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The annual convention of the State Temperance Union, to be held in Topeka in May, is to be an interesting and important one on account of the timely topics to be discussed. They are chiefly along the line of practical enforcement of the law. The law which makes the owner of a building in which liquor is sold a party to the crime is to be handled, also the questions of when and how a city and city officials may be ousted for failing to observe the statutes. Other than legal topics, however, will be discussed. T. E. Stephens, former secretary of the union, will speak on "Prohibition v. License." Mr. Stephens has recently been making an elaborate study of the comparative results of prohibition and license and is prepared to present some highly significant facts. Rev. F. W. Emerson will also discuss the question of "Local Temperance Organizations." Inasmuch as results ultimately depend on the local workers, this topic is important and likely to elicit a lively interest, especially as it is to be presented by so forceful and stirring a man as Mr. Emerson.

CUBAN RECIPROCITY.

The question of reciprocity with Cuba is occupying much attention in Congress and in the press. The proposition now is to take off one-fifth of the import tax on Cuban sugar and tobacco in exchange for a like reduction of the Cuban import tax on American products. President Roosevelt has made this an administration measure by throwing all of his influence in favor of its passage.

Congressman Long, of Kansas, is the leader in the House of Representatives in favor of the measure. The opposition is powerful and well organized. It is inspired chiefly by the American sugar and tobacco interests. The cane-sugar people are making but little stir in the matter, having so often been met with the showing that with more than a half century of protection their industry still produces but a small fraction of the sugar required by the people of the United States. But the beet-sugar interests are more aggressive. They claim that unless they have nearly 2 cents a pound advantage over the Cubans they will starve to death at the beet-sugar business—or words to that effect. An advantage of 1½ cents would not save them.

On the other hand, it is argued that mutual concessions on the tariff schedules will secure the markets of Cuba to America for all of the varied agricultural and manufactured products which will be consumed by a prosperous people. Instead of leading an existence on yams and sugar-cane the Cubans are expected to sell their sugar and tobacco in the United States and to buy flour, corn-meal, pork, and beef; instead of going half clothed they are expected to buy dry goods of every grade from American mills; instead of doing without railroads and the various products of the iron mill, they are expected to become large patrons of American iron industries.

On the argument both as to advantages to Cubans and to Americans the reciprocity people have the strong side. When it comes to the votes it remains to be seen who has the advantage.

WHAT SHALL BE DONE WITH THE WHEAT LAND?

Every spring there is some wheat land on which there is only a partial stand and some on which the wheat has been entirely killed. This spring promises larger areas of partial and total failures than usual. What shall be done with these areas, is just now a pressing question. It will receive answers which will vary somewhat according as the answer is from one or another part of the State.

In eastern Kansas the usual course in case of entire failure of the wheat will be to list the ground and plant corn. This will be varied by substituting Kaffir for Indian corn to an extent greater than ever before. Kaffir-corn has proven more reliable than Indian corn under adverse conditions. The grain is not quite as valuable, pound for pound, as Indian corn, but when fed, an average acre of Kaffir-corn produces more meat than an average acre of Indian corn grown under similar conditions.

Those who are in need of feed at the earliest date possible will in some cases sow oats among the wheat.

In any part of Kansas it will be good practice to sow alfalfa among the wheat wherever there is less than a half stand of wheat. The soil will need no further preparation. Use twenty pounds of seed for an acre. Formerly, it was thought necessary to defer sowing the alfalfa until all danger of spring frosts had passed. Recently, experiences have been reported favorable to early sowing. It is, probably safe to sow the alfalfa as

early as it is safe to sow oats. Formerly it was thought impossible to mend a poor stand of alfalfa. Several farmers have reported success in reinforcing poor stands. If, therefore, sowing alfalfa on an irregular stand of wheat shall result in an unsatisfactory stand of alfalfa, the stand may probably be made good the next season. This is much more readily done since, than before it was demonstrated that alfalfa is benefited by disking.

There are some reports of intention to sow spring wheat to supplement poor stands of winter wheat. Some early varieties of spring wheat ripen about with the Turkey varieties of winter wheat. The newly introduced Macaroni wheats require but a short season and should prove excellent for this purpose. It is doubtful, however, whether any considerable quantities of Macaroni seed can be had for the present season.

There are several plants which will be used in greater or less quantities to produce early feed and for summer pasture. Sorghum will probably be planted on a larger acreage than usual. Cow-peas and soy-beans will be planted both for early and for late feed. Rape should be sown extensively. Some of the forage crops of later introduction furnish much pasturage or liberal quantities of cured forage as may be desired.

TEST ALL SEEDS.

Much seed-corn is coming into Kansas from other States. Seed saved in Kansas with only ordinary care will usually possess a high percentage of germinability. In most of the other corn-growing States greater care is necessary to assure the proper curing of the seed. Some have raised a question as to whether Kansas-grown corn of last season is suitable for use as seed. The germinability of seeds is so easily tested that it is almost criminal negligence to omit to make the test. Take an ordinary glass fruit-jar; place in the bottom two or three thicknesses of plotting paper or twenty or thirty thicknesses of old newspapers; moisten the paper with water; place 100 seeds on the paper and replace the lid without the rubber; set in a warm place. If the paper tends to dry out, add more moisture. In a few days, the percentage of germinability may be determined by counting the sprouted seeds.

Some uneasiness has been expressed least the damage to tassels, last season, may result in imperfect plants this year. While experience on this point is wanting, there is no apparent reason why a good ear of corn produced last season shall not produce good stalks and good ears this season. The fact that grains of corn were produced on the cob is proof that the pollen performed its function. Without fertilization no grains are produced. Some experimenters will be inclined to prefer to use for seed the corn that was produced under the adverse conditions, on the theory that the corn which withstood these conditions has, and is likely to transmit, more than ordinary adaptation to such conditions.

The rise in land values in the farming sections of the United States amounts to a "ground swell." The question is raised whether land that sells at \$100 an acre can be farmed at a profit. This figure seems to be fixed in mind as likely to mark the price of good farm-

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ing land possessed of good market facilities. It will be noted that market facilities develop with the development of the country so that every extensive area of good farming land will eventually, and probably at no distant day, be provided with good market facilities. Land which produces with reasonable regularity under good farming fair crops of the staple food-stuffs may be made to pay 4 per cent on \$100. No investment that is equally secure yields more. It is safe to say that land that pays \$4 an acre rent is worth \$100. If it pays \$3 rent it is worth \$75. No on need at any time be surprised to hear of \$100 farming land in Kansas.

BLOCK 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.

Agricultural Matters.

The Millets.

EDITOR KANSAS FARMER:—Mr. L. B. Parsons, of Arkansas City, Kans., writes me a long and interesting letter, and among other things he says: "Last spring I sent to what I supposed was a reliable seed-house for enough Siberian millet seed to sow four acres. I planted on March 7 with a press disk drill on ground which was in splendid condition. The plants came up in a reasonable time with a good stand, but were always very feeble and did not stool at all—not a single plant—and it made about one-third of a ton per acre. It was cut about July 15 and the heat and drouth came too late to seriously affect it. Since I read your article on Siberian millet I have concluded I did not plant Siberian millet at all, as you say the seed is large—much larger than ordinary millet. That which I planted was very small, and the seed-house I got it from advertises it as very small, saying that the extreme small size of seed made it go farther, taking less seed per acre. I wish you would call the attention of the KANSAS FARMER readers to this point and emphasize it, as the seed-house is still advertising Siberian millet as having a very small seed."

Others have written me in the same strain, and it is a shame that a responsible seed-house has been imposed on by some one, and is selling seed not true to name and probably not aware of it. I have the seed-house catalogue before me. They illustrate a head of German millet to represent the new Siberian millet, whose head is in no wise like a German millet head. Here is what they say about the size of the seed: "The seed of the new Siberian millet is so much smaller than that of other sorts, that the cost is lessened greatly in quantity of seed required per acre, which is only eight quarts if wanted for seed and from sixteen to twenty if wanted for hay, according as it is drilled or broadcasted."

Now as a matter of fact, the new Siberian millet seed is the largest, much the largest, of any of the millets. It is pointed at each end, has a depression on one side and is a deep orange color, the size, shape, and color attracting one's attention at once as very much out of the ordinary.

A great many are advertising this new millet and quoting very low prices per bushel. They are probably sending out common Hungarian seed.

New Siberian millet-seed, recleaned and sacked, is worth \$1.50 per bushel. The seeds are large, not nearly so large

this year as is common on account of the great drouth, but only half as much seed is required to be planted as German millet, as the plant stools out so, as many as forty-one stalks having been grown from one seed.

A great many are being led astray by the great booming of the new forage plant, "Pencilaria," which is represented as growing ten to sixteen feet high with forty to sixty tons of green feed per acre. It is nothing more nor less than the old "cat-tailed millet," sometimes called "Pearl" millet, which is described as follows: "The plants at first appear feeble, resembling broom-corn, but when a few inches above ground they begin to tiller and new shoots appear rapidly from the original roots, numbering from six to twelve, or more. The stems at first are nearly prostrate, but when about two feet long they begin to assume an upright position, reaching a height of eight to ten feet." Now, let any one who has bit at the bait and bought some of this new plant "Pencilaria," send and get a sample package of "Pearl" millet and try a row of each side by side and note the results.

It is a good plan to let our experiment stations try these new plants first. The South Dakota Station tried Siberian millet in 1897 and reported it as the most productive and best millet grown there that year and very highly recommended it. I am only recommending it to plant after harvest as a second crop where German and other millets would not do at all. Under such circumstances I really believe it is a valuable plant.

Moran, Kans.

[There have been many inquiries about Pencilaria. Mr. S. S. Ferguson, who farms near Topeka, tried it last season. He sowed it June 4 and cut it October 14. It averaged eight feet high. Mr. Ferguson and his neighbors were so well pleased with it that they have sent for enough seed to sow six acres this season. The KANSAS FARMER hopes for further reports on pencilaria. Editor.]

Johnson-grass.

EDITOR KANSAS FARMER:—Having seen several inquiries about Johnson-grass to which no reply has been made, and as I have had ten years' experience with it, I will try to make an answer. I feel sure there is no farm pest equal to this grass. I will give a short description of it as I have learned to know it, leaving those making inquiries, and all others who are thinking favorably of this pest of the farm, to draw their own conclusions.

About twelve years ago, the owner of the farm joining mine on the south sowed a half pint of this seed on a piece of land that washed badly. After waiting some time for the seed to grow he plowed again and planted to cane. So he did not get a crop till the next summer. The reason was that he did not know the grass when he saw it. The grass from this half pint of seed has spread so that this field of forty acres is about all seeded over, and for the past three years much of it has been mowed, as no other crop could exist there. There are five other farms with fields almost as bad as this one, and it is spreading every year.

The grass resembles cane until it gets a foot high. The difference is in the appearance of the roots. The roots of cane are small and red, and it is easily pulled up; while the roots of Johnson-grass grow out in shape like the spurs of a rooster's legs about two or three inches long with a hard sharp point at the end. The root is of a glistering white color, and when the plant is pulled it breaks off at the ground nearly every time. These roots being left soon furnish a new top or stem.

This grass never shows above ground until late in the spring after all other grasses are six inches or more high, and the first frost in fall kills the tops. They are as easily killed as young cane. After being once fairly started nothing but frost will kill this grass, and as the roots go deep into the ground the plant lives below the frost line. I have dug roots out a depth of two feet. Another plant I followed to depth of twenty-eight inches, where I quit digging.

The roots of a mature plant resemble the calamus root only that they are never large and are whiter. They have a bud or eye at every joint, alternately on opposite sides. It takes but a little while for these roots to multiply and become thick in the soil like asparagus roots.

I have tried killing it with strong salt brine, but the plant seemed to thrive on it, judging from the growth afterward. I tried yarding cattle and horses on it for two years, and it appeared to be killed, as not a spear of it could be seen. When we started to plow it we found

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the soil full of large live roots; in places so many that I could rake them in piles. I tried to smother it by sowing cane on the land, and as the land was very fertile, the cane grew a heavy crop; but the Johnson-grass was three feet ahead of the cane, and made a good seed crop.

As to the hay value of this grass, I can say that the stems grow from twelve to twenty inches long and from a quarter to a half inch through. As to hogs eating the roots, I can say that this field that was first sown here has had from 100 to 150 hogs on it each year until planting time, and I have never seen a hog eating the roots.

I have a little advice to give to the man who is going to sow this seed. After you finish sowing make out a deed, deeding the whole farm to the Johnson-grass and have it recorded; and then prepare to move out, for it is only a question of time till the grass will take possession. J. C. WEATHERS.

Howard, Kans.

Kaffir-corn in Edwards County in 1901.

EDITOR KANSAS FARMER:—In commenting on the article in KANSAS FARMER of March 6, by Mr. Geo. L. Clothier, without any disrespect to that gentleman, I wish to say that I do not think it fair for him to write just as though the climatic and soil conditions were the same throughout the whole State of Kansas. He says: "If every Kansas farmer who grows corn had planted one-half of his corn-field to Kaffir-corn during the season of 1901 and had tended the crop for its grain instead of fodder, I have no doubt but that the State would have produced one hundred million bushels of feed instead of forty millions as was the case."

Now if Mr. Clothier had spent the past twenty years farming out here in Edwards County as I have done, he would know that Kaffir-corn has been a has been a prominent crop here for some years, both as a fodder and seed crop. During the season of 1901, many farmers were unable to plant their Kaffir-corn at all. The soil was so extremely dry that plowing was impossible. Where the soil was sandy, they succeeded in planting the crop, but much of it never came up so that it could be cultivated. Where it did manage to make a fodder crop, it matured very little seed. I had a few acres planted on finely pulverized early breaking, which made about four bushels.

Ordinarily Kaffir-corn is a good crop here, but in 1901 it was a worse failure than corn, as the corn made more fodder. I have threshed a great deal of Kaffir-corn in the last few years, and fifteen bushels per acre is about an average crop, although it sometimes runs up to twenty-five bushels.

Again, Mr. Clothier speaks just as though there was not an acre of land in Kansas that would not produce a large crop of alfalfa. He evidently does not understand the nature of alfalfa at all, or he would know that while it can be successfully grown in the river bottoms of western Kansas, which have an underflow near the surface, there are thousands of acres on the uplands where he might spend a life-time trying to raise alfalfa, and then not get a stand, unless he could find some means of irrigating it.

I agree with every writer on the subject, that Kaffir-corn and alfalfa are just the thing where it is possible to raise them, but I am getting weary of the misleading articles which are appearing from time to time in our farm journals.

W. A. STAPLETON.
Belpre, Edwards County, Kansas.

Alfalfa With Wheat.

EDITOR KANSAS FARMER:—I read in the KANSAS FARMER of February 27, the experience of a Mr. Scott and neighbors with alfalfa sown in wheat. I am glad to see such letters go out to the people of Kansas and other States. I and my neighbors can testify to the good results of alfalfa sown with wheat in March or April, or any time before the wheat gets too large to be run over with a harrow or disk alfalfa-seeder. I believe there is as good a chance of getting a stand in this way as there would be if the land was especially prepared for alfalfa, especially if the stand of wheat is thin.

By seeding alfalfa this way, you do not lose the use of your land one year, and another great advantage is that you do not have to mow the weeds off four or five times; one or two times is sufficient. When the wheat stubble is thick enough, I propose to burn it off; and where not thick enough, I will rake and burn it after mowing.

I sowed fifty-nine acres in this way last spring; but owing to a very heavy lashing rain after sowing, the seed did not come up well; and it will be necessary to patch up this field by sowing over with a disk seeder. However, I expect to get more value out of this fifty-nine-acre field in hay and seed this season than I could possibly get in any other way. The stand is as good as some I sowed the past season on land especially prepared for alfalfa seeding.

I will be glad to see the day when every farmer that has land adapted to alfalfa-raising, has alfalfa for his hog-pasture, and enough alfalfa hay for all his stock; then he can have beef, pork, butter, eggs, chickens, turkeys, milk, and honey for himself, and enough to spare to make all his city neighbors happy.

Salina, Kans.

Alsike Clover.

EDITOR KANSAS FARMER:—I notice a reply to the inquiry in regard to alsike clover that differs from my own experience with it. It is a perennial clover and thrives best in moist soils. I regard it as an almost perfect supplement to alfalfa for pasture in our undrained bottoms, since it thrives on soil entirely too wet to grow alfalfa. The past two dry years have entirely killed out the white clover on the place, while alsike, though making no growth in the dry times, still survived. I have never tried it for hay.

I sow three pounds of seed with some kind of grass-seed. I have tried sowing alfalfa in wheat twice and failed both times. I have read in an agricultural paper that rape may be sown in the spring with oats and make a rank growth after harvest. Has any one ever tried sowing it early in wheat; and with what success?

Iola, Kans.

Barbed-wire Fence.

EDITOR KANSAS FARMER:—Will you please be kind enough to give some of your valued space to tell me the best method of removing barbed wire from fence, with the view of stretching it again on fence at a different place? I saw the sled with a pulley or windless made on it highly spoken of, also advice to roll it on a common sugar or flour barrel. But my three-wire fence is in the timber and the trees are much in the way of the sled. I know some of your many subscribers can tell me a better method than either of the above.

Atoka, I. T.

C. R. ANGLIN.

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FROM FARMERS' BULLETIN NO. 146, U. S. DEPARTMENT OF AGRICULTURE.

PARIS GREEN.

Among the most important insecticides now on the market is Paris green, and this article deserves first consideration. Paris green, if perfectly pure chemically, is a compound made up of three substances—arsenious acid, acetic acid, and oxide of copper—joined to each other in a chemical combination called copper aceto-arsenite. These should be present in the following proportions:

	Per cent.
Arsenious acid	58.65
Copper oxide	31.29
Acetic acid	10.06

Because of faulty methods of manufacture, however, and also because arsenious acid is cheaper than the other constituents of Paris green, large amounts of this substance are sometimes present in Paris green on the market not combined as it should be with the other two constituents, but present in the free state. A sample of this kind will cause great damage to the foliage by scorching, and the avoidance of such Paris green can not be too strongly recommended. The maximum amount of free arsenious acid that should be allowed in Paris green has been found in California to be 4 per cent and in Idaho between 4 and 5 per cent.

There is no easy test by which one who is not a chemist can recognize the presence of free arsenious acid in Paris green. Intending purchasers should consult bulletins on the subject which give the names of the various manufacturers, along with an analysis showing how much of the arsenious acid is free and how much combined, as it should be with the other constituents.

Another method of adulterating Paris green is by the addition of calcium sulphate (gypsum). It is hardly necessary to state that this substance is absolutely worthless as an insecticide and is only added to give weight. Such an adulteration as this is more rare than that first mentioned, and is also much easier of detection. To apply the test for this form of adulteration take about as much Paris green as can be held on a 5-cent piece, transfer to a drinking glass and add about six tablespoonfuls of household ammonia; stir all the time and continue stirring for about five minutes. If the green is pure a dark blue solution will be formed and no residue will remain undissolved. If calcium sulphate is present, however, a white residue will remain suspended in the blue liquid, which will soon sink to the bottom of the glass in a compact mass.

There is one other substance that commercial samples of Paris green always contain because of their method of manufacture. This is sodium sulphate (Glauber salts). This substance will neither harm nor help plants or insects. It should not be present in good samples of Paris green except in very small amounts, 1 to 1.5 per cent, since it only adds weight and causes purchasers to pay the market price of standard goods for a weaker article.

The author has recently examined 47 samples of Paris green collected by the Division of Entomology, and finds that the total arsenious acid varies from 56.2 to 62.16 per cent, the copper oxide from 27.58 to 31.16 per cent, and the acetic acid from 6.5 to 12 per cent. Out of these forty-seven samples ten had more than 1.5 per cent sodium sulphate, one reaching even to 3.59 per cent. As to free arsenious acid, there are two methods for its determination: The first, or sodium acetate extraction method, shows more nearly the amount of free arsenious acid present in the original green, while the second, or water extraction method, shows the amount of free arsenious acid originally present in the green, together with some that has been set free by the action of water on the green. Although it has not yet been proved, the second method more than likely shows more accurately the value of Paris green in actual

orchard practice. By extracting with sodium acetate, one sample contained 8.91 per cent and one sample 6.37 per cent. Besides these there were two samples containing between 3 and 4 per cent, no samples containing between 2 and 3 per cent, and the remainder containing less than 2 per cent. By extracting with water, nineteen samples contained above 5 per cent free arsenious acid, sixteen between 4 and 5 per cent, and the remaining twelve below 4 per cent.

There are two other substances now being sold that are very closely allied to Paris green, and consequently will be taken up in this connection.

"GREEN ARSENOID."

The first of these is "Green Arsenoid." This compound is very much like Paris green in its composition and effect on insects. If pure, it should be composed of arsenious acid and oxide of copper joined to one another in a chemical combination called copper arsenite, but unlike Paris green it does not contain any acetic acid. An analysis of this substance shows that besides combined arsenious acid and oxide of copper it contains:

	Per cent.
Free arsenious acid (when extracted with sodium acetate).....	3.23
Free arsenious acid (when extracted with cold water).....	5.83
Sodium sulphate	2.02
Sand	1.30

It will at once be seen that the percentage of free arsenious acid is somewhat too high when a water extraction is used. The amount of sodium sulphate and sand present also is too large, causing the manufacturers to gain the price of over three pounds of Paris green on each 100 pounds sold, with an equal loss to the consumer if the price is maintained. We would not, of course, expect to have commercial articles entirely free of these two substances but with care the sodium sulphate could easily be reduced to 1 per cent, and the sand to much less than 1 per cent. As a whole, however, this is a very good compound and has given excellent results in the various State Stations, especially when mixed with a little lime.

"PARAGRENE."

The second substance spoken of above is a patented article, "Paragrene." This is composed of arsenious acid, oxide of copper, acetic acid, and about 27 per cent gypsum. The gypsum, of course, is of no use as an insecticide, so is in the way and only adds weight. Also, 6.12 per cent of the arsenious acid is present in a soluble condition. Consequently this can not be classed as a high-grade insecticide.

LONDON PURPLE.

London Purple is another of the arsenical insecticides sold in America in large quantities. This substance is prepared by boiling a purple residue from the dye industry, containing free arsenious acid, with slaked lime. In this way a compound of these two substances, called calcium arsenite, is formed. This on exposure to the air during subsequent boiling is partly converted to a closely allied compound, calcium arsenate. Since the dye residue has accumulated some dirt during the process of manufacture, sand will also be present in all samples of London Purple. It will thus be seen that this substance will consist of calcium arsenite, calcium arsenate, a dye residue, and small amounts of sand and moisture. In case not enough lime is added to the dye residue or the boiling is not continued long enough, some of the arsenious acid will be present in free condition, thus causing the foliage to be scorched.

A chemical examination of four samples, recently made by the author, shows that the moisture varied from 1.87 to 4.07 per cent, the sand from 2.46 to 3.55 per cent, the arsenious acid from 6.40 to 17.31 per cent, the arsenic acid from 26.50 to 35.62 per cent, and the calcium oxide (lime) from 23.59 to 25.09 per cent. If the arsenious acid and arsenic acid are combined and both calculated as arsenious acid, a variation of from 37.07 to 40.12 per cent only was noted. Cold water dissolved from these samples amounts of arsenious acid varying from 1.44 to 13.49 per cent and amounts of arsenic acid varying from 7.12 to 19.56 per cent.

Since calcium arsenate and calcium arsenite are both, however, somewhat soluble in water and since water breaks up both compounds to some extent on standing in contact with them, we are not able at present to say how much of this arsenic acid and arsenious acid are in the free condition, and how much combined with the lime. It is probable that plants can bear without scorching larger quantities of these sol-

uble arsenic salts than of free arsenious acid.

LEAD ARSENATE.

Lead arsenate is prepared by the action of lead acetate on sodium arsenate, and of all the arsenicals used as insecticides is probably the most insoluble and consequently the least liable to scorch the foliage. A recent analysis of a sample of "Swift's Lead Arsenate" in this laboratory showed that it contained:

	Per cent.
Lead oxide.....	58.90
Arsenic acid	25.62
Organic matter	13.00

The organic portion of the substance was composed almost entirely of two sugars—dextrose and dextrin—showing that glucose sirup had been added to the lead arsenate to cause it to stick to the foliage. Practical tests with this insecticide show that its action is excellent, and that on account of its almost entire insolubility it seldom scorches the foliage.

"PINK ARSENOID."

Closely allied to lead arsenate is lead arsenite, sold by one firm under the name of "Pink Arsenoid," and prepared by the action of lead acetate on sodium arsenite. This substance was found by the California Experiment Station (Bulletin 126) to consist of arsenious oxide, lead oxide, small amounts of impurities, and a small amount of a pink dye-stuff to color it. Only 3.24 per cent of the arsenious acid was in the free condition. This, next to lead arsenate, is probably as insoluble as any of the arsenicals, and according to reports from various experiment stations, has given good results.

"WHITE ARSENOID."

Another of the arsenites—barium arsenite—was recently put on the market under the name of "White Arsenoid." This is prepared by dissolving arsenious acid in a solution of sodium carbonate and treating the resulting fluid with barium chloride. There will be formed a compound of barium oxide and arsenious acid, barium arsenite and a compound of barium oxide and carbonic acid, barium carbonate. The results from this mixture have not been good, and a chemical analysis shows that all of the arsenious acid is dissolved by cold water; so it has, it is understood, been withdrawn from the market.

"SLUG SHOT."

