



The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 2—C. C. Keyt, Short-horn cattle and Poland-Chinas, Verdon, Neb.
OCTOBER 3—W. H. Wren, Poland-China swine, Marion, Kas.

FACTS ON FEEDING.

A table compiled by G. E. Patrick, Agricultural college, Ames, Ia., showing the average amounts of water, organic matter and ash in the more common American feed-stuffs; also the composition of the digestible portion of the organic matter.

Nearly all the figures for the composition of the digestible portion are the result of Prof. Henry's calculations, based upon the average composition of American feed-stuffs (tables of Jenkins and Winton) and the most reliable digestion coefficients available. Special Report, United States Department of Agriculture, 1892.

B.—Prof. Woll's Standards for Milch Cows, based upon the practice of successful American Dairymen.

Table with 8 columns: (1) Average for 28 American herds (1892), (2) Average for 128 American herds (1898), and six columns of numerical values.

Standard (2) represents the average winter dairy rations fed by 128 successful dairymen, scattered over twenty-four States of the Union, and Canada. (Prof. Woll, Wisconsin Experiment Station Bulletin No. 38, January, 1894.)

TO COMPUTE A RATION.

First make a "working table," showing the amounts of organic matter and of digestible nutrients in one pound of each of the feeds you intend using. Do this by dividing the figures for organic matter and digestible nutrients in Table I. by 100—by moving the decimal point two places to the left in each case. Suppose the ration is to be for milch cows and you wish to feed corn fodder, clover hay, mangels, corn meal and oats, and will supplement if necessary with wheat bran. The working table will be as follows:

IN ONE POUND OF EACH FEED:

Table with columns: Total organic matter, Protein, Carbohydrates, Fat, and Nutritive ratio. Rows include Corn fodder, Clover hay, Mangels, Corn meal, Oats, and Wheat bran.

Then, by use of this working table, compute a trial ration. Try, say:

Table with columns: Total organic matter, Protein, Carbohydrates, Fat, Total digestible nutrients, and Nutritive ratio. Rows show trial rations for Corn fodder, Mangels, Oats, and wheat bran.

Both the second and third trial rations conform quite closely to Woll's standards, based upon American practice. (See Feeding Standards—B—other column.) The nutritive ratio could, of course, be made narrower, and the ration brought nearer to the German standard, if desired, by using linseed meal in place of part or all of the wheat bran.

Study Your Horse's Face.

Roman nose in a horse, like a corresponding aquiline shape in a man, generally indicates strong individuality, often accompanied by great intelligence.

A straight facial line is quite often found with a high degree of intelligence, but a dish-faced horse is rarely anything but a nonentity in character or a fool. We have seen few exceptions to this rule, but they only prove it.

A fine muzzle usually denotes a high nervous organization, while a coarse and large muzzle with small and non-expansive nostrils and pendulous lower lip means stupidity.

A sensitive and trumpet-shaped nostril means courage and intelligence, even when, as it does sometimes, it also means heaves.

A broad and full forehead and length from eye to ear are good indications of intelligence, but the eye and ear are the speaking features of a horse's face.—Breeder and Sportsman.

Irregular Feeding.

"Promptness in the performance of every duty on the farm is the first requisite for success," says Rural Life. "This means close application to the study of the business and to the labor necessary to carry out every detail in the growing of crops or in the care of the domestic animals. Live stock especially needs the best of attention.

"Irregular feeding is the source of many disorders among live stock. Regularity in the time of feeding is advisable, because stock that is fed at stated periods each day will soon learn to look for their meals at that hour, and in the intervals will contentedly go out and forage for the rest of their living. The exercise they thus obtain is conducive to health and production. But if fed at irregular hours, now early and now late, one day twice a day, and another day three or four times, they will be sure to loaf about the feed troughs anxious to see what is coming next. Regularity as to quantity is as important as regularity in time. To

have a feast one day and a famine the next, is not good for man or beast. The digestive organs cannot endure it a great while, and sooner or later there will be a break-down."

A Grand Berkshire for Kansas.

Kansas is determined to be in the front with her hogs. Within the last few years great strides forward have been made. The latest and perhaps the greatest addition to her swine is an importation which has just arrived at Wm. B. Sutton & Sons' Rutger farm, Russell, Kas. The new arrival is Earl of Wantage 33123, bred by W. Puniok, Littleworth, Berkshire, England, and purchased by Metcalf Bros., of East Elma, N. Y., for Rutger farm. He was sired by Lord Curzon 23161, and is a full brother to Lord Windsor 30461, one year younger. Lord Windsor was first prize winner in his class at all the great English shows in 1893. He was then imported to America and won first prize in his class at the Columbian Exposition, at Chicago. Lord Curzon and his three sons, Windsor Supreme, Lord Windsor and Earl of Wantage are, in the judgment of English experts, the greatest boars England has produced. The family has produced more prize-winners than any other. Earl of Wantage is of the Lord Windsor type, very smooth and even, with great quality. He was farrowed March 17, 1893, and now weighs about 600 pounds. His head is small, short, wide and deeply dished, ears are small, thin and erect. His neck is short and thick. His back is broad, slightly arched, with even lines. He particularly excels in the hams. His legs are very short, straight, strong and set wide apart. His feet are perfect. His coat is thick, long, black and very soft. He is active and "has some style about him." You can read his pedigree from the end of his nose to the tip of his tail and it is as faultless as his certificates.

Actual business practice through United States mail at Wichita Commercial College, Y. M. C. A. building.

The nutritive ratio of a feed or ration is found by multiplying the digestible fat by 2.2, adding the product to the digestible carbohydrates, and dividing the sum by the digestible protein. That is, by making a ratio having for its first term the digestible protein, and for its second term the digestible carbohydrates plus 2.2 times the digestible fat. To illustrate, take the grain of Indian corn average of all varieties. Digestible fat 4.2 x 2.2 = 9.24; plus digestible carbohydrates 62.7 = 71.94; the digestible protein being 7.1, the nutritive ratio is 7.1:71.9, which, reduced to its simplest form by dividing both figures by the first term of the ratio, becomes 1:10.1. The reason for multiplying the digestible fat by 2.2 is that one pound of fat will produce as much heat as two and two-tenths pounds of carbohydrates (i. e., starch, sugar, gums and fibre).

TABLE II—FEEDING STANDARDS.

PER DAY PER 1,000 POUNDS LIVE WEIGHT.

A.—Woll's Standards, commonly known as the German Standards.

Table with columns: Av. weight per head, Total organic matter, Digestible organic matters (Protein, Carbohydrates, Fat), Total digestible organic matter, and Nutritive ratio. Rows include growing cattle and growing fat pigs.

\*Rations corresponding to these two standards will not usually be found as profitable in Iowa, or elsewhere in the Western corn-belt, as those containing less protein and more carbohydrates and fats, and having therefore a somewhat wider nutritive ratio. The following standards for milch cows are better adapted to existing Iowa conditions:















upon the debtor, requiring of him so much more property to satisfy the debt when due than was purchased with the money for which the debt was contracted. It is this which is rapidly arraying every producer, whether a laborer on his own account or on account of some employing capitalist, in one camp, against those who have planned for a "reduction in prices" and are exulting in the expectation of forcing "a greatly reduced scale of wages."

