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We have one of the largest herds of registered
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Have twenty-two choice pure-bred
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BERKSHIRES.

We offer choice selections from our grand herd, headed by a great imported boar. New blood for Kansas breeders.
WM. B. SUTTON & SON, Russell, Kansas.

Highland Herd of Poland-Chinas.

Herd headed by Breckenridge 12987 S. We have a fine lot of fall boars and sows ready to ship. Spring gilts bred. A fine lot of spring pigs just arrived that are sired by such noted hogs as Seldom 14251 S., Upright Wilkes 13246, a noted son of George Wilkes, and World's Leader 15578 S. Rietrich & Gentry, Richmond, Kas.

100 PIGS GIVEN AWAY WORTH \$1000

TO INTRODUCE
My Improved Chester Whites into new neighborhoods, I have concluded to absolutely give away one boar pig, value \$10, to the first eligible applicant from each neighborhood. Not to exceed ten will be given into each State and only one in each county. These pigs are from the World's Champion herd, winners of \$9,300 in prizes at the World's Columbian and best State and independent fairs.

TO INTRODUCE

Whinery's Swine Advocate A 20-page monthly. We will, while they last, give all the back numbers of this year free to any one who will send his own address and that of ten neighbors who are interested in hogs. The Advocate is the most concise, practical, up-to-date swine paper published, devoted to all breeds. This advertisement will not appear again. WILLIS WHINERY, Salem, Ohio.

HIGHLAND KENNELS, TOPEKA, KAS.—Great Danes and Fox Terriers. The first prize and sweepstakes winner, Great Dane King William, in stud. Dogs boarded and treated for all diseases; also, remedies by mail. Correspondence solicited.

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96 pages, printed in 6 colors. Birdseye view of largest Poultry Farm. Tells all about Chickens, Prices of same, their Diseases, remedies, poultry buildings, etc.; finely illustrated. Price only 15c. C. C. SHOEMAKER, Freeport, Ill., U.S.A.

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Agricultural Matters.

THREE VARIETIES OF SORGHUM.

EDITOR KANSAS FARMER:—When we consider the amount of time and money spent by the United States government, in improving and perfecting the sorghum plant, work done with a thoroughness and at a cost never equalled in the same line, not even by Germany on her beet seed, it seems a pity that results gained at such an outlay should so soon be lost, or at least be in danger of being wasted, for unless more pains is taken to keep up the high quality gained and purity of seed, sorghum will presently be, as to quality, where it was in 1887-8, when 8 and 9 per cent. sucrose was an average. Nothing deteriorates sorghum like cross-fertilization, to which this plant is extremely susceptible.

It is difficult for farmers at Medicine Lodge to realize that all Kansas does not know the merits and uses of sorghum, but the daily stream of letters from all over the State, and indeed from all Western States, shows that there is even yet more interest than knowledge on the subject. This is the reason and excuse I offer for trying to tell what little I can. We are so used to seeing great crops of cane here, that we wonder how any one can doubt its being most desirable; how they can ask if it is good for summer pasture, or winter feed, or if hogs and cattle do well upon it. The universal verdict at Medicine Lodge is, I think, that given enough it is good for all stock and in every form, whether the cane be young or old, green or dry, for early pasture, autumn feed or winter rations. This is much to claim but not more than is warranted by facts.

To have the best crops we must start with good seed, and this is where the benefit of six years' work at Sterling, with shorter periods at Medicine Lodge and Calumet, comes in. We know that out of the hundreds of varieties, many of them excellent, three stand as best, giving highest percentage of sugar, tons and bushels to acre, and qualities of keeping and being true to parent seed and greatest improvement for labor bestowed. These are Folger's, Colman and Collier. The work at experiment stations was mainly directed to finding the best for sugar and sirup, but all have proved as valuable for forage, and as far ahead for this purpose as for the factory.

It is wonderful, when so much can be learned from reliable reports issued by the government and to be had for the asking, as to the superiority of certain canes, that people can go on planting Amber and scarcely seeming to know there is any other. Amber is only a few days earlier than Folger's, and is not any sweeter a hundred days from planting, and it does not give nearly so much cane or seed per acre, and ferments directly if it is not cut up when just ripe, and never is worth keeping for winter feed, nor so responsive to work of improvement. I only know one farmer here who grew any amount last season, and last week I heard him say he would not again plant Amber if he had the seed given, his crop of that being so inferior to Colman and Folger's. Folger's is a splendid cane, and, like Colman and Collier, has steadily improved in quality, until now they are all known and stand at the head of the list of finest sorghums.

