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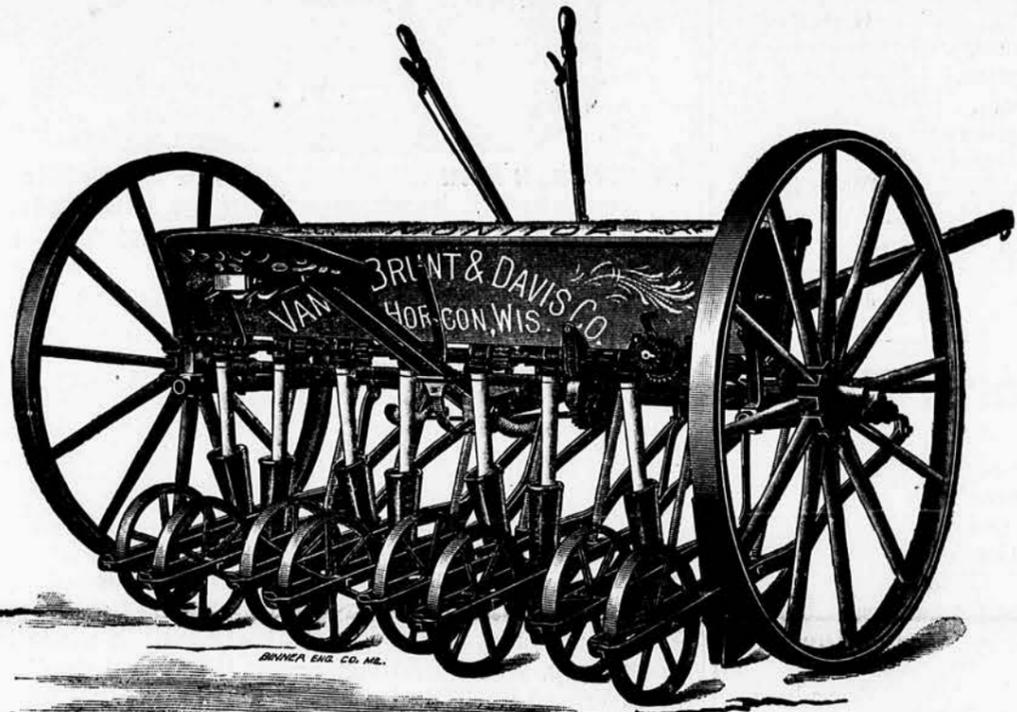
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Agricultural Matters.

IRRIGATION AND TREES.

Paper read by Hon. M. Mohler, Secretary, before the State Board of Agriculture, at Topeka, Kas., January 13, 1890.

At no time in the history of the country has agriculture on the plains commanded so much the attention of our people as now. The best thought of our nation has been turned to the solution of the problems:

First.—Is irrigation practicable on the plains and to what extent?

Second.—Can we discover a new kind of agriculture, which is adapted to climatic conditions now existing on the plains?

In regard to the irrigation problem the first step taken was the appointment of a Senate committee, which, with a corps of engineers, one year ago made a tour of investigation throughout the arid and semi-arid districts of the United States, making a sort of preliminary survey of those sections in which irrigation was desirable or necessary. The next step taken was an appropriation by Congress for the investigation of the sources of water supply and for determining the most feasible plan for utilizing the water for irrigating purposes. * * *

But after all that may be said, there are thoughtful men who are greatly concerned for the welfare of western Kansas people and the general prosperity of that country, yet who are of the honest opinion that irrigation over any considerable portion of the western half of Kansas is impracticable, or if practicable by means of wells and pumps, it can only be on a small scale.

While they do not discourage honest and legitimate efforts to secure irrigation, but on the other hand would encourage such efforts, yet they at the same time believe there is more relief in reason to be expected to come to the people generally from the solution of the second problem.

"Can we discover a new kind of agriculture and new methods of culture which may be adapted to the soil and climate of western Kansas?"

I have no direct authority, but I feel quite safe in classing Senator P. B. Plumb among these men, for with the express object of determining the question whether, anywhere in the world, grasses of value could be found which are adapted to the conditions existing in western Kansas now, he secured several years ago an appropriation for establishing a government grass station at Garden City, and in a letter written to me last summer, he said that while out at Garden City last September he saw there grains and grasses growing without irrigation, which satisfied him it was possible to adapt an agriculture to the condition of things existing in western Kansas minus irrigation.

Now, it is to this line of thought and to this line of action I desire to direct your attention at this time, for it is very clear to my mind that irrigation in western Kansas will fall far short of meeting the expectations of the people. There are still, with all the knowledge possessed by the best informed, several unknown factors that enter largely into the solution of the problem, outside of a few favored localities, and it will require years of experimentation and the expenditure of much money to determine the value of those factors.

It is, therefore, to my mind, not only wise, but eminently proper, to move forward both divisions of the army in solid phalanx, and if one falters or falls, the other may gain the victory. The savage-

ness of the climate must be eliminated by the introduction of civilizing forces. Trees are great civilizers, so are luxuriant grasses or vegetable productions of any kind, and so is a plow that cuts a furrow or loosens the subsoil eighteen inches deep.

Now to return. I have a word further to say of the grass station at Garden City. I visited the station last October and found foreign grasses growing there without irrigation which had withstood the extreme heat and drouth of last summer, and they were in a thrifty condition. Several of these grasses covered the ground quite well, and one of them, a French grass, in appearance was much like our Kentucky blue grass. If only one kind of grass out of the hundreds introduced from foreign countries is found to be thoroughly adapted to the climatic conditions on the plains, and is to that country what blue grass or clover or timothy is to eastern countries, a long step has been taken in the solution of the problem before us.

Some years ago, by act of Congress, for the purpose of establishing an experiment station in each State in the Union, an appropriation of \$15,000 was made for such a purpose.

These stations were to be placed under the control and direction of agricultural colleges in all States where such institutions existed.

Our experiment station, as you all know, is at Manhattan, under the control of the Agricultural college. This experiment station, I think, is doing excellent work, and the results obtained from experiments at that station are of much value to such sections of the State where conditions of soil and climate are similar to those at Manhattan; but in much more than half of the State these conditions are so different from those at Manhattan, that results obtained there are practically of no value.

The results obtained from experiments in feeding stock at Manhattan—cattle and hogs—may be practically of the same value in all portions of the State, but for the reasons above given, those obtained from experiments in grains and grasses are not.

Now, while I do not claim to know whether the appropriation of \$15,000 for experimental purposes is sufficient to warrant establishing several branch experiment stations, I only know that it is not just to the State as a whole, that less than half of it derives all the benefit there may be in such a station, while the balance of the State, which is in special need of help, gets none.

It occurs to me that there might be a portion of this appropriation used, sufficient to establish and maintain several small stations devoted exclusively to experiments in grains and grasses for the benefit of the western half of Kansas.

The thought is thrown out to call attention to a matter which I conceive to be of much public interest.

There is still, in my judgment, one thing more the government at Washington ought to do. It ought to help our people of western Kansas as well as other sections of the plains country to cover the prairies over with trees.

I place a high estimate on the value of trees in Kansas. I believe if every quarter section of land in Kansas had forty acres in trees, the entire quarter section would be worth more money than if that forty acres were grown to any other crop, especially so when we know that after trees have reached a fair size they may be thinned out, and the grove sown to orchard grass, or blue grass, or alfalfa, and in this way it becomes the most valuable pasture on the farm. It is not because of the gold there may be found in trees that I so highly value them in western Kansas; it is because of their ameliorating influence upon climate.

First—Trees are moderators of extremes of heat and cold.

Second—Trees are conservators as well as distributors of moisture.

Third—Trees tend to an equilibrium of climatic forces.

In short, to sum up the whole thing in a nutshell, trees are very efficient factors in improving climatic conditions of any country. But in order that trees have such influence they must be planted in large numbers, and every inducement possible should be held out to encourage tree growing—not only an abatement of taxes for a term of years on lands planted to trees, but a premium to every man who will plant and properly care for, for a stated term of years, ten acres, or twenty

acres, or forty acres, in the western half of the State.

The State is a family, and the older and stronger members should help the weaker. In a much larger sense the nation is a family, and it is the duty of the government to look after the interests of its people in all sections of this broad domain. We are not asking for an appropriation to improve the Arkansas river for navigating purposes, nor the Republican nor the Solomon, nor even the historic Kaw, but we do think Uncle Sam should take hold and assist us in mitigating the asperities of a savage climate. He has no small empire between the 90th degree of longitude and the Rocky Mountains, stretching from the Gulf of Mexico to the British possessions in which to try his hand at the business.

But, to confine ourselves to the practical point before us, would it not be a wise and judicious, and at the same time a profitable investment, for the government to establish a United States forestry station somewhere in western Kansas, which may do for the forestry interests what the grass station at Garden City is doing for the grass and forage interests of that country. We should draw upon the whole world for trees, and select those best adapted to the soil and climate and that will be most valuable when grown.

It is true our State is now doing work in that line. She has a forestry station—two of them. Last October I visited the one at Dodge City, and to my surprise found that trees there, even intensely hot and dry as the season was, had made a fine growth without irrigation. The State forestry institutions, while they do much valuable work, are not competent to do what is demanded in the way of experimental tree growing on the plains.

What is, in my judgment, demanded, is a test of forestation on the plains westward and southward of Kansas State lines, with a view to determine the limit of successful tree growing on the plains. Where trees can be grown successfully the presumption is that a kind of agriculture may be discovered which will be at least reasonably successful.

An experiment station of this kind, judiciously conducted for a period of ten years, would demonstrate the fact as to its utility, and if found in a fair degree useful in giving to the people information of value and needed help, other similar stations would at once be built in different sections of the arid and semi-arid districts of our country. And when we recognize the fact that any improvement of climate on the plains will directly benefit us in eastern Kansas, in eastern Nebraska, and, in fact, in all States contiguous to the plains, it is difficult to estimate the good that may ultimately flow from such a source.

Now we come to consider briefly the conditions of climate in western Kansas with respect to rainfall, hot winds and its bearing upon agriculture. First, I will say it is a dry country—there is no dispute about that. We have no definite information as to the amount of rainfall on the plains except at a few points—Dodge City, Hays City, and a few other points in western Kansas. At these points it ranges from eleven to twenty-four inches, or less than half the amount at Lawrence. Yet, we know that with a very few exceptions, as the records show, the rainfall has been sufficient to grow very good crops of sorghum, rice, corn, Kaffir corn and other plants of the sorghum family, in every county in the State. A practical question, however, is, will there ever be a material increase in rainfall in that section? I think not. The distribution of rainfall throughout the growing season may be improved, and I think will be, as it has been in eastern Kansas; but, for iron-clad reasons, there will be no material increase in rainfall in that country for all time to come, or at least so long as the Rocky mountains remain where they are and the Gulf of Mexico continues to hold its present position.

The former are an insuperable obstruction, on account of their altitude, to the passage of water by air currents from the Pacific ocean to the east side of the mountains. The latter is the fountain whence the supplies of rainfall for all the trans-Missouri country and for much of the trans-Mississippi country come, and the main line of air currents, freighted with water from the gulf, is northward throughout the continent, and the rainfall from the Missouri river westward diminishes steadily, and from central Kansas more rapidly towards the mountains.

From the peculiar location of the plains it is, as it appears to me, a physical impossibility to have in the future a material increase in the amount of rainfall. This stern fact may as well be admitted at once, even if some of our old theories must go. However, the old theory which gave us so much courage and hopefulness years ago, is not altogether an idle dream. The only mistake we made was our failure to make due allowance for the different conditions existing in eastern and western Kansas; that the ascent to higher altitudes from central Kansas westward was much more rapid than in the eastern half of the State, and that the distance of the western section from the main line of rainfall was much greater. In consequence of these facts, the progress made in the improvement of climatic as well as agricultural conditions is much slower.

I will now state to you a fact which I trust may afford you at least some relief. For the last four years we have had abnormal weather conditions. The winters have been extremely mild and the summers, excepting 1889, extremely dry. We need not refer to records of rainfall. Our recollections of crop conditions are fresh in our minds. Taking the last four years together, they constitute a series of the worst crop years, probably, in the history of the State, as shown by statistics in this office. This condition of things, however, is not confined to our own State.

At a meeting of the Improved Stock Breeders' Association recently held in Iowa, Mr. J. R. Sage, Director of the Iowa Weather and Crop Service, in an address, speaking of Iowa, said: "Since 1887 we have had two phenomenally mild winters and three exceptionally dry summers. The total deficiency of precipitation in these last four years is about fifty inches." And he further adds that this deficiency of rainfall in recent years has affected streams, wells, springs and sources of water supply of stock farms very greatly, and he asks the pertinent question, "Is the State drying up?"

Croakers are saying the State is going dry; that the arid belt is generally extending eastward, etc. But Mr. Sage takes no stock in these gloomy prognostications, and throws to the winds all thoughts of a permanent shortage in rainfall.

The fact is, our Western States generally have had abnormal weather conditions for the last four years, much as European countries had from 1872 to 1880. In the statistical records of Canada we find the following officially stated: "There has been a series of bad harvests in Europe, commencing in 1872 and culminating

in 1880, during which years, particularly, the failure of the wheat crop was, for duration and extent, without a parallel in the last four centuries."

In our country, however, crop failures have not been so marked generally as the drying up of springs, wells, and the shrinking or diminishing in a general way of the water supply of the country. A change, however, has come in the meteorological conditions of Europe, and full average harvests have blessed that country since 1881. In like manner will the pendulum swing back again to plentiful harvests and an abundant water supply in our country as well.

Now a few words about hot winds on the plains:

This subject has been more thought about, more written about, and I might say more wailed about than any other subject connected with agriculture on the plains.

Many theories have prevailed among the "scientific fellows" as to their cause, but the consensus of public opinion now is that their cause is local; that they originate where they are felt. It is true they are in a special manner the product of the plains. Their home seems to be there, and the popular opinion is that from their home they occasionally make incursions into adjacent countries, and wherever they go they leave behind them a train of shattered hopes and sometimes of bleeding hearts. A few of the more daring ones, it is stated, ventured even so far as Iowa last summer, and from all accounts they made the hairs on the farmers' heads stand upright.

What! Are these marauders of the plains coming here, too? Yes; Satan; it does seem, was turned loose on the plains last summer and the climax of his power for evil was reached.

But it may all result in good. Neighboring States to the east, realizing the damage thus done to the products of the farm, are calling upon the government to aid in binding with chains this demon of the plains.

Mr. Sage, above referred to, in his address, after giving an extremely scientific and abstrusely profound theory as to their cause, uses the following language in regard to "The Remedy for Hot Winds": "The remedy, in my opinion, is possible and wholly practicable, viz.: By extending the area of cultivation in the direction whence the trouble arises through systematic irrigation, by damming the streams, and by the planting of trees wherever a tree can be made to hold in that now desolate and desolating region; in short, an abundance of vegetation in that section, of trees and hardy plants, will measurably shade the ground and prevent the rapid radiation of heat that is carried on the wings of the winds to blast and destroy the products of our farms. Only the government—that is, the people in their collective capacity—can command the means and the force to apply this remedy. And this again is an illustration of the possibilities of benefits from the national service."

The above is sound sense, and we endorse it all. But still it is a shot fired at long range. We who floated for years on the border wave of civilization, and have caught the breath of the fiery fiend in his native heath, are apt to have some practical thoughts that do not occur to an Iowa man.

I remember quite well in the early days of northwest Kansas, how prairie fires annually swept over vast areas. For miles and miles, every vestige of vegetation was burnt off, and moved from the face of the earth, and thus was made of the earth an oven for the cooking or roasting of atmosphere, and sending its skywards or on missions like unto destroying angels over the land. While freighting in those days I frequently passed through these burnt districts, and I always felt to thank God that I got through with my life.

The consensus of public opinion, as I have said, now is that the cause of hot winds are local. I have long been of that opinion, and for the following reasons:

It is a well known scientific fact that the sun's rays pass through any perfectly transparent substance without imparting to it any heat. The rays pass on until they strike some opaque substance, as the earth. In this way the earth is heated, and from it heat is imparted to objects coming in contact with it. The atmosphere is transparent, or nearly so, therefore the sun's rays pass through the atmosphere without imparting to it any or but little heat. These rays pass on until they strike the earth. The earth becomes heated and the air in contact with it becomes in like manner heated, and by another law in physics, being specifically lighter, it rises and a stratum of colder air instantly comes in contact with the earth, which in turn is heated and rises, leaving a vacuum which is instantly filled by the rush of colder air. It is this rush of air to fill the vacuum created by hot air rising that causes the phenomenon we call wind, which is air in motion.

You perceive, therefore, other things being equal, that it is the character of the earth's surface that determines the climate of a country with respect to heat and moisture. If the earth's surface is bare—devoid of vegetation, and yet the ground is full of moisture—the heat of the sun is exhausted to a large degree in the process of evaporating the moisture from the soil. This is the reason why sprinkling the city streets in a hot day so perceptibly cools the atmosphere. This is the reason, also, why the larger proportion of a given area covered with water gives greater humidity to the climate; hence the more ponds, lakes and reservoirs that are created in western Kansas the better for the climate there, and here, too. It is also for this reason—that climatic conditions are always better when the earth's surface is covered with dense vegetation, because plants reach far down into the soil after the moisture which they need, and the sun's heat is in a large measure absorbed in the evaporation of moisture from the plant. It is simply changing sensible heat to insensible or latent heat.

From this reasoning, which I believe to be sound, the more thoroughly the earth's surface is covered by vegetation in a country which has naturally a dry climate, the better will be the conditions of climate, and of course, the conditions of agriculture as well. It will be apparent, also, to the thoughtful, why trees have a greater influence on climate than any other kind of plant life, the reason being that trees penetrate the earth to a much greater depth by means of their roots after moisture, and the sun's rays continue to draw moisture from their foliage even through the entire drouth period of the summer. Hence the importance of tree-growing on a large scale, as already stated.

Now we have come around to the place of beginning—the importance of the grass station, the branch experiment station, the government forestry station, and the necessity of government aid in the work of irrigation, of storing water in lakes and reservoirs, etc. Let it be understood that every barrel of water that is saved to that country, from the surplus that annually is lost to it by being carried eastward, is a benefit to the country; that every barrel of water that is brought up from below the surface and utilized in growing crops, or simply to float fish in, is a "savior of life unto life."

The Stock Interest.

THOROUGHbred STOCK SALES.

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

APRIL 8—J. H. Rea & Sons, R. B. Hudson & Sons and W. J. Turpin, Carrollton, Mo., Aberdeen—Angus cattle.
MAY 13—Inter State Short-horn Breeders, show and sale, at Kansas City.
MAY 14—A. A. Crane & Son, Osco, Ill., Herefords.

AN OPTIMISTIC VIEW OF OUR SWINE INTERESTS.

EDITOR KANSAS FARMER:—The season of 1890-91 will long be remembered as an off year by those engaged in the breeding and rearing of swine. In Kansas, particularly, we behold a phenomena that may not occur again in the next decade.

Within one brief year we have seen the relative value of corn to hogs completely reversed. As recently as ten months ago feeders were exerting themselves to procure hogs at almost any price in order that they might convert their surplusage of 15-cent corn into pork that would make it worth 45 cents per bushel. Six months later the most undesirable thing on a farm was a stock hog.

I have no recollection, in a residence of twenty-four years in Kansas, when there was as wide a discrepancy between the market price of fat hogs and the price of corn on farms as exists at this time, to the detriment of breeders and feeders of swine. And this condition of affairs does not alone exist in Kansas, but in every part of the United States where the swine industry is carried on extensively. As misfortunes, it is said, never come singly, and it never rains but it pours, the shortage of the corn crop is followed in many sections of our land by a visitation of hog cholera, decimating and even wiping out whole herds, creating a panicky feeling amongst farmers, the effects of which in an overburdened and already demoralized market is simply deplorable.

