peace that lights her beautiful eyes, she quietly says, "Because I know for me my work is best."—F. B. M., in Chautauquan.

The Boy Webster.

Daniel Webster as a lad is thus described by John Bach McMaster, the historian, in the first of his illustrated papers on the statesman, published in the November Century: "As the boy grew in years and stature his life was powerfully affected by the fact that he was the youngest son and ninth child in a family of ten; that his health was far from good; that he showed tastes and mental traits that stood out in marked contrast with those of his brothers and sisters; and that he was, from infancy, the pet of the family. Such daily work as a farmer's lad was then made to do was not for him. Yet he was expected to do something, and he might have been seen barefooted, in frock and trousers, astride of the horse that dragged the plow between the rows of corn, or raking hay, or binding the wheat the reapers cut, or following the cows to pasture in the morning and home again at night, or tending logs in his father's saw-mill. When such work was to be done it was his custom to take a book along, set the log, hoist the gates, and while the saw passed slowly through the tree-trunk, an operation which, in those days, consumed some twenty minutes, he would settle himself comfortably and read."

The Intelligent Snake.

The naturalist, John Burroughs, is opposed to nature books that treat of animals too imaginatively—that impute to animals sentiments of love, pity, tenderness and refinement.

"Sometimes, in reading one of these nature stories, I am reminded," Mr. Burroughs said one day, "of the story of the intelligent copperhead. This story is quite as true as many that are implicitly credited.

"According to it, there was a man who had a habit of teasing copperheads. He would find a copperhead's hole, and then would wait beside it till the snake returned—till it had got so far into the hole that only the end of its tail protruded. This he would seize, and with a quick movement he would throw the snake twenty or thirty feet away.

"One day the man did this to a copperhead of unusual intelligence. The snake on alighting did not make for its hole again immediately, as the others had always done; but it lay still and regarded its tormenter, thinking. For a long while it thought. Then, very slowly, it approached the hole, turned around and entered backward—entered tail first—sneering slightly at the man whom it had thus duped."

Bad Table Manners.

William's table manners were notoriously bad—so bad that he was facetiously accused of spoiling the manners of a pet coon chained in the back yard. He gripped his fork as though afraid it was going to get away from him, and he used it like a hay-fork. Reproaches and entreaties were in vain. His big sister's pleading, "Please, William, don't eat like a pig," made no impression upon him.

One day William and his bosom friend, a small neighbor, dined alone, and William was heard to say in a tone of great satisfaction as he planted both elbows on the table, "Say, Harry, they's nobody here but us. Let's eat like hogs and enjoy ourselves."—Caroline Lockhart, in July Lippincott's.

A Grateful Stork.

A story of a stork is told by a German paper. About the end of March, 1891, a pair of storks took up their abode on the roof of the schoolhouse in the village of Poppenhofen. One of the birds appeared to be exhausted by its long journey and the bad weather it had passed through. On the morning after its arrival the bird was found by the schoolmaster lying on the

ground before the schoolhouse door. The man, who, like all Germans, considered it a piece of good luck to have the stork's nest on his house, picked up the bird and took it indoors. He nursed it carefully and when it was convalescent used every morning to carry it to the fields a short distance from the house, where its mate appeared regularly at the same hour to supply it with food. The stork is now cured; and every evening it flies down from the roof and bravely walks by the side of its friend from the schoolhouse to the meadows, accompanied by a wondering crowd of children.—Dumb Animals.

Stories About Ravens.

The raven always pairs for life, and the strength of affection, the fidelity, the dignity which this implies seem to me to raise him infinitely, as it does the owls, above birds which congregate in flocks, and so abjure family ties and duties through a greater part of the year.

A raven kept at the "Old Bear" inn at Hungerford, struck a close friendship with a Newfoundland dog. When the dog broke his leg the raven waited on him constantly, catered for him, forgetting for the time his own greediness, and rarely, if ever, left his side. One night, when the dog was by accident shut within the stable alone, Ralph succeeded in pecking a hole through the door, all but large enough to admit his body.

Another, kept in a yard in which a big basket sparrow-trap was sometimes set, watched narrowly the process from his favorite corner, and managed, when the trap fell, to lift it up, hoping to get at the sparrows within. They, of course, escaped before he could drop the trap. But, taught by experience, he opened communications with another tame raven in an adjoining yard, and the next time the trap fell, while one of them lifted it up the other pounced upon the quarry.

A female raven, known at that time to be 60 years of age, and who had passed much of her early and middle life with a strange companion, a blind porcupine, was given, in the year 1854, by Mr. J. H. Gurney, the well-known ornithologist, to the rector of Bluntisham, in Huntingdonshire. She seemed so disconsolate at the loss of her surroundings that her new owner, failing to get another raven, managed to secure a seagull for her as a companion. A warm friendship soon sprang up between the two birds. They followed one another about everywhere and the raven often used to treat her companion to pieces of putrid meat which she had buried for her own consumption in the shrubberies. These were delicacies in the eyes of the raven, but they were not so good for the sea gull. In course of time, whether from indigestion or not, the gull fell ill and the raven became more assiduous than ever in her attentions, never leaving him and plying him with her most nauseous tit-bits. The gull grew worse, as was perhaps natural under the treatment, and less companionable, and one day, when he positively refused to touch a more savory morsel than usual, which the raven had denied to herself and doubtless thought to be a panacea, the raven, in a fit of fury at the ingratitude of her patient, fell upon her friend, killed it, tore it to pieces, and burying half of it for future consumption, devoured the rest.—Nineteenth Century.

A Secret of Happiness Disclosed.

The two has paused for a moment at the parting of the ways and were talking of a friend.

"Lizzie is kind and generous," said one, "and so energetic, too, if only she were a little more careful!"

"But she isn't," interposed the other, cheerfully, "so we must take her as we find her and piece out her shortcomings, whatever they are, with our own long-going. I suppose none of us quite fill the measure of what other people consider desirable, and probably Lizzie says of me: 'Elinor is warm-hearted and well-meaning, and so careful, if only she were a little more'—something that I am not! I used to worry a good deal because I could not

make my friends over into what I thought they ought to be, but I am learning to take them as they are and fill up their deficiencies with all love's might."

A laugh rippled through the words and still shone in her eyes as she turned away, but we felt that somewhere the world would be brighter and life sweeter for her presence.—North-western Advocate.

A Story With a Moral.

A few days ago two farmers came to town, and both brought butter for sale. One of the farmers had his product pressed into neat, compact half-pound packages, and he readily sold it at 25 cents a pound. He told the Herald man that he could not meet the demand for his butter. The other had his butter in a bucket and it looked soft and watery. After tramping around town from place to place trying to sell, he gave up in disgust and said it was no use to bring butter to town to sell as nobody would buy it. Guess the moral.—Palestine (Tex.) Herald.

Lark Buntings.

EDITOR KANSAS FARMER:—I wish you would say that the small white winged blackbirds seen by Chas. M. Jennison were lark buntings, not dark buntings as the compositor made me say, and I hope this will make it easier for Wilson G. Shelley to find a description of them. MARJORY LESTER. Edwards County.

For the Little Ones

THE SANDMAN.

The Sandman comes across the land,
At evening, when the sun is low:
Upon his back, a bag of sand—
His step is soft and slow.
I never hear his gentle tread,
But when I bend my sleepy head,
"The Sandman's coming!" mother says,
And mother tells the truth, always!

I guess he's old, with silver hair,
He's up so late! He has to go
To lots of children, everywhere,
At evening, when the sun is low.
His cloak is long, and green, and old,
With pretty dreams in every fold—
His shoes are silken, mother says,
And mother tells the truth, always!

He glides across the sunset hill,
To seek each little child, like me:
Our all-day-tired eyes to fill
With sands of sleep, from slumbers'
sea.

I try my best awake to stay,
But I am tired out with play;
"I'll never see him!" mother says,
And mother tells the truth, always!
—Marie Van Vorst, in Harper's Magazine.

The Storm.

The leaves on the tall cottonwood tree were very excited. They danced about, and turned this way and that, and would run to another and then to another, and all the time they kept up a great chattering. (Cottonwood leaves almost always chatter. Sometimes when you are out under a cottonwood tree, listen and you will hear them.)

"What is it? What is it I feel in the air?" said one tender little leaf.

"Oh, I'm afraid, afraid," shivered another.

"I'm not afraid," exclaimed a big bold leaf. "I love the wind when he comes whispering like this."

"Yes," said an old wise-looking one, "Yes, but soon he'll do more than whisper. He'll come with a terrible howling. He'll strike us. He'll shriek at us. He'll pound and batter us and drive us first this way and then that."

"I'm not a cowardly leaf," said one pert-looking leaf, who kept tossing his head conceitedly. "You just never mind what those old croakers say. Just do as I say, and nothing will hurt you."

They all crowded eagerly over to his part of the tree, and listened in breathless silence for a moment.

"Whenever there is a storm, just stick to your branch, and bend as the wind pushes you, and you will be all right."

"Hark! hear the old wind rushing, rushing from the west! Oh, he's bringing all his army with him!"

They waited uneasily. There was that stillness in the air that sometimes comes before a great storm.

Then, just as the wind reached the cottonwood tree, a few big drops of rain fell. Then the poor leaves began



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to feel cruel blows, besides beating of the wind.

"Oh, it is hail!" they cried. "Poor leaves! Poor leaves!"

The hail beat them. It tore some of them from their branches and hurled them to the ground and beat them there. The wind was angry, too, and he howled and shrieked, helping the hail in its cruel work.

In a little while it all was over. The wind went howling away to the north. The leaves hung limp on the trees, while great tears fell from their eyes for their lost brothers and sisters. But presently the sun peeped around a cloud at them, with a smiling face. They they all brightened into smiles and danced for joy as if there never had been a storm.

"For Right is Right, since God is God,
And Right the day must win;
To doubt would be disloyalty,
To falter would be sin."

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KANSAS GOLD.

My Kansas, oh, my Kansas,
I love your drifted snows;
Your sweet and sudden springtime
When the balmy chinook blows.
Queen of the wide prairies
Where mighty winds are born,
Your scepter is the sunflower,
Your throne the yellow corn.

I've searched for shining nuggets
In lands beyond the sea,
But the gold that grows in Kansas
Is the only gold for me.
It feeds the countless cattle
That range her rolling plains,
It gives her sons and daughters
Their beauty and their brains.

I hear its broad leaves murmur,
A pleasant tale they tell
Of bowls of hasty pudding,
And sump and milk as well,
When all the ears are garnered
In bags of fragrant meal,
And frost has seared the stubble,
And turned the lakes to steel.

Behold the allied forces
Of Kansas marching by,
With banners green and silken,
And plumes against the sky,
With shields all bronze and golden
And tassels proudly worn.
A vast and peaceful army,
The sunflower and the corn!
—Minna Irving, in Leslie's Weekly.

A KANSAS FARMER IN THE OLD COUNTRY.

X.—Florence.

From Rome northward to Florence the distance is about 200 miles, and during a ride between the two cities on July 6, many hundreds of harvesters were seen at work cutting the grain with sickles, the same as our great, great grandfathers used to do in the very ancient time of more than one hundred years ago.

Our American party of five persons, from Baltimore and Topeka, arrived in Florence at 9 o'clock in the evening, and secured good rooms at pension Champendall, via Nazionale 10, and were soon sleeping and dreaming dreams of the beauties which Florence is famed for having, and which we expected to see in the morning.

Florence, known to the Italians as Firenze, has been a city of importance for more than two thousand years. It was formerly the capital of the Grand-Duchy of Tuscany, and from 1865 to 1870 was the capital of the Kingdom of Italy. It has been a noted place for learning for hundreds of years, and the modern language of the country has emanated from this city. Its location is extremely beautiful and many writers of renown have given it extensive description. One author says of it: "Each street of Florence contains a world of art; the walls of the city are the calyx containing the fairest flowers of the human mind." It can not be undertaken, in this letter, to attempt to completely describe the points of interest in Florence, but if the reader will follow our party of viewers, a few of the interesting places will be mentioned.

From our hotel a short walk brought us to the Cathedral, which is known to the Florentines as Il Duomo, or La Cattedrale di Santa Maria del Fiore. This church was not built last year nor in the last century, but was begun six hundred and ten years ago, so it has considerable age to its credit. To give an idea of its size, we will mention that it is 556 feet in length, and 342 feet at its greatest width, while its height is 300 feet. The interior is furnished with many altars at some of which mass is being sung at nearly every hour of the day. A great array of statues and holy images can be seen on the walls, and many very large, and really beautiful paintings, said to have been done by very famous artists. Near the present cathedral is the Battistero, or church of Saint Giovanni Battista, which was the real cathedral for the city down to the year 1128. It is a very old church and is adorned by richly variegated marble ornamentation and representatives in statuary of exceedingly good saints. All children born in Florence are baptized in this establishment. It has three very large and famous bronze doors, which are heavy enough to require a couple of strong men to open or shut them; they are ornamented with bas-reliefs of scenes from

the life of St. John the Baptist, and other representations.

The Campanile, or bell tower is near by; it was built in the years between 1334 and 1387. It is a square structure, 292 feet high, and is ornamented with fine statues of saints, etc. Any one desiring to go to the top by elevator, may do so by paying a few cents.

A few blocks further brings us to the Piazza Della Signoria. This is the spot where Savonarola and two other Dominican monks were burned at the stake on May 23, 1498. This location also contains the Loggia dei Lanzi, an open vaulted hall, where public ceremonies can be performed before the people, who may assemble in the Piazza Della Signoria.

Two blocks further along brings us to the Palazzo delgi Uffizi, which was erected some 350 years ago, and now contains, among other things, the celebrated picture gallery, the National Library, and the central archives of Tuscany.

In this palace our party spent several hours viewing the magnificent paintings, and groups of marble statuary, a description of which would fill a large volume. The gallery originated with the Medici collection, to which was added the paintings from the Lorraine family, and is now one of the greatest in the world.

A car ride across the River Arno, over the old bridge (Ponte Vecchio) brings us to the Palazzo Pitti. This palace was built in 1440 to 1464 by Prince Lucca Pitti, though not finished until the following century. The building now is the home of the king of Italy, when he visits Florence, and is a very imposing structure. Here our party found it necessary to spend many hours in viewing the picture gallery and the collection of statuary. A special permit being obtained, we were taken by a guide through the king's domestic establishment, or through as many of the 167 rooms as we cared to visit. The family dining room, the state dining room, the throne room, king's bedroom, queen's bedroom, etc., were visited in turn, and all found to be furnished in royal style. One of our party, who had visited many royal palaces of Europe, pronounced this one of the very finest seen. In one room was exhibited the gold and silver plate, and many jewels and rich stones. We were shown the golden dinner service which was used to entertain the emperor of Germany at dinner, a month or so ago.

The king and queen, of course, were not at home, but we had seen them a few days before, in Rome, when they went to the railway station to take the train for the north. Besides the royal guards, and the long line of police to keep back the crowd of curious ones, there were not a great many people out to see the royal ones; not so many as Topeka would furnish to see President Roosevelt, if he were to be at the depot to take the train. N.

Food and Medicinal Value of Fruits.

EXTRACTS FROM A PAPER BY SADA V. BLAIR, READ BEFORE ILLINOIS HORTICULTURAL SOCIETY.

First of all, the apple—the king of the fruit world—is a valuable antiscorbutic remedy and a laxative. It contains malate of potassium and sodium salts, as well as lime, magnesium, and a trace of iron, with free organic acids, and phosphorus in sufficient quantity to be a soluble nerve restorative. Since its cellular tissue is somewhat firm, it is considered not quite so readily digested in a raw state as when baked. It is probably true, however, that its value as a laxative is somewhat lessened by cooking. Apples also lessen the acidity of the stomach.

The banana is probably the best example of the food fruit, containing a fair amount of carbohydrates and an appreciable amount of proteid matter. It is, however, too bulky to constitute an essential item of diet, as it would require about 80 per day to supply enough energy to keep a reasonably active man going, and about 160 to supply him with sufficient proteid matter, according to one authority. It has been estimated, however, that on a given acreage bananas will support a

larger number of persons than will wheat. A wider recognition of the food value of the banana is rapidly spreading, although even 10 years ago so great an amount as 12,695,386 hands of this fruit came into American ports in one year, while at the present time over 100,000 bunches are sold each month for distribution in and about New York city alone.

Bananas, having been imperfectly ripened in most cases, are scarcely fit to serve unless cooked in some one of the many appetizing ways in which they can tickle the palate even of an epicure. It may be of interest to know that in its native land the variety of banana shipped to us is never eaten raw. There is one variety, possibly more, whose flesh is considered delicate to serve uncooked, but these never leave the home lands. If a banana has been properly baked it is sufficiently tempting to destroy forever the appetite for a raw one.

Dates and raisins have even greater nutritive value than bananas, and Densmore says one-half pound of dates and one cup of milk is an ample meal for a sedentary person; while dried figs are proportionately more nourishing than bread. The action of blackberries in cases of summer complaint is sufficiently swift and sure to make blackberry juice one of the most dependable of home remedies.

Other fruits, such as apples, pears, peaches, oranges, cherries, shaddock, and prunes, are laxative because the vegetable acids and salts which they furnish, upon being absorbed, stimulate the digestive secretions and peristalsis.

Grapes, especially the unfermented juice from them, are considered a very valuable tonic. The juice combined with olive oil is said to be very beneficial to the system and fattening. The grape cures of France and Germany are well known and probably have a greater value than is attributed to them in this country. For dissolving calculous deposits and washing out the system generally, grapes, in such quantities as are there prescribed, would undoubtedly be efficacious. But I fancy it would take an enthusiastic lover of grapes to dispose of twelve pounds a day, and continue to sing the praises of the vine after a week's treatment.

Grape fruit, lemons, and limes are the most serviceable of the antiscorbutic fruits, promoting gastric digestion. Lemon juice has been used successfully as a remedy for seasickness, for taking fur off the tongue, and in some cases will counteract nausea. The juice of limes is used on sailing vessels to prevent scurvy, and in almshouses and prisons, where an appalling monotony of diet is the rule.

Pears have no special value, but stimulate the appetite. Quinces are considered indigestible, unless properly cooked. The pineapple, too, is indigestible in a raw state, but the juice is very wholesome, containing a ferment capable of digesting proteid matter. Tamarinds are cooling and laxative, and the same is true in a greater degree of oranges, which, on this account, are very valuable in mild fevers. Orange water or lemon ice, well frozen and not too sweet, may be used for children in inflammation of the throat. The strawberry is very wholesome and exceedingly useful on account of its richness in potash, soda, lime, and its diuretic and laxative properties.

Fruit should not be eaten at the conclusion of a hearty meal. Many a desert, valuable in itself, has been under a cloud of suspicion, as the cause of digestive disturbances, when the only trouble is that it has been crowded at the close of heavier courses into the few remaining interstices of an outraged and indignant stomach. The place for fruit is at the beginning of the meal. Indeed, when used instead of medicine for its laxative virtues, it should be eaten half an hour before breakfast with a glass of hot or cold water.

Seasonable Recipes.

TOMATO CHILI SAUCE.

Nine large, ripe tomatoes, peeled and cut small, 3 red peppers and 1 onion chopped fine, 1 teacup vinegar, 2 table-

spoons brown sugar, 1 tablespoon salt, 1 teaspoon each of ginger, cloves and allspice; mix all together, adding the vinegar last. Simmer for one hour. This is excellent, and much more wholesome than when made more highly spiced.

SHIRLEY SAUCE.

Wash, peel and slice two dozen ripe tomatoes, 4 large onions, and 4 medium sized green peppers, add 4 tablespoons brown sugar, and 1 pint best cider vinegar. Boil the tomatoes and onions first until tender, then boil all slowly until done. Put into jars and seal.

GOVERNOR'S SAUCE.

One peck green tomatoes, 4 large onions, 6 red peppers, 1 teacup grated horseradish, 1 teaspoon each of cayenne and black pepper, 1 teaspoon mustard, ½ cup sugar. Slice the tomatoes and sprinkle over them 1 teacup salt, let lay all night, then drain well, and simmer all together until cooked through. Seal immediately.

ENGLISH SAUCE.

One pound brown sugar, ½ pound salt, ½ pound garlic, ½ pound onions, ¼ pound pepper, ¼ pound ground ginger, ½ pound mustard seed, 1 pound raisins, 2 pounds apples, ½ ounce cayenne, and 2 quarts vinegar. Chop are raisins, pare and cut the apples, and boil them in 1 pint of the vinegar. Chop fine and bruise well the garlic and onions, and make the sugar into a syrup with 1 pint of the vinegar. When the apples are cool, mix the whole, including the remainder of the vinegar. Blend well together and seal airtight.

CHUTNEY SAUCE.

Chop finely one quart each of green tomatoes, and apples, and 1 onion. Sprinkle with salt, and let stand for two hours. Then drain in a colander, and add 1 tablespoon each of finely chopped mint and nasturtium seeds, 1 pound seeded and chopped raisins, 2 cups sugar, 1 pint vinegar, 1 cup lemon juice, 1 teaspoon cayenne pepper, and 1 tablespoon each of ground ginger, mustard and grated horseradish.