Folger's is the best for sirup. None of the others equal it in this respect. It gives fine sirup, that does not so easily crystallize. Colman and Collier showed a higher per cent. of sugar at factory, but do not give satisfaction for sirup, so rapidly turning to sugar. Then for feed, Folger's is almost equal to Collier, and though an early cane, it cures well and keeps good all winter. The seed is dark and looks ripe early, claiming attention and so getting cut in good time, a very desirable point if the cane is to be kept.

Colman is highly recommended from all experiment stations and private growers. It is short and stocky, very rich in sugar, and stands up against heavy winds and gives large seed head, almost like Kaffir corn. To turn stock into as soon as ripe it is highly valued.

The heavy seed crop and rich cane prove very fattening.

Collier has many friends where known. Mr. Denton says of it: "Collier is recommended for all latitudes where cane can be grown, especially for the Northern States, for its abundant foliage is resistant to frosts, and though extremely tall and slender canes it stands up well, and has made a good record wherever tried." Though a late cane, Collier matures early, ripening before Orange. Planted up to June 15, it has never failed to mature seed, and sown broadcast in July has given good returns. As broadcast it is invaluable; the animals all relish its tall sweet canes so much, and it gives so much feed per acre, and we have never had any to sour. Around Medicine Lodge it is becoming quite the custom to bring stock from the range and turn them into the fields of ripe cane to fatten.

The time of planting is very long—from early in April to end of June—but we find May about the best month. Mode of cultivation is easy and yield almost certain. Through all the dreadful droughts of the last few seasons, sorghum alone has given us decent crops. We have never failed to have some return for it in the worst year. Nothing gives as cheap hog feed. We use it in some form all the year round, and have not in six years lost an animal from disease. The hogs choose the coarsest stalks during winter.

I saw inquiries in KANSAS FARMER, the other week, as to effect of sorghum on milk cows. We find sorghum fodder and Kaffir meal gives us plenty of milk of rich quality and sweet flavor. When fed on Kaffir fodder the milk was bitter and unpalatable. At present our cows are going in a field of standing cane and do not care for meal or bran, and they are milking well.

It cannot be too widely known that to allow different sorts of sorghums, Kaffir or broomcorns to grow near each other is to rapidly spoil the best seed and to lower the per cent. of sucrose and the value of the cane in many respects. Some fine seed sent to agricultural college in France was ruined in two seasons by being grown near broomcorn. To use pure seed is, therefore, the only way to insure good results. It is easily seen that 7 and 8 per cent. sugar cannot be compared to the same plant giving 18 and 20 per cent. A gentleman wrote last week from Garden City to say that he had been quite unable to get seed that was not mixed with either Kaffir or broomcorn. The same complaint is made from many places.

As to the merits of sorghum and Kaffir, there is not so much diversity of opinion as formerly. Every one agrees as to Kaffir being a glorious grain crop, but after maturing a large crop of seed, very few people consider it of much value for fodder, classing it with corn stalks. There are, however, many opposite opinions and arguments on the question, but I notice that the dumb animals do not proceed to discuss Kaffir at this time of year, until they have polished off every stalk of cane in sight.

The farmers here are very successful with Kaffir and have the finest seed to sell that I have ever seen. I do not grow Kaffir now, fearing to have it mix with the sorghum, so I can freely admire the fine product of my neighbors.

MARY BEST.

Medicine Lodge, Kas.

A mortgage makes a man rustle, and it keeps him poor. It is a strong incentive to action, and a wholesome reminder of the fleeting months and years. It is as fully symbolical in its meaning as the hour-glass and scythe that mean death. A mortgage represents industry, because it is never idle night or day. It is like a bosom friend, because the greater the adversity the closer it sticks to a fellow. It is like a brave soldier, for it never hesitates at charges, nor fears to close in on the enemy. It is like the sand-bag of the thug—silent in application, but deadly in effect. It is like the hand of providence—it spreads all over creation, and its influence is everywhere visible. —Field and Farm.

He Raised 104 Bushels of Corn Per Acre.

Mr. J. A. Baxter, of Waveland, Shawnee county, Kansas, who raised as high as 104 bushels of shelled corn per acre in 1895, furnishes the State Board of Agriculture the following account of it, together with some of his corn-raising methods in general:

"The portion of my crop giving a yield of 104 bushels of husked, well dried (fifty-six pounds, shelled,) corn per acre was five acres of fifty-seven I planted last year. My land is slightly rolling prairie and about a fair average of Kansas soil, with a hard, impervious subsoil. The five acres mentioned were at one end of a twenty-five acre field, part of which had been in potatoes for two years and the last crop dug with a listing plow late in October, which was about equivalent to a deep fall plowing.