There is a compound called "Slug Shot" that is very extensively sold because of its cheapness. An analysis of this substance shows that it is composed almost exclusively of crude gypsum with a small amount of arsenious acid and copper oxide added, probably in the form of Paris green. The amounts of these two substances in a sample recently examined were only 1.58 per cent arsenious oxide and 0.58 per cent copper oxide. It is needless to say that an article containing as little arsenious oxide and copper as the above will do little or no good as an insecticide, while 5 cents per pound is a large price to pay for a sample consisting of nearly 100 per cent gypsum.

"BUG DEATH."

Another insecticide that has recently come into great prominence and had a very large sale all over the United States, is "Bug Death." This substance is composed largely of zinc oxide with small amounts of iron oxide and lead oxide, and about 3.27 per cent of ammonium and potassium chlorides. Of course, the chlorides of potassium and ammonium would be of some value as plant food as far as they go.

The Sixteenth Annual Report of the Maine Agricultural Experiment Station (1900) says in regard to this insecticide:

"When it is applied to potato vines at the rate of forty pounds to the acre it has no appreciable effect on bugs, nor does it affect the foliage. When it is applied at the rate of 100 pounds to the acre it frees the vines of bugs, but at the same time some of the leaves curl up and die. As a fungicide this compound is of not much value, although it has a slight effect in pre-

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venting blight when applied at the rate of 180 pounds to the acre."

Finally, the following remarks are made:

"Because of its high cost and slow application, no one growing any considerable amount of potatoes can afford to use Bug Death. The price of the labor required to apply Bug Death to one acre will buy the material and spray two acres with Bordeaux mixture and Paris green."

"BLACK DEATH."

"Black Death" is another insecticide that is now on sale in various localities. It is composed of about:

	Per cent.
Sand and charcoal.....	23.00
Gypsum and limestone.....	75.00
Arsenious acid97
Copper oxide59

The same statements made in regard to "Slug Shot" will apply to this mixture also.

"SMITH'S VERMIN EXTERMINATOR."

This substance, advertised to kill every species of worm, bug, lice, etc., and selling at the rate of 5 cents per box, is composed of partly air-slaked lime, treated with about 3 per cent crude carbolic acid and colored with a pink dye. Even if this compound contained 50 to 60 per cent instead of 3 per cent of carbolic acid, its value as an insecticide would be extremely doubtful, but as it is, it is worthless.

LICE EXTERMINATORS.

Besides the insecticides usually spoken of in agricultural bulletins, attention is called to certain others. These are the lice killers on the market, a number of which are not worth the boxes they are put up in.

One lice-and-flea exterminator analyzed in this laboratory and selling at the rate of 25 cents per box, "P. D. Q." was found to contain about 15.5 per cent sulphur, a very small amount of some volatile substance that possessed the odor of naphthalene, and other higher coal-tar products, and 80 per cent of what appeared to be only common earth.

Another sample, selling at 25 cents per box, is "Instant Louse Killer." This consists of a very small amount of tobacco, a large amount of partially air-slaked lime treated with a small amount of the higher products of coal tar, and a large amount of what appeared to be clay.

Still another sample, "Lambert's Death to Lice," and selling at 25 cents per box, was analyzed. It is a mixture of tobacco with a small amount of lime, which appeared to have been treated with the higher products of coal-tar. Either through negligence in cleaning the tobacco or on purpose a large amount of sand is present.

It will at once be seen that all three of these lice killers are frauds. The

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The illustration in this advertisement is a sample of the saving you can make in buying a buggy direct from our factory. You can buy surreys, phaetons and other high grade vehicles at equally low prices. We save you two profits—charging net factory cost with a moderate profit added. We also sell harness, etc., at factory prices. With each purchase we give a broad guarantee. If the purchase is not satisfactory in every particular, you can return it to us and we will pay freight charges both ways. Send for free illustrated catalogue.
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first, it is true, does contain sulphur and a substance like naphthalene, each of which is good in driving away vermin, but it also contains 80 per cent of worthless earth, for which we are paying at the rate of 20 cents per pound. The second contains nothing that will kill vermin except tobacco, and some of the higher products of coal-tar, and these are present in such small quantities as to be practically of no use. The third contains enough tobacco to perhaps be of some value, but the same amount of good tobacco as in the sample could be bought for one-third as much as the cost of the "Death to Lice."

ROACH DESTROYERS.

Other preparations that are very extensively sold are the roach destroyers. These usually appear in two forms, as powders and pastes. An analysis of a number of the powders shows that nearly all of them have borax as their chief constituent. This is sometimes mixed with meal, sometimes with flour, sometimes with sugar, sometimes with Persian insect powder, sometimes with cloves, etc. The mixture is often colored with pink or blue dye-stuffs. Nearly all could be prepared at home at one-half to one-tenth the cost of the store preparations. As to the pastes, all of these have from 1 to 2 per cent of phosphorous as their poisonous principle. The remainder is sometimes molasses and corn-meal or flour, and sometimes glucose sirup and corn-meal or flour.

BORDEAUX MIXTURE.

Probably the most important of all fungicides is Bordeaux Mixture, prepared by the action of lime suspended in water on a solution of copper sulphate (blue vitrol). It has been pointed out in Farmers' Bulletin 38 of this department that the way of mixing these two constituents has a very appreciable effect on the chemical and physical properties of the mixture. It was further pointed out that if both solutions are dilute when mixed, a product will be formed which will stay in suspension and adhere to the foliage much better than if both solutions were concentrated. There are now several firms putting up an article called "Dry Bordeaux Mixture." This article represents an attempt to supply the ready mixed Bordeaux Mixture to the consumer, but such an attempt can hardly be successful. In the first place, drying the mixture is a step farther than using concentrated fluids, so that the dry product obtained in such a way would have very different chemical characteristics from the mixture properly prepared. Again, when we dry the mixture the suspended particles become much coarser, so that when completely dry we would have a substance the principal part of which, i. e., the oxide of copper, would hardly stay in suspension at all, but would immediately sink to the bottom.

"GRAPE DUST."

"Grape Dust" is an article put up for the treatment of diseases of the grape vine. It contains:

	Per cent.
Gypsum	35.00
Sulphur	60.00
Copper oxide	90
And 4 per cent (about) of other different substances.	

Two of these constituents, i. e., sulphur and oxide of copper, are, of course, valuable for the purpose intended, but the 35 per cent of gypsum is of no value, and only adds weight.

"VELTHA."

"Veltha," another fungicide, contains:

	Per cent.
Sand and carbon.....	35
Sulphate of iron (green vitrol or cop- peras)	65

This latter compound, of course, has some value as a fungicide, but the 35 per cent of sand and carbon only add weight.

"FIBRO FERRO FEEDER."

This is another substance said to be both a fungicide and a plant food. An analysis made by the Maryland Agricultural Experiment Station (The Analysis of Commercial Fertilizers, 1893), shows that it has neither nitrogen, potash, nor phosphoric acid; so, of course, it is of no value as a plant food. An analysis made in this laboratory shows that it consists of quite a large amount of organic matter, chloride of iron, and sulphate of iron (green vitrol), which has been partly dehydrated and partly oxidized to ferric sulphate. Although the green vitrol is of some value as a fungicide, and the chloride of iron may be of use in certain cases of plant diseases, the same amount of these two ingredients as are in the Fibro Ferro Feeder could be

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This Engraving is made from a Photograph of our Horse and Cow as they appeared on the streets of Minneapolis. The horse is undoubtedly the largest 4-year-old horse ever known, being 20 hands and weighing 2500 lbs. He is almost a full-blooded Percheron. The cow shows Shorthorn points and weighed 2070 lbs. at six years of age and is over 6 feet tall. They are the wonder of every one who has seen them. It is sold on a Spot Cash Guarantee to Refund Your Money in any case of failure by over 30,000 Dealers. Fat and Healthy. Is used and strongly endorsed by over 500,000 Farmers. It is sold on a Spot Cash Guarantee to Refund Your Money in any case of failure by over 30,000 Dealers. It will make you extra money in growing, fattening or milking. Owing to its blood purifying and stimulating tonic effects it cures or prevents disease. It is a safe vegetable medicinal preparation to be fed in small sized feeds in connection with the regular grain. It fattens Stock in 30 to 60 days less time, because it aids Digestion and Assimilation. In this way it saves a large amount of Grain. The use of "INTERNATIONAL STOCK FOOD" only costs 3 FEEDS FOR ONE CENT. Ask your dealer for it and refuse any of the many substitutes or imitations. It always pays to feed the best. "INTERNATIONAL STOCK FOOD" is endorsed by over 100 leading Farm Papers.

FROM A WELL KNOWN CATTLE BREEDER.

International Stock Food Co., Minneapolis, Minn.

DEAR SIR:—I have used "International Stock Food" on my farm for years, and can say that I have found it to be a valuable Food for all kinds of stock. I have used it on my Angus cattle with great results. It not only helps them to put on flesh, but keeps their system in fine condition, making them able to consume a greater amount of Food with greater gains. As for cattle, I have never fed anything that gave me greater returns for the amount invested than this Food has done. It also gave me extraordinary results in conditioning my hogs for the sale ring. Breeders told me that I must have the art of feeding down pretty fine, and I told them I used "International Stock Food." I cannot recommend it too highly to any farmer or breeder, as I have received great benefit from it on Cattle, Horses or Hogs, and would not be without it. At the present time we are feeding it to our fifty head of Angus cattle that we are fitting for sale.

Respectfully yours,
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bought for much less, and unmixed with worthless matter.

DESIRABILITY OF ASCERTAINING COMPOSITION AND VALUE OF COMPOUNDS BEFORE PURCHASING.

In view of the fact that so many of the above insecticides and fungicides are either fraudulent or extremely expensive, considering the value of the ingredients employed, it would be well for the public to be very sure of the composition and value of any such compound before purchasing. In many cases this can be done by consulting bulletins from the local experiment stations dealing with this subject. In some States the data published concerning the composition of insecticides and fungicides is extremely meagre or entirely lacking. It is to supply this want that the Bureau of Chemistry has issued this bulletin, which is somewhat of a preliminary report to a bulletin more technical in character, which is in course of preparation, giving the exact chemical composition of many of these substances, bought on the open market in nearly every State of the Union.

The Bureau of Chemistry will make analysis of samples of insecticides and fungicides purchased by farmers and others using such bodies, if instructions for securing and forwarding these samples are obtained from this bureau.

Not a Lost Peach.

EDITOR KANSAS FARMER:—In the KANSAS FARMER of February 27, Wm. Ramsey, Solomon, Kans., is enquiring about the Morris White peach. Any up-to-date nursery is carrying said peach, but in the name of Holy Trinity, what does he want of this old seedling that made its bow and passed out years ago? Come, Brother Ramsey, wake up and get something newer and better. I can name twenty varieties any one of which is far superior to it.
D. D. T.
Vinland, Kans.

The Apiary.

Conducted by A. H. Duff, Larned, Kans., to whom all inquiries concerning this department should be addressed.

Notes for the Apiary.

Spring is now far enough advanced to learn the condition of every colony of bees. You should find no brood in the combs of every hive that has a lot of bees. You should find brood in the combs, you can arrive at the conclusion that something is wrong, probably the hive has no queen. Some very weak colony that has no brood may have a queen but it is a rare exception that

one weak enough to survive at all will not have at least a few cells of brood. Brood in the combs is evidence that the queen is all right, and if the colony, in addition to this, has plenty of honey, it will come out in first class shape. It will need looking after, however, on account of the possibility of running short of stores.

Put every colony in shape for good work during the honey season. This can be done completely in early spring, but it can scarcely be done after they become strong and the combs are filled up with brood and honey. Clean all the frames of burr combs, propolis, wax, etc., and set them in a new hive body, or clean the old one after the frames are removed and use it again. This cleaning-up process with bees and hives must be done every spring to insure success. Hives are usually out of good handling shape after each honey season, and each part must be put back in its original position. Crooked combs can now be straightened up in the frames, and transferring of bees from old hives to new frame hives can now be done; but later in the season it would be an impossibility.

Hives needed for the season should be put in readiness early, we can not wait until we need them before looking them up. We should have at least an extra hive for every colony; and if we expect to increase our stock to any extent, we should have two or three hives to the colony. Hives are easily and cheaply obtained in almost any locality, as cup-dealers have them kept at almost every town of importance and advertised in almost every agricultural paper; so that any one may have the opportunity of getting the latest improved hives. We will find no trouble in deciding which kind of hive to use for there is but one kind of hive now manufactured, or at least a uniform frame is used. All may be said to be of one and the same kind.

Be careful about moving hives about to different locations. No harm will result in moving them a mile or more, but to move them less than this will do them an injury from the fact that many of the bees will return to the old stand and will not find their hive. A small loss of bees at this season of year will greatly reduce the strength of the colony. Such hives frequently fall a prey to robber bees, as young bees of the hive do not protect themselves well. A colony may be successfully moved by taking it a few feet each day, for the bees will follow it and thus find their way back to the hive. Bees mark the location of their hive and retain the landmarks of the locality that the hive sets in and not the hive itself. For this reason they will follow it very far away.

Bees of the Western districts, which have been called the semi-arid localities of the West, and which now include large numbers of colonies in the alfalfa districts, need especial attention in early spring. In fact, they must have it or loss is likely to follow. The high winds and the scarcity of honey-bearing flowers through the months of April and May, up until alfalfa begins to bloom, bring many bees to starvation; and it is absolutely necessary to feed them heavily all through this period, unless they have a heavy supply of stores previously laid in for them. Those who have bees in these districts should bear this in mind, or they may get badly disappointed on their first trial.

Queen-bees—When Profitable.

Many who keep bees and do not make a close study of the hive and its contents may not be aware of the fact that fully one-half the queens found in hives that are kept on the go-as-you-please plan are of little value and will not prove to be of much, if any, profit. Queen-bees outlive their usefulness, but the colony puts up with them about as long as they live and lay a few eggs. Frequently a queen will remain in the hive two seasons after her usefulness as a first-class queen, and thus this colony will be one of little or no profit. A queen reared in early spring will do her best work during that spring and summer, and will never again be as prolific. She will fall off in egg-production the second season. Usually after this, she is not capable of more than keeping up a standard colony without producing an increase of bees or surplus honey; the third year of her life is of less value. Many queens will live four or five years, but most queens disappear at three or less.

To get good results every season from each colony of bees it is necessary to keep young queens in the hives, and with but very few exceptions, a queen over one year old. One would scarcely think so, but the old queens are the most persistent swarms; will take the swarming fever before their hive is nearly full of bees, and will come off with weak and small swarms. The young queen, on the other hand, is quite different in her views on this subject. She will remain at home without attempting to swarm and will have her hive full to overflowing with bees. It is these young queens that remain at home with a large force of bees that produce the largest yields of honey, and the beekeeper that is well onto this little trick so arranges things that no old queens remain in the apiary and nothing but young, prolific queens are found in the hives.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

March 25-27, 1902—National Hereford Exchange, Chicago, Ill. (Sothern management.)
April 1, 1902—M. Sooter, Lockwood, Mo., Shorthorns.
April 8 and 9, 1902—Breeders' Combination Sale of Herefords, at Kansas City, Mo.
April 15, 1902—Geo. H. Augustus, Kansas City, Mo., Shorthorns.
April 16, 1902—Geo. Bothwell, Nettleton, Mo., Shorthorns.
April 16, 1902—W. O. Park, Atchison, Kans., Aberdeen-Angus.
April 22-24, 1902—National Hereford Exchange, Kansas City, Mo. (Sothern management.)
April 25 and 26, 1902—H. O. Tudor, Holton, Kans., Shorthorns.
May 7 and 8, 1902—Collin Cameron, Kansas City, Arizona Herefords.
May 27-29, 1902—National Hereford Exchange, Omaha, Neb. (Sothern management.)
June 24-26, 1902—National Hereford Exchange, Chicago, Ill. (Sothern management.)

About Morgan Horses.

LEWIS HYDE.

Friends of the Morgan horse are usually well pleased when his long-time champion, Mr. Allen W. Thompson, speaks in his defence. But it appears that there is difference of opinion as to the blood of the original Justin Morgan. The strong presumption is that he had a worthy origin. If he carried an infusion of the blood of the thoroughbred, it is very fortunate that he did not have enough to spoil him for general use. The verdict of our older farmers is that the Morgans were the best general-utility horses for their weight that we ever had here. For many years, say from 1850 to 1870, they enjoyed a monopoly of popular favor in this part of the Reserve—this offshoot of New England. We had Black Hawks, Dave Hills, Comets, Gold Dusts and Billy Bakers. Stallions of these sub-families were especially noted for their prepotency, and this was satisfactory evidence that they carried several crosses of good, strong blood.

C. J. Hamlin in an able article, "Forty Years a Breeder," written for "The Christmas Horseman" in 1894, pays this tribute to a pair of Morgan mares, daughters of Ethan Allen, that he owned back in the 50's: "These mares were typical Morgans, very shapely, sound, round in their barrels, and their legs were what I have always since called 'futed,' although I know of no one else who uses the term. There was in these mares a certain grace and beauty, combined with speed, which I always think should go together in a gentleman's road horse. What I found in them solidified in my mind my idea of type." And will the reader please note that this is from the man who had long been the owner of Mambrino King? In this same article Mr. Hamlin tells us that the strongest reason that induced him to buy Almont, Jr., was that his dam was the handsomest mare in Kentucky, Maggie Gaines, by Blood's Black Hawk.

When a man slurs or belittles the Morgan horse, my conclusion is that he does not know much about typical Morgans. Does any reasonable horseman believe that a family of such marked individuality and of so great excellence was ever founded without recourse to good strong blood? I well remember a pair of Billy Baker mares, that went from this county to Hartford, Conn., about forty years ago. They brought \$2,000. These horses could go as far in a month or year, or twenty years, as any horses we have to-day, and with great pleasure and safety to their owner. As a farmer, I try to raise a few good roadsters, and it is no easy matter to find trotting-bred stallions that will sire horses that the market wants with any degree of uniformity. Dr. Smead very wisely tells us not to breed for speed. I hope he will yet tell us where to find stallions that will sire sound, fine and stylish roadsters with something like the uniformity of the old-time Morgans. A dealer here advises me to use a hackney stallion, as he is doing. Perhaps I shall, yet confess to a warmer love for the well-bred American horse. Yet, many of the most famous trotting-bred stallions are mere racing machines. The breeder of roadsters has no use for them.

Save the Young Lambs.

EDITOR KANSAS FARMER:—The loss of a young lamb looks like a very small matter, but when we consider that every well-bred lamb represents a \$5 bill for mutton purposes, or if pure-bred, may represent much more for breeding purposes, we can see that the loss of a few young lambs in the spring figures materially in the profit-and-loss account of the flock at selling time. This being the case, great care should be taken to save every lamb possible.

Supposing that the ewes have been properly treated up to weaning time, a

constant watch should be kept over the flock both day and night, especially if the weather is cold or stormy. The lamb should be gotten to the teat as soon as possible, and the milk should be started with the thumb and finger as often as the teat gets so closed that the lamb can not start the milk.

If the lamb is weak and slow to take the teat, a spoonful of warm milk from a fresh cow given every few minutes will strengthen it up very rapidly. Here I would say that one should always arrange to have a cow to come in fresh at the commencing of the lambing season. In case a lamb gets chilled, get it to the fire as soon as possible. If very badly chilled, it may be brought to by placing it in warm water and giving a little warm milk with a drop or two of spirits, as soon as it will swallow. The water will sometimes cause the ewe to disown the lamb and should be the last resort.

Sometimes we have an orphan lamb left on our hands, caused by the death of the ewe, a spoiled udder, or possibly from a ewe disowning it. These lambs may be profitably raised on cow's milk, and when there are children in the family, feeding the lambs will give them pleasant and profitable employment. The milk of the ewe is very rich in fats, consequently the richer the cow's milk the better. While young, the lamb should be fed very frequently, but when a few weeks old two or three times a day is sufficient if it is given all it will take at each feed. The best way to feed is to use a teapot or sprinkling-can with a rubber nipple attached to the spout. If more than one lamb is to be fed three or four spouts may be attached to a can and that many lambs fed at one time. The lamb will soon learn to come at the call of the person feeding it.

E. S. KIRKPATRICK.
Wellsville, Kans.

Color in Beef Cattle.

EDITOR KANSAS FARMER:—In order to settle the question whether any attention is paid to color of hair in a beef steer or cow on the Kansas City market, I wrote to the firm of Clay, Robinson & Company live stock commission merchants, Kansas City, Mo., and asked the following question, viz.: "Will a carload of beef cattle, steers or cows, of one solid color, sell any higher on the market than a load of mixed colors of same weight and quality?"

They answered: "They will not, or the difference is so small it is immaterial. Remember you say 'Same weight and quality.'"

In their letter they further say, in general, that "that day has come when the packers and exporters look little to the color of an animal if he has the form and the same fat as one of a solid color."

There is no higher authority known than Clay, Robinson & Company. As the end and aim of all stockmen is to put their stock upon the market in the form of beef cattle, it seems strange that so many would become infatuated with any one color over another, when there is nothing in it but the mere gratification of the eye. So long as this craze exists, or where it exists, the breeder is compelled to cater to it in self-defense. He is compelled to use nothing but red bulls to head his herd, and has to buy red bulls of much inferior quality to roans that would be available except for the craze. I mean as a general rule. In this way the general average of the breed suffers a deterioration that would not take place if breeders could use bulls of any color, and the loss to the country generally can not be estimated.

D. P. NORTON.

Dunlap Kans.

Interest in Stock-Judging at Manhattan.

EDITOR KANSAS FARMER:—The swine-judging school at the State Agricultural College is in progress. Three hundred and fifty students taking the agricultural course, are studying the breeds of swine and fat hogs. You would be delighted to see the enthusiasm manifested, and the interest by the students in scoring and judging stock.

Professor Cottrell and Professor Otis deserve the hearty approbation of the breeders and farmers of the State for their special efforts in inaugurating the study and judging of stock in the agricultural course, and should receive encouragement and support by all who believe in improved stock and advanced farming, to continue and extend the work along these lines at our agricultural college.

The animals representative of various breeds at the college farm are fairly good. Improvement should be and will be made as time and opportunity permit. In the matter of subjects to be

The Crisis Comes to Women at the Turning Point in Life.

A woman's life is very much like a river. It begins in the little rivulet of girlhood, but grows broader and deeper in womanhood, with many a rock, threatening wreck. At last as middle life is approached a look ahead shows the river broadened out into a calm and placid lake, but before the lake is reached there are rapids to be run, which threaten peril and misfortune. That calm and placid lake is the well-earned rest of wife and mother after years of care. The rapids that lead from the river to the lake mark the period known as change of life. There are few women who pass this period without sickness more or less serious. Sometimes this change of life becomes a sad change; the change of decay. The body weakens, the mind fails, and in the very prime of

any food on my stomach; had constipation and awful headache; was bloated at times in the bowels, had pain in the chest and hacking cough, but, thanks to Dr. Pierce, I am not troubled any more. I also used the 'Pellets' and the 'Golden Medical Discovery,' and find all of them just as Dr. Pierce recommends them to be.

"Since last October I have traveled over hard rocky roads in farm wagons and felt no return of any of my old troubles, and I know that before using Dr. Pierce's medicines I could not have stood half of it, as the least jar would have caused aching from head to foot. "I most highly recommend all of Dr. Pierce's medicines, and I hope all ladies suffering from female complaint will try Dr. Pierce's Favorite Prescription, and I know that if used right, relief and happiness will follow."

EXTRAORDINARY RESULTS

have followed the use of Dr. Pierce's Favorite Prescription by women undergoing this change. In some cases where insanity has been pronounced the use of "Favorite Prescription" has restored soundness of mind with strength of body.

There is no condition of body resulting from this period which "Favorite Prescription" is not perfectly adapted to meet. In nervous affections its influence is promptly felt. It is a nerve nourishing medicine, and quiets the crying nerves as crying children are quieted—by feeding them. It encourages a healthy appetite, and gives quiet and refreshing sleep. It is the best tonic and nerve for weak, run-down women.

"I can testify," writes Miss Lena Pazdernik, of 1520 Ricker Street, St. Louis, Mo., "that my mother must give her sincere thanks to the doctors of the World's Dispensary

Medical Association for their advice in her trouble—change of life; also must say that the 'Favorite Prescription,' with the 'Pellets,' was of great benefit to her. I recommend them to all sufferers in similar cases."

Dr. Pierce's Favorite Prescription is the best friend of women at every critical period of life. It enables the maiden to pass through the first change of life without the lassitude, weakness and misery often experienced. It establishes regularity, dries unhealthy drains, heals inflammation and ulceration, and cures female weakness. It is the best preparative for maternity, giving the mother abundant vigor and vitality, and making the baby's advent practically painless. It is a purely vegetable preparation, containing no alcohol, neither opium, cocaine, or any other narcotic. It can not disagree with the most feeble constitution.

A FACT FOR WOMEN TO PONDER.

Any weak and sick woman is invited to consult Dr. Pierce, by letter, free. All correspondence is held as strictly private and sacredly confidential. Address, Dr. R. V. Pierce, Buffalo, N. Y.

It sometimes happens that there are peculiar difficulties to be overcome in the treatment of individual cases, and under such circumstances Dr. Pierce's free advice is often of inestimable value.

The dealer who offers a substitute for "Favorite Prescription" does so to gain the little more profit paid on the sale of less meritorious medicines. His profit is your loss, therefore accept no substitute.

