

The Stock Interest.

THOROUGHbred STOCK SALES.

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

APRIL 16—Col. W. A. Harris, Short-horns, Chicago.
APRIL 23—F. McHardy, Galloways, Emporia, Kas.

CATTLE INDUSTRY OF AMERICA.

Address of H. M. Valle, of Independence, Mo., delivered at the first annual meeting of the stockmen of Missouri, at Sedalia, January 15 and 16, 1890.

Mr. President and Gentlemen of the Convention:

It is needless for me to say to you that the beef interest of our country is in a badly demoralized condition—that prices have been this year, and are now, lower than they have been in fifty years. I may also add, wheat, corn, oats and hay, are lower at this moment than at almost any time in the memory of man, and I might include almost everything else produced by agriculture, and which, together, are the foundation, the substrata, the monumental pillar of all the wealth and greatness of and in a nation. This foundation being in a sickly state—these gurgling streams, weak, puny, and with little vitality, running into the secondary interests of our country, the artificial, the manufacturing, they too are in a like condition, as it were, because of being fed from feeble streams.

We are not happy as agriculturists, and we raise our eyes from our discontent—from our unprofitable business, to the manufacturing and commercial world, and we find that full, and the laborers therein filled with discontent and repining—that large plants, costing large sums of money, because of a want of a market for their productions, are compelled to put their labor upon half time, or shut down for three or four months of the year, thereby throwing their labor out of employment and reducing it to the bare necessities of life.

Hence, we have before us the spectacle of more wheat and corn raised than can be reasonably consumed, showing that there are too many men engaged in the business, and prices are forced below a paying basis.

We also see more men engaged in the manufacturing and commercial pursuits than the business demands—in short, every avocation in our country seems to be full and overflowing, and all equally full, hence, we cannot take labor from the producing class, and thereby reduce the productions of the country, and put them among the non-producers—into the manufacturing world, because that is already full to almost starvation.

Look where we will—into whatever avocation we may, in any part of our country and we find all quite alike, full; and the only thing, at this moment, that seems to be vigorous and thriving, is the comparatively modern plant that has sprung up on a large number of farms, all over the country, familiarly called mortgage, bond and mortgage—deeds of trust.

Years ago little of this seed was to be had—farmers could not buy it with which to plant their farms, and only a few cared to have it, but now it seems to be almost a regalia, a farm ornamentation, exhaustive of the soil and the energies of labor.

The time was when our surplus population and money could find vent, employment in the West, subduing the native wilds, making from wastes new homes—building new cities, extending our civilization and railroads; but now, alas, we have no West, no East, North or South—it is one consolidated country, entirely overrun, and we are engaged

in filling in the last chinks, everywhere.

This is the condition now confronting us—it is this that has brought us together in consultation, to suggest ways and means out of this dilemma, into a bright and prosperous future; and allow me to say, I see a way out—it is the only way, a clear way to me, but the mention of it may seem severe to you and the world, though I shall have to do so, ere I am done.

However, before I branch off into this wide and open field, new and unexplored to most of you, if not all, I will return to consider our depressed beef interest for a moment; and permit me to say, look where you may, into whatever business you will, this is the only one on which a bright and long day is dawning at this moment.

Horse-raising is overdone, except for high-headed, rangy, good-stepping carriage horses, and a limited number of speedy trotters. This field is not occupied to any considerable extent, and it is large, but the general horse interest is running into a long, dark night, with little hope of a morn for years to come.

The sheep interest has a momentary flush, but we cannot raise sheep at a profit on our high-priced lands, at the present prices of mutton and wool; though the use of mutton, for animal food, is increasing very rapidly throughout the West, and it will always be a substitute for, and take the place of beef, more or less, but its future is not particularly bright at this time.

Wheat has a bright future, and a greatly enhanced price, but it is away off in the distance; barring a failure of the crop, and serious disturbing causes in Europe, which are liable to occur at almost any moment—that is, for some years there is likely to be produced in this, and other countries, more wheat than will be needed for consumption, but in time there will be a great shortage, because of the increase of population, and no increase of wheat lands.

Corn and pork are local—they belong together, and will be up and down, depending a good deal on local circumstances.

But beef has had three years of night, and this last the darkest of all, proving the adage true, "it is always darkest before the day." At no time has there been a legitimate overproduction, but simply an overmarketing.

I know many will take issue with me, yet they must acknowledge our ratio of increase in population has been greater than in cattle, showing there has not been an overproduction. In the flush days of cattle speculation, a few years ago, there was a hoarding of cattle, as it were, making the market short, and prices high—then followed the breaking away of the dams, one by one, for the last three years, flooding the market with more stuff than its legitimate demand required, and to be rid of it at all, concessions had to be made, and these very concessions would frighten some one else, and he, or they, would cut loose their dams, and flood the market again. This has been the process going on for the last three years, and this year our markets have been perfectly overwhelmed with female stock, cows, heifers and young calves.

By reason of drouth in the North and central West, one and two years ago, farmers reduced their female stock more than 25 per cent., and have not increased it since.

This year many of our Western ranches have marketed nearly all their female stock, selling them as low as \$10 per head, and it is safe to say that more than 25 per cent. of the female stock of the West has been marketed this year.

But for this class of stock marketed

this year good steers would have brought from 4 to 6 cents per pound. There really has been a shortage of steers on the market this year, and cows, heifers and calves have taken their place.

But this policy dries up the beef fountain, and it takes a long time to renew it from a few feeble streams.

This has been a fearful policy for our stockmen—wild and insane, and when the tide comes rushing back, as back it will come, many who have been able to hold on, will be in no condition to ride upon its crest, and their efforts to mount it will be exhausting.

We know we can't have steers without cows, and it takes a long time to breed a large herd from a few cows, hence, we may justly expect a much better price for our beef this next year, and never will it be as low again in this country, since our grazing lands are limited, and almost fully occupied, and our population will be almost unlimited.

I myself have unbounded faith in the future of our cattle interests, and never has the future looked so promising or bright as at this time, because of the serious depletion of our herds. I see but one important flood-gate that may be opened this next year, to prevent the realization of my expectations of 4 to 6 cents per pound for our beef, and that is the dumping upon the market next year, all, or nearly all of the Cherokee Strip cattle.

There is on that strip not far from 300,000 cattle, and not more than 100,000 will be fit for market, but if the 200,000 not fit for market are to be sold, their price must be low, and this will to an extent not only take the place of good beef, but fix a price for much better beef.

I hope this flood-gate may not be opened, but it is, at this moment, very uncertain, since many of our editors seem to think beef-raising is almost a crime, and lands put to that use are not used at all, or for a base purpose.

In fifty years we will have a population of more than 150,000,000 of people, and our present area of country the same.

With this population, beef will be a rarity, a luxury, and the owners of land the most envied of all people.

Prices will be so high that only the rich can use beef. With this increased population there will be a shortage in wheat also, for, allowing six bushels for each person, we will need 900,000,000 bushels, and where will this come from? We now produce less, or about one-half this amount, therefore, wheat lands cannot be changed into beef lands, thereby increasing the supply of beef.

Fifty years is but a short time in the life of a nation, or it should be, and from day to day we are cutting down this limit, and nearing the time when it will be impossible for us to produce beef and flour enough to supply our home consumption, and long before this time arrives. Does it need a prophet to foretell that prices of all the agricultural products must be greatly enhanced.

Agriculturists value their possessions, at this moment, lightly—they are but a synonym of hard labor and poor pay, but at no distant day the rich will covet that which you consider a bondage, and by tempting offers, will buy your inheritance with a mess of pottage, and send you forth, homeless, a vassal and a slave.

The time was when a poor man with a large family could sell his home and with its proceeds go to the West, settle upon rich, new lands, and make a sort of kingdom for himself, but that day has passed, and it can no longer be done. This move enabled him to better his

condition and that of his family, whereas, now when he sells his home it is almost a thousand chances to one but he will be a loser.

True, we have much unsettled country, but except here and there a spot, it is not worth settling—a thousand acres will scarce keep a deer.

All this will have a tendency to enhance the price of beef and other products of the soil, and consequently the price of land.

While the business of the country is not as a rule quite satisfactory, yet there are many accumulations, great and small, and together they aggregate a large sum, which must find investment in something, and in what shall it be?

New countries offer but little inducement, because the soil is so poor—manufacturers do not need it, because their plants can now overproduce the demands of the country—railroads need little, since the country is generally supplied with a greater number than can be made profitable—and let me here remark, in time railroad property bonds and securities will be among the poorest properties in our country.

True, this last year there have been built over 5,000 miles of railroad, short and unimportant lines, costing over \$100,000,000, largely money from abroad. This will not be repeated this year, yet this money is in our country somewhere, and it is to be added to the sums to be invested.

We see large sums of foreign money coming into our country to buy our breweries, and various manufacturing establishments, which verifies a prediction of mine, made years ago, that such would be the case, thereby casting upon the market millions of home capital to seek employment and investment, and in what shall it be? Where and how shall it be located or placed?

This is a problem of much more serious import than the parties who have received these large sums of money may now imagine, or have properly considered. As to the propriety of receiving so much of this foreign money, I am not in doubt—let it come—it is but destiny ordained for the good of our country and the world. The moment it becomes invested in any enterprise in our country, that moment it becomes a part of our wealth—is under the protection of our laws, and liable to taxation the same as though it had always been in here, and it is without any special identity.

I have asked what will the owners of these large sums of money invest it in—what is the best and safest security?

You may say real estate loans, and I will say true, but it cannot all go there, and the farmers who borrow it, what will they do with it?

This question I cannot answer, but I will express the hope that one-half of all the money borrowed by the farmers may be invested in cattle.

While I would not advise the farmer to borrow money, generally, I would advise him to borrow money if need be, to buy all the cattle he can keep, at the present prices, feeling sure he will not fail of a handsome profit in the next two years. I have neglected to state one other circumstance that may, and probably will have a tendency to keep prices low in the spring and early summer, that is the large number being fed on cheap corn—the number is unnaturally large in the West, because of cheap corn.

Now and here, let me ask the farmers of Missouri—yea, and all the farmers of our country, to be advised by me, and do not forget or depart from it; that is to hold your lands, do not sell them, even though you have to labor hard, and make the poorest of livings, for in them you have a rich inheritance for yourselves and your posterity that will surpass a king's ransom.

(To be continued next week.)

The Home Circle.

To Correspondents.

The matter for the HOME CIRCLE is selected Wednesday of the week before the paper is printed. Manuscript received after that almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

A Little Maid of Two.

A smiling face, a dimpled chin, Some tender eyes of blue; Wherefore is she condemned for sin, My little maid of two?

She runs to meet me up the path, Her graces mine renew; 'Tis false, she is no child of wrath, This little maid of two.

Her little hand is on my cheek, It thrills me through and through; My lips refuse awhile to speak, But kiss my maid of two.

"You talk of primal wickedness, Pray, what has that to do With all this laughing blessedness, This little maid of two?"

"Depraved and totally undone," I think'st about your view; But when your argument is spun, Here's still my maid of two.

Her innocence, her artless ways, Her faith and love so true, Refute your dogma to God's praise— This little maid of two.

Ah, me! were all the world as she, What should the angels do, But yield their crowns, bestow their palms On little maids of two!

—Benjamin S. Parker.

TO LIVE WELL, THOUGH POOR.

"Can you give me some idea how ladies of moderate means manage so that they both live and dress as well as neighbors who are much better off?" was asked of a lady well known in society in Brooklyn, one day last week. "Do they find books on economy of much practical service?"

"Well, some of them give useful hints, but as a general thing they tell how to economize by going without things, not how to economize so as to be able to get them. I love pretty clothes, and like to have good things to eat as well, so I set about trying to learn how to make the best of my husband's money in a business-like manner. The first thing I found out was that in all kinds of shops—butcher, grocers and dry goods—they will have a special line of goods that they sell at about cost in order to attract trade. The second thing was that it is never economy to buy a second-grade thing.

"A great deal is said about the disadvantages of people having a bill at a dry goods store. It may be so if people are careless, but if a woman really means to save, it often keeps her from doing a foolish thing. For instance, she needs a new dress to go somewhere. She intended to buy it any way in another month, when she would have had all the money saved for it; but she wants it now to go to a reception, we'll say. The desire to go, nine times out of ten, will tempt her to buy goods of an inferior quality that look well while new, because she has not money enough on hand to buy the best. She has made a great mistake, for the cheap goods will wear no time at all. If she had a bill at the store she would have bought the best. In that way she would have had the dress when she wanted it, and paid for it the next month when she had saved all the money.

"Now about going to the different stores. If you take advantage of the fact that Smith, the grocer, sells sugar 1 cent cheaper per pound as an advertisement, and Jones, the grocer, sells canned goods cheaper for the same reason, and Hopkins, the grocer, sells butter and eggs cheaper for the same reason, you can save a great deal on the house expenses and yet not lower the standard of your table. It is the poorest economy in the world to eat innutritious things because they are cheap. It only injures the health and leaves one unfit for labor, mental or physical.

"How do I economize in my housekeeping other than by buying well? That is difficult to say without writing a cook book. Every family has to plan in accordance with its individual tastes. But a great deal depends upon the man of the house. Some men will never eat anything but fresh fish, or roast as it is first served.

That cuts the housewife off from many channels of economy and at the same time deprives the man, if he did but know it, of many delights of appetite. To buy a small roast of beef or lamb is, to my mind, a very extravagant thing to do. In a four-pound roast you lose the goodness of the beef before its first serving, and what is left is of no service. Cold roast beef or lamb may be served in a thousand different ways, which one may learn from any cook-book, and in an eight or ten-pound roast you keep all the richness of the meat and waste nothing. No need for a family to be tired of it, either, if it is judiciously intermixed with other dishes. Then soup is a great assistance. Many people have an idea that it is an expensive and difficult dish to prepare. Quite the contrary. Soup can be made from odds and ends of meats and vegetables and is nourishing and inexpensive. It prepares the stomach for the dinner, and (let me whisper this) takes off the edge of the appetite, so people do not eat nearly so much.