**"THE CHANCE OF A LIFETIME."**

Under the above catching heading, has recently been sent out a circular, the first sentence of which reads: "Farmers, hold your corn." The circular is signed "A Farmer," but bears no name and no date. Whether issued in the interest of some clique of speculators now owning large amounts of corn or for the purpose of conferring a benefit on the corn-raisers is not apparent. The argument presented in support of the admonition to hold corn is far from accurate in its statements. It is as follows:

There never was such an opportunity for the farmer to dictate the price of corn as at the present in this country. The crop of 1892 and 1893 was over 600,000,000 bushels short and the country is all oversold. The farmer, as a rule, not keeping enough to last through till a new crop.

The country elevators are all bare of corn, having shipped it all into the leading markets. The stock of corn in St. Louis elevators is 70,000 bushels, against last year's stock of 700,000 bushels. Cincinnati has none in store. Kansas City 10,000 bushels. All the leading corn markets are short of corn. The only market with any corn in store is Chicago, and that is less than last year, and two-thirds of that is owned or held by one firm.

There has been 15,000,000 bushels of corn more exported during the first four months of this year than during the same length of time last year.

The distilleries are running at full blast and consuming more corn this year than ever before; the crop of oats was short and corn has had to take their place.

Farmers, do not sell a bushel of your surplus until corn is worth 50 cents a bushel in Chicago. It will all be wanted at that price before a new crop comes, which does not get into market for four or five months yet. "Farmers, hold your corn."

The facts as to amounts of corn in store June 30, at the points referred to, are, that at St. Louis the stock was 76,000 bushels, while same date in 1893, 71,000 bushels, instead of 700,000, as the circular states; Cincinnati had none either this year or last; Kansas City is correctly stated for this year and had only 13,000 last year.

The visible supply of corn in the United States July 1, for ten years, has been 6,441,000 bushels in 1894, 8,075,000 in 1893, 7,844,000 in 1892, 3,850,000 in 1891, 14,822,000 in 1890, 9,489,000 in 1889, 11,315,000 in 1888, 10,180,000 in 1887, 9,132,000 in 1886, and 5,291,000 in 1885.

From these figures it will be seen that the visible supply is not large yet is nearly double that of 1891. Each farmer can form his own conclusion from these facts and need not be led away by circulars of any kind.

**GREAT EXCESS OF EXPORTS.**

During the month of June, 1894, the total exports of merchandise from the United States were valued at \$57,471,945, as compared with \$65,446,569 during the corresponding month of 1893, while the imports during June, 1894, were valued at \$51,624,904, as compared with \$69,694,544 in June, 1893. During the fiscal year ending June 30, 1894, the total exports were valued at \$82,111,280, against \$847,665,194 during the twelve months of the previous fiscal year, while the imports during the fiscal year ending June 30, 1894, were valued at \$654,835,875, against \$866,400,922 during the corresponding period of the previous year, leaving a balance of trade in favor of the United States during the fiscal year just closed of \$237,275,407, whereas during the previous fiscal year a balance of \$18,735,728 appeared against the United States.

During the fiscal year 1894 \$77,038,729 worth of gold was exported, as compared with \$108,680,844 worth during the previous fiscal year, while the imports of gold during the first period were valued at \$72,453,066, as compared with \$21,174,381 worth imported during the fiscal year ending June 30, 1893. So it will be seen that during the fiscal year 1894 the excess of exports of gold

over imports of gold amounted to only \$4,585,633, while during the fiscal year ending June 30, 1893, the exports of gold exceeded the imports by \$87,506,463.

The exports of silver during the fiscal year 1894 were valued at \$50,541,043, and the imports at \$13,282,605, or an excess of exports over imports of \$37,258,438, while during the fiscal year ending June 30, 1893, the exports of silver were valued at \$40,737,319, and the imports at \$23,193,252, or an excess of exports over imports of \$17,544,067.

We are probably discharging considerable amounts of our foreign interest-bearing indebtedness. How much debt we are paying it is impossible to determine, for this depends not only upon our excess of exports over imports, including not only merchandise and gold and silver, but also upon the amount of our foreign interest charge and the expenses of wealthy Americans who spend much of their money in Europe.

**SUBSTANTIAL MEN FOR PUBLIC PLACES.**

The interest sometimes manifested by certain persons in political matters is so great as to bewilder the substantial citizens and to convey the impression of wondrous public spirit. If the citizen will remember back over the years of the past he will observe that the enthusiasts of a not very long ago, the men who assumed to know all about what was good for the country and to have the most perfectly defined convictions as to the necessity of electing Bill and Tom and Joe to office have disappeared, while the said Bill and Tom and Joe have not shown that they ever had any considerable interest in anything save their own advancement, certainly none in the substantial progress of the country.

It is time to make an end of this reign of political promoters and to select for positions of public trust men who are firmly identified with their communities. Men who own the soil, men who may prosper under good government and must suffer under abuse of power are the safest.

The KANSAS FARMER is not going into politics, but it desires to impress upon its readers the importance of the selection of the right men at the primaries of all the parties. Then there will be an end of the reign of promoters of doubtful, not to say thieving schemes at the public expense—the expense of the tax-payers. To do this, the substantial farmers and other citizens must take time to inform themselves about who is running for nomination, must attend to voting at the primaries and perhaps do some talking beforehand in favor of the men who ought to be put into public positions.

The conviction is continually gaining ground that much of the wrong in the present situation is the result of unwise legislation. It is even charged that much legislation has been procured and much prevented by corruption. The voters have it in their power to correct this by sending to the Legislature such well-known, capable and honest men as are to be found in abundance in every legislative district. See to it that such a man is nominated by your party in your district. You owe it to yourselves, to your children and to your State.

The reports from the sugar works at Medicine Lodge state that the cane crop is the finest ever produced, the acreage is large and the supply for the factory will be abundant. The mill is in excellent condition, and the managers and hands have now had sufficient experience to insure efficient operation of the plant, and it is expected that as good results as are possible will be obtained. The English owners of the property consider this the best season, and upon its results will rest the future of the industry. If they shall warrant the belief that the sugar industry may be profitable with such measure of protection as the present Congress shall leave to it or without protection they are prepared to invest as much money as is needed for its extension.