While a few far-seeing men are realizing handsome profits and even small fortunes by the sale of corn husbanded from the colossal crop of 1889, we are inclined to sympathize with that more numerous class of producers who in the season of 1890-91 have had more hogs than corn. The situation is the more to be deplored, as some five or six years ago the swine breeders of our State were sufferers from an epizootic of cholera, from which it took five years to regain lost ground. The superabundance of corn in 1889 stimulated the breeding of swine and in the month of June, 1890, when corn was selling at 22 cents and hogs at \$3.30, there was never before in the history of the State such an encouraging outlook for an extraordinary fall and winter supply of fat hogs. Then came drought and hot winds, leaving not only blasted corn fields, but blasted hopes in their wake. Some breeders have become discouraged and expressed a determination to quit the field. The veteran breeder, however, knowing that there are reverses in all lines of business, continues on in the even tenor of his way, with bright hopes for the future. If he is as wise as he looks he has culled out his herd and reduced it to such proportions as will admit of no serious drain on his resources. He has retained, wherever practicable, sows not only of good exterior form, but such as are known to be prolific, good mothers and good sucklers, or the progeny of such dams. He has given further scope to the judgment of a wise man by mating them to a thoroughbred boar of good proportions, with a pedigree not only as long as the oft-quoted "moral law," but with a pedigree made gilt-edge through ancestors of notoriety and pronounced characteristics of the type desired.

As by force of circumstances, misfortune or otherwise, he disposed of his

last year's crop of pigs at a loss, and with the spectre of an empty corn crib staring him in the face, he has delayed breeding until later in the season than usual in order that advantage may be taken of the pastures and the stubble fields by the sow and her pigs.

In the eight great swine-producing States of the West the corn crop of last year was far below the normal yield. In all these States hog cholera has raged to a greater or less extent. All the conditions that obtain in Kansas in relation to hogs and corn apply to these States. If Kansas farmers have shown unusual diligence in snatching their unripe pigs from the jaws of an untimely death by disease or starvation, and thrusting them on the market for what they would bring, their celerity of movement has only been equalled by that of their brother breeders in Ohio or Nebraska. It requires no mathematician to figure out that 50-cent corn fed to 3-cent hogs must entail a loss upon the feeder of 15 to 20 cents on every bushel of corn consumed. Is it any wonder then that the stock yards have been overrun with half-grown and half-fatted pigs? A feeder said to me a few days ago, "I have a fine bunch of fat hogs that I have been holding for a higher

could get them from this present location. A week afterwards I met him again and inquired after the welfare of the pigs. He answered me that they were still dying. I asked him if he had followed my advice. "No," he replied, "it was too much trouble." Now you see such shiftlessness is what gives a black eye to the hog business. When swine-breeders begin to realize that by eternal vigilance only can the losses from disease be kept down to minimum, then we shall hear less of the terrible inroads made by this insidious enemy. I know one man, an extensive breeder of thoroughbreds, who has had no cholera in his herd for fifteen years. He dreads it as the fellahen of Egypt dreads the tax-gatherer, hence he is always on the lookout for the enemy. Visit his yards and pens and your senses will not be shocked by the sight and smell of filth. His hogs at no time are compelled to dive into a heap of compost for a stray ear of corn, or imbibe filthy water from a mud-hole to allay thirst. While they do not eat from platters, they are fed out of clean troughs fastened to a floor. When corn and mill feed is high he uses a feed cooker, and when low soaks his corn and makes a swill of his mill feed, never

hygienic and sanitary measures in connection with swine-raising would pay all the taxes of every man engaged in the business.

When the market price of hogs is below the cost of production, as at the present time, there is not the same incentive to care for them as under more favored auspices. We are now upon the threshold of another year. Unless all precedent is at fault, and all prospects delusive, the man who has saved his breeding herd, and means to save it if within his power, and raises both a crop of pigs and corn, will obtain such prices for them as will compensate him fully for all his care, solicitude and outlay, and what more do we want?

We want the markets of the world open to our manufactured hog product. The legitimate foreign demand for such calls for one-half of all we can produce. In the proportion that any of the markets of the world are closed to us, just in that proportion are prices affected, and it behooves every swine-breeder to strengthen the hands of the man or the party that advocates reciprocal measures favorable to the advancement of one of the most important industries of the great West.

COL. M. STEWART.

Wichita, Kas.

The Murray "Comfort Spring" Cart.

On this page will be found cut of the Murray "Comfort Spring" Cart, which is manufactured by the Wilber H. Murray Manufacturing Company, of Cincinnati, Ohio. It is claimed for this cart that it rides even easier than a buggy, and is the only cart that is absolutely free of horse motion. The objection to all other carts has been that the horse motion is always perceptible in some way or other. In the Murray "Comfort Spring" Cart all horse motion has been entirely done away with; it also has a nice phaeton body, as shown in cut, and has room under seat for parcels. In fact, it combines everything that pertains to usefulness, ease of riding and styles, and the price is a marvel of cheapness. The Murray people make a full line of carts, they are also the manufacturers of the world-renowned Murray \$55.95 buggies and \$5.95 harness. Write them for their fine new catalogue, containing full description and prices of their work. Their address is, Wilber H. Murray Manufacturing Company, Murray Building, Cincinnati, Ohio. They sell direct to the consumer, and do not belong to the so-called buggy or harness trust.

Do not be afraid of putting windows in your barns. There is no danger of having too much light.

With a very free horse it is desirable to cautiously accustom him to the sound and feel of the whip lightly drawn across him so as not to hurt him at all, says an experienced horseman.

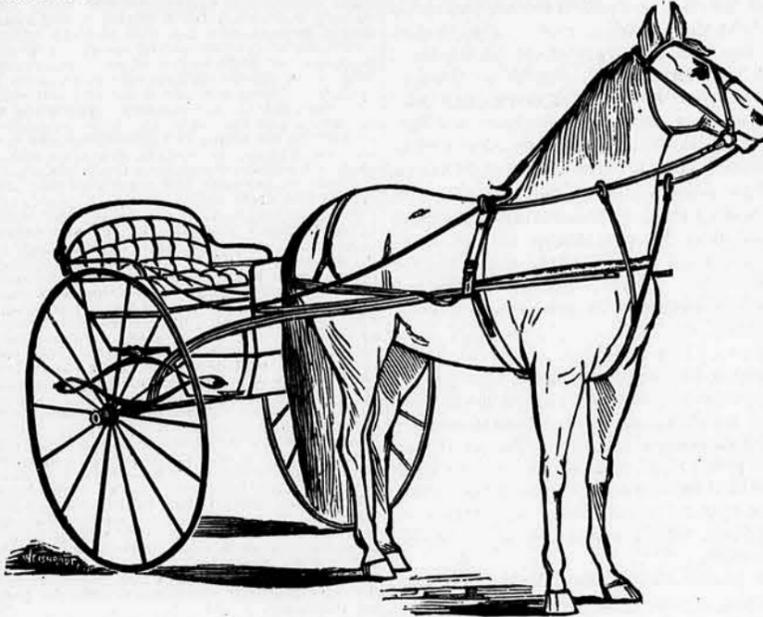
A Veil of Mist

Rising at morning or evening from some lowland, often carries in its folds the seeds of malaria. Where malarial fever prevails no one is safe, unless protected by some efficient medicinal safeguard. Hostetter's Stomach Bitters is both a protection and a remedy. No person who inhales, or sojourns in a miasmatic region of country, should omit to procure this fortifying agent, which is also the finest known remedy for dyspepsia, constipation, kidney trouble and rheumatism.

Ingersoll on California.

In a recent magazine article, Mr. Ernest Ingersoll, the noted writer, says: "The climate of southern California in winter closely resembles that of Egypt. Its equability is constant, and its dryness is proverbial. The only complaint made is, that it is too nearly perfect. Residents bred in the Eastern States confess now and then that a rousing storm would give them a grateful sensation. But this sentiment meets with no favor from the man who has just fled from a superfluity of wetness and chilling gales. To him perpetual summer seems perpetual paradise, and to the invalid dreading the advance of disease the still and arid atmosphere is as the breath of life."

The most comfortable way to reach the Pacific coast is via the Santa Fe Route. Weekly excursions in Pullman tourist sleepers at low rates. Apply to G. T. Nicholson, G. P. & T. A., Topeka, Kas., for folder.



THE MURRAY "COMFORT SPRING" CART.

Manufactured by WILBER H. MURRAY MFG. CO., Cincinnati, Ohio.

price. I am offered \$3.60 for them, and I am going to let them go." I said to him, "now that you have held them through the depression, and hogs are on the up-grade, why not hold a while longer until you can get even on your corn." His reply was, "I am afraid to risk it; two of my neighbors' herds have the cholera, and I think I shall 'let her go, Gallagher.'"

Not long since I noticed in the Associated Press dispatches from Washington an announcement that the Bureau of Animal Industry was advised of the discovery of a drug that was a sure specific for hog cholera. Alas! that the veracity of this discovery must take its place alongside of the "Elixir of life," Koch's cure for consumption, the Keeley motor, and screw-propelling air-ship. Dr. Salmon writes me that the report is premature and incorrect and without authority from the government. It is the same old story. One man claims that he has discovered a sure cure in the use of a preparation of poke-berry root. Another claims that inoculation is the surest remedy. Quack nostrums are for sale in "original packages" by all druggists, and the unfortunate breeder tries first one, then another, and finally gives up in despair. A man who was feeding a large number of hogs on swill from restaurants, came to me in great perturbation of spirit, relating that his hogs were dying of cholera, and asking my advice. I urged him, as the first step looking towards relief, to separate the sick from the well, and drive the latter to uninfected grounds as far distant as he

allowing it a chance to sour. They have free access to depositories of ashes, salt, lime and sulphur. Once in a while crude carbolic acid is mixed in their drinking water and air-slacked lime is scattered broadcast throughout yards and pens. They have the run of a rye patch fall and winter, and late in the spring grass and clover. The owner of these hogs has a horror of lice, hence if his eagle eye discerns one roaming at its own sweet will through the bristles of a favorite animal he pounces on it like a hen on a June bug. He uses the brush on his breeding stock once in a while, and the white nits so often seen glued to the hair back of the head and shoulders are speedily defertilized by the use of kerosene and lard. He raises no runts and his fear of contagion is so great that if a pig fails of his feed or shows an inclination to droop, or even has a slight cough, off it goes to the hospital, and if its recovery is doubtful it is knocked in the head and burned. Some will say, "this is too much trouble." I admit that with a large herd of hogs on the farm where swine-raising is not a specialty, and the time of the farmer is divided amongst other duties, this man's system may be too rigid, and yet the nearer one approximates to it the greater will be his immunity from loss by disease. Suppose now that every swine-breeder in the State of Kansas were to imitate this man's example, do you doubt for a moment the effect it would have on the swine industry of the State? I assert that the loss sustained through willful neglect and the disregard of

In the Dairy.

How Cheese is Made From Granular Curd.

In an article in *Hoard's Dairyman*, E. L. Eastman, one of the best practical cheese-makers in Wisconsin, tells in the following how he successfully makes cheese from granular curd:

Set the milk, cut and gently stir the curd till the temperature of 98° is attained, the same as it would be right to do, if the curd is to be suffered to pack, and is to be ground. Remove part of the whey when a temperature of 92° is reached; and drain the balance (the temperature in the meantime having been raised to 98°) at the first appearance of acid, as shown by the hot-iron test, that is when the curd will just fairly stick to the iron, but will not "spin" scarcely at all. Then stir the curd more briskly and continuously until it has thoroughly drained, and as often thereafter as is necessary to keep it in a granular condition. It will, in ordinary weather, lower a little in temperature pretty soon after the whey is gone, but it should not be suffered to go below 94° or 92°. Treat it in this way until the required acid has developed, at which time add the salt, and after twenty-five or thirty minutes put to press. In hot weather I sometimes add the salt, or a part of it, before enough acid has developed (but not until it has thoroughly drained,) thereby checking the development of acid. Consequently more time is required than would be necessary if salting was put off until the required acidity was reached. The result in the cheese is the same in both cases.

I have made cheese, as above stated, for several years, handling nearly 9,000 pounds daily the past summer, with one apprentice assistant, and have had no use for a curd mill. Some years ago I had occasion to operate a circular vat, holding 8,000 pounds, with an arch beneath it for heating purposes. I used it successfully until it was worn out, having 8,181 pounds in it as the most ever worked, and still saw no use for a mill. Gassy or floating curds can be as successfully handled without as with a mill; while a genuine "stinker," (as the cheese-makers and buyers call them), nothing will save; not even a curd mill will make a fine cheese of them.

My cheese have sold as readily and for as much money as those made with a mill, and no dealer or buyer has ever advised me to get one, or said he would give me more if I used one. And more, I have never heard of cheese that was made with a mill selling for more money, in this, or Sheboygan county, than those made by the dry acid granular process.

We were told when the Canadian process was imported by our "cheese instructors" that we would all have to get and use curd mills, or we would be selling cheese a half cent or a cent below those who were advised to buy and use them; but a close watch for results showed they did not sell their cheese for more money than other makers of good cheese did who used no mill. Neither do they to this day though they use their mills faithfully.

I say "fire" the curd mills, and "fire" the "makers" who say they cannot make a fine cheese without them.

Fat Globules in Cow's Milk.

An investigation of the fat globules in cows' milk has been conducted for the past two years, for the special purpose of studying the changes that take place in the number and the size of the globules during the advance of the period of lactation. It has been found that the number of globules is smallest when the cows come in fresh, and that the size is the largest at that time; from this period and on, the number of globules is constantly increasing, while the size is decreasing, until toward the time when the cows are drying up, when the largest number of globules is found, and these of the smallest size. The many difficulties in the way of creaming and churning the product from strippers are largely explained from the minute size of the globules in the milk from such cows.

The stage of the lactation period seems to be of greater importance than is the breed or individuality of the cow in determining the size of globules; while the number of globules is sometimes three to four times as large when the cows are strippers as when they come in fresh, the size is smaller at this time in about the same proportion. A disturbance of any kind, hard treatment, excitement, sickness,

etc., will leave its mark on the number and size of globules, and hence influence the creaming qualities of the milk and the rapidity and completeness with which the churn will do its work. Succulent feeds seem to diminish the size of the globules and increase their number.—*Bulletin Wisconsin Experiment Station.*

Dairy Notes.

The importance of the dairying interest may be somewhat appreciated when it is remembered that \$200,350,000 is invested in this branch of industry.

Prof. Henry, of the University of Wisconsin, advises—where cornstalks are to furnish the principal rough food—the following as a day's ration for a cow: Cornstalks, cut, fifteen to eighteen pounds; clover hay, five pounds; bran, six pounds; corn meal, four pounds.

A cleanly-kept cow will yield sweet milk, with an agreeable, sweet odor, and quite free from any taint or injurious quality whatever. That such milk is very rare is simply because such cows are rare, and this is the reason why the very best purely flavored butter is rare too.

The exposure of cows for an hour or two on cold days while getting water, causes the consumption and loss of many dollars' worth of food during the winter; besides, it is much better that animals should be able to drink without interference from others, and this can only be done by putting the water before the animal as it stands in its stall.

To keep cow's hair out of milk, even at the season when the herd are shedding old coats freely, the *American Dairyman* advises laying two thicknesses of fine cheese-cloth in a basin strainer, wire-cloth bottom. "A single strainer lets through a vast number, and a double one is a little better. The hairs get into the cream and butter, and make endless trouble."

A cement floor is not the best for a dairy, as it absorbs the drippings of milk and becomes foul in a short time. A good floor is of matched plank, with tight joints, and painted, so that it will absorb no moisture. Whatever drippings that should fall from the churn could be washed off such a floor without leaving any traces. Brick is quite as absorbent as cement. A flagstone floor with close joints set in cement is the best of all.

\$2,500 Reward for a Lost Cat.

The equivalent in English money of \$2,500 was once offered by an old lady in London for the return of a favorite cat which had strayed or been stolen. People called her a "crank," and perhaps she was. It is unfortunate that one of the gentler sex should ever gain this title, yet many do. It is, however, frequently not their fault. Often functional derangements will apparently change a woman's entire nature. Don't blame such sufferers if they are "cranky," but tell them to use Dr. Pierce's Favorite Prescription, which is an infallible remedy for "female weaknesses." It will soon restore them to their normal condition. It is warranted to give satisfaction in every case, or money paid for it will be returned.

Dr. Pierce's Pellets, the original and only genuine Little Liver Pills; 25 cents a vial; one a dose.

For a Spiritual Song.

A Christmas story.—A poor country congregation found itself badly in want of hymn-books. The clergyman applied to a London firm, and asked to be supplied at the lowest (Church) rates. The firm replied that on condition the hymn-books contained certain advertisements, the congregation should have them for nothing. Necessity knows no law, and the minister sorrowfully complied, thinking to himself that when the advertisements came they could be removed from the leaves. The hymn-books arrived, and—joy of joys—they contained no interleaved advertisements. At the thanksgiving service the good parson joyously gave out the Christmas hymn, and the congregation sang the first verse with fervor. When they reached the last line they found that this was what they had been singing:

"Hark! the herald angels sing,
Beecham's Pills are just the thing;
Peace on earth and mercy mild,
Two for man and one for child."

Now is the time to build the Hog Sanitarium. No mud! No waste! No filth! No work! Healthy hogs. Think of it. Send for circulars to E.M. Crummer, Belleville, Kas.

The Poultry Yard.

Raising Chicks Without Hens.

It is now well known that incubators and brooders are no longer an experiment, but perfectly natural and practical; and that chicks can be raised much cheaper and easier by their use than when hens are employed to do the work. The advantage of an incubator is, that it enables the breeder to get young chicks at any time of the year he desires, and when the chicks will bring the highest price in the market. Early in the season the hens are always indifferent about sitting, and give a great deal of trouble to the breeder; but when incubators are used they can be set at any time, and are much easier to manage, and naturally give better results with less trouble.



There is an enormous demand for incubators in this country and Europe, and hundreds of people are turning their attention to the poultry business as a means of getting a good living; but a person on entering this business should carefully select the proper kind of appliances to use, or he will never succeed. The business is a very profitable one, and being easy to manage and light work, is adapted for women and children, as well as men, and oftentimes they succeed even better.

The advantages of artificial incubation are many. First, there is no waiting for a broody hen; an incubator is always ready to set, never deserts its nest, does not eat the eggs nor clumsily break them. Hens are certainly "kittle-cattle" to deal with, for while one eats her eggs, another clumsily breaks them, and a third leaves them to become cold. Not so with an incubator. Then, too, the fitful and fretful manner in which a hen sits is often a cause of great anxiety to her owner, especially when she has been entrusted with eggs costing several dollars a setting.

This anxiety is never felt when working an incubator, for you look at the thermometer and see that the temperature is being maintained at from 100° to 104°, and you feel satisfied that all must be going on well.

The picture at the head of this article represents the incubator manufactured by Geo. H. Stahl, of Quincy, Ill. It is very highly recommended, and any one interested in poultry raising will do well to write to the manufacturer for description and full directions to manage the same. We have received from Mr. Stahl his finely-illustrated catalogue, a copy of which he will be pleased to mail to any one who cares to write him for it.

Poultry Notes by a Correspondent.

A Leghorn is a good winter layer, if you understand their needs to make them lay. They can prove very poor ones if neglected. Eggs in winter mean something, and a farmer who wants them must manage his flock with this point mainly in view.

No fowl as large as the Langshan can successfully compete with the Leghorn or Minorca, although some authorities state so. Experience has fully proven this point. The Leghorn and Minorca are kings in the poultry yard as egg-producers.

Scoring by comparison was adopted to see what benefit, if any, there was in this form of judging poultry. At the last New York show, (February, 1891,) this plan was tried, but it is too soon to hear with what benefit it has been. It is to be hoped that the benefit will be towards equity in judging the fowls.

Many of our prominent breeders are not selling eggs from their yards, but using them in setting, themselves, selling only the chicks reared during the season. Egg selling is often productive of much hard feeling, distrust, and not infrequently of fraud. A man who sells eggs for hatching cannot be too careful in this matter. It seems to us this plan of not selling eggs

would be our plan of action. It might be tried and tested.

The Golden Wyandotte is the ideal fowl of beauty, and, besides feather, possess all the useful qualities of the silver variety, a breed which has won a name as a general-purpose fowl, being the rival of the Plymouth Rock, one of our grand fowls, the favorite and popular variety among farmers and poultrymen generally.

The Dark Brahma is again coming to the front as a popular breed. For ten or more years they have not received the recognition of our breeders of poultry that they really deserve. With good care and proper mating, the value of the Dark Brahma can be increased many times over its present standing. We hope they will now become popular again.

"The ounce of prevention"—this is the question to be solved; a meaning to every poultryman who has had much sickness among his fowls. It matters not how healthy your flock may be, it should be borne in mind that if you neglect them sickness will be sure to follow. Take each bird that shows signs of drooping in hand and treat it apart from the other fowls. If taken in time, it can be cured.