"But experience alone can teach a housekeeper how to best economize for her own family. Little things tell in expenses. Turning down the gas when you leave the room, if only for a moment, is one. To have the ashes carefully sifted, is another. To realize that there is almost nothing in the way of eatables that is useless, is still another. And yet, above all, a good servant or servants. There you come to the great test of a good housekeeper—her servants. And the way to have good servants is to have care. Care in the selection of your material in the first place, care in the training when you have them. I do not believe in nagging a girl. I do not believe in allowing her to neglect her duties. But show her patiently and intelligently how to do her work; then let her try it alone. If she fails, call her attention to it pleasantly; if she succeeds, praise her. A kind word will do more than any amount of upbraiding, and if in this way your domestic does not become a faithful, trustworthy servant, then she is not worth keeping. Let her go and try another, but remember to be always patient, for a good servant is the first and all-important item of house economy. My experience is that when you hear mistresses constantly complaining of the rudeness and ill-breeding in their servants, the servants have before them constantly the example of rude, ill-bred mistresses. Courtesy begets courtesy, even from mistress to maid.

"I will tell you some of my secrets as to economy in dress. I buy my boots, all of them the very best makes, of a man in Grand street, New York, who sells what are called 'sample shoes' at very low prices. They are shoes he buys of drummers after they are through with them. You may not always be able to get what you want, for he had but one pair of a kind—then you must try again. If you have a large foot you cannot do this, because he has only small sizes in the sample shoes. You always admire a well-fitting dress; that is because the wearer of the dress has on a good corset. I pay \$5 a pair for mine. It accomplishes three things: It makes me look well; it makes my dress wear for a long time, because a good corset never wears out into an awkward shape, as a cheap one does; and it saves dressmakers' bills, because it is very easy to fit your dresses over a well-fitting corset. If the corset is out of shape it makes the pull come on the dress in the wrong place, and so the seams pull out and wear crooked.

"How can I afford to buy such a high-priced corset? Another secret. I never wear them in the house. In that I again accomplish two ends—I keep my health by making my back strong, and save the corsets. Of course, if you are very stout you can't do that; but I have a friend who is stout, and yet she only buys one pair of corsets in eighteen months. She wears the old ones at home, keeping them in repair and replacing any broken bones in them, and so saves the new pair.

"Another important point is to have a house dress made especially for indoors. If you can have but two dresses, have one made pretty and easy for house wear, and take off the street dress the moment you come into the house. If you wear the out-

door dress in the house, no matter how hard you may try to preserve it, it soon looks worn. You will reach up in it to light the gas, for instance, and that stains the waist, and you will sit down in it, and that ruins the appearance for walking.

"In these days bonnets and hats are not a very expensive item of dress, for one can make a small and stylish toque or bonnet out of a small piece of one's dress goods, or a little velvet and a few feathers and flowers. Of course, one can have the most expensive hats, but fashion fortunately at the present time assists us in encouraging small, inexpensive bonnets.

"It is hardly necessary to speak of underclothing. Every woman knows how cheaply she may buy neat, well-made undergarments in almost any store. And she also knows how by watching lace sales she may buy lovely trimmings for garments she may prefer to make herself. There is nothing more tempting to a lady's eye than beautiful underclothes, and she must decide for herself how far she will yield to the temptation.

"Gloves are, to my mind, the most expensive item of a lady's dress. Of course, it depends somewhat upon the person. Some people are not hard on their gloves. But never buy cheap ones, for nice, well-fitting gloves, be they so soiled, if carefully mended and the buttons sewed on, mark the lady. I mend mine over and over. I put in patches and new tips to the fingers, but I feel that although those who see them may pity my poverty, they will respect my taste and care."—New York Sun.

Pocket Lamps for Traveling.

While riding in a railroad car trying to read a newspaper by the uncertain light of the lamp which was suspended at a tantalizing distance from my eyes, says Taverner in the Boston Post, a friend who sat next to me said: "Taverner, old fellow, don't spoil those critical optics of yours by using that wretched apology for a lamp, but suit yourself with this." He whipped a little tube out of his pocket which he fastened to my button-hole, and before I could see what he was driving at, a bright light illuminated the newspaper which had been blurred by the devious rays from the railroad lamp. "That's electricity," added my friend, with seemingly superfluous frankness, and he then went on to show how the apparatus worked. It had a storage battery for the motive power and a reflector to concentrate the light, and the entire weight of the lamp was only one and a half pounds. I found the electric light somewhat glaring at first, the reflection from the newspaper dazzling my eyes, and the shadows cast giving a sort of dark lantern gloom to outlying objects. But this effect soon wore off, and by adjusting the paper to the light it was easy for me to read without experiencing any inconvenience.

A Moorish Cup of Tea.

When a party of guests enter the house or the tent of a rich Moor one of the near relatives of the host is charged with the duty of making tea. He squats in one corner, having on either side of him a large server or platter. Upon one of these servers is a number of cups, and upon the other a sugar-bowl, a box of tea, a pile of fragrant menthe leaves, a copper apparatus for heating water and a tea urn. The tea-maker sets the water to boiling with a little fuel, and then pours the boiling water into his tea urn, quickly adding to it some tea and some sugar, and allows the compound to steep a few moments. Then he pours out a cup of the tea and tastes it, smacks his lips, sniffs the odor of the liquid, and draws a deep breath—all with an air which says, "I am going to get this tea just right."

The chances are that he does not find the compound to his taste at the first attempt, for he pours the tea in his cup back into the tea urn, adds a little sugar or a little tea, and pours out another cup for a second test. This process goes on, the tea-maker tasting his tea and pouring it back again, until he gets it just to his mind. Then the guests are called, and if any one of them does not finish his cup, he is expected to pour it back into the urn, for it

WELLS, RICHARDSON & CO'S IMPROVED Butter Color. EXCELS IN STRENGTH, PURITY, BRIGHTNESS

Always gives a bright natural color, never turns rancid. Will not color the Buttermilk. Used by thousands of the best Creameries and Dairies. Do not allow your dealer to convince you that some other kind is just as good. Tell him the BEST is what you want, and you must have Wells, Richardson & Co's IMPROVED BUTTER COLOR. For sale everywhere. Manufacture, Burlington, Vt.

BABY PORTRAITS.

A Portfolio of beautiful baby pictures from life, printed on fine plate paper by patent photo process, sent free to Mother of any Baby born within a year. Every Mother wants these pictures; send at once. Give Baby's name and age. WELLS, RICHARDSON & CO. BURLINGTON, VT.

is the custom in Morocco to take three cups in succession, and the tea-making has to be begun over again. The first of the three cups offered is plain tea with sugar, and the two succeeding cups are perfumed with menthe or vervine. In preparing these successive kinds of tea, the cups go back to the tea-maker, and change hands at the next serving without any washing.—Montreal Star.

Safety of Ocean Travelers.

It has long been recognized that if a permanent record could be kept automatically and continuously of the course traveled by a ship, much information could be gained and possibly considerable economy effected in the time of the ship's passage and also in the fuel consumed. The accomplishment of this by electricity has always presented serious difficulties. These, however, have now been overcome, and a device has been designed by which the compass is under the influence of the current for but a fraction of a second each minute, and at that time is fixed in its position. The records obtained in this way will afford ample means of checking the vigilance of the wheelman, and its adoption will go far toward securing exemption from many accidents from carelessness.—New York Telegram.

Consumption Surely Cured.

TO THE EDITOR:—Please inform your readers that I have a positive remedy for above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption, if they will send me their Express and P. O. address. Respectfully, T. A. SLOCUM, M. C., 181 Pearl St., New York.

Every Lady Her Own Physician.

A lady who for many years suffered from Uterine Troubles—Falling, Displacements, Leucorrhoea and Irregularities, finally found remedies which completely CURED her. Any lady can take the remedies and thus cure herself without the aid of a physician. The recipes, with full directions and advice, securely sealed, sent FREE to any sufferer. Address, MRS. M. J. BRABIE, 232 South Tenth St., Philadelphia, Pa. (Name this paper.)

ST. JACOBS OIL CURES PERMANENTLY RHEUMATISM

Suffered for Nearly 30 Years. 187 N. Chester St., Baltimore, Md.

For nearly 30 years I suffered with rheumatism in arm and shoulder; could not lift my arm. Less than two bottles of St. Jacobs Oil cured me. W. H. HEESON.

Of Many Years' Standing. Gadsden, Crockett Co., Tenn.

My case was rheumatism of many years' standing, contracted during the war; tried most everything without relief. St. Jacobs Oil finally cured me. FRED. ROGGE.

AT DRUGGISTS AND DEALERS. THE CHARLES A. VOGELER CO., Baltimore, Md.

Habitual Costiveness

causes derangement of the entire system, and begets diseases that are hazardous to life. Persons of costive habit are subject to Headache, Defective Memory, Gloomy Forebodings, Nervousness, Fevers, Drowsiness, Irritable Temper and other symptoms, which unfit the sufferer for business or agreeable associations. Regular habit of body alone can correct these evils, and nothing succeeds so well in achieving this condition as Tott's Pills. By their use not only is the system renovated, but in consequence of the harmonious changes thus created, there pervades a feeling of satisfaction; the mental faculties perform their functions with vivacity, and there is an exhilaration of mind and body, and perfect heart's ease that bespeaks the full enjoyment of health.

Tott's Liver Pills REGULATE THE BOWELS.

KANSAS FARMER.

ESTABLISHED IN 1898.

Published Every Wednesday by the KANSAS FARMER COMPANY.

OFFICE: KANSAS FARMER BUILDING, Corner Fifth and Jackson Sts.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

For an extra copy free fifty-two weeks for a club of six, at \$1.00 each.

A MEMBER OF THE Western Agricultural Journals CO-OPERATIVE LIST.

New York Office: Thos. H. Child, Manager, 150 Nassau Street. Chicago Office: Frank B. White, Manager, 543 The Rookery.

ADVERTISING RATES.

Display advertising, 15 cents per line, agate, (fourteen lines to the inch). Special reading notices, 25 cents per line.

Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of 40 cents per line for one year.

Annual cards in the Breeders' Directory, consisting of four lines or less, for \$15.00 per year, including a copy of the KANSAS FARMER free.

Electros must have metal base. Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send the cash with the order, however monthly or quarterly payments may be arranged by parties who are well known to the publishers or when acceptable references are given.

All advertising intended for the current week should reach this office not later than Monday. Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders to KANSAS FARMER CO., Topeka, Kas.

Hessian fly is reported in some Missouri wheat fields.

New Kansas wool, slightly burry, sold in St. Louis last week at 21 cents a pound.

The KANSAS FARMER is asked for an editorial article on the "Sub-Treasury question." You shall have it next week.

The number of stands of bees on farms and in cities and villages will be included in the census this year, and for the first time.

Mr. John Cline, New Cambria, Saline county, Kansas, says he has a "sure cure" for "pear blight," and "money will get it"—the cure.

Senator Stanford, California, has favored this office with a copy of his remarks in the Senate on the question of government loans on real estate security.

HEDGE-GROWING.—An excellent article on the growing of Osage orange hedges was received yesterday—too late for this week. It will appear in our next issue.

Farmers should be prepared, as far as possible, with the figures called for this year in the census, so that the count may be quickly and correctly made. The plans of Superintendent Robert P. Porter for the most complete census ever taken of agriculture in all its branches are now all in shape and it only needs the cheerful co-operation of every farmer to carry them out to complete success.

A friend kindly suggests that a little more practical agriculture and a little less politics in these pages would be an improvement. We think so ourselves, but just now politics has the floor. We have nearly a bushel of letters on various subjects from the tariff to booming towns, that it is impossible to print; but we have not more than three communications on farm matters, and they will be printed next week.

Superintendent Robert P. Porter has issued a circular stating that no assessor or other person connected with matters of taxation shall be eligible for the position of enumerator. Farmers and others should remember that the enumerators, and all other officers connected with the census, are sworn not to reveal to any one outside of their official relations any of the facts and figures obtained. The information is never published in the names of individuals, but only when summed up in figures by counties and by States.

THE POLITICAL SIDE OF THE FARMERS' MOVEMENT.

The party press is needlessly alarmed. Some of the papers go as far as to charge that the organization of farmers is a menace to parties. In Alabama the Alliance is threatened by the Democrat press; in Kansas it is threatened by the Republican press. An unlimited amount of confidence and sympathy are tendered to the Alliance in both cases, but only on condition that it, the Alliance, does not do or attempt to do anything in a political way. One paper calls the meeting of county Presidents an "anti-Republican caucus." This is not only foolish; but, as it looks to us, it is bad policy in a party sense. Men are not, ordinarily, regarded as traitors to party simply because they do not agree with all doctrines adopted by the party, or because they propose a new doctrine. If it be assumed that a party creed is to remain always the same, then, of course, any departure from that is heresy; but if, when new issues are presented, a party may take one side or the other of it, until party action has been taken, it is not good party policy to quarrel with the membership about their views concerning the new matter. The parties have not yet taken action upon any of the leading questions presented by the Alliance, and until that is done, or until an opportunity to do so has been ignored, it does not seem to be good management to charge members of the Alliance with a weakening of party fealty because of their position on the new questions.