Summer Hygiene.

Summer is the season of health and recuperation for those who properly regulate their mode of living. For those who do not it is a season of discomfort.

Pure, healthful, light food that will not stimulate heat production while it properly nourishes and strengthens the body and brain is the great essential.

It is conceded that the best of all foods for summer diet are the quickly made flour foods—hot biscuit, rolls, puddings, cakes, muffins, etc., such as are made with baking powder. A most excellent household bread is also made with baking powder instead of yeast. These, properly made, are light, sweet, fine flavored, easily digested, nutritious and wholesome. Yeast bread should be avoided wherever possible in summer, as the yeast germ is almost certain in hot weather to ferment in the stomach and cause trouble. The Royal Baking Powder foods are unfermented, and may be eaten in their most delicious state, viz., fresh and hot, without fear of unpleasant results.

Alum baking powders should be avoided at all times. They make the food less digestible. When the system is relaxed by summer heat their danger is heightened.

The flour-foods made with Royal Baking Powder are the acme of perfection for summer diet. No decomposition takes place in their dough, the nutritive qualities of the flour are preserved and digestion is aided, which is not the case with sour-yeast bread or cakes.

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Horticulture.

Plant Forest-Trees on Lands Seriously Injured by the Flood.

The question of the most profitable use of some of the bottom lands in Kansas recently injured by the flood has engaged the attention of many thinkers. It is an important one to the owners of the lands. Doubtless the greater portion of these lands will be farmed much as in the years of the past and with equal profit. But there are many tracts which, on account of drifts of sand or deep erosion, or from both these causes, have become unsuited to ordinary crops. That they be devoted to timber has been suggested by several.

If they are to be so used the profit of such culture will depend upon the intelligence with which the plans shall be laid and the work carried out. It is fortunate on this account that the Division of Forestry of the U. S. Department of Agriculture stands ready to extend its aid in planning the work.

The following letter to the editor of this paper is important in this connection:

United States Department of Agriculture, Bureau of Forestry, Washington, D. C., July 27, 1903. Prof. E. B. Cowgill, Editor KANSAS FARMER, Topeka, Kans.

My Dear Sir:—I take pleasure in sending you herewith enclosed Circular No. 22 of the Bureau of Forestry which outlines a plan of cooperation by which assistance to tree-planters is rendered. The recent floods in your section have caused the ruin of much good land for agriculture. It seems to me that large areas of injured land could be utilized very profitably in plantations of forest-trees.

If enough of your people desire to enter into cooperation with the Bureau of Forestry under the provisions of this circular, I believe a man could be sent this fall to examine the land and make recommendations for its treatment. It seems to me that the Union Pacific Railroad Company ought to take great interest in this question and furnish transportation to our agent if we send one out. Other railroad companies are contributing liberally to propaganda for the enlightenment of farmers on forestry questions.

Here is an opportunity for some one to take the initiative. The policy of the Bureau is to send its men upon request of landowners or other interested parties. It would hardly be proper for us to send out a man without such request coming for our assistance.

I feel deeply interested in the situation on the Kaw Valley. If the people decide to plant trees, it will be very easy for them to make costly mistakes. The services of the Bureau of Forestry are rendered absolutely free to those desiring our advice and assistance. Very truly yours,

GEORGE L. CLOTHIER,
Acting Chief of Division.

Mr. Clothier will be remembered by readers of the KANSAS FARMER as a valued contributor to its columns. He was for a time connected with the Kansas Experiment Station in the work of plant-breeding. Following are excerpts from the circular mentioned in Mr. Clothier's letter:

PRACTICAL ASSISTANCE TO TREE-PLANTERS.

The Division of Forestry is prepared, so far as its very limited appropriation will permit, to render practical and personal assistance to farmers and others by cooperating with them to establish forest plantations, woodlots, shelterbelts, and windbreaks. A section of the Division has recently been organized and placed in charge of an expert tree-planter, assisted by a number of collaborators and assistants residing in the different States, who are thoroughly familiar with their local conditions. This section will devote itself entirely to investigations in tree-planting and to the assistance of those who may avail themselves of the cooperative plan outlined in this circular. Applications for such assistance will be considered in the order of their receipt, but the Division reserves the right to give preference to

those likely to furnish the most useful object lessons. After an application has been made and accepted, the superintendent of tree-planting, or one of his collaborators or assistants, will visit the land of the applicant, and, after adequate study on the ground, will make a working plan suited to its particular conditions. The purpose of this plan is to give help in the selection of trees, information in regard to planting, and instruction in handling forest-trees after they are planted.

Briefly stated, the Division proposes to give such aid to tree-planters that woodlots, shelterbelts, windbreaks, and all other economic plantations of forest-trees may be so well established and cared for as to attain the greatest usefulness and most permanent value to their owners.

ORIGIN OF THE PLAN.

The cooperative plan announced in Circular No. 21 of this Division, by which farmers, lumbermen, and others are assisted in handling forest lands, has been so well received, that the Division offers, in the present circular, a similar cooperative plan to aid farmers and other landowners in the treeless regions of the West; and wherever it is desirable to establish forest plantations. Under the provisions of Circular No. 21, issued in October, 1898, about 400,000 acres of woodland have already received attention. Applications have been received for assistance in the management of about 1,500,000 acres, and attention is being given to them as rapidly as the resources of the Division will permit.

Public recognition of the success of better methods applied to the management of timber-lands is rapidly increasing. Equal success must follow the application of such methods to the developing of forest-plantations, woodlots, and even shelterbelts and windbreaks. Upon that fact the cooperative plan set forth in this circular is based.

TREE-PLANTING IN THE PAST.

Forest-tree planting has been in progress in the West for many years. Although reasonable success has usually followed skillful planting and close attention to the selection of species and to their subsequent care, many of the tree claims of that region are failures. This condition has largely arisen from the difficulty of obtaining accurate information at first hand regarding the most desirable species to grow in a given locality and from the lack of personal supervision by a competent tree-planter in the setting out and subsequent care of the plantation. The growing of forest-trees for economic purposes can not be successfully undertaken without some knowledge of trees, their habits, and their adaptability to the place where they are to be planted. The grower must know what to plant, how to plant it, and how to care for it afterwards.

Many of the earlier papers on forest-tree planting, scattered through the Western press and through the reports of Western horticultural societies, forest associations, and board of agriculture, were based upon untried theories or upon experience too brief to warrant the deductions made. Many species were recommended with the utmost confidence for planting in regions for which late experience has shown them to be entirely unfit. Although many valuable papers occur in the great mass of published material on Western tree-planting, they are so obscured by unreliable matter as to be of little use to the inexperienced planter.

WHAT IT TEACHES.

A careful study of the older tree claims of the West, of recent plantings, and of plantations set out and cared for under expert supervision, shows most forcibly the value of careful selection of species and of judgment in planting. Some of these plantations are dead or dying, others are in a thrifty condition; some are upon one kind of soil, some upon another; some are planted with trees close together, others with trees long distances apart; some have been pastured, others have not; some have been carefully cultivated, others have been allowed to grow to grass and

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weeds. Accurate conclusions drawn from the work of the past, a knowledge of the causes of failures, and a correct accounting for the successful plantings should materially lessen future failures. The application of such knowledge must necessarily give a new impulse to tree-planting for economic purposes.

THE VALUE OF FORESTS TO FARMERS.

Few persons comprehend in full measure the direct and indirect value of forests to farmers. In the humid portions of America, where nearly every farm has its woodlot, the total area of the woodland is more than two hundred million acres. It is not possible to make an accurate statement of the value of the annual product from these lands, but when it is considered that nearly all the fuel used by the farmers of the region mentioned, together with most of the wood for fencing and a considerable portion of the timber for building purposes, are annually cut from the woodlots, their value begins to be appreciated.

For fuel and fencing the woodlot and other forest plantings are equally desirable to dwellers on the plains. On Mr. E. T. Hartley's farm, near Lincoln, Neb., an acre of land set to willow has for several years provided all necessary fuel used on the farm, and to-day there is more standing timber upon it than ever before. The planting is in a ravine of little value for general farming. A plantation of hardy catalpa, near Hutchinson, Kans., planted in the spring of 1892, began a year ago to reimburse the owner. The trees taken out at that time, in thinning the plantation, were cut into fence posts. They were cut at the level of the ground and each tree furnished two posts. The trees removed averaged 18 feet high, one of the tallest measuring 21 feet 9 inches.

Forest plantations are valuable not only for the purposes above indicated, but in addition they have great indirect value. By conserving the moisture and tempering the wind, they modify the local climate to a very marked degree.

As the farmers of the plains come to recognize more fully the great indirect as well as direct value of forest plantations, woodlots, shelterbelts, and windbreaks, scattered over the agricultural treeless regions, and undertake to row them in greater numbers, even if individual plantations are small in extent,

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It always Pays to plant the Best. Our varieties grown from pure stock imported by us, cost but little more than common sorts, but will yield 45 to

60 Bushels Per Acre

Write for our Free Seed Wheat Catalog with full descriptions of our New "MALAKOFF," the grandest new variety of wheat ever introduced; requires less seed per acre; stools better; stands up better; gives larger yield and better quality of grain; stiff straw; rust proof and never attacked by fly; as hardy as Rye. Price, \$1.50 per bushel. Turkish Red, - \$1.10 per bu. Bags Free. Mammoth Winter Rye, \$0.90 per bu. Ask for prices on Timothy, Clover and other seeds.

RATEKINS' SEED HOUSE, Shenandoah, Ia.

160 ACRE FARMS IN WESTERN CANADA FREE

Western Canada

Land of the Sunshine, Grain Growing, Mixed Farming.

The Reason Why

more wheat is grown in Western Canada in a few short months, is because vegetation grows in proportion to the sunlight. Area Under Crop in Western Canada 1902—1,987,330 Acres. Yield 1902—117,922,754 Bu. Abundance of water and fuel. Building material cheap. Good grass for pasture and hay. A fertile soil. A sufficient rainfall and a climate giving an assured and adequate season of growth. All these conditions are found in Western Canada.

160 ACRE HOMESTEADS FREE

The only charge being \$10 for entry. Send to the following for an Atlas and other literature, showing location of lands in Western Canada, and also for certificate giving you reduced freight and passenger rates, etc. The Superintendent of Immigration, Ottawa, Canada; or to the authorized agent of the Canadian government—

J. S. CRAWFORD, 214 West Ninth Street, Kansas City, Mo.

Write for Prices and Catalogue.



SOROSIS - RELIABLE - PEERLESS
FARM AND STOCK SCALES.
Standard Scale and Foundry Company, Manufacturers. Scales of Every Description. KANSAS CITY, MO.

3 FEEDS TO THE ROUND ADMIRAL HAY PRESS CO. SELF FEEDER 5 SAVINGS IN HAY BALING WRITE TODAY FOR OUR FREE CATALOGUE



BOX 25, KANSAS CITY, MO.

THOMPSON "EVER READY" ENGINE
With Pumping Attachment.

The reliable little power which fits a hundred farm uses. Strong, 2 h. p., machine cut gears, mounted on substantial platform for easy moving to all work. So simple any one can run it, and the cost for gasoline is but a trifle. Absolutely safe. Generate power instantly. You are surprised at the number of things it is adapted to and the duty you get out of it, such as pumping, sawing, grinding, separating cream, etc.

J. THOMPSON & SONS MFG. CO., 117 BRIDGE ST., BELOIT, WIS.



the total result will be of vast importance in the development of the West.

Tree culture in regions formerly treeless is dependent largely upon agriculture. Wherever large areas of land have been brought under cultivation the growing of trees is yearly becoming more successful. Nearly every State of the plains region has, among many failures, some admirable examples of plantations, of all ages from 1 to 25 or more years, which have been in every way successful. The success of these plantations, when compared with the more numerous failures, proves the great need for practical experience, combined with wide and accurate knowledge, in growing forest-trees in the West.

The forest plantation at the Agricultural College, Brookings, S. D., illustrates what may be accomplished in a few years on the open prairies of that State. The plantation at the Agricultural College, Manhattan, Kans., with its dense undergrowth, illustrates the possibility of the perpetuation of forests in that and similar localities after they are once well established, and many of the catalpa plantations of Kansas and southern Nebraska are living arguments in favor of tree planting on the plains. At Ogallah, longitude nearly 100 west, the State of Kansas has established a forest experiment station. The vigorous growth of many of the species at this station illustrates the value of thorough cultivation as a means of overcoming the effects of continued drouth. The neighboring tree claims are either dead or in poor condition, largely from lack of cultivation. On the farm of Judge C. E. Whiting, Monona County, Iowa, the timberbelts, planted about forty years ago, supply all the posts for keeping up forty miles of fencing, the fuel for the homestead and the tenants, and a large surplus as well. Only the overtopped trees are cut. Each species is planted pure, the trees growing in belts and in groves which protect the fields and the farm buildings. A varied undergrowth is coming in, which will maintain the forest after all the planted trees are cut down. The plantations established a few years ago by this Division in cooperation with the agricultural experiment stations in many of the Western States show interesting possibilities in mixing planting and in the selection of species.

Many similar illustrations are available to show what has been done and to indicate the possibilities in tree-planting in the West.

AN INCIDENTAL VALUE OF FOREST PLANTATIONS.

To the majority of people there is nothing else so attractive about a home as trees. A well-planted woodlot, in two or three years after its establishment, will provide the farmer with a supply of trees to plant along roads and for ornamental purposes about buildings and gardens. As the trees in a plantation begin to crowd each other many may be removed with material advantage to those that remain, care being taken not to interfere with the shading of the ground. The superfluous trees often pay the cost of cultivation and care for the plantation after it is once established.

WHEN AND HOW LONG PLANTATIONS PAY.

The immediate value of the woodlot for fuel will depend largely upon the rapidity of growth of the trees planted and the fuel value of their products. Under favorable circumstances, after the woodlot has reached the age of from 8 to 12 years, some trees suitable for fuel and posts can be taken out yearly without injury to the rest. If the plantation be correctly managed, young trees will often come up of their own accord to take the places of the older trees as they are removed. This is true already in many of the better managed among the older plantations in the West. Under a broad shelterbelt of pine, soft maple, white elm, black walnut, and ash, planted some thirty-five years ago at Manhattan, Kans., there is now a thick undergrowth which contains a large percentage of the trees and shrubs indigenous to eastern Kansas. This undergrowth is entirely the result of natural condi-

tions. Seeds from trees and shrubs on the river bottoms have been brought in by the wind and by birds and other forms of animal life. Undergrowth of this kind, which varies in this plantation from a few inches to fifteen feet in height, will, if properly managed, provide ample material to take the place of the older trees as they are gradually cut down. In this plantation, as in others handled in like manner, there is no reason why there should not be a continual succession of trees, generation after generation, without the expenditure of a single dollar for replanting. But if sheep or other stock are allowed to graze in or overrun a plantation, undergrowth is prevented from coming in, and no provision is made for the perpetuation of the forest condition. The soil becomes packed by the trampling of the stock, the natural mulch is destroyed, and the trees suffer.

After a woodlot has begun to provide fuel, posts, and other material for farm uses it should continue to supply such products indefinitely. To secure this result, however, only a limited amount may be taken out in any single season.

The many failures on the timber claims of the West should not be discouraging. Much of the poor success has been directly due to the selection of undesirable species, poor judgment in planting, and to the lack of proper care of the plantation after its establishment.

PLANTING IN NONIRRIGATED REGIONS.

In nearly the whole of the broad prairie belt extending from the wooded regions to longitude 100° west, and reaching from North Dakota to Texas, trees may be grown with varying success. On the western border of the wooded area nearly all the species may be grown which are indigenous to the adjacent woodlands. Farther west the range in selection becomes more and more restricted, until the western limit of successful tree-culture on non-irrigated lands is reached.

PLANTING ON WORN-OUT FARMS.

Many of the worn-out farms in humid regions may be brought back to their original fertility by growing forest-trees upon them for a series of years, and very many of them contain land better suited to the production of wood than to any other purpose. Such land should never have been cleared. It is fortunately true that throughout the regions once wooded worn-out farm lands will usually revert to their previous condition if protected from fire and stock. This result may be very materially hastened and usually more desirable species grown if some attention be given to forest planting.

THE PLAN OF COOPERATION.

Applications for assistance under the terms of this circular will be considered, as already stated, in the order in which they are received, but precedence will be given to the lands most likely to furnish useful examples, after the study on the ground has been made. The plan formulated for establishing and developing the forest plantation, woodlot, shelterbelt, or windbreak will not be put into effect unless it be satisfactory both to the Division of Forestry and to the owner.

HINTS TO APPLICANTS.

Persons desiring the assistance of the Division as here indicated should make application as early as November of each year, or earlier if possible, so that ample time may be afforded the agent of the Division to visit the farm of the applicant and formulate plans under which the work is to proceed in time for the planter to order the nursery stock or seeds for spring planting. Applications which do not reach the office by November 15 are likely to go over until the following year.

Applicants are requested to specify the acreage, situation, and soil conditions of the land which they desire to plant. The land should be located by State, county, and township, or by public surveys. GIFFORD PINCHOT, Approved: Forester.

JAMES WILSON, Sec. of Agriculture. Washington, D. C., July 8, 1899.

Dewey Invited.

Admiral George Dewey has been invited to attend the State G. A. R. reunion at Lawrence.

If Dewey accepts, it will be his first visit to Kansas. He has made several trips through the country, but has never happened to include Kansas in his itinerary. His presence at the State reunion would be about the biggest drawing card the State officers of the Grand Army could find.

With a few exceptions one of whom is Dewey, the speakers invited for the State reunion have accepted and Department Commander Smith has sent to the printer the copy for the official programme.

The program is as follows:

Tuesday evening, September 15, free-for-all camp fire, presided over by ex-Lieutenant Governor A. J. Felt.

PRAIRIE GROVE DAY, SEPTEMBER 16.

Wednesday morning 10 o'clock, dedication of camp Lincoln. Address of welcome.

Response by Department Commander A. W. Smith.

2:30 p. m., address by General John C. Black, commander-in-chief of Grand Army of the Republic.

7:30, campfire, presided over by Rev. Bernard Kelly.

LINCOLN DAY, SEPTEMBER 17.

Morning session in charge of Women's Relief Corps.

Address by E. W. Hoch, of Marion, Kans.

Afternoon meeting, John C. Black, commander-in-chief, presiding officer.

Address, "The Life and Character of Abraham Lincoln," by George R. Peck, of Chicago.

Evening, address by General L. H. Waters, of Kansas City, on "The Memories of Lincoln."

GETTYSBURG DAY, SEPTEMBER 18.

Morning session in charge of Ladies of the Grand Army of the Republic.

Afternoon session, Captain W. F. Henry, presiding officer. Address by E. H. Funston.

Evening session, address by Robert W. Blue.

CHICKAMAUGA DAY, SEPTEMBER 19.

Morning session in charge of the Spanish-American soldiers. Presided over by General Wilder S. Metcalf.

Afternoon session, address by Captain J. G. Waters.

Evening campfire, address by W. A. Calderhead.

MEMORIAL DAY, SUNDAY, SEPTEMBER 20.

Morning, 10:30, memorial services, Rev. Bernard Kelley presiding. Sermon by B. F. Boyle, department chaplain.

Afternoon service conducted by Rev. H. D. Fisher, survivor of Quantrell massacre. Sermon by Rev. Carl Swenson, of Bethany College.

KANSAS FARMER'S NEW WALL ATLAS.

The KANSAS FARMER has arranged with the leading publisher of maps and atlases to prepare especially for us a New Wall Atlas, showing colored reference maps of Kansas, Oklahoma, Indian Territory, the United States, and the world, with the census of 1900. The size of the New Wall Atlas is 22 by 28 inches and it is decorated on the outer cover with a handsome design composed of the flags of all Nations.

Tables showing products of the United States and the world, with their values, the growth of our country for the last three decades and a complete map of the greater United States are given. This is an excellent educational work and should be in every home. The retail price of this New Wall Atlas is \$1.

Every one of our old subscribers who will send us \$1 for two new trial subscriptions for one year will receive as a present a copy of this splendid New Wall Atlas postpaid, free.

Any one not now a subscriber who will send us 50 cents at once will receive the KANSAS FARMER for five months and will be given a copy of our New Wall Atlas free and postpaid.

When writing advertisers please mention this paper.



Growing Old

Ought not to mean growing weak and feeble. It does not mean weakness or feebleness for those who eat with good appetite and sound digestion. It is of the utmost importance that old people should retain the power to digest and assimilate food which is the sole source of physical strength. When age brings feebleness it is generally because of the failure to assimilate the nutrition contained in food.

Dr. Pierce's Golden Medical Discovery cures diseases of the stomach and other organs of digestion and enables the perfect digestion and assimilation of food. It invigorates the liver and promotes general physical well being.

"It is with gratitude we acknowledge what Dr. Pierce's medicine has done for grandmother's good, in fact it has cured her," writes Miss Carrie Ranker, of Perrysburg, Ohio. "She had doctored with several physicians but found no relief until Dr. Pierce advised her what to do. She has taken only three bottles of 'Golden Medical Discovery' and is entirely well. She suffered with pain in kidneys, bladder and liver for ten years, and her limbs were swelled with dropsy so bad she could hardly walk. My grandmother's name is Mrs. Caroline Hennen, her age is 71 years. I will gladly answer all letters of inquiry."