The breeding of Game fowls, while more or less carried on in every section, have not the docile properties which always attract attention among our farmers. A fighting chicken is their last choice. However, the Game is a very useful breed, and none know this better than the breeders who keep them. They are layers of fine-flavored eggs, and when wanted as a table fowl they will always give satisfaction. Don't be too hard on the Game.

In selecting pullets or hens for the breeding-pen, pick out only such birds as are in high health, and as uniform in size as possible. A long, deep body; neat, thin, red comb; small head, stout shanks, and close-lying feathers—these are points in a good breeder. A hen of two seasons is best, yet many three and four years old have we used with good success. It is time to have your hens well mated and in readiness for the approaching season's work. Upon your breeding-pens will depend your success in producing nice, well-bred chicks.

J. W. C.

Stand Your Ground.

When you make up your mind to take Hood's Sarsaparilla, do not be induced to buy some other preparation instead. Clerks may claim that "ours is as good as Hood's" and all that, but the peculiar merit of Hood's Sarsaparilla cannot be equalled. Therefore have nothing to do with substitutes and insist upon having Hood's Sarsaparilla, the blood purifier and building-up medicine.

To Farmers.

The Union Iron Works, Kansas City, Mo., manufacture everything necessary for grain elevators. Power shellers, engines and boilers and other machinery of the latest and most approved styles. They furnish plans and make estimates for parties contemplating erecting elevators free, and where contracts are awarded superintend the construction and put everything into successful operation. Write them.

Worms in Hogs--It Causes Hog Cholera.

MR. G. G. STEKETEE—*Str.*: Please send me \$3 worth of Steketee's Hog Cholera Cure. Last year I lost thirty hogs with cholera, and thought it was caused by worms. Last spring my pigs were taken the same way. I at once gave your Steketee's Hog Cholera Cure and cured every one of them. It put a move to the worms, and the pigs soon began to eat and grow fat. I would recommend it to all stockmen to use. M. M. JOHNSON.

Neligh, Neb.
It is not only used for hog cholera, but for worms in all kinds of animals. It is one of the most powerful worm remedies known for extracting worms from horses, hogs, dogs, sheep and fowls. Fifty cents per package, at the drug stores. Sixty cents by mail. Read Steketee's advertisement in this paper.

Farm Loans.

Loans on farms in eastern Kansas, at moderate rate of interest, and no commission. Where title is perfect and security satisfactory no person has ever had to wait a day for money. Special low rates on large loans. Purchase money mortgages bought. T. E. BOWMAN & Co., Jones Building, 116 West Sixth street, Topeka, Kas.

For a Disordered Liver try BEECHAM'S PILLS.

Alliance Department.

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Officers or members will favor us and our readers by forwarding reports of proceedings early, before they get old.

SPECIAL.

We want some members of every farmers' organization—Grange, Alliance or F. M. B. A.—to regularly represent the KANSAS FARMER and help extend its fast-growing circulation and usefulness. Please send name and address at once.

Saline County.

At a regular meeting of the Saline County Alliance, representing thirty-two sub-organizations, the following was unanimously voted for:

WHEREAS, The Union Pacific railroad is steadily increasing its indebtedness, and is not even paying interest on bonds secured the United States government, and is apparently making no effort to pay it; therefore be it

Resolved, That our Senators and Representatives in Congress be requested to work for the foreclosure of the government lien on the said Union Pacific railway.

Fourth District Alliance.

Delegates from the various County Alliances in the Fourth Congressional district met at Emporia, Kas., February 27 and 28, and completed the organization of a District Alliance by adopting a constitution and by-laws, and electing the following officers: President, W. H. Biddle, Augusta; Vice President, A. H. Knox, Cottonwood Falls; Secretary and Treasurer, O. B. Wharton, Emporia; Lecturer, R. J. Basel, Michigan Valley; Assistant Lecturer, A. E. Wharton, Council Grove.

A Business committee, consisting of one from each county, was elected as follows: Chase, W. G. McCandless; Osage, W. T. Coffman; Lyon, O. B. Wharton; Greenwood, C. A. Yearout; Morris, G. E. Dutcher; Butler, C. F. Prinn; Coffey, C. H. Custenborder; Marion, J. Coxon; Shawnee, D. M. Howard; Wabaunsee, manager of the Alliance store at Harveyville; Woodson, manager of the Alliance store at Toronto.

Many propositions in the interest of the order were discussed, and on adjournment it was decided to meet at Emporia the first Tuesday in April, at 1 p. m.

Organization Notes.

The Farmers' Alliance is doing more to ally sectional feeling than all other forces combined.

It is high time that the government—the people—take control of the finances of this country, instead of longer leaving them in the hands of a class who only manipulate them entirely in their own interest.

The People's party at Wichita, in convention, February 20, nominated a candidate for Mayor, and other city offices. This is the first time and place in which the new reform party has taken a hand in municipal politics, and the result is awaited with much interest.

All delegates to the County Alliance, and as many members as possible are

urged to attend the next meeting of the Shawnee County Alliance, which meets in Topeka, at Lincoln Post hall, Friday, March 6, at 10 a. m., as important business will come before the meeting.

The Farmers' Alliance and other industrial organizations have given notice to the politicians that the questions of finance and transportation are to be paramount questions in the next Presidential canvass, and that no man who favors national banks and opposes silver can be elected President of these United States.

The Alliance Herald, Stafford, Kas., says: The time has come when farmers and wage-workers are rapidly laying aside the prejudices of years and are finding out that what injures one injures both classes. They are also finding out the duplicity of those who are dependent on the differences of opinion that have heretofore kept them apart. The two-faced politicians will soon have to lay aside their masks, for, in spite of them, light is breaking in the dark places.

The National Economist says that the Alliance is to-day stronger, more united, and more determined in its efforts of reform than ever before. It has withstood the onslaught of the politician, the trickster, and the trimmer, and stands solidly united, leading the greatest reform movement the world ever saw, which will ultimately restore the government to the people and bring prosperity to the nation. Let no one shirk his duty, but bend every energy toward the accomplishment of that end for which the Alliance was organized.

J. DeTurck, Berks county, Pennsylvania, writes us that they started an Alliance on January 8, 1891, and that their growth is healthy and beyond all expectation. He says that while that county is one of the most foremost in the old Keystone State, yet farmers are poorer than they were twenty years ago. There are 217 sales of farmers' personal property advertised in that county at present, which plainly shows "whither they are drifting." We of the West are not alone in the raging current of destruction, but our Eastern brethren are swelling our ranks.

In an interview, Chauncey M. Depew, President of the New York Central railway, made the following statement. That he knew what he was talking about and stated the truth, will not be questioned: "Fifty men in this United States have it in their power, by reason of the wealth which they control, to come together within twenty-four hours and arrive at an understanding by which every wheel of trade and commerce may be stopped from revolving, every avenue of trade blocked, and every electric key struck dumb. Those fifty men can control the circulation of the currency, and create a panic whenever they will."

Rev. T. DeWitt Talmage says that "the overshadowing curse of America to-day is monopoly. He puts his hand on every bushel of wheat, every sack of salt, every sack of flour and every ton of coal, and not a man, woman or child in America but feel the touch of his moneyed despotism. His scepter is made out of the iron track of railroading and the wire of telegraphy. He proposes to have everything his own way, for his own advantage and the people's robbery. He stands in the railway depot and puts in his pocket each year \$2,000,000,000 beyond the reasonable charges for his services. He controls nominations and elections, city elections, State elections, national elections."

J. H. Lucas, Ulysses, Kas., thinks the late Democratic victories throughout the country rather show a want of confidence in the Republican party than an indorsement of the Democratic party, and would indicate that the people are groping in darkness, seeking an avenue of escape from the evil effects of a vicious, economic policy in national affairs, and have only to be educated in the questions of tariff, land and transportation to secure their enlistment in the ranks of the great industrial movement—the People's party. He believes that a complete national victory can be gained in 1892 by thoroughly organizing each and every State upon the plan so successfully adopted by Kansas.

W. P. Brush, well known to most of our readers as the pioneer Organizer in Kansas, is now "waking up" the "hayseeds" of Illinois, and writes us that he has organized at every place where he has spoken with that object in view. He says he finds that the farms in that State are growing large, in face of the fact that the

population is steadily increasing, and that more than one-half of the farms are tilled by renters, the owners living in towns and cities. Prices of average farm lands are constantly increasing, ranging from \$50 to \$80 per acre, and rent for the same averages about \$4, or about two-fifths of the crop. It is only a question of time when it will be necessary for the renter to devote most all his energies to the payment of rent, as is now the case with the Hindoo farmers in India, the farmers of Egypt, Russia or Ireland. Not only the sweat of honest toil, but the "blook" and "pound of flesh" will soon be demanded by the "Shylocks." Farmers within a few miles of the greatest mart for farm products in the world (Chicago) are no more favorably situated than those in other parts of the country.

Wheat Prospects.

Recently, Secretary Mohler, of the State Board of Agriculture, announced that reports received at his office indicated that the prospects were excellent for a large crop of wheat in Kansas for the season of 1891. From a few reports received by letter at this office, as well as many cheerful accounts given by KANSAS FARMER callers from different parts of the State, it would seem that the Secretary's announcement was entirely correct. The KANSAS FARMER will give, in its April 1 issue, full reports from every county, showing condition of all kinds of crops in the State.

A communication from Chicago, received at this office with request for publication, we give herewith. It explains itself:

CHICAGO, February 25, 1891.

Publishers Kansas Farmer:

GENTLEMEN: The enclosed is a copy of a letter sent to P. P. Elder, Speaker of the Kansas House of Representatives.

We receive here for sale from Kansas people much wheat. It seems strange to us that people should be so blind to their own interest as to publish to the world such statements.

Year after year, about this time, they begin making these statements, and keep it up month after month until the world begins to believe they are to be deluged with wheat, and we find it almost impossible to get a fair price for wheat sent to us for sale. Yours truly,

R. L. DAVIS & Co.

[COPY.]

CHICAGO, February 25, 1891.

HON. P. P. ELDER—DEAR SIR: We enclose herein one extract taken from the Commercial Trade Bulletin of the 19th, and one extract each, taken from the commercial columns of the Chicago Tribune and Chicago Herald of the 20th. This statement was on the 19th telegraphed to England, France, Germany, and, in fact, all over Europe and this country, and caused a decline of two cents per bushel in the price of wheat. And if a few more of the same kind are sent out, they will cause a decline of ten cents per bushel.

We sell grain from shippers in the west—our interest and those of the farmers are identical; hence we wish that some member of the Kansas House of Representatives would rise, and from his place in the House ask why the agricultural bureau of Kansas should, at this early date, send out such a statement—calculated to scare (from buying) every miller who wants a bushel of wheat, and holding out prospects to European buyers of getting our wheat much lower than present prices.

We cannot understand what is expected to be gained by the agricultural department of an exporting State sending out such glowing statements calculated to depress the very article the State has to sell.

Will you kindly hand this letter to some member who has the interest of the farmers at heart, and let him openly, in the House, ask this question? Yours truly,

R. L. DAVIS & Co.

Gossip About Stock.

Kansas is fast becoming as famous for its fine horses as Kentucky.

M. R. Platt, of Kansas City, Mo., informs one of our representatives that he will have his great annual sale of Gallopway cattle April 2.

While all farmers cannot have thoroughbred registered stock, they can, with intelligence and care surprisingly increase the quality of their animals by good breeding, good feeding, and good handling.

M. H. Alberty, in remitting for advertisement, says he has this week sold stock as follows: Holstein bull calf, to H. S. Hiner; three-year-old bull, S. Haggety, Brooks, Kas.; one boar, to Geo. Peel, Howard, Kas., and a pair of pigs to F. R. Deaver, Quenemo, Kas.

The Alliance-Herald remarks that it is true the world over that the sheep never dies in debt to its owner. The wool upon its back will pay the expense of keeping. The sources of profit are greater than in any other kind of stock, in that it yields its offspring, wool and flesh. As a gleaner and eradicator of noxious weeds that grow

upon almost every farm it has no equal. There are many weeds no other animal will touch that are eagerly sought by the sheep.

The Albuquerque Citizen says that a firm in New Mexico five years ago offered to close out their flock for \$9,000, but could not get it. This year they sold \$4,000 worth of wool. Their ranch and sheep are said to be worth between \$50,000 and \$60,000. This is evidence that a "long pull" is required in the sheep business.

As novel as it may appear to most of our readers, it is true that the rabbit as a wool-bearing animal is rapidly gaining headway, especially in France. The wool is softer and finer than that of a sheep, and is believed to help the rheumatism. The amount produced by a rabbit in a year, as he can be combed several times, is worth about \$1, or as much as the wool of a lamb.

John D. Ziller, proprietor of Lawndale Stock Farm, Hiawatha, Kas., is a breeder of Holstein-Friesian cattle, high-grade Norman horses, and recorded fancy Poland-China swine. He says that his desire is to furnish his patrons with as good stock as can be bred by any breeder, and guarantees all stock as represented. See his advertisement in the KANSAS FARMER.

It is quite probable that you may need the services of a physician some day; but you can postpone the time indefinitely by keeping your blood pure and your system invigorated through the use of Ayer's Sarsaparilla. Prevention is better than cure.

To Alliances.

Send to Brother D. W. Cozad for special terms to Alliances on all classes of nursery stock. Address D. W. Cozad, LaCygne, Linn county, Kansas. (Mention KANSAS FARMER.)

Here We are Again.

WHEATON, ILL., December 7, 1890.

MR. STEKETEE:—Your Dry Bitters has no equal for kidney or liver complaint. Have been troubled for the past ten years. Find your bitters excellent.

FRANK SCHUSLER.

Send G. G. Steketee, of Grand Rapids, Mich., 30 cents in U. S. stamps and we guarantee that he will send at once.

We are acquainted with Mr. Schusler and know his testimony to be reliable.—Ed.—Farm, Field and Stockman.

Where are the Best Buggies Made?

The Pioneer Buggy Co., Columbus, Ohio, on receipt of 10 cents, will send you their treatise on the horse, which also answers the above question.

LAST HALF PACKAGE—And the half cured two hogs.

MR. G. G. STEKETEE, proprietor Steketee's Hog Cholera Cure:—I received one package of your Hog Cholera Cure for worms. One-half of it was gone when I received it. I had two hogs that could not stand on their hind feet; after feeding what remained in the package they were all right. MARTIN CONNERY, P. O. Box 132, Farley, Iowa.

Read Steketee's advertisement in this paper for his address. And who will say that this remedy is expensive?

Special Club List!

In order that we may save our regular subscribers some money, and at the same time supply the very best newspapers and magazines, we have selected a few representative journals, such as are most in demand, which we offer at a very low combination rate, exclusively for subscribers of the KANSAS FARMER. If more than one paper or magazine is desired, in each case subtract one dollar from the combination rate, the remainder representing the amount to remit for that particular one. We can only supply sample copies of the KANSAS FARMER.

Table with 2 columns: Publication Name and Price. Includes Breeder's Gazette, Globe-Democrat, Farm, Field and Stockman, Kansas City Times, Western Agriculturist, Topeka Democrat, Topeka State Journal, Daily Kansas State Journal, Topeka Capital, The Advocate, Nonconformist, Cosmopolitan, Leavenworth Weekly Times, Leavenworth Daily Times, Kansas City Weekly Star, Kansas City Daily Star, Western Poultry Breeder, Ham and Eggs, Fanciers' Review, Alliance Tribune, American Swineherd, National Economist.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, Dr. S. C. ORR, Manhattan, Kas.

BLACK-LEG.—Will you kindly inform me as to the cause of black-leg in calves, how to prevent it and how to cure it?
Coldwater, Kas. H. W.

Answer.—See reply to C. G. B. in issue of December 17, 1890.

HIP SWEENEY.—A twelve-year-old mare has hip sweeney. I think it was done in foaling last May, but I did not notice it until she began to lose flesh last August. She has never shown any lameness. I have blistered. Please state whether curable, and give treatment.
Lyndon, Kas. A. N.

Answer.—If your mare is not lame, the muscles should fill out if you feed her up to good flesh. Blister over the hip joint with cerate of cantharides. Next time sign your name in full.

WART.—I have a three-year-old horse that has something growing on the inside of his left hind leg between the fetlock and hoof. It is a raw, fleshy substance, which I take to be a wart. It started last fall, and is now about the size of a door-knob. I think it is large enough. How shall I proceed to gather it?
Big Springs, Kas. F. P.

Answer.—If the wart is smaller at the base than at the top, tie a string around it and tighten it every third day, and it will soon drop off. For further advice, see reply to F. W. B., in this issue.

SKIN DISEASE.—Some of my horses and colts have been rubbing themselves ever since last December. They ran in the stalk field until Christmas, and since then I fed them on cane hay, oat straw and corn fodder. They have no lice on them. What is the matter, and what can I do for them?
Jewell City, Kas. J. H.

Answer.—We would be glad to answer your questions, but you have given us no symptoms, except that they are rubbing, which may be due either to eczema, mange or pin-worms. In the issues of January 28 and February 4 and 18 you may find something which will apply to your case. If you do not, then write again, giving symptoms, and we will be glad to help you.

ENLARGED LIMB.—A two-year-old filly was cut by barbed wire on front part of hock joint, first of November. I used fish oil and carbolic acid and it healed very fast, but it left the leg very large, so I stopped healing the wound and it still runs. What can I do to bring the leg to its proper size?
Axtell, Kas. E. W. S.

Answer.—You should have said whether the mare is lame or not. You may have a case of open joint. If the joint is not open, apply a poultice of warm linseed meal every day for a week. If you think there is open joint, then take glycerine 2 drachms, carbolic acid 1 drachm, and flour to form a paste. Put a plug of this paste in the wound every day and then apply the poultice cold, and in the meantime write again and give the symptoms more fully.

LAME MARE.—A mare five years old in the spring is lame in left fore limb. I think it is in the foot. She has been lame about two months, and stands with lame foot in front. I have doctored her for sweeney. She travels better on hard than on soft roads. What can I do for her?
LaFontaine, Kas. W. L. W.

Answer.—Keep the mare's foot in a warm poultice for ten days and then blister the coronet with cerate of cantharides. Some of the symptoms are indicative of navicular-joint disease. Write again and answer the following: What part of the hoof is most worn? Does the heel grow high and narrow? Can you see any difference in the size of the two front limbs? Does pressure upon the frog cause pain? Does she grow better or worse after traveling a short distance?

SWOLLEN TONGUE.—A four-year-old cow has had her tongue badly swollen since the latter part of last October. She froths at the mouth most of the time and it is hard work for her to eat, and she is growing very thin in flesh? What can I do for her?
Everest, Kas. B. F. H., M. D.

Answer.—Examine the cow's tongue carefully for a splinter of wood or other foreign body which might be lodged there. Or you may find some irregularity of the teeth which is constantly wounding the tongue. But in the absence of a visible cause the probability is that you have a

case of *actinomyces*. In this case the tongue will appear to be filled with small knots or hardened swellings which will cause it to be larger and less flexible than it should be. These knots should be incised and smeared once a day, for a week, with an ointment made of iodoform half a drachm, vaseline half an ounce. If the disease is far advanced treatment is of no avail. The cow should be isolated from other cattle, and we advise you to have her examined by a qualified veterinarian if you can. You will find an article on this subject on page 3 of the KANSAS FARMER of January 14.

SORES—WORMS.—What shall I do for my pointer dog? He has a sore on his left hind leg and his ears are sore. He has worms, and seems to be cold all the time.
Assaria, Kas. G. P.

Answer.—Wash the sores once a day with warm water and castile soap, and apply an ointment made of oxide of zinc one part, powdered alum one part and fresh lard six parts. Do not allow him to lick the sores while the ointment is on. (2) You do not say with what kind of worms the dog is troubled, but as the round worm is the most common we will prescribe for that. Have six powders made up, each containing the following: Santonine, 4 grains; sulphuret of iron, 2 grains; sugar of milk, 20 grains; powder and mix. Give one of these in a tablespoonful of milk, on an empty stomach, each morning until done; then follow next morning with two tablespoonfuls of castor oil and ten drops of turpentine mixed. In about three weeks the treatment for worms should be repeated.

WARTS—BLACK-LEG.—(1) A three-year-old colt has a wart, two inches in circumference, on the inside of the hind leg, just above the hoof. I burned it down once with muriatic acid, but now it is bigger than ever. (2) I want to ask your opinion in regard to some calves which I have lost. I turned them on some good wheat pasture, and some claim they died from eating wheat with the frost on it in the morning, and some say it was from drinking cold water. Both of these reasons appear to be very good, for by examination I find that the blood seems to be too thick to circulate, and the lungs and liver got feverish and swelled, and even the heart in one of them seemed to be double size. There is generally a gathering of blood under the skin of one leg, mostly a fore leg.
Caldwell, Kas. F. W. B.