While the "Farmers' Movement" is not a party movement, it is largely political, because the relief needed must come largely through legislation. Upon a few fundamental propositions all Alliance men are agreed. As to details there is nothing settled, that is left for further consideration, and there will be concessions. But upon the principles there is no difference of opinion. Every member naturally prefers to work with his own party, and he takes his new doctrines there for discussion. If he outnumbered his old associates who do not agree with him, he converts his party to his side of the question and it then will have the advantage of the party machinery to carry it into execution. If he fails in his argument and his doctrine is not accepted by his party, then it will become a question which he must determine for himself whether he will further urge his views touching the particular matter and whether he will do it among friends or among enemies. If he prefers his party to the Alliance, he will take sides with the party in all matters of difference; if he prefers the Alliance, he will align himself on that side.

Party leaders will be compelled to meet these new issues squarely; for while the Alliance is not partisan—being made up of all sorts of party men—it has espoused certain doctrines and it intends to put them all in issue. There will be no delay in this matter and no parlying. The movement is aggressive. Men who are in front are expected to take sides one way or the other. To ignore the movement is to be recorded against it, and none of its interests will be entrusted by the Alliance to its enemies. The parties which expect to retain among their membership those persons who are enrolled in the Alliance, must indorse Alliance doctrines, and the sooner this is attended to the easier the work will be.

"THIS IDIOTIC MEASURE."

That is what a Washington correspondent says of the sub-treasury plan proposed by the National Alliance and presented to the United States Senate by Mr. Vance, of North Carolina, in the form of a bill. Why should it be called an idiotic measure? Would it be any more difficult to operate than is a postoffice or a national bank? And is it in any respect, except as to the extent of its operation, essentially different from any ordinary co-operative business? Are not men in their private affairs doing business on that plan, and are they not doing well for themselves? Why not extend the principle to greater numbers? If the farmers should undertake to do this sort of work for

themselves, who would object on the ground that it is "idiotic?" If they may properly do it among and for themselves, what would change its character into idiocy if it were extended so as to include all the farmers in the country under government supervision?

THE GOVERNMENT AS A LANDLORD.

Last Wednesday the Lawrence Journal-Tribune contained the following editorial paragraph:

Judge Peffer told the farmers yesterday that the government should loan them money at a small rate of interest. Is Judge Peffer a Nationalist? If he is not, has not experience taught him that if his scheme is adopted the government will be the landlord and the farmers the tenants within a quarter of a century? If the farmers desire to remain independent that is the last scheme they should think of adopting. It is better to be in the power of a small corporation than in the clutches of a very large one.

If the writer of that paragraph had heard the speech he would have learned that its object was to suggest a way out of present troubles and not a way into greater ones. Under existing conditions it will be impossible for a great many of our people to pay off their indebtedness and the inevitable result will be the loss of their homes. In that case what will become of these unfortunate people? Their homes will have passed to other hands, and they must become renters or go to the public lands and start again.

The object of that speech and others by the same speaker is to arouse the people to an assertion of their power. They can help themselves out of this difficulty by taking charge of their own business in their own way, distributing money among themselves just as they distribute other public conveniences through public agencies only, relieving all individual persons and corporations from the responsibility of doing what the government can do much cheaper. There is no good reason why money which is made for the people's use should be chargeable with the salaries of officers and profits of corporations, before it reaches the people. If the people see to it that the money which they, through the agency of what is called "the government," is delivered to them directly and at cost, they will soon have their debts paid and they themselves will be the landlords. There is no danger of so just and wise a policy as this ever resulting in making the government a landlord; but if it should be so, there would be nothing hurtful about it. The government now is a very good landlord. Some years ago it was extravagant and wasteful, giving large tracts of land to railroad companies; but latterly it has been husbanding its landed resources. There is nothing alarming in the government landlord idea.

JEWELS IN THE ROUGH.

There is a great deal of harsh and ungenerous criticism of some of the proceedings of farmers in their Alliance meetings. All this, however, comes from enemies and not from friends of the "Farmers' Movement." One of these critics, and his comments are a fair sample of all or most of the others, puts it this way, referring to the published resolutions of the county Presidents' meeting:

The first "demand" is for "legislative enactment" to make up for the shrinkage in value of lands between the time of giving the mortgage and the time for its foreclosure. Of course, what is "saucy for the goose should be saucy for the gander;" and so when the value of merchandise, or of a horse, or of manufacturing implements—anything—shrinks between the time of foreclosure and sale from the same cause as the land depreciation in value, should be legislated for in the same manner. Justice to one should be to all. Or do these demagogues set up the plea that farmers are made of a little holler and better clay than the rest of mankind, and, therefore, are entitled to more consideration than others? Of course, every sensible farmer will see the unspeakable absurdity of this proposition at a glance, unless its scope is widened to take in all the rest. And then what? An end to business, for all foundation is removed and nothing is left to build up a business upon.

The "demagogues" that this writer refers to are not trained politicians; they do not know how to dissemble. What they mean they say, using words which express the leading idea. Some resolutions adopted by Alliances do appear to professional writers as "unspeakable absurdities," and yet, we dare say, not one set of resolutions has gone out from any sub-Alliance that did not contain at least one fundamental

idea based on justice between man and man. These people, accustomed to hard work on the farm, in the shops and mines, are not trained to the use of words; they express themselves roughly it may be, but their homely words sometimes contain the choicest thoughts. Like jewels in the rough, bright thoughts and laudable sentiments are concealed beneath these crude expressions. In the hands of skillful word painters the central thought in many of these same "unspeakable absurdities" would glow and glisten like diamonds in a coronet. Take, for example, the "shrinkage" resolution above referred to. The men who adopted it gave expression to an idea of great and good import, an idea which underlies the Alliance movement, that of simple justice between man and man. Is there one money-changer in a thousand that ever thinks of sharing the misfortunes of his debtor? He wants the contract complied with to the letter, no matter how hard it is. He has no mercy. He has the law on his side, and he insists upon its prompt and complete enforcement. That a family is to be ruined by his conduct is no matter of his. He looks to his own interest and cares nothing about that of his debtor. On the other hand, not one debtor in a thousand but is careful to guard the rights of his creditor and would not occasion him the loss of a farthing if it be possible to prevent it. This "shrinkage" resolution is but the expression of an idea which, when it is made plain, means the administration of exact justice; that and nothing more.

GOING INTO POLITICS.

The Sumner County Press is in love with the Alliance, but it harbors a mental reservation. It extols the objects of the "organization," but is in dread lest it make a mistake by going into politics. Hear the Press:

Gentlemen, you cannot afford to lower your flag. There is a vast work for you to do, as an independent force working with a single eye to the common good. Guided by wisdom and patriotism you cannot fail to accomplish great good. Your province is to prune the parties. By keeping your army of members together bent on the one purpose to rid the country of criminal combines and class laws against our laboring interests—to thwart all schemes to rob you of the benefits of toil, you can soon have things much your own way. Aim your guns at frauds and swindles of every description; down the tools and tricksters of the money power, whether Democratic or Republican; meanwhile incidentally, see if you please, that your members have their share of the offices, and the country will bless you. Go into politics as a party and your great power for good is destroyed and your organization is a goner sure, because you will average no better than other parties. This is the advice of one who earnestly desires to see you carry out the truly great mission before you.

Now, will the Press kindly inform us how this "vast work" which it desires to be done can be effected by not going into politics? How can the Alliance "prune the parties" by saying nothing about politics? Are not the parties in politics? Can they be found anywhere else? Is it not absolutely necessary to go into politics in order to prune the parties? Will the Press suggest how the needed work can be done in any other way?

This may or may not mean separate political action. The platform adopted by the St. Louis convention and by the State organizations make up the Alliance platform and the principles therein enunciated must be adopted by the parties or the pruning process will be greatly retarded if not absolutely prevented.

FARMERS' POWER IN CONGRESS.

Col. Van Horn, of the Kansas City Journal, writing from Washington about silver coinage and the interest Western people have in it, says the farmers can have free silver coinage if they insist upon it. "If the farmers will next fall organize on this question and make the candidates for Congress—all parties—pledge themselves to see that free coinage of silver is made the law by the Fifty-second Congress, the thing is done. The House of Representatives is composed of 330 members. Out of these the farmers, or country vote, control at a low estimate 250 districts—or three to one. Not only could they pass a bill, but override a veto, and have thirty votes to spare. And add to this the resolutions of instruction to Senators from the State Legislatures that the farmers can control, and the thing is done."

HOME AND FOREIGN MARKETS.

Some friend kindly sent us a marked copy of the Mount Pleasant (Iowa) Free Press, the marked matter being a communication criticising an article on "over-production" published in the April Forum.

Readers of the KANSAS FARMER know that we have all along advocated protection, but that we have insisted on not paying for it more than it is worth; that free trade, as in sugar, is sometimes the best protection.

But what we began to write about is the assertion that the tariff operates as a "fence" or "wall," keeping our people out of foreign markets and keeping foreign traders out of our markets.

WHY NOT DEMAND?

A correspondent of the Topeka Capital objects to the use of the word "demand" in public utterances of the Alliance. It is a common thing for political parties to publish declarations of principles, and in connection therewith to state what they desire pertaining to legislation; but we do not now recall an instance where the word "request" or one of similar import was used.

A WORD ABOUT BOOMING.

We have a long communication from a Sumner county friend, written in opposition to "booming." He is exactly right in his estimate of its object and effect. Who are the boomers? Not farmers or hand workers; they are men who live by their wits and by lending other people's money.

rise in property values that he may fatten on it, leaving his victims to bear the loss when reaction comes. Kansas farmers would be vastly better off to-day if the development of her resources had been left more to normal processes.

Tree-Planting in Western Kansas.

We copy the following observations of Hon. Martin Allen, State Commissioner of Forestry, as printed in the Cimarron Echo: The alanthus grow too fast, and they winter-kill somewhat; and because it is such a fast grower is exactly why it is so valuable for fuel."

"To protect the trees from borers, Mr. Allen advises that the trees be pruned so low that the tops will shade their own trunks, leaving the lowest limbs on the south side of the tree. The high bare trunk of a tree devoid of side branches is very apt to sun-scald, which makes a favorite spot for the borer to burrow in.

"The most useful fruits to grow in western Kansas are, first, cherries; second, plums; third, apples. The Missouri Pippin and Winesap come into bearing the soonest of winter varieties. The country is rather dry for strawberries, but it has fair success. Blackberries do not flourish. The Concord grape does quite well. The apricot is harder than the peach. The pear has been grown with success.

"The ground should be deeply and thoroughly prepared. Plant a trifle deeper than the tree grew in the nursery. Do not hill up, but keep the ground level. Mulching has many advantages—persistent cultivation is much better. Dry dust constantly stirred through a long drowth is the best form of mulching that can be given. Shallow cultivation and plenty of it is the best about growing crops.

"The best way to keep gophers from burrowing in under fruit trees is to plant castor beans occasionally through the orchard, and the gophers will leave."

"THE WAY OUT."

The demand for this little book is increasing very fast. The first edition was mailed a week ago; the second edition is now being mailed, and the third edition is in press. "The Way Out" opens a new field of thought; it not only shows where we are and how we got here, but it shows the way out and makes plain every step as we go.

State Dairy Association.

We have a full report of the proceedings of the State Dairy Association at Abilene, last week, but it came too late for insertion this week.

Our esteemed contemporary decides in regard to Judge Peffer's plan of borrowing money from the government "that it is better to be in the power of a small corporation than in the clutches of a very large one."

A correspondent, writing from Perth, Sumner county, asks whether County Commissioners are authorized to donate money to "boom the State?" No. The duties of County Commissioners are plainly prescribed in the law.

A Washington dispatch says that Senator Ingalls, by request of the "Wage Workers' Alliance" introduced a bill proposed by that organization, to establish a system of national banking by the government, so that people may obtain money on security at rates low enough to cover expenses.

Gossip About Stock.

The Colorado cattlemen have decided to form a live stock commission company on the same style of the American Live Stock Commission company. They propose to sell on a 25-cent basis.

I. L. Whipple, Ottawa, Kas., says that stock is doing well. He expects twenty thoroughbred sows to farrow during this and next month. Thirty February and March pigs are doing nicely. Good breeders and regular advertisers cannot breed too much stock for the demand at paying prices.

Atchison Champion: The dairy industry in Kansas is rapidly coming to the front. There are now 108 creameries in this State in successful operation. The only kind of dairying that will not succeed in Kansas, at least not this year, is the attempt to milk and churn the Alliance in the interest of political hacks.

Swine-Breeders' Journal: F. Bellows & Son, Maryville, Mo., report the sale of 110 head during 1889, at an average of \$21 per head. For the trade of 1890 they have forty young and twenty old sows to farrow, bred to Royal Gold Dust 3735 S., Baron Victor 4006, Chief Tecumseh 4352, Quality 4401 and Tecumseh's Chief 10211.

W. A. Travis, North Topeka, an advertiser of Holstein-Friesian cattle, in a letter says: "Of all the advertisements I have carried in from four to six agricultural papers, I have realized more real benefits in the immediate vicinity of the West from the KANSAS FARMER than all others I have had in two years. I like the way you advocate the farmers' cause."

Rumsey Bros., Emporia, Kas., report the sale of a herd of sixteen cows and one bull (Devons) to Henry N. Persons, Longton, Kas., with whom we expect they will prove a success. They have also sold twelve calves for shipment to the Gulf States, besides other sales. As the good qualities of the Devon becomes known the demand for them steadily increases.

T. C. Taylor, Green City, Mo., writes: "My Poland-Chinas are coming through the winter in fine condition. My herd consists of fourteen choice sows. Two of them have already farrowed, the two having twenty pigs. Who says now that Poland-Chinas are not prolific? These sows are of the justly famous Corwin strain. I recently shipped three pigs to Kansas; the FARMER has credit for the sale."

Again we call the attention of our readers to the grand closing-out sale of Galloways at Emporia on the 23d of April, as advertised elsewhere in our columns.

The herd of forty head represents some of the finest individuals and best blood found in the country, many of them having been awarded the highest honors of both America and Great Britain. Those wanting to purchase Galloways should not fail to attend this sale.