EVERY WOMAN NEEDS

a copy of Dr. Pierce's Common Sense Medical Adviser. It is a complete guide to healthful living. This great work, containing more than a thousand large pages and over 700 illustrations is sent free on receipt of stamps to pay expense of mailing only. Send 31 one-cent stamps for the cloth-bound volume, or only 21 stamps for the book in paper covers. Address, Dr. R. V. Pierce, Buffalo, N. Y.



life the woman finds herself a wreck. No woman can escape this period of change. Just how far-reaching its effects will be, depends upon the womanly health. The only way in which women can approach this time in safety is by making

PROPER PREPARATIONS FOR THE CHANGE. This proper preparation means the building up of the womanly health and the general physical health, for the health of the delicate womanly organism is intimately related to the general health of the body, and while womanly diseases remain uncured the general health must suffer. When an athletic woman enters into a struggle for some championship at golf or tennis, she prepares for the strain and brings her body up to the highest point of resistance to fatigue. If she did not make extra preparation for the extra strain she must endure, she would surely be beaten. When a woman nears the period of change of life, she is nearing a period of unusual strain, and if she wishes to win through this period in comfort she must make extra preparation for the extra strain she is to undergo.

Doctor Pierce's Favorite Prescription, which makes weak women strong and sick women well at all other critical periods, will not fail women at this last great crisis of her life. If used as a preparative for this change it will practically remove all its pains and dangers, and render this critical time free from the physical disorders and mental affliction so commonly associated with it. But if the period has been entered upon without preparation, "Favorite Prescription" will promptly cure the painful symptoms and restore the balance of perfect health.

"It is now two years since I first began to use your medicines," writes Mrs. Charles E. Thompson, Georgetown, Eldorado Co., Calif. "When I first tried the 'Favorite Prescription' I thought I would never live through the 'Change.' I suffered from all the troubles one could have and live. I had stomach trouble; lived on dry bread and hot water for three months, not being able to keep

used as object-lessons and models of animal form, "the best are none too good" GEO. W. BERRY.

March 13, 1902.

The Perfect Horse.

While it is almost impossible to get a perfect horse, one may come near to it if the dimensions of such horses are known. Oscar Gleason, the noted horse-trainer, gives the following as the dimensions of what a perfect horse should be. These are the average measurements of six horses accepted for perfect symmetry, and include two celebrated stallions, two thoroughbred hunt-

ers and two chargers. This will not apply to the draught horse, but it will be found that the nearer the general-utility horse comes to these measurements the better he will be:

Height, 66 inches; length from shoulder point to quarter, 66 inches; from the lowest part of the chest to the ground, 36 inches; from the elbow point to the ground, 39 inches; from the withers to the poll, just behind the ears, in a straight line, 30 inches; the same measured along the chest, 32 inches; length of head, 22 inches; width across the forehead, 9½ inches; withers to the hip, 22 inches; stifle to the point of the

Sharples "Tubular" FARM Cream Separators.

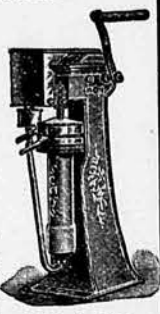
If no agent will bring you a Sharples Separator, we will loan you one for trial free of cost. Though hundreds of our latest have gone on trial, not one has been returned. The truth is, they give more butter than any other separator, enough to pay big interest on the whole first cost, and they turn much easier (former capacity doubled with less driving power) and are entirely simple, safe and durable.

Separator improvements come fast here. These new machines are far ahead of anything else known. We have been making separators for 19 years (longest in America) and are proud of them, but these new "Tubulars" discount anything either ourselves or anyone has ever made.

Other agents will try and draw comparisons between their new machines and our old ones,

but don't let them. Have a trial of a "Tubular" Dairy Separator; they are double the money's worth. Free book "Business Dairying" and catalogue No. 105.

Sharples Co., P. M. Sharples, Chicago, Ill., West Chester, Pa.



hock, 29 inches; root of the tail to the stifle joint, 26 inches; point of the hock to the ground, 22½ inches; length of arm from the elbow to the pisiform bone (the rear bone of those forming the upper articulation of the knee), 19½ inches; from the pisiform bone to the ground, 19½ inches; girth varies from 79 to 89 inches; circumference of fore cannon bone (large metacarpal or shank bone, extending from the knee to the fetlock), 7½ to 9 inches; circumference of arm just below the elbow, 16½ to 18 inches.—American Agriculturist.

The Kansas State Agricultural College is holding a school in judging horses March 19 to 22. J. W. Robinson, El Dorado, the largest breeder of draft horses in the State, is instructor. Mr. Robinson is also an extensive breeder of trotting horses, and gives instruction in judging draft, driving, and saddle horses. Some of the best horses in the State have been loaned to the college for this work. Every man and woman who loves a good horse is invited to attend this school. Owners of good horses are invited to bring them and have their horses judged.

Judging Hogs at the Agricultural College Under the Instruction of Mr. Geo. W. Berry.

Editor Kansas Farmer:—The past week has been one of the most interesting and profitable of all the weeks so far spent in stock-judging. The work in the judging-room opened Monday afternoon with a lecture on the "Fat Hog and the Valuable Cuts." A large diagram on cloth at one end of the judging-room showed the region of the valuable cuts with the price of each cut as rated in the London market. The class were surprised to learn that the high priced cuts were well up on the hog in the region of the shoulders, ham, upper sides, and back, ranging in price from 18 to 24 cents per pound. Another diagram showed the divisions commonly made by butchers in Chicago with the price of each cut from snout to tail. Students were then told how to feed and "finish" hogs for the market. Hogs are, from a commercial standpoint, divided into three classes: First class, heavy, fat hogs, 350 pounds and upward, dressed; second class, medium hog, packers, and stockers, 200 to 350 pounds (this class usually brings the top price in the market); third class, light hog, the Yorkers, 100 to 150 pounds, dressed. While the latter are light in weight, they should be neither thin nor poor.

The manner of cutting up carcasses vary with the purpose for which the pork is used. A large number of the first class go to supply markets in the South and Southwest. This is cut up in a different manner from either of the others. The bacon type falls in the second class and is awakening considerable interest on this side of the Canadian line, since Canada has vied with Ireland and Denmark in supplying England with its best flavored bacon.

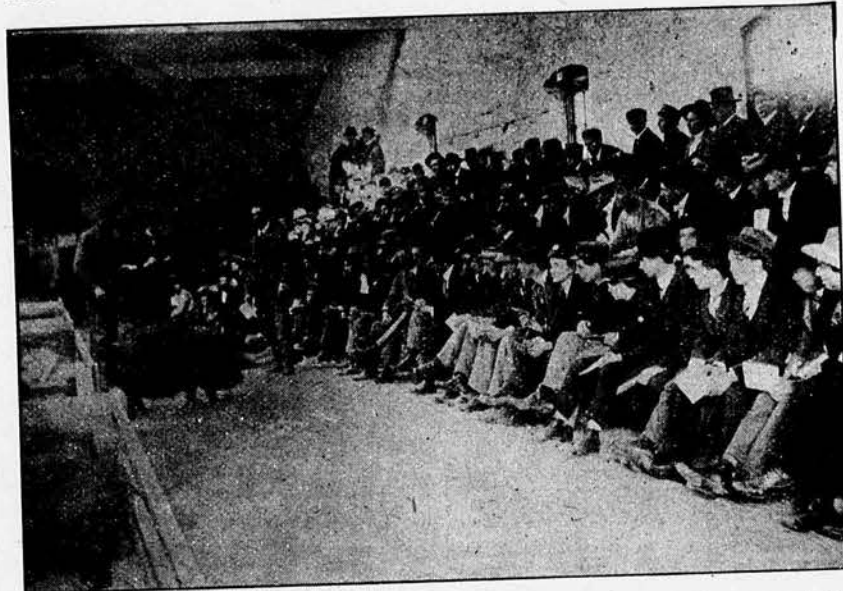
Tuesday, Mr. Berry gave "The History of the Berkshire Breed," and he showed with some excellent specimens, the characteristics of the Berkshire breed and then showed the class how to score a hog. The best score of typical animals scarcely ever goes above 85. Wednesday, Mr. Berry discussed, in a similar manner, the Poland-China name, giving an interesting account of how the breed came to have a hyphenated name. Thursday, the Duroc-Jersey breed was described and illustrated with some excellent specimens.

Mr. D. Froth, of Abilene, was introduced to the class as a most successful breeder of Duroc-Jerseys for twenty years. He explained how he came to raise Durocs and told the class that he could not supply the demand for animals for breeding purposes.

Each day the students were given the privilege of scoring several hogs of the breeds under discussion.

Here is a student's score made on the first day, for a 1-year-old Berkshire sow:

Points judged.	Score.	Score.	Score.
Head	4	2	1
Eyes	2	1½	1½
Ears	2	1½	1
Neck	2	1½	1
Jowl	2	2	1
Shoulders	6	4	4
Chest	12	10	10
Back and loins	14	13	9
Sides and rib	10	9	7
Belly and flank	4	2½	2
Ham and rump	10	9	5
Feet and legs	10	8	7
Tail	1	1	½
Coat	3	3	2
Color	3	3	2
Size	5	4	3
Action and style	3	2	1
Condition	2	2	1½
Disposition	2	2	2
Symmetry	3	2	2½
Total	100	80½	62



Judging Hogs at the Agricultural College.

The following is a score-card made out by the pupil after a few days' instruction by Mr. Berry:

Points judged.	Score.	Score.	Score.
Head	4	2½	2
Eyes	2	1½	1½
Ears	2	1½	½
Neck	2	1½	1
Jowl	2	1½	1
Shoulders	6	5	4
Chest	12	9	9
Back and loins	14	10	11
Sides and rib	10	8	9
Belly and flank	4	2½	3
Ham and rump	10	7	7
Feet and legs	10	7	7
Tail	1	½	½
Coat	3	2½	2½
Color	3	2½	2½
Size	6	4	3½
Action and style	3	2	2
Condition	2	1½	2
Disposition	2	2	1½
Symmetry	3	2	2½
Total	100	73½	73½



Judging Hogs at the Agricultural College.

On Friday the Tamworth representative at the college was placed in the center as a unit, and after Mr. Berry's lecture on the bacon hog the students were asked to select from fully eight or ten different types of hogs, the hog having the best shoulders for bacon, the one having the best sides for bacon, the one with best hams for bacon, and the one hog that is the all-round best type of bacon hog, the Tamworth being excluded. This representative is a fair type of the Canadian Tamworth hogs, is one year old, has never been pushed, and now weighs 315 pounds. His sire—Amber Luther 150—weighed 1,100 pounds at maturity, and Iowa Laddy 865,

the Kansas State Agricultural College representative, promises to at least equal if he may not surpass his sire's record.

The students studying "Iowa Laddy" as a unit of comparison were enabled to make a very satisfactory list, and a great deal of interest was awakened.

Saturday, Mr. Berry told the students that the object of a score-card was to enable one to see weak as well as strong points. He said: "You have now had a week's practice in scoring hogs and several weeks judging of other stock. I desire you to make a careful inspection of the fourteen sows in the ring and select and rank the three best sows for brooding purposes. Also select the five best stockers that will bring the very best price, pound for pound, in the market. I want to see the value, now, of your week's work. You are first to build up your herd with the three best sows you can find. Second, you are a hog buyer, and you want a bunch of the five best hogs. Ones that will bring the top price on the market."

When the lists were completed the class were called to their seats and one

Half and Half.

The dyspeptic may well be represented pictorially as being half masculine and half feminine, and combining the least desirable characteristics of either sex. He has all the stubbornness of the man with the peevish irritability of a sick woman. He's not pleasant company at home or abroad.

Dr. Pierce's Golden Medical Discovery cures dyspepsia and other diseases of the stomach and associated organs of digestion and nutrition. It renews physical health which carries with it cheerfulness of temper, and makes life a pleasure instead of a penance.

The "Discovery" purifies the blood by eliminating the corrupt and poisonous accumulations from which disease is bred. It increases the activity of the blood-making glands, so increasing the supply of pure rich blood, which gives life to every organ of the body. It gives new life and new strength.

"Your 'Golden Medical Discovery' has performed a wonderful cure," writes Mr. M. H. House, of Charleston, Franklin Co., Ark. "I had the worst case of dyspepsia, the doctors say, that they ever saw. After trying seven doctors and everything I could hear of, with no benefit, I tried Dr. Pierce's Golden Medical Discovery and now I am cured."

Accept no substitute for "Golden Medical Discovery." There is nothing "just as good" for diseases of the stomach, blood and lungs.

The Common Sense Medical Adviser, 1008 large pages in paper covers, is sent free on receipt of 21 one-cent stamps to pay expense of mailing only. Address Dr. R. V. Pierce, Buffalo, N. Y.



ond. Under the head of the third, he gave, among other instructive things, the following excellent facts:

"The man who takes his hogs through this summer will be the man who makes the money. How can it be done with grain so high? Corn to-day in Manhattan is \$23.74 per ton, while shorts (middlings), are \$22 per ton. One hundred pounds of shorts will make about eight pounds more of pork than one hundred pounds of corn. Buying at present rate you will save \$3.60 per ton by feeding shorts and this furnishes a good quality of pork.

"If pasture is not yet provided for the coming summer, begin at once to provide one; for this spring's pigs will be the money-getters this year. Blue-grass in eastern Kansas and Missouri affords a splendid pasture. Here and farther west alfalfa is good. Sow oats for early pasture, and while pasturing oats, disk up the hog-lots and sow rape. In fall, when light rains begin, sow rye for fall pasture. While hogs are on pasture give your skim-milk to the hogs and even if corn is high feed one or two ears per hog per day.

"It is a good feed for pastured hogs and serves to balance their ration. Roots pay in this country. Plant pumpkins with your corn for hog feed also.

"A pig at one month of age should weigh from 20 to 25 pounds; 2 months, 50 to 55 pounds; 3 months, 80 to 90 pounds; 4 months, 120 pounds; 5 months, 150 to 160 pounds; 6 months, 180 to 200 pounds; 7 months, 210 to 230 pounds; 8 months, 240 to 270 pounds; 9 months, 270 to 310 pounds; 10 months, 310 to 380 pounds.

"The best time to market hogs is from 7 to 10 months of age. Pigs up to 300 pounds, make more profitable gains than afterwards. Top prices are usually given for pigs weighing from 240 to 380 pounds.

"Select the type that you desire and then breed toward your ideal. Exercise care and good judgment, for here is a field that calls for both. Seek to diminish weak points and intensify strong points."

Saturday afternoon, Judge Berry, in giving his closing words to the large class that had all the week so thoroughly enjoyed his instruction, said: "Young men, your enthusiasm has been an inspiration to me. I trust that as you go back to the farm from this college you will take with you the practical facts obtained here. When your fathers came to Kansas they brought with them their best blooded horse, their choicest cow, and a well-bred hog with which they have made worthy records. They made no mistake in this regard, and have shed lustre on the fair name of our State. It now devolves upon you to advance along all these lines. There is one word on every mile-post—progress. You will find competition in every line you may take up. May you maintain Kansas where she now is, the brightest and fairest star in the galaxy of the Nation."

His closing words were greeted with, "Three times three, and a tiger," by the 350 boys who have so thoroughly enjoyed his work.

Professor Cottrell is to be congratulated on his most successful school in stock-judging for the Kansas State Agricultural College boys.

W. H. OLIN.
Manhattan, Kans.

Rain and sweat have no effect on harness treated with Eureka Harness Oil. It resists the damp, keeps the leather soft and pliable. Stitches do not break. No rough surface to chafe and cut. The harness not only keeps looking like new, but wears twice as long by the use of Eureka Harness Oil.

EUREKA HARNESS OIL

Sold everywhere in cans—all sizes. Made by Standard Oil Company



The Condition of the Wheat-fields.

Editor Kansas Farmer:—Regretting that I am unable for once to wholly agree with the Kansas Farmer in the belief that it is too early to attempt to measure the damage wrought in Kansas wheat-fields by adverse atmospheric conditions during the last three months, or yet in relation to those who write in relation to such damage, I would say that my observation shows that it is not the farmers whose crops have been injured who do the most of the writing in relation thereto, or that even farmers of any kind who do most of this writing. So far as such observation shows anything, it is that, of all reports respecting crops and the injury they have sustained or their astonishing promise in good seasons, nine-tenths of such reports and cognate statements originate with townspeople and mostly with millers and grain-dealers who, having many and great hedging contracts outstanding at all times, are ever exaggerating good prospects and making strenuous efforts to minimize poor ones—just as they and their organs are forever exaggerating the volume of grain still in the hands of growers.

The complaints of the farmer are rarely if ever welcome in offices of editors of commercial or political papers and are seldom made in that quarter, but the surmises, innuendoes, and contemptuous flings at the crop-killer of the miller, the grain-dealer, and the space-filler are ever welcome to most of the so-called makers of public opinion, and it is these "welcome writers who originate "crop scares" by making haste to deny all injury to the crop, or assert with unctious that it is of the most trifling character, and the damage will be at once repaired when the first warm rain falls. The farmer is generally too busy in trying to remedy defects in his fields or in replanting devastated ones to do much complaining, and he leaves the matter mostly to the miller and grain-dealer who has outstanding hedging contracts that can only be bought in at a profit by depreciating the price of soil products.

Admitting that close estimates of the damage wrought are now impracticable, yet it is as difficult to assent to the statement, credited in a late issue of the "Abilene Reflector" to Secretary Coburn that it is too early to be sure of the wheat's condition, as it was to assent to the statement early in February from the same source that, in substance, the condition of the Kansas wheat-fields then left little to be desired, and that the promise was then for one of the largest crops the State had ever grown. Indeed, I refused to believe Mr. Coburn could have made such a report—a report which in my opinion had no warrant in conditions then obtaining or that had obtained since the third week of December, until I saw it had been cabled to London and Liverpool and was made use of on those markets.

As early as the last week in December I knew, as did many farmers in this part of the State, that much of the early-sown wheat of south-central Kansas had been utterly destroyed; that the stand of the late-sown had been badly injured, and partially killed; that the only fields that gave any promise were the late-sown and those corn-fields sown to wheat without plowing. Moreover, I had been informed by letter from nearly every important wheat-growing county in the State that similar if not as discouraging conditions were common, more especially in all the region south of the Kaw and Smoky Hill Rivers and west of the Flint Hills, and that the only districts promising average yields were those widely scattered and limited ones favored with fairly abundant autumnal rains.

In the case of the farm from whence I write I would say that the only wheat promising anything at all is the late sown; that no early sown, hard as well as soft, is alive; that a piece of wheat late sown, but on fall-plowed land that was rolled, and drilled both ways with about 1.75 bushels to the acre, shows a fair stand, although much of the wheat was killed—the fair stand being the result of liberal seeding and cross drilling—while another piece plowed at the same time but not rolled is without any portion of a stand, although seeded at same time as the rolled piece. That is, the rolling and the not rolling gives in the one case a stand in this exceptional season, and in the other the privilege of planting to corn.

That the farmer writing to either the

commercial or political papers stands an excellent chance of having his communication either suppressed in whole or garbled, is evident from many things that have come to my knowledge, especially if he is so inconsiderate as to write about either the quantity of wheat in the hands of growers, or in relation to a too evident injury to the crops.

A case in point, and a recent one, is that of a farmer in one of the great central wheat-growing counties on the Union Pacific line, who wrote to a Kansas City paper stating the quantity of wheat which he estimated to have been fed, and at the same time stating the condition of the crop in his region. He writes me that the salient feature of his letter was suppressed either by oversight or otherwise, and the communication deprived of all force. In this connection I may say that I am in communication with leading wheat-growers in all the principal wheat-producing counties of Kansas, and derive my information almost wholly from their statements, at least so far as Kansas fields are concerned.

From information derived from such sources it appears that the condition of the fields is much worse south of the Kaw and Smoky Rivers than north thereof; is worse south of the 38th parallel (west of the Flint Hills), than north of such line, and better north of the 40th parallel than between that and the 39th; that the wheat in the northeast section of the State—largely soft wheat—is in bad shape; that south of the Kaw and east of the Flint Hills the wheat is in better shape than in any other large fraction of the State, although this is an area of small production; and that there are a few counties in the northwest corner where conditions appear to be less unfavorable than over most of Kansas, although this is another section of small production. Taken as a whole, conditions in the wheat-fields of Kansas have but once in my experience, extending back to 1863, appeared as unfavorable in the middle of March as they do in this year of 1902. That was after the frightful havoc wrought by the blizzard of February 6-7, 1895, the harvest of that year giving a yield, according to Secretary Coburn, of but 3.84 bushels an acre for the State! It is certain that the wheat-fields of south-central Kansas presented in March 1895 no such measure of destruction as they do in March, 1902!

Lying west of the Flint Hills, between the 37th and 38th parallels, and extending from the 97th to the 100th meridian, is one of the most productive wheat regions of Kansas. Of some 1,700,000 acres sown in this region quite 1,300,000 acres appear to be in a condition to return no more than a quantity equivalent to the seed sown. Between the same eastern and western limits, and lying between the 38th and 39th parallels is a region where materially less damage has been done, but if we can believe those most interested in these fields, there has been entire and partial destruction of stands in this great and prolific district, equalling the entire original stand upon 50 per cent of the area sown. North of the 40th parallel and between the 97th and 100th meridians, where much less wheat is sown than in either of the two more southerly districts, the damage is again less, although in some portions of this section much complaint is heard of the presence of great numbers of the Hessian fly and of winter-killing.

From information in my possession I am forced to the conclusion—an opinion, not a prediction—that there are, west of the Flint Hills between the 97th and 100th meridians and between the 37th and 38th parallels, or in the southern third of the wheat-belt proper, 1,300,000 Kansas acres under wheat out of a total of 1,700,000 acres sown within those limits, that will no more than grow the wheat required for seeding an equal area.

There is a like area in Oklahoma in quite as bad plight, while Texas has 1,500,000 acres that promises little if any better. That is, there is here on block more than 4,000,000 acres sown to wheat which has, so far as the commercial supply is concerned, been literally swept off the face of the earth.

If it is true, as alleged in a despatch from Topeka to a Kansas City paper, that the State's chief grain inspector has stated that only a third of the last Kansas wheat crop has been sold and that farmers hold for a better price all but an implied small part (fed to live stock), of the remaining two-thirds, and if Mr. Coburn's alleged estimate that not more than 15,000,000 bushels of the crop of 1901 would be fed to live stock, was even approximately correct, then those charged with the official duty of guarding the interests of the farmers of Kansas should at once endeavor to remedy the effect of reporting in the first week of March that the condition of the wheat-fields of the State left little to be desired and that the promise was for a phenomenal out-turn from the State as a whole!

To me it seems as impossible that State Grain Inspector Northrup could have made the statement credited to him; as it did, till confirmed by its acceptance on the markets of Liverpool and London, that Secretary Coburn could, in view of conditions

then well-known to exist in so many Kansas wheat-fields, have made the report which at least one English grain-trade journal deemed singular. It is improbable that the State's chief grain inspector's alleged estimate includes as part of the quantity of wheat sold by Kansas farmers that bought by local mills, nor that other great quantity moved by rail from inspectorless small stations to milk located at other inspectorless places, nor yet but a small fragment of that 45,000,000 bushels which Mr. C. J. Stromquist, treasurer of McPherson County, estimated would be fed live stock during the harvest year, nor the 700 bushels per farm which a leading wheat-grower in one of the greater wheat-growing counties of the Smoky Hill Valley estimates as the average consumption of wheat by live stock in his county!

If the alleged reports of Messrs. Coburn and Northrup are actualities, they are of such a character as in my opinion to seriously injure every farmer who still has Kansas wheat for sale; and if their estimates of the amount fed and sold are correct, then the farmers of Kansas have from a third to a half of the last crop yet to sell! Is either quantity possibly in the hands of growers?

C. WOOD DAVIS.
Clearwater, Kans., March 15, 1902.

The Last Sale of Poland-Chinas.

April 4, at Mound City, Kans., will be held what is probably the last hog sale of the season for that section. The consignors, Harry Evans, Pleasanton; and O. E. Morse & Sons, Mound City, selected this late date because of the scarcity and high price of feed. Buyers will be put to very little expense carrying their stock till grass comes and yet will get it in the best possible condition to do them good.

Most readers of the Kansas Farmer know enough of the breeders making this sale to expect creditable representatives of the type of hogs kept in both herds. Missouri's Black Chief, Look Me Over, Chief Perfection 2d, and Knox All Wilkes blood predominate, and any one familiar with the get of these four boars can form a good idea of the ideal which Mr. Evans and Messrs. Morse keep before them. Finish, coat, and quality like Missouri Black Chief; the box like square endedness of the Perfections; weight, bone, and brood-sow characteristics such as old Look Me Over bred; and the long life and rugged health that have made Dietrich & Spaulding's Knox All Wilkes famous, are points which every good hog-breeder wants in his herd.

Messrs. Morse and Evans do not claim that they have gotten all these just as they want them, but they have been to a fair degree successful, and are putting a class of hogs in their sale which will bear out any claims they make for patronage.

The offering will consist of ten boars, fifteen open gilts, and twenty-five bred sows. The boars will run from 6 to 12 months old. Five of the more suitable for use in good registered herds. The others are only a shade behind in matter of blood or quality, and many will disagree as to where the line should be drawn. Some extra nice things will be found among the open gilts, but, of course, the best values will be among the bred females. Two of the sows will probably be suckling litters. The balance will farrow in April and May.