Answer.—(1) Warts of the kind you mention are sometimes very hard to remove. The best remedy is the knife in the hands of a surgeon. If you have no surgeon near you, then apply nitric acid, carefully, once a day, till the wart is entirely destroyed. (2) Your calves died of black-leg, induced by a too sudden change to rich, succulent pasture. See reply to C. G. B., in issue of December 17, 1890.

WIRE CUT.—A two-year-old filly got cut in several places a little below the seat of spavin. I could get my finger in one of the places—a sort of pocket that would not drain itself, and I cut it down, and the bone feels rough. This place discharges aropy, whitish matter. The leg is badly swollen, and she has not touched it to the ground for several days. I am using Mustang Liniment, and to-day I cleaned it out and filled the hole full of rosin. I hope this may reach you in time to get an answer in this week's FARMER.
Leoti, Kas. J. W. C.

Answer.—We fear your treatment has made a bad case worse. Either the joint is open or else it is the sheath of a tendon. The latter is not quite so serious. Put the case in the hands of a veterinarian, if you can. If you cannot, then take carbolic acid 1 part, glycerine 3 parts, and flour to form a paste. Fill the hole with this paste; then syringe the entire wound over with a solution of sulphate of copper 1 drachm to soft water 1 quart, and then apply over the whole a poultice of linseed meal made hot and let get cold. Dress it in this manner twice a day till the matter stops running from the opening, and then omit the paste, but continue the rest. Put her in slings if you can.

PRURIGO.—A fourteen-year-old mule has had some kind of an itch for five or six years. It begins in the spring when the weather gets warm, and the hotter the weather the worse it gets. It is worst on her head, ears, neck and tail. It does not break out, but she just rubs the skin off. She gets nearly wild and wants to rub all the time, making it very disagreeable to work her. As the weather gets cool it gradually disappears. If you can give me any advice it will be gladly received.
Abbeyville, Kas. E. B.

Answer.—This is a chronic condition, scientifically known as prurigo, and is due to a heated condition of the body. It is sometimes very difficult to effect a cure. Temporary relief is about all you can expect. Give the mule a purgative of 6 drachms of Barbadoes aloes in 1 pint of warm water. After twenty-four hours begin to give, twice a day, in bran mash, the following dose: Epsom salts, 1 tablespoonful; powdered saltpetre, one teaspoonful. Get your druggist to make you the following wash: Potass. liquoris, 2 drachms; hydrocyanic acid, 1 drachm; aqua, 2 pints; mix. Apply with a sponge to all the irritated parts of the skin, and then tie so she cannot bite it. Apply twice a day if necessary.

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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.

If Flow'rs Could Sing.

If flow'rs could sing, the poets lays
Would not be needed for their praise;
They, of which men have sung so long,
Would sing their own enchanting song.
What fragrant accents oft would float
From out the rose's velvet throat.
What soulful solace would they bring—
If flow'rs could sing.

If flow'rs could sing, how would they bless
The love that lips dare not confess;
How would they voice the secret throes
Of passionate and utter woe;
How would they thrill the maiden fair
Who wore them in her breast and hair;
What tender tidings would they bring
If flow'rs could sing.

If flow'rs could sing, the birds would die;
What use were it for them to try,
By any means, to e'er disclose
The charms that render sweet the rose?
They lovely colors have, 'tis true,
But have they lovely fragrance, too?
The birds would die from envy's sting—
If flow'rs could sing.

Indeed, the world would be too sweet,
If carols sang the marguerite
In that fond hour when twilight's ear
Is waiting woodland hymns to hear.
The violet her scent, ere long,
Would squander in the breath of song;
And song would be too sweet a thing—
If flow'rs could sing.

—Frank Leslie's Monthly.

Written for the KANSAS FARMER.

HARRIET ANN'S PINE CONES.

It was the close of a lovely October day. The air was full of that hazy softness so beautifully characteristic of that delightful time of autumn known as Indian summer.

The sun went down in dreamy splendor, leaving a track of scarlet and gold which, deepening into purple twilight, was succeeded by the silvery light of a crescent moon.

In the distance, a red light shone out from the darkness like a solitary campfire. Weird figures passed to and fro within its magic circle, suggestive of a veritable witch's dance with its attendant mystic rites.

Determined to solve the mystery of these uncanny proceedings, I sallied forth, and soon found myself in the presence of witch, boiling caldron and all.

"What magic mess is this you are concocting now, Aunt Hester?" I said, by way of introduction, as I took from her hand the huge ladle with which I briskly stirred the bubbling wine-colored mass.

"Land sakes! Making apple butter is desperate tedious," she answered. "I want to finish this off before the moon goes down. It's mighty lonesome-like out here alone."

"I'll keep you company, Aunt Hester. Only tell me one of your wide-awake stories, and I will be lively as a cricket."

"Well," said she, after replenishing the fire, "I don't believe I ever told you about Harriet Ann's pine cones, did I? Laws! It was too funny, though Harriet Ann didn't seem to think so; and I rather think she shed some pretty bitter tears over the loss of 'em, too."

"You see there was a mighty craze for 'em all of a sudden, in our neighborhood."

"Some one was visitin' 'Squire Dalton's folks from back East somewhere, and they happened to spy some of them great, fringed acorn cups, and jest gathered all they could find to take back with 'em, and then sent the 'Squire's wife a grand picture-frame all trimmed off with pine cones, to put in her best room, and a box full of cones besides."

"Well, folks got to see 'em, and the craze set in fast."

"Mrs. Loomis, she went back to Pennsylvania on a visit, and brought home sights of 'em. I declare, I never seen so many nicknacks as she conjured up—picture-frames, boxes, and what-nots. Yes, and she even had the mantel-piece and the old clock prinked out with 'em, too. You see, they stuck 'em on in fancy ways, and then give 'em a good coat of varnish, which set 'em off splendid."

"She was wonderful free-hearted, and gave her nearest friends some, which made them as hadn't any crazier than ever."

"Harriet Ann was pretty kind o' chipper 'bout pickin' up such things, and she did want some o' them cones 'mazin' bad. She made an arrant over to Mis Loomis, thinkin' she'd be perlitte enough to give her a sample. But laws! Mis Loomis

thought she'd given away more than she could spare, and she kept a thousand miles away from the subject of pine cones.

"So it run on, and one day Deacon Brown cum in, and sez he: 'Harriet Ann, what do you s'pose I've concluded to do?'"

"Well, I dunno, father, unless you're goin' to run for Guvner," sez Harriet Ann, laughin' like.

"You see, a long time before Harriet Ann was big enough to remember, her father got the nomination for Guvner from the Whig party. But land o' nothin! he was too modest to run, and so it's been a standin' joke agin him ever since. But he told Harriet Ann 'she'd have to guess something likeller to come to pass than that;' and the next thing that cum into her mind was that he was goin' to California. He'd allus said 'he was goin' to see that land of Ophir, if the Lord let him live long enough."

"So when Harriet Ann guessed that, he said 'he was goin' 'bout as fur t'other way. He was goin' clear back to old Vermont."

"It was such astoundin' news, that Harriet Ann didn't think till after he was gone what a chance it would be to get pine cones. He was goin' to start on Monday, and this was Thursday."

"Harriet Ann was mortal busy gettin' a carpet off to the weavers; but she left everything, and went right off and got some beautiful handkerchers, and hemmed 'em nice as could be. And Saturday she went out to bid him good-bye and give 'em to him, the main object bein' to ask him to bring her some pine cones."

"He'd always sot great store by Harriet Ann, and of course he promised quick enough."

"She was so afeard he'd forgit, tho', that she writ, conspicuous like, on every one of them handkerchers—'Pine cones. Remember 'em.'"

"Well, the first letter that come said—'Tell Harriet Ann she shall hev bushels of cones,' which tickled her 'mazingly, and every letter he made mention of them cones to show her how well he remembered of 'em."

"He was terrible forgetful 'bout ordinary matters, but I s'pose he wanted Harriet Ann to have some fancy jimcracks 's well as any one."

"Well, she sot to and got her carpet off, and then went to fixin' frames and things ready for the cones."

"The Deacon lingered ruther longer than he 'spected to, visitin' relashuns all along in Pennsylvania and the Western Reserve. But at last he writ a letter, sayin' 'he was tired out a visitin' and was coming home. He'd got Harriet Ann's cones; went ten miles to git 'em—way up to the mountains in Pennsylvania, and he'd had so much trouble posting round with 'em that he'd be as glad to git rid of the pesky things as she would be to receive 'em,' which kept Harriet Ann chirked up."

"She thought a master sight of her father, but them pine cones weighed heaviest on her mind just then."

"It wasn't long after that till her new carpet come home. And it was a beauty, I tell you! Not another rag carpet in the hull neighborhood could hold a candle to it."

"Harriet Ann went right at it, and hadn't much more'n got it done and put down in her sittin'-room, than home cum Deacon Brown. And sure as you live, he brought Harriet Ann enough cones to decorate the biggest meetin'-house in the country."

"They was all sorts and sizes, and prettier than any she'd seen at the 'Squire's, or at Mis Loomis', either."

"It wasn't long, neither, till everybody 'round knew that Harriet Ann Smith had sum of the beautifullest and queerest cones ever seen, sum that nobody else had any of. And soon one and another called to see her new carpet. They was so anxious to get the pattern of that new stripe in it—he! he!"

"Harriet Ann, all unsuspecting and proud-like, would show 'em into her settin'-room, which the new carpet made it look mighty grand. She'd a wonderful obligin' disposition, Harriet Ann had, and she jest kept givin' this one and that one a few cones, till the pile was considerably dwindled in size, and so she jest hid 'em. Didn't even tell me where she put 'em—till she was ready to use 'em. It was gittin' pretty well along in the fall, and she wanted to get house-cleanin' out of the way. And besides, she hadn't the varnish to brush her cones with. Then there was the old settin'-room stove had

to be resurrected and cleaned up. Harriet Ann did despise that stove, but she didn't risk askin' for a new one. And all the time John was plannin' to surprise her with one. You see, he'd made a bargain with a hardware man in town to sell the old stove second hand, and he'd buy a new one. (It was good enough to warm by, but it was most mortal ugly to look at.)

"Well, things seemed to turn out all right, for that evenin' Mis Loomis sent word that a lot of 'em was goin' out to her father's next day, and would stop for her early; and next mornin' off she went."

"About 10 o'clock a man cum with the new stove—a fine one, I tell you!—which he dumped onto the porch there, and took off the old heater."

"John was bound to have it 'fore Harriet Ann got home, and for three mortal hours was rassed with that stove-pipe before we got it to act accommodatin' enough to allow itself to be put up."

"I declare! It's bound to boil over. Just pour in some of that cold cider; that'll stop it. There! It's kind o' contrary, ain't it? I allus used to say that hens was the most contrary streaks in existence; but, I yum, there's more than one thing to match 'em, and that stove-pipe was one of 'em."

"Harriet didn't get home till after dark, and there was the new stove all up and shinin' bright as a diamond. She was too astonished to say a word, but just fell to huggin' John like mad."

"The next mornin' I was busy in the kitchen—I remember it was churnin' day—when all at once out rushed Harriet Ann, lookin' wild as the west wind, and gasped out, 'Aunt Hester, where's the old heater?'"

"Laws! Harriet Ann, I sez, 'I thought you'd had a revelation, you look so scairt.' 'I'm 'feard I'm goin' to have. Aunt Hester, where's the old heater gone?'"

"That old thing! Why, the stove man took it off. He'd sold it."

"Land o' livin'!"

"And the next minit she was flyin' out to the field where John was to work. My! She cum back in about an hour lookin' solemnier than lamentations."

"What under the canopy pow, Harriet Ann?" sez I. "What's the matter?"

"Matter enough!" she snapped out. "Not one of you had sense enough to look in that old heater, and now they're gone! The last one of 'em—my pine cones!"

"Well, it just struck me as mortal funny, and I just sot down and laughed fit to kill, which was the last straw, I guess, and kinder broke Harriet Ann all up. Any way, she founced into the bed-room and shtet herself in. And after that we steered a thousand miles away from the subject of pine cones, too."

Leaving me to wield the "stirrer," Aunt Hester dished from the contents of the kettle a saucerful to test. It was a beautiful marmalade, rich and fragrant. It was perfection."

"But the cones?" I questioned. "Did she never recover them?"

"Never! They found out, after considerable trouble, the man's name that took 'em off and where he lived. John even went out there—it was ten or twelve miles, in a new settlement; but the tidings he brought back wa'n't very comfortin' to Harriet Ann. He found the old heater on duty, but the cones—well, the man said he allowed he'd show his young uns what kind o' fun he had when he was a boy, and so he let 'em make a bonfire of 'em.' Over it? Well, if you want to know bad enough, don't be backward, but just mention pine cones to Harriet Ann. You'll be sure to find out."

"My sakes! I'm thankful this kettle-ful is through with. It must be nigh on to 11 o'clock, judging by the moon; it sets 'fore midnight."

We ladled the fragrant mess into jars, and then Aunt Hester deftly extinguished the last spark of fire."

"Whenever I see the light from your lonely camp-fire, Aunt Hester, I shall come over for another story," were my parting words, as I walked briskly homeward in the fast-fading moonlight, inwardly laughing at the fate of "Harriet Ann's Pine Cones." COR CORRELLI.

Vidette, Kas.

No one seems to answer Mrs. Hunter's question as to what planet and what star of the first magnitude were in close proximity about November 10. I remember—it must have been about that time—that Mars, in passing through the constella-

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tion Scorpio, was very close to Antares, its largest star. Antares "twinkled," but Mars shone with a steady, reflected light. This "twinkling" distinguishes stars from planets. PHEBE PARMALEE.

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Col. H. H. Stanton, so long the popular proprietor of the hotels along the Union Pacific, is now proprietor of the Centropolis, Kansas City. He maintains his reputation in his new location, and Kansans visiting that city should not fail to call. The Centropolis is easily reached from the Union depot by the cable cars.

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MR. EDITOR:—I feel it my duty to inform your readers of an easy and honest way to make money. In twenty-five days I cleared \$360 selling hair-restorer and my trade is daily increasing. As the nine hundred bottles which I sold made the hair stop falling out and grow on the most bald heads and smoothest faces in every case, you can guarantee it "no hair no pay." It is surprising how anxious people are to buy it. Any person can easily make \$10 a day. Write to Conner & Co., Zanesville, Ohio, and they will assist you in starting; and I see no reason why any one should be poor with such an opportunity within their reach. J. T. CASEY.

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The Young Folks.

The Farmer and His Boy.

The farmer stands beside his land,
Deep trouble on his features showing;
"This field I tilled with careful hand,
Only the purest seed-corn sowing;
Yet, see the many weeds thereon;
This has the wicked Devil done!"

Comes from the field his little boy,
Bright blossoms in his hands extending,
Which he had plucked with eager joy,
Cornflower and poppy gaily blending,
And shouts aloud: "See, father, see,
What the dear God has made for me!"
—William W. Caldwell.

The Crocus.

"Rest, little sister," her sisters said—
Violet, purple, and wild-rose red—
"Rest, dear, yet, till the sun comes out,
Till the hedges bud and the grass blades sprout.
We are safe in the kindly earth, and warm—
In the upper world there is sleet and storm.
Oh, wait for the robin's true, clear note,
For the sound of a drifting wing aloft;
For the laughter bright of an April shower
To call and wake you, sweet Crocus flower."

But brave-hearted Crocus said never a word,
Nor paused to listen for note of bird,
Or laugh of rain-drop. * * * In rough green
vest
And golden bonnet, herself she dressed
By the light of a glow worm's friendly spark,
And softly crept up the stairway dark,
Out through the portal of frozen mold
Into the wide world, bleak and cold.
But somehow a sunbeam found the place
Where the snow made room for her lifted face.
—Madeline S. Bridges, in Ladies' Home Journal.

For Farmer Boys to Read.

The following appeared in an Ottawa (Kansas) paper, a short time since. Let all our "Young Folks" read it; but tell your papas not to read it:

LIFE CONTRASTED.

Does there live a single soul that at times does not contrast his condition with that of others? As a boy, stumbling over the clods of a hillside corn field in Ohio, we thought the life of the teacher in the little school house over the way, was the acme of pleasure, compared with that of the farmer. As a teacher, weary and sick with the cares of two score noisy children, we saw in the life of the physician, as he swept past us behind his handsome bays; in the triumphs of the attorney, as he bullied a witness, and even in the life of an editor, as he talked to a world of willing listeners, something more desirable than our own daily grind. Naturally we envied the representative of his people, from Sheriff to Senator, and in our envy we fancied our lot worst of all. We tried merchandising, and waited on our fellow men from early morn until the world should have been asleep. As we progressed, we learned this fact—that every path has its thorns and that the nettle in the farmer's pasture makes a softer carpet than the thorns that hedge the ways of public life.

No one who has tasted the sweets of a country life, the peace of quiet farm life, and afterwards has drifted into public life, either as merchant, physician, or a recipient of political honors, but looks back upon his rural days as the sweetest of life. No life is so independent as that of the farmer. Its hard work is attended by the gentle dreaming of restful sleep, and his wakeful hours are not from midnight to morn, but beneath a clear sky fanned by the breezes of innocence. No disappointed client, no captious, uncharitable subscriber, no ill-natured patient—none of these disappointments that make city life a round of annoying experiences.

The farmer thinks he is not getting wealth like the merchant, nor honor like the statesman. Little does he know how empty are such baubles. Only 4 per cent. of our merchants get rich, 6 per cent. of our professional men make more than a good living, while 25 per cent. of the farmers become independent, 50 per cent. are in comfortable circumstances.

The isolation of the farmer's life is at times not pleasant, but isolation instead of bills that are paid with tears is certainly not to be dreaded. From the country comes the vigor that makes the business man of the city, the pulp orator and the clear-brained statesman. Farmers, be content—your life is the grandest of all.

Indian Truth and Eloquence.

It is unpleasant if we must own that the Indians who have come to Washington to see the Great Father and the Great Council have the better of the argument. "The troubles," said Young-Man-afraid-of-his-Horses, "spring from seed. The seed was sown long ago by the white man not attending truthfully to his treaties

after a majority of our people had voted for them. When the white man speaks, the government and the army see that we obey. When the red man speaks, it goes in at one ear and out of the other. The Indian is for eternity interested in the subject, the white man only when he comes into office for two or three years. I am not an old man, but I have seen many Great Fathers and his headmen.

"Why was not the late treaty fixed promptly by the Great Council? Why were our rations cut down a million of pounds? Why have not our winter annuities come? Why was the whole Sioux nation called to account for dancing a religious dance? Why are the agents always being changed? Why was Agent Gallagher discharged when he wrote that our crops had failed, and our rations must not be cut down? Why was the army called in by Agent Royer? And if he was right, why was he discharged? And why does not the blame for what followed belong to the white men? Let everything that is said here be written down, so that when we have to speak with other men it cannot be denied what was said here."

This was the burden of all the speeches. It is the burden of the evidence of the most competent white witnesses. It is the general belief of intelligent citizens who are informed upon the subject. The remedy seems to be clear and simple enough. It is what is called common honesty. If the Indians were treated with good sense and fidelity to our own word, there would be no Indian question.—Harper's Weekly.

Man and Land.

A somewhat humorous bit of rhyme appeared in the Baltimore Weekly Sun, and, although it was dedicated to Georgia farm lands, it may be read with profit by some of our western Kansas friends who have a half-formed notion to try farming in some other State.

The rhyme is as follows:

I knowed a man, which he lived in Jones,
Which Jones is a county of red hills and stones,
And he lived pretty much by gittin' of loans,
And his mules was nothing but skin and bones,
And his hogs was flat as corn-bread pones,
And he had 'bout a thousand acres of land.

This man—which his name it was also Jones,
He swore that he'd leave them old red hills and stones,
Fur he couldn't make nothing but yallerish cotton,
And little er that, and his fences was rotten,
And what little corn he had, hit was boughten,
And dinged if er livin' was in the land.

And the longer he swore the madder he got,
And he riz and walked to the stable lot,
And he hollered to Tom to come thar and hitch
Fur ter emigrate somewhar whar land was rich,
And to quit raisin' cock-burrs, thistles, and sich,
And a wasting their time on the cursed land.