Jewell County Review: Chas. F. Horne, of this office, last week received by express two thoroughbred recorded Small White Yorkshire pigs from the noted herd of Col. S. N. Delap, Iola, Kas. These two pigs are, without exception, the most perfect specimens of the hog family that ever came to Jewell county.

Levi Chubbuck, Secretary Missouri State Board of Agriculture, reports that there has been an increase in all classes of stock, excepting sheep, in the State as a whole. Sheep have decreased in all sections excepting in southeast Missouri, the total decrease for the State being 7 per cent., or 47,072 head. There has been an increase of horses in the State of 5 per cent., or 48,877 head. Mules increased 4 per cent., or 8,852 head. Jack stock, 91 per cent., or 4,689 head. Cattle, 5 per cent., or 113,424 head. There was a falling off of 2 per cent. of the cattle in southwest Missouri. Hogs increased in number 7 per cent., or 437,981 head.

Savage & Farnum, of Island Home stock farm, write us that their sale season has opened up very satisfactorily, and the correspondence promises a good business during the next few weeks. A notable feature of the correspondence is this, that it indicates a better class of farmers and breeders going into the horse business in the near future than we have had in the past. The very best farmers and many business men in towns and cities are engaging in the draft horse industry for the simple reason that there is always a ready market and at good prices for their product.

The public sale of Galloway cattle by M. R. Platt, of Kansas City, resulted very well considering the long depression of the business. The Kansas City Journal gives the following: While there was not the crowd seen at such sales in years past, there was, nevertheless, a fair number of buyers from Missouri, Kansas, Illinois and Nebraska. Among the more prominent breeders of Galloways present were noticed Frank McHardy, Emporia, Kas.; Leveret Leonard, Mount Leonard, Mo.; J. B. Black-shere, Elmdale, Kas., and C. E. Musick, of Hughesville, Mo. The sale was commenced in the morning, but dragged so that it was adjourned over until after dinner. When time was called the second time a number of new buyers were on hand and the sale progressed fairly well under the spirited crying of Col. L. P. Muir, the auctioneer. The cattle were a fine lot of young things, both as to breeding and individuality, most of them of the Drumlaurig breeding. As compared with the brighter days in the cattle market, prices ran low, but contrasted with recent sales it was a fair success and showed decidedly better feeling among breeders than a year ago. Twenty-five cows and heifers sold for \$3,161, an average of \$126, and twenty-six bulls for \$4,140, an average of \$159. The best sale of the day was Hopeful II. of Dyke Creek, a very fine two-year-old bull, of Dyke Creek, a very fine two-year-old bull, both as to breeding and individuality. He was by Marksman of Drumlaurig (3832), one of the Duke of Buccleuch's prize bulls, and out of imported Dorothea. Dou of Dyke Creek, another Drumlaurig bull, a beautiful yearling, brought \$315. For a female the best price paid was \$250, given by C. E. Musick, of Hughesville, Mo., for Susie Hood V., a Drumlaurig, a two-year-old heifer by that noted bull, Scottish Chief. She was as rich in form as breeding, and would grace any herd. Mr. Musick got many other "plums," taking no less than eleven of the best offerings.

Topeka Weather Report.

For week ending Saturday, April 5, 1890. Furnished by the United States Signal Service, F. A. Whitney, Observer.

Table with columns: Date, Max. Min., Rainfall. Rows for March 30, 31, April 1, 2, 3, 4, 5.

Half Rate.

From May 8 to 28, 1890, you can obtain of your local ticket agent or by addressing the undersigned, tickets via the Missouri, Kansas & Texas railway to Fort Worth, Texas, and return, good until June 3, 1890, at one fare for the round trip. This low rate is made by the M., K. & T. Ry. on account of the Texas Spring Palace, which opens at Fort Worth May 10 and closes May 31, 1890. Geo. A. McNutt, Trav. Pass. Agt., 244 Exchange Building, Kansas City, Mo. Gaston Mesler, Gen'l Pass. & Ticket Agent, Sedalia, Mo.

Reduced Rates via M., K. & T. Ry., Account of Southern Baptist Meeting.

Account of the Southern Baptist Meeting, which convenes at Fort Worth, Texas, May 9, 1890, the Missouri, Kansas & Texas railway will sell upon May 7, 8 and 9, 1890, round-trip tickets to Fort Worth at the rate of one fare for the round trip, tickets to be good thirty days. Call upon your local ticket agent for tickets and particulars, or address Geo. A. McNutt, Trav. Pass. Agent M., K. & T. Ry., 244 Exchange Building, Kansas City, Mo., or Gaston Mesler, G. P. & T. A., Sedalia, Mo.

Horticulture.

THE AMERICAN HORTICULTURAL SOCIETY--TEXAS MEETING.

Third paper—By Prof. E. A. Popenoe.

Prof. H. C. Ford, of California, read a comprehensive and valuable paper upon "The Bamboo," giving a general history of the noble grasses known by this generic name, and advert to the possibilities of their profitable introduction into the warmer parts of our own country. Botanists have already described twenty genera and 170 species of this family, and additional forms are found and are still to be looked for with every extension of exploration into the interior of the continents under the equator.

The species now known are most numerously represented in southern and eastern Asia and in the islands of the East Indian Archipelago, where they are of the greatest importance to the natives, the uses to which the parts of the plant are put being innumerable. There is but a single species, the common cane of the Southern lowlands, indigenous to the United States. It is suggested that even this species is worth the attempt to improve it by cultivation.

In the bamboos, the slender jointed cane is hollow, the joints being closed by a partition at each node. The cortex or bark is very hard and siliceous, and the narrow-pointed leaves give a graceful appearance to the plants that render them of great demand in ornamental gardening wherever the species are hardy.

They produce annually, from the subterranean running stems, new canes which grow with such rapidity that even in the tall species of China and India they require but a month or two to reach full height. It is stated that the giant bamboo of India has been observed to grow a foot per day, and in others a growth of two to two and one-half feet per day has been recorded. California specimens do not reach the maximum rapidity of growth, eight inches per day being considered worthy of note.

Bamboos flower at the age of from twenty-five to forty or even sixty years, and the stem then dies, so that the seed, though a very useful product, is uncertain in quantity and in time of maturity. The grain is small, and from the description might be supposed to resemble in form and size a grain of chess. It makes a healthy food, and when boiled it may be compared in taste, flavor and appearance to ordinary rice. It is said that in seasons when the rice crop has failed, famine has sometimes been averted by the opportune flowering and seeding of the bamboo.

The species of this family are not all so strictly tropical in their distribution as some suppose. One form extends northward in China to the 40th degree of latitude, and on adjacent islands still farther. In Japan the species must often endure a cold sufficient to freeze ice an inch and a half in thickness. Small species are successfully grown by gardeners in southern England and some even in parts of Scotland. It is suggested that many forms may be made to grow in the valley and coast regions of California, in Arizona, New Mexico and Texas, and even in States somewhat north and east of these. It might reasonably be expected that a plant so useful to the half-civilized races that people the lands of its habitat, would in the hands of civilized artisans soon expand its already broad field of usefulness.

Certain California gentlemen are interesting themselves in the introduction and distribution of the choice Japanese sorts, and several of these have already been experimentally grown in the gardens of the State University at Oakland.

As the seeds are germinated with great difficulty and as they are produced in some at such long intervals, they are not relied upon by the Japanese for the propagation of new plants, but for this purpose, as stated by Mr. Fernow, an established plant is trenched about, and in the trench is put a soil specially prepared and composted, in order to encourage the growth of roots from underground stems. When this result is accomplished the plant so

treated may be removed to a new station, while the runners cut in its removal themselves send up shoots and soon become strong plants.

When fully matured the stems of the bamboo are available in a great many ways. They may be used in fences, water-pipes, drains, ladders, beams, and indeed in the different sorts materials may be found for the construction and furnishing of an Oriental house entire. The stems of certain climbing bamboos, commonly known as ratans, are used as cords, cables, ship rigging, bridge material, and the like. Others are useful in the construction of agricultural and domestic implements, and in appliances for fishing, while not only household furniture and musical instruments, but even wall hangings, floor coverings and some articles of clothing are made of the smaller canes, their fibers or their leaves.

The succulent new growth is cut and eaten as we eat asparagus. Sliced and boiled it is said to be very tender and of delicate flavor. A California planter considers the forage produced from his bamboo plantation (*Bambusa arundinacea* being the sort grown) as of great value for stock feed. He says one acre of bamboo produces as much feed as twelve acres of alfalfa, as he can prove. He has found by trial that the young growth is a food of special value to dairy cows. While this grower succeeded in the production of abundant feed without irrigation, he states that the occasional application of water is productive of more satisfactory results.

The cultivation of the banana in California was discussed by Mr. Kinton Stevens, who thinks that while there are few localities in that State where the banana can be grown to a profit from a financial standpoint, yet the success already had by amateur planters is likely to encourage a more general cultivation of the fruit by those who prefer the finer flavor of the naturally ripened home-grown to that of the immature imported fruit. Where the tomato will stand the winter unprotected the banana can be grown and fruited. Slight frosts stop the growth but a short time. The plants are of as easy cultivation as corn, and respond promptly to irrigation. They delight in a well-drained alluvial soil and are great feeders.

The Abyssinian banana, known to botanists as *Musa ensete*, is of ornamental value only, its rich foliage being much admired; its fruit, however, is full of seeds and its pulp is tasteless and dry. The common plantain (*Musa paradisiaca*) grows to the height of ten to fifteen feet, and the leaves, spotted with brown when young, reach a length of five and a width of two feet. Its fruit is edible and of fair size. The Orinoco or horse banana is of hardy growth, but is less desirable than some others because of the difficulty with which the fruit is ripened. When picked before maturity the fruit becomes insipid and decays, and if allowed to hang, it will often remain six or eight months before it becomes mellow. The Chinese or Dwarf banana (*Musa Cavendishii*) is the smallest of the fruiting sorts, attaining but four to six feet in height, and on this account easily protected from frosts by a covering. The plant is stout and not likely to break when loaded with fruit. The bunches are of good size, but the separate fruits are small. Hart's Choice or Lady-finger is thought by the writer to excel all others for his locality. Its fruit is abundant and of fine quality. The plants of this variety are less readily propagated than are some others, as few suckers arise from the base. The Red Jamaica or Baracoa grows well, but is less hardy than the last. The skin of the fruit is red but the flesh is yellowish white. The plant attains a height of ten feet, and is quite susceptible to injury by the wind or by frost. The Golden Fig banana from the Sandwich Islands is of robust and tall growth and very hardy. Its fruit is bright yellow, fine and juicy.

The propagation of the banana is effected by the transplanting of the suckers that usually spring up in numbers about the base of the old stems. In California it takes from twenty months to two years to mature fruit from the setting of the young plant, and it is necessary to transplant at

such a time that the fruit will be maturing during the hot season, as fruit ripening in the winter is comparatively worthless. It is well to tie a bunch of leaves over the fruit while ripening, to protect from sun-scald and to hasten mellowing. The soil should be rich and deep, and the cultivation restricted to the raking of the surface, as the roots lie shallow. Mulching is of great service. The locality should be well protected, with a southern exposure, the south side of a building being a favorable site.

A report on the progress of olive culture in the Santa Clara valley, California, written by E. E. Goodrich, was read by the Secretary. This report stated in substance that in the two years past since the visit of the Society to the Santa Clara olive orchards, the yield of fruit was small but the quality of the oil produced very satisfactory. The propagation of olive trees is now a business of importance. They are grown from the cuttings taken off the bearing trees during the winter pruning. The orchards are now in full bearing and are well cared for, the prospect being good for a good crop in the present season. Experiments in the grafting of the best of the Italian varieties of the olive have been quite successful, and it is proposed to utilize this method in changing the character of the fruit whenever a variety is found to be unsuited to the surroundings. To economize space, the intervals in the orchards are planted to grapes. Olive culture seems likely to become a profitable industry, and inventors are now engaged upon more simple processes of oil extraction that bid fair to increase greatly the profits of these orchards.

Apple Culture.

Extract from a paper read before Brown County Farmers' Institute, by B. F. Partch: "I have to say first, that in selecting a site for an orchard it should be near the house, and if possible on a north-east slope, for the reason that that lay of the land is best adapted for the protection of trees from the sun and hot winds. I would plow the land in the fall and plow deep, subsoiling, allowing the subsoil to remain at the bottom. The ground should be plowed again in the spring and thoroughly pulverized before planting. I would then plant the root-grafts, three grafts, eight inches apart; each not more than eight feet apart in the row each way, taking out the two that have made the least growth after the first year, planting corn between the rows and cultivating the same as corn, both ways. This cultivation should be kept up for eight or ten years, or until the trees have attained the size desired. If at any time you wish to check the growth of the tree for the purpose of making the tree bear more fruit, it can be done by stocking to grass, the common red clover is the best. The trees should be headed low, for this fact should be borne in mind, that notwithstanding all the artificial wind-breaks that you may invent or put up, the tree itself must largely be depended upon for its own protection, and if you take care that it has all the means that nature has provided it with to win the race, it will win. After the tree is grown and comes into bearing then comes the question of how shall we protect the fruit from the depredations of the codling moth which become more and more marked each year. Last year two-thirds of the fruit, more or less, was injured and made unfit for market. It is quite evident that something must be done to check its ravages."

1890 is the Year to Plant Trees.

IF YOU DON'T WANT 1,000 TREES

SEND \$1.00

for 100 Forest Trees by mail, or 100 Strawberries by mail, or 20 Grape Vines by mail, or all three packages for \$2.50. Send for catalogue and prices.

Hart Pioneer Nurseries, Fort Scott, Kas.