Morse & Sons will distribute the catalogues, and inquiries for same should be addressed them at Mound City, Kans. See advertisement on another page.

The Herefordshire of Kansas.

About one year ago the Kansas Farmer called attention to the great Hereford stronghold of Kansas by giving a list of breeders and number of animals in Marshall County, and now we are glad to know that these breeders have organized a Hereford Cattle Breeders' Association. They elected the following officers: President, Wm. Bommer, Marlette; vice president, Wm. Ackerman, Vermillion; secretary, E. E. Woodman, Vermillion; treasurer, F. J. Faulkner, Cottage Hill. Board of directors, the president and secretary, Fred Colville, Irving; Charles Drennan, I. D. Yarle, Blue Rapids; John H. Whiting, Frankfort; J. M. Winter, Irving.

The Hereford business is assuming large proportions, and the breeders feel that they need cooperation and closer union. They will arrange for frequent meetings, exhibitions, sales, and other matters of general public interest.

Ryan's Shorthorns Average \$402.55.

The public sale of Shorthorns at South Omaha on March 13, by T. J. Ryan & Sons, of Irwin, Iowa, was a record-breaking sale of the year. The attendance of representative breeders was large.

Forty cows and heifers sold for \$17,570, an average of \$439.25, and seven bulls sold for \$1,350, an average of \$192.85. Forty-seven Shorthorns sold for \$18,920, a general average of \$402.55.

The top-notch sales were as follows:
62d Duchess of Gloster, Leeper Bros., Graham, Mo., \$2,125
Imp. Zoe 5th, bull calf at foot, Chas. L. Marston, M. D., Mason City, Iowa, 1,215
70th Duchess of Gloster, C. A. Saunders, Manilla, Iowa, 1,000
16th Marchioness of Barrington, calf at foot, C. C. Bigler & Son, Hartwick, Iowa, 960
Alexandrian of Oak Grove, Bentel & Son, Buck Grove, Iowa, 900

If you want the best, the most improved, and the most reliable binder in the world—buy the McCormick—it is the unit of measure in harvesting machines.

Cancer

A Celebrated Ohio Physician's Marvelous Discovery How to Cure the Dreaded Cancer in Your Own Home, Mailed Free.

This treatment has completely cured hundreds of cases so desperate that noted surgeons refused to operate, declaring them fatal and hopeless.

Mr. Geo. W. Yost, an old and prominent citizen of Easton, Ill., says: "Your home-treatment cured me without pain in 12 days of a cancer of 20 years standing."

James McMullen, a leading G. A. R. and old resident of Lebanon, Ohio, says: "I suffered for years with cancer of the lip. In 10 days your remedy cured me with hardly a sign of a scar left."

Mrs. J. Woodrow, of 11 Lyne Road, Crewkerne, England, says: "Your remedy cured me of cancer of the breast in 12 days."

Send name and address if you are a sufferer or if you know of any one who is, and we will send all necessary information and hundreds of convincing testimonials absolutely free. Address Dr. Curry Cancer Cure Co., Box 595, Lebanon, Ohio. Don't fail to write to-day.

Gossip About Stock.

O. L. Thiesler, proprietor Riverside Stock Farm, Chapman, Kans., in making a change of his regular advertisement, announces that he has some eighty head of high-grade Angus heifers, coming 2 years old, and they have some twenty-calves at side, all due to calve this summer, for sale. This lot of cattle, if taken soon, will be sold cheap.

The Shorthorn event of Kansas this spring will be the grand public sale to be held at Holton, Kans., on April 25 and 26 by H. O. Tudor, owner of the Bill Brook Herd, who will contribute eighty cows and heifers and twenty bulls. Besides twenty head will be consigned by Hon. M. a Low, Topeka, and ten heifers from the herd of Hon. A. D. Walker, of Holton, a member of the Railroad Commission. It will be the buyers' opportunity of the year to secure Shorthorns.

The two days' sale held on March 12 and 13 at Trenton, Mo., by the Northwest Missouri Breeders' Association was considered a success by those who were present. On the first day sixty head of Shorthorns brought \$5,830. Of these twenty-one were females, which averaged \$121.43, and thirty-nine bulls, averaging \$84.10, or a general average for the sixty head of \$97.17. On the second day forty-one Herefords sold for \$5,160, a general average of \$125.85. The fourteen cows in this sale averaged \$210, and the twenty-seven bulls, \$82.22. The fifteen Aberdeen-Angus bulls averaged \$84.66.

The breeders' combination sale of Herefords, at Kansas City, April 8 and 9, should attract all classes of buyers. The offering consists of 150 head, choice selections from a large number of representative herds in Kansas and Missouri. A full list of the contributors was given in last week's paper. It is an opportunity given good breeders to dispose of some of their produce. The management does not expect the sale to make a record-breaking average. It is simply the buyers' opportunity to get representative Herefords at a fair value. Farmers and breeders who are interested in getting pure-bred Herefords at right prices should send for catalogue to Guggell & Simpson, Independence, Mo.

Snyder Bros., of Winfield, Kans., have their hogs in fine shape and ready for the combination sale on March 21, at Winfield, where they are to be joined by Harry E. Lunt, of Burden, with a choice offering of Poland-Chinas. Snyder Bros. bought a number of good sows at Shelton and Dietrich & Spaulding's combination sale at Paola on March 15, among which was Perfect Graceful, by I Am Perfection, out of Graceful Cheefess; Cantrill's Choice, by Majestic Chief, out of Black Chief's Lady; and Sunshine Price, by Silver Chief, out of Miss Seldom. They had to pay a pretty good price for some of this stuff, but they got the quality and they don't buy cheap stuff anyway.

Note the advertisement of E. S. Shockey this week, in which announcement is made of acclimated young Orgeon draft-bred mares and geldings for sale or trade. These are heavy-boned, wide-hipped, well-grown horses, weighing 1,100 to 1,300 pounds. They have been on farms over a year; some are broke; all gentle, running in same lots with milch cows, calves, and pigs. Mr. Shockey also has a fine lot of young high-grade Shorthorn and Hereford cows and heifers "worth the money." Also registered Herefords raised above the quarantine line in Texas, comprising fifty coming 2-year-old bulls and seventy-five coming yearling bulls, well-grown and strong-boned; sixty-five coming yearling heifers and thirty coming 2s. He also has eighty-five head pure-bred, unrecorded Herefords, 2-years old, and 125 head young cows and heifers, bred to imported bulls.

Col. Geo. W. Crawford, proprietor of Sharon Valley Stock Farm, Newark, Ohio, has decided to start a branch barn at Emporia, Kans., and has shipped a carload there, consisting of Belgian, French Draft, and Percheron stallions. Colonel Crawford is one of the largest importers in America, and won the championship at the late Chicago show.

(Continued on page 238)



Cascarets
CANDY CATHARTIC
BEST FOR THE BOWELS

10c 25c 50c. Druggists

Genuine stamped C C C. Never sold in bulk. Beware of the dealer who tries to sell "something just as good."

TREES

Price List Free. Address

W. F. SOHELL, Proprietor. WIOHITA NURSERY, Wichita, Kans.

THE BEST IS THE CHEAPEST.

We furnish a Certificate of Genuineness that my stock is TRUE TO NAME. A full line of Fruit Trees, Roses, Shrubby, Ornamental and Shade Trees. Send for Illustrated Catalogue and

Grange Department.

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

Conducted by E. W. Westgate, Master Kansas State Grange, Manhattan, Kans., to whom all correspondence for this department should be addressed. News from Kansas Granges is especially solicited.

NATIONAL GRANGE.

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

KANSAS STATE GRANGE.

Master..... E. W. Westgate, Manhattan.
Lecturer..... A. P. Reardon, McLouth.
Secretary..... Geo. Black, Olathe.

How Can We Increase the Membership of Our Grange?

LAURA E. RIGNEY, BEFORE HONEY CREEK GRANGE NO. 1, INDIANA.

This is a hydra-headed question, admitting of many answers. I shall divide my answer into four parts: First, interesting meetings; second, good attendance; third, "hustling" for members; fourth, how to let outsiders know the grange is a good thing.

The first and most essential thing I think, is to make our grange meetings so interesting that each and every member will make it a point to never miss a meeting. Honest, conscientious attention to regular order of business, and good variety in programs will make interesting meetings. Everybody do their best when given work, and you will all be surprised how well you can do. In fact, we learn by doing. If you are honestly interested and pleased with

A good meeting?" "Wasn't Sister 'So-and-so's' paper good?" "Brother 'So-and-so' made such a good talk," or "Wasn't that the funniest recitation you ever heard?" Your friends' curiosity is aroused. They ask questions and you explain. They become interested—and you ask, "Why don't you join us and help us have a good time? We need you and you need us." Ten to one you get an application or two.

It is necessary to get out and "hustle" for some people. Its the "hustler" that "gets there" these days. Some people are backward about asking admittance to an organization. They would like very much to join, but none of the members ask them to do so. Hunt up such persons and ask them to join the grange and ask them in such a manner as to convince them that you are in earnest and really wish them to join. Explain to them the social, business, and educational features. Impress upon them that the objects of the grange are: "To develop a better and higher manhood and womanhood among ourselves. To enhance the comforts and attractions of our homes, and strengthen our attachments to our pursuits. To foster mutual understanding and cooperation. To maintain inviolate our laws, and to emulate each other in labor, to hasten the good time coming. To reduce our expenses, both individual and corporate. To buy less and produce more, in order to make our farms self-sustaining. To diversify our crops, and crop no more than we can cultivate. To condense the weight of our exports, selling less in the bushel, and more on hoof and in

none of its teachings ever made a man or woman worse, but it has made hundreds and thousands better. Its lessons all develop the good, the beautiful, and the true. The half has not been told of its good works, and it can and will do more."

"May kind Heaven the glad day hasten,
When in one fraternal band,
We shall number in our order,
All who till this smiling land.
Like a mighty host with banners,
Peaceful victory we will gain,
Moved by right's resistless purpose,
Held by law's electric chain."

The Rural Carriers.

Representative Loud, of California, has proposed to put rural-free-delivery carriers under the contract system, letting the contract to carry the mail in each case to the lowest bidder. One of the best statements of reasons why this proposal should be defeated is that of the Denver Republican, which says: "There is no reason whatever why what has proved the most popular branch of the postal service, so far as it affects the great mass of the reading and writing population of the country, should be thus discriminated against. The plan would take away the premiums on carriers' experience, so valuable to patrons of rural routes. It would nullify the very important knowledge of persons and places on rural routes which makes the old carrier such a valuable Government employee. It would with the consequent and inevitable changes resulting from its operation make every post-office from which rural service originated a perpetual kindergarten for newly appointed carriers at the expense of the

TO YOUNG LADIES.

From the Treasurer of the Young People's Christian Temperance Association, Elizabeth Caine, Fond du Lac, Wis.

"DEAR MRS. PINKHAM:—I want to tell you and all the young ladies of the country, how grateful I am to you for all the benefits I have received from using Lydia E. Pinkham's Vegetable Compound. I suffered for



MISS ELIZABETH CAINE.

eight months from suppressed menstruation, and it effected my entire system until I became weak and debilitated, and at times felt that I had a hundred aches in as many places. I only used the Compound for a few weeks, but it wrought a change in me which I felt from the very beginning. I have been very regular since, have no pains, and find that my entire body is as if it was renewed. I gladly recommend Lydia E. Pinkham's Vegetable Compound to everybody."—MISS ELIZABETH CAINE, 69 W. Division St., Fond du Lac, Wis.—\$5000 forfeit if above testimonial is not genuine.

At such a time the greatest aid to nature is Lydia E. Pinkham's Vegetable Compound. It prepares the young system for the coming change, and is the surest reliance for woman's ills of every nature.

Mrs. Pinkham invites all young women who are ill to write her for free advice. Address Lynn, Mass.

that the seeming difference between men and women is largely caused by the advantages offered being accepted and used, and that we are nearly all at the beginning every-day people. Behind every instance of a lasting success lie years and years of work. There is no short road to success, you can not "cut across lots," there is but one road and that is the road paved by patience and hard work. Nothing is to be had for the asking; everything must be acquired; nor can the majority of things, particularly those of most value to us, be bought; they must be experienced, and a great deal of hard work goes with most experiences. GEO. S. LADD, Master Massachusetts State Grange.

Only \$45 California and Back

First class round trip, open to everybody, \$45.00, from Topeka to Los Angeles and San Francisco; the Santa Fe.

Corresponding rates from all points east.
Account National Convention, Federation of Women's Clubs. On sale April 22 to 27. Tickets good for return until June 25.

Only line under one management all the way from Chicago to California.

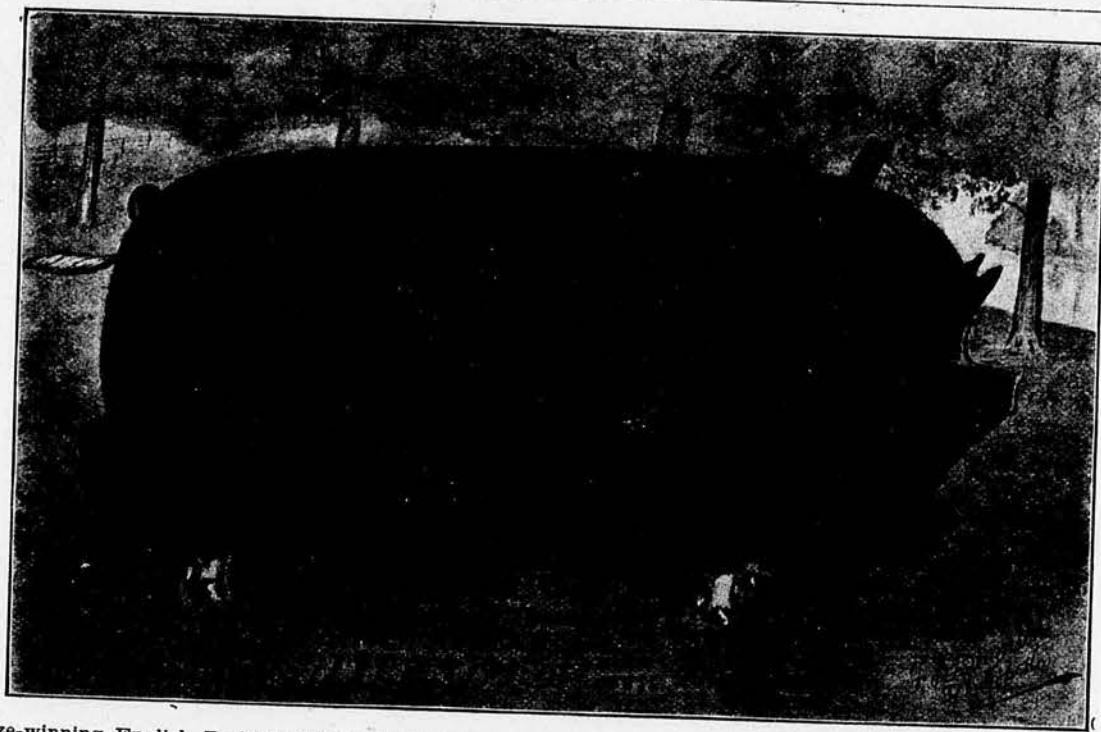
Only line for both Grand Canyon of Arizona and Yosemite.

Only line to California with Harvey meal service.

Write for descriptive literature, free.

Address, T. L. KING, Agt., Topeka.

Santa Fe



The prize-winning English Berkshire Sow, SILVER TIPS XXX 42686; weight, 670 pounds; winner of prizes at State Fairs of Nebraska, Missouri, and Illinois. Sir: Majestic Lad 32201, out of Imported Majestic, winner at Columbian Exposition. Dam: Silver Tips XVII 31134; champion sow at Kansas State Fair. Bred and owned by G. W. BERRY, Topeka, Kansas.

your grange work you can not help but interest your associates out of the order. You will talk grange in spite of yourself, and your influence will be in proportion to your interest and enthusiasm in grange work.

When the attendance at grange is good, outsiders soon notice it and begin to say among themselves: "They must be doing something at the hall these times, as 'So-and-so' never misses a meeting." Then when two or more patrons meet in a crowd, they naturally make such remarks: "Haven't seen you since grange meeting." "Didn't we have

fleece; less in lint, and more in warp and woof. To systematize our work, and calculate intelligently on probabilities. To discountenance the credit system, the mortgage system, and every other system tending to prodigality and bankruptcy. We propose meeting together, talking together, working together, buying together, and selling together."

With the above objects set clearly before your neighbors and friends you ought to be able to bring in new applications at every meeting until there is not another eligible person in your grange neighborhood that is not a member of the order of Patrons of Husbandry.

How to let outsiders know what we are doing in grange work. This is easy to do. Make your work of some account and it will be heard of. Make your meetings so interesting that the members can not but talk of them outside the hall.

Send your country papers the news of your meetings and they will be glad to publish it. Then subscribe for the paper yourself and thus help the editor to get your news into circulation. And above all, give your grange paper an inkling of what you are doing in grange work.

If some one would suggest that grange work might interfere with church work, tell them what Hon. Mortimer Whitehead says of it: "The grange has made and is making the farmer and his family more social. It makes brighter and happier homes. It benefits its members mentally, morally, socially, and financially; temperance is supported; charity is a prominent characteristic. It makes the farmer better to himself, better to his neighbor, better to his country, and better to his God. It has by

service." Granges everywhere should protest against the adoption of the Loud proposal. The rural service has made an excellent beginning and should not be hampered by any contract system.—Grange Bulletin.

In accordance with the above suggestion, we wrote to the Hon. W. A. Calderhead, member of Congress from the Fifth District, a word against the contract system for rural mail carriers, and put in a suggestion against the repeal of the anti-canteen law, and I trust it is no betrayal of confidence to present his reply, as it shows him to be in favor of good service to the patrons of the rural mail, and of sobriety in the Army. He writes:

"I agree with you about the rural route carriers. I think a majority of the House will be against the contract system for rural mail service. I think we might with equal propriety let the post-office to the lowest bidder.

"As to the Army canteen, I do not think the United States needs drinking soldiers at any time, and I am against any repeal of the anti-canteen law. I am glad your views on both these subjects approve my own."

"W. A. CALDERHEAD."

Hard Work Essential to Grange Success.

What we want to be told to-day is the story of every-day life, not remarkable events, not what uncommon persons have done, but what men and women like you and me have said and done, how they have met life and what they have made of it. It is true we study the deeds of the bright ones and make them our examples, but the closer we study them the more positive we are

About half the lamp chimneys in use have my name on them.

All the trouble comes of the other half.

MACBETH.

If you'll send your address, I'll send you the Index to Lamps and their Chimneys, to tell you what number to get for your lamp.

MACBETH, Pittsburgh.

The Home Circle.

ANNABEL LEE.

It was many and many a year ago,
In a kingdom by the sea,
That a maiden lived, whom you may know
By the name of Annabel Lee;
And this maiden she lived with no other
thought
Than to love and be loved by me.

I was a child and she was a child
In this kingdom by the sea,
But we loved with a love that was more
than love,
I and my Annabel Lee—
With a love that the winged seraphs of
heaven
Coveted her and me.

And this was the reason that long ago,
In this kingdom by the sea,
So that her high-born kinsmen came,
And bore her away from me,
To shut her up in a sepulchre
In this kingdom by the sea.

The angels, not so happy in heaven,
Were envying her and me,
Yes, that was the reason (as all men
know)

In this kingdom by the sea,
That the wind came out of the cloud by
night,
Chilling and killing my Annabel Lee.

But our love it was stronger by far than
the love

Of those who were older than we,
Of many far wiser than we,
And neither the angels in heaven above,
Nor the demons down under the sea,
Can ever dissever my soul from the soul
Of the beautiful Annabel Lee.

For the moon never beams without bring-
ing me dreams
Of the beautiful Annabel Lee,
And the stars never rise but I feel the
bright eyes
Of the beautiful Annabel Lee.
And so, all the night tide I lie down by the
side
Of my darling, my darling, my life and
my bride,
In her sepulchre there by the sea,
In her tomb by the sounding sea.

—Edgar Allan Poe.

Consolidation of Schools.

EDITOR KANSAS FARMER:—I notice a communication in your paper of last week on the subject of "Consolidation of Schools," from a teacher at Riley, Kans., which especially interests me, as we are now discussing consolidation here with much enthusiasm. I believe this teacher fears that she will lose her position as an educator, and that she is in need of information upon this subject, which may be gleaned from reports where consolidation has been tried.

Regarding the first, I can sympathize with her for I too am a teacher. We will be shaken up, and fully one-half of our number will be asked to seek some other means of support. But this is no objection to the system. The public has been fleeced out of much money and the country children have worse than many times wasted their time in attending schools carried on by persons who were devoid of almost every factor required to make a successful teacher. Do you not think that if the public adopts some plan whereby the services of one-half or two-thirds of the teachers will not be needed, it will not also enable us to determine who of us are best fitted for teaching? We contend that "a good teacher is cheap at most any price," and "a poor teacher is expensive at any price."

Now, for the second trouble, the writer speaks about mothers getting up at 3 o'clock to get their children off to school at 5 o'clock so they may ride four hours to a school which in her imagination is seventeen miles away. Now this would be a heart-rending condition indeed if it were true, but no one has ever before conceived of such a condition. If the writer will take the trouble to drop a card to our State Superintendent or to the State Superintendent of Iowa, Indiana, or Ohio, as I have done, she will find that children have been conveyed to school in a goodly number of cases in these States, by starting at from 8 to 8.15, and that it has proven highly satisfactory in almost every case. And that in these places where it has been tried the old district plan is thought of no more.

As to the statement that the graduates of the country or ungraded school being more satisfactory than the graduates of the graded school, the writer can not be in earnest on this point. I agree that some of them are possibly better educated than some in the graded school, but I submit this question: Is it because of the ungraded condition of our country schools or is it in spite of this system?

If country children with poorer facilities for an education grade up with those who are more favored, may we not expect excellent results from a much better plan? There is no use in teach-

ers in the country saying we have a graded school. We have not, and making such a statement only shows our ignorance of what it takes to constitute a graded school.

Now as to the question of a graded or an ungraded school, there is no longer any ground for argument; every one knows who knows anything of the merits of the two plans that the graded school is far superior to the ungraded school.

Now would not the "well-to-do" districts, who are only voting 8 mills to run an ungraded school be more than willing to combine with some of their neighbors (some probably as fortunate as they), put their money together and hire fewer teachers, specialize each teacher's work, grade the school and require the children of the enlarged district to do the work of his grade, and not let him drag along from class to class simply because he is the same size as others in the class.

But it will not be more expensive after the "consolidation plan" is in good working order. For proof, I again refer to the reports heretofore suggested.

As to the suggestion that the services of a "doctor," "trained nurse," a "disciplinarian," and a "herder" would be necessary with each wagon to see that no child should be stepped upon, or sat upon, or that the robe should be kept properly over them, I again refer you to the above reports.

If there is any place in the United States where consolidation can be made a success, I believe it is in Kansas. We seldom have bad roads and if at all but two or three days at a time; and scarcely any rain during the school season, but little cold weather as compared to States now making a marked success of the plan, and a large number of horses with but little work for them at this season. In closing, I say I do not believe there is a valid objection to the adoption of the plan in our State, and that in case it should cost more it will also be worth more, and when the people are properly informed as to its merits they will be willing, they will be anxious to incur the added expense.

U. S. ALEXANDER.

Winfield, Kans.

A Quiet Man's Experience in the Danish Islands.

The United States has concluded a treaty by which this country acquires the island of Saint Thomas and some other Danish islands in the West Indies. When Andrew Johnson was President it was thought we had bought Saint Thomas, but some how the deal fell through. Mark Twain, the humorist, was then a Washington correspondent of the New York Tribune, which paper was strenuously opposed to the purchase. Mark sent the following letter to the Tribune:

INFORMATION WANTED.

"Washington, Dec. 10, 1867.—Could you give me any information respecting such islands, if any, as the Government is going to purchase?"

"It is an uncle of mine that wants to know. He is an industrious man and well disposed, and wants to make a living in an honest, humble way, but more especially he wants to be quiet. He wishes to settle down and be quiet and unostentatious. He has been to many of the new islands—St. Thomas—but he says he thinks things are unsettled there."

"He went down there early with an attache of the State Department, who was sent down with money to pay for the island. My uncle had his money in the same bank, and so when they went ashore, getting a receipt, the sailors broke open the box and took all the money, not making any distinction between the Government money, which was legitimate money to be stolen, and my uncle's, which was his own private property, and should have been respected."

"But he came home to get some more and went back. And then he took

the fever. There were seven kinds of fever down there, you know, and as his blood was out of order by reason of loss of sleep and general wear and tear of mind, he failed to cure the first fever, and then somehow he got the other six. He is not a kind of man that enjoys fevers, though he is well meaning and does always what he thinks is right. So he was a good deal annoyed when it appeared that he was going to die. But he worried through, and got well, and started a farm. He fenced it in and the next day that great storm came and washed the most of it over to Gibraltar or around there somewhere. He only said in his patient way that it was gone and he could not bother about trying to find it, and where it went to, though it was his opinion that it went to Gibraltar.

SHOOK HIS FARM DOWN.

"Then he invested in a mountain and started a farm up there, so as to be out of the way when the sea came ashore again. It was a good mountain, and a good farm, but it wasn't any use—an earthquake came the next night and shook it all down. It was all fragments, you know, and so mixed up with another man's property that he could not tell which were his fragments without going to law, and he would not do that because his main object in going to St. Thomas was to be quiet. All that he wanted was to settle down and be quiet."