**LIME AND FERTILIZERS.**

The subject of artificial fertilization of soil is one which has attracted little attention in Kansas from the fact that the native soils of this State contain, in excellent proportions, the native elements of fertility. These have been wasted far less by leaching than in the States of excessive rainfall. While in the older portions of the State the value of manure is beginning to be appreciated, there has as yet been but little attention given to mineral fertilizers. Some inquiries have, however, come to this office on the subject, and we are able this week to present an article on the subject from Prof. W. F. Massey, whose experience has been an extended one and has been extended to the reclamation of lands which produced nothing. He says:

"The subject of nitrification in soils well stored with organic matter is one of absorbing interest to all cultivators of the soil. We must distinguish between nitrification in soils well filled with humus and the fixation of nitrates by means of the symbiotic organisms in certain nodules on the roots of leguminous plants. Only one form is engaged in this work, while the ordinary nitrification in a fertile soil is carried on by three distinct organisms. The first carries the process only to the formation of ammonia. The second form changes the ammonia into nitrite and the third forms nitrates, the only form apparently in which nitrogen is used by the roots of green plants. Now it has been found that in a soil abounding in humus or vegetable mold, nitrification is always most active in the presence of a plentiful supply of carbonate of lime, and this has recently been demonstrated to be due to the fact that these organisms can take their carbon from the carbonate of lime. The greatest value from this nitrification comes in when there is abundant potash at hand, and the nitrogen is fixed as a nitrate of potash. This comes in as a constant accompaniment of the nitrogen fixing by the root organisms of leguminosae. And herein consists the great value of these plants, such as clover and cow peas, the capturing, as it were, without cost, the nitrogen of the air, instead of buying it at high rates in fertilizers. But it must be remembered that clover and peas are greedy consumers of potash and use more lime than most other plants. In an experiment made eight or ten years ago to test the value of different forms of lime on clover, we applied to adjoining fields water-slacked lime and plaster or sulphate of lime. The same money value of each was used, but far the larger quantity per acre of the slacked lime. The field where the lime was used had had a crop of peas plowed under two years before; the other field had been an old sod on which a small grain crop had been sown to seed the clover with. Both fields gave good results, but that one where the lime was applied was remarkable. It was a steep, rocky, upland field of only moderate fertility, but I had a ranker growth of clover on that rocky hill than on a fertile bottom near by. Lime is really of little use as plant food direct. All of the cultivable soils have in them all the lime essential for plants; but by the liberal use of lime we are not only enabled to unlock plant food existing in an insoluble state in the soil, but we are enabled to get better results from the use of the cheaper mineral forms of fertilizers than we could get with complete and high-priced fertilizers without the help of the lime. Thus by using liberally dissolved South Carolina rock phosphate and some form of potash we can get a good growth of clover. Lime added to the surface on the young clover will rapidly promote the nitrogen fixing and the growth of the clover, too, and when the clover sod is broken the presence of the lime carbonate is an active assistant in the nitrifying process in decaying organic matter. We do not approve the plowing under of a crop of peas or clover ordinarily, as the crop on a fairly fertile soil is worth more for feed than for manure. But if on a soil barren in vegetable matter we have gotten, by means of fertilizers, a good growth of clover or peas, it may pay to plow un-

der the whole growth in such a soil. If this is done a dressing of lime at rate of not less than thirty bushels per acre should at once be added, not only to actively promote nitrification, but to prevent injurious acetous fermentation. There will be little danger from this source if the crop is not plowed under until mature. Mr. Ruffin, of Virginia, used to limit the region where lime would pay to the section of his State where the loblolly pine was the 'old field' growth, but I found it profitable up at the foot of the Blue Ridge, where no loblolly grows. The use of lime in connection with acid phosphate and kainit and the growing of clover and other legumes by their help is to be the farm practice of the future for all who wish to do the best for soil and crops at the same time."

A man in Hackensack, N. J., has written to Governor Lewelling, warning him that a severe storm entailing much loss of property, etc., will pass over Kansas July 22-25. He particularizes as to the character of the storm in different parts of the State, and claims that he sent a similar prediction to Governor McKinley of a storm which recently passed over Ohio. He thinks he has a new and exact system of meteorology by which may be foretold with accuracy the coming of storms. He should remember, however, that he is not the first and is not likely to be the last to make such a claim.

Some of the statisticians now place the present year's wheat crop in the United States at 444,000,000 bushels. The following from the Cincinnati *Price Current*, is probably a fair estimate of the stocks available for the present crop year:

	Bushels.
Prospective harvest, 1894.....	444,000,000
Visible supply, July 1.....	55,000,000
Farm reserve, July 1.....	50,000,000
Interior elevator stocks in transit and Pacific coast stocks.....	*27,000,000
Wheat in the form of flour.....	*9,000,000
Total stocks.....	585,000,000
Unavailable stocks (farm reserve).....	50,000,000
Available stocks July 1.....	535,000,000

\*Estimate of the Daily Trade Bulletin.

The interest of the tiller of the soil in a just and effectual settlement of the labor troubles is possibly less immediate but no less important than that of the inhabitants of cities subject to the immediate effects of violence. Already there are wandering bands of unemployed as well as the desultory tramps. These subsist from the contributions of the people. While these are freely given and while they still retain the hope of some time regaining a respectable standing in society, there will be little or no trouble. But these conditions are both wearing away rapidly. Should the interruption of industry continue until the tramp and the wandering "industrial" become brigands, the exposed situation of the farmer will make him their easiest prey. It cannot be permitted that the intelligence, philanthropy and patriotism of this age allow a condition of barbarism to succeed. Radical steps must be taken in advance and thus avert retrogression. No people can stand still.

Representative Lane, of Illinois, has secured a favorable report from the Judiciary committee upon his bill which provides against gold contracts and declares that contracts for the payment of gold shall be construed as for payment in any money that shall be legal tender at the time the debt becomes due. Mr. Broderick, of Kansas, was the only Republican member of the committee who voted with the majority. Mr. Lane considers that society has a right to have a staple money to use in business, and that it is unjust to hold borrowers responsible for the fluctuation of currency, because if gold goes to a premium the debtor is compelled to pay much more than the amount of the indebtedness. He also holds that individuals should not be allowed to discredit the money of the country, and cites the laws of England which make it a felony to discredit the money of the realm, and those of France, under which a contract discriminating between notes of the bank of France and coin had been declared to be illegal.

**Horticulture.**

**SWEET POTATO FLOWERS.**

EDITOR KANSAS FARMER:—I enclose a sweet potato flower. Probably few of your readers have ever seen one, for the sweet potato blooms rarely. This season there are many blossoms on the vines of Mr. F. Blades, of Sterling, and it is quite possible that these flowers may produce a few fertile seeds. There is no evidence that there has ever been an attempt to propagate the sweet potato by seed, although the great improvement which has been made in the Irish potato is well known to have been made by growing seedlings from potato seeds.

The sweet potato is a tropical plant, and there are many tropical plants which produce no seeds, or produce seeds very rarely. The pineapple, the banana, the sugar cane and the sweet potato have been propagated by the buds of the stem or of the roots, and not by seed, and it is very seldom that a new variety originates in that way, but all of these plants probably produce seeds occasionally.