So him and Tom they hitched up the mules,
Pertesting that folks was mighty big fools
That 'ud stay in Georgia ther lifetime out,
Jest scratching er living when all 'em mout
Git places in Texas whar cotton would sprout
By the time you could plant it in the land.

And he driv by a house whar a man named Brown
Was a livin' not fur from the edge o' town,
And he bantered Brown fur to buy his place,
And said that being as money was skace,
And bein' as Sheriffs was hard to face,
Two dollars an acre would git the land.

They closed at a dollar and fifty cents,
And Jones he bought him waggin and tents,
And loaded his corn, and his wimin, and truck,
And moved to Texas, which it tuk
His entire pile with the best of luck,
To git thar and git him a little land.

But Brown moved out on the old Jones farm,
And he rolled up his breeches and bared his arm,
And he picked all the rocks from offen the ground,
And he rooted it up and he plowed it down,
Then he sowed his corn and his wheat in the land.

Five years glib by and Brown one day
(Which he'd got so fat that he wouldn't weigh),
Was a setting down, sorter lazily,
To the bulleest dinner you ever see,
When one of his children jumped on his knee
And says, "Yan's Jones, which you bought this land."

And thar was Jones standin', out at the fence,
And he hadn't no waggin nor mules nor tents,
Fur he had left Texas afoot and cum
To Georgy to see if he couldn't git some
Employment, and he was looking as hum
Ble as if he had never owned any land.

But Brown he asked him in, and he sot
Him down to his vittles smokin' hot,
And when he had filled hisself and the floor,
Brown looked at him sharp and riz and swore
That "whether men's land was rich or poor
Thar was more in the man thar was in the land."
—Sidney Lanier.

A Girl Worth Having.

After reading Mr. Gray's experience in the plating business, I sent \$3 to W. H. Griffith & Co., Zanesville, Ohio, for a Plater, and cleared \$36 in a week. Isn't this pretty good for a girl? There is tableware and jewelry to plate at every house; then, why should any person be poor or out of employment with such an opportunity at hand.

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Judge Bailey, of Garden City, says that over 50,000 acres of crops will be irrigated in Finney county alone this year, the cost being about \$1.25 per acre.

The Territorial Legislature of New Mexico, which adjourned on the 26th ult., appropriated \$25,000 towards making an exhibit at the Columbian World's Fair.

The mortality roll of the Fifty-first Congress has been unusually large, as twelve Representatives and three Senators have died during this Congress. The last one was Senator Hearst, of California, who died in Washington on February 28.

It has been estimated that 23,000,000 bushels of oysters are opened annually in the United States, and that this represents an accumulation of shells amounting to not less than 243,390,000 cubic feet, which, if spread out, would cover a space of more than 450,000 square yards to a depth of three feet.

"Jones of Binghampton, he pays the freight," has been a conspicuous advertisement in the agricultural press for many years. Mr. Jones is Lieutenant Governor of New York, and when Governor Hill retires on March 4, as United States Senator, Mr. Jones will succeed as Governor of the great Empire State. Verily the adherence to the tow-line of representative agricultural papers leads to prosperity or distinction.

President Harrison has seen fit to honor two Kansans with foreign Consulships. Hon. John A. Anderson, the retiring Congressman from the Fifth district, has been appointed Consul General at Cairo, Egypt. The other appointment is W. W. Apperson, of Ford county, as Consul to Vera Cruz, Mexico. Mr. Apperson is a well-known farmer and stockman. Both of these appointments are creditable to the President and satisfactory to Kansas.

It is estimated by competent authority that we have 83,000,000 bushels of wheat less now than we had one year ago. This may prove an important fact of deep significance, should the wheat crop of 1891 for the whole country turn out no better than last year. Our crop correspondents are requested to carefully note the condition and prospects of the wheat crop of Kansas, so that when they receive their next blanks they can make immediate and accurate report.

It has been an unusually favorable winter for stock of all kinds in the open range country, and now unless a late and unusual installment of winter should set in stock will come through the winter in better condition than for years. And in case of a good corn crop during 1891 the feeders will have no difficulty in securing all the cattle and sheep desired at prices that will make it an object to visit the range country this fall. Owing to the shortage of the corn crop thousands of sheep and cattle were held there.

BURDENS OF THE FARM.

In view of the recent statement of the Superintendent of the Census that there were 9,000,000 real estate mortgages in force in the United States last year, the following article may be of interest. It was prepared by the editor of the **KANSAS FARMER** and published a few weeks ago in *The Voice*, of New York city:

The farmers' complaint is based upon existing conditions, and the justness of their complaint is found in the injustice of commercial combinations which have brought those conditions about. To illustrate, let a few facts be submitted.

Beginning with the census year 1850 and covering the period which has elapsed since that time, it appears that the development of four of our great departments of production and commerce has been as follows:

- Railroads, 1,580 per cent.
- Banking, 918 per cent.
- Manufactures, 408 per cent.
- Agriculture, 252 per cent.

CONTRACTION OF THE CURRENCY.

The Finance report for 1886 shows that we had at that time \$1,800,000,000 of Government paper money in circulation among the people, and in addition thereto \$281,000,000 of national bank notes—a total of over \$2,000,000,000, or more than \$52 per capita. We then had a population of 36,000,000. During the year 1886 nearly \$400,000,000 of that money was withdrawn from the currency, and the contraction continued until 1878, when the per capita circulation had been reduced to \$17, according to Treasury reports, and this includes bank reserves and similar deposits. The statement is: Total money in the country, 1878, June 30, \$1,082,489,759; amount in Treasury, \$256,675,417; leaving amount in circulation, \$825,804,342. Money in actual circulation to-day is less, certainly not more, than \$500,000,000, or less than \$8 per capita, our population being less than 63,000,000. The Treasury statement shows more than twice as much as is given here, but the report simply states the difference between the total amount of money supposed to be in the country and the amount known to be in the National Treasury, taking no account of the vast amount of *idle money* held in banks and other depositories.

Senator Plumb of Kansas, after a very careful examination of the subject, gave it as his best judgment, in a speech delivered in the Senate last May, that there is not more than \$500,000,000 available for use among the people at the present time.

DECREASE IN THE VALUE OF FARM PRODUCTS.

The cereal grain crop of 1867, including wheat, corn, oats, rye, barley and buckwheat, aggregated 1,329,729,400 bushels, valued at \$1,284,037,300. Twenty years later, 1887, the same crops amounted to 2,860,557,000, valued at \$1,204,289,370. That is to say, the crop of 1887, though twice as large as that of 1867, was worth \$84,000,000 less. Dividing the period between 1870 and 1890 into two equal parts, the average price of wheat in the United States during the first part was \$1.05 a bushel, and during the second part the average was only 75 cents a bushel. The average price of No. 2 wheat in Chicago during the five years ending with 1883 was \$1.11 a bushel, and during the next following five years the average price of the same grade of wheat in the same market was 81 cents, a drop of 28 1/2 per cent., although the wheat consumption of the country had fallen off 2 1/2 per cent. and the population had increased 15 per cent. in the same time. Corn and live stock, cotton and wool, are about 40 per cent. lower than they were ten years ago. The annual average production of wheat in the United States in the years from 1871 to 1881 inclusive—eleven years—was 342,224,776 bushels. The average for the eight years—1880 to 1887—was 448,150,757 bushels, an increase of 30 per cent., just about equal to the increase of population during the same time. The annual average export of wheat during the years 1871 to 1882 inclusive—twelve years—was 95,345,889 bushels; and during the years 1881 to 1887—seven years—the average was 135,506,076 bushels, an increase of 42 per cent. This shows that our consumption of wheat during all the years from 1871 to 1889 did not increase as fast as the population by about 3 per cent. Wheat was lower in the United States in 1885 than it has been in forty years, and lower in England in 1886 than it has been in 100 years. The average value of our wheat crop by the acre during the four years—1880 to 1883—was \$11.77, and during the next four years it was \$8.30—a drop of 29 1/2 per cent.

GROWTH OF MORTGAGE INDEBTEDNESS.

Soon after the close of our great war a vast scheme of railroad building and settlement was projected for the western region. Immense bodies of land were given to railroad corporations, and these lands were sold out to individual settlers on long time and mortgaged for the deferred payments. Then began the building of feeders to the main lines, and these feeders were built in large measure by the people of the cities, counties and townships through which the roads run. In a few years all this western region was populated, the people enjoying facilities of transportation exceeding those of some of the older States, and many of the comforts of an older civilization were enjoyed in these new communities. Contemporaneously with this marvelous development came a general system of money lending, the money being in the East but represented here by loan agents. Lands were purchased with borrowed money. Stock and farm implements were purchased with borrowed money. Houses were built with

borrowed money, and rates of interest ranged in the beginning as high as 40 to 50 per cent. per annum.

INDEBTEDNESS GREATER THAN ASSESSED VALUES.

It appears now, in this year 1890, that the municipalities and the people individually are all overburdened with debt. Take the State of Kansas, for example. The last report of our State Board of Railroad Commissioners (1889) shows that the total capitalization of the railroads within the State, with a main line mileage of 8,755 miles, is \$456,719,000, of which amount \$229,548,000 represents bonded debt, and \$227,171,025 represents stock. For purposes of taxation the roads, including all their property of every description, are assessed at \$57,566,232. The Auditor's report for 1890 shows the municipal indebtedness to be nearly \$38,000,000. At least two-fifths of the farms are mortgaged, and the lowest estimate which has been made by any person who has investigated the subject, puts the aggregate farm mortgage indebtedness of the State at about \$60,000,000. Village and city real estate is encumbered in like manner to an extent fully equal to \$30,000,000. Putting them together, the figures show, in round numbers:

Railroad indebtedness.....	\$456,000,000
Municipal indebtedness.....	38,000,000
Farm mortgages.....	60,000,000
City real estate mortgages.....	30,000,000
Total.....	\$584,000,000

Valuation of property for taxation:

Railroads.....	\$ 57,000,000
Farms.....	173,000,000
City real property.....	76,000,000
Total.....	\$306,000,000

Brought together the totals show:

Indebtedness of railroads and lands of Kansas.....	\$584,000,000
Taxable value of railroads and lands of Kansas.....	306,000,000
Difference.....	\$278,000,000

It appears that our recorded indebtedness—that for which our lands are held—is \$278,000,000 more than our lands, with all their improvements, are worth. If it be said our valuation for assessment is low, it is quite as true to say that if our landed estate were sold at auction on notice, it would not bring its assessed value. And the same is true as to conditions in other States.

CAPITALISTIC COMBINATION.

Transportation rates, like interest rates, are exorbitantly high, keeping the prices of farm supplies at high figures, and all sorts of farm machinery and equipments are sold through agencies, with several added profits by the time the purchaser is reached. A brief but comprehensive statement of the situation is this: Manufacturers and railroad companies operate in combination; railroads control transportation rates, and capitalists who own the mortgages on the homes of the people individually, and the bonds of municipalities, do also own the bonds and stock of the railroads, so that the people are at the mercy of the comparatively few men who own and control the money of the country. The lands of a people are always held, in the end, as security for debts. At last the great burden falls upon the land. The land must pay for everything when the end comes. So we have it now. Money is owned by a few, the government flees to the rescue of that few whenever a "stringency" occurs in their "money market;" they hoard money, they impoverish the people. And in these things are found the "Unjust Burdens of the Farmers."

PROHIBITING COMBINATIONS.

Senator Roe's bill prohibiting combinations to prevent competition among persons engaged in buying or selling live stock has passed both houses, received the Governor's signature, been published in the official paper, and is now a law of the State.

As might be expected, a fearful lamentation goes up from the Kansas City stock yards, calling it "an iniquitous measure," "a stab at the Western live stock trade," etc., followed by a threat to move across the line into Missouri. All right, gentlemen, act your own pleasure, denounce the measure in your most bitter terms, and move across the line if you so will, but do not entirely lose sight of the fact that Kansas is capable of managing her side of the line. The law is a just one, and will receive the hearty support of all the live stock men in Kansas. As it is of great importance we publish the body of the bill, as follows:

Be it enacted by the Legislature of the State of Kansas:

SECTION 1. That it shall be unlawful for any two or more persons or corporations in this State, engaged in the business of buying or selling live stock for others on commission, to enter into any combination, agreement or arrangement for the purpose of, or which tends to fix or control the charges or commissions to be demanded or received by such persons or corporations for their services for the sale of live stock.

SEC. 2. That it shall be unlawful for any person or persons, or corporation or corporations engaged in buying or selling live stock for others upon commission, to continue with or enter into any agreement or arrangement with any person or persons or corporation or corporations engaged in the business of purchasing live stock, either for themselves or upon commission, either for themselves or as the agents for others, which shall have for its purpose or in any

respect tends to prevent full and free competition in the business of selling live stock upon commission for others, or which has for its purpose or tends to the fixing or maintaining any sum as a minimum commission for the services of selling live stock for others. And it shall be unlawful for any person or persons, corporation or corporations doing business in this State to be or become a member of any society, association or corporation whose by-laws provide for and fix the minimum commission for the selling of live stock for others, or whose by-laws prohibit its members from purchasing live stock from persons who are not members of such society, association or corporation; and all such by-laws of any society, association or corporation doing business in this State are hereby declared illegal and void, and any person attempting directly or indirectly to enforce or make the same operative or effectual shall be deemed guilty of a misdemeanor; and any corporation which shall attempt to have any such by-laws enforced, or shall obey such by-laws and refuse to buy from others on account of such by-laws, shall, in addition to the penalties hereinafter provided therefor, forfeit its charter.

SEC. 3. That all persons entering into any such combination, agreement or arrangement, or who shall after the passage of this act, attempt to carry out or act under any such combination, agreement or arrangement, described in sections 1 and 2 of this act, either on his own account or as the agent for another, or as an officer, stockholder, or member of any corporation, society, or association, or as a trustee, committee, or in any capacity whatever, or who shall in any respect violate either of the foregoing sections, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be fined not less than five hundred (\$500) dollars nor more than one thousand (\$1,000) dollars, or be imprisoned in the county jail not less than (30) days nor more than six (6) months, or by both fine and imprisonment for each and every such offense.

COMMERCIAL CONGRESS.

The commercial congress to be held at Kansas City, April 15, promises to be one of the largest gatherings of representative and business men that has assembled in the West for years, and its proceedings will be anxiously watched by the great producing classes. It is intended that every State west of the Mississippi river, and Ohio, Indiana, Kentucky, Tennessee, Michigan, Wisconsin and Illinois on the east, will be represented. In the hands of our friends, this important meeting can be made to greatly enhance the material welfare of the Great West; therefore we say to the Eastern capitalists and politicians, hands off.

The bill that Senator Kelly introduced in the Kansas Senate, providing for this commercial congress, is as follows:

WHEREAS, The complaint throughout agricultural sections, based upon economic questions, having become general in the States of the West and Southwest; and

WHEREAS, With a view to the advancement of the material interests of Western agricultural and mining States, and recognizing the importance of harmonious action on the part of the States and Territories within the agricultural and mining regions west of the Ohio river, and extending to the Pacific ocean; therefore be it

Resolved, By the Senate, the House of Representatives concurring therein, that the Legislature of the State of Kansas hereby requests, with a view to the consideration of important commercial and economic interests, that the several States and Territories lying between the Ohio river and Pacific ocean join in a commercial congress of such States and Territories to be held April 15, 1891, and in view of central location we suggest Kansas City as the place of meeting, and as a basis of representation in such proposed commercial congress we suggest that each State name as delegates four Senators and five members of the House of Representatives, and that the Territories be allowed five delegates each.

Resolved, That the President of the Senate and the Speaker of the House of each of the States shall be *ex-officio* members of said delegation.

Resolved, That the presiding officers of each house of the several States and Territories, where the Legislatures are in session, be requested to name the delegates to such convention, and where the Legislature of any State is not in session the Governor of such State or Territory shall appoint the requisite number of delegates for his State or Territory from the members of the Legislature of such States or Territories.

Resolved, That the Secretary of the Senate send copies of this resolution to the Executive of each State and Territory west of the Mississippi river, and to the following States east of said river, namely: Ohio, Indiana, Kentucky, Tennessee, Michigan, Wisconsin and Illinois, with the request that the Executives of the several States or Territories herein designated, signify to the Governor of this State their concurrence or otherwise in the purpose of this resolution, as well as in the action of their several Legislatures.

Adopted by the Kansas Legislature, February 11, 1891.

Mr. H. M. Cottrell, M. Sc., of the Experimental Station at the Kansas State Agricultural college, has kindly favored us with a timely, able article on their experiment at that station with the selection of seed oats. The article was received too late for this week, but will appear in the Agricultural department of our next issue. Every farmer, especially those contemplating the sowing of oats this spring, should read the article, and govern themselves accordingly.

Regarding the possible shortage of cattle, the *Breeder's Gazette* propounds a query and comments as follows: "Have we rounded the turn? This is the query that naturally presents itself to beef cattle growers in comparing the January receipts with those for previous months. Shippers and feeders scarcely need to be reminded of the discouraging fact that the average increase in receipts per month during 1890 was 40,000 head; but for the first time in a number of years the receipts for January, 1891 show a decrease over the corresponding month in previous seasons. The decrease is not large it is true—some 9,000 head at Chicago—but the fact that there is a decrease of any size is alone worthy of special mention. There has been much talk of a shortage of cattle. Has this shortage begun to materialize of late?"

The Director of the Mint has submitted to Congress a report on the production of the precious metals in 1890. The gold product of the United States was 1,588,880 fine ounces (Troy) of the value of \$32,845,000—an increase of over \$45,000 over the product of the preceding year. The silver product approximated 54,500,000 ounces, corresponding at the average price of silver during the past year to \$57,225,000 and at the coining value of silver to \$70,464,645, against a product of 50,000,000 fine ounces of the commercial value of \$46,750,000 and coining value of \$64,464,464 in the preceding year, an increase of 4,500,000 fine ounces. The total value of the gold deposited in the mints during the calendar year was \$56,217,105. The total amount of silver offered for sale to the government during the year was 68,130,457 fine ounces, and the amount purchased 37,594,373.75 fine ounces, costing \$39,991,840, the average cost being \$1.06 per fine ounce. The Director estimates that the gold product of the world for the calendar year 1890 was \$118,490,000, a falling off of \$3,007,000 from 1889, and that the silver product of the world was 130,650,000 fine ounces, an increase of 7,859,375 fine ounces over 1889.

Henry Clews, of New York, in a late weekly financial review, states that "The operation of the Silver Act of last summer has already added over \$30,000,000 to the circulation of the country, and this increase will be swelled at the rate of \$5,000,000 each successive month; which is calculated to exercise an inflating effect upon prices. Then, as an offset to the current export of specie, it is to be remembered that the reserves of the banks stand unusually high, the amount of surplus shown in last week's statement being \$20,700,000 as compared with \$12,000,000 on an average for the last two years and \$15,500,000 for the last four years. It is also to be kept in mind that the large prospective increase in the payments of the Treasury, without any corresponding gain in revenue, is likely to keep the Treasury balance much below its former usual figures. Under these circumstances, a continuance of cash in the money market is reasonably assured. Again, the steady demand for railroad bonds is evidence of a healthy condition of the investment movement; and the continuous advance in these securities may be reasonably expected to have its effect upon the value of stocks at a later period. It also deserves attention that the gross January earnings of railroads turn out on the whole better than has been expected, and promise to show, when the figures are in, some improvement on the business of January last year, which exhibited a gain of 13.3 per cent. The prospects as to silver legislation cannot be taken into these forecasts, as the problem still remains undetermined. The probabilities, however, strengthen daily against the chances of any change from the law as it now stands, and the realization of such a result would be likely to prove an important 'bull' factor both at New York and London."

One of our subscribers desires some of the KANSAS FARMER readers to inform him whether or not good vinegar can be made of sorghum, and if it can, by what process? Will some one who is thoroughly posted kindly furnish the desired information?

Daily Business: The production of beef in the United States in 1890 was 29,328,536 barrels, against 26,211,320 barrels in 1889. The increase for 1890 was 3,117,216 barrels. Nearly 4,500 barrels were credited to Kansas in 1889 and only 2,100 in 1890. Iowa is credited with 89,141 barrels in 1889 and 102,178 barrels in 1890.

THE LEGISLATURE.

The following bills were introduced on dates named:

Monday, February 16.

SENATE.

Senator Kirkpatrick, an act for the relief and protection of railroad employees.
Senator Forney, an act relating to divorce and alimony.
Senator Long, an act to locate and endow a State normal school.
Senator Kimball, an act in relation to procuring evidence by legislative committees and the taking of testimony by such committees.
Senator Martin (by request), an act for the prevention of lotteries.