"He thought it all over and finally concluded to try the low ground again, especially as he wanted to start a brick yard this time. He bought a flat and put out 10,000 brick to dry, preparatory to baking them. But luck appeared to be against him. A volcano shoved itself through there that night and elevated his brick 2,000 feet in the air. It irritated him a good deal. He has been up there and says the brick are all baked right enough, but he can not get them down. At first he thought maybe the Government would get the brick down for him, because the Government bought the island it ought to protect the property when a man has invested in good faith; but all he wants is quiet, so he is not going to apply for the subsidy he was thinking about."

HE NEARLY LOST HIS LIFE.

"He went back there last week in a couple of ships of war to prospect around the coast for a safe place for a farm, where he could be quiet, but another earthquake came and hoisted both of the ships out into one of the interior counties, and he came near losing his life. So he has given up prospecting in a ship and is discouraged."

"Well, now he don't know what to do. He has tried Walrusia (Alaska had just been bought of Russia), but the bears kept after him so much and kept him so on the jump, as it were, that he had to leave the country. He could not be quiet there, with these bears prancing after him all the time. That is how he came to the new island we have bought, St. Thomas."

"But he is getting to think St. Thomas is not quiet enough for a man of his turn of mind, and that is why he wishes me to find out if the Government is going to buy any more islands shortly. He has heard that the Government is thinking about buying Puerto Rico. If that is true he wishes to try Puerto Rico, if that is a quiet place. How is Puerto Rico for his style of a man? Do you think the Government will buy it?—Mark Twain."

Useful Accessories.

It hardly seems possible that I can teach a progressive Kansas farmer's wife anything new, but some one wishes to know if there is any method to teach her to save time. She says that she is always busy and has no leisure. This is not good management, her mother writes her, yet she does not see a way out of it.

As a general rule, every other room in the home is better equipped with conveniences than is the one in which the busy housewife spends so great a part of her time—namely, the kitchen.

A great aid to my work was a paper-pad hung over the kitchen table. It is a great time-saver. If you jot down articles needed upon this pad, they will not be overlooked, and to the average housekeeper the minute saved is time earned for rest or self-improvement. Keep plenty of stove holders about the stove.

Have plenty of washing cloths and nice tea-towels, and for health and hygiene's sake never allow them to get dirty. Wash them out in a warm suds every day. Cheese-cloths make light, nice dish cloths.

Keep plenty of nice tea or dish-towels to wipe your china and glass upon.

HEART PALPITATION

Nervous fluttering or severe heart throbbing is an indication of disorder in the digestion.

PRICKLY ASH BITTERS

Is a valuable remedy in such cases. It cleanses and strengthens the stomach, liver and bowels, removes the cause of the heart symptoms, promotes digestion, builds up a strong and vigorous body.

Sold at Druggists.

Price, \$1.00.

All these are helpful in daily work and hasten it. MRS. S. HENTON. Georgetown, Ky.

Farmers of Kansas have originality. There are among their leaders some of the strongest workers for agricultural advancement that the Nation affords. New methods are constantly being evolved that are frequently put in practice in other States. Among the plans that are likely to be put to the test is the method of cooperative grain selling inaugurated last June by the Farmers' Cooperative Grain and Live Stock Association. All through the summer this association has paid its members an average of 3 cents more a bushel for wheat than the regular dealers have been offering, and this fact has stimulated the organization of about fifty other similar associations among the farmers, many of which have marketed their grain through the association. The establishment of such associations with a plan for the loaning of money to the farmer on the security of his grain, which might be held in storage in elevators, insuring at all times a liberal supply of grain to fill orders, seems to be one that may be very successfully worked out where cooperation on a large scale can be secured.

Man has nothing that the animals have not at least a vestige of, the animals have nothing that man does not in some degree share.

Since, then, the animals are creatures with wants and feelings differing in degree only from our own, they surely have their rights.—Ernest Seton-Thompson.

There is no need of wandering widely to catch incident or adventure; they are everywhere about us; each day is a succession of escapes and joys—not perhaps clear to the world—but brooding in our thought and living in our brain. From the very first, angels and devils are busy with us, and we are struggling against them and for them.—Dream-life.

How's This!

We offer One Hundred Dollars Reward for any case of Catarrh that can not be cured by Hall's Catarrh Cure. F. J. CHENEY & CO., Props., Toledo, O. We, the undersigned, have known F. J. Cheney for the last fifteen years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by their firm. West & Truax, Wholesale Druggists, Toledo, Ohio. Walding, Kinnan & Marvin, Wholesale Druggists, Toledo, Ohio. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Price, 75c per bottle. Sold by all Druggists. Testimonials free. Hall's Family Pills are the best.

Some Coffees

are Glazed

with a cheap coating. If glazing helps coffee why aren't the high-priced Mochas and Javas glazed also?

Lion Coffee

is not glazed. It is perfectly pure and has a delicious flavor.

The sealed package insures uniform quality and freshness.

The Young Folks.

Conducted by Ruth Cowgill.

BROOKS' CANADA SONG.

To Canada Brooks was asked to go,
To waste of powder a pound or so,
He sighed as he answered, No, No, No,
They might take my life on the way, you know.

Those Jersey railroads I can't abide,
'Tis a dangerous thing in the trains to ride.
Each workman carries a knife by his side—
They'd cut my throat, and they'd cut it wide.

There are savages haunting New York Bay,
To murder strangers that pass that way;
The Quaker Garrison keeps them in pay,
And they kill at least a score a day.

Beyond New York, in every car,
They keep a supply of feathers and tar;
They daub it on with an iron bar,
And I should be smothered ere I got far.

Those dreadful Yankees talk through the nose;
The sound is terrible, goodness knows;
And when I hear it, a shiver goes
From the crown of my head to the tips of my toes.

So, dearest Mr. Burlingame,
I'll stay at home, if 'tis all the same,
And I'll tell the world it's a burning shame.
That we did not fight, and you're to blame.
—William Cullen Bryant, in New York Evening Post of 1856.

A Son of the Soil.

VII.

THE BLUES.

John felt that he was at last fairly introduced into the college life, and it was far more fascinating, more full of varied interest than he had dreamed it would be. He owed a great deal of his pleasure doubtless to his own keen capacity for enjoyment, his own lively appreciation of what is beautiful or good. For it is true to-day, as it always has been, that "life is what we make it."

John's great difficulty was in the multiplicity of the things he wanted to do. Always first, of course, were his lessons; he would sit up till midnight trying to solve an interesting problem; he would walk miles to find a certain botanical specimen; he delighted to spend an afternoon in the library reading up upon a certain topic in history. Latin, however, was distinctly a bore to him. He studied it conscientiously, but laboriously, until he went to sleep over it—all of which took a good many hours out of a day.

Then there were lectures and concerts; there was a Freshman debating club; there were class parties, receptions and all sorts of jollifications. His work at Dr. Brown's also filled any vacant hours he might otherwise have had. His employer had never found reason to complain that John's duties were neglected, for he had a sturdy honesty that forbade him to steal time from the duties for which he was paid, no matter how tempting or how important other matters might seem to him.

Then, last but not least, was the Glee Club, which practiced two nights in the week. He, had a really good voice which he was just beginning to appreciate. He wished he could take special vocal training, but, since that was quite beyond his means, he contented himself with getting the utmost benefit possible out of the club. He was very loath to give it up, yet the time came when it seemed to him that he must.

He walked slowly homeward, one night after Glee Club practice, with his hands in his pockets and his head down, thinking very deeply.

"No, there's no use talking," he said to himself gloomily, "I've got to give it up. I might as well think of buying a house, as far as having the money for it goes. * * * Then next practice night I'll have to tell them I'm going to quit. Then there'll be a great hullabaloo, and they'll want to know why. Then I'll say I can't buy a dress-suit. Then they'll all look serious, and maybe somebody'll offer to lend me one!" John's cheeks burned at the thought.

He reached Dr. Brown's house in such a sober mood that the doctor, chancing to meet him in the hall, asked him if he was sick and ordered him to let him see his tongue, which elicited a faint-hearted chuckle.

"See here, boy, I've got to take you in hand. Come into my office and we'll see what's the matter with you." And the impetuous doctor took John by the arm and dragged him into the office without heeding his protests.

"Now, my boy, what is troubling you?" he said, dropping his professional tone, but looking so concerned that John was ashamed.

"Oh, it's nothing," said John. "I guess I've got the blues."

"Of course, you've got the blues. Any body can tell that by looking at you. I never saw you before without a twinkle in your eye, and I never heard you come in without a whistle or a song, so I know there's something up."

"Well, I told you I hadn't any money but what I could make myself, and that seems to be mighty little. This morning in chapel the president made me squirm—he said: 'All who have not paid the second half of this term's tuition will please see the treasurer at once.' I'm sure he looked straight at me. I've got to get some new books, too. And now I've got to give up the Glee Club. They're going to give some concerts pretty soon and all the fellows have to wear dress-suits. I don't know how much dress-suits cost, but I couldn't get one if they were only 25 cents a piece. I s'pose I'm kind of foolish, but I don't like to tell them I can't afford it—but the worst of it is, I'll lose the drill."

The doctor sat looking at him thoughtfully and sympathetically.

"I see, I see," he said. Then looking him straight in the eye, he said: "Well, I suppose you'll have to just drop out and go back home to your mama"—John flushed hotly and looked up quickly as he caught the tinge of sarcasm in the tone—"I've seen boys, lots of them, who thought college was a fine place as long as everything was lovely, but just let them run up against something a little tough and they backed down in a hurry."

John's eyes flashed angrily. Since he came to college he had heard many pleasant things about himself, every one had spoken kindly of him, for he had the faculty of making friends, which certainly does do much toward making the path of life smooth and easy to tread. Never yet had any one spoken to him in this way and the words had a bitter sting to them. Weeks afterward he admitted that Dr. Brown knew what to administer for a sick mind as well as for a sick body, and that this bluff rebuke was just the tonic he needed, but now he was so angry he did not think of the kindly purpose behind the words.

"If you wished to dismiss me you might have said so in fewer words." He started to leave the room, but the older man's laugh detained him. The doctor really seemed amused.

"Why, you're a regular fire-cracker, aren't you? Strike a match and s-s-s-bang you go. Now, come back here, and let's talk this over."

John came back reluctantly. He thought Doctor Brown was the strangest man he had ever known. His anger oozed out at his finger-tips and he began to wonder what was coming next.

"I guess that small thunder-storm cleared the atmosphere somewhat, eh, John?"

John could not help laughing at the doctor's quizzical look.

"Now, let's see, you haven't paid your tuition for the second half, you say—and you haven't the wherewithal. Well, what are you going to do about it? Why haven't you been thinking of this before?"

"Well, I declare, time has gone so fast I didn't realize it. I don't believe I'd have thought of tuition again this year, if I hadn't been reminded. And I don't know what I'm going to do about it. I've thought of lots of plans for making money, but I don't seem to have much spare time."

The doctor laughed, again. "Well, you are certainly a very happy-go-lucky boy," he said. "Now, for instance, what was one of your plans?"

John hesitated a moment. "Well," he said, "a great many of the boys have paper routes. They only take about two or three hours a day and they make quite a little if they're handled right. But you've got to have the cash to buy one, and cash is just what I haven't got."

"I see," said the doctor. "Why don't you borrow?"

"Well, my father didn't want me to come at all, you know, so I don't like to ask him to loan me any money. He said if I came I'd have to pay my way as I went."

Just then the telephone rang. "Hello," said the doctor. "All right. I'll come right out."

"Got to go to a sick man's. See how quickly you can hitch up."

John rushed out and in five minutes the doctor was leaving.

"Well," said John to himself, as he watched him go swiftly down the street; "well, he's a queer man. I must say."

* * * Wonder if I could work that paper route business? Got to give up the Glee Club for this year, that's sure. My, I didn't realize how poor I am. I've got to do some pretty tall hustling if I'm going to make this thing go, and—he pressed his lips together firmly and the blood rushed to his face again as he thought of the look on the doctor's face when he "supposed he'd go home



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**BIGGER
BOX
SAME
PRICE**

**LIQUID-
BETTER
YET!
FIRE PROOF!!**

to his mama." "And I've got to make it go. I wouldn't give up now, for—for a dress-suit!" with one of his old-time chuckles.

(To be continued.)

Andrew Carnegie.

Rich men are not few, neither are generous men, yet the two attributes do not always occur together and when they do so occur, they make a striking combination.

Andrew Carnegie, the multimillionaire, might have lived out his three score years and ten and gone to his grave, and to the multitude he would have been but a name, a synonym for energy, achievement, but quite as devoid of personality as a powerful trust or syndicate.

But Andrew Carnegie, the benefactor, has become a household word in many homes. By his benevolence he has made himself a place in the hearts of the American people, who are proud to call him a typical American.

And yet he is an American by adoption only. By birth he is a Scotchman, and he still retains a love of his own Fatherland. He was eleven years old when he came to this country with his parents and he at once went to work. It was very humble employment—bobbinboy in a cotton-factory—yet the employment does not make the man, though the man may grace or disgrace his employment. Perhaps the time seemed long and the work dreary to the little Scotch laddie, who must sometimes have longed to romp and play all day long like other boys. But his industry had its reward, and he soon arose step by step from bobbinboy to engineer and then to clerk for his employer, until in two years, he left the dirty, noisy factory and became a messenger boy for a telegraph company. While here, he learned the art of telegraphing. It is a fact that deserves notice, that no matter how lowly or disagreeable his place of duty, Andrew Carnegie always did his work well, with his whole heart and brain, not content with doing his simple duty, but always determined to know everything connected with it. And doubtless he has since made use of every bit of knowledge which he acquired in his laborious climb from poverty to wealth.

From telegraph operator he became train dispatcher, then secretary for the superintendent of the railroad division, then himself superintendent. Next he was put in charge of the military railroad and telegraph lines during the Civil War, then he became the founder of the Keystone Bridge Works; and finally king of the world of steel.

Let no one think that young Carnegie was "lucky." It is not luck that when you add three to four you have seven; neither is it luck that when you add pluck to industry you get success.

But we must not think that Carnegie's life was a dull round of work, work, work. In an article in the World's Work, to which we are indebted for much of the information given here, Mr. Lanier says:

"Right here is manifested the quality which makes Andrew Carnegie much larger and more rounded than a mere steel magnate or business genius. He has never been contented to sink himself entirely even in these tremendous enterprises which would seem to demand any man's last ounce of energy and concentration. Long before he became a rich man he showed his admirable balance in this respect. We have seen that he was a hard worker, but he never 'ground' his mind and spirit to the exclusion of sport and pleasure. A friend who knew him as superintendent of the Pennsylvania's western division tells how he would have the conductors and brakemen gather information for him about the best fishing places along their routes. His visits of inspection were then so arranged that he could disappear for half a day or more at a time, and industriously whip these streams in search of trout and bass. His fondness for this sport has stuck by him all his life, and to it among other things he owes his acquaintance with his great friend Her-

bert Spencer. These two hardened anglers are accustomed, when they get together, to exchange 'the ideas about the sort of fly most desirable to use in complicated cases, and to try to reason out the fish's mental attitude when it sees the fisherman's bait.'

"Sixty trips across the ocean, a journey around the world, and expeditions to the North Cape, China, Japan, and Mexico, are a record eloquent in themselves that he does not 'work hard' in the sense in which most American men of affairs understand that phrase. His mail now averages from three to six hundred letters a day, and while a capable private secretary and a yawning waste-paper basket absorb by far the larger portion of this mass of correspondence, he is nevertheless called upon to transact a huge amount of business. But he never permits the load to become an Old Man of the Sea. In the library of his home he attends to the necessary things in less time than most business men expend in travelling to and from their offices, and like Napoleon realizes that a fortnight answers more letters than he does.

"Often he will go away all day to play golf, which he jokingly declares to be the only 'serious business of life.' A correspondent once went to Cumberland Island, his sister's home, on the Georgia coast, to interview him on some event of tremendous importance in the world of steel. He found him on the golf links, and fired at him, point blank, a long list of carefully prepared questions concerning this matter. Mr. Carnegie listened with patience till the newspaper man had finished, then he broke out:—

"Oh, I don't know anything about all that; but yesterday I broke my record. I just went around this course in five strokes less than ever before."

Of Andrew Carnegie's generosity we are all aware. It was he who said it was a disgrace to die rich, and he seems intent on escaping that humiliation.

He seems to have two benevolent fads, the founding of public libraries and the presentation of organs to churches and such like institutions. The world knows of his munificent public gifts, but after all, it is the little things that make or mar a life and the little things are the things the public does not know about. It is pleasant to think of the half-hundred young men he has gathered about him, "partners in his business;" of his numerous employees whom he makes sharers in his prosperity (for twelve years he has paid his men wages in direct proportion to the prosperity of the business which they maintain); but best of all is the personal interest which he shows for struggling young men, who are striving in all sincerity to make a success of their lives.

Says Mr. Lanier: "It is a pleasant picture this, of a sturdy, forceful, large-minded man, putting the whole energy of his nature into carrying out great enterprises, or playing golf, or writing books, or fishing, or coaching, or placing the means of self-education within the reach of millions of his fellow men. Surely he is a fine specimen of the modern citizen of the Republic."

QUESTION BOX.

Brooks' assault.—Was Brooks ever punished for his assault on Sumner in Congress? ELEANOR J. RATCLIFF.

Yes, he was punished, though insufficiently, as many people thought at the time. It was at a time of great political turmoil and strong party hatred, so that many people applauded the cowardly act while others were equally zealous in denouncing it. Resolutions were offered in the Senate, censuring Brooks and demanding his expulsion, but they were not passed, since there was not the necessary two-thirds majority in favor of it. The votes stood 121 to 95.

He was also tried in the United States District Court, where a fine of \$300 was imposed upon him, which was unaccompanied by any word of reproof or criti-

cism from the judge. Sumner was unable to appear at this trial, and, indeed, did not wish to take any part in it, but Brooks made a defiant speech, "justifying and glorifying the outrage," to quote a paper of that time.

Brooks was showered with gifts of gold-headed canes and other costly presents by his friends and admirers, but the intelligent, level-headed people generally were severe in their denunciation.

Mr. Burlingame made a speech in the Senate in which he said, in part: "I denounce it in the name of the sovereignty of Massachusetts; I denounce it in the name of humanity; I denounce it in the name of civilization, which it outrages; I denounce it in the name of that fair play which even bullies and prize-fighters respect. What! Strike a man when he is pinioned—when he can not respond to a blow! Call you that chivalry? In what code of honor did you get your authority for that?"

Upon this, Brooks challenged Burlingame to a duel. Burlingame accepted and chose rifles for the weapons and Canada for the place of meeting. Brooks did not appear, however, giving as his reason that "he must go through the enemy's country to get there."

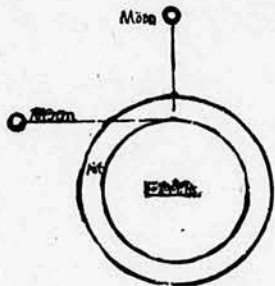
On learning of this, William Cullen Bryant, who was then a reporter on the New York Evening Post, wrote the poem, "Brooks' Canada Song," which appears at the head of this page.

This was in 1856; the following winter Brooks died and a handsome marble shaft was erected above his grave, on one side of which were the words: "He was a man in whom all the virtues loved to dwell." Verily, put not your faith in the words of an epitaph!

As to the size of the moon:—The moon is nearer to us when it is directly above us. Why does it look larger when it is rising or setting?

MARGARET SMITH.

There are two possible explanations. One is that when it is near the horizon we unconsciously compare it in size with the other objects within our range of vision, which we are unable to as it rises in the heavens. The other is illustrated by the accompanying diagram:



There is only a thin shell, as it were, of air around the earth, above which is supposed to be a vacuum. As can be seen by the diagram, the sun has more of the air to shine through when it is horizontal to you; the air has the quality of refraction, which, of course, is greater for a larger amount.

If you will notice, you will see that the moon sometimes looks distorted when it is rising. The cause for this, also, is the refraction of the atmosphere.

We once were in a class where the theory of sight was being discussed, and the question arose as to the apparent size of the moon at a certain time and place. The teacher asked different members of the class what its size seemed to them. We were surprised at the great diversity of the answers. To some it was no larger than a dime, while to others it appeared as large as an umbrella.

"I sometimes wonder if they ain't no account took of little child'en's trials. Seems to me they ought to be a little heavenly book kep' a-purpose; an' 't wouldn't do no harm ef earthly fathers an' mothers was occasionally allowed to look over it."—Ruth McEmery Stuart.

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FOR THE LITTLE ONES

A MARCH GLEE.

I hear the wild geese honking
From out the misty night—
A sound of moving armies
On-sweeping in their might;
The river ice is drifting
Beneath their northward flight.

I hear the bluebird plaintive
From out the morning sky,
Or see his wings a-twinkle
That with the azure vie;
No other bird more welcome,
No more prophetic cry.

I hear the sparrow's ditty
A-near my study door—
A simple song of gladness
That winter days are o'er;
My heart is singing with him,
I love him more and more.

I hear the starling fluting
His liquid "o-ka-lee;"
I hear the downy drumming
His vernal reveille;
And from out the maple orchard
The nuthatch calls to me.

Oh, Spring is surely coming,
Her couriers fill the air;
Each morn are new arrivals,
Each night her ways prepare;
I scent her fragrant garments,
Her foot is on the stair.
—John Burroughs.

The Blue-bird's Nest.

Two little blue-birds were sitting on the barded-wire fence. "Chirp, chirp," said one. "Let us look around for a good big tree. We must soon begin to build our house, for spring is here."

"Yes, yes," said the other little blue-bird, turning her pretty little head this way and that. "Spring is surely here."

"This morning, as I hopped along over the meadow," said the first little bird, "I heard deep down in the ground the little violets talking."

"Oh, what did they say, my dear?"

"They were in a great hurry. One of them was afraid Mother Nature would not get her new green dress done in time, and another was beginning already to worry about her new purple bonnet."

"Look!" said Mr. Blue-bird. "Is not that a fine tree for our home? It will be beautiful when it is all covered with shiny green leaves, and it is so tall that if we choose the highest branches the cruel boys will never know we are there."

"Oh, we must be sure to keep our dear little home hidden well," said his wife, looking very serious. "Do you know, Mrs. Red-breast says some of those cruel creatures stole all of her eggs last spring, so she was very lonely in the summer."

Just then two other little blue-birds came.

"Good-morning, good-morning," they said. "Is this going to be your home? What a lovely place!"

"Yes, we're thinking of building here," said Mr. Blue-bird. "You must come to see us when our house is done."

"Thank you," said the other Mrs. Blue-bird. "We'll come if we are not too busy with our own nest then."

Then they flew away, and a robin came up and sat on a limb, watching the awhile.

"Why, how do you do," said Mrs. Blue-bird, as she carefully arranged a string and a leaf in the coming little nest she was making.

"How-de-do, how-de-do," sang the robin. "I see you have chosen your home already. I am just out looking around for one, myself. My wife will be here soon. I like this tree very much and perhaps we shall decide to make it our home."

"Indeed, Mr. Robin," said polite Mrs. Blue-bird, "we shall be very glad to have you for neighbors. I shall be glad to know your wife. Is she coming soon?"

"Here she comes, now," said he. "Ah, my dear little wife, this is Mrs. Blue-bird."

"I'm very glad to know you, Mrs. Blue-bird," said Mrs. Robin. "What a beautiful location for a home!"

"And how would you like to make your home here, too, my dear?" said Mr. Robin, swaying up and down on a limb in his excitement.

"That would be delightful," said his wife. "Let us begin at once."

So she began busily to prepare a place, while Mr. Robin sat on a limb and sang a beautiful song of delight.

"My dear," said Mrs. Bluebird, to her husband, "I'm glad you are willing to work. Mr. Robin is a very nice bird, but he does nothing but gad about or sit in the parlor and sing, while his poor wife is busy building their home." I'm glad you are not like him, my dear."

And so Mr. Blue-bird worked harder than ever, flying far away to find some soft downy feather or rag or paper to put into his fine house, and it was not many days before it was done, and Mrs. Bluebird was sitting contentedly on five little eggs, up among the leafy branches,

Breathe Properly.

The secret of breathing is to a great extent, the secret of health, and all those who dwell in towns, should therefore pay special attention to the subject. Normal, unconscious breathing sustains life, but it does not thoroughly extend the lungs, or oxygenate the blood.

The lungs need to be bathed in air as the body in water. To do this requires intelligence, forethought and conscious act.

Deep, voluntary, systematic breathing strengthens weak lungs and protects the strong. Quick and deep inspiration of fresh air warms the blood when it is chilled by standing in the open air.

Inhale always through the nostrils, so that the air may be warmed in the nasal passages and any impurities arrested there. Contagious diseases are comparatively rare among those who breathe through their nostrils.

A distinguished physiologist asserts that "many people die for want of breath"—adding, "it is their own carelessness, alone, that prevents them from breathing." Half-breathing is half-living. Many of us use only the upper half of the lungs when breathing. Occasionally this arises from the want of thought upon the subject, sometimes from constricted clothing, which renders deep inspirations impossible.

To increase the lung power is to increase the life power. Deep breathing strengthens the entire muscular system.