Sick people are invited to consult Dr. R. V. Pierce by letter, free. All correspondence is held as strictly private and sacredly confidential.

Dr. Pierce's Pleasant Pellets regulate the bowels.

Publisher's Paragraphs.

J. M. Maher, Fremont, Kans., whose advertising card appears on page 871, writes that he has been very busy thrashing out his seed wheat. The winter wheat yielded thirty-five bushels per acre, which is considered a very good yield even for this season. He writes that he is receiving inquiries for his seed wheat right along and is now able to fill orders large or small.

Kansas Farmer readers have doubtless noticed the splendid advertising card of Highland Park College, Des Moines, Iowa, which has the distinction of being in session the entire year, and which has enrolled more than eighteen hundred students during the year just closed. Fourteen different departments including Electrical, Steam, Mechanical, and Civil Engineering, Pharmacy, Law, Music, Oratory, Actual Business, Shorthand, Telegraphy, and preparation for the civil service; all this at expenses reduced to the minimum and with board ranging from \$1.50 to \$2.50 per week.

We might tell you of the hard usage that Page Fence will stand, of its simple construction, of the better quality of its material, of how much longer it will last, of the wire being over twice as strong, of how it will let out and take up in varying temperatures, of how each wire is coiled from end to end, of how much experimenting we have done in order to produce so good a fence; but we could not convince you with all our arguments, as one demonstration of the actual fence convinces. See it stretched up or see it survive an accident that would ruin others. Talk with any number of persons who have ever used Page Fence and other kinds, and ninety-nine out of every one hundred will tell you that the Page is the best; that it possesses all the advantages found in others, and many advantages purely its own.

One of the most successful educational institutions of the West and one which has had a phenomenal growth, is Platt's Commercial College, of St. Joseph, Mo. Founded but a few years ago in the face of keen competition, it has developed into the first institution of its kind in the city of St. Joseph and one of the first in the Missouri Valley. Its founder and present president is Prof. E. M. Platt, who received the earlier portion of his training under the direction of his father, Prof. J. E. Platt, who was for more than a quarter of a century a member of the faculty of the Kansas State Agricultural College. Coming of an educational family, Professor Platt has improved his opportunities, and now finds himself at the head of this great institution. Professor Platt has personal supervision of the welfare of all his students, and the success that this institution has met with in placing its students in profitable positions has been remarkable. Platt's Commercial College has recently had the distinction of having one of its professors elected to a position in the State Agricultural College of Kansas. St. Joseph, Mo., is a large city with the opportunities for growth and development as well as for business employment that are found so much better in large cities than in smaller places, and with such an institution as this college to attend, and with cheap and good boarding facilities, it will be seen that here is just the place for young men or women who are seeking a thorough training for business life. See their advertising card on page 869 and write for catalogue.

A KANSAS OIL TOWN.

(Continued from page 861.)

wells with forty-seven now being pumped. For this purpose a great gas engine of 180 horse-power is used to operate twin air pumps which force the air below the oil in the earth and thus compel it to rise to the central storage tanks. From these it is piped to the refinery at Neodesha some thirty-five miles distant or is shipped in tanks on the railroad. Chanute is located in the midst of a rich agricultural region in the Neosho valley where farmers receive the usual returns from their land and the extraordinary ones from the oil leases which interfere but slightly with the cultivation of the soil. As an example of strenuous American life seen at its best, we think the citizens of Chanute and vicinity furnish a typical example.

WORLD'S FAIR TAKING SHAPE IN KANSAS.

The Kansas World's Fair Commissioners are rapidly developing their plans for gathering and arranging the Kansas exhibits. F. Burtleigh Johnson, of Hays City, has been appointed chief in charge of agricultural exhibits. He has secured many specimens of grains in the straw and many specimens of grasses. Those who know of desirable specimens of these that may be obtained should immediately notify Mr. Johnson. Corn specimens will be secured later.

The appointment of W. F. Schell, of Wichita, to have charge of the horticultural exhibits met the unanimous endorsement of the directors of the State Horticultural Society. At their meeting last Thursday committees were appointed to cooperate with Mr. Schell in the various branches of the work. The specimens for preserving and for cold storage will be brought to Topeka. Secretary Barnes is an expert in the art of preserving specimens for exhibition and was placed at the head of the committee having that work in charge. Each director is a committee on collections in his district. It will be well if the commissioners reward marked efficiency in collecting by appointments at the Fair.

The mineral exhibits will be gathered and arranged under the direction of Prof. G. P. Grimsly, than whom none better could have been secured. In her agricultural and horticultural exhibits Kansas should stand second to no State unless it be Missouri. In live stock she should occupy a place very near the front. In mineral she should present a varied and attractive exhibit.

Let all Kansans pull together and have the State measure fully up to her opportunities in the great exposition of 1904.

BALANCED RATION OF SUGAR-BEETS AND ALFALFA HAY.

EDITOR KANSAS FARMER:—Please answer through your paper the feeding qualities there are in sugar-beets and what is would take with them and alfalfa to make a balanced ration for beef cattle.

J. B. KAUFMAN.

Laramer County, Colo. If a balanced ration without regard to bulk were the only thing desired such can be made from sugar-beets and alfalfa. The ration per 1,000-pound beef-steer would be, in whole numbers: Sugar-beets, 107 pounds; alfalfa hay, 12 pounds. That this ration would lack concentration and would be too "washy" there is little doubt.

A balanced ration for this beef-steer can be made from corn and alfalfa hay. Such a ration would contain: Corn, 14 pounds; alfalfa hay, 13 pounds. That this would be a good ration for young steers such as are now usually fed, no one will question. But if it is desired to use the sugar beets also the two rations—the one composed of sugar-beets and alfalfa hay, the other of corn and alfalfa hay—may be used together in any desired proportions without destroying the "balance."

If the prosperity of the steers alone is to be considered, a good plan is to place the feeds all before them, allowing them to eat as much of each as they desire. They will generally bal-

ance the ration and will take about as much of each as will produce the best results.

WEEKLY WEATHER-CROP BULLETIN.

Weekly weather-crop bulletin for the Kansas Weather Service for the week ending August 11, 1903, prepared by T. B. Jennings, Station Director.

GENERAL CONDITIONS.

The week has been cool in the eastern and middle divisions, with temperature about normal in the western. The rainfall has been heavy in the eastern division, the northern half of the middle division, and the extreme north part of the western and in Clark County. Over the rest of the western division and the southwestern part of the middle it has been deficient. Hail storms occurred in some of the northern counties.

RESULTS.

EASTERN DIVISION.

Corn is in fine condition. Late corn has grown rapidly and is tasseling and silking, while the earliest is practically made in some counties. The week has been so wet that much wheat and oats in stack and shock have been damaged, some by sprouting and some by discoloration; some hay stacks have been damaged also, and thrashing, plowing, and haying stopped. Pastures are fine. The third crop of alfalfa is heavy and ready to cut. Potatoes are a poor crop in Johnson, and a very short crop in Marshall, while the late potatoes are not looking well in Atchison. Apples are doing very well south, but are a short crop north. Peaches and grapes are doing finely in Chautauqua. Flax is good in quality but light yield in Franklin.

Anderson.—Farmwork stopped by excessive rains which are injuring corn and greatly damaging hay and grain stacks.

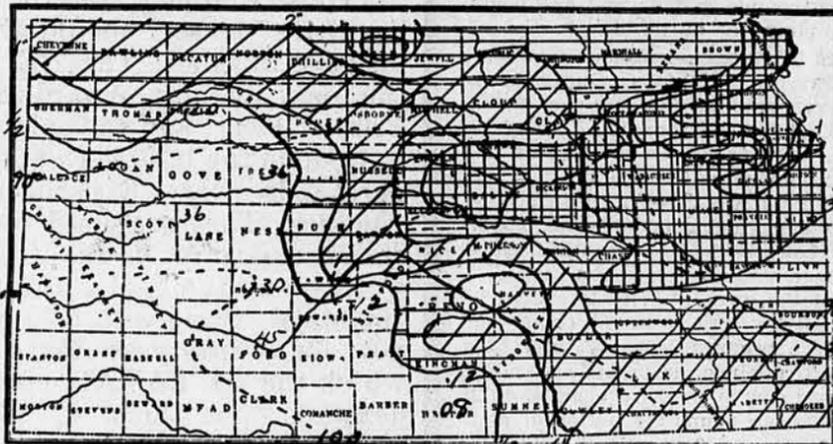
Atchison.—More than half of the oats still in the shock and very greatly damaged; corn doing well, but too wet for lowland and late corn; late potatoes not looking very well.

Bourbon.—Corn still making rapid and heavy growth; haying retarded by the rains.

Brown.—Thrashing delayed by rains; fall plowing in progress; late corn growing finely and much improved during last ten days; pastures good and stock doing well.

Chase.—Corn doing finely, the latest planting now tasseling; Kafir and cane doing well; some alfalfa seeding being done; alfalfa saved for seed injured by continued wet weather; but little prairie-hay cut yet; thrashing at a standstill; grass fine and stock doing well;

Rainfall for Week Ending August 15, 1903.



Maximum temperature shown by broken lines.

SCALE IN INCHES.



third crop of alfalfa hay ready to cut; crop larger than first and second.

Chautauqua.—All growing crops doing well; apples, peaches and grapes are doing finely; corn crop far better than expected.

Coffey.—But little farmwork done this week; haying and thrashing almost at a standstill.

Crawford.—Corn growing rapidly, late tasseling and silking and early in roasting ear; plowing for wheat well along; some fields are too wet to plow now; a large acreage of wheat will be sown.

Doniphan.—Wheat a light crop and low-ground oats hurt by rust; ground in very good condition for plowing; very light crop of fruit.

Elk.—Sunshine needed for haying and thrashing; corn doing well.

Franklin.—Corn is making fine progress; thrashing delayed by rain; flax good quality with a light yield.

Greenwood.—Corn and Kafir-corn doing finely; pastures very fine; third crop of alfalfa being harvested and is a heavy crop; meadows in fine condition, but too wet for haying.

Jackson.—A fine week for corn which is making good progress in most fields; small grain in shock badly damaged by wet weather; pastures look well for August; prairie haying delayed by rains.

Jefferson.—Crop is irregular, some looking very well and other fields very poor; it is feared that much stacked hay is damaged; alfalfa greatly damaged by wet weather; apple crop nearly a failure.

Johnson.—Good prospects for corn, but much of it is late, some not yet tasseled; thrashing nearly done; wheat yield poor to fair; plowing for wheat progressing with ground in good condition; pastures good and cattle doing well; apples a poor crop; also potatoes.

Leavenworth.—Pastures good; both early and late corn promise well; too wet for any farmwork.

Linn.—Corn doing well; most ground too wet to plow for wheat; some damage to oats and flax by rain; prairie haying retarded.

Lyon.—Corn is making good growth.

Marshall.—Corn and all other growing crops doing finely; millet, cane and all fodder crops promise a large yield; pastures good; potatoes a very short crop; no peaches; there will be some apples; ground in good condition for plowing.

Montgomery.—A good growing week for corn and pastures; late corn in fine condition; haying has been delayed by rains; ground in fine condition for plowing.

Morris.—All farmwork delayed by rains; wheat badly damaged in shock, nearly a total loss on overflooded lands; late crops making a fair growth, but it is too wet and not warm enough for rapid growth.

Pottawatomie.—Late corn tasseling with prospects for a good crop; too wet to plow for wheat; a good growing week.

Riley.—Heavy rains have stopped farmwork; late corn making fine growth.

Shawnee.—Thrashing and haying retarded by

THE OLD WAY A COLONIAL HUSKING BEE



When She Found a Red Ear at the old-time husking bee, a penalty was exacted. It was great sport for the boys and girls.

DEERING HUSKERS AND SHREDDERS

have stopped the sport but have saved mints of money for the modern farmer. DEERING two-roll and four-roll shredders fill every requirement of the large or small farmer, double his profit, and ease his labor. THEY ARE MODERN, UP-TO-DATE MACHINES

Write or ask your nearest dealer for a "Deering Corn Annual" and post upon the IDEAL LINE of corn binders, corn shockers, huskers and shredders.



THE NEW WAY DEERING HUSKER and SHREDDER

heavy rains; oats damaged in shock and stack; late corn tasseling and silking, early in roasting ear; corn getting very weedy in the bottoms; fall plowing begun; upland in fine condition for plowing; garden truck plentiful; apples fine; pastures unusually good; cattle doing very well.

Wabaunsee.—Corn conditions greatly improved by the rains, and there are now prospects for a good crop; the third crop of alfalfa will be a heavy one.

Woodson.—Poor week for haying; considerable hay spoiled; both early and late corn doing well; plums ripe; many have fallen off

stacking, and plowing; wheat is damaging in the shock; the rains will benefit corn, forage crops, alfalfa and pastures.

Reno.—Plowing progressing rapidly with ground in good condition; corn looking well and promises a better crop than was expected; cane, Kafir, alfalfa and prairie-grass growing well; pastures improved; a fair crop of potatoes mostly dug; plenty of tomatoes and cucumbers in market.

Republic.—Corn filling nicely and promises a large yield; some stacking to do yet; thrashing delayed by rains; third crop of alfalfa growing rapidly; plowing for wheat begun.

Russell.—Too damp for thrashing, though it is making slow progress; corn in fine condition.

Saline.—A wet week; much wheat being seriously damaged in the stack; all corn making splendid growth but farmwork greatly delayed by rains.

Sedgwick.—Fine growing weather; corn greatly improved; apples give promise of good yield.

Smith.—Some corn damaged by hail on the 13th; where not injured is very promising; early corn in roasting ear; thrashing greatly delayed, and considerable wheat damaged in shock; wheat is yielding well; forage crops doing well; pastures good and stock doing well.

Stafford.—Plowing in full progress; thrashing continues with good yield.

Washington.—A good week for all growing crops; early corn earing heavily; replanted growing rapidly; some corn damaged by hail; grass and pastures doing well; grass hurting the alfalfa; grapes doing well; ground too wet to plow.

WESTERN DIVISION.

Thrashing has progressed rapidly and continues to show a good yield of a fine quality of wheat. Corn is in good condition in the central and northern counties and in Lane the early corn is being used on the table. Grass has been improved in Lane by the rains while in Wallace the range-grass has cured sufficiently to fatten cattle. Haying is progressing in Wallace. Alfalfa has improved in Ford. Forage crops have benefited by the rains, though in Thomas much damage was done by hail. Cattle are doing well except where tormented by flies. Plowing for fall seeding has progressed in several counties.

Clark.—All crops doing well.

Decatur.—Thrashing well under way with wheat yielding well; millet a good crop, partly in stack; other forage crops fine; prospects for a heavy corn crop.

Ford.—Corn fodder, Kafir, and cane benefited by rains; alfalfa also improved; wheat thrashing continues with fine yield and quality; some fall plowing being done.

Lane.—Early corn in roasting ear and promises a good crop; sorghum and Kafir-corn doing well; grass improved by the rains.

Thomas.—Stacking and thrashing making good progress in parts of the county, too wet in other parts; wheat turning out better than expected; corn doing finely and forage crops abundant; ground in fine condition for plowing which is in progress; disking of stubble ground is also being done.

Trego.—All thrashing machines are working; ground becoming dry; some plowing done during the week.

Wallace.—Haying is the order of the day, and the hay is good; late corn doing finely but needs rain; range-grass curing, but flies retard the fattening of cattle.

He that falls in love with himself will have no rivals.

Advertisement for Gem City Business College. The ad features a portrait of a man and text describing the college's offerings, including business education, typing, and bookkeeping. It mentions that the college has 1150 students and 16 teachers, and is a \$100,000 building. The president is D. L. Musseleman.

Advertisement for Thresher Belts. The ad describes the belts as being made of red canvas, stitched, and endless. They are six inches wide and four-ply. The price is \$20.00 per belt, with a 10% discount for bulk orders. The ad is from Chicago House Wrecking Co., 35th and Iron Sts., Chicago.

The SHARPLES Tubular Separators.

There are two kinds of cream separators and only two. **OURS and the OTHERS.**

The Tubular bowl. The patent protected kind. The bowl without complications, that is easily cleaned. The entirely clean skimmer under all conditions. The can't get out of order kind.

The bucket bowl. The bowl with discs, cones, graters or contraptions that can't be kept clean. The fairly clean skimmer under favorable conditions. The bound to give trouble kind.

There is a lot of real difference in the two kinds and it amounts to big money in a year's time. Investigate. Separators are different. Free Catalogue No. 165. **P. M. SHARPLES, West Chester, Pa. THE SHARPLES CO., Chicago, Ill.**



In the Dairy.

Conducted by George C. Wheeler, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

Records of Individual Cows from Illinois.

A bulletin from the Illinois Station has just been received giving the records of individual cows on eight Illinois dairy farms. The report includes 144 cows covering a period of one year, and the results show the usual wide variation in the productiveness of different cows and other variations due to differences in care and feeding. Some of these herds were kept at a good profit while others yielded very small profits, and one herd was kept at a loss. Cows were found in six of the herds tested that did not pay for the feed they consumed. In the estimate of profit and loss, the calf was counted as paying for the cow's keep while dry, and the skim-milk to balance all labor.

The most profitable cow gave 8,949 pounds of milk and made 472 pounds of butter. The poorest cow produced only 1,482 pounds of milk and 68 pounds of butter. The average production of all herds excepting that of H. B. Gurler was 4,721 pounds of milk, 3.67 per cent fat, 173 pounds of butter-fat, and 202 pounds of butter.

Mr. Gurler has been improving his herd by the use of the scales and test for years and has an exceptionally fine herd of profitable cows so that it would not have given a fair average of general conditions to have included his herd in the averages. In fact it may well be assumed that the men who took up this work of cooperation with the Experiment Station were more progressive dairymen than the average and undoubtedly had better cows than the average.

The most profitable cow gave a net profit of \$57.22 and the poorest cow was kept at an actual loss of \$17.83.

The farmers who aided in conducting this test were required to weigh and sample the milk from each cow every seventh week for fourteen consecutive milkings.

Herd "A" consisted of eighteen cows which had not been bred for dairy purposes. They produced an average of 119 pounds of butter-fat and the average loss was \$4.54. The best cow yielded \$18.40 profit while the poorest was kept at a net loss of \$17.83. This man would have been better off if he had sold his feed at market prices.

Herd "B" consisted of twenty cows, some of which were fairly good dairy animals. Three were kept at a loss of

from \$1 to \$1.28 each. The two best cows made a profit of \$24.98 and \$25.32 respectively.

This herd was fed from October 1 to November 1 on ear corn, corn-stalks and pasture. During November and December they were fed a daily ration of 6 pounds bran, 6 pounds corn-meal, 8 pounds millet hay, and 10 pounds corn-stover. This ration is deficient in protein and would have been much better if two pounds of oil-meal or gluten-meal had been substituted for three pounds of the corn-meal and would have been just as cheap.

In January and February the fresh cows were given seven pounds of bran, four pounds of corn-meal, and oat straw and corn-stover all they would consume.

During the months of March and April they received bran, 6 pounds; gluten-feed, 3 pounds; clover hay, 5 pounds; corn-stover, 8 pounds; and oat straw ad libitum. This is a fairly well-balanced ration, although slightly deficient in protein for the highest yields of milk.

In May the fresh cows and the ones giving the highest yields of milk were fed a daily ration of 7 pounds shorts, 3 pounds gluten-feed, 5 pounds clover hay, and 8 pounds millet hay. For the rest of the year this herd was on blue-grass pasture with 2 pounds of shorts as a grain ration. The average profit per cow for this herd was \$12.12. The average cost of producing 100 pounds of milk was 57 cents and 16.1 cents to produce one pound of butter-fat.

The best cow in the herd produced 100 pounds of milk for 40.7 cents and a pound of butter-fat for 12.6 cents.

The poorest cow charged 71 cents for 100 pounds of milk and 23.2 cents for a pound of butter-fat.

Herd "D," which contained forty-seven cows, is the famous Gurler herd, and even here we find one cow which was kept for the year at a loss of 18 cents. The profits on the rest of the herd ranged from \$2.52 to \$57.22.

This herd was cared for entirely by hired help and undoubtedly would have shown still better results if they had been under the personal supervision of the owner. With this herd it cost only a little over 12 cents per pound to produce butter-fat and 54.9 cents to produce 100 pounds of milk. The best cow in the herd charged only 7.5 cents per pound for butter-fat and 35.5 cents per 100 pounds of milk.