Tuesday, February 17.

HOUSE.

Patterson, an act authorizing the appointment of a fish commissioner, and for the protection and propagation of fish in the waters of the State.
Doubleday, an act for the suppression of felony, and authorizing arrests to be made by certain persons.

Clover, an act providing for the drainage of swamp, bottom or other low lands, the property of and for the convenience of individuals, for agricultural and sanitary purposes, and supplemental to and entitled "An act providing for the drainage of swamps, bottom, or other lands," which went into effect February 24, 1886.

Jones, of Butler, an act to provide for the government of the Kansas institution for education of the deaf and dumb.

Gable, an act concerning the building of bridges and grading of public roads and to amend sections 517, 518, and 519 of the general statutes of 1889.

SENATE.

Senator Mohler, an act to prohibit the publication of a certain class of newspapers.

Senator Rush, an act for the taxation of banks and banking corporations.

Senator Martin, an act relating to the appointment of a State veterinary surgeon.

Wednesday, February 18.

SENATE.

Senator Mechem, an act to provide for the assessment and collection of taxes.

Senator Wilson, an act making appropriations for the Kansas soldiers' home at Fort Hays, Kansas.

Senator Carroll, of Leavenworth, (by request), an act to protect associations and unions of workmen in their labels, trade marks and forms of advertising.

Senator Harkness, an act relating to the location and removal of county seats.

Senator Emery (by request), an act to prevent public schools from being merged into sectarian schools.

Senator Elliston, an act in relation to the location and construction of court houses.

Senator Gillett, an act to establish a court of appeals.

Senator Wright, an act to detach agricultural lands from cities.

Friday, February 20.

HOUSE.

Hoover, an act for the continuation and maintenance of the forestry stations of this State for the encouragement of the planting and growing of forest trees, and making appropriations therefor.

Milner, an act to provide for the establishment and maintenance of separate schools for the colored children in all cities of the second class lying adjacent to a city or cities of the first class.

Jones, of Butler, an act for the sale of certain real estate owned by the institution for the education of the deaf and dumb, and providing for the investment of the proceeds.

Dolan, an act to detach agricultural lands from cities.

SENATE.

Senator Howard (by request), an act in relation to the duties of treasurers of cities of the second class.

Senator Long, an act providing for the assignment of mortgages of real property.

Committee on Public Health, an act to amend an act to create State and local boards of health and to regulate the practice of medicine in the State; an act to regulate the State and local boards of health and the practice of medicine in the State.

Senator Wilson, an act in relation to mortgages and trust deeds.

Senator Bentley, an act to regulate the police government of cities of the first class.

Monday, February 23.

HOUSE.

Simmons, an act in relation to the duties of treasurers of cities of the second class.

An act to provide for the collection, arrangement and display of the products and live stock of the State of Kansas at the World's Columbian Exposition of 1892 and 1893, and making an appropriation therefor.

Pierson, of Pratt, an act fixing the title to the emblements or annual crops on land conveyed, sold on foreclosure of mortgages, or otherwise, and fixing the rights of the owners thereof.

Tuesday, February 24.

SENATE.

Senator Long, an act to prohibit any officeholder under the constitution and laws of the State of Kansas from being or becoming during his incumbency in such office the agent, servant, employe, promoter, representative, attorney, legal adviser, counselor, officer, director or manager of any corporation.

Wednesday, February 25.

SENATE.

Senator Wilson, an act to authorize irrigation by means of wells and pumps.

Thursday, February 26.

SENATE.

Senator Richter, an act to provide for the opening to the public the library of the Kansas Academy of Science and granting a salary to the librarian.

Senator Martin, an act to prevent the sale of intoxicating liquors or liquid substances or drugs that will produce intoxication or stupefaction to inmates of national or State homes for disabled volunteer soldiers and to punish the violation of the same.

Senator Long, an act to protect the lives of the public and to prevent railroad corporations employing incompetent servants.

Friday, February 27.

SENATE.

Senator Lockard, an act making railroad companies liable to the owners and occupiers of abutting property for damages thereto.

Congressional Apportionment Committee, an act to apportion the State into eight Congressional districts, and to repeal the act entitled "An act to apportion the State into seven Congressional districts."

Book Notices.

THE POULTRY DOCTOR.—Published by Boericke & Tafel, 1011 Arch St., Philadelphia. Price 50 cents. Every poultry-raiser should have this volume and save the price of the book several times every year.

IOWA TRIBUNE QUARTERLY.—A valuable addition to reform literature. The first number is devoted to financial questions. We commend this to every student of finance. Send 25 cents to the Iowa Tribune, Des Moines, Iowa.

WAR AND THE WEATHER.—It estimates the cost of producing rain by artillery firing. All the various theories discussed. It contains letters by all the notable military men. The author will send you this interesting work for \$1 by addressing E. Powers, C. E., Delavan, Wis.

MR. BLAINE'S ARTICLE.—In the list of contributors to "The Youth's Companion" of March 5th, appears the name of James G. Blaine, our eminent Secretary of State. His paper on "How Debates in Congress Grow," will be of special value to the older readers, and a source of information to all those who are interested in the making of our Nation's laws.

THE NEW ONION CULTURE.—Illustrated. It gives all the details of the new method by which 2,000 bushels are as easily grown on one acre, as 800 bushels in the old way. This system makes onion-growing both at the North and the South a certain success. If you desire to make money by growing onions, follow the instructions in this book. Price 50 cents. Address J. Greiner, La Salle, N. Y.

THE SOCIALISM OF CHRIST.—This is a review of the life of the "lowly Nazarene" from the standpoint of the Socialist, who sees much in the Master's sayings and doings to throw light on many phases of human character. It is an exceedingly interesting volume, no matter whether the reader agrees with the author or not. The author is Austin Bierbower, and the work is published by Charles H. Sergel & Co., 318 Dearborn St., Chicago.

VINCENT'S PUBLICATIONS.—We are in receipt of several books from the publishing house of the Vincent Bros., Winfield, Kas. This reminds us to again state to our readers that the Messrs. Vincent have a large assortment of good works on economic subjects, and it would be well for Alliance people and others interested to write for Vincent's catalogue. The books we have just received from their house are "Sketches of Financial History," "Pointers," and "The Money Monopoly."

TOLSTOI'S WORKS.—We have just received several works of Count Leo Tolstol, a Russian writer of great ability who has made a special study of social problems. The books just received are "Work While Ye Have the Light," "The Kreutzer Sonata," and "The Dominion of Darkness." These books are published by Charles H. Sergel & Co., 318 Dearborn St., Chicago. They are all full of interest to persons who are fond of social philosophy. Count Tolstol is a clear, forcible writer, and his works are exciting a great deal of attention among literary critics.

LIFE OF GENERAL SHERMAN.—Announcement is made that Messrs. Hubbard Bros., of Philadelphia, are on point of issuing a Life of General Sherman, covering all the events and features of his remarkable career from earliest youth to ripe old age. It is being written by General O. O. Howard and Willis Fletcher Johnson; the former, Sherman's intimate friend for many years and next but one to him in rank in the army, and the

latter a historical writer whose former works have met with great popularity. The volume ought, therefore, to prove one of the most interesting and popular books of the year.

THE FORUM FOR MARCH.—With its number for March, *The Forum* begins its eleventh volume. Throughout the whole period of the ten volumes now finished, the publishers announce that there has been an uninterrupted increase of their business—an indication of the steady growth of the popular interest in the free discussion of the most important subjects of the time. So great has been the growth of the magazine that it is necessary to procure larger office room than the quarters now occupied by *The Forum*, which three years ago, seemed large enough for an indefinite period.

HISTORY, PROPHECY AND GOSPEL.—Is the title of one of the ablest and most interesting expositions of International Sunday School Lessons for 1891. The volume of 500 pages was edited by E. Benjamin Andrews, D. D., L. L. D. It is designed to elevate the character of Sunday School instruction. This volume differs somewhat from those heretofore in use. Less attention is devoted to textual explanations and details and more to the presentation and enforcement of the "lessons" which should be garnered and treasured, thus making a departure toward a broader and more definite study of the truths of the Word of God. This elegant work will be post-paid for \$1.75 by the publishers, Silver, Burdett & Co., Boston.

LABOR, LAND AND LAW.—This is the title of the ablest work on the subjects named which has yet come under our observation. It was prepared in 1885 by Hon. W. A. Phillips, of Salina, Kas. It was published in 1886 by Charles Scribner's Sons, but no attempt was made to introduce the book in the Western States. The author recently purchased the right from his publishers and he proposes to get out among the people who will care to read it. We have taken some pains to study the book, its bearings and scope, and the more we examine it, the better it appears to be. Its merit consists (1) in reciting the history of labor from the earliest times of which any trace is found in books; and (2) in an able and instructive discussion of the present condition of labor, more especially in its relation to capital. We have not room to particularize, but will add that all persons who wish to study the labor question from the foundation up will find in this book a large fund of most valuable information. Every sub-Alliance, every local association of workers of whatever order or class, every lecturer on economic subjects, every teacher and every preacher ought to have a copy of this book. We do not know its price, but a note of inquiry addressed to the author, Hon. W. A. Phillips, will settle that.

Our First Page Illustration.

It is interesting to note the perfection which is being attained in the line of agricultural machinery. We show this week the "Monitor" Shoe Press Drill, which is manufactured in some thirty different styles, including both shoe and hoe drills, and either with or without grass seeder. These machines have many strong points to recommend them, among which may be mentioned an absolutely positive force feed adapted to all kinds of grain or grass seed, an indestructible pipe frame, perfect balance and lightness of draft. Parties interested can obtain any additional information they may desire by addressing the Standard Implement Company, Kansas City, Mo., who are general western agents. This company is one of the largest and most responsible in their line, and have the name of doing exactly as they say.

Kansas City to Toledo Without Change of Cars via the Wabash Railroad.

A solid train, composed of the finest sleeping and chair cars in the world, is now running on the Wabash railroad from Kansas City to Toledo, leaving Kansas City every day at 6:20 p. m., arriving in Toledo at 4:15 next afternoon, passing through the cities of Jacksonville, Springfield, Decatur, Danville, Lafayette, Logansport, Fort Wayne, Defiance to Toledo. No other line out of Kansas City runs a solid train as far east as the Wabash. This fast Wabash train arrives in New York at 4 p. m., the second afternoon from Kansas City. There is no extra charge on this fast train. We will reserve your sleeping-car accommodations through to destination by applying at Wabash ticket office, northwest corner Ninth and Delaware streets, Kansas City, or write or telegraph to H. N. GARLAND, Western Passenger Agent.

Horticulture.

KANSAS FRUIT MANUAL.

As Prepared and Published by the Kansas State Horticultural Society.

THE APPLE—(CONTINUED).

Implements Required for Picking Fruit.

—In gathering apples, as in doing any other work, it is necessary to have the right kind of tools to work with. The first thing in this line is a rig for the wagon suitable for hauling apples. For a wagon rig, make a platform 40 inches wide, 14 feet long, of 2-inch plank, with 2x4-inch cross-pieces underneath, at each end and in the middle, with a 4-inch bolt through each plank where it covers the cross-piece. Put it on the wagon, and make a notch to fit the standards. This platform is the best wagon rig for hauling barreled apples upon. It holds two barrels side by side, and sixteen barrels can be loaded on it with ease; is very convenient in loading and unloading, and has considerable spring to it. When the wagon is loaded, put a pin or stake in the rings of the standards, and slip a common fence-board between the stakes and barrels; this keeps the barrels from tipping. Now tie a rope across, behind and before, and it is in shape to be hauled anywhere with safety.

Sorting-Box or Table.—For sorting apples, use a shallow box 3 feet wide by 4 feet long, and 4 to 6 inches deep. This box can be set on a couple of barrels, or legs can be put to it. Tack a piece of old carpet or piece of heavy cloth on the bottom, so the apples will not bruise while being poured in, and the sorting-table is complete.

Picking-Sacks.—Take common seamless sacks, put a hoop in the mouth of each to hold it open, then tie the bottom and top together, and throw it over the shoulder in same manner as for sowing grain. These sacks are fully as convenient for picking apples from the trees as a basket, and the fruit is bruised less.

Ladders.—The ladder for getting up into trees should be about 12 feet long, 2 feet wide at the bottom, and tapering to a point at the top; made of 1½x4-inch pine for the sides, and good tough hickory for the rounds. This makes a good strong ladder, easily handled, and can be run up into the tree anywhere.

Barrel Press.—The barrel press consists of a piece of oak, 4x4, 20 inches long, with a common inch bench-screw running down through the center. On the ends are bolted flat iron rods; these rods run down, and have hooks on the lower ends, so as to catch onto the under side of the barrel. This press is used to press the heads into barrels after packing.

Barrels.—Barrels are the best of all packages in which to handle apples, and the sooner they are packed into them after picking, the less liable they are to injury; hence packing is recommended in the orchard. The four-barrel size for apple barrels, 28-inch stave and 17½-inch head, is the best. A barrel of this size holds about three bushels, and is fast becoming the standard size all over the West. The barrels are made in large quantities by machinery, and are furnished in what is called "knocked-down" shape; that is, the staves are cut the right length, width and thickness, and beveled. The heads are turned the right size; hoops are cut, and put up in coils; and all are tied up in suitable packages for handling or shipment. With the material thus furnished, a good cooper will set up thirty to fifty per day, and any man handy with tools can soon learn to set them up. A supply of barrels should always be provided before picking-time commences.

FRUIT—ITS CARE AND HANDLING.

Time to Gather.—The time to gather most varieties of apples is when they have attained their full size and are well colored. Some kinds, that hang on well, and are intended for immediate use in the family, may be allowed to stay on the tree until fully ripe. But where they are intended for shipment or storing away, they must be picked before they get mellow, or they are sure to be injured in handling, and will not keep.

Picking.—Having everything ready, and the fruit being at the right stage for picking, move the outfit into the orchard, setting the sorting-table in the center of a block or group of trees. The pickers gather the apples one by one from the trees, putting them into a sack, and when about a half bushel is in the sack, empty

them upon the sorting-table. When all are picked within a reasonable distance, move to the next block, and so on. When the apples are hard to pull, give them a little twist while pulling. If the trees are reasonably full and the fruit of fair size, each picker ought to average fifty bushels per day.

Sorting.—As the apples are picked and emptied upon the sorting-table, one or more hands should do the sorting and packing. They should be sorted into four grades, the first embracing all good sound fruit above a certain size—say about seven inches in circumference—and packed into barrels. The second grade should consist of all above that size that are bruised or damaged in any way; this grade can be evaporated to advantage, or can be made into cider, apple butter, vinegar or jelly. The third grade should contain all sound fruit below the first size named; this can be worked into cider, jelly or vinegar. The fourth grade should embrace all rotten apples, and should be fed to stock.

Packing.—Set the barrel near the sorting-table in the orchard, and take out one end; select good, fair, average, uniform-sized apples for "facers;" put these in the bottom of the barrel, in two layers, stem end down, and pack close together; then fill up the barrel, shaking it well while filling, and rounding up about one inch above the chime; apply the press, and force the head into place; drive down the hoops, and nail in the "liners;" drive four to six four-penny nails through the upper hoop into the head; see that all the hoops are nailed so they will not slip off; turn

a good place for storing fruit. A large per cent. of our most delicious kinds are so perishable that they last but a short time. The apple, however, with proper treatment, with our early and late varieties, and a good fruit-house, can be kept in good condition the year around. A fruit-house must be built of such material, and the walls of sufficient thickness, as will keep out frost. Brick, stone and wood are the materials nearly always used. Either answers the purpose; wood is the best non-conductor. They can be put under or above ground. Cellars under buildings are most in use. They should be so arranged that the temperature can be regulated at will. Experience has demonstrated, time and again, that fruit keeps best, and undergoes less changes, when the temperature is kept just above the freezing point; and the fruit-house that can be kept at this point will answer all purposes. There are two ways to do this: one is to keep a sufficient quantity of ice in the building to keep the temperature down to the desired point; and where large quantities of fruit are kept, this is undoubtedly the best plan; but with most fruit-growers this is not practicable. Second plan: The varieties intended for keeping are generally picked in October, and by this time the nights are cool; and after the fruit is put in, the doors, windows or ventilators are kept open at night, so as to give free circulation to the air in all parts. This will cool off the fruit and the inside of the building or cellar, and if shut up in the morning, will retain a low temperature all day. Of course, when winter sets in, it



THE COLERAIN GRAPE.

the bottom end up, and nail and line this end, and mark the name of the variety and proprietor on it; remembering always that this is the opening end. This completes the packing, and the apples are ready for sale or shipment. An apple has a certain amount of "give" or "spring" in it, and it can be pressed to that amount without bruise or injury, and when so pressed into the barrel it can be rolled about or handled without injury. Whenever in handling they are found to be loose in the barrels, and are shaking about, the barrels should be immediately opened, and the fruit repacked, or it will be ruined.

Gathering for Storage.—When the apples intended for storage, it is not necessary to pack in barrels. Boxes 2 feet long, 16 inches wide and 8 inches deep, sides and bottom made of half-inch and the ends of inch lumber, with holes cut in each end for "hand-holds," make excellent receptacles with which to handle apples in the orchards. These boxes hold about one bushel, and can be set on the platform of the wagon, and taken into the orchard and filled by the pickers while on the wagon; and where the fruit is scattering, this is the most convenient way to gather it, even for packing. It can be hauled to some central point for packing, or to the place of storage, and can be sorted from the boxes nearly as well as from the sorting-table. These boxes cost much less, and will last longer, than bushel baskets, and are equally as handy; and when enough of them are made, they are an excellent thing in which to store away the apples.

Fruit-House.—A vast deal of time and thought has been spent in deciding upon

will be necessary to keep it closed most of the time; but by a little care, the temperature in this way can be kept down to nearly the desired point the greater part of the time.

Storing Away the Fruit.—It is not material just how the apples are stored away. They can be stored in bulk, in barrels, or in boxes. If stored in bulk, the piles should not be too large, as they will generate some heat. Some fruit men practice storing apples in sheds, out-houses, or on the north side of a building, or in any cool place where there is a free circulation of air, and leaving them there until the weather becomes cold. This plan works well, but requires unnecessary handling, and sometimes they are left too long, and are caught by the cold.

The Colerain Grape.

Many changes and new varieties of fruit come to light each season, but it is seldom we ever have such an acquisition as in the Colerain.

It was originated in a locality of Friends, from whence its name springs. Being a seedling of the Concord, it resembles it in hardness and productiveness.

The vine is a strong grower, free from disease, showing no sign of rot or mildew wherever tested; an abundant bearer and very early, ripening in this latitude about August 15, and will hang for a long time on the vine; bunches are large and shouldered; color light-green, with a delicate exotic flavor; berries are covered with a beautiful light bloom; skin very thin and tender, flesh juicy and remarkably sweet; never over one seed to a berry, and many times not any.

The Rural New Yorker of March, 1896,

says: "Try a Colerain as soon as offered for sale." Under a more recent date it says: "It is the best early white grape, all things considered."

Popular Gardening says: "Remarkable for its honeyed sweetness and richness, a favorable contrast with the other early sorts."

National Stockman says: "The finest flavored fruit we have met this season, worthy to be placed in the best collections."

Ohio Farmer says: "The best white grape that comes to this market."

Through the kindness of E. W. Reid, of Bridgeport, Ohio, the introducer of this wonderful new grape, we are indebted for this description and cut, representing it; and all of our readers who are interested in fruit should send to him for his illustrated catalogue.

Hood's Sarsaparilla is on the flood tide of popularity, which position it has reached by its own intrinsic, undoubted merit.

The State at its forestry stations at Ogallah, Trego county, and Dodge City, Ford county, now has about 1,300,000 yearling forest trees for free distribution. Persons wishing a share of these little trees ought to let me know at once at either of the above named places or at Hayes City, Kansas, so that I may correspond with them and receive their formal application prior to February 15, 1891. Martin Allen, Commissioner of Forestry.

Hog Could Not Move.

Cured by the use of Steketee's Hog Cholera Cure. Read.

G. G. STEKETEE:—Please send me two more packages of your Hog Cholera Cure. I gave the last I got from you to a sick hog that could not move itself, and now it can get up and come to the trough for feed. I want to feed this lot mostly to my horses. I believe it is a good remedy.