A full, slow inspiration of fresh air which penetrates the remoter lung cells and is held as long as possible, then exhaled slowly through the parted lips, builds up cells that have partially contracted through lack of use; it not only increases lung capacity and enriches the blood, but has a decidedly beneficial effect upon the throat and upon the vocal organs.

Moreover, none need plead that they have not the time to practice breathing properly, for even five minutes a day only will do good.—London Express.

The Crystal Springs of Florida.

Nearly all the streams of Florida originate in large springs of remarkably clear water. Some of these springs form lakes of considerable dimensions, while others flow off directly in bold streams. The water is so clear that the most minute objects, even on the bottom, are readily distinguished, and large streams of crystal water can be seen gushing up through the white colored limestone beds beneath. At points remote from these inlets the bottom is covered with the long green moss that grows only in pure spring water; beautiful fish of many varieties are also plainly visible. The outlets of the springs are generally deep, narrow and rapid streams. Of so much importance to Florida are these river-producing springs that the United States Geological Survey, in its investigation of the country's water resources, has made a series of measurements of their discharge. One of the characteristic springs, which was measured by hydrographer B. M. Hall, of the Geological Survey, is Silver Spring, near Ocala in Marion county. It is the head of Ocala River and is also the head of navigation, as steamboats come up the river into the spring and have a regular land-

ALL RUN DOWN

Weak, Nervous and Debilitated as a Result of Grip.

To the many sufferers from the after-effects of grip, who have sought in vain for relief, the facts stated in the following interview will be of great interest.

Mrs. Emily J. Black lives at No. 3 Howard Street, Brewer, Me. She had a severe attack of the grip, the winter before last, which left her weak, nervous, and debilitated. Nothing seemed to help her and, growing worse and worse, she almost gave up hope of ever being well again, until she tried a remedy which has brought relief to thousands of similarly affected people. When interviewed by a Commercial reporter she said:

"More than a year ago I had a severe attack of the grip, which left me in bad shape. Everything I ate distressed me so much that I could not bear to take food, and I thought I must starve. I had numbness in my limbs and could not taste or smell for four months. I was ailing for six months or more and part of the time I was obliged to stay in bed. I took various medicines that were recommended to me, but none helped me and instead of getting better I became worse. Finally, when I was all run down, weak, and nervous, I saw a pamphlet advertising Dr. Williams' Pink Pills for Pale People, and decided to try them. From the first box I experienced relief and by the time I had taken six I was entirely cured. I have not needed them since."

Dr. Williams' Pink Pills for Pale People contain, in a condensed form, all the elements necessary to give new life and richness to the blood and restore shattered nerves. They are an unfailing specific, not only for the after-effects of the grip, of fevers, and of other acute diseases, but also for such diseases as locomotor ataxia, partial paralysis, St. Vitus' dance, sciatica, neuralgia, rheumatism, nervous headache, palpitation of the heart, pale and sallow complexion, and all forms of weakness, either in male or female. Dr. Williams' Pink Pills for Pale People are sold by all dealers or will be sent postpaid on receipt of price, fifty cents a box; six boxes for two dollars and fifty cents, by addressing Dr. Williams Medicine Co., Schenectady, N. Y. Be sure and get the genuine. Substitutes never cured anybody.

ing wharf there. The river flowing out of this spring was found to be 60 feet wide. It had a mean depth of 11 feet, a mean velocity of one foot and a quarter per second and a discharge of 822 cubic feet per second. The spring basin is about 35 feet deep and the temperature, late in December, was 72° F. Though the water has a slight limestone taste, it appears to have no other mineral constituents, and is excellent for drinking.

See how fast you can say this:
How much wood would a wood-chuck chuck if a wood-chuck would chuck wood?
Just as much as the dew-drops drop when the dew-drops do drop dew.

RUNNING FOR AN EXPERT.

Did you ever have to send "post haste" to town for an expert to get that harvester to cut a swath without balking, or incur vexatious delays from breakages, when every moment meant money?

USE A DEERING AND AVOID IT.

The successful operation of any Deering Harvester is not contingent upon the condition of the crop. Every requirement of harvesting meets with satisfactory, profitable fulfillment in

THE DEERING IDEAL LINE OF HARVESTERS.

It will pay you to investigate.

DEERING HARVESTER CO.
CHICAGO, U. S. A.

World's Greatest Manufacturers of Binders, Headers, Mowers, Reapers, Corn Binders, Corn Shocks, Huskers and Shredders, Rakes, Twine, Oil.



Gossip About Stock.

(Continued from page 233)

cago International Live Stock Exposition with the imported Belgian stallion Coriolan 17902, and also won first in his, the 3-year-old class. Colonel Crawford has made three importations within the last year and has won more prizes to the number he has exhibited than any other importer in America. In selecting his horses he looks for quality and not number. All lovers of fine draft horses should not fail to see his stock. The Colonel expects to close out this car-load between now and the first of April in order to make more room for a new importation, consequently will knock prices down to the low-water mark either to private individuals or to companies. Any parties wishing to see the horses are cordially invited to call and see them. See advertisement.

In coming years, when the importance and value of the Angora goat industry is better understood and more generally recognized, there will be one conspicuous figure standing out preeminent as a potent promoter of the same and will be known as "the man who made the Angora goat famous" and that name is W. T. McIntire, of Kansas City, the present secretary of the American Angora Goat Breeders' Association. He has awakened an enthusiastic interest in this great industry throughout the entire United States, and as a result of his aggressive enterprise the present supply of high-class Angoras is inadequate to the demand. Mr. McIntire has recently acquired a tract of 1,700 acres of land at Morse, Kans., only ten miles from Kansas City, on the Santa Fe railway, where he can handle 10,000 goats with the present capacity, which can be increased. So great is the present interest that the Santa Fe and United States Postal Department are seriously considering the matter of changing the name of Morse Station to that of McIntire or Angoraville. Mr. McIntire will make his first individual auction sale of 1,500 Angora goats at Kansas City on March 31, at the Stock Yards. This offering will consist of 500 registered does, 500 high-grades, and 500 wethers, selected stock from the famous flock of Mr. Armour of New Mexico and the Landrum flock of Texas.

At the Shorthorn sale at South Omaha on March 14, by C. A. Saunders, Manilla, Iowa, and Geo. E. Ward, Sioux City, Iowa, who realized the splendid average of \$326.83 on fifty-nine head; 30 cows averaged \$408.83 and 29 bulls, \$242.24. Geo. E. Ward, Hawarden, Iowa, received \$1,300 from Brown & Randolph, Indianola, Iowa, for Imp. Jessica, 22 months, bred by Wilson, of Scotland. Rosewood Maid, 18 months, sold to C. F. Ferrand, Ireton, Iowa, for \$1,015. W. J. McLean, Rock Valley, Iowa, paid \$850 for Imp. Susanne, 5 years. Walpole Bros., Rock Valley, Iowa, took Nonpareil and Bluffview, 4 years old, for \$805. The consignment of C. A. Saunders, at Manilla, Iowa, was topped by a cow sale at \$495, one at \$490, and one at \$460. One of the Saunders bulls also brought \$400. In the consignment of F. P. Helmick, Webster City, Iowa, Lavender Oakland, a 3-year-old cow, was bought by

F. A. Edwards for \$1,000 and Rose of Bluffview, a 6-year-old, by E. S. Donahay, Newton, Iowa, for \$730. A Helmick bull brought \$400. The top sale in the consignment of Henry Davis, Defiance, Iowa, was \$550. Four bulls sold for Riley Bros., Albia, Neb., one at \$800, one at \$505, one at \$455, and one at \$200. The best price among the four bulls sold by F. A. Edwards was \$230.

The annual sales from Weavergrace herd of Herefords owned by T. F. B. Sotham have always been regarded as important Hereford events, but the star Hereford sale, by National Hereford Exchange under the management of Mr. Sotham to be held at Chicago Tuesday and Wednesday, March 25 and 26, should be regarded as a Hereford event extraordinary, because the Weavergrace consignment of seventy-five head including all the middle-aged cows and heifers, a portion of the regular breeding herd at Weavergrace, will be sold. It is with great reluctance that Mr. Sotham finds it necessary to part with so many valuable animals. Notice the advertisement in this issue. In making this last announcement of this notable event it must be said that it is important that parties interested should have a catalogue, in order to properly appreciate the many choice gems of the whole offering. It is an objection, as the Breeder's Gazette says, to a running review of these cattle, that animals worthy of mention are sure to be missed, but the public will see them all in the ring and can estimate them according to its pleasure. The young cow Armour Nalad 1st, daughter of Kansas Lad, reveals the genuine Beau Real character of width of frame and thickness of flesh; she is a real block with a beautiful coat of yellow-red hair. Benefice and Benson need no word; it may be said that possibly Mr. Sotham will not be able to bring himself to part with Benson. Much has been said of the valuable character of this offering, and much should be said for an offering that contains such as Camella, a beautiful cow got by Corrector out of Prettyface 2d, which was the dame of The Woods Principal, the sensational champion of the International steer show. When have such riches been exposed to public valuation? Possibly the name Choke Cherry was deliberately given to warn that the heifer is a "cherry" on which many a show-yard competitor will likely choke. At least we count her one of the rarest products of this herd—full sister to that grand matronly show cow Lady Charming. Scale and the usual Corrector character will be found in large measure in Contour, not yet reached a year in age, which has for dam the fine breeding cow Content. Another beauty of about the same age is Coralline, out of Cora, granddaughter of Cherry Boy through Columbus. Such backs come only among the Correctors. A great "dumpling" of rare refinement is the heifer Exquisite, out of Elena 10th, especially admirable in head and neck, breadth of back and fullness of hind quarters. A show cow and a breeding cow of unusual excellence is Florimel, out of the dam of Fragrance, which holds such promise of show-yard development, and is again in calf to Improver. Gaylass, another sister to Grace and Sir

Comewell, is a great beauty. Gladys, a member of the calf herd of 1900, is developing in wonderfully promising fashion, and in her beautiful character and superb finish she is well qualified for high honors. Helena, full sister to Hebe C., will be wanted by some man who likes to buy the real good ones, and Hermia, another one from the same mating, is of similar character. The blood of Improver, Corrector and Hesper has united in Hattie to produce a heifer of great depth and thickness, one that will mature into a noteworthy cow. At about a year old Hesper, full sister to Happiness that brought \$2,300 for Clem Graves at the "Kriterion" sale, will come before the public. And so on—scarcely an animal can be mentioned that is not closely related to one that has a show-yard or a sale-ring reputation—and such reputations are worth money nowadays just as wheat in the bin or corn in the crib.

Fine Stock at Auction.

Mrs. Rachael Hughes will sell at public auction at her farm at Lawrence, Kans., the remainder of the fine blooded stock of the late Thos. Hughes, including the celebrated fashionable and standard-bred Greensburg 6500. This famous stallion is known the western horse world over as a great breeder and his progeny are of the most fashionable roadsters to be found in any place. He is a grandson of the great Harold, also grandson of Happy Medium, the sire of Nancy Hanks 2:04.

A number of fine roadsters will be sold; also several registered Shorthorn bulls, cows and heifers, including Eben Wild Eyes 129531, who at 2 years old weighs 2,000 pounds. Write for further particulars. RACHAEL HUGHES, Lawrence, Kans.

THE MARKETS.

Kansas City Live-Stock Market.

Kansas City, March 17, 1902. Continued stringency in receipts was the feature of the local market last week. In the cattle division arrivals were 22,600, about the same as the previous week, but 8,000 less than a year ago. The expected stronger feeling in light-weight beefs during the spring months, began to materialize last week, steers 1,000 pounds and under holding fully steady at ready sale all week, while fat export steers broke 10 to 15c. Choice handy-weight heifers sold at the high point of the season, straight heifers reaching \$5.75 and mixed steers and heifers going to \$6. Nice butcher-weight cows sold as high as \$5.25. Feeders throughout the territory tributary to this market are keenly aware of the demand for light-weight beefs during the spring months, and are preparing all their light stock for market. An unexpected large supply, resulting from this policy may break prices in the future, but the shortage of corn will prevent too heavy a supply being handled.

Owing to the strong feeling prevailing in the fat-cow and heifer market, the stock was in good demand all week, best heifers

Feed Your Cattle Right

It pays to feed a variety of feeds. Make a grain ration of ground corn with

Gluten Feed and Germ Oil Meal

These digestible feeds are nutritious, easily assimilated and cattle, hogs, calves, etc. eat them with a relish. Write for samples and letters of recommendation, addressing Department K F.

The Glucose Sugar Refining Co.,
The Rookery, Chicago.

selling at a range of \$3.50 to \$3.75. Canner cows, on the other hand, broke again, the decline amounting to 25c. Dealers look for no improvement in the canner market in the near future, and advise holding such stock until grass puts them in better shape. Good, big-boned feeding steers showed strength during the week, owing to reduced receipts and sold at high as \$5.10 for straight loads. Extra milking cows sold well, owing to the spring demand setting in in earnest. Good cows readily commanded \$50.

The hog market varied slightly during the week, but at the close weakened and left prices a shade lower than at our last report. The top was \$6.60, the highest

THE FARM SEPARATOR SYSTEM IS A WINNER.

The Milk Producer is Pleased Because the Money All Goes to Him.

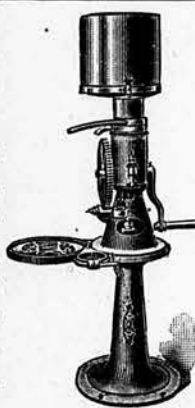
Think of it! 25 Cents a Pound for Butter Fat the Middle of March



RUNS EASY.

THE EMPIRE SEPARATOR

Is the peoples' choice because it runs easy. It cleans easy. It skims close, and is durable. Hundreds have seen it and are testifying to its merits by ordering one. The BLUE VALLEY CREAMERY COMPANY will be glad to send you one of their Handsome 1902 Catalogues. Write for one immediately.



TAKES CREAM ALL OUT.

WHEN YOU SELL MY CREAM TO THE BLUE VALLEY CREAMERY CO. I PAY FOR MY FEED AND CARE AND RETURN A PROFIT EACH YEAR EQUAL TO 100% OF THE AMOUNT INVESTED IN MY MILK LIKE TO DO THIS.

IT PAYS TO SELL CREAM TO AN "UP-TO-DATE COMPANY." I KNOW EVERY DAY JUST WHAT MY CREAM BRINGS AND I GET A STATEMENT EVERY WEEK. NO GUESS WORK. SO MUCH MORE LIKE BUSINESS THAN THE OLD WAY. I TELL YOU I LIKE TO DO BUSINESS WITH THE BLUE VALLEY CREAMERY CO. ST. JOSEPH, MO.

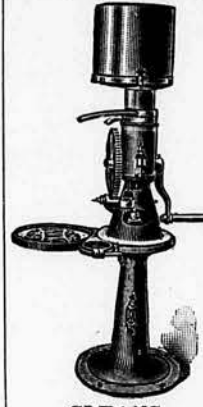
THE EMPIRE CREAM SEPARATOR

BLUE-VALLEY CREAMERY CO. SELLING AGENTS. ST. JOSEPH, MO.

I TOOK 1ST PRIZE AT THE WORLD'S FAIR

SEE! THIS IS FUN, FOR IT IS SO EASY TO RUN.

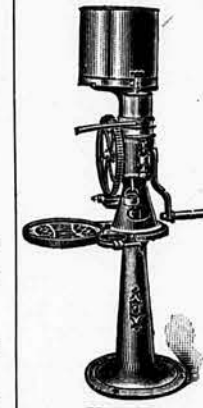
JUST THE THING FOR PIGS.



CLEANS EASY.

No more hauling milk. No more sour skim-milk for feeding. No more big loads of dirty cans to clean every day. Economy is the watchword. The farm separator is used. Time is saved. Work is saved. The calf is saved. The pigs are saved. The chickens are saved. There is no piece of machinery on the farm so useful and that makes so much money. Write the

BLUE VALLEY CREAMERY CO
for more information.



VERY DURABLE.

500 Dairymen will add their names in March to the list of Patrons that have already endorsed the Creamery System that pays the highest price for Butter Fat. We want every Dairymen in Kansas and Missouri or Iowa and Colorado within 500 miles to write us. Remember we are the "Pioneers."

BLUE VALLEY CREAMERY CO., St. Joseph, Mo.

SELLING AGENTS EMPIRE SEPARATOR.

value reached by swine since 1893. A year ago \$5.67 was the best price paid. The local supply was right at 40,000 head, a decrease of 10,000 from a year ago. A feature of the week's trade was the better proportion of good hogs arriving. The seemingly endless wave of light hogs has evidently become exhausted throughout the country and shippers are being compelled to turn their attention to heavier weights. The cessation in the heavy movement of small swine also indicates a desire on the part of feeders to hold back such stock and feed them for the summer markets.

Depressed conditions in Eastern markets gave the buyers here a good opportunity to bear lamb values last week, which they proceeded to take advantage of as much as possible. Lambs averaged 10c lower, but ewes and mutton stuff sold steady to a little higher. Extra choice Western lambs sold at \$6.30. A reaction is looked for in the sheep market this week, and better prices are anticipated. Dealers all declare the high point of the season has not yet been reached, and claim values will hold stiff until the Texas and Western grass sheep begin to arrive.

Another good week was had in horses, all tappy stock selling strong. Good express horses, with fat and quality combined, sold at \$350 a span, and single animals brought \$150 to \$175. There was also noted a strong inquiry for tappy drivers, more of which could be handled to advantage. This class of horses is expected to sell well for the next month or two. Mules, fifteen hands and upwards, brought strong prices and found ready sale, but stock un-weak as regards prices. POWELL.

The Week's Grain Market Review.

Topeka, March 17, 1902. Last week's wheat market was one of weakness, partially caused by scattering rains in the winter-wheat belt of the Southwest, but mainly by the publishing of reports from the principal statistical bureaus as to the amount of wheat in farmer's hands on March 1, 1902. It seems all of the private statisticians over-reached the already large Government estimate of farm supplies, with estimates as follows: Government Report, 156,000,000 bushels; Orange Judd Farmer, 182,000,000 bushels; Chicago Trade Bulletin, 186,000,000 bushels; Cincinnati Price Current, 190,000,000 bushels; Modern Miller, 195,000,000 bushels; and to cap the climax, Chief Inspector of Grain Northrup, of Kansas, caused himself to be interviewed, giving out the report that the Kansas farmers had only shipped about one-third of their wheat crop, which caused a break of one-half a cent per bushel in less than fifteen minutes. Why this official would make a statement, directly injuring the grain-producers of Kansas, who pay him for his official work, is beyond the caliber of an ordinary mortal to comprehend. Receipts of wheat are running much less than they were some time ago, and are much below the receipts of 1901, 1900, and 1899, for the same time of the year. Especially are the primary receipts of Minneapolis decreasing, which has prompted some of the big mills to arrange with the Government to grind Canadian wheat in bond for export. The law requires that these millers, when grinding foreign wheat for export, must be under the supervision of Government storekeepers, whose salary is paid by the mills. Does it not look a little bit paradoxical that with the enormous (?) farm reserves claimed by the different statistical bureaus, our mills should be compelled to import foreign wheat in the Northwest and shut down for the want of wheat in the Southwest? Did it ever appear to any one that it might be possible that these reports are only guess work, to draw it mildly? And does it not seem strange that these statistical bureaus, that periodically take an inventory of the American farmer's granaries, are all located east of the Mississippi River, while the great wheat and other grain-producing States extend from the Mississippi River to the Pacific Coast? Why don't the farmers of the great Middle West organize and start a crop bureau of their own with the Kansas Farmer or some other up-to-date agricultural journal in Topeka as the hub, and thus disseminate at least reliable reports? This seems to the writer as one of the most feasible plans to counteract the price depressing tendencies of crop statisticians always operated in the interest of speculators.

Crop reports concerning the growing wheat are beginning to come in, some of them bad, with rumors that the wheat in Pacific coast States has suffered severely this winter. Prices of wheat from now on will be influenced by the growing crops, and not by statistics and crop reserves, for all that could have been said concerning old supplies to lower the price, has been said.

The situation in the corn market is much stronger than it was ten days ago. Receipts are falling off everywhere, and the demand is on the increase, especially in the Southwest. The elevator stocks in Kansas City and St. Louis are decreasing from day to day, although the visible supply of all the terminal markets has not changed much. But the statistical situation on corn is so strong that the writer can not see how prices can be forced down much; in fact, we believe that both wheat and corn are around bottom prices at present, with a chance for a good advance.

Decreases in the visible supply for the week were as follows: Wheat, 1,153,000 bushels; corn, 399,000 bushels; oats, 533,000 bushels. Visible supply now is: Wheat, 51,006,000 bushels; corn, 9,686,000 bushels; oats, 3,476,000 bushels.

Market closed weak to-day at quotations as follows:

Chicago.—No. 2 red wheat, 82½¢@83¢; No. 2 hard winter-wheat, 74¢@75¢; No. 2 corn, 60¢; No. 3 corn, 59¢@59½¢; No. 2 oats, 45½¢. Kansas City.—No. 2 red wheat, 81¢; No. 2 hard wheat, 72½¢@73¢; No. 2 corn, 63¢; No. 2 white corn, 65¢; No. 2 oats, 44½¢. F. W. FRASIER.

Elgin Butter Market.

Elgin, Ill., March 17, 1902. The quotation committee announce but-ter 27c.

Cancer, Tumor, Piles, Catarrh, Ulcer, and Skin Diseases.

Successfully cured by a combination of Medicated Oils. Thousands of persons come or send to Dr. Bye, of Kansas City, Mo., for this wonderful Oil. Many cases are treated at home without the aid of a physician. Persons afflicted

should write for illustrated book showing the various diseases before and after treatment. Physicians endorse this mild method of treatment. Call or address Dr. W. O. Bye, Cor. Ninth and Broadway, Kansas City, Mo.

At the Kansas City Market.

There is probably no live stock commission firm that does business at the Kansas City Stock Yards that can give you better service in the way of selling or purchasing stock than the Union Live Stock Commission Company. This company has a corps of competent men in all of the departments of the live stock trade. It furnishes market reports free upon application.

Directors: M. S. Peters, Jerry Simpson, F. E. Rowles, W. K. Greene, Henry O'Neill, Geo. W. Williams, L. C. Boyle.

Real Estate Wanted

and for sale. If you want to sell or buy (no matter where located) send description and cash price and get (FREE) my successful plan. W. M. OSTRANDER, North American Bldg., Philadelphia, Pa.

GOOD SEEDS

Send at Once

25 cts. for our Great Garden Seed Collection. 10 full size packages of finest vegetables. A larger collection of 25 varieties for 50c.

25 cts. for our Beautiful Flower Seed Collection. 10 full size packages of beautiful flowers. A larger collection of 25 varieties for 50c.

Both life collections for 40c, or both 50c col. for 75c. This is positively the greatest seed offer made. Send promptly, while stock lasts. Fine illustrated catalog sent FREE.

MISSOURI VALLEY SEED CO.,
P. O. Box 555, "The Good Seed Store," St. Joseph, Mo.

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. Initials or a number counted as one word. Cash with the order. It will pay. Try it.

SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with order. Stamps taken.

CATTLE.

FOR SALE.—Pure Shorthorns. My herd bull, Elmwood Regent (14781) Vol. 48, red, a good individual and a grand breeder. One red bull 20 months old, extra good. Some yearlings of same quality and breeding. These bulls trace to Imported Young Mary by Jupiter 2170. Barred Plymouth Rock eggs for sale now \$3.00 per 15. They have not been culled. Best cockerel in Kansas at head of pen. Hens carefully selected. Pen No. 2 \$1.00 for 15. A. C. Rait, Junction City, Kans.

FOR SALE.—Registered Hereford bulls, 12 to 15 months old, good ones; our own breeding. Will sell; Worth the money. H. B. Clark, Geneseo, Kans.

FOR SALE.—Several choice registered Hereford bulls; also one or two heifers. My herd is strong in the Anxiety, Wilton, and Grove 3rd strains. Prices reasonable. Thomas White, Salina, Kans.

BEULAH-LAND FARM.—Has for sale young Red Polled bull calf, \$50. Cows and heifers, \$75 up. Poland Chinas, choice and cheap. Wilkie Blair, R. R. 1, Girard, Kans.

FOR SALE.—A thoroughbred Hereford bull, 4 years old, weighing 1,800 pounds. Splendid breeder, his spring calves now weighing 800 pounds. Call on or address A. Woodcock, Bronson, Bourbon Co., Kans.

FOR SALE.—My herd bull, Model 147941, he by Glen-dower 103387. Ought not to use him longer. Is good enough to head any herd east or west. Is red, extra heavy bone. Will be 4 in May next, and weigh about 1,800 pounds; no trade. L. F. Parsons, R. R. 3, Salina, Kans.

FOR SALE.—Three pure Cruickshank-Shorthorn bulls. Call on or address H. W. McAfee, Topeka, Kans.

THE STANDARD CATTLE COMPANY has 12,000 acres of the richest land in the west; and will receive applications from tenants desiring to lease land. We also want men with families to work in beet-fields. Correspond with Standard Cattle Company, Ames, Neb.

D. P. NORTON—Dunlap, Kans., will sell long and short yearling Shorthorn bulls at price of calves.

FOR SALE.—Three registered Hereford bulls; also a few high-grades. Inspection of foundation stock invited. A. Johnson, Clearwater, Sedgwick Co., Kans.