Although sugar cane has been grown extensively in tropical countries for many centuries, yet it has been believed until recently that it never produced seeds. In Louisiana sugar cane very rarely flowers, and in no country were seeds known to be produced, but it has lately been found that sugar cane does, sometimes, produce seeds which are too small to be seen without a magnifier, and many thousands of seedlings have been grown from the seeds. It has been found that these seedling canes differ surprisingly from canes of known varieties, and from each other, some being no larger than a lead pencil, some being of extraordinary size, some ripening early, and some much later. Great hopes are now based upon the development of new and superior varieties of sugar cane by propagation from sugar cane seeds, for this makes it possible to produce new varieties.

These facts make it appear possible that new varieties of the sweet potato may be also produced by carefully looking for seeds whenever the sweet potato blossoms, and by growing seedlings.

About 1850 Mr. C. E. Goodrich undertook the improvement of the Irish potato by planting the seeds, which are numerous produced in the "potato balls." He thus produced many thousands of seedlings. Many of these were very different from potato plants of any known varieties. By far the larger number were inferior. A few were quite superior, and from these originated varieties which were decidedly superior to those which had been previously grown. The old varieties were quickly displaced, and all, or nearly all, of our best present varieties were due to the seedlings produced by Mr. Goodrich. It has been said that the greatest event in modern potato culture was the introduction of the Early Rose variety, and that was a seedling from one of Mr. Goodrich's varieties, and this is true of all of our best varieties.

These facts make it seem possible that new varieties of the sweet potato may be also produced by carefully looking for seeds on the rare occasions when the sweet potato produces blossoms.

As the sweet potato is a tropical plant which is grown far north of its original home, by special culture, it seems that it would be desirable that harder varieties, as hardy, perhaps, as the Irish potato, should be originated from seedlings. Varieties may be found which mature earlier, which have better keeping qualities, and which do not require hot-bed culture, or which are superior in some other respect.

It appears from census returns that the sweet potato is grown to some extent in every State in the Union. If it were possible to produce seedlings, varieties suited to the special conditions of every section of the country would be quickly developed, but new varieties are very rarely produced from the buds of the tuber or of the stem of any plant.

As an illustration, there is a part of

Florida in which the peach does not thrive, for the reason that the peach is a sub-tropical, not a tropical fruit. The Peen-to variety, brought from China, succeeded best in the lower part of Florida, but failed above the frost line. But it was not long cultivated in Florida before new varieties of the Peen-to type were developed from seedlings of the Peen-to variety, and these new varieties succeed far north of the frost line. If, however, the Peen-to variety had been propagated by buds only, as the sweet potato is propagated, new varieties suitable to the north could not have been produced.

It is said that the sweet potato grown in the South contains more sugar, and that the sweet potato grown in the North contains more starch. The Southern sweet potato being "soggy" when cooked, while the Northern sweet potato is "mealy" when cooked, and it is said Southern people value the sweet potato according to its sweetness, while Northern people esteem it more for its "mealiness," and so the Northern people and the Southern people think their own sweet potatoes are the best. This seems to show that change of latitude changes the plant and also changes tastes.

The great sweet potato growing States are North Carolina, Georgia, Texas, Alabama, Mississippi, New Jersey, South Carolina, Tennessee and Louisiana. The development of harder and earlier varieties would quickly carry the production northward, and would mark an advance in sweet potato growing as the development of the Early Rose variety marked an advance in Irish potato growing. What C. E. Goodrich accomplished by growing Irish potato seedlings may possibly be accomplished by growing sweet potato seedlings.

It seems to be a general rule that varieties of plants which originate in and are developed in the country where they grow succeed better than varieties which are imported from countries where the conditions of soil and climate are different. It is seldom that a foreign variety has the highest excellence. American fruits have won their reputation mainly from American varieties, and in attempting to improve foreign varieties of plants, as, for instance, sorghum or the sweet potato, the first effort should be to develop home varieties, thus obtaining varieties better suited to the conditions which prevail here. D.

[The foregoing paper from the pen of Mr. A. A. Denton, of Sterling, is most valuable and interesting. The sweet potato flowers sent have much the appearance of morning-glories, except that the sweet potato flowers are smaller. The horticultural world will not probably be disappointed in its expectations that Mr. Denton, who is an expert in the propagation of new and in producing improvements in old varieties of plants, will make the most of the present rare opportunity to produce sweet potatoes from seed should these flowers, as appears probable, develop seed.—EDITOR.]

**SPECIAL FOR JULY.**—For new subscribers, both the KANSAS FARMER and the Topeka Weekly Capital, to January 1, 1895, for 50 cents, club-rates to keep half the money.

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**Keeping Early Potatoes.**

EDITOR KANSAS FARMER:—Will you kindly tell me through the FARMER how to prevent early potatoes (which must now be dug and stored) from wilting, growing and rotting, in short, how to preserve in bin or hole?

Highland, Kas. H. S. HOGUE.  
This inquiry was referred to Prof. S. C. Mason, at the Agricultural college, who answers as follows:

"Replying to the above, I would say that an outdoor cave or cellar is the best place to keep early potatoes that I know of. If this is built in a northern slope or hill-side, all the better. The roof should be well supported, as the earth covering should be deep and sufficiently steep to effectually turn off water. Front wall should be either

very thick or double. Double doors with an air space of a foot between are best. Slight ventilation should be given by means of a tile flue through the roof and a small gate in the doors. If the potatoes are pitted in the open ground the piles should not be made too large. Ample ventilation must be provided, a sufficient thickness of earth covered over them to keep as cool as possible, and surface water kept away from the pit."

**Growing Celery.**

Since it has been found out that the peculiar muck soil of certain swamp lands is especially adapted to the cultivation of celery, an increased acreage of such land is devoted every year to raising that vegetable for market, and in some places, especially in Michigan, its cultivation has become a very large industry. When this plant was first introduced, and raised only here and there, few insects attacked it; but many of our native insects have acquired a liking for it, so that the species which attack celery have rapidly increased in number and in the severity of their attacks. Bulletin 102 of the Agricultural Experiment Station of Michigan, which is devoted to these insects, will therefore be especially welcome to all commercial growers, as well as the owners of private gardens. A very complete history of the various insects which have been found to injure celery, together with the most available methods of preventing their ravages, are here set forth in about thirty pages of carefully illustrated text.—Garden and Forest.

**Drying Tomatoes.**

Italy is the native home of tomatoes, where they were called Eve or love apple. They were brought from that country to this by one of their men being a prisoner. He had the seed in his pocket and planted them. In Italy an extensive business is carried on in drying tomatoes to use in those portions of the year when fresh fruit cannot be obtained. According to the Italian Rural Record tomatoes are grown, for the most part, between rows of grape vines. Sometimes the tomatoes are trained on the lower bars of the trellis to which the vines were attached. The tomatoes are allowed to remain in the bunches until they are quite ripe, then they are picked and pressed in bags made of coarse cloth, which allows its pulp to pass through, but retains the seeds and skins. The pulp is then thinly spread out on a cloth, boards or shallow dishes, and exposed to the sun to dry. When it becomes quite dry it is broken up fine or ground and put into boxes or bags and sent to market. A large part of it is used for making soups, but a considerable portion is employed as we do tomatoes when preserved in tins or other cans. It is soaked for a few hours in warm water, then cooked in the ordinary manner.