Taylor, Wis. B. E. COLBY.
Saved his hog at an expense of two packages of Hog Cholera Cure. If your druggists do not keep it, then send 60 cents to G. G. Steketee, of Grand Rapids, Michigan.

Oregon, Washington, and the Northwest Pacific Coast.

The constant demand of the traveling public to the far West for a comfortable and at the same time an economical mode of traveling, has led to the establishment of what is known as Pullman Colonist Sleepers.

These cars are built on the same general plan as the regular first-class Pullman Sleeper, the only difference being that they are not upholstered. They are furnished complete with good comfortable hair mattresses, warm blankets, snow white linen curtains, plenty of towels, combs, brushes, etc., which secure to the occupant of a berth as much privacy as is to be had in first-class sleepers. There are also separate toilet rooms for the ladies and gentlemen, and smoking is absolutely prohibited. For full information send for Pullman Colonist Sleeper Leaflet. E. L. Lomax, General Passenger Agent, Omaha, Neb.

Still the Favorite.

If you are contemplating a trip for business or pleasure it will be well to remember that the Burlington Route is still the favorite. Her old established line to Chicago hardly needs more than a mere mention for the reason that every man, woman and child in the country is so familiar with the fact that over this line runs the famous solid vestibule "R.L.I." with its splendid Pullman sleepers, chair cars and dining cars. Your attention is now called to our Double Daily service between Kansas City, Atchison, St. Joseph and St. Louis. Heretofore we had but one daily train from the Missouri river to St. Louis, that being a night train, placing passengers in St. Louis in the morning in time for breakfast and all Eastern connections, but on account of the increasing demand another train has been put on and now leaves Kansas City, Atchison and St. Joseph in the morning, placing the passenger in St. Louis in the early evening of the same day.

Omaha and Council Bluffs are put in rapid communication with the lower Missouri river points by two superb daily trains, one leaving Kansas City late in the morning and the other in the evening, making the run from Kansas City in about eight hours. The morning train carries a through buffet sleeping car to St. Paul and Minneapolis, placing the passenger in the twin cities twenty hours after leaving Kansas City. For further information, call on or address H. C. Orr, G. S. W. P. A., 900 Main St., Kansas City, Mo., or A. C. DAWES, G. P. & T. A., St. Joseph, Mo.

Special Offer.

We have special arrangements with the publishers of the Weekly Capital, the official State paper, a large 12-page weekly newspaper with full dispatches and State news, price \$1. We can supply both the Capital and the KANSAS FARMER one year for only \$1.50. Send in your orders at once.

Horticultural Notes.

Don't dispose of all your potatoes till you have selected the best for seed.

When packing apples, handle carefully and pick out all that are bruised or damaged in any way.

A plant must be well fed if the best results are expected. Poor soil will produce poor quantity and quality of plant growth.

To be successful as a gardener, you must do more than raise large crops—you must gather up the fragments and turn them to account.

The successful gardener or florist must feed his plants all they can digest, and care for them as a stock-raiser would for his show animals.

When cut flowers begin to wilt, they may often be revived by cutting off about an inch of the stems and placing the freshly cut end in hot water.

Pile the coal ashes where they will be ready for use next spring among the currant bushes. That is, unless you take them each day to the hen-house.

The largest peach we heard of last season measured eleven inches in circumference and weighed one and a quarter pounds. This was raised in Southern California.

Get out your manure now, while other work is not so pressing as in the spring. There is little danger of manuring ground too heavily for vegetables. Heavy fertilizing will always improve the quality and health of the plant.

One of the best fertilizers for house plants is land plaster. Sprinkle around the stem, and then work it carefully around the roots with a table fork. Geraniums and fuchsias are especially benefited by an application once a week.

Several scientific societies of Vienna have been investigating the wonderful weather plant. It is claimed that its weather foretelling properties are thoroughly verified. The Austrian marine war department is to give it a trial on shipboard.

If the garden soil is composed mainly of clay, nothing will improve it as much as an inch, or more, of clear sand applied in addition of the manure. If the soil is very sandy, add clay. It always pays to gather from every available source all the material which can be turned into plant food.

A new disease, at least it is so pronounced, has broken out among the grape vines of Santa Ana and San Gabriel valleys of California. The vines begin to wither and in a short time die. The disease is infectious, and spreads very rapidly. The best remedy known is to dig up the vines as quickly as they show the blight, and burn them.

A man who has practiced medicine for forty years, ought to know salt from sugar; read what he says:

TOLEDO, O., Jan. 10, 1887.

Messrs. F. J. Cheney & Co.—Gentlemen:—I have been in the general practice of medicine for most 40 years, and would say that in all my practice and experience have never seen a preparation that I could prescribe with as much confidence of success as I can Hall's Catarrh Cure, manufactured by you. Have prescribed it a great many times and its effect is wonderful, and would say in conclusion that I have yet to find a case of Catarrh that it would not cure, if they would take it according to directions.

Yours truly,

L. L. GORSUCH, M. D., Office, 215 Summit St.

We will give \$100 for any case of Catarrh that cannot be cured with Hall's Catarrh Cure. Taken internally. F. J. CHENEY & Co., Props., Toledo, O. Sold by Druggists, 75 cents.

Consumption Cured.

An old physician, retired from practice, had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all Throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints. Having tested its wonderful curative powers in thousands of cases, and desiring to relieve human suffering, I will send free of charge to all who wish it, this recipe in German, French or English, with full directions for preparing and using. Sent by mail, by addressing, with stamp, naming this paper, W. A. NOYES, 820 Powers' Block, Rochester, N. Y.

Star Land-Roller. Best on earth. The Castree-Mallery Co., Flint, Mich.

DO IT NOW! WHAT?



WRITE TO

F. W. BIRD & SON, East Walpole, Mass.

They will send you FREE, Samples and full descriptive Circulars that will Convince and Save you Money.

"Neponset" Water Proof Fabrics

Are Necessary to Every Farmer and Poultryman.

S. E. BARRETT MANUFACTURING CO., WHOLESALE AGENTS, CHICAGO, ILL.

STEKETEE'S



IMPROVED HOG CHOLERA CURE

Greatest Discovery Known for the cure of

HOG CHOLERA

PIN-WORMS IN HORSES!

HUNDREDS OF THEM.

BOSWELL, IND., October 13, 1890.

Mr. G. G. Steketeer:—Your Hog Cholera Cure, of which I fed two boxes to a yearling colt, brought hundreds of pin-worms and smaller red ones from her. She is doing splendidly. We believe it to be a good medicine. WILLIS ROBISON.

Never was known to fail; the only sure remedy for worms in Hogs, Horses, Sheep, Dogs or Fowls. Every package warranted if used as per directions. Price, 50c. per package, 60c. by mail, 8 packages \$1.50 by express, prepaid. If your druggist has not got it send direct to the proprietor, GEO. G. STEKETEE, Grand Rapids, Mich.

I Challenge all Other Hog Cholera Remedies. Always mention KANSAS FARMER.

SEEDS CURRIE BROTHERS Milwaukee, Wis.

O, SAY! I have seventy varieties of Small Fruits, new and old sorts. If you want plants, write for my price list. B. F. SMITH, Lawrence, Kansas.

CHRYSANTHEMUMS (80 varieties) AND ROSES (40 varieties) EXCLUSIVELY, at the very lowest prices. Send for price list, giving culture directions, to W. L. BATES, Topeka, Kas.

ROSE LAWN FRUIT FARM.

All kinds of small fruit plants. Strawberries our specialty. Prices low. Write for Descriptive Price List. DIXON & SON, Netawaka, Jackson Co., Kas.

Our Dollar Mail Collections

Of first-class Trees and Plants, will start any one in the fruit-growing business. Price List for 1891, free to all. Address Prospect Nursery Co., Otsego, Allegan Co., Mich.

FREE FLOWERS—To introduce this bright, handsome 16-page illustrated monthly, price 50 cents per year, into the home of every flower lover, we offer a three-months trial subscription and a packet of mixed flower seeds, over 300 kinds, for only 10 cents in stamps. WESTERN GARDEN, Des Moines, Iowa.

Forest Trees

And EVERGREENS. One hundred varieties. Small seedlings for Tree Claims and Groves. Large Trees for Streets and Parks. I will not be undersold. Catalogue free. Geo. Pinney, Evergreen, Wis.

379 FRUIT TREES

Varieties VINES, PLANTS, Etc. Apple, Pear, Peach, Cherry, Plum, Quince, Strawberry, Raspberry, Blackberry, Currants, Grapes, Gooseberries, &c. Send for catalogue. J. S. COLLINS, Moorestown, N. J.

Nebraska Seed

36 Packets Choice Vegetable Seeds \$1. Early Mastedon Corn, with a yield of 215 bushels per acre. It will pay you to send for our Catalogue before buying your seeds. DELANO BROS., Seedsmen, Lee Park, Neb.

Forest Tree Seedlings!

Red Cedars, Fruit Trees and Plants. Largest stock, lowest prices. Mammoth Dewberry, luscious to the core—best berry for the prairies. Black Locust, Russian Mulberry, Tulip Tree, Box Elder, Ash, Elm, Walnut, Cottonwood, etc. I retail at wholesale prices. Save 60 per cent. and write for my Price Lists. Address GEO. C. HANFORD, Makanda, Jackson Co., Ill.

BEST OF ALL BARNARD'S TRUE TO NAME TESTED SEEDS. PURE TO PLEASE. BOOK MAILED FREE TRY US ONCE SEND AGAIN.

Complete assortment of Flower, Vegetable and Farm Seeds, Garden Tools, Etc. Send for illustrated catalogue. W. W. BARNARD & CO. (Successors to Hiram Sibley & Co.) 6 & 8 N. Clark-st. Chicago

FRESH KANSAS SEEDS.

OUR NOVELTIES:—Jerusalem and Kansas White King Corn, Denver Market Lettuce and Kansas Stock Melon.

OUR SPECIALTIES:—Alfalfa, Esperette and all other Grass Seeds, Kafir Corn, Milo Maize, Seed Corn, Millet and all other Field Seeds. Tree seeds for Nurseries and Timber Claims. In fact everything in the Seed line. Our Beautiful Catalogue mailed FREE on application. KANSAS SEED HOUSE, F. BARTELDES & CO., Lawrence, Kans.

THE DINGEE & CONARD CO'S GROW and BLOOM. ROSES

We have the know-how of growing them, keeping them, shipping them. Acres of Glass. If you really like Roses you are bound to come to us in the end. Our NEW GUIDE—124 pp., illustrated, complete, the best book of its kind, FREE to all interested. We send ROSES, HARDY PLANTS, SUMMER BULBS, FLOWER and VEGETABLE SEEDS postpaid, to all post offices. Safe arrival and satisfaction guaranteed. THE DINGEE & CONARD CO.—Rose Growers and Seedsmen—West Grove, Pa.

THE DINGEE & CONARD CO'S FOR SPRING ROSES AND SEEDS PLANTING.

If you plant Roses, Hardy Plants, Bulbs or Seeds, we would like to send you our NEW GUIDE, 124 pages, beautifully illustrated, FREE on application. You will find it interesting and useful. We offer all the Choicest Novelties and best things in NEW ROSES, HARDY PLANTS, BULBS and SEEDS, postpaid to your door, satisfaction guaranteed. Our business is one of the largest in the Country and we will be pleased to serve you no difference whether your orders are large or small. Write to-day for our New Guide, FREE. THE DINGEE & CONARD CO. WEST GROVE, PA.

FIELD AND GARDEN SEEDS

OUR ILLUSTRATED CATALOGUE SENT FREE.

Send 4c. in stamps and we will send a packet of the great novelty, THE PERSIAN MONARCH MUSKMELON, the finest flavored melon grown.

Box B. BOUK & HUPERT, Greenwood, Neb.

AN ELEGANT FLOWER BED FOR 25 Cts.

We will furnish 20 designs for beds of flowering plants, with full instructions showing names of varieties and number of plants required to fill fine show beds at a cost of from 15 cents to \$1 each. It requires knowledge and taste, not wealth, to possess elegant beds of flowers. Think of a fine bed all summer for a few cents! These designs mailed, with Vick's Floral Guide, for 1891, on receipt of 10 cents. Now is the time to plan. Send at once.

JAMES VICK, SEEDSMAN, ROCHESTER, N. Y.

1891. Home Grown, Honest, Reliable. I offer you my Vegetable and Flower Seed Catalogue for 1891 FREE. Note the immense variety of seed it contains, and that all the best novelties are there. Not much mere show about it (you don't plant pictures) but fine engravings from photographs of scores of the choice vegetables I have introduced. Would it not be well to get the seed of these from first hands? To be the oldest firm in the United States making mail and express business a specialty proves reliability. Honest and honorable dealing is the only foundation this can rest on. My Catalogue is FREE as usual. A matter on second page of cover will interest my customers. J. J. H. GREGORY & SON, Marblehead, Mass.

THE NOVELTIES OF THE SEASON

JOHNSON'S DIXIE WATERMELON. A New Southern Variety, surpassing the Kolb Gem as a shipper and without a peer in quality and productiveness. It is a cross between the celebrated Kolb Gem and that old delicious variety the Mountain Sweet. Possessing the good qualities of both parents, it is the most perfect Watermelon in the world to-day. Price, pkt. 15c.; 2 pkts. 25c.; oz. 40c.; 1-4 lb. \$1.25; Pound, \$4.50; 10 lbs. \$40.00. NETTED BEAUTY MUSKMELON. The earliest Muskmelon grown. Uniformly rich, lusciously sweet, and very productive. It is closely netted as shown in cut. Flesh very thick and of a pale green color. Netted Beauty when known will rapidly popularize itself as the best of all early Cantaloupes for either home use or market. Price, pkt. 15c.; oz. 35c.; 1-4 lb. \$1.00; Pound, \$3.50. CUMBERLAND RED TOMATO. This magnificent new Tomato originated in Cumberland Co., New Jersey, where they have been grown with great profit by a few truckers. Vigorous growers, skin remarkably tough, and keeping a long time after being pulled, making them a most desirable variety for market and shipping. Very smooth, handsome shape, and a beautiful rich red color. Price, pkt. 20c.; 3 pkts. 50c.; 7 pkts. \$1.00. THESE THREE STERLING NOVELTIES for 1891 are without rivals. Large planters can order them liberally with the assurance of success. In order to introduce them we will mail 1 pkt each (which amount at retail prices to 50 cents), together with a copy of our handsome and complete GARDEN and FARM MANUAL on receipt of only 30 cents in stamps or silver. Order now. JOHNSON & STOKES, SEEDSMEN, 217 and 219 Market Street, Philadelphia, Pa.

Publishers' Paragraphs.

OUR INSECT FOES AND HOW TO DESTROY THEM.—This is the title of a valuable illustrated book which we have just received from P. Q. Lewis, Catskill, N. Y. Mr. Lewis manufactures brass spraying outfits at a remarkably low price, and gives one of the illustrated books free to each purchaser. The book contains valuable information on the best ways and means for destroying insects of all kinds, and should be in the hands of every farmer and fruit-grower. Write him at address given, for illustrated circulars and valuable information on the subject of spraying fruit trees. See his advertisement in another column.

DESTROYING INSECTS.—Our State Legislature may or may not make an appropriation to aid Prof. Snow in developing his discovery for the destruction of chinch bugs. But many of our readers are fortunate enough to have valuable orchards which need protection from the ravages of those pests which infest their fruit trees. For this purpose a good spraying pump and outfit should be procured at once. We are in receipt of the catalogue of The Goulds Mfg. Co., Seneca, N. Y., whose spraying pumps have been tested for several years. If you are contemplating the purchase of such machinery, send for their illustrated circular.

NEW MELON.—The greatest novelty introduced by seedsmen this season is the winter Pineapple Muskmelon. It is a native of one of the Sandwich Islands; has been grown successfully in the United States the last two years and will undoubtedly become one of the most popular kinds in cultivation if it possesses one-half the qualities claimed for it by the introducer. Aside from its remarkably fine eating qualities and pleasant flavor, it is said to keep sound and sweet all winter and late in the spring. It certainly should be given a trial by all lovers of this delicious fruit. Samuel Wilson, of Mechanicsville, Pa., one of the most popular seed-growers in the United States, is the introducer of this valuable melon. His large and handsomely illustrated catalogue can be had free on application. Send for it.

WATCH THIS FENCE.—The Hartman Mfg. Co., of Beaver Falls, Pa., seem to have captured the public fancy with their Steel Picket Fence for lawn, field and garden enclosures. The extreme beauty, durability and moderate cost of their fencing makes it one of, if not the most popular article of the kind on the market. The sales of the "Steel Picket Fence" are reported as being enormous during the past season, and the demand increases. From the Pacific coast to the Atlantic, orders have come in by the roll and by the carload, and there is not a doubt the "Hartman" fence has come to stay. The fence is easily put down, is extremely light and graceful—what the purchaser always seeks—lasting. Live hardware and implement dealers in every State are handling the Hartman Co.'s goods. Their advertisement, which is worth attention, appears in another column.

HOW TO COOK VEGETABLES.—We have received from W. Atlee Burpee & Co., Seedsmen, Philadelphia, Pa., a copy of a new book with the above title, written by Mrs. S. T. Rorer, Principal of the Philadelphia Cooking School. It is a book of 182 pages, neatly bound, and is the first to treat comprehensively on the important subject of its title. It gives numerous receipts for the cooking of vegetables of all varieties in every style—many of which will be new even to the most experienced housewives. As an illustration of how thoroughly the subject is treated, we would mention that it gives 40 ways of cooking potatoes, 26 of tomatoes and 22 of corn, 28 ways of making soups and 37 receipts for salads. "How to Cook Vegetables" is not published for sale, but is given as a premium on seed orders by the publishers, W. Atlee Burpee & Co., Philadelphia, Pa. Send for their seed catalogue.

SOUTHERN CABBAGES.—During the past week the KANSAS FARMER received from Welch & Marye, real estate agents at Alexandria, La., a crate of cabbage. In their letter accompanying the same, they say: "We send you by express to-day a cabbage grown about a mile from our city. A German, Mr. Aertker, has 17,000 of them now growing. These cabbages were planted in October and were cut to-day. He has made two crops of Irish potatoes

the past year; the spring crop, harvested in March, from two acres, netted him \$150, and his fall crop, on same acreage, netted him \$250. Melons ripen with us by the 1st of June, cucumbers 1st of May, tomatoes June 1st. This German cultivates ten acres and realizes therefrom \$2,000 per annum. With the completion of the railroads now being built this section will offer a most promising field for gardening early vegetables for shipment North and West."

Hog Cholera Cured—Read.

CEDARVILLE, N. J., February 10, 1891. G. G. STEKETEE:—Please find enclosed \$3, for six packages of your Hog Cholera Cure, as I know it will do all you claim for it. Last fall I had three hogs sick with Cholera. I sent and got ONE package of your Cure, used it according to directions, and at the second dose I could see an improvement. One of the hogs was so bad that I dragged him out of the pen to let him die, but I thought I would try your Cholera Cure with him—the result was that when I killed them December 14, 1890, the one that was the sickest was the heaviest, weighing almost 400 pounds, and as long as I can get your powders, I intend to use them. WALTER QUADLING. Any one doubting this writing can address this man. Ask your Druggists for STEKETEE'S HOG CHOLERA CURE, 50 cents at the Drug Store, 60 cents by mail. Address, G. G. STEKETEE, Grand Rapids, Mich.

Live Chickens Wanted.

Will pay cash from \$2 to \$3 a dozen. Send in light coops by express at once. Also first-class farm and dairy butter wanted. Write and say what you have to sell. GILT EDGE BUTTER CO., S. G. Sheaffer, Mgr., Pueblo, Colo.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City.

March 2, 1891. CATTLE—Receipts 1,585. Market active and higher. Beef steers, \$3 00a4 85; stockers and feeders, \$3 00a3 90; cows, \$1 50a3 25; bulls, \$1 30a 3 25. HOGS—Receipts 3,562, of common quality. Bulk of sales, \$3 30a3 50. SHEEP—Receipts 455. 250 sold, averaging 82 pounds, at \$5 00.

Chicago.

March 2, 1891. CATTLE—Receipts 11,000. Market 10c higher. Best beefs, \$5 00a5 40; good, \$4 40a4 90; medium, \$3 80a4 40; common, \$3 45a3 65; stockers, \$2 25a2 50; feeders, \$2 50a3 45; bulls, \$1 25a3 60; cows, \$1 15a3 50. HOGS—Receipts 30,000. Mixed, \$3 40a3 70; heavy, \$3 40a3 75; light weights, \$3 40a3 65. SHEEP—Receipts 9,000. Natives, \$4 00a6 00; Western corn-fed, \$4 50a5 90; lambs, per cwt., \$5 65a 15.