SHORTHORN CATTLE SALE—I will offer at public sale, 1½ miles south of Marysville, at 2 o'clock p. m., on Tuesday, October 15, 17 registered Shorthorns, 19 high grade Shorthorns, and 3 thoroughbred Jerseys. Lewis Scott, Marysville, Kans.

POULTRY.

WANTED.—Full blood R. C. B. Leghorn cockerels. J. E. Wright, Wilmon, Kans.

SILVER LACED WYANDOTTES.—Eggs for sale (Steinmensch strain), \$1 per setting. Frank W. Rice, Watheas, Kans.

ORCHARD PARK POULTRY YARDS.—Barred Plymouth Rocks only. Eggs \$1 per 13. Mrs. A. J. Whitney, Garnett, Kans.

BUFF PLYMOUTH ROCKS.—We will sell pure-bred eggs from our flock (all good ones), for \$1 per 15; from pen prize-winners at Kansas State Poultry show, at \$3 per 15. The Smiths, Manhattan, Kans.

AGENTS.

WANTED.—A good, active man with horse and wagon, to represent us in each county. Will bear investigation. Imperial Stock Food Co., 902 Jackson St., Omaha, Neb.

HORSES AND MULES.

PUBLIC SALE—April 3, 1902, of stallions, mares, and jacks, one mile west of Hartford, Lyon County, Kansas. Three registered Percheron stallions, 3 registered Percheron mares; 2 registered Hackney mares; 1 stallion standard-bred, Rubini 12844, sired by Lord Rus sell, sire of Maud S and grand sire of Miss Previous, sold at Marcus Daly's sale as a yearling for \$10,300; and Prelates for \$4,600; 1 large black jack, good and sure breeder; 3 work mares; 1 carload of Hereford heifers; 3 top crosses. Terms of sale, 9 months time at 6 per cent interest, 6 per cent off for cash. Address Thomas Evans, Hartford, Kans., or D. Harrington.

FOR SALE OR TRADE.—The best acting, 15-hand, 3-year-old black jack in Kansas; would prefer thoroughbred Red Polled cattle. E. E. Potter, Sterling, Kans.

FOR SALE.—Two black registered Percheron Stallions, from imported stock; Will sell cheap for cash if sold soon. Call at 213 West Fifth Ave., Emporia, Kans. W. H. Richards.

HAMBLETONIAN STALLIONS.—For sale, 2 fine stallions, coming 4 and 5 years, splendid individuals. Six crosses Hambletonian 10th blood and tracing direct to Justin Morgan. W. A. McCarter, Topeka, Kans.

PERCHERON STALLION FOR SALE.—A pure bred black 4 years old; a magnificent breeder, with pedigree unexcelled. W. T. Pence, 1335 Topeka Ave., North Topeka, Kans.

TWO BLACK JACKS cheap for cash. Will exchange for other stock. Box 8, Moran, Kans.

FOR SALE OR TRADE.—For a good jack, my Percheron stallion, dark gray, weight, 1,700 pounds; a fine breeder and a sure foal-getter of high-class horses. Address W. Q. Hyatt, Carbondale, Kans.

TO TRADE.—For draft stallions, one of two good jacks. J. Sharrock, Girard, Crawford Co., Kans.

FOR SALE.—A car-load Coach-bred mares, 2 to 5 years old. All bred from native mares. W. Guy McCandless, Cottonwood Falls, Kans.

FOR SALE.—French Coach stallion, Bismark 1925. Address C. E. Hayes, Stanley Iowa.

FOR SALE.—Black Percheron stallion Monthaber 13162 (24057), 12 years old, weight 1,800 pounds; an extra breeder; price \$400. Address G. W. Southwick, Riley, Kans.

FOR SALE.—Four big black jacks. Address J. P. Wilson, Wellsville, Mo.

FOR SALE.—At a bargain—young draft stallions. A. I. HAKES, Eskridge, Kans.

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

SHEEP.

FOR SALE.—Thirty full-blood Shropshire ewes and lambs. J. L. Bass, Route 4, Ottawa, Kans.

FOR SALE.—Plain Merino ewes, 150 head; Merino rams, 45 head; at low figures for quick sale. L. C. Walbridge, Russell, Kans.

SEEDS AND PLANTS.

BLACK HULL KAFFIR SEED of my own growing, re-cleaned and screened; a choice article; crop 1901. Send for samples and prices. Asher Adams, Osage City, Kans.

STRAWBERRY PLANTS Best varieties, true to name. Also, raspberry, blackberry, dewberry, gooseberry, currant, rhubarb, peach, pear, apple, plum, cherry and grape vines. J. C. Banta, Topeka, Kans.

GREENHOUSE PLANTS Carnations, Coleus, Roses, Fuchsias, Heliotropes, Geranium sorts. Samples by mail, 1 doz. 25c. Mrs. T. Montgomery, Larned, Kans.

BERRY PLANTS For Sale—40 varieties, moderate price. Send for 1902 Catalogue. B. F. Smith, P. O. drawer C, Lawrence, Kans.

ENGLISH BLUE-GRASS SEED—\$2.00 per statutory bushel of 22 pounds. Bright, sound, crop 1901. Seamless American "A" sacks, 17c; 3 bushel to sack. Write, Jno. S. Gilmore, Fredonia, Kans.

FOR SALE.—2,000 bushels choice seed—1,500 bushels of cane-seed, \$2.75 per cwt.; 200 bushels yellow milo maize, \$2.50 per cwt.; 200 bushels black bulled White Kaffir, \$2.50 per cwt. Sacks extra. J. P. Wolken, Syracuse, Kans.

FOR SALE.—Kaffir-corn seed. Send for samples and prices. I. W. Gilpin, Admire, Kans.

SEED SWEET POTATOES FOR SALE.—All leading kinds; also plants in their season. Enquire of N. H. Pixley, Wamego, Kans.

ALFALFA SEED FOR SALE.—\$4, \$4.50, and \$5 per bushal, sacked. Order by mail of J. C. Riggs (seed house), Florence, Kans.

SIBERIAN MILLET, the new foreign millet, 100 lbs., sacked, \$2.50; seed-corn, several varieties, per bushel, \$1.50; Bromus Inermis, per lb., 18 cents; per 100 lbs., \$18; Dwarf Essex rape, per lb., 8 cents; per 100 lbs., \$7. Write for catalogue. Trumbull & Co., Kansas City, Mo.

WANTED.—If you wish to buy or sell corn, oats, hay, cane seed, Kaffir-corn, corn chop, or anything in the feed line, correspond with us. Western Grain & Storage Co., Wichita, Kans.

HIGHEST PRICE paid for cane seed, alfalfa, millet, Kaffir-corn and pop-corn. Please send samples. Kansas City Grain & Seed Co., Kansas City, Mo.

FARMS AND RANCHES.

FREE 200 printed farm and ranch descriptions in 5 counties, 55 m. from K. C. Prices, maps, statistical book. Write G. Winders, Ottawa, Kans.

FOR SALE.—A well-improved small ranch in Grant County, Kansas, including cattle, well-graded Angus, horses, brood mares, and colts; farm implements, machinery to run the ranch; immediate possession given; for particulars enquire of T. W. Swinney, Shockey, Kans.

CASH for your real estate. Grain and moneyed man wanted. Buckeye Agency, Agricola, Kans.

WHEAT, STOCK, AND DAIRY FARM FOR SALE.—400 acres in wheat-belt central Kansas, 2 miles to town and creamery; inexhaustible supply of fine water; good buildings and orchards. Give immediate possession. Write or come. A. B. Gillett, Garfield, Kans.

SOME BARGAINS in farms and ranches. Correspondence solicited. J. M. Patten and Co., Dighton, Kans.

When writing advertisers, please mention this paper.

SWINE.

FOR SALE—Large English Berkshire boars, over 200 pounds each. E. C. Stratton, Pavilion, Kans.

BERKSHIRES FOR SALE CHEAP.—One boar 6 months old, and one bred gilt (registered). Pedigree furnished. G. D. Willems, Buhler, Kans.

FOR SALE.—2 pedigreed Duroc-Jersey boars, one yearling of Washington strain, and one July pig. Nice colors and form. H. A. J. Coppins, Eldorado, Kans.

SOME EXTRA nice fall pigs. Poland Chinas, both sexes. For sale at bargain counter prices. Also a few bred sows. H. W. Cheney, North Topeka, Kans.

PATENTS.

UNITED STATES AND FOREIGN PATENTS F. M. COMSTOCK & CO., Office, 629 Kansas Avenue, Topeka, Kans.

J. A. Rosen, attorney and counselor in patent, trademark, and copyright causes. Patents procured and trademarks registered. Office, Rosen block, 418 Kansas Avenue, Topeka, Kans.

MISCELLANEOUS.

WANTED.—Pasturage reasonably near Topeka for 50 head cattle; all one brand. Address, stating terms, Thomas Page, North Topeka, Kans.

FOR SALE.—Page Woven Wire fencing. O. P. Updegraff, General Agent, Topeka, Kans.

FOR SALE.—Farm and county rights of Singley's Boos pig-trough. Pigs can't get in it to waste feed; easily made and cheap; can be put on old troughs. Send for circulars and prices. J. J. Singley, Meade, Kans.

WHY WAIT until the middle of May to put your cattle on pasture, your alfalfa is usually large enough by April 1. Bush's Gas Releasing Bit prevent Bloat. See add elsewhere in this paper.

THE BEST CUP OF COFFEE and plenty of good things to eat. Farmers' trade a specialty. Come and get something good. The Two Minute Restaurant, 532 Kansas Ave., Topeka, Kans.

FOR SALE.—Two pedigreed Scotch Collie pups 7 months old; both females. Address, Hill Top Farm, Parkville, Mo.

FOR SALE.—Feed mills and scales. We have 2 No. 1 Blue Valley mills, one 600-pound platform scale, one family scale, and 15 Clover Leaf house scales, which we wish to close out cheap. Call on P. W. Griggs & Co., 208 West Sixth Street, Topeka, Kans.

FOR SALE.—Page Woven Wire fencing. O. P. Updegraff, Topeka, Kans.

VISITORS TO TOPEKA.—Rooms for rent for transients, northwest corner 12th and Polk Streets, Topeka, Kans. Meals served. Mrs. E. Porter.

WOOL WANTED.—We have just completed our New Woolen Mill in North Topeka and want at once 200,000 pounds of wool for which we will pay the market price. Write us if you have wool for sale. Western Woolen Mill Co., North Topeka, Kans.

BALMOLINE—Nature's Wonderful Healing Salve. Man or Beast. Druggists, 25 and 50 cents. Trial size 4 cents from B. H. DeHuy, Ph. D., Abilene, Kans.

STALLIONS FOR SALE Percheron, Belgian, Shire, coach and standard bred stallions for sale at prices you can afford to pay. H. C. Thompson, Peabody, Kans., on Santa Fe and Rock Island roads.

The Stray List.

Week Ending March 6.

Johnson County—J. G. Rudy, County Clerk. CALF—Taken up by M. S. Glynn, in Olathe tp., (P. O. Olathe), February 8, 1902, one dark red heifer, has horns and appears to be of Western stock; valued at \$15.

Week Ending March 13.

Montgomery County—D. S. James, Clerk. MULE—Taken up by Stephen Stiller, in Parker tp., (P. O. Coffeyville), February 12, 1902, one large, blue mare mule, 16 years old.

Week Ending March 20.

Ford County—S. P. Reynolds, Clerk. BULL—Taken up by Samuel Burrell, in Concord tp., (P. O. Dodge City), October 10, 1901, one pale red bull, horns sawed off, branded H on right hip. Sedgwick County—J. M. Chain, Clerk. BULL—Taken up by H. J. Nagel, in Minneha tp. March 3, 1902, one red bull, 1 year old; valued at \$12.

SHIPPED ON APPROVAL and Ten Days Free Trial. Not a cent deposit required on our wheels in advance. 1902 Models, \$9 to \$15. 1900 & '01 Models, best makes, \$7 to \$11. 500 Second-hand wheels all makes and models, good as new, \$3 to \$8. Great Factory Clearing Sale. A RIDER AGENT WANTED to each town. You can earn a Bicycle by distributing catalogs & make money fast. Write at once for net prices & our special offer. Dept. 3455. MEAD CYCLE CO., CHICAGO, ILL.

WANTED! Your order to buy on commission breeding stock or feeding cattle. **E. S. Shockey,** LIVE STOCK BROKER. Hotel Savoy, Kansas City, Mo. Acclimated young Oregon draft-bred mares and geldings for sale or trade.

THE SMITH CREAM SEPARATOR. The only separator on the market that does not MIX the milk and water, and sold under a positive guarantee. More Cream, Better Butter, Milk fine, and no labor at all. Get a SMITH. Agents wanted. Mention Kansas Farmer. **Smith's Cream Separator Co.,** 6th & Court Ave., Des Moines, Ia.

In the Dairy.

Conducted by D. H. Otis, Professor of Dairy Husbandry, Kansas Experiment Station, Manhattan, Kans., to whom all correspondence with this department should be addressed.

MANHATTAN DAIRY CONVENTION SONG.

TUNE—"HOT TIME."

Come along and get you ready,
Can't you close your creamery down?
For there'll be a creamery meeting
In this old Manhattan town.
All the "Dairy Boys" will be there,
And we want the "B. M.'s" too,
For the "Travelers" all will come
To keep you from the blue.

Chorus—

Ho-rah! 'Rah! Old Kansas right in line,
Our Dairy School, too, is not so far behind,
And when the convention am out,
For Kansas all will shout,
There'll be a hot time in Kansas that night.

All the "stockmen" they will be there,
And we'll have a happy time,
For they're going to judge the cattle
As well as all the swine.
If we don't have a rouser
From March fourth to the sixth,
It will be a funny matter,
For we've got the thing all fixed.

Chorus—

G. P. G.

Tank Heaters.

When we stop to think that the dairy cow, unlike the beef steer, has a thin hide, with little or no fat beneath the skin, and a poor surface circulation, as the blood flows to the udder for the production of milk, we can understand one of the reasons why the yield of the herd is so low in cold weather. The dairy-cow is a very sensitive animal, and when she is forced to use her food to keep up animal heat and then stand shivering while taking her fill of ice water, she certainly can not be expected to make a very good showing at the milk-pail. The Kansas Experiment Station has been using several makes of heaters in the cow-lot and in the feed-lots.

were kept going until April 1, 1901, with the following results:

Name and Manufacturer.

Name and Manufacturer.	Time fired, days.	Coal used, lbs.
U. S.—U. S. Wind Engine & Power Co., Batavia, Ill.	119	1,869
U. S.—U. S. Wind Engine & Power Co., Batavia, Ill.	119	1,869
Butler—Butler Company, Butler, Ind.	119	1,869
Butler—Butler Company, Butler, Ind.	119	1,869
Goshen—Kelly Foundry and Machine Co., Goshen, Ind.	119	1,869
Champaign—H. Reynolds, Gifford, Ill.	111	940

Total coal consumed by heaters, 10,354 pounds; average per heater, 1,725.6 pounds; total cost of coal, \$20.708; average cost per heater, \$3.452; average consumption of coal per heater per day, 14.66 pounds; average cost of coal per heater per day, \$0.02932. D. H. O.

The Future of the Creamery Business.

E. W. CURTIS, INSTRUCTOR IN BUTTER-MAKING, KANSAS STATE AGRICULTURAL COLLEGE.

The march of events in the creamery industry, within the last few years, has been by leaps and bounds; the music by which we used to set our pace was a dirge. To-day the pace is a gallop. But many men of our chosen profession are content to work to the same slow music we used to hear. It would seem as though there never was so much to learn and to do as at the present time, yet so many creamerymen fall into the rut and are willing to revolve there forever. They are satisfied with their surroundings, and before they know it their butter-maker friends are away in advance.

A great many items of advancement in creamery work within a decade are apparent. We have been given the system of starters and pasteurization, and a fuller knowledge of cream-ripening. We now have the acidity test by which the young butter-maker, as well as the old, may understand more of the condition of his cream. Many of our leading butter-makers are studying the question of moisture in butter, and some think they have a way of putting the moisture there and making it stay there. Within a decade our cream-separator development

central plants in each State. In the place of so many churning-plants as we

Name and Manufacturer.	Time fired, days.	Coal used, lbs.
U. S.—U. S. Wind Engine & Power Co., Batavia, Ill.	119	1,869
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Champaign—H. Reynolds, Gifford, Ill.	111	940

now have, we will probably see skimming-stations and hand-separator receiving-stations, both of them equipped for thorough pasteurization and cooling.

To the fellow who is in the rut and is content to plod along, the old way, I would say, "Attend every dairy convention that comes along. Take a course at a good dairy school, and every winter after that take one of the ten day courses. You will go home from every convention and dairy school with a fuller knowledge of your chosen work, and a greater determination to excel."

Apprentice Work in Dairying.

Mention has been made from time to time of the apprentice course in dairying offered by the Dairy School at Manhattan. During the meeting of the State Dairy Association the manager of one of our creameries stated that it was the intention of his company to set aside a certain sum each month to defray traveling expenses of their station-operators who could be induced to attend this apprentice course for a few weeks. The station men would be asked to pay their own board, the only necessary expense attached to the course, and it was believed by this manager that the knowledge gained while at the dairy school would more than repay them for the expense.

Here is an idea for other large creamery companies. The managers of these concerns are becoming more and more fixed in their determination to have station-operators that understand their business, and they are finding that the dairy school which the State provides can train their men cheaper than the creamery companies can. In fact, it is the office of the dairy school to train men along this line.

With the new system inaugurated by the Continental Creamery Company for the payment of patrons for butter-fat—and it is the best and fairest system yet adopted in Kansas—it is up to the patrons to see that the man who operates the station knows his business. If he does not, the patrons should see to it that he takes some means to inform himself and should encourage his attendance at the dairy school for a few weeks. The work taken up by this course will be entirely practical and will include all of the work done in the skimming-station. The student will handle all the machinery until he becomes thoroughly familiar with it in every detail. The receiving, grading, and testing of milk and cream will be made an important part of the work. Pasteurizers will be used and their requirements thoroughly studied. Hand-separator operation will be an important feature of the work.

For those who wish to take up factory work, the ripening of cream, preparation of starters, operation of churn, and all related subjects will be handled in as thoroughly practical way as the work for the station-operator. Term will be open March 28, 1902.

Ed. H. WEBSTER.

DE LAVAL CREAM SEPARATORS

which possess the patent protected "Alpha" disc and "split-wing" improvements

Are as Much Superior

to other Cream Separators as such other Separators are to Gravity Setting Methods.

Send for new "20th Century" catalogue.

THE DE LAVAL SEPARATOR CO.

74 CORTLANDT ST., NEW YORK.
RANDOLPH AND CANAL STS., CHICAGO.

"The Cow-Pea" is the title of the latest publication issued by the experiment-farm of the North Carolina State Horticultural Society at Southern Pines, N. C. This book, neatly bound and illustrated, discusses in plain and concise manner the value and uses of this important crop, the cow-pea. Every reader can get a copy free by writing to the superintendent of experiment-farm, Southern Pines, N. C.

"If a man would eat, he must work. A life of elegant leisure is the life of an unworthy citizen. The Republic does not owe him a living; it is he who owes the Republic a life of usefulness. Such is the Republican idea."—Triumphant Democracy.

Prickly Ash Bitters cures disease of the Kidneys, cleanses and strengthens the liver, stomach, and bowels.

To make cows pay, use Sharples Cream Separators. Book "Business Dairying" and Catalogue 237 free. West Chester, Pa.

Best of Trial The Easiest to Operate, the Closest Skimmer, Simplest and most Durable, is the

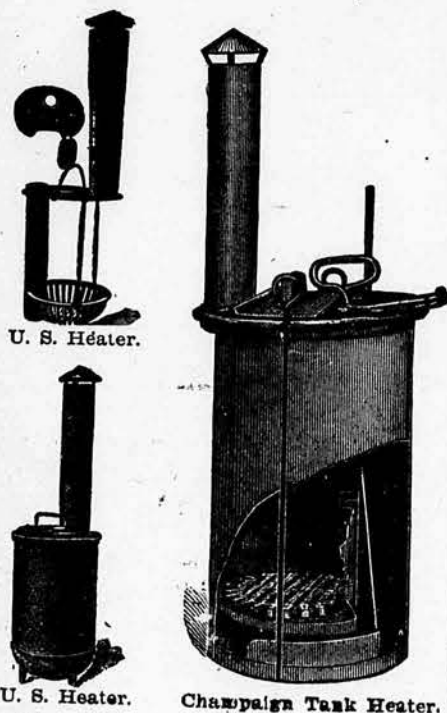
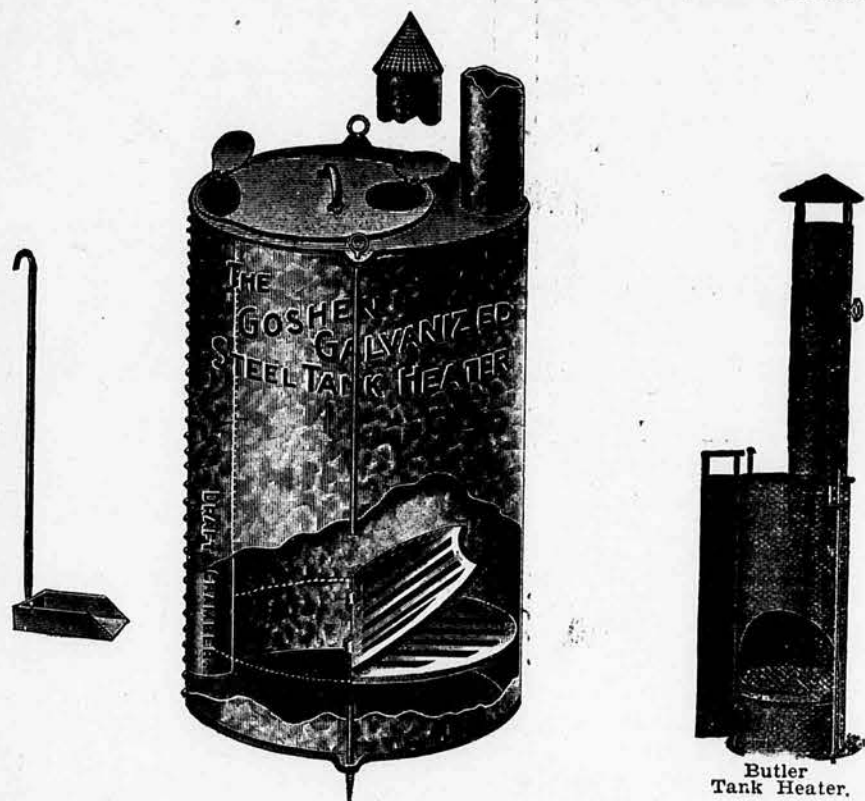
KNEELAND OMEGA Cream Separator.

We want you to know how good it is before you buy any other kind. Send for our free book, "Good Butter and How to Make It." The Kneeland Omega Creamery Co., 26 Concord Street, Lansing, Mich.

Notice to Dairymen

If you are thinking of buying a Cream Separator, write us or catalogue and information. We manufacture the best machine on the market

DAVIS CREAM SEPARATOR CO.
88-90-92 W. Jackson St., CHICAGO, ILL.



U. S. Heater. Champaign Tank Heater.

has extended so that a machine now does the work many times easier and better than it used to, and a separator costs no more now than then. The last few years have given us the hand-or farm-separator proposition with all its friends and foes, and I believe it will be extended, whether we want it or not. While a large proportion of our butter-makers are opposing the introduction of the hand separator, yet it takes only a casual study of conditions to see that the sale of hand separators is increasing month by month and year by year.

What of the future? I believe that within ten years no creamery will receive cream unless it is sweet, whether that cream comes from hand separators or skimming-stations. This is just and right, and many a butter-maker I know, will say, "Amen! Hasten the day." I believe this to be one of the most important matters before us as creamerymen to consider at the present time, and the matter will remain with us until solved and solved right.

Indications seem now to point that it will not be many years until the plan of centralization now being worked out by some of our large creamery companies will be extended, and my prediction is that the number of central creameries will be gradually cut down until there are possibly only half a dozen

THE U. S. CREAM SEPARATOR

HOLDS

World's Record

50 CONSECUTIVE RUNS:
Average Test of Skimmilk, - - - .0138

At the Pan-American Model Dairy, 1901.

No other separator has ever been able to approach this record.

Send for free pamphlets

Vermont Farm Machine Co., - **Bellows Falls, Vt.**



The Grass is Coming

You will then need double the milk cans you are using now. We make milk cans—good milk cans—the best milk cans. Better still, we sell them from our factory direct to you.

Write for Our Catalogue

and see for yourself what we can do for you, and remember that we are in the business to stay, and send out only high grade goods.

CATALOGUES.

No. 5—Milk Cans. No. 9—Cheese Apparatus. No. 10—Special Supply List. No. 11—Creamery Machinery.

Write for the catalogue you are interested in. We will take care of you as though you visited us in person. Write to-day.

Sturges, Cornish & Burn Co., 351 S. Green St. Chicago.
Kansas City. St. Paul.

The Poultry Yard.

Poultry Notes.

N. J. SHEPHERD, ELLEN, MO.

Especially at this time, when a variety and green food is hard to secure, sprouted grain can be used to advantage. One of the easiest ways of obtaining it is to pour warm water on any grain and allow it to stand over night; then keep it damp until it sprouts well, and it is then ready to feed.

The person that neglects to take proper care of his fowls when they require food and attention, will realize little if any profit. He may have the best known breed of fowls and yet fail to make them profitable if the management is bad.