There is a great prejudice against canned tomatoes, many being unwholesome. The acid juice which they contain unites with the solder of the tin cans and forms a disagreeable compound. Heat the tomatoes in a hot oven to kill the germ of insects before putting in bags.—Florida Agriculturist.

Concerning the remedial value of buttermilk, the Medical Advisor says that it is of so much worth that it has gained a distinct place in materia medica, and is largely prescribed by the best physicians for chest and lung troubles. An excessive buttermilk diet has seemed to bring about a cure for Bright's disease. A proper and constant use of it will greatly reduce and sometimes cure the craving for alcoholic liquors with which many persons are afflicted. The craving may be satisfied and the system benefited and strengthened instead of weakened. Buttermilk alone will often remedy acidity of the stomach. The lactic acid needed in many cases is supplied by it much more than by any other drink or food. It is said to alleviate the oppression about the heart that so many old people suffer from, and it should be constantly drunk by them. It is also to a certain extent a stimulant for the entire system; just what the aged need.

Improper and deficient care of the scalp will cause grayness of the hair and baldness. Escape both by the use of that reliable specific, Hall's Hair Restorer.



M. Hammerly, a well-known business man of Hillsboro, Va., sends this testimony to the merits of Ayer's Sarsaparilla: "Several years ago, I hurt my leg, the injury leaving a sore which led to erysipelas. My sufferings were extreme, my leg, from the knee to the ankle, being a solid sore, which began to extend to other parts of the body. After trying various remedies, I began taking Ayer's Sarsaparilla, and, before I had finished the first bottle, I experienced great relief; the second bottle effected a complete cure."

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Prepared by Dr. J. C. Ayer & Co., Lowell, Mass.  
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user says, "Oh, yes." Think a moment—first chew didn't? "No, that's so." Made you sick? "Yes." Your taste required educating, until the nervous system learned to like and look for its tobacco stimulant. Now you chew or smoke ALL THE TIME, because you have to. If you want to free your nervous system from tobacco's power use

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## In the Dairy.

Conducted by A. E. JONES, of Oakland Dairy Farm. Address all communications Topeka, Kas.

### Oleo Legislation.

Three of the best dairy States in the Union, viz., New York, Iowa and Wisconsin, have enacted stringent laws regulating the sale of oleomargarine, which has added largely to the sales of honest butter at better prices, and turned into the pockets of hard-working dairymen some of the money that would otherwise have gone to swell millions already accumulated by means of the filthy compound. The time is now ripe when every one interested in the suppression of adulterated food should agitate this same question in Kansas and instruct their representatives that on their action depends the success or failure of one of the most important industries in our State, and to allow the one article of spurious butter unlimited sale is to cripple a branch of farming that is getting well established and with protective laws is destined to supplant other branches that have heretofore yielded little or no profit. Kansas butter at the World's Fair made a record which placed her among the leading dairy States, and to be compelled to lower our standard to compete with a counterfeit production should be looked upon by every voter as degrading to our reputation, and shorn of the profits which a legitimate calling is entitled to.

The Legislature at its coming session will be asked to formulate some law affording relief to an honest calling that is now struggling against this infamous traffic.

The Dominion of Canada, by enacting such laws; has almost entirely prohibited the sale of oleo, and in consequence the price of dairy goods is not cheapened by the introduction of a fictitious article.

It is not expected that by placing a barrier against the sale of oleo the price of genuine butter would be advanced to an exorbitant figure, as legitimate competition will at all times regulate the market on the common necessities of life. The future success of our farmers depends largely on turning the products of the soil into such channels as will return the largest profits, and we firmly believe that when oleo is left out of our cuisine the creamery and the private dairy will take the lead as paying investments.

### The Fall Dairy School.

The next term of the dairy school at the Iowa Agricultural college begins July 24 and continues sixteen weeks. For those who can only stay one term this is the very best time to attend. More milk is received during this term than at any other time, and the student has the very best opportunity to get a thorough training in the practical work, simply because there is more work to be done and fewer students to do it. We urge young men who wish to study dairying as a business to make arrangements to attend this school. Full information can be had by addressing President Beardshear or Prof. Wilson, Ames, Iowa.

### Dairy Notes.

The hired man who will never shirk to milk the last stripping, who is neat and withal a rapid milker, is a good hand to keep the year round. Watch for him.

It is often actually true that the dairyman can better afford to pay the top price for a prime milker than to take an ordinary cow for nothing. Reckon it up for yourself where the average difference in daily yield would be, say, five quarts, reckoning for the productive life of the cows.

A writer in the *Jersey Bulletin* says: "I have a heifer that calved when a little over thirteen months old. Before she was fourteen months old her milk for one day was churned and made a pound of worked butter. How is that for a baby cow? She is well developed for her age, with a first-class udder and teats, and the characteristic dairy form."

Shall we keep up the herd by buying or breeding cows? is a question that can only be answered by each dairyman for himself. In some districts fairly good cows can be bought at reasonable prices, while in others it is a difficult matter to get a good cow unless she is bred at home. There is this to be

said in favor of breeding our own cows, we are surer of having good ones if we are careful as to the sire and dams from which we breed; while on the other hand there are farmers who sell milk, have but limited pasture, buy most of their grain feed, and so the growing of their own cow costs them much more than where these conditions are different.

One great point of advantage in dairy farming over almost all other specialties, says a recent writer, is that on the dairy farm the work is better divided. The grain harvest comes so close to haying that it often gets mixed up with it to the detriment of both; but where corn is grown and put into the silo for dairy feed, and not so much or no grain raised, the harvests are several weeks apart.

It is said that Wisconsin has over 700,000 cows that give 350,000,000 gallons of milk in a year, or 1,000,000 gallons every day. So it would only require the morning's milk to start the ship canal, which is to carry 300,000 cubic feet of water per minute. There are 2,500 creameries and cheese factories in the State, and these, with the large private dairy interests, represents 100,000 voters deriving their support from this industry. The capital invested in lands, herds, creameries and cheese factories is variously estimated from \$130,000,000 to \$150,000,000. Each of the 700,000 cows earns \$45 a year, making a total income of \$31,000,000 a year from this business.

It is a very natural thing for a man to figure that he can make twice as much butter from ten cows as he can from five cows, and certainly the thing is possible, but very few persons will do it. The trouble is that the greater the number of cows kept the less individual attention will be given to each, and it is this individual attention that counts. A writer in one of our exchanges, speaking of this matter, says: "A man with thirty cows does not have time to give each one a pat a day; when the last cow is going out of the stable—and the owner had to milk eighteen of them because one of his milkers was sick—he may possibly touch her up with his boot and say, 'hurry up, you hussy.'"