TOPEKA SEED HOUSE

Fresh Garden Seeds, Clover, Timothy, all kinds of Grass Seeds, Seed Corn, Seed Potatoes, GARDEN TOOLS, Flower Seeds and Flowering Bulbs. Address
TOPEKA SEED HOUSE,
S. H. DOWNS, Manager,
304 Kansas Ave., Topeka, Kas.

If you want the best Garden you have ever had, you must sow

MAULE'S SEEDS.

There is no question but that Maule's Garden Seeds are unsurpassed. Their present popularity in every county in the United States proves it, for I now have customers at more than 32,500 post-offices. When once sown, others are not wanted at any price. My new Catalogue for 1890 is pronounced the most original, beautifully illustrated and readable Seed Catalogue ever published. You should not think of purchasing any SEEDS before sending for it. It is mailed free to customers and to all others enclosing 10 cents in stamps for it.

My Special List of Striking Specialties for '90 mailed free to all who write for it, mentioning this paper. Address

WM. HENRY MAULE,
1711 Filbert St. PHILADELPHIA, PA.

CECIL'S FRUIT FARM AND NURSERY.
J. F. CECIL, Prop'r, North Topeka, Kas. Fruit and Ornamental Trees, Vines, Plants and Shrubs. Cherry Trees and Small Fruits a specialty.

Alfalfa Seed

DIRECT FROM GROWERS.

MEFFORD & PLATT,
Seedsmen,
GARDEN CITY, KANSAS.

Seeds!

Send for "Farmer's Special List" to

THE HARDEN SEED CO.,
Kansas City, Mo.

1867. IN KANSAS. 1890.

The Kansas Home Nursery

Offers a large supply of the best home-grown Fruit and Ornamental Trees, new and rare varieties of Apples, Pears, Cherries, Plums and Small Fruits. Originator of the Kansas Raspberry. Agents and dealers supplied on liberal terms. A. H. GRIESE, Prop'r, Drawer 28, Lawrence, Kas.

Evergreens!

SHRUBS AND ROSES.

Northern Red Cedar a specialty. My stock is well grown and in first-class condition. Buyers should write for prices. Boxing free. Full instructions for planting Evergreens.

GEO. W. TINCHER, Topeka, Kas.

Rose Lawn Fruit Farm

111 111 Jessie, Bubaoh, Warfield and Hav-erland Strawberry Plants. Immense supply of other varieties, both standard and new. All kinds of small fruit plants at lowest hard-time prices. Write for catalogue and prices, free. Address
DIXON & SON,
Netawaka, Jackson Co., Kansas.

Douglas County Nursery.

Established in the county in 1869. For the coming fall and spring, we present a full line of nursery stock for the market. We have a large surplus of 1, 2 and 3-year apple trees; 25,000 1-year Concord grape vines—No. 1; 8,000 of other varieties, by the 100 or less—Elyria, Drucat, Amber, Catawba, Worden, Niagara, Ives; pieplant by the 1,000; 750,000 No. 1 hedge plants. Everything at hard-time prices! Send us your list and let us give you rates. Write for price and variety list. WM. FLASKET & SON,
Lawrence, Kansas.

Litson Nursery and Fruit Farm.

10,000 No. 1 Apple Trees for sale cheap. Pear, Plum, Peach, Cherry, Small Fruits, Evergreens, Ornamental Shrubbery, etc. We sell direct to the farmer and save him the agent's commission. Write for free price list. W. H. LITSON, JR., NEVADA, MO.

1869. 1890.

Mount Hope Nurseries

For the SPRING OF 1890 we offer to our customers, new and old, a superb stock in all its branches, especially of Standard and Dwarf Pear, Cherry and Plum trees. This is Native Stock, and worth twice that of Eastern-grown. Catalogue on application. Correspond, stating wants. Wholesale trade a specialty. A. C. GRIESE & BRO., Lawrence, Kas.

The Poultry Yard.

Poultry Notes by a Correspondent.

There will be many chicks hatching before the month is up. Don't be neglectful and lose all you expect. From the very day the hen begins to sit you should look after her wants and see that she attends to her duties as she should; she will not do her best unless you help her.

A cross of Plymouth Rock cocks with large, coarse hens you can produce an excellent chick for market. They mature rapidly, have yellow legs and skin, and always look well when dressed. This is the time to consider such questions if you have not already done so.

Have you heeded our advice about clean hen-houses? Have you provided the necessary green food for them now, as there is none outside just yet? Is your house dry and well ventilated? These are just a few things that are necessary; we will remind you of others again later on.

Those barrels of manure from the hen-house saved from fall and winter we will use to good advantage about our strawberry plants and currant bushes soon. A farmer should never forget the value of keeping all the droppings from the hens; its value as a fertilizer for small fruits cannot be overestimated. A market gardener who has used it once can tell its value if you will but ask him. A barrel or a box covered over keeps it and its fertilizing properties retained; be sure and keep it so.

You can hardly make a success of the poultry business without a good incubator and brooder. If the markets are to be met with early broilers you will not be able to meet the demand from a flock of hens. An incubator hatches in December when most hens are resting; by this time or a few weeks later a lot of broilers are ready, you can readily see the advantage gained. Don't be a mossback and disbelieve this because it is new to you. Solomon once told a lie when he asserts that "there is nothing new under the sun." Facts will prove there is.

This season will find the hens not in the hay mow of the barn, but where they must belong, that's in their house below the barn. If hay is what they want provide it. A farmer that has forgotten to build a poultry house and permits his flock to wander where they will about the hay mow, should not own a hen. The hay they of necessity befall when in the barn is not inviting to the tastes of either cattle or horses, although they cannot tell you what they think about it all; they taste, that's sufficient, and they would if they could converse with you. Are you one to heed this advice—we hope you are.

In Barred Plymouth Rocks experience tells us the wisdom of mating medium-colored males and females together. Is the question put why? Well here we reply: What you want is a trifle lighter males than what is common among this breed. A few seasons' matings of the former colors produces males of just the color, and when you have the male up near perfection the females soon will follow suit, and three years' breeding should bring your stock to the point that they will breed the color nearly every time. To-day more perfect Plymouth Rocks exist than ever; it's not so hard to find the stock that will produce what nearly all are aiming for—good bars and well defined.

We make our nests dark; experience teaches that hens prefer a secluded place. They will steal away and lay until a setting's ready, then begin to settle down and hatch them out. Away from noise and the view of other fowls keeps them "at their work" with steadiness; this always means a hatch and a good one, too. If the chicks come out in day time we never feed or disturb them until the following day, then a light feed of cracker crumbs and soft meal made up of oats bran, and this in very moderate quantities is what is considered sufficient. After a day or two a change to cracked wheat may be given with bread crumbs; a little milk to drink is quickly taken by the little mouths, it's

relished too and nothing can excel it. Milk fattens and keeps the little fellows active, a better substitute than water for a thirsty mouth; they will not be long in indicating by their actions that its good. We would suggest at least a trial if you have forgotten what was told you in previous writings.

It is not always good policy for the city or town breeder to get fowls that he cannot restrict within his own premises, although suitable to his taste. The Brahma is especially desirable, for they can be kept in places where no small and lively breed would content themselves without leaving when an opportunity was offered and possibly doing mischief to the owner or neighbor. They are not obstinate like some breeds, and can be driven to their roosting places or runs much easier than a flock of sheep, and controlled within prescribed limits with very little cost attending it. Breeds of an erratic and nervous temperament will not keep still under the best treatment, but the Brahma, by force of natural characteristics, will keep quiet and contented if it has plenty to eat.

A codfish fastened up secure will benefit all fowls. They pick small pieces containing salt, which every chicken likes and needs. In this form they seldom get too much, the exercise will benefit even a lazy fowl; we hope the lazy ones are dead and gone long ago; some will appear in every flock, don't let it be in yours. It costs the same to keep a worker as a drone; the former works and pays its way, the other—well its hardly worthy of the space it occupies. Keep your eyes open and furnish all the dainties you can find, it means returns in profits every time. Variety is what is wanted, it will keep you thinking sure enough, yet what's your business. If you keep a flock of chickens, if you fail to keep them living to pay you right along, you'll find it pays, but not to neglect them.

Ground Bone for Poultry.

Poultry must have a liberal supply of ground bone. It contains lime, as do oyster shells, but it contains animal matter which is of great value. Bone when burnt is of comparatively little value over oyster shells, but when crushed or ground raw supplies value peculiar to itself. All classes of poultry are extremely fond of it. Care should be taken to have it pure and sweet. It is good for poultry of all classes and ages. For young chicks it should be used in the form of meal, mixing a small quantity two or three times a week in connection with their soft food. A quart to a bushel of corn meal is about the proportion. No injurious effects will follow, for it is nutritious and strengthens the bones and legs. Brahmas and other Asiatic chicks for the same reason are greatly benefited by its use.

CORN IS KING,

and KANSAS GOLDEN IS KING OF ALL CORN! Grains three-fourths of an inch in length, four large stalks, with four ears thereon, averaging ten inches in length, bearing 3,616 grains, all the product of a single grain. Sixty-five ears shelled 59½ pounds of corn, including cotton sack. Yield from 60 to 100 bushels per acre. The result of fourteen years of careful breeding. Send for circulars giving history, testimonials and price of this remarkable corn to WM. RAMSEY, Solomon City, Kansas.



FOREST TREES

Catalpa Speciosa, White Ash, European Larch, Pines, Spruces, Arbor Vitae, etc., etc. Catalpa Speciosa Seed Forest and Evergreen Seeds. R. DOUGLAS & SON, Waukegan, Ill.

PLANT SEED COMPANY'S RELIABLE



Wholesale and Retail Dealers in VEGETABLE, FLOWER and TREE SEEDS, GRASS and CLOVER SEEDS, ONION SETS, SEED POTATOES, SEED CORN. Fertilizers, Garden Seed Drills, Cultivators, Seed Sowers, etc. Our 1890 Illustrated and Descriptive CATALOGUE now ready. SEND FOR IT FREE. Address, [Established 1845.] PLANT SEED COMPANY, 612 & 614 North 4th Street, St. Louis, Mo.



\$10,000 FOUND IN AN ASH BARREL.

A New York rag-picker is reported to have found \$10,000 in greenbacks in an ash barrel. This was a rare piece of good luck, but how much more fortunate is the sufferer from consumption who learns that, although the doctors may have pronounced his case hopeless, Dr. Pierce's Golden Medical Discovery will cure him. Consumption is a scrofulous disease of the lungs. The "Discovery," which is the most potent blood-purifier of the age, strikes right at the root of the evil and there is no resisting it, if taken in time and given a fair trial. In the cure of all scrofulous and other blood taints, no matter from what cause arising, scalp diseases, old sores and swellings, it absolutely has no equal.

Thoroughly cleanse and enrich the blood, by the use of Dr. Pierce's Golden Medical Discovery, and good digestion, a fair skin, buoyant spirits and bodily vigor and health will be established.

For Weak Lungs, Spitting of Blood, Shortness of Breath, Bronchitis, Asthma, Severe Coughs, and kindred affections, it is an efficient remedy.

"Golden Medical Discovery" is the only blood and lung remedy, sold by druggists, and guaranteed by its manufacturers, to do all that it is claimed to accomplish, or money paid for it will be promptly refunded. WORLD'S DISPENSARY MEDICAL ASSOCIATION, Manufacturers, No. 663 Main Street, Buffalo, N. Y.



\$500 OFFERED for an incurable case of Catarrh in the Head by the proprietors of DR. SAGE'S CATARRH REMEDY.

SYMPTOMS OF CATARRH.—Headache, obstruction of nose, discharges falling into throat, sometimes profuse, watery, and acrid, at others, thick, tenacious, mucous, purulent, bloody and putrid; eyes weak, ringing in ears, deafness, difficulty of clearing throat, expectoration of offensive matter; breath offensive; smell and taste impaired, and general debility. Only a few of these symptoms likely to be present at once. Thousands of cases result in consumption, and end in the grave.

By its mild, soothing, antiseptic, cleansing, and healing properties, Dr. Sage's Remedy cures the worst cases. This infallible remedy does not, like the poisonous irritating snuffs, "creams" and strong caustic solutions with which the public have long been humbugged, simply palliate for a short time, or drive the disease to the lungs, as there is danger of doing in the use of such nostrums, but it produces perfect and permanent cures of the worst cases of Chronic Catarrh, as thousands can testify. "Cold in the Head" is cured with a few applications. Catarrhal Headache is relieved and cured as if by magic. It removes offensive breath, loss or impairment of the sense of taste, smell or hearing, watering or weak eyes, and impaired memory, when caused by the violence of Catarrh, as they all frequently are. By druggists, 50 cents.

NEW STRAWBERRY "LADY RUSK"

The best berry for long distance shipments. Will not rot or melt down if packed dry. Headquarters for all leading varieties of Berry Plants and GRAPE VINES having 300 acres in cultivation. Catalogue free. WM. STAHL, Quincy, Ill.

GRAPES NIAGARA VINES

Largest Stock in America. Also other SMALL FRUITS. Descriptive Catalogue Free. Send list for prices. EATON, T. S. HUBBARD CO., FREDONIA, N.Y.

THE SYRACUSE NURSERIES

OLD AND RELIABLE, LARGEST & MOST COMPLETE Assortment of Nursery Stock in America. In BUDDED APPLES and STANDARD PEARS they acknowledge no competition—quality considered. Nurserymen and Dealers will consult their own interests by getting prices on this SUBERB STOCK before buying. Special inducements to buyers in large quantities. SMITHS, POWELL & LAMB, Syracuse, N.Y.