"In spring the ground was much like a bed of ashes. It was then deeply plowed, made fine and smooth with a plank drag and drilled the first week in May with a "Farmer's Friend" planter of medium width, with a deep-grained yellow dent corn; about the same quantity of seed was used as would have been if from three to somewhat less than four grains had been placed in hills the ordinary distance apart. This was cultivated four times with common gang cultivators and hoed three times—the last hoeing after it had been finished with the cultivators.

"I am a strong believer in deep and thorough cultivation, and long since learned that a good crop of corn and a rank growth of cockle burs, crab grass and similar weeds cannot occupy the same ground at the same time. I have not subsoiled for previous crops, but last fall invested in a Perine subsoiler and used it on fifteen acres. I intend planting 100 acres in corn this season and aim to have it all subsoiled. Am subsoiling my fields the narrow way first (they are from forty to eighty rods wide and 120 rods long) as deeply as four horses can do the work, at distances of two and a half feet. Will then throw up the ridges crosswise of this with a listing plow, following it in each furrow with the subsoiler as deep as three horses can pull it, and drill the seed immediately in the track of the subsoiler. This will leave the land subsoiled in both directions.

"My whole crop for 1895 averaged only fifty-seven bushels per acre, yet would have made seventy-five bushels but for an unfortunate invasion just at the critical time by an army of chinch bugs from an adjacent thirty-acre field of oats. With proper treatment of our soils and thorough cultivation I am of the opinion that in all favorable seasons such as last we should raise from seventy-five to 100 bushels of corn per acre instead of the more common twenty-five to fifty bushels. I am always careful to avoid cultivating when the land is very wet, and think many farmers make a serious mistake by working their corn when the soil cleaves from the shovels in chunks. The sun is likely to then bake the ground and the growth loses its bright, healthy green and turns a sickly yellow."

Experience with Alfalfa.

To get alfalfa started is one thing, but to keep it started and growing is quite another. In 1889 I sowed twenty-five acres. The ground is bottom and it was in corn the year before. I sowed it to spring wheat and plowed the wheat in, running the plow two and a half to three inches deep, then sowed the alfalfa, running a smoothing harrow and a planker; all done by the first of April. I sowed eleven pounds to the acre and got a good stand, and have it yet. In 1892 I sowed twenty acres. I waited until May to sow and went over the ground several times with disc and harrow. It was fall plowed. I sowed nothing with it. The seed came up all right. I sowed twenty pounds to the acre, but the wind and hot weather destroyed it in a very short time. I prepared 120 acres in the fall of 1894 by plowing from one to two inches deeper than the ground had ever been plowed before and let the cattle, sheep and hogs run over it as much as they liked. Last March I began seeding and by the 10th of April had it all in. The first thirty acres I sowed a half bushel of

"Saved My Life"

A VETERAN'S STORY.

"Several years ago, while in Fort Snelling, Minn., I caught a severe cold, attended with a terrible cough, that allowed me no rest day or night. The doctors after exhausting their remedies, pronounced my case hopeless, saying they could do no more for me. At this time a bottle of



AYER'S

Cherry Pectoral was sent to me by a friend who urged me to take it, which I did, and soon after I was greatly relieved, and in a short time was completely cured. I have never had much of a cough since that time, and I firmly believe Ayer's Cherry Pectoral saved my life."—W. H. WARD, 8 Quincy Av., Lowell, Mass.

AYER'S

Cherry Pectoral

Highest Awards at World's Fair.

AYER'S PILLS cure Indigestion and Headache

spring wheat on the ground, then followed with a disc press drill, sowing thirty pounds to the acre, running the disc two to three inches deep. The seed came up generally very nicely and is now in fine condition, with the exception of where we crossed back furrows and high places, allowing the disc to run in the ground too deep. There the stand is thinnest. The second piece, of twenty acres, I sowed three-fourths of a bushel of oats, followed with the drill, sowing twenty pounds of seed to the acre. The stand on this is equally as good as the first, but the same thing is noticeable where the disc ran deep. All of this land is on the bottom, generally more or less sand mixed with the soil, although part of it is gumbo, and the alfalfa appears to be equally as good, if not better, there than elsewhere. The third piece is seventy acres of high land and rough. It has a subsoil mostly of clay, and in places at the heads of draws and along the edges the clay is so near the surface and so sticky that the plow will not scour. On this piece I reversed the order of sowing, putting the alfalfa on first with a seeder, fifteen pounds to the acre, following with the disc drill, sowing three-fourths of a bushel of oats to the acre. All three pieces of ground were immediately harrowed and rolled as soon after seeding as possible. The last piece of seventy acres was the finest stand I ever saw, and on the clay knobs it is as rank and fine as any one could wish. Do not pasture too much the first year. If you get a good stand after mowing it once or twice you can run pigs on it in the fall, with benefit to the alfalfa and pigs. Cut their noses so they cannot root, as they like the roots after freezing has killed the top. —I. B. Hampton.