The conformation which, according to Prof. Law, usually indicates a weakness of constitution and a susceptibility to tuberculosis in cattle is the following: Head narrow between the horns; sunken eyes; depth of cavity (temporal) back of the eyes; thin, narrow ewe neck; chest small, lacking in both breadth and depth; hollow flank and tendency to pot belly; a general lack of muscle, so that the limbs seem loosely attached to the body; in breeds that show a variety of colors, animals of the lighter shades of brown or yellow. If, however, such animals are of high value for the dairy and can be kept free from infection they need not be rejected. The finest conformations of Short-horns, Devons, Holstein-Friesians, black or red polled furnish no protection in the presence of the germ.

If you want to make money with your cows, give them some ground feed while they are on pasture. No matter how good the pasture is, the cows will do better with some grain to help out. This will look like painting the lily to many of my old-fashioned readers, but it is a cold fact all the same. The best dairymen at the north do it, and Prof. Cooke, of the Vermont station, says: "Cows that have been properly fed at the barn do not shrink in quality of milk when turned to pasture. They usually increase, both in quality and quantity. Full feeding with grain at the barn and while cows are on pasture produces a much larger flow of milk during April and May, and causes the flow of milk to keep up considerably later in the fall." Grass is supposed to be a perfect food, and so it is for simple growth and moderate milk yielding, but in these days we have passed beyond the "natural" condition of affairs, and now find the cow an artificial creature that must be treated artificially to get the greatest profit out of her, and profit, you know, is what we are after.

Elgin, Ill., you know, is the head center of two of the greatest industries in this country, watch-making and butter and cheese-making. These, you also know, are hard times, and many heretofore successful industries have met with financial collapse. Here is what the paper says: "The citizens of Elgin ought to doff their hats to every cow they meet. Hard times succeeded in shrinking our great watch factory from 3,000 hands to considerably less than half that sum; from six to four days, and at a material reduction in the scale of wages. This was a 'body blow' to Elgin, and had it not been for the festive bovine there is no telling what would have become of us. Our dairy interests have been our salvation, and to the good old motherly cow, the fountain head of our dairy industries, I, for one, feel like bowing in grateful recognition. The cow has proved to be our Moses, our deliverer. Long live the cow!" So say all of us. The cow is the mortgage-lifter, the farm-buyer, the educator of those who properly study and profit by her. She is a modest, humble, domestic creature, entitled to all your kindness, and truly grateful in returning with interest all she receives.

## The Poultry Yard

### Different Management.

EDITOR KANSAS FARMER:—The different kinds of poultry require different kinds of management if the best profit is realized.

With chickens, it is always best to select out a sufficient number of the earliest and best pullets for layers and for hatching, in fact, the earliest-hatched pullets are the principal dependence for winter layers.

With turkeys, a sufficient number of the best and earliest-hatched hens should be selected to keep for layers next spring. It is only by this plan and the use of a well-matured gobbler that the quality of the flock can be kept up.

With geese, in nearly all cases the better plan is to keep the old fowls, especially for breeding, and the younger ones should be pushed and when reasonably well matured marketed. The old geese make the best breeders and yield the most feathers, and with reasonably good treatment can be kept for a number of years without change. In making a start it is best to select out a sufficient number of the best until the number it is desired to keep is secured, and then keep these and market the younger fowls.

With ducks, a very good plan of management is to market the earliest-hatched, feeding them well and pushing the growth as much as possible. If hatched in good season and good care is taken to push the growth they ought to be ready for market by the time they are ten weeks old and should weigh on an average seven pounds a pair. The best time to sell is in June and July, and generally it will be best to sell all that are in a marketable condition at this time. The later-hatched can be kept to make up the desired number that can be kept with profit.

With guineas, a very good plan of management is to sell the eggs during the early part of the season and then when prices get low allow them to hatch out. Guineas are not a good market fowl. In many places they can hardly be sold at all, so that outside of what it is desired to keep and what can be used on the table there is no special advantage in hatching a large number. They lay a large number of eggs but do not commence laying until in the spring, rather late usually, but if in good condition are an excellent table fowl and as they are better able to take care of themselves than any other kind of poultry, a few at least can always be kept with profit.

Eldon, Mo. N. J. SHEPHERD.

**SPECIAL FOR JULY.**—For new subscribers, both the KANSAS FARMER and the Topeka Advocate, to January 1, 1895, for 50 cents, club-raiser to keep half the money.

**SPECIAL FOR JULY.**—For new subscribers, both the KANSAS FARMER and Topeka Weekly Capital, to January 1, 1895, for 50 cents, club-raiser to keep half the money.

### No Secret About It.

By a practical poultryman, in *Live Stock Indicator*:

"I would like to start a poultry farm and make it pay me. What would you charge me to give the secrets, so that I can make a success of it?" writes a would-be poultryman. There are no secrets in the business. The whole matter, for profit or loss, lies in the management. If there are any hidden mysteries they must be quartered in that. It is just as natural for a hen to lay when properly fed and cared for as it is for a cow to give milk. Yet some good farmers, who are experts in the growing of crops and adepts in making the dairy pay, cannot get a profit from their hens. Should we say they do not know how to care for poultry they would be insulted, yet such is the case. Any one who cannot make a hen profitable knows very little about her wants. A good dairyman knows how many years a cow is profitable, and at what age he had better send her to the butcher. He does not keep her beyond the allotted time—yet in his poultry yard are hens of all ages; hens that long since have outlived their usefulness.

The practical egg farmer knows that

by forcing the hen they can in two years get all the profit out of her, and at the end of that time she makes the most acceptable roaster. They profit in two ways. They save expense by keeping her but two years, and in that time get out of her all her real worth. By not forcing her she will in three years give the best of her product. But if, by forcing, she will give three years' work in two, does it not follow, then, that there is more profit in pushing her? That is egg-raising for profit.

The practical egg farmer also knows that there is more money in winter eggs than in those produced in summer. He likewise knows that if he allows the fowls to roost in open sheds and cold places and feeds nothing but corn he cannot secure a winter egg crop. He gets ahead of the average farmer by having good, warm houses, by feeding the very best grains for manufacturing eggs, by keeping the birds at work in scratching pens while the ground is covered with snow, by hatching his pullets in April and May and bringing them to profit at the right time. The farmer so manages it that his cows 'come in' at a time when there is the most money in butter, but he hatches his pullets at all times of the year. He is wise in the one and foolish in the other.