FIRE DRIED SEED CORN

CENTENNIAL WHITE First Premium at Nebraska State Fair in 1889. Peck, 60c; Bushel, \$1.75; 2 bushel, \$3.00. KING OF THE EARLIEST. 90 days, IMPROVED LEEAMING, RILEY'S FAVORITE, YELLOW DENT and EARLY CALIFORNIA: Peck 50c; Bushel \$1.20; 2 bushels \$2.00. NEW EARLY BONANZA, STOWELL'S EVERGREEN and EGYPTIAN SWEET CORN. Peck, 50c; Bushel, \$1.50. SWEET CORN for Ensilage. Bushel, \$1.00; 2 bushels, \$1.50. GERMAN MILLET: Peck, 50c; Bushel, 70c; 5 bushels and over, 50c per bushel. AMERICAN BANNER, WHITE BONANZA OATS and MANSHURY BARLEY. Peck, 40c; 2½ Bushels, \$1.50. JAS. W. BOUK & HUPERT, Greenwood, Neb. Box B.

Jewett's Sheep-Shearing.

On April 1 and 2, Samuel Jewett & Sons held a public sheep-shearing at their commodious establishment, near Lawrence, Kas. H. A. Heath, Secretary of the Kansas Wool Growers and Sheep Breeders' Association, took charge of the records, and below we give the result of the clip from some of his breeding and show sheep. It will be observed that his principal stock ram, Ben Harrison No. 550, clipped a fleece of 43 pounds 12 ounces, one of the heaviest and best fleeces ever shorn in the West. The result of the shearing is highly creditable. Eight rams clipped an average fleece of 31 pounds 2.4 ounces and five ewes averaged 23 pounds 12.4 ounces.

Table with columns: BREEDER AND FLOCK NO., Sex, Length of fiber (Shoulder, Hip, Belly), Age of fleece (Days), and Weight of fleece (Lbs, Oz, %). Rows include Whitford, Jewett, Hamilton, Payne, Hall, Jewett, Jackson, Towner, and Jewett.

The Scott Full Circle Steel Hay Press.

We desire to call our readers attention to the fact that the all-steel full circle steel Scott hay press, manufactured by the Scott Hay Press Co., Kansas City, Mo., is now taking the lead of the trade in Utah, Colorado, Nebraska and other States. It is constructed of steel and iron, and contains all the latest improvements valuable in hay baling. The sweep and pitman are both made of iron; the hopper is iron. It has a steel plate condenser which is so arranged with the power that it folds the hay down into the baling chamber, making the work of the feeder very light and rapid; the rebound is perfect; it does not require a heavy pack of hay in the chamber to rebound the pitman, as the mechanism is so arranged as to rebound it absolute. It is never known to fail. We do not thoughtlessly say that it is the best press on the market, but the very fact that it is made entirely of steel and iron is sufficient proof that it is much more stronger and durable than any wooden press. It is unexcelled in strength and durability. This any farmer can easily see, as in any press made of wood and cast-iron the wood will soon decay and split, causing breakages, loss of time and heavy expenses.

Farmers, do you want to purchase the best press on the market? We know you do, therefore we recommend you to study the merits of the Scott hay press. Send to the manufacturers for the description of the construction of the press as given in their circular, which will be mailed to any one upon application. After studying this and comparing with presses of other makes, you will decide that the Scott is best adapted to your work.

Mr. Harley Hoy, of LaDelle, Spink Co., South Dakota, has invented a very handy little drill for planting rows, which gives promise of selling quite generally. It is a very small and simple contrivance and not calculated for any work but distributing seed in furrow or mark, but it does its work well and is well worth the price, which is 75 cents.—Dakota Farmer.

Fine Playing Cards.

Send 10 cents in stamps or coin to John Sebastian, Gen'l Ticket and Passenger Agent CHICAGO, ROCK ISLAND & PACIFIC RAILWAY, for a pack of the latest, smoothest, slickest playing cards that ever gladdened the eyes and rippled along the fingers of the devotee to Seven-Up, Casino, Dutch, Euchre, Whist or any other ancient or modern game, and get your money's worth five times over.

Half-Rate Home-Seekers' Excursions.

The Missouri, Kansas & Texas Railway, upon Tuesdays, April 22, and May 20, 1890, will sell Home-Seekers' excursion tickets to points in Texas, Kansas and Southwest Missouri at one fare for the round trip. Tickets good for thirty days and stop-overs allowed. For tickets, folders and particulars call upon your nearest ticket agent or address Gaston Meslier, General Passenger and Ticket Agent, Sedalia, Mo.

THE MARKETS.

(APRIL 7.)

Market table with columns for GRAIN (Wheat, Corn, Beef Cattle, Fat Hogs, Sheep, Horses, Mules) and LIVE STOCK. Includes prices for Chicago, St. Paul, and Kansas City.

IMPORTANT TO HORSE OWNERS

THE GREAT FRENCH VETERINARY REMEDY FOR PAST TWENTY YEARS. RECOMMENDED BY THE BEST VETERINARY SURGEONS OF THIS COUNTRY.

GOMBAULT'S CAUSTIC BALSAM

A Remedy of Genuine Value. OFFICE OF JANESVILLE VETERINARY HOSPITAL, JANESVILLE, WISCONSIN. MESSRS. LAWRENCE, WILLIAMS & Co.—Gentlemen: We have pleasure in informing you that we have been using Gombault's Caustic Balsam for some time past in our practice, and can strongly recommend it as an application in throat affections, such as influenza, strangles, laryngitis, bronchitis and all other throat and chest troubles where external applications can be used.

WE GUARANTEE that one tablespoonful of our Caustic Balsam will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made. Every bottle of Caustic Balsam sold is WARRANTED to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars, testimonials, &c. Address LAWRENCE, WILLIAMS & CO. CLEVELAND, O.

JOHN W. GAUGHEY. FINE DESIGNING AND ENGRAVING. HORSES, CATTLE, SHEEP, HOGS & POULTRY A SPECIALTY. Send for samples of Electrotype we have for sale. Nothing sells stock as quickly as a fine cut. 49 FIFTH AVENUE, PITTSBURGH, PA.

ENGRAVING for Stockmen, Manufacturers and all who require cuts. A fine line of Electro of Horses, Cattle, Sheep, Hogs and Poultry for sale. Send stamp for samples. We have the best and cheapest. Send for prices.



The Public Want Their seed fresh and true. Would they not be most likely to obtain such by buying directly from the grower? I can buy seed at half what it costs me to raise it, but could not select sound should I warrant seed of this class. For the same reason I make special effort to procure seed stock directly from their originators. You will find in my new seed catalogue for 1890 (sent free) the usual extensive collection (with the prices of some kinds lower than last season) and the really new vegetables of good promise. You should be able to get from me, their introducer, good seed of Cory Corn, Miller Melon, Hubbard Squash, All Seasons and Deep Head Cabbages and many other valuable vegetables, which I have introduced. JAMES J. H. GREGORY, Marblehead, Mass.

STATE LINE To Glasgow, Belfast, Dublin and Liverpool. FROM NEW YORK EVERY THURSDAY. Cabin passage \$35 to \$50, according to location of stateroom. Excursion \$45 to \$90. Steerage to and from Europe at Lowest Rates. AUSTIN BALDWIN & CO., General Agents, 25 Broadway, New York. JNO. BLEGEN, Gen'l Western Agent, 164 Randolph St., Chicago. ROWLEY BROS., Topeka, Kas.

Nature's Greenhouses Send 50 cents and receive a budding Orange Tree that will blossom and bear fruit when planted in a tub, and our Illustrated Catalogue of all Rare Fruits and Flowers, giving information relating to Florida and how to secure an Orange Grove upon reasonable payments. Address Commercial Nurseries, office 64 1/2 West Bay St., Jacksonville, Florida.

NORTHERN GROWN TREES FRUIT and Ornamental TREES Vines, Shrubbery, BULBS and ROSES at Wholesale Prices to RETAIL BUYERS. We give more for the money than any other nursery in America. You cannot afford to do without our Catalogue. It tells the whole story and will be sent FREE to all who apply. Freeport Nursery, J. W. MILLER & CO. FREEPORT, ILL.

OUR NEW 1890 FLOWER SEED OFFER. A Magnificent Collection of FLOWER SEEDS 200 Varieties, FREE! An Unparalleled Offer by an Old-Established and Reliable Publishing House! The Ladies' World is a mammoth 16-page, 64-column illustrated paper for ladies and the family circle. It is devoted to stories, poems, ladies' fancy work, artistic needlework, home decoration, housekeeping, fashions, hygiene, juvenile reading, etiquette, etc. To introduce this charming ladies' paper into 100,000 homes where it is not already taken, we now make the following colossal offer: Upon receipt of only 12 Cents in silver or stamps, we will send The Ladies' World for Three Months, and to each subscriber we will also send Free and postpaid, a large and magnificent Collection of Choice Flower Seeds, two hundred varieties, including Fancies, Verbenas, Chrysanthemums, Asters, Phlox Drummondii, Balsam, Cypress Vine, Digitalis, Double Zinnia, Finks, etc., etc. Remember, twelve cents pays for the paper three months and this entire magnificent collection of Choice Flower Seeds, put up by a first-class Seed House and warranted fresh and reliable. No lady can afford to miss this wonderful opportunity. We guarantee every subscriber many times the value of money sent, and will refund your money and make you a present of both seeds and paper if you are not entirely satisfied. Ours is an old-established and reliable publishing house, endorsed by all leading newspapers. Do not confound this offer with the cheap penny schemes of unscrupulous persons. Write to-day—don't put it off! Six subscriptions and six Seed Collections sent for 60 cents. SPECIAL OFFER! To any lady answering this advertisement and naming the paper in which she saw it, we will send free, in addition to all the above, one package of the celebrated Ornamental Chilean Foliage Tree Seeds, one of the most beautiful foliage plants known, the leaves sometimes growing 3 feet long by 1 foot wide, in variegated colors. It is perfectly hardy, continuing an object of beauty long after Coleus and Ganna have succumbed to frost. Address: S. H. MOORE & CO., 27 Park Place, New York.

CHICAGO, ST. PAUL & KANSAS CITY R. R. TIME TABLE. Chicago & St. Paul Limited. Local freight. Through freight. NORTH. St. Joseph 2:00 p.m. 6:00 a.m. 8:30 p.m. Savannah 2:27 p.m. 6:50 a.m. 8:57 p.m. Rea 2:47 p.m. 7:30 a.m. 9:46 p.m. Kawwood 2:55 p.m. 7:47 a.m. 9:58 p.m. Guilford 3:02 p.m. 7:55 a.m. 10:11 p.m. Des Moines 3:00 p.m. 8:45 a.m. 6:30 a.m. SOUTH. St. Joe & K. C. Local freight. Through freight. De Moines 7:25 a.m. 6:30 a.m. 8:30 p.m. Guilford 12:05 p.m. 4:40 p.m. 4:05 a.m. Kawwood 12:23 p.m. 5:00 p.m. 4:17 a.m. Rea 12:38 p.m. 5:30 p.m. 4:30 a.m. Savannah 1:58 p.m. 6:30 p.m. 5:02 a.m. St. Joseph 1:25 p.m. 7:30 p.m. 6:45 a.m. W. R. BUSENBARK, General Passenger and Ticket Agent. C. E. BERRY, General Southwestern Agent. ST. JOSEPH, MO.

WHY PAY RETAIL PRICES WHEN YOU CAN BUY AT WHOLESALE WHATEVER YOU EAT, WEAR OR USE. WE HAVE NO AGENTS. Write for full Catalogue Sent FREE. H. R. EAGLE & CO., Farmers' Wholesale Supply House, 68 WABASH AVE., CHICAGO.

TO WEAK MEN Suffering from the effects of youthful errors, early decay, wasting weakness, lost manhood, etc., I will send a valuable treatise (sealed) containing full particulars for home cure, FREE of charge. A splendid medical work; should be read by every man who is nervous and debilitated. Address, Prof. F. C. FOWLER, Moodus, Conn.

FITS EPILEPSY OR FALLING SICKNESS In severe cases where other remedies have failed. My reason for sending a free bottle is: I want the medicine to be its own recommendation. It costs you nothing for a trial, and a radical cure is certain. Give Express and Post Office. Address: DR. F. A. DAVIS, 59 East 108th Street, New York

ON 30 DAYS' TRIAL. THIS NEW EGLESTON'S ELASTIC TRUSS Has a Pad different from all others, is cup shape, with Self-adjusting Bail in center, adapts itself to all positions of the body, while the pain in the cup presses back the intestines just as a perpendicular band would. With light pressure on does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail Circulars free. EGLESTON TRUSS CO., Chicago, Ill.

DOCTOR WHITTIER (Formerly St. Louis.) 10 WEST NINTH ST., KANSAS CITY, MO., By a perfected system of diagnosis, scientific urinary analysis and skillful treatment, PERMANENTLY CURES: Seminal Weakness, Impotency, Emissions, Dizziness, Exhaustion, Pimples, Defective Memory, Aversion to Society, etc., etc. PERMANENTLY CURES: Urinary, Kidney and Bladder troubles, Incontinence, Weak Back, Gleet, Stricture, Gonorrhoea, Prostatorrhoea, Varicocele, etc. PERMANENTLY CURES: Scrofula, Syphilis, Eczema, Rheumatism, Goutre and all diseases of the blood and skin, with purely Vegetable Treatment. NO FEE UNTIL CURED, from responsible patients, and no promises made that age, integrity and long experience can not justify. Medicines sent anywhere by mail or express secure from observation. No charge for consultation. Office hours, 9 to 5; 7 to 8. Sundays, 10 to 12. BOOKS & BLANKS FREE, SEALED. Address, H. J. WHITTIER, M. D. 10 W. Ninth Street, Kansas City, Mo.

PURE CHESTER WHITES FROM CHESTER CO.



Headquarters for this famous breed. Recorded in C.W. Rec. Assoc'n. Scotch Collie Pups, Real beauties, from trained parents. Fine English Beagles. Enclose stamp for Circular. **J. A. JOHNSON, Cochranville, Pa.**

Arkansas Valley Herd.