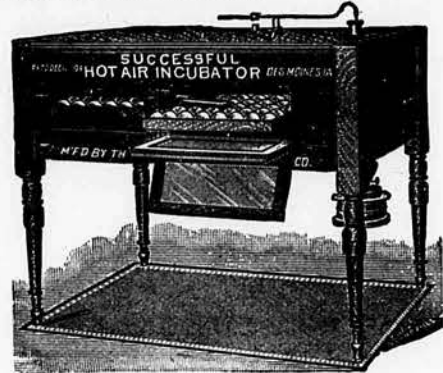
Early in the spring is the best time to make a start with poultry, but whether it is best to start with fowls or with eggs is sometimes difficult to determine. If one can afford to buy a few good fowls, with proper management a nice lot of chickens may be raised, and original stock will be worth nearly or quite the original price. Or if one can not afford to purchase the fowls, a good start can be secured by purchasing eggs from reliable breeders. There is a risk either way; high priced fowls are as liable to die as any others, and high priced eggs sometimes fail to hatch. Some experience is necessary to success, and it is a good plan for the beginner to commence on a small scale and to increase his stock as success warrants.

When it can be done with little trouble it will be found a good plan to put a piece of sod inverted in the bottom of the nests, especially of the sitting hens. Over this put a layer of clean, dry straw with which should be mixed some tobacco stems. The nests should be in a somewhat darkened place, as the hens are then less likely to be disturbed by other fowls. They should be arranged so that the hens may step in upon them rather than be compelled to jump or fly to them. They should be kept as free from vermin as possible and should be kept clean.

All breeds of fowls have certain strong points in their form; and in selecting the breed, the purpose for which they are to be kept should be determined. One should hardly decide to adopt a breed simply because it looks large or pretty when on exhibition. If eggs more than flesh are desired, the proper breeds of fowls to produce them should be kept; while if an abundance of meat is wanted, select one of the table breeds.

The "Successful" Abroad.

If any person has an idea that the incubator business of this country is sleeping, or is not sharing in the "expansion" of American trade, of which we hear so much, it would be a good plan for him to drop into Des Moines and look into the factory of the Des Moines Incubator Company, where the "Successful" incubators and brooders are made.



Your correspondent was astonished at the general activity about the place. It seems that the great factory there, filled with busy workmen, ought to run out enough incubators to supply the world—and in fact that's just about what the Des Moines factory is doing. Europe, Asia, South Africa, South America, and Australia are drawing upon the Des Moines Company for machines, and the most gratifying feature of the growth of this foreign business is the fact that it has not been brought about by excessive booming or extensive advertising by the company, but as a result of personal investigation of representatives of foreign firms, who have selected the "Successful" as the machine best suited for all climates and conditions. The company has on file in its office an unusually fine lot of letters from foreign customers, of which these may be taken as fair sample:

"Dear Sir:—The Des Moines hot water incubator purchased from your company during last season, gave the greatest satisfaction. I found it very easy to manipulate, and although the printed instructions were often contrary to my ideas, I followed out to the letter with highly satisfactory results. I consider the incubator one of the best on the market and would purchase no other. Yours faithfully,

WILLIAM CHADWICK, Equitable Permanent Benefit Bldg., Land & Saving Inst., Sydney, Australia, June 6, 1901."

"Gentlemen:—In reply to your letter of the 1st inst., inquiring what success had attended my efforts in working the No. O Des Moines incubator, I have to say that I had 90 per cent hatch from it, with my own eggs, and the machine is now running very smoothly with another lot, the result

of which you will be advised. So far as I have gone with the machine, it has been quite up to expectations. Yours faithfully,

CHAS. P. HARRINGTON, Rock Lily, New South Wales, Nov. 14, 1901." Of course these letters only confirm what thousands of Americans have already said, but it is gratifying to note that other lands appreciate a good thing, as well as we do, and that a good, honest machine, built on the right plan, of first-class material, by careful workmen, and sold at a fair price, will win favor and popularity at home and abroad.

Write for their catalogue to-day. The English editions contain 156 pages and is sent for only 4 cents postage. The German, Swedish, French, and Spanish books are sent free. Address the Des Moines Incubator Company, Des Moines, Iowa, or Buffalo, N. Y.

Deserves Its Success.

It is always a pleasure to us to notice the growth of any concern which builds up its business by honorable methods and first-class goods. In this day it is hardly possible for any concern to succeed for any length of time unless the above is their policy. When any concern starts as did our advertiser, the Reliable Incubator Company, of Quincy, Ill., almost twenty years ago, in a modest way, and their business grows constantly from year to year until it becomes one of the very largest concerns in the country manufacturing incubators and brooders exclusively, one can not believe but that they make the right kind of goods and treat their customers in accordance with the golden rule. We present herewith a view of their office



and one department of the factory, regretting that space will not permit the use of several other interesting views of their departments, all of which would give our readers a better understanding of the magnitude of this company's business. Probably no incubator in the world has a higher reputation than the Reliable. It has taken many highest awards at various positions, as for example, the Columbian at Chicago, Cotton State at Atlanta, Trans-Mississippi at Omaha, International at Brussels, Universal at Paris, where they not only took highest award but the grand prize. They have first premiums at State fairs and poultry shows almost without number and the Reliable is always a favorite wherever exhibited. The company is already planning great things for the Louisiana Purchase Exposition to be held in St. Louis in 1904.

One reason why the Reliable has always been a successful machine is that its makers are practical poultry people, having owned and operated extensive poultry yards for many years, even before engaging in the incubator business. Every improvement which has been put out on the Reliable has first been tested many times in the company's own establishment. The present poultry yards is an immense plant covering 15,500 square feet of floor space. They raised about 5,000 chickens annually and every bird shipped from the Reliable Poultry Farm is guaranteed in every way. Doubtless hundreds of our readers are still "on the fence" as to what incubator to buy. We can only say, send for the Reliable catalogue before making your selection. Address Reliable Incubator Company, Quincy, Ill., and mention this paper.

Immediate Improvement.

Pilot View, Ky., Oct. 9, 1901. Heller Chemical Co., Chicago, Ill. Gentlemen:—You will find enclosed amount sufficient to cover 1 quart of Strengthening Tonic and 1 bottle of pills. I am feeling better from your two weeks' treatment. Please forward treatment at once. E. ERVIN.

Farmers desiring a good lister, or other agricultural implement for stirring the soil will do well to notice the advertisement of St. Joseph Plow Company and write to them, addressed Dept. K, St. Joseph, Mo., for their catalogue of implements.

J. R. Ratekin & Son, of Shenandoah, Iowa, report large sales of their seed-corn. This firm has been growing and selling seed-corn for 18 years, and has acquired an excellent reputation for fair dealing. Notice their advertisement, and send for their book on corn growing.

DO YOU FEED SWINE?
For the most practical swine paper, giving up-to-date methods and market reports, send 10 cents in silver for four months trial subscription. Regular price 50 cents a year. Address
BLOODED STOCK,
Oxford, Pa.



Everybody

Who suffers from Bodily Aches and Pains, such as Rheumatism, Gout, Lumbago, Headache, Pleurisy, Sciatica, Sprains and Bruises

Should Use

St. Jacobs Oil

It Conquers Pain

Price, 25c and 50c.

SOLD BY ALL DEALERS IN MEDICINE.

POULTRY BREEDERS' DIRECTORY.

Black Langshans

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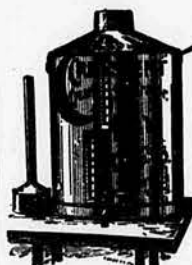
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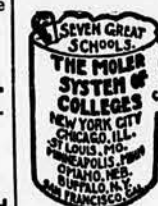
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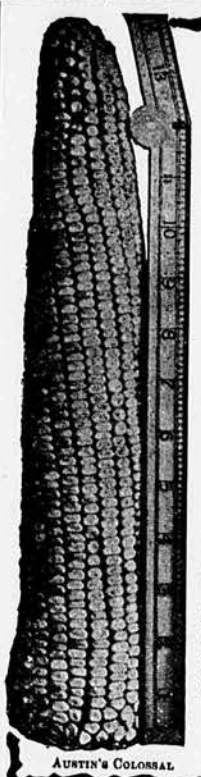
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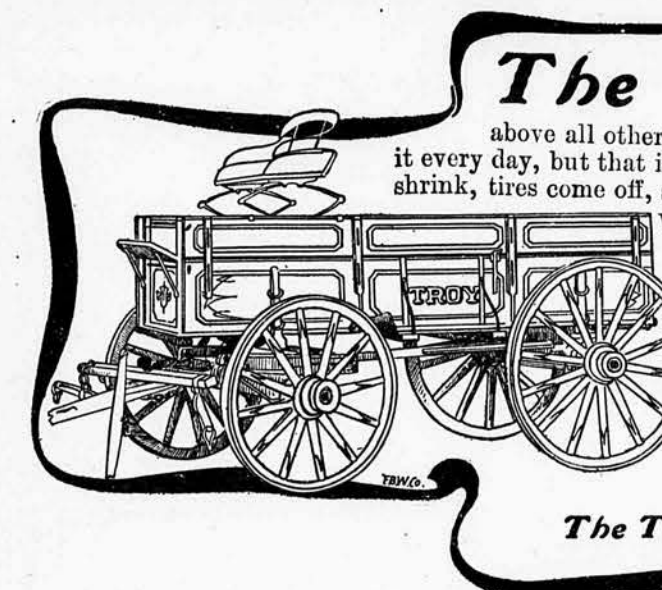
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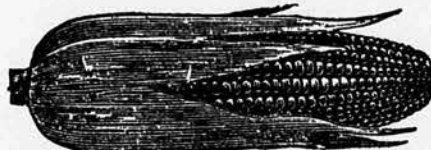
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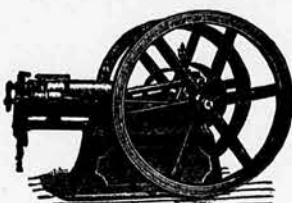
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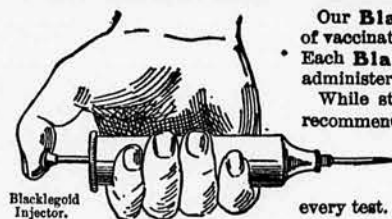
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Registered Stock, Duroc-Jerseys, contains breeders of the leading strains.

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100 head for this year's trade; all eligible to record.

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Has a few September and October pigs at private sale. Everything not sold May 15 will be held for fall sale.

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Stock for sale at all times.

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Write for prices on what you want in February, March, or April gilts open or bred to order. A few extra June and July pigs, \$10 each.

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Gilts of the lengthy, deep-bodied type, bred for March and April farrow, and a good lot of 4 to 6 months old pigs of both sexes.

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Registered Duroc-Jerseys

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S. L. WYANDOTTE CHICKENS. Eggs in season

POLAND-CHINAS.

Fifteen April and May

boars, 1 yearling boar

by Chief Perfection 2d. Good fall and spring gilts

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lusty fellows, 3 of them good enough to head any pedigree

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Prices low to early buyers.

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Breeder of

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HOPE, DICKINSON CO., KANS.,
Breeds Only the Best,
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Herd numbers 135, headed by ROYAL CROWN, 125838, a pure Cruickshank, assisted by Sharen Lavender 143002.
FOR SALE JUST NOW—16 BULLS of serviceable age, and 12 Bull Calves, Farm is 1 1/2 miles from town. Can ship on Mo. Pac. R. I., or Santa Fe. Foundation stock selected from three of the great herds of Ohio.

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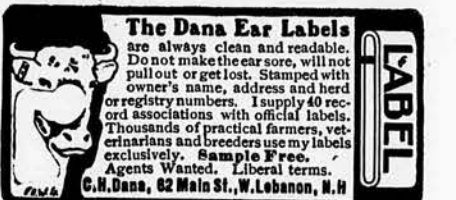
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...MOUND CITY, KANSAS, FRIDAY, APRIL 4, 1902...

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Missouri's Black Chief, Look Me Over, Chief Perfection 2d, and Knox All Wilkes blood predominating.

10 BOARS, 15 OPEN GILTS, 25 BRED SOWS AND GILTS.

A lot of shoats by Kansas Black Chief (see various pedigrees in Catalogue) averaged 304 pounds at 220 days old. So much for our early maturing type in the fattening pen. Write for Catalogues to MORSE & SONS, Mound City, Kans., and send bids in their care to the Auctioneers—Col. Jas. W. Sparks and Col. H. H. McGlothlin.

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GARRETT HURST, Breeder, ZYBA, SUMNER COUNTY, KANSAS. Young stock for sale of either sex. All registered.

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25 Mammoth, Warrior, and Spanish Jacks Now For Sale.
Quality and Breeding Unexcelled.
Inspection and Correspondence Invited.

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—Breeder of—

PERCHERON HORSES, AND POLAND-CHINA HOGS

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

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FOR SALE.
DIRECT 18839, by Bendago 11807, by Brilliant 1271, dam Fenelo 14118 by Fenelon 2682, by Brilliant 1271. Bendago's dam the famous prize-winner Julia 5976 by La Ferte 5144. Also 6 Young Stallions by Direct.
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The largest herd of Percheron horses in the west and the best bred herd in America. A choice collection of young stallions and mares always on hand. Prices consistent with quality. Address, or come and see at
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For Sale—25 Clydesdales, including 2 registered stallions of serviceable age, and 18 mares. Inspection and correspondence invited.



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Largest herd in the State. Imported, and American bred stallions and mares for sale at all times. Prices reasonable. Inspection invited.



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O. L. THISLER, Chapman, Dickinson Co., Kans.,
—IMPORTER AND BREEDER OF—
Percheron Horses and Shorthorn Cattle.

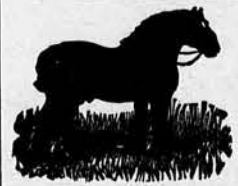
FOR SALE—Percheron Stallions and a few Mares, about 20 head of Shorthorn Females, and a few fine, young Bulls. Also several fine, large Jacks. Pedigrees and breeding of all stock guaranteed.



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In the United States, neither have we all ton horses. But we do make five importations each year. Our stables at Lincoln, Neb., and at South Omaha Union Stock Yards are full of first-class Percheron and Shire stallions. If you want a good one for what he is worth, it will pay you to see us. Our horses won sweepstakes in all draft and hackney classes at Nebraska State Fair. Address all correspondence to

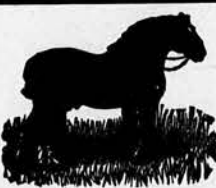
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SPECIAL NOTICE: Woods Bros., of Lincoln, Neb., have two cars of Short-horn and Hereford bulls and cows at a bargain.



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70 First Class Young Percheron Stallions

Now in our Shenandoah stables. Our last importation arrived October 1, 1901—mostly black, 3-year-olds, 30 imported stallions. An elegant string of 36 big two's and three's of my own breeding. Thirty years in the business. Come and see the horses.
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German Coach, Percheron, and Belgium Horses.

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Three Importations in 1901. 100 Stallions For Sale.

No other firm enjoys such buying facilities; the senior member being a resident of Germany is personally acquainted with the best breeders in France, Germany, and Belgium. We can save you money. Come and see us. We shall exhibit at the International Live Stock Exposition, Chicago, Dec. 1-7, 1901.



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Registered Mammoth, and Imported Spanish Jacks and Jennets;
Also Registered Stallions.



All stock guaranteed just as represented. Correspondence solicited.

SNYDER BROS., Winfield, Kans.,

Breeders of

POLAND-CHINA SWINE, SHIRE and PERCHERON HORSES, and POLLED DURHAM CATTLE.

Stallions of both popular Draft breeds for sale; also two jacks.

Attention is called to the Public Sale of Poland-Chinas on March 21, 1902, at Winfield, Kans., by Snyder Bros. and H. E. Lunt.



When We Talk We Tell the Truth and no one dare DISPUTE it.

We import nothing but HIGH-CLASS Stallions; no cheap or old stuff, no job lots or so-called bargains. We bring our stallions to this country early in the season, giving ample time to acclimate them. No concern in the United States has better facilities in the way of barns, stalls, hallways, etc., to reinstate their natural condition. We have a large number of coal black Percherons, 2, 3-, and 4-year-olds; also a number of the best Shire stallions in America, which we are offering at very close prices. Come and see us or write us at once.

Long Distance Phone—575. THE LINCOLN IMPORTING HORSE CO., 33 & Holdrege, Lincoln, Neb

OAKLAWN FARM.

The Greatest Importing and Breeding Establishment in the World.

Percherons and French Coaches.
500 Head on Hand.

Nearly 300 stallions purchased in France during the last twelve months, being more than double the number of Percherons bought by any other firm, and more high-class animals than by all others combined.

AT THE RECENT INTERNATIONAL LIVE STOCK EXPOSITION AT CHICAGO, the Oaklawn Percherons won every championship, first prize and gold medal award and every second prize in classes.

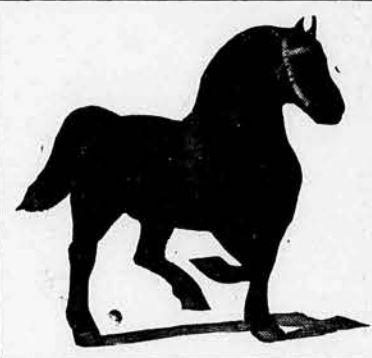
Notwithstanding the superior quality of our horses, it is a fact that our prices are lower than can be obtained elsewhere in America. Catalogue sent on application.

DUNHAM, FLETCHER & COLEMAN,
Wayne, Du Page County, Illinois,

America's Leading Horse Importers

We import not only far the greatest number of stallions from France, but far the best ones. We import more prize-winning stallions than all others combined at the three greatest shows of France, at Nogent-le-Rotrou, Nantes, and Mortagne. Our Percherons won every first prize including grand championship over all draft breeds at the great Pan-American Exposition. Our success at the Iowa State Fair and Ohio Exposition was equally as good. Our French Coach Stallions did not sustain one defeat at any one of these great shows. The best horses and just and honorable treatment of customers have given us the lead.

McLAUGHLIN BROS., COLUMBUS, OHIO.
BRANCHES: EMMETSBURG, IOWA; LAWRENCE, KANS.



THE BURGESS & GRAY IMPORTING CO.

ROBERT BURGESS & SON, Wenona, Ill. M. C. GRAY, Beatrice, Neb.

Are again prepared to save you from \$250 to \$500 on each horse you buy. We saved our Western customers over \$10,000 last winter, and from these same customers not a stallion has been returned and but one letter of complaint. We are not in the "clown" or "mascot" business, nor are we able to prevaricate in many languages; but we do keep some GOOD stallions, whose merits speak loudly for themselves, and THE BUYER TO THE JUDGE. See our American-bred and prize-winning Percherons and Shires before purchasing elsewhere; they are the best and most satisfactory at any price! But how does \$800 for a 3-year-old, that will mature at 2,000 pounds, strike you? You can get it at Beatrice. Don't throw your money into the sewer, but come where you can get a GOOD horse and a SQUARE DEAL at a MODERATE price! Call on, or address,

M. C. GRAY, Beatrice, Neb.

DRAFT STALLIONS

Percherons, Shires, and Clydes.



We have a selection that are sure to suit you. As grand a lot of young stallions, of serviceable age as can be found in the country. We do not claim to have every color or kind of a stallion, you or anybody may want, but what we claim you will find true if you pay us a visit. All of our selections are made by a member of our firm, who has been at this line of work the past decade and has absolutely a first choice from the leading breeders of Europe. Our last importation, consisting of the three great breeds, and 62 head in numbers were selected in the early part of February, before any of the shows and to-day are ready for sale. Write us, or come and see us, if you or your community are in need of the best to be found.

KEISER BROS., Keota, Keokuk County, Iowa.

REDUCTION OF WEAVERGRACE HEREFORDS

AT DEXTER PARK, CHICAGO, TUESDAY AND WEDNESDAY, MARCH 25 AND 26.



AN OFFERING UNPRECEDENTED IN CHARACTER AND ANCESTRY.

The death of my bulls Improver, Checkmate and Thickflesh compels a material reduction in my herd and I will therefore part with, to the public, seventy-five head of cattle which have hitherto been held wholly beyond price, as they constitute the material on which I have been relying to enlarge and improve the Weavergrace herd. I am reserving only the older matrons and the youngest calves as the basis on which (with the aid of Corrector and sons of Corrector and Improver) to build up a new herd. This offering involves the sacrifice of the best female produce of my herd for the past five years.

Thirty-one cows and heifers by Corrector, proved by sale and show ring records, the greatest Hereford sire. Eight daughters of Improver, whose progeny has demonstrated him the most conspicuous success on record in selecting a great bull to follow a great bull. Also cows and heifers by the \$5,000 Thicket, Sir Comewell, Heslod 2d, Earl of Shadeland 22d, Kansas Lad, Eureka, Shadeland Dean and the great English sire, Gold Box. The cream of my breeding at Weavergrace during half a decade and eight of the choicest English-bred cows from the Nave and Armour importations are included in this reduction sale.

Show cattle of international fame will be sold in Lady Charming, Pure Gold, Benison, Benefice, Lady Brenda, Lustre, Sunflower 2d, Imp. Rafia, and Princess Pearl. The females

Imp. New Year's Gift, Florimel, Woodmaid, Nanette, Lady Coral, Gladys, Georgiana, Galatea, Clarissima, Heartsease, and Princess Pearl. The females have calves at foot or are in calf by Corrector or Improver. History will be vainly searched for such a sacrifice of the treasures of a breeder's herd as is represented by this consignment.

In order that all tastes and pocketbooks may be suited at the first Chicago offering under the auspices of the National Hereford Exchange I have accepted contributions from the following named breeders: H. D. Smith, Compton, Que.; John I. Body, Woodland, Ill.; Geo. P. Henry, Goodenow, Ill.; E. Buckles, Lake Fork, Ill.; James Paul, Patch Grove, Wis.; M. H. Longhead, West Liberty, Mo.; Thos. E. McCarthy, Princeville, Ill.; Gilbert Mason, Wheeler, Ill.; H. F. Schnelker, New Haven, Ind.; Benjamin Edwards, Flisk, Wis.; Norton & Campbell, Maple Grove, Mich.; Robt. Turnbull, La-prairie Center, Ill.; Henry Ley, Clay City, Ind.; James McWilliams & Sons, Galveston, Ind.; E. C. Woolsey, Gibson, Ill.; C. A. Burghoefer, Lasalle, Ill.

The Catalogue will be sent to all those who apply to **T. F. B. SOTHAM, Manager National Hereford Exchange, CHILLICOTHE, MISSOURI.**



Angora Goats

... AT ...

Public Sale.

ON MONDAY, MARCH 31, 1902,
AT KANSAS CITY, MO.,

I will sell at PUBLIC AUCTION, 1,500 head of High-class and recorded Does in Sheep Division No. 2, Kansas City Stock Yards. These does are exceptionally fine and due to kid the first half of May. They are all carrying twelve months' fleece. Will also sell 500 wethers for brush cleaning purposes. Parties wishing to purchase Angora Goats, will do well to attend this sale. Sale begins promptly at 10 a. m.

W. T. McINTIRE, Agent,
221 LIVE STOCK EXCHANGE,
KANSAS CITY, MO.

Right Price. Right Price is Made

Farms should be sold. They must be sold right. Also advertised right. A small profit. To make right prices—buy right, sell right, don't waste time and money. Our prices are net. See or address
J. F. SCHUMP, Box 28, Garden Plain, Kans

14 JACKS FOR SALE. AGES 1 TO 10 YEARS OLD



Breeding Jacks 14 to 15 1-2 hands high; standard measure.
J. M. OLIVE,
HUME, BATES CO., MO.

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THE WELLINGTON OIL & GAS CO.,
W. W. Degge, Manager 216 Jackson Bldg.,
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SHARON VALLEY STOCK FARM... Belgian, French Draft, and Percherons

The Finest Selection of Draft Horses in America chosen by one who is a judge of a horse. I have no representative in Europe buying the culls rejected by the government, but buy them myself from the breeders' farms, in first hands—no rejects. This is why my horses give such universal satisfaction. I am not after number, but quality. My horses must be a credit and honor to the American breeder, and not a disgrace, as some are. My horses took more premiums to the number in 1901 than any other importer—winning first and second prizes in class, and champion over all, wherever shown. I have just established a new branch barn at Emporia, Kans. Trust all interested in good horses will call and see them.

COL. G. W. CRAWFORD, Proprietor, EMPORIA, KANS.

GLENDALE SHORTHORNS.

Imp. Prince Lovely 155860 and Scotland's Charm 127264
— IN SERVICE —

Young Bulls, Cows, and Heifers for sale at all times.

O. F. WOLF & SON, Ottawa, Kans.

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MAINS' HERD OF POLAND-CHINAS.

Pigs by Anderson's Perfect, Harris' Black U. S. (the champion sweepstakes boar at the Iowa State Fair of 1900), Kemp's Perfection (the highest priced pig by Chief Perfection 3d sold last year). Stock of all ages for sale, including three yearling boars.

JAMES MAINS Oskaloosa, Kansas.

20 Shorthorn Bulls For Sale.

Three of them, 3 years old, balance 10 to 20 months, in good, serviceable condition, by Cruik-shank and Scotch-topped sires. This is the best and evenest lot of bulls we ever raised. Prices moderate.

A. B. & F. A. HEATH, Republican, Neb.

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