An experiment was tried last year by the writer. He kept a separate account of a family cow and fifty hens. The cow's milk and butter, for a year, brought \$144.10, and eggs and chicks raised by the hens netted \$150.81. Now, if we count the feed of the cow, nine quarts of ground grain and the hay, alongside of four quarts of ground grain and six quarts of wheat or oats to the hens, we see a vast difference. Furthermore, to enumerate the work of feeding, milking and caring for the cow, to say nothing of the labor at making the butter, compared with the work of feeding the hens, cleaning up the manure and setting the hens, is it not plain that fifty hens will give less labor than the family cow? Yet the average farmer looks upon the hen as of very little consequence. Poultry-raising, however, is growing annually, and each year the farmers are becoming better acquainted with the industry. The census report of poultry and eggs for the year 1890 shows that in the United States there were 258,871,125 chickens, 10,844,060 turkeys, 8,440,175 geese and 7,544,080 ducks, or a total of 285,699,440 fowls of all kinds, which at 25 cents each are valued at \$71,469,860. There were 818,249,201 dozen eggs produced, which valued at 12½ cents per dozen amount to \$102,281,150. This is a large sum for one year, and which is now probably \$200,000,000 per year for both poultry and eggs, being not far behind the wheat crop in value. Does that look like an "insignificant hen" business? Farmers, you had better think seriously over the matter and do your share in the work.

### About Cheese-Making.

Mrs. A. J. Brown, of Tripp, South Dakota, writes C. E. Kittinger, of Powell, South Dakota: "I never knew before that good cheese could be made so easily on a farm without any special apparatus until I tried your process. I sell all the cheese I can make to my neighbors, and it is easier made than butter, besides it brings me three times as much as butter would." See Mr. Kittinger's announcement on this page.

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For one dollar I will mail you ten rennets, with instruction curing cheese at home with such apparatus as has. Hundreds of farmers now using my process. Your money refunded if you fail.  
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and Cream will sour and cause loss unless you use **PRESERVATIVE**. It's cheap and harmless, keeps milk and cream fresh and sweet five to seven days, without ice. Successfully used for 17 years. Sample Free. Preservative Mfg. Co., 10 Cedar St., New York.

### The Family Doctor.

Conducted by HENRY W. ROBY, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed. Correspondents wishing answers and prescriptions by mail will please enclose one dollar when they write.

#### The Universal Vice of Mankind.

Prescribing is the universal vice of mankind; the only vice that all men, women and children, sane and insane, are guilty of. Who ever sees a state, condition or thing that does not seem right to him or her is ready to offer a remedy. We all know just how to bring about the millennium, if only the balance of mankind would follow our advice—our prescription.

The preacher does nothing but beg and prescribe. He asks for his living and in return prescribes a course of conduct which he assures you will bring relief from wrongdoing of yourself and others, and set up peace and prosperity here and hereafter.

The lawyer demands and prescribes. He says: "Give me a good retainer's fee and I will tell you just what the law is and just how to get out of your scrape or your dilemma. I will prescribe the legal remedy for your particular case."

The doctor, who is supposed to be a born prescriber, with a special prescriber's education added to the born qualities, says to all mankind: "Hear ye! Hear ye! Hear ye! I have the panacea; I know the laws of life; I can cure you, and my charges are very moderate for so great a service as I shall render. Now, who will be saved? Who will buy my great medical discovery? Who will be first to take my 'favorite prescription?'"

Then along comes Dictator Debs, saying: "Ho, all ye laboring men, hear me. I can and will prescribe the sure cure for your wrongs and hardships, your starvation prices, your unappreciated toil and sweat and sorrow. Give me a good salary and full authority and I will prescribe the dose that will settle the plutocrats, the bondholders, the coupon-cutters, the railway magnates and all the proud and arrogant oppressors of honest toil."

Geo. M. Pullman and the board of railway managers say to the bondholders and other investors in their enterprise: "We have watched the course of events, we know thoroughly the temper and calliber, the moods and make-up of these wild labor agitators, who are deluding their ignorant followers into paying them good salaries to form combinations to break down all the safeguards to property and investment and who seek to set the rule of anarchy and iconoclasm in the land. We have wisdom and we can prescribe the dose that will settle Debs and his deluded followers."

The politicians sit in the shade, all the way from the dome in Washington to the last totem pole in Alaska, calling out to all men: "We know the remedy for your wrongs and misfortunes, for the panic and the hard times. Elect us to office and we will prescribe the remedy that will set all the looms and spindles and forges and factories and mines and manufactories going again." And a deafening chorus arises like the sound of many waters: "Vote the Republican ticket! Vote the Democratic ticket! Vote the Populist ticket! Vote the Greenback ticket! Vote the Prohibition ticket! Vote the Nationalist ticket! Vote the Single Tax ticket! Vote for woman suffrage! Vote for silver! Vote for sound money! Vote for the bonds! Vote against the bonds! Vote for good roads! Vote for the Nicaragua canal! Vote for government ownership of railways and all of the general utilities of the country! Vote for the tariff! Vote for free trade! Vote for reciprocity! Vote the Chinese out! Vote to abolish immigration! Vote against competition with cheap foreign labor! Vote for Mrs. Lease for Senator! Vote! Vote! Vote!" and the noise and clamor becomes so deafening that one cannot hear and distinguish all the prescriptions that the politicians and office-seekers offer to the dear people for their sole and separate good.

The disappointed in wedlock come along and prescribe the abolition of marriage, declaring it a failure. The Mormons prescribe polygamy. The Mohammedans prescribe four wives and the Koran, for the miseries of men. The Hindoo prescribes as many wives as one chooses to take care of for human happiness. The Polynesian and Thibetan prescribe polyandry for woman's welfare—all the husbands she cares to smile on. The Vatican prescribes monogamy and no divorce for its unhappy sexes. Madam Blavatska will send the Mahatma to every afflicted mortal to confer lasting happiness. And all the people with one accord cry out: "Take this! Take this! It will do you good. It will cure you. It will banish all your ills!" From every hill-top, from every plain, from every hamlet and village and city and metropolis the universal chorus goes up: "Take, take, take," and every hand holds aloft some "favorite prescription." Dr. Pierce's favorite prescription is far from being the only "favorite prescription." You offer yours, I offer mine, Jones and Pildash and

all the other dose-mongers and nostrum-venders, and pharmacutists and pill-wallahs of the whole earth offer their prescriptions, and yet some of us live, notwithstanding. Many, alas, are not here to tell the tale. "Drugs have killed more people than war, pestilence and famine combined," says one, and yet we go right on prescribing all the concoctions of pharmacology.

A missionary who escaped being eaten in Korea has recently returned from that delightful terra incognita and gives us the following paragraph on Korean prescriptions:

"To cure any local swelling or irritation, red-hot needles are dipped into a native medicine and then thrust into the flesh regardless of the locality of the trouble. For fevers the head is shaved and the top thereof burned with a hot iron. When things get to the worst, a brother or sister of the patient sometimes consents to have a finger cut off, which is burned to a crisp and powdered for the sick man to swallow."

And is it any wonder that Japan has just sent 10,000 troops into Korea to prescribe some Japanese nostrum for the body politic?

On the 11th of last month two lady missionaries in Canton, China, were walking in Honam and found a Chinaman by the wayside, apparently dying. The instinct to prescribe came swiftly to hand and they gave the poor fellow some tea and allowed him a few whiffs from a smelling bottle. But he went on with his own program and died by the roadside. And the infuriated mob, taking exceptions to the prescriptions of these "Christian dogs," set upon the ladies and beat and stabbed and stripped them of their apparel, and were only compelled to desist from giving the ladies a Chinese mob's prescription by themselves being forced to take the prescription of the embassy and local authorities.