O. McINTYRE & BRO.,
Halstead, Harvey Co., Kansas.



Breeders of Thoroughbred **POLAND-CHINAS.**
Give or Take and other noted strains.
Pigs, both sexes, for sale.

J. S. RISK, WESTON, MO.



Breeder of fancy **POLAND-CHINAS.**
Fancy lot of April, May and fall pigs, sired by six different boars. Write for prices and call and see stock.

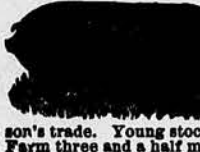
BUCKEYE HERD POLAND-CHINAS.

Property of **T. O. TAYLOR,**
Green City, Sullivan Co., Mo.



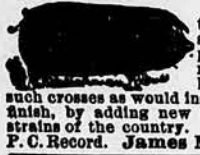
Established 1874. Pigs of high merit and good pedigrees.
Also Langshan Fowls. Correspondence solicited. Inspection invited.

MAPLE GROVE HERD



WM. PLUMMER, breeder and shipper of **POLAND-CHINA SWINE** and Light Brahma Fowls of the best strains. 25 choice sows bred to three first-class boars for the season's trade. Young stock for sale, and eggs in season. Farm three and a half miles southwest of Osage City. **WM. PLUMMER, Osage City, Kas.**

MAINS' HERD OF POLAND-CHINA SWINE.



A fancy lot of sows bred and to breed and fall pigs of both sexes for sale. My stock first purchased from the most noted breeders of Ohio. I have endeavored to make such crosses as would insure large growth and fine finish, by adding new blood from the most noted strains of the country. Stock all recorded in Ohio P.C. Record. **James Mains, Oskaloosa, Kas.**

HIGHLAND HERD POLAND-CHINAS

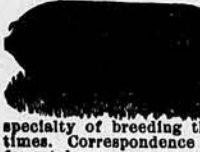
Dietrich & Gentry, Ottawa, Kas.



Lord Corwin 4th 4801 A. R., the sweepstakes boar at St. Louis and Chicago in 1885, at head of herd, assisted by Victor Chip 4076 S. R., sired by the noted Victor. Also David Finch's choice young boar, Butler Chief 4068, sired by King Butler 3577, dam Queen of B.E. Tribe 49058. Some very fine young sows bred for sale. Forty fall pigs for sale at reasonable prices. Mention KANSAS FARMER.

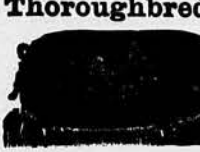
LAWDALE HERD OF POLAND-CHINAS

J. D. ZILLER, Prop'r, Hiawatha, Kas.



Consists of twenty carefully selected sows from 1 to 6 years old, bred to four noted boars representing the leading strains. Sows in this herd scored 87% by Hazlette. I make a specialty of breeding the best. Prices to suit the times. Correspondence promptly answered. Write for catalogue.

THE GOLDEN BELT HERD OF Thoroughbred Poland-Chinas



Fifty choice sows safe in pig, due to farrow in April and May next, and eighty October pigs of either sex for sale. Merchandise express rates and safe arrival guaranteed.

STOCK SHIPPED FROM HERE OVER EITHER THE A., T. & S. F., MO. PACIFIC OR ST. LOUIS & SAN FRANCISCO R. R. All breeders registered in American P.-C. Record. Pedigree with each sale.

F. W. TRUESDELL, Lyons, Kas.

SHANNON HILL STOCK FARM.

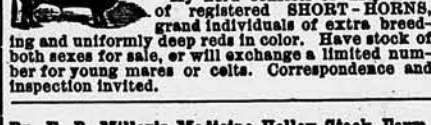
G. W. GLICK, ATCHISON, KAS.,



Breeds and has for sale Bates and Bates-topped **SHORT - HORNS.**
Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane, and other fashionable families.
The grand Bates bulls Imp. 8th Duke of Kirklevington No. 41798 and Waterloo Duke of Shannon Hill No. 89879 at head of herd.
Choice young bulls for sale now. Correspondence and inspection of herd solicited, as we have just what you want and at fair prices.

HIGHLAND HERD OF SHORT-HORN CATTLE

JOHN T. VOSS, Breeder, Girard, Kansas.



My herd consists of fifty head of registered **SHORT - HORNS,** grand individuals of extra breeding and uniformly deep reds in color. Have stock of both sexes for sale, or will exchange a limited number for young males or culls. Correspondence and inspection invited.

Dr. E. P. Miller's Medicine Valley Stock Farm, MEDICINE LODGE, KAS.

Choice Holstein-Friesian bulls and heifers for sale. We have at the head of our herd **NETHERLAND KANSAS,** grandson of Netherland Prince, and **PETERJE PRINCE,** grandson of the great cow Peterje 3d. The Netherland and Peterje families stand first on milk and butter records. Choicest breeding, acclimated to the West, and sold at Western prices.
Breeders also of Hambletonian horses and Poland-China and English Berkshire swine. Address as above.

Burdick Brothers



Importers of **Pure-blood Clydesdale, Belgian and French Draft Horses.** Correspondence and inspection solicited. **CARBONDALE, KAS.**

To Farmers and Horsemen!



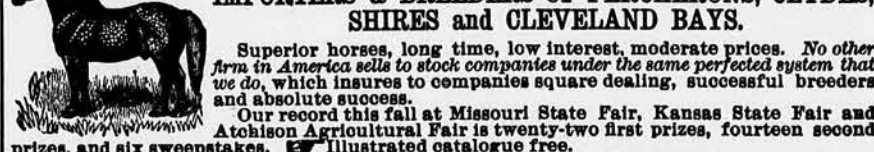
We, **COLBY & VEALE,** invite you all to visit our barns, between Van Buren and Harrison streets, and between Fifth and Sixth streets, Topeka, Kas., to see and examine our large collection of **CLYDESDALE, ENGLISH SHIRE, PERCHERON AND FRENCH COACH HORSES AND TROTTER-BRED STALLIONS.**

It will justify any intending purchaser to visit our barns before buying elsewhere, as we can show such horses as were never before seen in the State of Kansas, and terms and prices to suit the times and people. We can simply say we have the largest collection of **French Coach Horses west of the Mississippi river.** We solicit correspondence, which will receive prompt attention. All visitors welcome.

COLBY & VEALE,
Address all letters 406 Topeka Ave., Topeka, Kas.

RIX & GOODENOUGH,

TOPEKA, KANSAS,



IMPORTERS & BREEDERS OF PERCHERONS, CLYDES, SHIRES and CLEVELAND BAYS.
Superior horses, long time, low interest, moderate prices. No other firm in America sells to stock companies under the same perfected system that we do, which insures to companies square dealing, successful breeders and absolute success.
Our record this fall at Missouri State Fair, Kansas State Fair and Atchison Agricultural Fair is twenty-two first prizes, fourteen second prizes, and six sweepstakes. Illustrated catalogue free.
Farm and Stables—Two miles east of Highland Park, TOPEKA, KAS.

Blair Brothers,

AURORA, ILLINOIS,



IMPORTERS OF
Clydesdale, English Shire and Cleveland Bay —HORSES.—
A new importation just received. The animals now on hand are of large size, good colors, low, wide and blocky, with good, heavy bone, good feet and the best of action. We have winners at the greatest shows in England. We offer first-class animals of the choicest breeding at very low prices. Every animal recorded and guaranteed. Visitors welcome. Catalogues on application. Stables in town. Always mention the KANSAS FARMER.

RIVER HOME STOCK FARM.

AUSTIN & GRAY BROS., PROPRIETORS.

IMPORTERS OF
ENGLISH SHIRE, CLYDESDALE, PERCHERON AND ENGLISH COACH
—STALLIONS AND MARES.—
Also the premier Trotting Stallions Scott Chief ("The ghost from Kansas"), record of 2:28 in his first race over a mile track; Allen Herr, the only full brother living to a campaigner with a record of 2:17 1/2, and one hundred and twelve heats in 2:30 and under—the mighty Joe Davis.
Our horses are all young, of the very choicest strains, and every animal guaranteed a breeder. Will sell on longer time and a lower rate of interest than any other firm in America. Give us a call or write us, and we will do you good.
References:—Ex-Gov. E. J. Ormsbee, Brandon, Vt.; First National Bank, Salem, N. Y., First National Bank, Emporia, Kas.; Cetonwood Valley National Bank, Marion, Kas.
BAERNS one block north of A. T. & S. F. Street cars front of door. **EMPORIA, KANSAS.**

1890 = RUTGER STOCK FARM = 1890

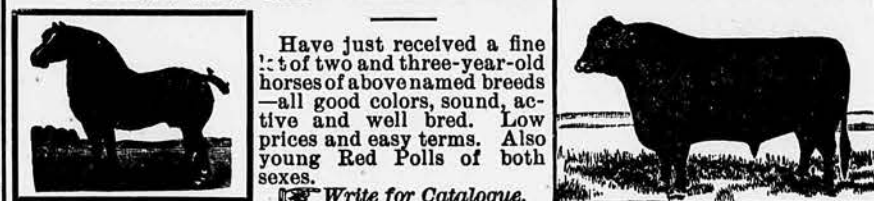
The Fashionably-bred Wilkes Trotting Stallion
BLIZZARD 3751,
Standard and Registered,

Bay horse, foaled 1884, bred by Colonel R. H. Pepper, Frankfort, Ky.; 16 1/4 hands high, weight 1,300 pounds, with fine action; can speed a 2:30 gait, untrained. Sired by Onward 1411, record 2:25 1/4, sire of twenty-seven in the 2:30 list, by George Wilkes. Dam Little Fortune, record of 2:32 1/4, dam of Attraction, 2:28 1/4, by Scott's Thomas, record of 2:31, and sire of two in the 2:30 list; second dam Dame Gourlay, by Planet, sire of dams of Palo Alto and Jessie Ballard; third dam Flora G., by Lexington. Terms \$35 for the season, with return privilege the next season.
Mares kept on grass and hay at 50 cents per week; on grain, with box-stalls, at \$1.25 per week; by the year \$50. Mares received at the cars and reshipped without charge; same care as our own, without liability for mishaps or accidents of any kind. Change of ownership of mare or horse forfeits return privilege. We reserve the right to reject any mares offered. Write for extended pedigree. Farm one and one-half miles from depot.
We also breed Holstein-Friesian and Aberdeen-Angus cattle and Large English Berkshire swine. **RUTGER STOCK FARM, Russell, Russell Co., Kansas.**

Sexton, Warren & Offord,

IMPORTERS AND BREEDERS OF

ENGLISH SHIRE, SUFFOLK AND NORFOLK HACKNEY STALLIONS AND MARES AND RED POLLED CATTLE.



HITCHING PRINCE. **PETER PIPER (717).**

MAPLE HILL, WABAUNSEE CO., KANSAS.

E. Bennett & Son,

TOPEKA, - KANSAS,

The Leading Western Importers of

CLYDESDALE, PERCHERON, CLEVELAND BAY
—AND—
French Coach Horses.

AN IMPORTATION OF 125 HEAD,
Selected by a member of the firm, just received,
Terms to Suit Purchasers. Send for illustrated catalogue. Stables in town.

E. BENNETT & SON.

SUBSCRIBE NOW AND SAVE MONEY!

TO PREPARE FOR A CHANGE IN MY BUSINESS

I will offer my entire stock of **200 CLEVELAND BAY AND SHIRE STALLIONS!**

Three and five years old, and fifty Pure-bred Mares, sound, vigorous, fully acclimated **At Greatly Reduced Prices!**

150 DEEP MILKING HOLSTEIN-FRIESIANS AT CORRESPONDINGLY LOW FIGURES. **MUST BE SOLD DURING THE NEXT THREE MONTHS.**

An opportunity rarely offered to secure such high-class stock at the prices and terms I am prepared to offer. Send for pamphlet giving full particulars.
GEO. E. BROWN, Aurora, Kane Co., Ill.

GALLOWAY CATTLE AND CLYDESDALE HORSES

THE BROOKSIDE FARM COMPANY,
Fort Wayne, Indiana,
Have always on hand a large collection of choice GALLOWAY Cattle and CLYDESDALE Horses. All first-class pedigrees. For sale at reasonable prices. Call on or address **DAVID MCKAY, Secretary, Brookside Farm Co., FORT WAYNE, IND.** (When writing mention KANSAS FARMER.)

FULL LEATHER TOP. DIRECT TO CONSUMER.
Saving 25 to 40%
ROAD CARTS A SPECIALTY.
 For full illustrated Catalogue and COMPLETE HORSE BOOK, send six cts. in stamps.
PIONEER BUGGY CO., COLUMBUS, O.




AGENTS WANTED to sell our GAS PUMP.
 Kills Gophers and all animals that burrow. For terms address **GOPHER EXTERMINATOR CO., Winona, Minn.** Mention this paper.

"DOWN WITH HIGH PRICES."

- A \$25.00 Sewing Machine, with Attachments \$18.00
 - A \$50.00 Platform Scale, on wheels \$30.00
 - A \$15.00 Top Buggy Saron Patent Wheels \$8.00
 - A 2-Tea Wagon Scale, Brass Beam and Beam Box \$40.00
 - A 2-Tea Wagon Scale and Patent Stock Rack \$75.00
 - A \$50.00 Power Feed Mill for Farmers, only \$30.00
 - A Portable Forge and Farmers' Kit of Tools \$20.00
 - A \$40.00 Road Cart, or Sewell Body Cutter \$15.00
 - A \$15.00 Single Buggy Harness \$7.50
 - A \$40.00 Scoop and Platform Scale \$3.00
 - A 4-lb Family or Store Scale, with Brass Scoop \$1.00
- Catalogue and Price List of 1000 useful articles sent free.
 Address **CHICAGO SCALE CO., Chicago, Ill.**

SCOTT HAY PRESS
 KANSAS CITY, MO.