This herd was exceedingly well cared for and received a well-balanced ration during the whole year. As an example of the best feeding of dairy-cows the feeding of this herd is summarized as follows: During September and until the middle of October the cows giving the largest flow of milk were given 6 pounds of grano-gluten daily and all the green corn they would eat up clean. From October 15 to December 7 the ration of the best milker was 5 pounds of grano-gluten, 3 pounds of corn-meal, 45 pounds of corn silage, and 5 pounds of timothy hay. From December 7 to February 1 the ration was 3 pounds shorts, 2 pounds corn-meal, 3 pounds gluten-meal, 45 pounds silage, and 5 pounds hay. The cows did not seem to do as well on the ration as on the one previous. From February 1 to March 15 the ration was 5 pounds of grano-gluten, 3 pounds of corn-meal, and 50 pounds of corn silage and timothy hay. From this time until turned on grain they received 7 pounds grano-gluten, 3 pounds corn-meal, and 60 pounds silage. During July and August they received nothing but pasture grass. The pasture was undoubtedly better than we can expect in Kansas during July and August.

These rations, of course, were not fed to the very poor cows and strippers in the quantities indicated. The rations given are not heavy grain rations but every one given contained over two pounds of digestible protein and a liberal supply of the other digestible nutrients required. These rations are given more to show that a ration containing the required amounts of digestible nutrients must be given than to recommend the Kansas farmer to go and buy such feeds as grano-gluten and gluten-meal. The point is that he must provide the required

"Dog-Days" and Cream Separator Fakirs

Every "dog day" season one of our old time "tin-can" creamer would-be competitors, of late years making a separator of which it is said that its only good feature is its sacrilegiously taken name—the "U. S."—is seized with a new advertising spasm of some kind and a desire to buy newspaper space for use in imaginary self-comparison of itself with the DE LAVAL, in which new fake it usually grows worse from week to week until the DE LAVAL stoops to notice its fairy stories.

First it was so-called Experiment Station fake "skim-milk records"; then a false representation of a Paris Exposition award and a still more false one of the DE LAVAL machines not having received the Grand Prize; then a garbled report of the Buffalo Exposition skim-milk tests and much lying about the awards made there. And so it has gone for some years.

Now the latest fit of rabies of which this disciple of Ananias is the victim is brazenly advertising that his machine can't skim cool milk because of quickly clogging up with it, while he pleads that it is wickedly cruel of the DE LAVAL agents to remind buyers of separators that there are frequent occasions when this is both convenient and necessary, and that the practical separator must be capable of it, though only the DE LAVAL is with good results.

Those who may read the advertisements of our envious little "teaser" should always keep these fundamental facts in mind: The DE LAVAL machines received the only Regular Award at Chicago, the only Grand Prize at Paris, and the only Gold Medal at Buffalo. They have done the best work and are held to be the best separator in every Experiment Station in Europe and America. They are used by 98 per cent of the experienced creamery users of separators throughout the world—and their sales are ten times all other makes combined, while with a 50 per cent greater output every year for twenty years there has never been a year yet in which the DE LAVAL manufacturers could meet the demands upon them.

This is a record of stone-wall facts which any of our pigmy would-be competitors are perfectly welcome to stand up and measure themselves alongside or butt their shortcomings into whenever they may be foolish enough to attempt it.

If any reader may not understand why a DE LAVAL SEPARATOR is as much better than the best of its imitators and followers are better than gravity systems a DE LAVAL catalogue to be had for the asking will make the reasons plain.

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 9 AND 11 DRUMM STREET, SAN FRANCISCO. NEW YORK. 248 McDERMOT AVENUE, WINNIPEG.

amount of protein from some source. If possible to raise it on the farm so much the better, but if not it will pay to sell some of the corn or oats and buy protein in the cheapest form possible.

The most conclusively demonstrated fact to be taken from this record of individual cows is that even our best herds show wide variation in profitability and are susceptible of much improvement. The poor cows must be disposed of and their places taken by better ones.

The Influence of Food Upon Milk Secretion.

By A. W. Bitting, M. D., Inspector, City Board of Health, Laboratory of Comparative Pathology, Indiana Agricultural Experiment Station, in Creamery Patrons' Handbook.

During the period when physiologists attempted to explain practically

all changes upon chemical and physical bases, the teaching was that milk resulted from a separation of its constituent elements from the blood, the separation taking place in the udder. Upon this teaching the belief became fixed that the quantity and quality of the milk-secretion was in a measure dependent upon the amount and kind of food the animals received. The influence of this teaching is still potent. Many elaborately planned experiments have been made by individuals and Government experiment stations to determine the truth or falsity of this view. The results have been very confusing, unless all the data be known. It must be admitted that a large per cent of practical dairymen believe that they can take poor or average cows, and by good feed and management greatly increase the quantity and bet-

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ter the quality of milk produced. The results of experiment stations have not been wholly in accord with this view. No doubt but that the dairyman, taking a cow in poor condition, scarcely receiving sufficient food to maintain the body nutrition, and giving her good care and abundant feed, will be able to increase both the yield and quality. The experiment station or person who takes an animal in a good state of nutrition, and feeds highly may still further increase the flow, or maintain it, and may improve the quality for a short time, but not permanently. The error too often committed by the dairyman in drawing a proper conclusion is, first, testing the milk for quantity and quality which is below the normal for the animal because of her impoverished condition, and second, in drawing the conclusions from the temporary change occurring soon after the change in food. The experiment stations, as a rule, use only well-nourished cattle, and consequently do not find such market changes, and furthermore, they keep the records for a longer period of time, so that the conclusions are not biased by the incomplete data obtained from the temporary changes. Among those who believe that the quality of milk is practically a fixed character in any individual and not subject to more than temporary variation by the feeding, are G. H. Witcher and S. M. Babcock. The latter sums up the matter as follows: "My opinion is that the quality of milk so far as it is measured by the per cent of fat, depends almost upon the individual peculiarities of the animal, and so long as sufficient food is supplied and consumed, very little depends upon the kind of food. External conditions, which often are not apparent, seem to have a greater influence upon the richness of milk than the kind of feed. This is shown by the fact that the daily variations in the per cent of fat in the milk from the same cow, when no change has been made in the ration, is often greater than occur when a radical change in the food is made." Furthermore, the same ration will affect different animals differently. According to this theory, the man who endeavors to keep up the standard of his milk by careful feeding can not attain that end, and has no advantage over his neighbor who uses the cheapest ration possible.

According to others writers, as Youatt and Wing, the food has considerable influence upon the quality, but not to the same extent as the quantity. In fact, with cows kept under favorable conditions, with an abundant supply of food, it is hardly possible to increase the proportion of fat to other solids by a change of food. While the total solids can not be easily affected, the character of the constituents may be influenced and this is notably so of the fat. For example linseed-meal, gluten-meal, and certain other foods make a soft, oily fat, while cottonseed-meal, the seeds of the various legumes, and wheat bran make a hard fat. The constituents, other than fat, are not so easily affected. When cows are fed on watery herbage, brewers' grains, or other food containing a high percentage of water, the milk becomes poorer in solids. The explanation offered for this last condition is based on the assumption of a more watery character of the blood, due to excess of water in the food. A poor, watery diet impoverishes the blood, and leads to the production of watery milk.

The assumption of a watery diet producing a watery milk is not fully in accord with close observation, as it has been found that the fat content has not been diminished by turning cattle from dry feed to pasture. It is in line, however, with the statements so frequently accredited to health boards, that cattle fed on brewers' grain and starch refuse have a lower fat content in the milk than those using dry feeds. My own analyses do not show enough difference to be able to decide from the milk test alone which dairy uses sloppy feed and which one uses dry feed and pasture. The average of a large number of analyses from dairies using slop feed shows about

one-half per cent less fat than dairies using dry feed and pasture. No factor other than food seems to account for the difference.

Dairy Exhibits at St. Louis.

The dairy products at the Louisiana Purchase Exposition will occupy three huge glass refrigerators each 90 feet long and from 30 to 40 feet wide. These refrigerators will be located in the agricultural palace, which is a building 500 feet wide and 1,600 feet long. Beside these refrigerators will be the working dairy in which will be handled all the milk from the dairy herds that will be entered in the test. This dairy will be equipped with the latest and best dairy appliances and machinery for handling butter and cheese, and visitors to the fair will be able to watch the work since the walls will be of glass. Besides this there will be an immense exhibit of dairy and creamery machinery, fancy foreign and domestic cheese and butter, sanitary milk plants, etc. The magnitude of the St. Louis Fair can not but impress the visitor. Its educational value to the States of the Mississippi Valley will be very great, not only as showing the dairy possibilities of the country but also the vast natural and artificial resources of this "granary of the world."

Through the persistent advocacy of Chief F. D. Coburn, in the face of considerable opposition from some sources, the butter made there next year during the proposed cow demonstration will be judged by giving a possible credit of 15 points in a total score of 100 to "aroma" and 30 to "flavor," instead of ignoring the element of smell or aroma and giving a possible 45 points to flavor alone. Chief Taylor, of the Department of Agriculture, under whose supervision the butter will be made and judged, is heartily in favor of recognizing aroma, and the representatives of the different breeders' associations furnishing cows for the test are unanimously for it.

The World's Fair Cow Demonstration.

The cow demonstration proposed as one feature of the World's Fair cattle exhibits at St. Louis next year has been definitely arranged, and on a much broader scale than anything of the sort heretofore attempted. It has been designated as a "cow demonstration" because, while not in any way neglecting the dairy-test idea developed at former world's fairs, it is intended to illustrate in a comprehensive way the practical adaptabilities of the pure-bred cow. The strictly dairy breeds are given opportunities to make a large showing, while features not in the least conflicting with their privileges enable the dual-purpose breeds to demonstrate their value for both dairying and beef production. This means a demonstration rather than a competitive test, and will enable each breed anticipating to show its own peculiar advantages.

The Jersey, Shorthorn, Brown Swiss, and French Canadian Associations have already entered. Entries will be permitted from individuals on behalf of other breeds if received before December 1. Prizes will be awarded to herds and to individual cows, and entries of from five to twenty-five cows may be made by representatives of any one breed. The same cows may compete for herd and individual prizes.

The tests will continue 100 days, beginning Monday, May 16, 1904, and will be conducted in four classes, designated as Tests A, B, C, and D. Test A is for the demonstration of the economic production of butter-fat and butter; B, of milk for all purposes related to dairying; C, of all the products of the cow; and D, for demonstrating the greatest net profit in producing market milk. In Class C the calf will be judged for its beef merits. A cow may be entered in more than one class.

Copies of the rules may be had by applying to F. D. Coburn, Chief of Department of Live Stock, World's Fair, St. Louis, Mo.

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All happy, contented and satisfied Cream Shippers, testify every day to the merit of our system of shipping a can of cream. Do you want to join this happy family? Are you going to continue to keep the cows, or do you want the cows to keep you? For 360 days we have enrolled on an average five new members every day. Who is next?



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The Poultry Yard.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

In selecting the hens to be kept for breeders take those with small, smooth, and neat heads, well-developed combs, bright eyes, and nice, tapering necks, long and deep bodies, active movements, vigorous in constitution and good layers.

Eggs in winter mean good prices and good profits, and one aid in securing them is to select the best of the early-hatched pullets and the 1-year-old hens that moult early and keep them especially for this purpose, providing them with dry, comfortable quarters and feeding so as to keep in a good, thrifty condition.

A flat perch is best because of being the most comfortable to the feet and best support to the breast when the chicken is sitting down. Arrange them far enough from the door to avoid a direct draft, on a level and not over three feet from the ground, and so arrange them that they can readily be taken down to be cleaned.

The production of eggs is a great drain on the fowl's system, and during the laying season about one-half of the whole amount of nourishment taken into the fowl's crop is used in the production of eggs, and it is very essential to see that they are supplied with plenty of the proper kind of food for egg-production.

For swelled head and eyes in fowls a saturated solution of boric acid applied with a soft sponge is one of the best remedies known. A teaspoonful poured down the throat twice a day is an excellent remedy for roup, while a mixture of equal parts of the powdered boric acid and borax—a teaspoonful once a day—is given as a good remedy for cholera.

While charred bones as well as charred corn is given poultry for the sake of the charcoal which is very healthy for them, purifying the blood and aiding digestion, this charred stuff does not contain the food value of ground raw bone on account of the animal oils contained in the latter, which are consumed in the charring process. Fresh bones, when ground, are the most valuable, being full of animal matter.

Bourbon Red Turkeys.

As I have been reading your paper for several years and have never seen anything about the Bourbon Red, or, as they are more commonly called, the Buff turkey, I would like to say a few words in their behalf, as they are favorites with me. They are a trifle smaller than the Bronze; are just as healthy and strong as any turkey. In color the feathers are deep reddish buff, edged with black, except the wing and tail feathers, which are white, making a beautiful bird. Then in their habits and disposition they are more like chickens that are good rustlers than anything else. With them one does not have to be spending any time roaming the country in search of turkeys. They go to the fields as soon as they receive their feed in the morning, are back again by 6 o'clock in the evening for feed and water and to spend the night on some elevated pole near the house. Mine this year have taken to the grape arbor, which just suits me, as they harm neither the vine nor the fruit, and the foliage forms a protection for the turkeys. The hens go to roost just as soon as the young are able to fly up.

The Buff can be made great pets of, so that even the old ones can be handled as easily as a kitten. The king of our flock is "Cupe," named for "Cupe," the negro in "Stringtown on the Pike," because of his cuteness. He is certainly king of the whole poultry yard. Whenever there is a fight in progress in the poultry yard Cupe is sure to step in between the combatants and put a stop to the conflict. No one can be talking anywhere near Cupe but he will come up and stand just as close as he can, cock his head to one side and look up with a human expression, just as if he understood every word. If we speak of him he

Kansas State Fair and Exposition

Class G.

Thomas Owen, Topeka, Superintendent.
A. DeMuth, Director in Charge.
E. H. Rhodes, Expert Judge.

Lot 1.—American Class.

Ring No.	1st Prize.	2d Prize.
1	Barred Plymouth Rocks, old birds.....\$5	\$2
2	Barred Plymouth Rocks, young birds.....	1
3	White Plymouth Rocks, old birds.....	2
4	White Plymouth Rocks, young birds.....	1
5	Buff Plymouth Rocks, old birds.....	2
6	Buff Plymouth Rocks, young birds.....	1
7	Silver Laced Wyandottes, old birds.....	2
8	Silver Laced Wyandottes, young birds.....	1
9	Golden Laced Wyandottes, old birds.....	2
10	Golden Laced Wyandottes, young birds.....	1
11	White Wyandottes, old birds.....	2
12	White Wyandottes, young birds.....	1
13	Buff Wyandottes, old birds.....	2
14	Buff Wyandottes, young birds.....	1

Lot 2.—Asiatic Class.

15	Light Brahmas, old birds.....	5	2
16	Light Brahmas, young birds.....	2	1
17	Dark Brahmas, old birds.....	5	2
18	Dark Brahmas, young birds.....	2	1
19	Buff Cochins, old birds.....	5	2
20	Buff Cochins, young birds.....	2	1
21	Black Cochins, old birds.....	5	2
22	Black Cochins, young birds.....	2	1
23	White Cochins, old birds.....	5	2
24	White Cochins, young birds.....	2	1
25	Partridge Cochins, old birds.....	5	2
26	Partridge Cochins, young birds.....	2	1
27	Black Langshans, old birds.....	5	2
28	Black Langshans, young birds.....	2	1
29	White Langshans, old birds.....	5	2
30	White Langshans, young birds.....	2	1

Lot 3.—Mediterranean Class.

31	S. C. White Leghorns, old birds.....	5	2
32	S. C. White Leghorns, young birds.....	2	1
33	R. C. White Leghorns, old birds.....	5	2
34	R. C. White Leghorns, young birds.....	2	1
35	S. C. Brown Leghorns, old birds.....	5	2
36	S. C. Brown Leghorns, young birds.....	2	1
37	R. C. Brown Leghorns, old birds.....	5	2
38	R. C. Brown Leghorns, young birds.....	2	1
39	Buff Leghorns, old birds.....	5	2
40	Buff Leghorns, young birds.....	2	1
41	Blue Andalusians, old birds.....	5	2
42	Blue Andalusians, young birds.....	2	1
43	W. F. Black Spanish, old birds.....	5	2
44	W. F. Black Spanish, young birds.....	2	1
45	Black Minorcas, old birds.....	5	2
46	Black Minorcas, young birds.....	2	1
47	White Minorcas, old birds.....	2	1
48	White Minorcas, young birds.....	1	50 cts

Lot 4.—Miscellaneous.

49	W. C. Black Polish, old birds.....	2	1
50	W. C. Black Polish, young birds.....	1	—
51	Golden Polish, old birds.....	2	1
52	Golden Polish, young birds.....	1	—
53	Silver Spangled Hamburgs, old birds.....	2	1
54	Silver Spangled Hamburgs, young birds.....	1	—
55	Golden Spangled Hamburgs, old birds.....	2	1
56	Golden Spangled Hamburgs, young birds.....	1	—
57	Red Caps, old birds.....	2	1
58	Red Caps, young birds.....	1	—
59	Silver Gray Dorkings, old birds.....	2	1
60	Silver Gray Dorkings, young birds.....	1	—
61	Houdans, old birds.....	2	1
62	Houdans, young birds.....	1	—
63	Cornish Indian Games, old birds.....	2	1
64	Cornish Indian Games, young birds.....	1	—
65	Rhode Island Reds, old birds.....	2	1
66	Rhode Island Reds, young birds.....	1	—
67	Buff Orpingtons, old birds.....	2	1
68	Buff Orpingtons, young birds.....	1	—
69	Silver Spangled Bantams, old birds.....	2	1
70	Silver Spangled Bantams, young birds.....	1	—
71	Golden Spangled Bantams, old birds.....	2	1
72	Golden Spangled Bantams, young birds.....	1	—
73	Pit Games, old birds.....	2	1
74	Pit Games, young birds.....	1	—

Ring No.	1st Prize.	2d Prize.	
75	Best pair Bronze Turkeys.....	\$5	\$2
76	Best pair White Holland Turkeys.....	2	1
77	Best pair Pekin Ducks.....	2	1
78	Best pair Toulouse Geese.....	2	1
79	Best display Belgian Hares.....	2	1
80	Best display White Rabbits.....	2	1
81	Best display Guinea Pigs.....	2	1
82	Best display Pigeons.....	10	5
83	Best display Pet Stock.....	5	2.50
84	Best dozen of Eggs.....	1	50 cts

85	Heaviest pair of fowls in American Class.....	2
86	Heaviest pair of fowls in Asiatic Class.....	2

Lot 5.—Special Premiums.

87	Best display of S. C. White Leghorns, 100-egg Incubator by Sure Hatch Incubator Co., Clay Center, Neb.	
88	Best display in American Class, \$5.00 in advertising by Kansas Farmer.	
89	Best display in Asiatic Class, \$5.00 in advertising by Kansas Farmer.	
90	Best display in Mediterranean Class, \$5.00 in advertising by Kansas Farmer.	

C. H. SAMSON, Secretary, Topeka, Kans.

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POULTRY BREEDERS' DIRECTORY.

BLACK LANGSHAN EGGS for sale, 5cents a piece. Minnie M. Steel, Gridley, Kans.

BARRED ROCKS ONLY.—Heavy boned, vigorous stock, unlimited range. Eggs carefully and securely packed. 100, \$4; 15, \$1. Adam A. Wier, Clay Center, Neb.

SUNNY NOOK POULTRY YARDS.—S. C. B. Leghorn eggs, from vigorous, good layers, \$1 per 15. John Black, Barnard, Kans.

FOR SALE CHEAP.—Pedigreed Scotch Collie pups. W. H. Richards, V. S., Emporia, Kans.

EGGS FROM GEM POULTRY FARM are sure to hatch high-scoring Buff Plymouth Rocks. No other kind kept on the farm. 15 for \$2.30 for \$3.50. Satisfaction guaranteed. M. B. turkey eggs, 11 for \$2. C. W. Peckham, Haven, Kans.

COLLIE PUPS AND B. P. ROCK EGGS—I have combined some of the best Collie blood in America; pups sired by Scotland Bay and such dams as Handsome Nellie and Francis W. and others just as good. B. P. Rock eggs from exhibition stock; none better; 15 years' experience with this breed. Eggs \$1.50 per 15. Write your wants. W. B. Williams, Stella, Neb.



DUFF'S POULTRY

During the summer months we will sell all our fine breeders, consisting of over 400 one-year-old birds, from our breeding-pens of this season. Birds costing us from \$5 to \$25 will all go at from \$1.50 to \$5 each. We will also sell spring chicks all summer. Our stock can not be excelled by any in standard requirements and hardiness. Barred Plymouth Rocks, White Plymouth Rocks, Buff Cochins, Partridge Cochins, Black Langshans, Light Brahmas, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs and S. C. Brown Leghorns. Single birds, pairs, trios and breeding pens. Circulars Free. Write your wants.

A. H. DUFF, Larned, Kans.

will either open his mouth as if he wants to speak or will gobble. If we pass him by without a pat on the head or a word he looks very indignant indeed. I have now about sixty young ones doing nicely and very lively indeed.—Mrs. M. M. B. Brown, Appleton City, Mo., in Journal of Agriculture.

Revolutionizing the Poultry Business.