Dandruff forms when the glands of the skin are weakened, and if neglected baldness is sure to follow. Hall's Hair Renewer is the best preventive.

Union Pacific Route.

What you want is the through car service offered between Denver and Chicago via the Union Pacific and Chicago & Alton railroads, which is unexcelled by any other line. Magnificent Pullman sleepers, dining cars and chair cars, run through daily without change, Denver to Chicago via Kansas City.

Unsurpassed Facilities

are offered to passengers traveling via the NICKEL PLATE ROAD to all points East. Parties arriving in Chicago in the morning via any of the western roads can leave at 1:30 p. m., arrive at Cleveland the same evening at 11:30, Buffalo the following morning at 6 o'clock and New York at 6:30 p. m. and Boston at 8:45 p. m. Its rates are always the lowest. Its road-bed is perfect; a train service that is unsurpassable and that affords all the comforts available in travel. 58

The Stock Interest.

DESCRIPTION OF THE HEREFORD.

EDITOR KANSAS FARMER:—You refer to me the following letter for reply: Will you publish in FARMER a description, with general characteristics, of thoroughbred Hereford cattle, and oblige a subscriber?
J. S. BARNES.
Pratt, Kas.

Subscriber, if a cattleman, has doubtless read in market papers and reports, in agricultural papers, in commission men's circulars and elsewhere, about "the coming steer," "the new steer," "baby beef," etc. All these terms mean or are accompanied by a description of a "low-down," blocky, thick-fleshed steer, fully ripe at from sixteen to twenty-eight months old, "all quality and no waste." These descriptions, if the color, "red with white face," be added, are the descriptions of the Hereford. These people omit the breed so as not to offend any possible customer.

Before the Hereford came into general use, the feeders thought great scale the desideratum and were heedless of quality so long as they had weight. It took about forty years to get the American people to recognize merit in the short-legged, thick-meated, curly-coated Hereford that "weighed like lead," though apparently dwarfed by the stilts upon which the more fashionable sorts were stuck.

Falling to receive proper recognition for their favorites at the fairs, where, in competition with Short-horns, they were obliged to submit to adjudication of Short-horn breeders, the Hereford men advocated butcher judges. These being seldom granted them on breeding stock, they worked for a fat cattle or steer show, the results of their efforts being the Chicago and Kansas City fatstock shows. The first substantial victory of the Hereford was the abolition of classification at these shows for steers above thirty-six months old, the lists afterward being confined to two-year-olds and younger. Then the influence of the Hereford began to be felt in earnest. The long-legged, long-necked Short-horns were discarded and the blocky, short-legged ones came into fashion—that is, other breeds were forced to search themselves for animals approaching to the Hereford type, hence the popularity of the Scotch Short-horn among Short-horn breeders.

The Hereford is one of the oldest established breeds in existence. For 200 years they have had white faces (though some of them were brockle or tick face) and some were gray-bodied, but these exceptions during the past century have entirely disappeared, and the breed has come to be known as the "white-faces," and they have invariably white bellies and white switch of tail and more or less white on their legs. Many have white on top of shoulders, and very many of the best cattle have spots of red at the eyes. Exact markings cannot be laid down. A little more or less white cuts no figure, and *vice versa* red, provided the animal and its pedigree are vouched for by an honest, reliable breeder.

The Hereford is essentially a money-maker. In the intelligent management of the Herefordshire (England) tenant farmer the Hereford paid the rent. While the Short-horns were the fad of the nobility and certain pedigrees sold its possessor for fabulous sums, the Hereford breed was a work-a-day sort, undergoing a weeding process, male and female. The inferior went to the shambles, the best were preserved to breed from. Thrift was the desideratum with the Hereford men and for 200 years the selection was kept up, till, put them where you will, on the range, in the pasture, in the feed lot or in the stalls, they invariably exhibit their inherent capacity to make the prime beef at the lowest cost.