Lightning Well-Sinking Machinery.
 Makers of Hydraulic, Jetting, Revolving, Artesian, Mining, Diamond, Tools, Wells & Prospecting, Engines, Boilers, Wind Mills, Pumps, etc. Sold on **PAID UP PLAN.** An ENCYCLOPEDIA of 1,000 Engravings, Earth Stratification, Determination of Minerals and Quality of Water. Gives Light, Finds Gold. Mailed for 25 cts. Gas Book 25 cts.
The American Well Works, AURORA, ILLS.

"IDEAL" DRILLING MACHINE
 Steam Outfit
 Complete for Wells 300 feet.
\$295
 Same with Horse Power **\$195**
 Large Catalogue Free
Wells Machine Wks, Fostoria, O.



LIGHTNING HAY PRESS
 FULL CIRCLE
 TWO FEEDS TO CIRCLE



STEEL. MOST RAPID AND POWERFUL
 MANFD BY **K.C. HAY PRESS CO., KANSAS CITY, MO.**

Sunflower Windmill.
 Constructed entirely of IRON and STEEL. A solid metallo wheel, thoroughly well built and Warranted for TWO years. No wood to swell or shrink. No sections to blow out.



THE SUNFLOWER WINDMILL TOPEKA, KANS.

SIMPLE AND POWERFUL. Automatic governor. The perfection of modern mechanical invention. Write for Catalogue and prices. Reliable and experienced Agents wanted. Address, Sunflower Windmill Co., Knox Building, TOPEKA, KANSAS.

FENCE PRICES REDUCED
 Heavy Netting. Best made. (STEEL WIRE.) Catalogue FREE. Write **SEDWICK BROS., RICHMOND, IND.**

STANDARD POULTRY FENCING.
 AND
 BROTHER SUPPLIES OF EVERY DESCRIPTION
BROCKNER & EVANS
 28 VESEY ST.
 NEW YORK CITY

The ELKHART CARRIAGE & HARNESS MFG. CO.

For 16 years has dealt direct with consumers at Wholesale Prices
 Saving Them the Dealers Profit.

No. 1. Farm Harness. We ship anywhere, with privilege of examining before buying. We pay freight charges both ways if not satisfactory. Warrant everything for 2 years. Any one that can write can order a Buggy or Harness from us as well as pay \$10 to \$50 to some middle man to order for them. We give no credit, and have

ONE PRICE, ONLY.
 Platform Wagons, \$50, same as others sell at \$75. Top Buggies, \$75; fine as sold at \$100. Ours at \$100 are fine as sell for \$140. Phaetons \$125; same as sold at \$165. Fine Road Cart, with dash, \$145 good as sell at \$225. We box and deliver on cars in Elkhart free of charge.

HARNESS
 Our Harness are all No. 1 Oak Leather, Single \$9 to \$20. Light Double, \$20 to \$40. 64-page Illus. Catalog Free. Address, **W. B. PRATT, Sec'y ELKHART, INDIANA.**



ECLIPSE POST DIGGER and BAR
 POST HOLE DIGGER. POST HOLE BAR.

Greatest Labor Saving tool ever invented. Capacity, 200 to 300 holes, 2 ft. deep, per day. The only Digger that works successfully in sod, stony or rocky ground. No Back Breaking. Is driven by the handle easily through the hardest soil. Also Manufacturers of Hay Bakes, Spring Tooth Cultivators, Quaker City Feed Mills, &c. Send for Circular and Price List. **SPRINGFIELD IMPLEMENT CO., SPRINGFIELD, O.**



THE KEYSTONE HAY LOADER

Will load a ton of hay in 5 minutes. You will make hay easily and quickly, and save help. Often pays for itself in one season. 10,000 sold. Fully guaranteed. Loads loose small grain also.

KEYSTONE MFG. CO., Sterling, Ill.
 USE THIS HAY LOADER. [Mention this paper.] Branch Houses conveniently located.



MARK C. FARR
 Successor to J. F. SWAB, General Western Agent for
DE LAVAL SEPARATING CO.

Manufacturer and dealer in Creamery and Dairy Supplies, Engines and Boilers, Cream and Milk Vats, Weigh Cans, Teet's Chicago and New York Steel and Iron-clad Cans, J. F. Swab's "Jacketed Refrigerator Cans," the best and cheapest cans in the market. "J. F. SWAB'S VENTILATED MILK AND CREAM-COOLER" (Royalty stamps sold for these cans), acknowledged by the best Judges as the leading invention. Thousands in use and giving the best of satisfaction. Revolving Box Churns, Butter-Workers, Buttermilk, Cream and Milk Strainers, Butter Cloth Circles, Tin and Acme Tub Clamps, De Laval Turbine Belt and Hand Separators. Complete outfits a specialty. Estimates furnished on short notice. Send for illustrated catalogue—mention this paper. Office and Factories: 8 AND 10 NORTH FIRST ST., CEDAR RAPIDS, IOWA. CHICAGO OFFICE, ROOM 67, NO. 95 CLARK ST.

OUR NEW U.S. MOWER GRINDER
KNIFE GRINDER
 PRICE **\$6.00**

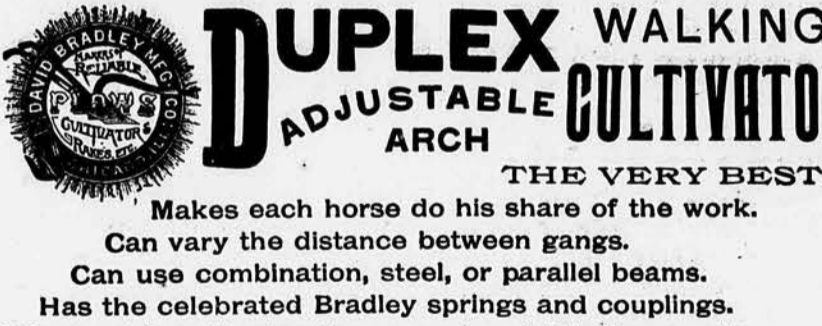
The Most Complete MOWING MACHINE KNIFE GRINDER made. Small, Light. Weighs only 13 pounds. Can be carried into the field, and attached to Mowing Machine Wheel.

CLARK'S CUTAWAY HARROW
 SUPERSEDES THE PLOW! BEATS THE WORLD!
 Ground Made into a PERFECT SEED BED. HAS A SEEDING ATTACHMENT FOR SOWING ALL KINDS OF GRAIN. Send for New Circular, with full description, FREE. **HIGGANUM MAN'G CO., HIGGANUM, CONN.; 189 AND 191 WATER STREET, NEW YORK.**



DAVID BRADLEY MFG. CO.
DUPLEX WALKING ADJUSTABLE CULTIVATOR
 ARCH
THE VERY BEST.

Makes each horse do his share of the work.
 Can vary the distance between gangs.
 Can use combination, steel, or parallel beams.
 Has the celebrated Bradley springs and couplings.
 Thoroughly cultivates the ground and kills the weeds.



ASK Your Dealer for our Pocket Annual which illustrates and describes goods made by us. If he has none send us, or to our Branches for it.
DAVID BRADLEY MFG. CO., CHICAGO.

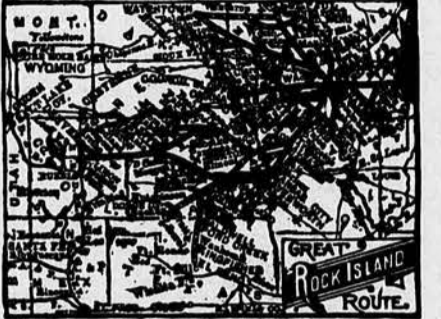
MANY DOLLARS SAVED BY BECOMING CO-OPERATIVE MEMBERS OF THE FARMERS CO-OPERATIVE MERCANTILE ASSOCIATION OF CHICAGO.
ANTI-TRUST CAPITAL STOCK \$1000,000
 ENCLOSE STAMP FOR INFORMATION TO W. W. MESSERSON, SEC. 115 W. WASHINGTON ST. CHICAGO, ILL. All kinds of merchandise at wholesale prices.

I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life-long study. I warrant my remedy to cure the worst cases. Because others have failed is no reason for not now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy. Give Express and Post Office. **H. G. ROOT, M. D., 183 Pearl St. New York.**

TO ADVERTISE and meet with success requires a knowledge of the value of newspapers, and a correctly displayed advert. To secure such information as will enable you to advertise **JUDICIOUSLY CONSULT LORD AND THOMAS** NEWSPAPER ADVERTISING, CHICAGO, ILLINOIS.

A MAN
 UNACQUAINTED WITH THE GEOGRAPHY OF THE COUNTRY WILL OBTAIN MUCH INFORMATION FROM A STUDY OF THIS MAP OF THE



Chicago, Rock Island & Pacific Ry.

Including Lines East and West of the Missouri River. The Direct Route to and from CHICAGO, ROCK ISLAND, DAVENPORT, DES MOINES, COUNCIL BLUFFS, WATERTOWN, SIOUX FALLS, MINNEAPOLIS, ST. PAUL, ST. JOSEPH, ATCHISON, LEAVENWORTH, KANSAS CITY, TOPEKA, DENVER, COLORADO SPRINGS and PUEBLO. Free Reclining Chair Cars to and from CHICAGO, CALDWELL, HUTCHINSON and DODGE CITY, and Palace Sleeping Cars between CHICAGO, WICHITA and HUTCHINSON. Daily Trains to and from KINGFISHER, in the Indian Territory.

SOLID VESTIBULE EXPRESS TRAINS

of Through Coaches, Sleepers, and Dining Cars daily between CHICAGO, DES MOINES, COUNCIL BLUFFS and OMAHA, and Free Reclining Chair Cars between CHICAGO and DENVER, COLORADO SPRINGS and PUEBLO, via St. Joseph, or Kansas City and Topeka. Excursions daily, with Choice of Routes to and from Salt Lake, Portland, Los Angeles and San Francisco. The Direct Line to and from Pike's Peak, Manitou, Garden of the Gods, the Sanitariums, and Scenic Grandeur of Colorado.

Via The Albert Lea Route.

Solid Express Trains daily between Chicago and Minneapolis and St. Paul, with THROUGH Reclining Chair Cars (FREE) to and from those points and Kansas City. Through Chair Car and Sleeper between Peoria, Spirit Lake and Sioux Falls via Rock Island. The Favorite Line to Watertown, Sioux Falls, the Summer Resorts and Hunting and Fishing Grounds of the Northwest. The Short Line via Seneca and Hankakee offers facilities to travel to and from Indianapolis, Cincinnati and other Southern points. For Tickets, Maps, Folders, or desired information, apply at any Coupon Ticket Office, or address **E. ST. JOHN, JOHN SEBASTIAN, Gen'l Manager, Gen'l Tkt. & Pass. Agt. CHICAGO, ILL.**

THE GLORY OF MAN STRENGTH VITALITY!
 How Lost! How Regained,

THE SCIENCE OF LIFE



KNOW THYSELF.

THE SCIENCE OF LIFE
 A Scientific and Standard Popular Medical Treatise on the Errors of Youth, Premature Decline, Nervous and Physical Debility, Impurities of the Blood.

EXHAUSTED VITALITY AND THE UNTOLD MISERIES

Resulting from Folly, Vice, Ignorance, Excesses or Overtaxation, Enervating and unfitting the victim for Work, Business, the Married or Social Relation. Avoid unskillful pretenders. Possess this great work. It contains 800 pages, royal 8vo. Beautiful binding, embossed, full gilt. Price only \$1.00 by mail, postpaid, concealed in plain wrapper. Illustrative Prospectus Free, if you apply now. The distinguished author, **Wm. H. Parker, M. D.**, received the **GOLD AND JEWELLED MEDAL** from the National Medical Association for this **PRIZE ESSAY ON NERVOUS and PHYSICAL DEBILITY.** Dr. Parker and a corps of Assistant Physicians may be consulted, confidentially, by mail or in person, at the office of **THE PEABODY MEDICAL INSTITUTE, No. 4 Bulfinch St., Boston, Mass.**, to whom all orders for books or letters for advice should be directed as above.

FOR MEN ONLY!

VIGOR AND STRENGTH For **LOST or FAILING MANHOOD;** General and **NERVOUS DEBILITY;** Weakness of Body and Mind, Effects of Errors or Excesses in Old or Young, Robust, Noble **MANHOOD** fully restored. How to enlarge and strengthen **WAK, ENLARGED ORGANS & PARTS OF BODY.** Absolutely unfailing **HOME TREATMENT—** Benefits in a day. Men testify from 50 States and Foreign Countries. Write them. Descriptive Book, explanation and proofs mailed (sealed) free. Address **ERIE MEDICAL CO., BUFFALO, N. Y.**

YOUNG AND MIDDLE AGED MEN

Suffering from the effects of Youthful Follies, Indiscretion, Excess or Indulgence, producing Nervousness, Debility, Dimness of Sight, Self Distrust, Failing Memory, Physical Decay, Pimples on Face, Aversion to Society, Loss of Ambition, Unfitness to Marry, Dyspepsia, Stunted Development, Pains in Back, Milky Urine, Night Losses, Unnatural Drains and Lost Manhood, you can be **CURED TO STAY CURED.** Relief at once, all exhausting drains stopped, weak parts strengthened and enlarged. Treatment tested 32 years and in thousands of cases. Send stamp for Question List No. 1, in plain envelope. Add. **JAMES WHITTIER, M. D., 215 W. Fifth St., KANSAS CITY, MO.**

WIVES

Should know how child bearing can be effected without **PAIN or BANNER** and cure their ill. Send for special information. A wonderful discovery. **DR. J. H. OYE, Buffalo, N. Y.**