The missionaries are great prescribers. They go abroad to prescribe if they cannot find people at home to take their prescriptions. And in foreign lands they not only go about prescribing moral and religious remedies, but go into medical prescribing, avowedly in order to enhance their opportunities for successful theological prescribing.

And now the Mohammedans are coming back at us and have set up Mohammed All Webb, or some such dignity, in New York, to prescribe good Moslem doctrines and panaceas for us who have done so much prescribing for them. Gun Wa and Wau Chin and Loo Fair and a host of Mongolians are going about this country with bulging pockets as the result of their fine arts in prescribing for our own host of prescribers.

Ah! What a joy forever and supreme delight is prescribing! The ignorant may prescribe as well as the wise, and they will readily admit that they make the wisest prescriptions of all. Their modesty is at a discount and self-abnegation is nowhere. The world's most sublime exhibit of complacency and self-satisfaction is best shown when somebody thinks he or she has made a great prescription that overtops' all the other prescriptions.

#### Answers to Correspondents.

(NUMBER 30.)

H. W. ROBY, M. D.:—I have had a pain in the small of my back more or less for nine years. I got it from lifting too heavy early in the spring when I was not used to hard work. I have it more in warm weather than cold. I generally get it from stooping, and it comes as quick as if some one had shot me. I am 44 years old and otherwise I am well and hearty. Can you do anything for it? If you can, please inform me through the KANSAS FARMER.

Glen Elder, Kas. SAMUEL HUBAKER. Your trouble is like that of a great many other men. Large boys and green young men often think they are very smart and foolishly try to outlift all creation, and frequently they rupture a muscle in the back or loin or hip or leg, or break a ligament, and then they are laid up for weeks or months and even years with what is commonly called a weak back, and there frequently come spells, when a sudden stitch of pain comes into the weak spot, and then the man is "done for" for a few hours, or days or weeks. He is laid up with what is known as lumbago, a kind of rheumatism. It does not afflict all men, and but few women, for, as a rule, women do not try to outlift Sandow, or Dr. Winship, or Samson, and they seldom break their backs by that foolishness. I have been there and I know now how foolish it is to overtax one's lifting capacity.

Small doses of arnica internally, or bryonia, or nux vomica, or rhus tox. will often greatly improve the condition and sometimes cure permanently. The galvanic battery (not the electric) will do the case much good if applied correctly. But orificial surgery does more than all other remedies combined for lumbago. It cures the internal hemorrhoids and frees the great sympathetic nerve from a pinch and thus allows the process of nutrition to go on untrammelled in the system and the ruptured muscle is put in a state of fine repair, and with proper care will remain so.

#### A New Veterinary College.

To the intending student no institution in the country offers greater advantages than the McKillip Veterinary college, of Chicago. Among the many advantages may be mentioned the new college building, which is the finest of its kind, especially constructed for the business, containing all the more modern improvements, and embracing two large, well-lighted lecture rooms, chemical laboratory; two operating rooms, dissecting room, a thoroughly equipped hospital, students' reading room and library, forges, etc. The curriculum is most complete and thorough, and reaches over a term of three years, of six months each, beginning October 1 of each year. Students will have the advantage of assisting in the largest and most lucrative practice in this country, in addition to the usual college training. The faculty is composed of gentlemen of high character and well-known experience and ability in the veterinary art. Olaf Schwarzkopf, V. M. D., late professor of veterinary medicine at the University of Minnesota, is Dean of the faculty, and those contemplating a course in veterinary medicine would do well to address him at the office, 1639 Wabash avenue, Chicago, for catalogue or further information.

#### Railroad Fares Reduced.

The Nickel Plate road has made material reductions in the fares to many points on that line, including Fort Wayne, Cleveland, Painesville, Ashtabula, Erie and many other Eastern points. Ticket office, 199 Clark street; depot, Twelfth street viaduct and Clark street, Chicago.

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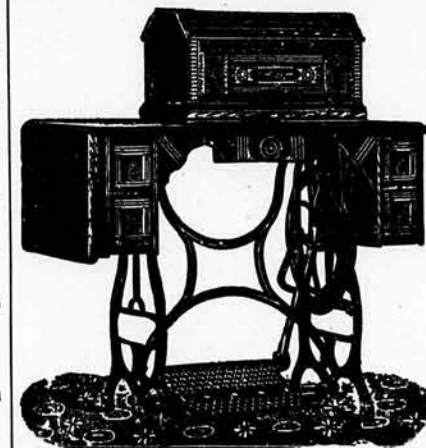
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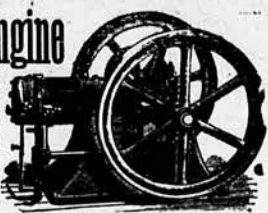
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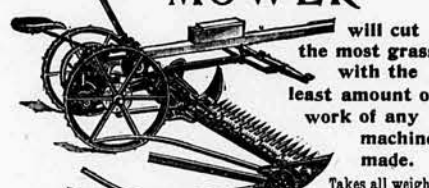
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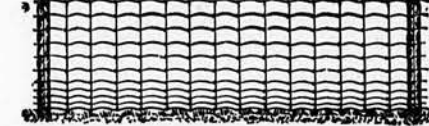
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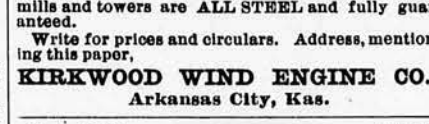
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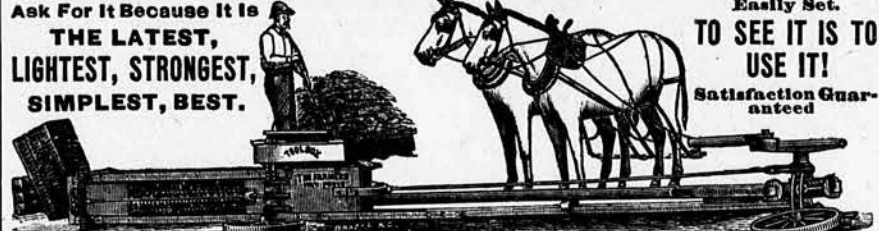
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Table with 6 columns: Cattle and calves, Hogs, Sheep, Horses and mules, Cows. Rows include Official Receipts, 1893, Slaughtered in Kansas City, Sold to feeders, Sold to shippers, Total sold in Kansas City.

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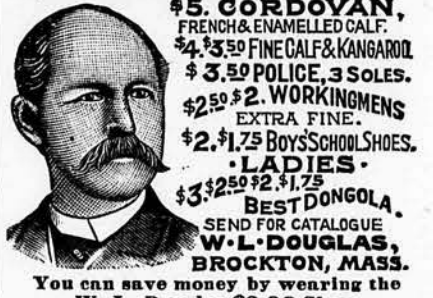
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