Very few people realize what a revolution is going on in the poultry business of this country. From the beginning of poultry history up to within a very short time, the handling of market poultry in the country has been almost a matter of barter. It was customary for farmers and others to select what poultry they had to sell and take it to the nearest town and sell it for cash or barter it for goods with the merchants of the town. Or a huckster would go about in a wagon and gather up the surplus poultry and either sell it to the merchants or ship it to some commission merchant in the city, each separate transaction involving but a small amount of money and the whole work being conducted on a small scale.

Then the big packing firms which had revolutionized the meat business of the country began to take an interest in poultry. They established packing plants in various places and began to buy poultry, bidding against the country merchants and securing the bulk of the crop. In reviewing the situation in the West an exchange says:

"The poultry business is now just coming under the influence of the same conditions which have so radically revolutionized the meat industry in the last twenty-five years. Cold storage and refrigerator transportations are opening possibilities in poultry production that will tremendously increase the importance of the industry in the next decade. Under old conditions poultry consumed in any section of the country was of local production, as chickens bear long live shipment but poorly. With the application of refrigeration will come a change, both in production and distribution. Production, instead of being confined to localities in ready touch with markets, will concentrate in the districts where poultry can be produced most cheaply. In other words, the center of production, as in the case of beef, will be near the grain fields and especially in the corn belt. Another change will be in the direction of production on a large scale instead of chicken-raising as a mere incident to farming. In the past chickens have either been shipped alive to market centers, to be killed just before being offered to the consumer, or killed on the farm and shipped to the commissionman for immediate disposition. From an economic standpoint either method is wasteful. The by-products in the shape of feathers and offal are practically wasted.—Commercial Poultry.

Miscellany.

His Kansas Farm Not for Sale Yet.

EDITOR KANSAS FARMER:—As so many of my old neighbors in Kansas expressed a desire to be informed of my impressions of Oregon, I would like to use the FARMER for the purpose. When we left Rice County, April 13, the farmers were well along with the spring work, oats were up, etc. On our arrival here, April 17, they were just commencing to plow for oats, which is probably the principal crop in this (Yarnhill) county. The season has been backward, harvesting commenced about August 1. Hay crop was quite extensive, mostly clover, timothy, oats, and cheat. Considerable hay is baled in field, out of shocks, the balers furnishing everything at \$2 per ton. Loose hay brings from \$6.50 per ton for wild hay to \$10 for timothy. Wheat and oats are a fair crop this season. Thrashing is all done from shocks at 6 cents for wheat and 5 for oats, thrashers furnishing everything but sacks, twine, and wood for fuel. Wood is worth \$2.50 per cord. We had the last rain July 6 and none

is expected before September, so there is fine weather continually for haying, harvesting, etc. A Kansan notices the absence of wind, hot weather, thunder and lightning. It is usually cloudy in the morning, the sun shows up about 9 o'clock and a sea breeze about 3 o'clock in the afternoon. The roads are quite dusty during the dry months.

Fruit of all kinds except peaches grow in abundance, also vegetables. A good many run-down farms whose owners live in town, are in this vicinity; evidently new blood and energy is needed to develop the country which need is partially supplied by newcomers, principally from Nebraska, the Dakotas, and Minnesota.

Dairying is as yet in its infancy, and things are not up to Kansas in thriftiness and general appearance. We have bought a farm of 321 acres on Baker Creek, two and one-half miles from town, but our Kansas farm is not for sale yet. Will stay in McMinville this winter to take advantage of schools. If any Kansans pass this way should like to meet them; live on northeast corner of Second and "D" Streets, where the latch string is always out for any of the FARMER family.

Geo. F. HAUSER.
McMinville, Ore., August 8, 1903.

Iowa State Fair.

The constantly increasing interest displayed in the judging contest for the Iowa State College Scholarship, which will be one of the features of the State Fair this year, has proved a surprise to the management. It was expected the contest would arouse interest but it was hardly anticipated the number of entries would be as large as is now assured. Secretary Simpson is receiving entries at the rate of six or seven a day and there are numerous inquiries. Notice is given that all entries must be in by August 13 and that entries must be made on entry forms provided by the secretary's office. Secretary Simpson says that while he can not say just what breeds of cattle and horses the contestants will be called on to judge, each young man will be required to judge two rings of cattle and two of horses. It is pointed out, too, that this is a contest for farmers' boys and not for agricultural college students, and that no boy on the farm, who is a competent judge of cattle and horses, need be afraid of being outclassed. The judging contest will take place Monday morning, August 24.

Crude Drugs from a New Source.

A number of common plants, occurring in some cases as weeds, furnish, when properly collected and cured, crude drugs such as are now imported in large part from Europe and elsewhere. The Bureau of Plant Industry of the U. S. Department of Agriculture is now engaged in the preparation of a Farmers' Bulletin pointing out the desirability of satisfying the demand for these drugs from domestic sources. The bulletin will contain descriptions and cuts of the plants, and methods of collecting, handling, and curing will be given.

In order to increase the effectiveness of the bulletin it is thought necessary to bring the prospective collector in touch with buyers. Therefore circular letters are being sent to dealers in drugs asking if they wish to be included in the list of firms to whom the Bureau is authorized to direct those wishing to submit samples and get prices.

Breaks All Records.

From Atlantic to Pacific in Three Days' Time.

Account of Most Remarkable Long-distance Run in History of Railroad.

All previous records for railroad time from Atlantic to Pacific coast were broken on Friday, August 7, when the H. P. Lowe special rolled into Los Angeles over the Santa Fe at 1:06 P. M. Henry P. Lowe, of the Engineering Company of America, left New York Tuesday afternoon, August 4, at 2:45, immediately upon hearing of his daughter's fatal illness in the distant California city of Los Angeles. Catching the Twentieth Century Limited over the New York Central and Lake Shore Railroads, he raced westward to Chicago at an average speed of 48.8 miles per hour, arriving in Chicago on Wednesday forenoon. Hurrying from the Lake Shore to the Santa Fe depot in a cab which was being held in waiting

Griswold Square Mesh Field Fence.



The best of all Lawn and Field Fences. Is hog proof. Manufactured in 12, 24, 33, 39, 50 and 56 inch heights; in 20 and 40 rod rolls. The narrow widths can be supplemented to any height desired by Barbed or Plain or two strand twisted Cable wire. Manufacturers of Diamond Mesh Fence, Plain, Galvanized, Barbed or Telephone Wire. Wire Nails and Hay Bale Ties. Write for illustrated catalogue and price lists. **Dillon-Griswold Wire Co., Sterling, Ill.**

for him, the anxious father boarded the special and was outward bound twenty-three minutes after reaching the "Windy City." Composed of coach and hotel-car "Rocket" and drawn by a powerful iron greyhound, with Engineer Duggan at the throttle, the Santa Fe special leaped into the race, with orders to make no stops except those to take water and coal and to change engineers and crews.

Leaving Dearborn station, Chicago, the train struck out toward the Southwest, with a whirl and a rush. Swiftly rising to the level of the elevated roadbed, it was off on its way toward Joliet before the grief-stricken passenger has been given time to settle down for his long ride. Indeed, it can not be said that he settled down at all, for, in his anxiety to cover the ground in the shortest possible time, Mr. Lowe repeatedly urged that the speed be increased, and for a great share of the distance he rode in the engine cab, the rumble and roar of the mighty locomotive soothing, in a measure, his troubled mind.

Faster and faster the giant ten-wheeler flew. Faster and faster the local way stations whizzed by the windows in a indistinct blur. Crossing the State of Illinois in a space of time heretofore unequalled, the special rolled across the Mississippi at Fort Madison, clipped off a section of Iowa, traversed the northern part of the State of Missouri, bridged the broad Missouri river and steamed into Kansas City Union depot.

With scarcely a halt in its wild flight it was off over the rolling prairie land of Kansas and on toward Colorado, climbing the ever-increasing grade as the Rockies were approached. On and on it sped, not only maintaining the schedule laid out, but gaining with every mile it flew.

La Junta was reached at 9:10 A. M., August 6, an veering toward the southwest the special split the solitude of the Colorado and New Mexico wilderness, plunging into Albuquerque at 5:37 P. M. From Albuquerque straight west, crossing the desert of New Mexico and Arizona, surmounting the range of the Glorieta mountains, the train reached Seligman in western Arizona at 4 A. M., August 7. Leaving here it climbed the Williams range and entered the Golden State across the Colorado river.

At 1:06 P. M. on Friday, August 7, the train rolled into Los Angeles ten hours ahead of the schedule as originally planned, the distance from Chicago to the Pacific coast (2,266 miles having been covered at an average of 42.8 miles per hour, beating the time of the Santa Fe's California Limited by fifteen hours and sixteen minutes.

While he was still this side of the Rocky mountains, it was known that Mr. Lowe's daughter had passed away. Messages were hurried ahead of the special. As the wires were down, the sad word was not received by Mr. Lowe until he had reached Las Vegas, N. M.

In spite of his disappointment, however, Mr. Lowe expressed his gratitude to the Santa Fe officials who had tried to the utmost to assist him in his trouble. "The time made by the Lowe special is an achievement of which we are justly proud," said Passenger Traffic Manager Nicholson, of the Santa Fe. "Our only regret is that the extraordinary speed could not avail Mr. Lowe as he hoped it might."

This crossing of the American continent in seventy-three hours and twenty-one minutes establishes a record for the transcontinental trip that will not be surpassed for many days to come. When it is considered that the time was brought down to this remarkably low figure only by extraordinary speed on the level prairies and the broad tablelands, some idea of the tremendous strain may be gathered. For long distances a speed of considerably over a mile a minute was maintained. The route from the Mississippi to the Continental Divide is up-grade, with much steep mountain climbing in places.

In 1900 a remarkable run was made by the Peacock special from West to East, its average speed being 41.7 miles an hour between Los Angeles and Chicago. This train, however, had the advantage of the down-grade from the Rockies to the Mississippi valley.

The famous Nellie Bly special made the trip from San Francisco to Chicago in sixty-nine hours at an average speed of 37.1-3 miles an hour.

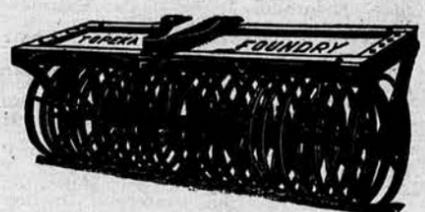
By a comparison of these schedules a fair idea may be gathered of the remarkable record of the Lowe special. This achievement will go down in red letters in the annals of railroading.

KANSAS CITY Business College
N. E. CORNER TENTH AND WALNUT STS.

Bookkeeping, Shorthand, Typewriting, Telegraphy, Penmanship and all English and Commercial branches thoroughly taught by experienced teachers. Highest endorsements. Elegant apartments. For illustrated catalogue and list showing hundreds of pupils in positions. Address C. T. SMITH, Principal.

English Blue-grass Seed
FOR SALE BY
JOHN G. HINISH, EUREKA, KANS.

PACKER PULVERIZER ROLLER.
A full stand of wheat guaranteed.



A good stand means a full crop. You cannot fail if you use our Packer. Write for circulars.

..Topeka Foundry..
Topeka Kansas.

Thomas County, Kansas

offers exceptional advantages for the home-seeker. I have some choice farms in Thomas County, at prices, which considering the prosperous conditions, are the best bargains to-day on the market.

- Write me for Land Buyers' Guide, giving list of many choice farms.
- 80 acres, level land, 9 miles from town, Thomas County, ordinary improvements; 30 acres cultivated. Price \$700.
- 160 acres, Thomas County, mostly smooth, 7 miles from Rexford, 10 acres cultivated, balance grass. Price \$1,400.
- 320 acres, 60 acres cultivated. Price \$3,000.
- 240 acres, house and barn, good well and windmill; 3 miles from town, all cultivated. Price \$3,000.
- 480 acres, mile and half from town; 4-room house, stable, sheds. 200 acres cultivated. Price \$5,500.

HILAND P. LOOKWOOD,
102 Bryant Bldg., Kansas City, Mo.

FINE DAIRY ..AND.. STOCK FARM FOR SALE.

340 acres located on Badger Creek, Lyon County, Kansas, divided as follows:
150 acres in cultivation (100 acres bottom land), 10 acres orchard, 20 acres good timber, 60 acres pasture and meadow land. Good improvements. Eight-room house in nice grove, new creamery building (cost \$750), two good barns, cattle sheds, chicken house, hog house, coal house, two ice houses, two silos (100 tons each), never-failing water, pond and three wells, elevated tank and windmill, underground water pipes with hydrants, two stock tanks with floating valves and tank heater, 40 acres in alfalfa. Three miles from railroad station, 8 miles from Emporia (county seat), 10,000 population. Long-distance telephone connecting with Emporia exchange and all parts of the State goes with the farm. Fifty cows kept on this farm at present. Would like to lease creamery building of purchaser and will contract to take all milk produced on farm by the year. Price \$60 per acre. Easy terms. Address owner.

G. W. PARKMAN, Emporia, Kansas.

STEEL ROOFING.
Strictly new, perfect, Semi-Hardened Steel Sheets two feet wide, six feet long. The best Roofing, Siding or Ceiling you can use. We furnish nails free and paint roofing, two sides. Comes either flat corrugated or "V" crimped. Delivered free of all charges to all points in U. S. east of Mississippi River and north of Ohio River at \$2.25 PER SQUARE. Prices to other points on application. A square means 100 square feet. Write for Free Catalogue No. 61 on material bought from Sheriffs' and Receivers' Sales. **CHICAGO HOUSE WRECKING CO., W. 25th and Iron Sts., Chicago.**

The Stock Interest

Kansas Live Stock Committees for the World's Fair.

At the last annual meeting of the Kansas Improved Stock-Breeders' Association members were named as chairmen of committees to represent each of the pure breeds and to have charge of the securing of a creditable exhibit of the several breeds for the Louisiana Purchase Exposition in 1904. These committees have been filled out and are as follows:

Herefords—C. A. Stannard, chairman, Emporia; Robert H. Hazlett, Eldorado; Marion Jones, Comiskey.

Shorthorns—S. C. Hanna, chairman, Howard; J. F. Stodder, Burden; T. P. Babst, Auburn.

Aberdeen-Angus—Chas. E. Sutton, chairman, Russell; Parker Parris, Hudson; Thos. Anderson, Iola.

Galloways—Geo. M. Kellam, chairman, Richland; E. W. Thrall, Eureka; S. M. Croft, Bluff City.

Red Polls—Wilkie Blair, chairman, Girard; Chas. Morrison, Phillipsburg; Mahlon Groenmiller, Centropolis.

Polled Durhams—Case Broderick, chairman, Holton; John D. Snyder, Winfield; J. J. Achenbaugh, Washington.

Dairy breeds—M. S. Babcock, chairman, Nortonville; E. W. Melville, Eudora; Wilkie Blair, Girard.

Berkshires—G. W. Berry, chairman, Emporia; W. H. Rhodes, Tampa; E. W. Melville, Eudora.

Poland-Chinas—H. W. Cheney, chairman, North Topeka; C. F. Dietrich, Richmond; T. A. Hubbard, Rome.

Duroc-Jerseys—H. A. J. Coppins, chairman, Eldorado; J. B. Davis, Fairview; W. R. Dulaney, Wichita.

Chester-Whites—D. L. Button, chairman, North Topeka.

Tamworths—C. W. Freelove, chairman, Clyde.

Draft Horses—H. W. Avery, chairman, Wakefield; John D. Snyder, Winfield; H. W. McAfee, Topeka.

Standard-bred and Harness Class—O. P. Updegraff, chairman, Topeka; Dr. J. T. Axtell, Newton; J. W. Creech, Herington.

Sheep—E. D. King, chairman, Burlington; E. W. Melville, Eudora; E. S. Kirkpatrick, Wellsville.

Angora Goats—N. A. Gwin, chairman, Lawrence; Drake Spencer, Kickapoo; R. C. Johnson, Lawrence.

H. A. Heath,
Secretary of the Committee.
Topeka, Kans.

The Herd-Book Secretaries.

The annual meeting of the American Association of Live Stock Herd-Book Secretaries was held in the Administration Building of the Louisiana Purchase Exposition last week.

The address of welcome by Hon. F. D. Coburn, chief of the department of live stock, world's fair, was replete with interesting information concerning the universal exposition of stock, and the response by E. O. Cowan, of Chicago, was full of happy incident and appropriate sentiment.

The annual report of the secretary, Col. Charles F. Mills, contained much of encouragement concerning the unprecedented prosperity of the hundreds of National Live Stock Herd-Book organizations composing the association.

The election of officers for the ensuing year was unanimous and resulted as follows:

President, C. R. Thomas, Kansas City, Mo., secretary American Hereford Breeders' Association.

Vice-president, Mortimer Levering, Indianapolis, Ind., secretary American Shropshire Association.

Secretary, Col. Charles F. Mills, Springfield, Ill.

Treasurer, Geo. W. Stubblefield, Bloomington, Ill., secretary American Percheron Horse Breeders' Association.

EXECUTIVE COMMITTEE.

Cattle—B. O. Cowan, Chicago, Ill., American Shorthorn Breeders' Association.

Horses—I. B. Nall, Louisville, Ky., American Saddle Horse Breeders' Association.

Jacks and mules—J. W. Jones, Columbia, Tenn., American Breeders' Association of Jacks and Jennets.

Swine—Robert J. Evans, El Paso, Ill., National Duroc-Jersey Swine Association.

Sheep—Frank W. Harding, Waukesha, Wis., American Cotswold Association.

The association instructed the executive committee to confer with Hon. F. D. Coburn, the chief of the department of live stock, and aid in the preparation of the program of exercise for the day set apart by the Louisiana Purchase Exposition as "Live Stock Day of the World's Fair."

The association decided to hold its next annual meeting in connection with the World's Fair, and during the period of the live-stock exhibit.

Gossip About Stock.

George W. Jessup, of Rockville, Ind., held a sale of Berkshires on Tuesday, August 4, which drew a goodly crowd from several States, although most of the purchases were made by residents of Indiana. The top of the sale was \$180, brought by the yearling sow, Miss Plattsbury 20th, by Pacific Duke 56691. The top of the boar sale was \$115, brought by King Alfonso 6131 by Young Baron Victor, Indiana, Tennessee, Illinois, and Ohio were represented among the buyers.

We call special attention to the new advertisement of the Pawnee County Poland-China herd owned by Tyro Montgomery, Larned, Kans. He has a very select lot of sale stock of different ages, sizes, and sex, which he will sell at reasonable prices. The stock offered for sale is of the Wilkes, Tecumseh, Missouri Black Chief sires. Buyers who want choice, thrifty, well-bred stock will find it quite desirable to confer with Mr. Montgomery, as he is an old, experienced breeder and his foundation stock was of the best obtainable.

Mr. W. L. Reid, the Poland-China breeder of North Topeka, is meeting with success in his business. Among the letters from pleased customers that he has lately received, is one from W. D. Calder, Bancroft, Kans., which reads as follows:

"I am well pleased with the sow I bought of you. I could sell more of her boar pigs if I had them, as every one thinks they are fine. They are the best-balanced pigs I ever saw; good back, loin, hams, and shoulders, and neat head and ears. I like them and so does every one else, and they sell themselves."

The gilts that are offered by Dietrich & Spaulding, Richmond, Kans., whose advertising card is on page 882, are choice individuals with best of breeding, and are bred to two of their herd-boars that have the best of blood, combined with size and style. Chief Ideal 2d is a grandson of Chief Perfection 2d and on the dam's side of L's Tecumseh. U. S. Perfection they consider one of the best yearlings they ever saw. He was sired by the \$4,000 Perfect Perfection. At the Macy, Indiana, sale a half-brother of U. S. Perfection was placed at auction and one-half interest in him sold for \$5,000. Dietrich & Spaulding breed for size and quality and they have seldom had such bargains to offer.

G. G. Council, manager of the Willowdale Berkshires, of Williamsville, Ill., announces a change in his advertisement. He has a fine lot of spring pigs sired by Baron Lee 8th, Royal Baron, Sunny Side King, the sweepstakes boar at Kansas City last fall. This herd won the leading Berkshire prizes offered in 1902 at the State fairs and National shows and the pigs for thirty days are the produce of prize-winners. Mr. Council says: "I will make a special offer for thirty days on all the spring crop, as I will start on my fair circuit at that date and want to sell a lot of pigs before I start. I have pigs enough to win any place and have a fine lot of herd-headers sired by my prize boars last year and out of the sweepstakes sows of the show-ring in 1902."

On August 6, at Rosco, Ill., A. J. Lovejoy & Son held another sale of the Riverside Berkshires. Good hogs, good weather, and a good attendance from nine States and Territories made the sale a complete success. Among the purchasers were three State agricultural colleges—Illinois, Iowa, and Colorado. The total Illinois, Iowa, and Colorado. The total of forty-four head was disposed of for \$3,487, average \$79.30. Twenty-one yearlings sold for \$2,205, average \$105. Twenty-three fall and spring pigs sold for \$1,282, average \$55.75. The top of the sow sale was brought by Queen Perfection 3d 69961, sired by Combination, who went to our advertiser, G. B. Council, Williamsville, Ill., for \$205. He bought nearly all the high-priced sows in the sale. The top of the boar sale was Premier Lee 69950, who went to Oklahoma for \$130.