St. Louis.

March 2, 1891. CATTLE—Receipts 1,500. Native steers, common to fancy, \$3 40a4 90; Texans, common to good, \$3 00a 15. HOGS—Receipts 3,200. Bulk of sales, \$3 35a 3 55; range, \$3 20a3 75. SHEEP—Receipts 3,400. Natives, \$3 75a5 25.

GRAIN AND PRODUCE MARKETS.

Kansas City.

March 2, 1891. WHEAT—Receipts 143 cars. No. 2 red, 90a 90 1/2c; No. 2 hard, 85a26c. CORN—Receipts 70 cars. No. 2 mixed, 48 1/2c; No. 2 white, 50c. OATS—Receipts 23 cars; 44 1/2a45 1/2c. RYE—Receipts 1 car; 80c. FLAXSEED—\$1 14. BRAN—85c, sacked. HAY—Fancy prairie, \$9 00; choice, \$8 50; common, \$4 50a5 00.

Chicago.

March 2, 1891. WHEAT—Receipts 22,000 bushels. No. 2 spring, 94 1/2a94 3/4c; No. 2 red, 93 1/2a97 1/2c. CORN—Receipts 153,000 bushels. No. 2, 54c. OATS—Receipts 180,000 bushels. No. 2, 46 1/2a 47c; No. 2 white, 47 1/2c. RYE—Receipts 42,000 bushels. No. 2, 83c. SEEDS—Flaxseed, No. 1, \$1 18 1/2; timothy, \$1 28a1 27.

St. Louis.

March 2, 1891. WHEAT—Receipts 34,000 bushels. No. 2 red, 96 1/2a97 1/2c. CORN—Receipts 112,000 bushels. No. 2, 52 1/2a 53c. OATS—Receipts 46,000 bushels. No. 2, 46c. HAY—Choice to fancy prairie, \$10 00a10 50.

HORSE OWNERS! TRY GOMBAULT'S CAUSTIC BALSAM



A Safe, Speedy and Positive Cure for Curb, Splint, Sweeney, Capped Hock, Strained Tendons, Founder, Wind Puffs, Skin Diseases, Thrush, Diphtheria, Pinkeye, all Lameness from Spavin, Ringbone or other Bony Tumors. Removes all Bunches or Blemishes from Horses and Cattle. Suppresses all Glanders or Firing. Impossible to produce Scar or Blemish. Every bottle sold is warranted to give satisfaction. Price \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars. THE LAWRENCE, WILLIAMS CO. Cleveland, O.

DAKOTA EARLY VEGETABLES AND BIG PRICES, The result of using seeds grown in our short seasons and cold climate. This is the testimony of our Southern and Eastern customers. Send for our free Catalogue. F. J. MATTS & CO., Huron, South Dakota. SEEDS

SPRAY YOUR TREES. \$17 Spraying Outfit \$5.50. Outfit Combines 3 Complete Brass Machines. Will thoroughly SPRAY A 10-ACRE Orchard per day. Express Paid, for 10-ACRE Orchard per day. A valuable illustrated Book (worth \$3) on "Our Insect Foes," given to each purchaser. My agents are making from \$5 to \$20 per day. GOODS GUARANTEED AS REPRESENTED OR MONEY REFUNDED. Don't buy a spraying outfit until you receive my illustrated circulars, price list, and other valuable matter on spraying fruit trees and vines. Write at once and mention this paper. Address, P. C. LEWIS, Catskill, N. Y.

GRISWOLD'S SEED STORE.

Garden and Field Seeds and Planet Jr. Tools. SWEET & IRISH POTATO SEED. FLORISTS' SUPPLIES 140 S. 11th Street, LINCOLN, NEBB. Seeds guaranteed to be fresh, pure, and true to name.



Every FARMER Boy Will hail with delight my new Wonder Melon, City of Mexico, and will be glad to send 15c. for a package from which to grow 200 great, glorious, early melons. FARM SEEDS. How would 184 bu. of Oats (my Bonanza Oats took the American Agriculturalist prize of \$500 in gold for the biggest field, cropping 134 bu. per acre), 40 bu. Wheat, 60 bu. Barley, 100 bu. Corn, and 200 to 300 bu. Potatoes suit you at present high prices. SALZER'S Northern-Grown Seeds produce them every time. 60,000 Bushels Seed Potatoes Cheap. 35 Packages Earliest Vegetables, sufficient for a family, postpaid, \$1.00. My new Catalogue is elegantly illustrated and contains several brilliant colored plates painted from nature, which, when framed, would make fine parlor ornaments. Send 5c. for same, or we will send Catalogue and grain samples upon receipt of 5c. or Catalogue and package of City of Mexico Melon for 15 cts.

CECIL'S NURSERY AND FRUIT FARM. Get my prices on WARFIELD and MICHON'S EARLY Strawberry Plants. Also general assortment of Fruit Trees, Roses, Evergreens, etc. Address J. F. CECIL, North Topeka, Kas.

PURE ALFALFA SEED. I will fill all orders for pure Alfalfa seed, f. o. b. at Syracuse, Kas., at \$3.50 per bushel. References—Bank of Syracuse or Hamilton County Bank. All orders sent either bank, accompanied by remittance, will receive prompt attention. L. P. Worden, Syracuse, Kas.

Prettiest BOOK Ever Printed. FREE SEED cheap as dirt by oz. & lb. One cent a pkg. Up if rare. Cheap, pure, best. 1,000,000 extras. Beautiful Illustrated Catalogue free. R. H. Shumway, Rockford, Ill.

Garden Seeds.

THE HARNDEN SEED CO., Kansas City, Mo. Catalogue and Price List on application. Michigan-grown Seed Potatoes a specialty.

Alfalfa Seed

For sale. Car lots or less. Also JERUSALEM CORN for sale. R.J. Mefford, Seedsman, Garden City, Kas. Grower and Dealer.

True Danvers Onion Seed

My seed farms extend into Danvers, and I frequently buy of the best onion raisers there hundreds of bushels of their handsome onions to plant to grow seed from, sometimes paying as high as five dollars a barrel. I offer such seed, all this year's growth and of my own raising at \$3 a pound, with a discount on large quantities. Much of the onion seed sold is either too flat or too round for true Danvers Choice Danvers carrot seed, \$1.08 per pound. Seed catalogue sent FREE to every one. JAMES J. H. GREGORY & SON, Marblehead, Mass.

Seed Potatoes

CHOICEST NEW VARIETIES. Early Vermont, Charles Downing, Pearl of Savoy, Clark's No. 1, Morning Star, Empire State, Perfect Peachblow, Green Mountain, etc., for \$1.25 per bushel until sold. Packing free.

SMALL FRUITS!

Largest stock in the Northwest. Lowest prices for best quality. Lists free. JOHN F. DAYTON, Waukon, Allamakee Co., Iowa.

600 ACRES. 13 GREENHOUSES. TREES AND PLANTS

We offer for the Spring trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Price Catalogue, spring of 1891, mailed free. Established 1862. PHOENIX NURSERY COMPANY Successors to SIDNEY TUTTLE & CO., BLOOMINGTON, ILL.

VAUGHAN POTATO Is the best new early variety now before the public. You are perhaps intending to buy Seed Potatoes this Spring, and if you are, why not buy the best with new and vigorous life? Our Catalogue is very complete on all farm seeds. FREE. VAUGHAN'S SEED STORE, Box 688, CHICAGO.

SEEDS ESTAB. 1838 J. M. McCULLOUGH'S SONS PLANTS BULBS 134 and 136 Walnut Street Every-thing for Farm and Garden. Catalogues free.

EVERGREENS FRUIT AND FOREST TREES 50,000,000 trees for spring trade. No agents employed. All trees sold direct from the Nurseries. Send for our catalogue, mention this paper, and you will receive by return mail a valuable work, (How to Grow EVERGREENS), and a coupon good for 50 cents worth of Trees FREE. Our Evergreen and Forest Trees are all grown from seed on our own grounds. Prices lower than the lowest. We send them by Mail and Express, prepaid. Address THE E. H. RICKER CO. Elgin Nurseries, Elgin, Ill. Established 1854. Incorporated 1888. 7th year.

USE FERRY'S SEEDS BECAUSE THEY ARE THE BEST. D. M. FERRY & Co's Illustrated, Descriptive and Priced SEED ANNUAL For 1891 will be mailed FREE to all applicants, and to last season's customers. It is better than ever. Every person using Garden, Flower or Field Seeds, should send for it. Address D. M. FERRY & CO. DETROIT, MICH. Largest Seedsmen in the world

ALL DISEASES OF MEN Our treatment Positively and Radically cures all forms of Nervous Disorders, Unnatural Losses, Sexual Decline, Gleet, Varicocele, Skin and Blood Diseases. Cures rapid. Charges moderate. Terms easy. Pleasantest, safest and surest treatment known. Book describing it, and how you may cure yourself at home, mailed free. DESLON-DUPRE MEDICAL CO., Incorporated under the Laws of the State of Mass., 165 Tremont St., Boston, Mass.

HAIR ON THE FACE, NECK, ARMS OR ANY PART OF THE PERSON Quickly Dissolved and Removed with the New Accidentally Discovered Solution = MODENE = and the growth forever destroyed without the SLIGHTEST injury. Harmless as water to the skin. IT CANNOT FAIL. There never was anything like it. \$1,000 reward for failure or the slightest injury. Sent by mail. Price, \$1.00 per bottle. Agents wanted. Full particulars (sealed) sent free. Address, MODENE MFG CO., Cincinnati, Ohio, U. S. A.

THE STRAY LIST.

FOR WEEK ENDING FEB. 18, 1891.

Jefferson county—A. B. Cook, clerk. STEER—Taken up by David Beason, in Jefferson tp., on or about December 15, 1890, one pale red steer, 1 year old, dehorned, no other marks or brands; valued at \$15.

FOR WEEK ENDING FEB. 25, 1891.

Jackson county—A. E. Crane, clerk. 8 STEERS—Taken up by John Stach, in Washington tp., January 5, 1891, three yearling muly steers—one roan, one red with a small white spot on side and big white spot in forehead, no marks or brands visible; valued at \$12 each.

FOR WEEK ENDING MARCH 4, 1891.

Meade county—L. E. Brown, clerk. MULE—Taken up by John W. Taylor, in Logan tp., February 11, 1891, one white or gray mare mule, small red spots on hips and shoulder, five feet high; valued at \$15.

TOO LATE TO CLASSIFY.

ALFALFA SEED, in any quantity, for sale. Address W. P. Haywood, Lakin, Kas.

FOR SALE—One Poland-China boar, one year old this spring; Tecumseh and Success blood. Also twenty October pigs, all thoroughbred Poland-China.

WANT GOOD IMPROVED FARM—In exchange for one imported Shire stallion, one Percheron stallion, one trotting stallion, twenty head trotting mares and fillies, and twenty head horses, breeding unknown. Give full description and cash value.

CLAIMS TO TRADE—For horses or cattle. Jas. P. Addis, Newton, Colo.

FOR SALE—Light Brahma cockerels, \$1 each, four for \$5; eggs \$1 for 15. Mrs. N. VanBuskirk, Blue Mound, Kas.

8 RED POLLED BULLS FOR SALE.—D. F. Van Buskirk, Blue Mound, Kas.

THOROUGHbred HOLSTEIN-FRIESIAN BULL to sell or exchange for stock. W. A. Travis & Son, North Topeka, Kas.

TWELVE YEARS BREEDERS OF Plymouth Rocks exclusively. Three fine yards. Birds raised on three farms. Eggs \$1 for 18 or \$2 for 30. Eggs packed safe to ship any distance. A good hatch guaranteed. J. CUMMINGS & Co., Bunker Hill, Miami Co., Indiana.

SPECIAL OFFER.—I will ship pedigreed male pigs to any one in county I have never shipped to—October pigs \$5, July and September \$7; Ell Jumbo, ten months, recorded, \$10; Crawford, eighteen months, \$12. Used last two on my herd; cannot use longer. M. H. Alberty, Cherokee, Kas.

MY IMPORTED FRENCH COACH STALLIONS will stand at my stables. Parties interested in breeding are cordially invited to call upon or address Henry Ballet, Tonganoxie, Kas. Also breeder of Holstein cattle. Thoroughbreds and grades for sale.

SHAWLS MUST GO!

ESPECIAL BARGAINS.

No. 06—Fine Beaver Reversible Shawls, Jacquard border. Full size, knotted fringe. Usually sold at \$4.00. They must go at..... \$2.95

CONSIGN YOUR CATTLE, HOGS & SHEEP TO Larimer, Smith & Bridgeford, LIVE STOCK COMMISSION MERCHANTS, Kansas City Stock Yards, Kansas City, Kansas.

Highest market prices realized and satisfaction guaranteed. Market reports furnished free to ship pers and feeders. Correspondence solicited. Reference—The National Bank of Commerce, Kansas City.

SMITH, BIGGS & KOCH, DEALERS IN Hides, Wool, Tallow and Furs. CASH PAID FOR DEAD HOGS.

For dead hogs we pay from 1/4 to 1 cent per pound. We receive them at our store, 108 E. Third street, or at our tallow factory, on river bank east of town, near city dump. As to hides, we are always posted on the market, and having a large business in Kansas City it enables us to sell direct to the tanners; therefore we guarantee highest market prices at all times. Special attention given to consignment trade.

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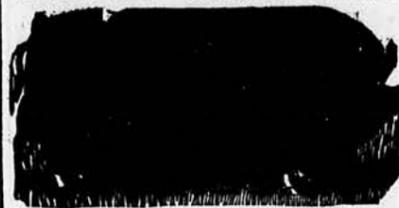
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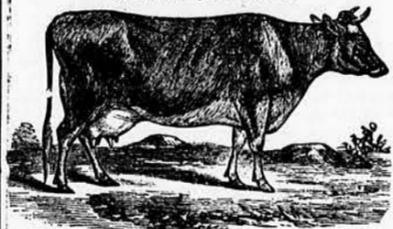
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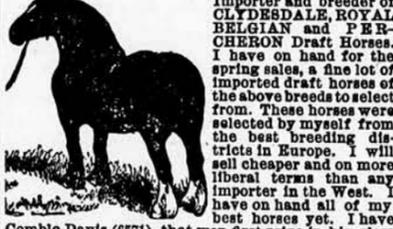
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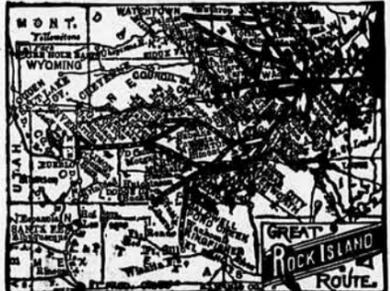
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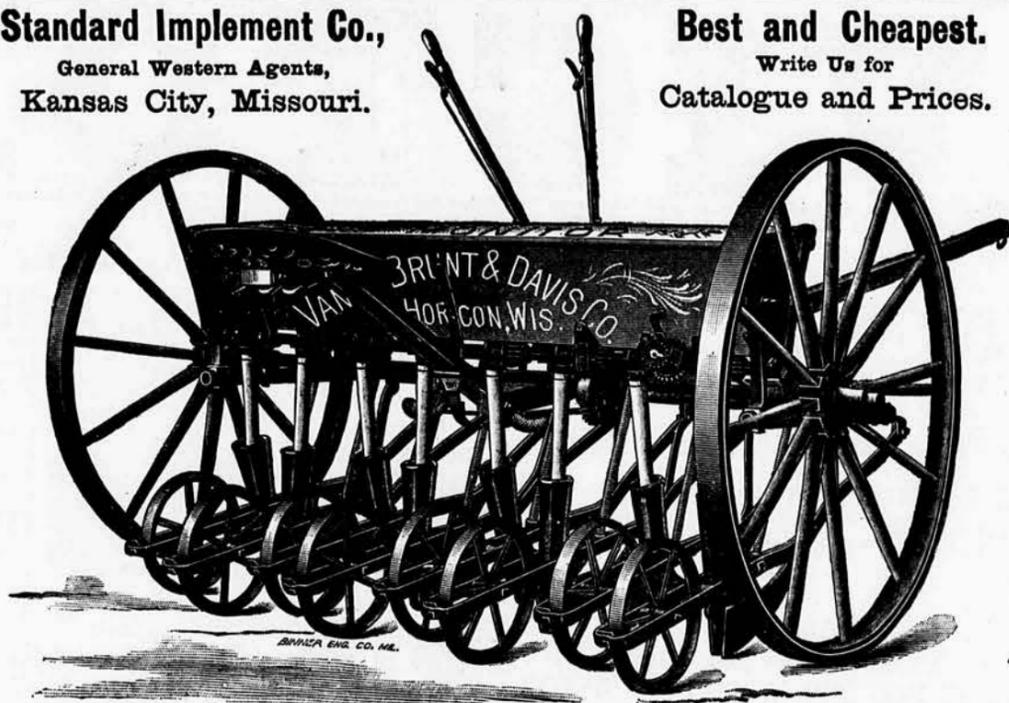
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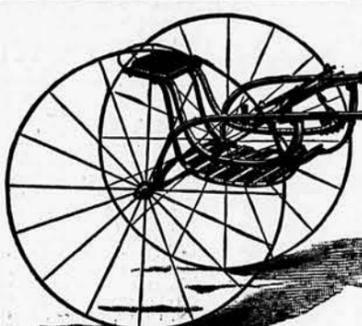
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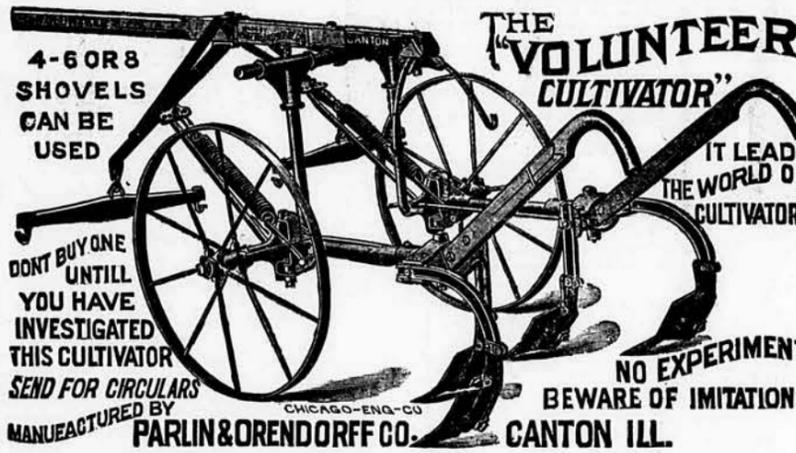
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Commenced Business 1859.

FINANCIAL STRENGTH, JANUARY 1, 1890:

Assets.....	\$107,150,309
Liabilities (4 per cent. basis).....	84,329,285
Surplus.....	\$ 22,821,074
Ratio of Assets to Liabilities.....	127 per cent.
Ratio of Surplus to Liabilities.....	27 per cent.

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The policy issued by the Equitable Society contains the following incontestable clause: "After two years from the date of issue, the only conditions which shall be binding upon the holder of this policy are that he shall pay the premiums and observe the regulations of the Society as to age and service in war. In all other respects, if the policy matures after the expiration of two years, the policy shall be indisputable."

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 Yours, JEROME & CO.
 OFFICE OF E. C. HEALY, DEALER IN DRUGS, CLOTHING, BOOTS AND SHOES, MORGANVILLE, KAS., April 19, 1890.

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200 BARRELS SEED SWEET POTATOES.—Nine best kinds, for sale. Write for prices.

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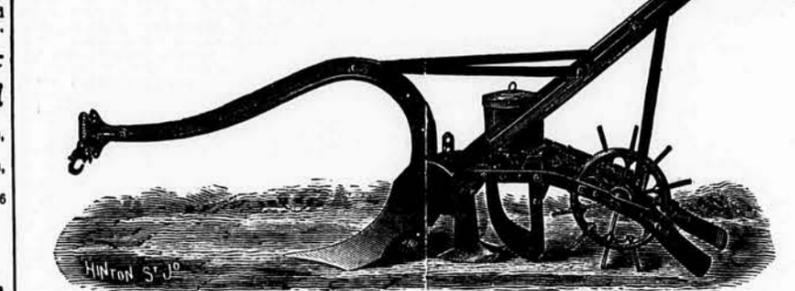
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