Beginning on February 4 next there will be a pure-bred stock sale at Wichita that will be a marker. At this time and place will be offered Percherons by J. W. & J. C. Robison, Towanda, Dr. Stevens, and Charles Covell, Wellington; Shorthorns, by J. W. & J. C. Robison, and J. F. Stodder, Burden; Herefords, Robert H. Hazlett and Mr. Bass, Eldorado; Poland-Chinas, Snyder Bros., Winfield. Most of the contributions to this great sale will be from prize-winning herds. The Robisons and Snyder Bros. have gotten into the habit of winning wherever they show, and the former made a great record with their Percherons at the Missouri State Fair last fall. Mr. Stodder has a show herd this year that is the best he ever started on the circuit. Mr. Hazlett will be remembered as the man who sprang into such prominence by winning in class at the American Royal with an unknown and untried bull. Since that time he has bought Dale Duplicate, which gives him another prize-winning herd-header.

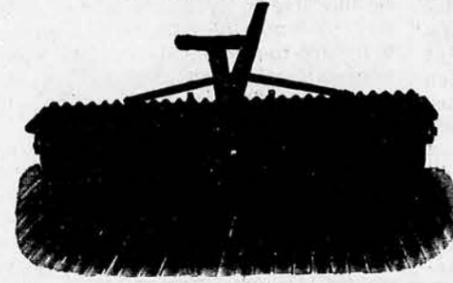
For a long time, Missouri has been recognized as one of the great centers of the pure-bred cattle industry, and she has now won the distinction of having more pure-bred Hereford cattle within her borders than any other State in the Union. Missouri is therefore a good place to go to buy cattle. On page 883 of this issue will be found the advertisement of a public sale of fifty pure-bred Hereford cattle, to be held by the Central Missouri Hereford Breeders' Association, at Moberly, on September 3. Moberly is on the main line of the M. K. & T. within easy reach of Kansas City. This sale is contributed to by one of the strongest pure-bred local associations in the West. It numbers among its members some of the best-known breeders of Hereford cattle in the State. Our advertiser, Mr. W. W. Gray, Fayette, Mo., who is the owner of the great herd-bull, Printer 66684, is a member and a contributor to this sale. This will be a sale of good cattle at your own price. Write S. L. Brock, secretary, Moberly, Mo., for catalogue.

A short time since our field man had the pleasure of visiting the Belvoir Herefords, owned by Steele Bros., Belvoir, Kans. Here is to be found one of the greatest collections of cows in any herd and of any breed in the State of Kansas. Individual merit alone being considered, this herd of cattle is an exceptionally good one. From this great herd will be made a selection which will constitute their show herd for the season and will include Roderick 159459 in senior yearling bull class, Principate 159457, junior yearling bull class, Princes 8th 165745, senior bull calf class; Heliotrope 159451, senior yearling heifer class, Domestic 165738, junior yearling heifer class, Princes May 3d 165746, senior heifer calf class. Steele Bros. will also show breeder's young herd and four animals, get of one sire. By reference to the herd-book it will be seen that these animals lack nothing in breeding and an inspection of the animals themselves shows that their chance for a string of ribbons is a first-class one. The Steele Bros. will consign a string of eight animals to the Hamline, Minnesota, sale. These are the get of Princes 66683, McKinley 68926, and Kalltan 90085. The bulls in this consignment are exceptionally good, being big, growthy fellows ready for immediate ser-



NEWTON PULVERIZER & ROLLER

Made of Separate Disks, 20 Inches Diameter and 3-inch Face.
HUNDREDS OF THEM IN USE AND EVERY ONE SATISFACTORY.



The most perfect Implement for preparing a Seed Bed for Fall Grain. Used before and after seeding will INSURE AN INCREASED YIELD.

Write for Particulars.

MCCOWAN & FINNICAN
FOUNDRY & MACHINE CO.,
ST. LOUIS, MO.



Perfection
Windmill
only \$19.00

All steel, strong, well built, well governed. Pumps more or less wind than any other mill. Above price is for our 8 foot mill. Larger sizes equally low.



Pitcher
Spout Pump,
top covered, dirt proof, fine finish,
only \$1.10.



Stock Watering Trough,
galv. iron, the best made. Five widths and depths, any length. Price 42 to 78 cents per foot.

THE UNITED MAIL ORDER COMPANY, 530 Delaware Street, KANSAS CITY, MO.

\$29-PEERLESS FARM and STOCK SCALE-\$29

The "Peerless" is a 5-ton Compound Beam Wagon and Stock Scale, material and workmanship guaranteed for 5 years. Certificate of City Scale Inspector as to accuracy furnished if desired. Send for catalog. Address, mentioning this paper, Peerless Scale Co., Milwaukee and Ft. Scott Ave., Kansas City, Mo. (We have contracted with manufacturers for the output of this scale.)

The heifers will be money-makers for the lucky man who buys them. Kansas is already second in number of pure-bred Herefords of the States of the Union, and a few such herds as that at Belvoir will easily place her in the first rank. It will pay to keep your eye on this herd and their winnings.

At beautiful Forest Park, Ottawa, Kans., will be held the thirty-seventh annual fair of the Franklin County Agricultural Society, from September 15 to 18 next. The fair association is just erecting a \$2,500 show and sale pavilion which will accommodate 150 head of cattle in both stalls and show-ring. This will take the place of the old cattle sheds which have been so long in use on the grounds and will be built in keeping with the other buildings in Forest Park. This is one of the big fairs of Kansas and the owners of good herds from all the eastern portion of the State and from western Missouri will be strongly represented. Last year there were twenty-five thousand people on the grounds and the exhibits of pure-bred cattle, horses, and swine were a credit to any fair, while the showing of agricultural and manufactured products was much above the average of that seen at anything except National expositions. Forest Park is only one block from the Santa Fe depot, which has a sidetrack for conveying stock to the barn. Remember the date and write Carey M. Porter, secretary, Ottawa, Kans., for premium list.

John W. Roat & Co., owners of the Crescent Herd of O. I. C. swine, Central City, Neb., sends us change of copy for their advertisement this week. They also enclose their new catalogue, which is nicely gotten up and contains some very choice pedigrees. This firm has chosen the O. I. C. breed because they find them the best and healthiest and at the same time the most profitable hogs for Western conditions. The reasons for this decision are their rapid growth, early maturity, their capacity for making more pork for the amount of feed than any other breed, the fact that no difference how old or

how large the animals get their meat is always as white-grained as chicken. They command higher prices at packing centers than the dark breeds because their clean white skin makes them preferred by consumers. They are more docile than other breeds and last, and most important, they are less liable to cholera and other diseases than are dark breeds. These are the reasons why this firm have adopted the Chester Whites as their breed. At the head of this herd stands Hero 13588, who is described as having a short head, broad forehead, well-dished face, medium, well-shaped ears with drooping point, broad, heavy shoulders, long hams well down at the gambrel, and splendid sides and flanks, four good, heavy-boned legs, and right up on his toes. The catalogue gives pedigrees and illustrations of a considerable number of choice members of the herd, followed by shipping directions and prices and descriptions of the choice Barred Plymouth Rocks, White Rocks, Black Langshans, White Wyandottes, and Imperial Pekin ducks which they raise. Notice the change in their card on page 879 and write for a copy of this catalogue.

Chestnut Grove Stock Farm, belonging to J. R. Young, Richards, Mo., has long been noted as a producer of the best of good Poland-Chinas. This was the home of Missouri's Black Chief and is now the home of Missouri's Black Perfection, his best son. Missouri's Black Perfection is a show hog from whose get the owner has already realized nearly \$10,000 in cash, and on any other farm would be thought the ideal Poland-China boar. On Chestnut Grove Farm, however, there is a younger boar named Mascot which weighed 300 pounds on the date he was 9 months old and is of such quality that we predict for him a greater record even than that won by his sire. He is by Missouri's Black Perfection 26517, out of Winnie Sunshine, who was sired by Winning Sunshine, and who is a full litter-sister of Business Sunshine, whose get made such a phenomenal record in the Macy, Indiana, sale reported in another column. He is a wonderful hog with a balck, loin,

Camping in Colorado

If you are fond of outdoor life, are willing to do your share of the work, and don't mind "roughing it," you will enjoy a fortnight under canvas in Colorado.

The climate is perfect; the fishing is good and the mountains are always in sight.

Why not get up a party of half a dozen congenial spirits and try it?



Whether you camp or not, you will be interested in the low rates to Colorado which the Rock Island offers, June 1 to September 30—\$17.50 for the round trip from Topeka. Information and literature on request.

Rock Island trains for Colorado Springs and Denver leave Topeka at 1.10 and 8.10 p. m.

For information and literature, see Rock Island Agents, or

A. E. COOPER,
Division Passenger Agt.,
TOPEKA, KANSAS.

bone, head and ears that we have never seen excelled and with a remarkably fine skin and a degree of mellowness that is unusual even in this breed.

A Valuable Implement.

Knowing that Hon. Norman J. Colman (editor-in-chief of the Rural World), had a Newton Pulverizer and Roller in use on his St. Louis County (Mo.) farms,

"I have a Newton Pulverizer and Roller on my farm and would not be without one if I had to pay twice its cost. I purchased it last spring and am satisfied it more than paid for itself the first season.

"I happened to be at the farm while he was harvesting the oats, and in crossing over the field came to a quite vacant space where the clover was sparse, while on each side of this space it was very thick and thrifty.

"I stopped and asked him what was the matter with this strip and why it was not as thick set as the balance. He laughed and said he did not use the Pulverizer and Roller on this space, skipping it to see whether it would not be just as good or better than that rolled.

"I am confident that on all dry soils the use of the Newton is almost invaluable. It pulverizes the lumps, presses the soil compactly about the seeds and leaves the ground in a fine condition.

"The farmer who contemplates changing his location should look well into the subject of irrigation. Before making a trip of investigation there is no better way to secure such advance information than by writing to those most interested in the settlement of unoccupied lands.

Farming in Colorado, Utah, and New Mexico.

The farmer who contemplates changing his location should look well into the subject of irrigation. Before making a trip of investigation there is no better way to secure such advance information than by writing to those most interested in the settlement of unoccupied lands.

Business Opportunities for All.

Locations in Iowa, Illinois, Minnesota, and Missouri on the Chicago Great Western Railway; the very best agricultural section of the United States, where farmers are prosperous and business men successful.

THE MARKETS.

Kansas City Live Stock and Grain Markets.

Kansas City, Mo., August 17, 1903. Heavy runs of cattle, hogs, and sheep at all the Western markets had a bad effect on prices to-day, everything selling on a lower basis.

Cattle receipts here last week were light at 40,000 head. The trade had expected at least 50,000 head, but the runs failed to materialize.

summer. Good rains and improved corn account for this. Best stockers are worth \$3.25@4, but pretty decent Westerns can be bought for \$2.75@3.

Among the good cattle marketed here last week were: W. W. Majors, Kearney, Mo., steers and heifers \$5.25; W. A. Wilmoth, Wilson County, Kansas, \$5.25; J. R. Brown, Lathrop, Mo., \$5.35; Peter Clark, Excelsior Springs, Mo., \$5.25; G. P. Robinson, Council Grove, Kans., calves, \$5.75; M. O. Laughlin, Clinton County, Missouri, \$5.30; C. M. Welk, Lebo, Kans., \$5.30; William Mortl, Leon, Kans., heifers, \$4.75; Miller Bros., Osage County, Kansas, Western, \$4.80; Louis Kunze, Winkler, Kans., \$5.55; L. A. Davidson, Clay County, Missouri, \$5.40; W. M. Hampson, Hillsdale, Kans., \$5.30; A. E. Edwards, Hamilton, Mo., heifers, \$5; Hank Staley, Richmond, Kans., \$5.10; Hall & Tinkler, Gypsum City, Kans., \$5; C. T. Dickinson, Tina, Mo., \$5; O. E. Ladd, Eureka, Kans., Westerns, \$4.80; J. A. Smith, Winchester, Kans., \$5.25; Charles Davis, Winchester, Kans., \$5.20; J. H. Rea, Carrollton, Mo., \$5; A. E. Hardon, Verdon, Neb., \$5.10; D. M. Saylor, Morrill, Kans., \$5.35.

Hog receipts were fair to light at 39,000 head, but this number included several thousand brought down from other markets to supply the needs of the local packers who could not get enough swine here to fill their orders. Prices advanced 10@20c during the week. Top lights brought \$5.60@5.65 and heavies ranged from \$5.15@5.45.

Grains generally advanced from 10@4c during the week. Wheat receipts were upwards of 1,200 cars and corn arrivals were around 300 cars, both heavy gains over the previous week.

The produce markets were not featured by sensational advances as took place the preceding week, but a good active market on most commodities was had throughout. Potatoes sold some higher and eggs held strong.

South St. Joseph Live Stock Markets.

South St. Joseph, Mo., August 19, 1903. The bad finish of the cattle market of the previous week had the effect of checking supplies, which was highly beneficial to the market, in that trading had good life, the demand was more vigorous, and prices advanced 10@25c, the good finished grades developing the most strength.

Offerings on the quarantine side were reduced and were marketed solely from Oklahoma and the Indian Territory. The demand was vigorous from all of the buyers and steers gained 10@15c, cow stuff showed some strength, and calves advanced 25c, with light grades going at \$5.75.

If shippers had kept up the course of action pursued the previous two weeks the trend of hog prices would have been much higher than they were last week, as packers were eager takers under light receipts even at a sharp advance in prices, but were very bearish upon any enlargement in receipts, which indicated that if the countrymen will only market their finished grades with caution and keep back their unfinished kinds they will enjoy much higher values than are at present prevailing.

In the sheep division the fore part of last week native mixed of rather ordinary quality made up the offerings, and there was no charge to note in prices, except for medium and bucky lambs, which sold 10@15c lower. The latter part of the week supplies were liberal and ran mainly to Idaho and Wyoming sheep and lambs.

New York Butter Market.

The New York butter market for the past week has been as follows: Monday, August 10, 19.33c; Tuesday, August 11, 19.33c; Wednesday, August 12, 19.33c; Thursday, August 13, 19.33c; Friday, August 14, 19.33c; Saturday, August 15, 19.33c; average for week of August 10 to 15 was 19.33c.

Special Want Column

"Wanted," "For Sale," "For Exchange," and small 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.

CATTLE.

FOR SALE CHEAP—For immediate or future delivery, 30 head of pure-bred lost pedigree young Shorthorn cows, bred to 2-year-old Shorthorn bull that took third premium at Kansas City last fall.

FOR SALE OR EXCHANGE for yearling: 3-year-old Holstein-Friesian bull, Mechtildie Sir Gerben 2768. Henry Richards, Barclay, Kans.

FOR SALE—Two double standard Polled Durham bulls, one my herd bull three years old, one yearling. A. L. West, Garnett, Kans.

FOR SALE—Three choice, registered Galloway bulls, one herd bull, two ready for service. Address, Wm. M. McDonald, Girard, Kans.

FOR SALE—Shorthorn herd bull, Lord of Independence 170388. Good individual and breeder. Address Gerald A. Otwell, R. R. 1, Independence, Kans.

FOR SALE—Five head of pure bred Hereford bulls of serviceable age. Address, A. Johnson, Clearwater Kans., breeder of high-class Herefords.

FOR SALE—Guernsey bulls from best registered stock. J. W. Perkins, 423 Altman Building, Kansas City, Mo.

FOR SALE—Ten registered and ten high-grade Jersey cows, from 2 to 5 years old; most of them will be fresh next month. Will be sold worth the money to anybody wanting some good cows. M. S. Babcock, Nortonville, Kans.

HORSES AND MULES.

FOR SALE OR EXCHANGE for sheep or cattle, one imported registered Percheron stallion, black. One black Missouri-bred Jack 3-year-old—will make a large Jack. Can be seen one-half mile south of city limits. J. C. Hentzer, Rural Route No. 6, Topeka, Kans.

WANTED—To buy or trade, a Clydesdale stallion for a span of good mules. H. W. McAfee, Topeka, Kans.

PROSPECT FARM—CLYDESDALE STALLIONS, SHORTHORN CATTLE and POLAND-CHINA HOGS. Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kans.

SWINE.

SAY MISTER—Buy a February Poland-China boar, best pedigree, heavy bone, good, useful pig, \$12. James McClure, Blue Hill, Neb.

SOME FANCY POLAND CHINA fall boars and spring pigs. Very cheap. Extra hams, backs, heads and ears, black straight coats, good enough to head any herd, fashionable blood. G. W. Harman, Ridge, Woodson Co., Kans.

OH, SAY! Want a Poland-China sow? Stock selected from five counties and two states, 10 October gilts, 6 yearling sows, 4 herd sows all bred, 20 spring shoats. Write me. Price low, quality guaranteed. F. H. Barrington, Spring Creek, Chautauqua Co., Kans.

DUROC-JERSEY PIGS—Recorded; also herd oar, Victor Chief. L. L. Vrooman, Hope, Kans.

FOR SALE—Pure bred Duroc-Jersey pigs, April farrow. Some very choice pigs of either sex. F. A. Hill, Durham, Kans.

FOR SALE—Duroc-Jersey boar, ready for service. He is from the famous Blocher-Burton stock. February pigs now ready for sale. J. P. Lucas, 113 West 23rd St., Topeka, Kans.

FARMS AND RANCHES.

U. S. LANDS under irrigation in Wyoming along Union Pacific Railroad. Water rights \$12 on 10 years time. Write David C. Patterson, Sole Agent, Omaha, Nebr.

FREE Farm list, information; Sales, trades. State map 10c. Buckeye Agency, Agricola, Kans.

FOR SALE—160-acre farm, well improved, first class and cheap if taken soon, 8 miles from McPherson on R. F. D. O. A. Redfield, McPherson, Kans.

120 ACRE FARM in Clark Co., Wisconsin, for sale. 24 acres under plow. 60 acres can be plowed. Plenty good hardwood timber. Fertile soil, excellent water. Crops, tools, machinery and stock, if desired. Write us for particulars. Hiles & Myers, A60, Matthews Bldg., Milwaukee, Wis.

FOR SALE—480-acres improved, good water. Also farms and ranches, containing 160 acres and upward. For description and terms address H. B. Gilbert, Wallace, Kans.

FOR SALE—80-acre farm, smooth land 9 miles S. E. of Topeka, 1 mile from R. R. Station, well improved; owner is going to Iowa and will sell for \$3,500. Title is clear, no encumbrance. Write to W. E. Mason, Berryton, Kans.

FOR SALE—Wheat and stock farm. For next 30 days only will offer 460 acres deeded, and leases on 1,400 acres; 7,000 bushels of wheat raised on place this year. Price \$4,000 cash. J. D. Hayer, Colby, Kans.

A CHEAP FARM—240-acres, 90 acres river bottom, 60 acres alfalfa, hog tight, 110 acres in cultivation, 15 acre orchard, 5 room house, good barn and out buildings, a fine spring, well and river. 10 acres of timber, telephone and R. F. D. Price \$5,500. Any-sized farm cheap. Try us. Garrison & Studebaker, Florence, Kans.

5,000 ACRES VIRGIN TIMBER LAND in Lamar county, Texas, in the Red river valley near the "Frisco System." Soil very rich and never overflows. Fine saw mill and tile proposition. Black, White, Red and Post Oak, Ash, Hickory, Walnut and Bou D'Arc. Will sell in small tracts to suit purchaser. Address, Chas. Lee Requa, Eureka Springs, Ark.

RANCH FOR SALE—1360 acres, 1120 acres of creek bottom, with model improvements, 140 acres alfalfa, 600 acres pasture, balance number one farm land. For further information address G. L. Gregg, Real Estate Dealer and Auctioneer, Clyde, Kans.

SOME BARGAINS in farm lands in Anderson County, Kansas, in farms ranging from 80 acres up. S. B. Hamilton, Welda, Kans.

FOR SALE—Farms and ranches in central and western Kansas. We have some great bargains in western ranches. Write us. B. F. Meek, Hutchinson, Kans.

SEEDS AND PLANTS.

WANTED—New crop alfalfa, red clover, timothy, English blue-grass, and other grass seeds. Correspond with us. Kansas Seed House, F. Barteldes & Co., Lawrence, Kans.

ENGLISH BLUE GRASS SEED—For fall sowing at \$1.25 per statutory bu. of 23 pounds, f. o. b. Seamless Amer. "A" sacks 18 cents capacity 8 bushels. Jno. S. Gilmore Fredonia Kans.

WANTED—To buy 20 bushels of alfalfa seed. Riverside Stock Farm, Topeka, Kans.

FOR SALE—English blue-grass for fall sowing. Write to D. O. Buell, Robinson, Kans.

BLUE GRASS—If you mean to sow this fall, write to J. G. Hinal, Eureka, Kans.

FOR SALE—Golden Yellow popovers, very productive, excellent for popping, very tender. Packet 6 cents; 7 pounds 50 cents. J. P. Overlander, Highland, Kans.

200,000 FRUIT TREES! Wholesale prices; new catalogue. Baldwin, Nurseryman, Seneca, Kans.

POULTRY.

BUFF COCHIN BANTAMS—Little beauties, cockerels \$1.25, pullets \$1.50. C. E. Armstrong, Eureka, Mo.

MISCELLANEOUS.

WANTED—Walnut logs, large size, must be round, sound, and straight. Geo. W. Tinscher, Topeka, Kans.

TWO YOUNG MEN—Want steady work on farm or ranch in West. References. John McGuigan, 101 Bedford Ave. Brooklyn, N. Y.

WANTED—A good farm hand on ranch. \$25 per month for two months work. Apply to A. C. Geer, Waldo, Kans.

ALFALFA BACTERIA—I can supply earth thoroughly inoculated with alfalfa bacteria from one of the most successful fields in Kansas. 40 cents per 100 pounds f. o. b. Whiting. Large quantities at a less rate. Address, A. Monroe, Whiting, Kans.

WANTED—Buyers for pure bred Scotch Collie pups. Cheap. Write soon. W. T. Walters & Son, Emporia, Kans.

FOR SALE—1,000 trained ferrets at \$3 per pair. Farnsworth Bros., Elk Falls, Kans.

WANTED—Oil agents, reliable, energetic men to sell on commission our high grade line of lubricating oils, greases, also roof, barn and house paints, etc., locally or travelling. Specialty to the threshing trade. Address, The Lion Oil & Grease Co., Cleveland, Ohio.

WANTED—Position as agriculturalist or farm foreman. 25 years experience. Address W. A. Kimble, 1019 Seward Ave., Topeka, Kans.

TWO more litters of those high-bred Scotch Collie pups, only one week old, but you will have to book your order quick if you want one. Walnut Grove Farm, H. D. Nutting, Propr., Emporia, Kans.

WANTED WOOL—Send us samples of your whole clip, we will pay market price. Topeka Woolen Mills, Topeka, Kans.

CREAM Separators Repaired at Gerdom's Machine Shop 820 Kansas Ave., Topeka, Kans.

WANTED—Money to get patent on a quick-selling toy. Will give 25 per cent of what it sells for. Henry Bolte, Webster, S. Dakota.

PATENTS.

J. A. ROSEN, PATENT ATTORNEY 418 Kansas Avenue, Topeka, Kansas.

[First published in Kansas Farmer, August 20, 1903.] Publication Notice. No. 22345

W. H. Hubbard and Anna S. Lull, and each of them will take notice that they have been sued in the District Court in Shawnee County, State of Kansas, by James C. Shimer; that the petition was filed in said court July 21, 1903, and alleges that you and each of you withhold possession of the following described real estate, situated in Shawnee County, state of Kansas to-wit: Lot 675 and the south half of lot 678, Van Buren Street, Walnut Grove Addition to Topeka, of which the plaintiff is the owner and to which he is entitled to the immediate possession, and asking that he recover possession of said real estate and costs. Now, unless you shall answer said petition on or before October 1, 1903, judgment will be taken against you and for the possession of real estate described. F. H. FORBES, Attorney for Plaintiff.

[SEAL] I. S. Curtis, Clerk.

PAWNEE COUNTY POLAND-CHINA HERD

Nice stuff; different ages, sizes, and sex at reasonable prices. Wilkes, Tecumseh, and Missouri's Black Chief sires. TYRA MONTGOMERY, LARNED, KANSAS.

THE CRESCENT HERD

O. I. C. THE WORLD'S BEST SWINE.

We are shipping the best pigs we ever raised. Every one a dandy. Three fall boars to sell. Largest herds in the west, grown on five different farms. Catalogue tells all about them—free for the asking. Thoroughbred poultry. Write to-day to JOHN W. ROAT & CO., Central City, Nebr.

BIG MAGAZINE one year free to quickly introduce it. As good as Harper's Munsey's, Ladies' Home Journal or McClure's. Send 10 cents to help pay postage. AMERICAN STORIES, Dept. G. F., Grand Rapids, Mich.

The Stray List

Week Ending August 20.

Pawnee County—James F. Whitney, Clerk. MARE—Taken up by M. J. Davidson, in Larned tp. July 10, 1903, one black mare, 14½ hands high, weight about 1150 pounds, bnch white hair in mane where collar works, valued at \$40.

Grange Department.

"For the good of our order, our country, and mankind."

Conducted by E. W. Westgate, Manhattan, to whom all correspondence for this department should be addressed. Papers from Kansas Granges are especially solicited.

NATIONAL GRANGE.

Master..... Aaron Jones, South Bend, Ind.
Lecturer..... N. J. Bachelder, Concord, N. H.
Secretary, John Trimble, 514 F St., Washington, D.C.

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan
Overseer..... J. C. Lovett, Bucyrus
Lecturer..... Ole Hibner, Olathe
Steward..... R. C. Post, Spring Hill
Assistant Steward..... W. H. Coultas, Richland
Chaplain..... Mrs. M. J. Ramage, Arkansas City
Treasurer..... Wm. Henry, Olathe
Secretary..... Geo. Black, Olathe
Gate Keeper..... G. F. Kyner, Lone Elm
Ceres..... Mrs. M. J. Allison, Lyndon
Pomona..... Mrs. Ida E. Flier, Madison
Flora..... Mrs. L. J. Lovett, Larned
L. A. S..... Mrs. Lola Radcliff, Overbrook

EXECUTIVE COMMITTEE.

Henry Rhodes..... Gardner
J. T. Lincoln..... Olpe
A. F. Reardon..... McLouth

The Grange.

Perhaps there is no order less understood, and yet at the same time doing more for civilization than the Grange. The good accomplished by the order is past calculation. It has raised farming to a science, and the man or woman who would be a successful farmer can obtain invaluable information from their meetings. No better recommendation need be given than the fact that wherever the Grange is strong there may be seen a prosperous farming community, with well-kept buildings, fertile fields and happy homes. The farmer of our time is as different from the farmer of old as night is from day. The ox team has given place to the thoroughbred; the flail to the steam thrasher; the scythe to the mower; the "Reuben" of old to the intelligent man. To-day we recognize the fact that it takes brains to manage a farm, and the best farmer is the intelligent one. The Grange provides a long-needed want, and it is the duty of the tiller of the soil to assist it, and by so doing to assist himself.

The writer was exceedingly sorry not to be able to attend the District Grange held at Barrackville on July 26 and 27.

One item of business for consideration at this meeting was the organization of a Fire Insurance Company to be under the control of the Grange. The present insurance rates of the old line companies are almost prohibitive so far as the average farmer is concerned, but farmers need to have their property insured and this is the only way by which, as we see it, that the farmers of the State can carry insurance.

We have before us a report of the Grange Insurance in New York for the years 1899, 1900 and 1901.

It shows the actual cost per thousand to be \$6.74 for three years! Compare this with what you are paying or would have to pay to other companies. The writer has been unable to get insurance for less than \$20 per thousand for three years.

The Jefferson County (New York) Insurance Association last year cost but \$1.81 per \$1,000, while the Steuben & Livingstone, same State, for the past three years cost 33 1/2 cents per thousand. This shows whether or not the old line companies make money at a \$20 rate.

The Grange Cooperative Insurance has proven one of the most substantial blessings to the agricultural classes.

It is one of the essentials to keep the farmers in close connection with the order and has helped materially to increase membership all over the country.

The Grange is not a political organization, so to speak, but it is within its province to speak out boldly on all questions of vital importance to its members whenever necessary to do so.

The Grange is a potent factor in fashioning governmental affairs of the present day.

If you would have people to respect you, it is necessary that you show them you are worthy of their respect and that you have an influence in the world. It is just so with the Grange. The business world has just awakened to the fact that agriculture is a science, that some of its devotees, at

least, are organized and wielding an influence in the world.

Nothing is more beautiful or impressive than the proper rendition of the unwritten work of the Order. Our brethren need to take a greater interest in doing it well.

One of the best journals that comes to our home is the Grange Bulletin, published at Cincinnati, Ohio. It is a weekly and always brim full of good things. Every Patron in the State should subscribe for it. Send for a sample copy.

Here is what Prof. T. C. Atkeson, the man who has done more for the Grange in our State than any other dozen men in it, says in the Grange Bulletin. It is too good to be read only by the Bulletin readers of the State:

"The Grange outlook in West Virginia is decidedly encouraging, at this time, and the present year will show a considerable increase if all signs do not fail. Four granges have been reorganized since the State Grange meeting the last of January.

"We are leaving nothing undone to harness every force we can to the Grange wagon, and a pretty good team is now hitched up to it and all pulling together. A few active deputies could perform wonders in this State during the present year.

"Our Grange Legislative Committee did splendid work at the recent session of the Legislature, having gotten about everything they went after but a revision of our tax and assessment laws, and they discovered the size of the colored individual in the taxation woodpile. There is some probability that Governor White will call an extra session of the Legislature some time in October to legislate upon the subject of taxation. In case he should not do so, taxation will be the warmest question before our voters. The question is sure to be fought to a finish very soon and the question settled whether the corporations can be made to pay their just proportion of the tax or not.

"If the farmers of the State could be made to understand that the Grange is the only organized force that is looking after their interests, they would surely rally to its support and give to it the giant strength that is necessary to secure anything like justice and equity before the tax laws. Governor White has taken a brave stand on the side of the people, and his hands should be strengthened in every way possible, so that he may be encouraged in well doing by the solid support the people are giving him."—West Virginia Farm Review.

Pomona Grange.

Osage County Pomona grange met in Hurricane grange hall, Overbrook, August 6. Owing to a very heavy rain the night previous, the attendance was not as large as had been hoped for.

Of the ten subordinate granges in the county, however, seven were represented at this time.

The granges of this county with the farmers' clubs have been invited to make a display at the county fair to be held at Burlingame, September 1 to 4. This invitation elicited quite an animated discussion. Upon being assured by the president of the fair association, who was present, that all gambling devices will be excluded from the fair, and that the association will do all in its power to suppress the handling and use of intoxicating liquors on and around the fair grounds, the grange decided to accept, and committees were appointed to make the necessary arrangements. September 2 will be Grange Day at the fair and a programme of speeches, music, recitations, etc., will be given. A. P. Reardon, member of executive committee, Kansas State Grange, will talk for the Grange, an E. B. Cowgill, of the KANSAS FARMER, for the farmers' clubs.

It was also decided to make an exhibit at the State Fair at Topeka; so the Patrons of this county have some work ahead of them for the next six weeks.

The lecturer presented the following questions for discussion: Would it be a benefit to the subordinate grange to have two meetings each quarter set



Miss Alice M. Smith, of Minneapolis, Minn., tells how woman's monthly suffering may be quickly and permanently relieved by Lydia E. Pinkham's Vegetable Compound.

"DEAR MRS. PINKHAM:—I have never before given my endorsement for any medicine, but Lydia E. Pinkham's Vegetable Compound has added so much to my life and happiness that I feel like making an exception in this case. For two years every month I would have two days of severe pain and could find no relief, but one day when visiting a friend I run across Lydia E. Pinkham's Vegetable Compound,—she had used it with the best results and advised me to try it. I found that it worked wonders with me; I now experience no pain and only had to use a few bottles to bring about this wonderful change. I use it occasionally now when I am exceptionally tired or worn out."—MISS ALICE M. SMITH, 804 Third Ave., South Minneapolis, Minn., Chairman Executive Committee Minneapolis Study Club.

Beauty and strength in women vanish early in life because of monthly pain or some menstrual irregularity. Many suffer silently and see their best gifts fade away. Lydia E. Pinkham's Vegetable Compound helps women preserve roundness of form and freshness of face because it makes their entire female organism healthy. It carries women safely through the various natural crises and is the safeguard of woman's health.

The truth about this great medicine is told in the letters from women being published in this paper constantly.

Mrs. C. Kleinschrodt, Morrison, Ill., says:—



"DEAR MRS. PINKHAM:—I have suffered ever since I was thirteen years of age with my menses. They were irregular and very painful. I doctored a great deal but received no benefit.

"A friend advised me to try Lydia E. Pinkham's Vegetable Compound, which I did, and after taking a few bottles of it, I found great relief.

"Menstruation is now regular and without pain. I am enjoying better health than I have for sometime."

How is it possible for us to make it plainer that Lydia E. Pinkham's Vegetable Compound will positively help all sick women? All women are constituted alike, rich and poor, high and low,—all suffer from the same organic troubles. Surely, no one can wish to remain weak and sickly, discouraged with life and no hope for the future, when proof is so unmistakable that Lydia E. Pinkham's Vegetable Compound will cure monthly suffering—all womb and ovarian troubles, and all the ills peculiar to women.

\$5000 FORFEIT if we cannot forthwith produce the original letters and signatures of above testimonials, which will prove their absolute genuineness. Lydia E. Pinkham Medicine Co., Lynn, Mass.



FREE. FREE. FULL SIZE. We are anxious to introduce our household remedies in every home throughout the Americas, and are doing so in a sensational advertising to do this quickly and thoroughly. Will you order home remedies from us, either for yourself and relatives, or to sell among friends, and get a beautiful dinner set FREE! Send us your name and address and we will send you eight boxes of remedies, sell each box for 20c, and return the money. When we have received the money for the medicine, which we will send you immediately upon receipt of your order, without the payment of a single cent more than for eight boxes, after you have sold the \$1.60 worth and returned the money, we will without any further work on your part or payment of any kind whatsoever send you a beautifully decorated 112-piece CHINA dinner set, exactly as per out, with either brown, blue or gold decorations, FULL size for family use. This set is genuine CHINA, and has absolutely no trade-mark or advertisement of ours on it; all we ask you to do is to show it to your friends and tell them how you got it. Absolutely no other conditions. Dishes packed and shipped addressed to you free of charge. Our No. 2 box of remedies contains \$10 worth, and you can also secure many other valuable premiums therefor. \$1.00 REWARD to any one who will prove we do not do exactly as we say. **NEW YORK MEDICAL ASSOCIATION, Dept. 55111 Broadway, New York.**

apart for initiation? What one thing more than any other would promote the best interests of the Grange?

In regard to the first question, the general sentiment seemed to be that two meetings each quarter were hardly enough, but that there should be stated times for initiation, thereby leaving plenty of time for lecture work and social features.

Will not some of the other granges in Kansas give their experience in this regard, in the KANSAS FARMER for the benefit of the fraternity? It is rather provoking to have candidates stringing along one or two at a time when they could all be initiated together at a stated time.

The second question brought forth a variety of thought: unselfish friendship among the fraternity, punctuality in attendance, frequent lecture work, good music, more strict obedience to law, etc.

It was decided to hold the next meeting at Lyndon, October 17. The fifth degree will be conferred in the evening of that date.

Why do we not hear more frequently from the granges of Kansas? Do let us be more sociable.

JENNIE E. HEBERLING,
Lecturer Pomona Grange.

Trade Between the United States and Canada.

Commerce between the United States and Canada was larger in the fiscal year just ended than in any preceding year. This is true both as to imports and exports. The figures of the year's commerce, presented by the Department of Commerce and Labor through its Bureau of Statistics, show that the imports from Canada amounted to \$54,660,410, and the exports to Canada, \$123,472,416. In this term is included British Columbia, Quebec, Ontario, Nova Scotia and New Brunswick. Of the imports of the year, 38 million dollars, speaking in round terms, were from Quebec and Ontario, 10 millions from New Brunswick and Nova Scotia, and 6 millions from British Columbia. Of the exports 110 million dollars were to Quebec and Ontario, 7 millions to New Brunswick and Nova Scotia and 6 millions to British Columbia.

Both in imports and exports, the total of the year's commerce with Canada was larger than in any preceding year. The imports never before reached so much as 50 million dollars save in one exceptional year, 1881, when they barely touched the 50 million line. In 1902 they were \$48,076,124; in 1903 they were, as already indicated, \$54,660,410. The exports to Canada never reached so much as 100 million dollars until 1901, when they were 105 millions. In 1902 they were 109 millions, in 1903, as already stated, they were \$123,472,416.

The figures of growth in the exports from the United States to Canada are especially interesting in view of the fact that the Canadian tariff has given to the products and manufactures of the United Kingdom and most of her colonies a reduction of 12½ per cent in the tariff rates since April, 1897, 25 per cent from August, 1898, to July 1, 1900, and since that date, a reduction of 33 per cent. Yet, it was during that period that the most rapid growth in the exports from the United States to Canada occurred. In the fiscal year ending June 30, 1897, the exports from the United States to Canada were 65 million dollars, yet they have increased to 123 million dollars in 1903. This is an increase of 90 per cent, while the increase in the total exports meantime has been about 40 per cent.

The Canadian tariff which gave lower rates to the products of Great Britain and her colonies, than to other countries, was introduced in April, 1897, and provided that the tariff should be at once lowered 12½ per cent on merchandise from Great Britain and her colonies, and that on July 1, 1898, the reduction should be 25 per cent. This was put into immediate operation. In 1900 the reduction was increased to 33½ per cent. It is proper, therefore, to include the fiscal year 1896 in any statement made for the purpose of determining whether the reduction in the tariff on articles

from Great Britain and the colonies has had a marked effect in increasing the imports from those parts of the world, or reducing those from the United States.

The following table, taken from a Canadian official publication, shows the total imports for consumption, into Canada, from the United States and Great Britain, respectively, in each year from 1897 to 1903. The figures of 1903 are estimated from the official figures for 11 months:

Imports into Canada from the United States and Great Britain and the share which they respectively formed of the total imports, in each year from 1896 to 1903:

Year ending June 30.	Total imported from		Percentage imported from	
	Great Britain.	United States.	Great Britain.	United States.
1896...	\$32,979,742	\$ 58,574,024	29.8	52.9
1897...	29,412,188	61,649,041	26.4	55.4
1898...	32,500,917	76,705,590	24.9	60.2
1899...	37,060,123	93,077,166	24.1	60.4
1900...	44,789,730	109,844,378	24.8	60.8
1901...	43,018,164	110,485,008	23.7	70.0
1902...	49,206,062	120,814,750	24.3	59.6
1903...	56,000,000	129,000,000	25.2	59.0

Farmers' National Congress.

Arrangements are well under way for the 24th annual meeting of the National Farmers' Congress, at Niagara Falls beginning Sept. 22. To judge from the efforts put forth by the officers, an instructive and interesting session may be expected. President Flanders informs us that the following gentlemen have accepted invitations to deliver addresses: Maj. G. D. Purse, Savannah, Ga., "Sugar Supply in the United States," Hon. Timothy L. Woodruff, Brooklyn, "Agricultural Conditions Understood to Exist in Our Insular Possessions, and the Possibilities in Their Development," O. P. Austin, chief of the bureau of statistics, Washington, D. C., "Farm Products in the Markets of the World," Dr. D. E. Salmon, Washington, D. C., "Infectious and Contagious Diseases of Farm Animals and Their Effect on American Agriculture," Prof. T. M. Webster, Urbana, Ill., "Diseases and Insect Pests of Plants and Their Effect on American Agriculture," James Wood, Mt. Kisco, N. Y., "How Can We Enlarge Our Foreign Markets for Farm Products," Aaron Jones, South Bend, Ind., "Extension of the Facilities of Our Mail System."

Gov. Odell will deliver the address of welcome, and the response will be made by Hon. Harvie Jordan, Monticello, Ga., first vice-president of the congress.

Twenty-four years this National body has cooperated with the other organizations of the United States in the betterment of the agriculture, and in making the life of the farmer more pleasant, more profitable, and, if possible, more honorable. You will notice by the subjects chosen, and the speakers assigned, that this organization is not an institute, but deals with the relations of the agriculturists to the other professions.

The delegates are commissioned by the Governors of the several States, and any farmer is eligible to appointment.

For information in regard to appointment as delegates, write to John M. Stahl, secretary, 4328 Langley avenue, Chicago, Ill.

Remember the date, September 22 to October 10, 1903.

Excursion rates on all railroads, on the certificate plan. J. H. Reynolds, of the Page Woven Wire Fence Co., is treasurer.

A Thing Worth Knowing.

No need of cutting off a woman's breast or a man's cheek or nose in a vain attempt to cure cancer. No need of applying burning planters to the flesh and torturing those already weak from suffering. Soothing, balmy, aromatic oils give safe, speedy and certain cure. The most horrible forms of cancer of the face, breast, womb, mouth, stomach; large tumors, ugly ulcers, fistula, catarrh; terrible skin diseases, etc., are all successfully treated by the application of various forms of simple oils. Send for a book, mailed free, giving particulars and prices of Oils. Address Dr. D. M. Bye Co., Drawer 505, Indianapolis, Ind.

Low Summer Tourist Rates Via Chicago Great Western Railway.

\$15.00 Kansas City to St. Paul and Minneapolis and return; \$19.00 to Duluth, Superior and Ashland; \$13.00 to Madison Lake, Waterville, Faribault, and other Minnesota resorts. Tickets on sale daily to September 30. Good to return October 31. For further information apply to Geo. W. Lincoln, T. P. A., 7 West 9th St., Kansas City, Mo.

HORSES.

Percheron Horses

HENRY AVERY & SON, WAKEFIELD, KANSAS.

Registered Stallions For Sale

15 HEAD AT SPECIAL PRICES CONSISTING OF

Five Percherons, 2 to 5 years old—all black but one, and that a black-grey; two black yearling Percherons; four Shires, 3 to 7 years old; three trotting-bred horses, 3- and 4-year-olds; one registered saddle stallion. All but two at prices from \$200 to \$1,000 each. Come at once for bargains. SNYDER BROS., WINFIELD, KANSAS.

ROBISON'S PERCHERONS AND SHORTHORNS

Percheron Herd headed by Casino (45463) 27830. Prize-winner Notional Show of France 1901. Winner of first prize at Missouri and Kansas State Fairs 1902. Shorthorn herd headed by Airdrie Viscount, a son of the great Lavender Viscount, champion of America in 1900 and 1901. Stock for sale. Address

J. W. & J. C. ROBISON, TOWANDA, KANS.

THE AMERICAN

Percheron Horse Breeders & Importers Association

Capital Stock, \$10,000.00. Shares, \$10.00 Each
Incorporated under the laws of Illinois.

No proxies can be used in this Association and no person or firm allowed more than ten votes. Our legal rights are fully and finally established by the courts. ONLY PERCHERON ASSOCIATION IN AMERICA RECOGNIZED BY THE UNITED STATES GOVERNMENT. It is the object of this Association to have its stock as widely scattered as possible, that the Percheron interests of the whole country, may be represented in its membership. We are now ready to sell stock and receive applications for registry. For application blanks, stock and full information, address,

GEO. W. STUBBLEFIELD, Secretary,
Bloomington, Ills.,

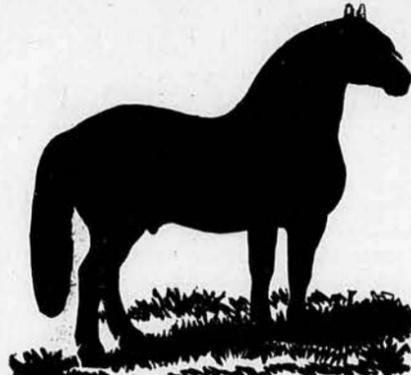


America's Leading Horse Importers

At the Great Annual Show of France held at Evreux June 10 to 14, our stallions won first, second, third, and fourth prize in every Percheron stallion class; also won first as the best collection. At the Show of the Societe Hippique Percheronne De France held at Nogent-le-Rotrou from the 18th to the 21st of June, our stallions won every first prize, over forty prizes in all. Two groups were made up of our exhibit, on which we won first and second. This prize-winning importation consisting of a hundred and nine stallions arrived home July 23, and is by far the best lot of horses ever imported to America. Call on us if your neighborhood needs a good stallion. A catalogue and calendar sent on application.

McLAUGHLIN BROS., Columbus, Ohio,
Emmetsburg, Iowa. Kansas City, Mo.

Cheyenne Valley Stock Farm.



F. H. Schrepel, Ellinwood, Kans.
Breeder of
PERCHERON HORSES and POLAND-CHINA HOGS

For Sale—Fifteen young stallions and a few mares. Inspection and correspondence invited.

Prospect Farm



H. W. McAFEE, Topeka, Kans.
Breeder of
CLYDESDALE HORSES, SHORTHORN CATTLE

FOR SALE—Two Clydesdale Stallions, one 5 years old, weight 1,750 pounds, the other 2 years old, weight 1,400 pounds; registered and sound. Inspection and correspondence invited.

POLAND-CHINA PIGS.



Elegantly built, fashionable bred, and well marked May and June pigs that have been raised right to develop into great money makers. They are sired by the 700-pound 2-year-old Proud Perfection 2d, the richest bred boar in the world, every drop of his blood comes direct from Proud Perfection, Perfect I Know, Chief Perfection 2d and Darkness, the four greatest hogs the world has ever seen, and out of dams by the 900-pound Black Missouri Chief, the largest Poland-China boar living to-day, and other noted boars. Great beauty, grand development and enormous productiveness await all of them. Also pigs by the massive 900-pound 3-year-old Black Missouri Chief that are out of dams not akin to my other sows. Single pigs, pairs, trios and breeding herds at reasonable prices. Young boars and bred gilts also. Pacific and American Express. Ranch 2 miles from station. Rural mail and telephone. Satisfaction guaranteed.

phone. If desired, express paid by me. I am not selling out, I am here to stay. Satisfaction guaranteed. Reference Kansas Farmer. J. CLARENCE NORTON, Moran, Allen Co., Kans.

DUROC-JERSEY SWINE.

D. M. TROTT ABILENE, KAS., famous Duroc-Jerseys, Poland-Chinas. Registered Stock, DUROC-JERSEYS, contains breeders of the leading strains. N. B. SAWYER, CHERRYVALE, KANSAS.

DUROC-JERSEY—Large boned and long bodied kind. Choice spring pigs for sale—both sexes. Prices reasonable. E. S. Cowee, R. F. D. 1, Carbondale, Kans.

DUROC-JERSEY SWINE. CHOICE PIGS FOR SALE. ADDRESS: **G. W. BAILEY** - - BEATTIE, KAS.

MAPLE AVENUE HERD DUROC-JERSEYS. J. U. HOWE, Wichita, Kansas. Farm 2 miles west of city on Maple Ave.

FAIRVIEW HERD DUROC-JERSEYS Combination Sale July 9. At Sabetha, Oct. 28, sale of males at the farm. February 5, 1904. bred sow sale at farm. J. B. DAVIS, FAIRVIEW, KANS.

DUROC-JERSEYS. 27 Duroc-Jerseys for sale. Choice 1903 pigs, both sexes. Prices \$20 and \$25, 125 head in herd to select from. NEWTON BROS., Whiting, Kans., and Goffs, Kans

DUCK CREEK HERD OF Duroc - Jersey Swine. 200 head to choose from. Write us your wants. Mitchell Bros., Buxton, Wilson Co., Kans.

ROCKDALE HERD OF Duroc - Jersey Swine. Has for sale 100 head of spring pigs of fashionable breeding, and good individuals. Correspondence and inspection invited. Free rural delivery and telephone from Frankfort. J. F. Chandler, Frankfort, Kans.

MAPLEWOOD HERD OF DUROC - JERSEYS. Our herd is headed by our fine herd boar, Missouri Champion 16349. Our spring pigs are doing excellently and we will be able to fill orders promptly with the very best, as we make it a specialty to select to please our customers. If you want some heavy-boned pigs with extra good length, send in your order. J. R. IMHAUSER, Mgr., Sedalia, Mo.

Rose Hill Herd DUROC - JERSEY HOGS. I have some choice February and March pigs for sale out of large, old sows of the most prolific strain and best breeding, sired by four good, well-developed boars. I can supply old customers with new blood, or pigs not related. I have the kind that will please you. S. Y. THORNTON, Blackwater, Mo.

Standard Herd of Registered Duroc-Jersey Swine, Red Polled Cattle, and Angora Goats.

Swine herd headed by Big Joe 7988 and Ohio Chief. Cattle herd headed by Kansas 8806. All stock reserved for October sale. PETER BLOCHER, Richland, Shawnee Co., Kas.

POLAND-CHINA SWINE.

East Side Herd Poland-Chinas Combines the best strains of blood in the breed. 24 spring litters. Royal Blue 27642 by Big Chief Tecumseh 24, first boar in service. Write for list of sires and dams in herd. W. H. BARR, ELLIOTT, IOWA.

Shady Lane Stock Farm HARRY E. LUNT, Proprietor, Burden, Cowley Co., Kans. A few choicely bred Poland-China Boars for sale; also fine B. P. Rock poultry.

Kansas Herd of Poland - Chinas Has some extra fine sills bred; also some fall boars. Will sell Sen. I Know, he by Perfect I Know. Address— F. P. MAGUIRE, - - HUTCHINSON, KANS.

Elmdale Herd of High-Class POLAND - CHINAS Shawnee Chief 28502 at head of herd. Three choice fall boars for sale, also spring pigs of both sexes. W. L. REID, Prop., R. R. 1, North Topeka, Kas.

SHADY BROOK STOCK FARM POLAND-CHINAS. I keep constantly on hand all sizes and ages of high-class Poland-China pigs. Quality high, prices low. Write for description and price to H. W. CHENBY, - - North Topeka, Kans.

PECAN HERD OF Poland - Chinas Will you want a few Bred Sows or Gilts for fall farrow, bred to Model Tecumseh or American Royal? Also fall Boars, sired by Model Tecumseh 6183. J. N. WOODS & SON, R. F. D. No. 3. - - Ottawa, Kans
...THOROUGHbred...
Poland-China Hogs. I am cleaned up on boars and bred gilts. I have some nice open June gilts and can spare a few yearling bred-sows. Orders booked for spring pigs by Keep On 61015, Imperial Chief 28978, Black Perfection 27188, and Corwin Improver 25768. On Missouri Pacific R. R., one mile west of Kickapoo, Kans. JOHN BOLLIN, R. F. D. No. 5, Leavenworth, Kans.

POLAND-CHINA SWINE.

FOR SALE Poland-China Hogs, Hel- stons - Friesia Cattle; either sex. Best strains represented. E. N. HOLDEMAN, Rural Route No. 2, Girard, Kansas.

Dietrich & Spaulding, Richmond, Kas. Have 5 extra good fall Poland-China gilts sired by Kansas Black Chief and Black U. S. Frize, safe in pig to U. S. Perfection by Perfect Perfection and Chief Ideal 2d. Price \$35 each if taken soon. They are cheap. 25 spring boar pigs for sale.

WAMEGO HERD ...OF... Poland-Chinas With Black Tecumseh 25116 at head, he by Big Tecumseh 2429, a grand individual and sire of large, strong, growthy fellows, nearly perfect in color, coat, and markings. Large M. B. turkeys and B. F. chickens for sale. Correspond with me at Wamego, Pottawatomie County, Kansas. C. J. HUGGINS.

..Oak Grove Herd.. OF PURE-BRED Poland-Chinas For Sale—A few choice Boars and 50 Gilts, some bred for early spring farrow. Write, or come and see. R. F. D. 5, Gus Aaron, Leavenworth, Kas.

Providence Farm Poland - Chinas. Correct by Corrector, Perfection Chief 2d by Chief Perfection 2d, Jewell's Silver Chief, and Kron Pring Wilhelm, herd boars. Up-to-date breeding, feeding, qualities, and large, even litters in this herd. Young stock for sale. J. L. STRATTON, One - Mile - Southwest - of - Ottawa, Kans.

Closing Out ROME PARK POLAND-CHINAS AND BERKSHIRES. Strictly choice show animals of Gilt Edged breeding. Established 20 years. For Sale—100 sows and gilts bred and not bred, 20 short yearlings and aged boars. Summer and fall pigs of all ages. Reduced prices before sale. T. A. HUBBARD, ROME, SUMNER CO., KANSAS.

FREEDOM HERD PURE-BRED POLAND-CHINAS Choice spring and fall pigs, both sexes, by Belleville Chief 29123; Kansas Chief 23250; Lamplighter 26890; Park's Spot 23829; Best on Earth's Chief 27087 and Royal Tecumseh 2d 25314. Royal Tecumseh 2d for sale. A snap. F. C. SWIERCINSKY, Phone 803. R. F. D. 1, BELLEVILLE, KANS.

Chestnut Grove Herds POLAND-CHINA SWINE The prize-winning Missouri's Black Perfection 26517 at head. The best of Missouri's Black Chief, Sunshine, and Chief Tecumseh blood. Young prize-winning stock, both sexes, for sale.

SHORTHORN CATTLE Pure Scotch Orange Blossoms with Orange Prince 192870 at head. A splendid young Scotch-topped Young Mary bull by Lochiel's Waterloo 149103 for sale with others of like quality. J. R. YOUNG, RICHARDS, MO.

CHESTER WHITE SWINE. PLEASANT VALLEY HERD OF CHESTER WHITE SWINE The kind that raises large litters of strong healthy pigs. Sows have no trouble at farrowing time. Young stock of both sexes for sale. Pedigrees with every sale. A. F. Reynolds, R. R. 4, Winfield, Kans.

The Crescent Herd O.I.C. The World's Best Swine. Bred Gilts all sold. A few choice boars large enough for service left. The best crop of springs we ever raised for sale. B. P. Rock and Pekin Duck eggs for sale, and prices right. Write today for catalogue prices. JOHN W. ROAT & CO., CENTRAL CITY, NEBRASKA.

BERKSHIRE SWINE. BERKSHIRES. The best imported blood that money can buy, crossed on the finest native blood. For bargains write, T. J. PUGH, Fullerton, Nebr.

Large English Berkshires Sold out of bred gilts; only a few fall pigs. Orders booked for spring farrow. Manwaring Bros., R. R. 1, Lawrence, Kans., Telephone 222-2.

BERKSHIRE SWINE.

...EAST LYNN... Champion Berkshires. Our herd won the Kansas State prize at the American Royal Show at Kansas City in 1902. ONLY THE BEST. Imported and American-bred stock for sale. A few choice sows bred, at prices that will move them. Inspection invited six days in the week. WILL H. RHODES, Tampa, Marion Co., Kans.

Knollwood Farm Herd BLUE BLOODED IG BONED ROAD BACKED BERKSHIRES... A Fancy Lot of Spring Pigs. E. W. MELVILLE, EUDORA, KANS.

Large English Berkshires A choice lot of extra good young boars and gilts of the most popular families. ROME PARK CHIEF 64775 head of herd. Headlight, Crown Imperial, and other equally good blood lines represented. Large herd to select from. W. H. S. PHILLIPS, CARBONDALE, KANSAS.

East Reno Berkshire Herd. Best Imported and American Blood. My herd is headed by Elma King 66056, a son of the high prices sow Imp. Elma Lady 4th 4468. Choice spring pigs by three grand boars for sale. Also bred sows and gilts. Send for free circular. G. D. Willems, R. F. D. 3, Inman, Kans.

...THE... WILLOWDALE Berkshires ROYAL BARON 58846, the Greatest Show Boar in the World, at head of herd. Home of the Winners. SPECIAL OFFER FOR 80 DAYS—Fall pigs, both sex sired by Royal Baron, Baron Lee 8th, and Baron Duke by Lord Premier, the boar that headed the sweepstakes herd at Kansas City last October. Special prices to make room for big spring crop.

G. G. Council, Williamsville, Ill. TAMWORTH SWINE. REGISTERED Tamworth Hogs. Twenty-five pigs of April, May, and June farrow for sale at reasonable prices to make room for fall pigs. Must take them this month. A few sow pigs for sale. Write C. W. Free love, Clyde, Kansas.

HEREFORD CATTLE. MODEL BLUE GRASS FARM HEREFORDS STOCK FOR SALE. OVERTON HARRIS, - - Harris, Mo.

WESTON STAMP HERD REGISTERED... HEREFORD CATTLE. Anxiety 4th females with Ambercromble 85007 at head. WM. ACKER, VERMILLION, KANSAS.

J. A. CARPENTER, Carbondale, Kans. Breeder of Pure-Bred HEREFORD CATTLE Special—For sale, four long yearling bulls, good condition.

Registered Herefords THOS. EVANS, BREEDER, Hartford, Lyon Co., Kans. Five bulls from 12 to 20 months old, nine 2-year-old heifers bred, and 16 yearling heifers old enough to breed.

SUNFLOWER Registered Herefords. 200 Head in Herd. Herd Bulls now in use are sons of Don Carlos 88784. Twenty-four Young Bulls ready for service for sale. D. L. Taylor, Sawyer, Pratt County, Kansas.

HEREFORD CATTLE.

VERMILLION HEREFORD CO., VERMILLION, KANSAS. Boatman 56011 and Lord Albert 131657 head of herd. Choice young stock of both sexes for sale. E. E. WOODMAN, Vermillion, Kans.

...Hazford Herefords... Herd headed by the young show bull, Protocol 2d 91715, assisted by Major Beau Real 71621, a nephew of Wild Tom. Females largely the get of Bernadotte 2d 71634. A few choice young bulls for sale.

Robt. H. Hazlett, Eldorado, Kas. The Wayside Herd of Registered HEREFORDS "ANXIETY WILTONS." Bulls in service are Printer 6684, March On 14th 10674, and Good Sign 14087. Next public offering at Sioux City, Iowa. Watch for date. You had better get some Printer heifers while you can. They will be higher than a cat's back after this year. Paste this in your hat. Savey? W. W. GRAY, FAYETTE, MO.

STEELE BROS., BELVOIR, DOUGLAS CO., KANS., BREEDERS OF SELECT Hereford Cattle.



Young Stock For Sale. Inspection or Correspondence invited. **RUBY RED HEREFORDS.** 100 REGISTERED CATTLE FOR SALE WE BREED, BUY, AND SELL

Our individuals are low, blocky, dark red, with drooping horns mostly. Their ancestry is the richest: Lord Wilton, The Grove 8d Anxiety, Earl of Shadeland 22d, and Hesiod. Three extra yearling Bulls and 7 good. Twenty yearling Heifers. Seventy Cows and Calves. **POLAND-CHINA SWINE.** Choice Registered Stock of both sexes for sale. R. J. SIMONSON, M'gr, Cunningham, Kingman Co., Kans

SOLDIER CREEK HERDS OF Herefords, Shorthorns, Polled Shorthorns

SERVICE BULLS: HEREFORDS Columbu 17th 91364, Elvina's Archibald 75998, Jack Hayes 2d 119761, Jack Hayes 8d 124109. **SHORTHORNS. POLLED.** Jubilee Stamp 126017, Orange Dudding 149469. **SCOTCH EMPEROR 133646, Ottawa Star 113109.** Herds consist of 500 head of the various fashionable families. Can suit any buyer. Visitors welcome except Sundays. Address **JOSEPH PELTON, MANAGER, Kiowa County, Belvidere, Kansas.**

SCOTT & MARCH, BREEDERS OF HEREFORD CATTLE

BELTON, MO. BULLS IN SERVICE: HESIOD 29th, Imp. RODERICK, GILTEDGE —son of Dale and Expansion. A car-load of Heifers bred to our best bulls, and a car-load of choice Bulls, 18 to 24 months old at private treaty.

SHORTHORN CATTLE. MAPLE LEAF HERD OF THOROUGHbred SHORTHORN CATTLE and POLAND - CHINA SWINE. Farm is 2 miles south of Rock Island depot. **JAMES A. WATKINS, Whiting, Kans.** **FOR SALE MY HERD BULL, Aberdeen Knight 165207.** Got by Orange King 180731, out of Mary Aberdeen, tracing to imported Young Mary; 2 years old, deep red, a splendid breeder. A bargain for someone. **HARRY EVANS, Pleasanton, Kan.**

SHORTHORN CATTLE.

D. P. NORTON'S SHORTHORNS.
DUNLAP, MORRIS CO., KANS.
Breeder of Pure-bred SHORTHORN CATTLE.
Herd bull, Imported British Lion 133692.
Young stock for sale.

GLENWOOD HERDS.

VICTOR OF WILDWOOD 126054 at head.
A pure Scotch herd-header for sale. Twenty yearling 1- and 2-year-old Scotch-topped heifers bred or with calves at foot for sale. Choice young bulls always for sale. Poland-China herd headed by Glenwood Chief, Faultless 27815. Address
C. S. NEVIUS,
CHILES, KANSAS.

PONY CREEK HERD
SCOTCH AND SCOTCH-TOPPED
SHORTHORNS

Young stock by the roan champion bull John Ward 159481 and by the present herd bull Barmpton Knight 148795. Choice breeding, good individuals, and square dealing. Address
E. D. LUDWIG,
H. R. No. 2, Sabetha, Kans.

...GREENDALE RANCH...
BREEDERS OF
PRIZE-WINNING
SHORTHORN CATTLE,
BERKSHIRE SWINE,
SHROPSHIRE SHEEP

Great constitution and lung capacity gained in high altitudes. A few select young swine and sheep for sale. **ED. GREEN, MORRISON, COLORADO.**

EUREKA VALLEY
BREEDING FARM

CHOICE SCOTCH SHORTHORNS sired by 22d Earl of Valley Grove 142569. Herd headed by Gloster's Best 178044 Young bulls for sale. Also breeders of Percheron and French Coach horses. Address
Warner & Odle, Manhattan, Kansas.

CHERRY CREEK HERD
Pure Scotch and
Scotch-topped

Shorthorns

Imported Scottish Knight 136371 heads the herd.
H. W. WEISS,
Formerly of Sutherland, Iowa. Westphalia, Kas

Mt. Pleasant Herd
SHORTHORNS

Herd Bull For Sale—Acomb Duke 18th 142177, is worth looking after; also 13 young Bulls ready for service, and eight young Cows with calves by Acomb Duke 18th. Inspection invited.
A. M. ASHCRAFT,
R. R. No. 3, Atchison, Kans.

Sunflower Herd of....
SCOTCH and SCOTCH-TOPPED
Shorthorn
Cattle,
Poland-China
Swine.

Two Scotch bulls in service. Representative stock for sale. Address
Andrew Pringle,
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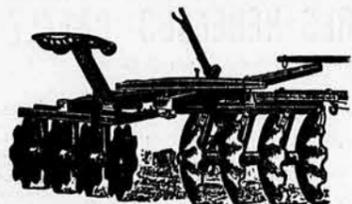
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