The first Herefords of any consequence imported into the United States were brought in 1839 by my father, the late Wm. H. Sotham. For many years he bred them in New York State. Among his first purchases was the cow, Spot, bred by J. Walker. This cow was champion Hereford female at the first exhibition of the Royal Agricultural

Society of England, at Oxford, 1839. My father changed her name and called her matchless, and under that name she, with others, were exhibited at the first American State fair, viz., the New York State fair, Poughkeepsie, N. Y. She is illustrated in the report of the New York Agricultural Society, 1842.

The depression from which the cattle business emerged in 1894, was long and disagreeable, but it had very good results. During the gloom feeders sought cattle that would make them money. In the selection of the successful feeder, quality came first, last and all the time. He cared nothing for breed; all his little, narrow prejudices were lost. Under these circumstances he came to see, in spite of himself, the Hereford doing better than any other sort, though confined on the same feed. Finding out the inherent thrift of the Hereford, feeders sought them, preferred them and ended by paying a premium for them, and this premium nine out of ten feeders who top the market will pay to-day.

T. F. B. SOTHAM.
Weavergrace farm, Chillicothe, Mo.

The Farmer Doing as Well as Anybody.

EDITOR KANSAS FARMER:—First, I desire to say that my 50-cent advertisement in "Want Column" sold my \$8,000 farm. A hint to the wise is sufficient.

That corn stalk disease. I have no infallible remedy to give. Will only offer my experience for what it is worth. Have always pastured my stalks and never lost an animal. I once had a hint from a widow lady, which I think was valuable to me. I saw her cutting green corn and feeding her cows early in August, while pasture was good. On inquiring her motive she remarked that her cows were breachy and she feared they would break into her corn field and she was preparing them for the event. I took the hint, and before turning on stalks I prepare by feeding corn. I feed lightly at first, gradually increasing until on about full feed. When corn is pretty well cleaned out of stalks I feed corn twice daily. I keep salt always before them and am careful that they have plenty of good water convenient. It is my opinion that cattle thus fed will never die of corn stalk disease, but will do well with no other rough feed.

Some may object to the corn remedy because it is expensive. I think it is profitable. I have never yet made any profit by roughing stock, and especially young stock, through the winter. By pushing young stock one year's feed can easily be saved. Every day that stock is not improving they are debtor to feed consumed. Every one knows that a certain quantity of food is required to sustain life. A little more will add growth.

I am greatly interested in the KANSAS FARMER. Think I have been greatly benefited by hints by the editor and the experience of my brother farmers. Think the way out is by better methods. True, times are hard, but who is better off than the farmer? Think by sticking to our business and improving our methods that we will weather the storm as well as our brethren in other branches of business. Our hope is in general prosperity.

A. P. ASHBROOK.

Linwood, Kas.

About the Horse Industry.

EDITOR KANSAS FARMER:—I am raising horses in a small way again. I think from the indications that there will be money in raising horses in the near future. Good horses have advanced in price here in the last sixty days. There is quite a demand among the farmers for them, and the shippers are scouring the country and buying up all classes and shipping them out. Good heavy draft teams will bring \$150 to \$175 here at the present time. The scrubs are being pretty well cleaned out, and the horse that will be raised in the future will be of a better class than was raised in the past. The heavy draft horse seems to be the best horse for the farmer to raise, as he is ready for market at 4 or 5 years old and will pay his way after he is 3 years old, and only requires to be in good flesh to bring the top of the market. It takes no ex-

tra work in fitting and training him to get him ready for the sale, and, as a rule, they are more docile and easier to handle than the trotting-bred horse.

Sabetha, Kas. J. A. WORLEY.

Oats and Field Peas for Green Fodder.

Prof. E. S. Plumb, Director Purdue University Experiment Station:

"Feeders are coming to recognize more and more the necessity of plenty of green food for stock when grass is getting short. Owners of dairy cattle in particular feel this necessity.

"For two years at the Indiana Experiment Station, we have planted Canada field peas and oats, for this purpose. The first year of planting, we scattered pea seed at the rate of a bushel and one-half an acre, over the ground, and plowed this in three or four inches deep. A bushel and one-half of oat seed per acre was then scattered over this plowed land, which was then thoroughly harrowed.

"In 1895, the above practice was not followed. The land was plowed about seven inches deep, and then harrowed to a fine tilth. A mixture of oats and peas, at the rate of one and one-half bushels of each per acre, was then drilled in, to the depth of about two inches. The plants thrived with great vigor until severe drought checked their growth, in common with all other farm crops. Either method of planting will no doubt be satisfactory.

"In planting oats and peas, the first seeding should be gotten in at the earliest date possible, when the land may be satisfactorily worked. One or two more plantings at ten day intervals, will give a good succession of crops, covering about six weeks.

"While cutting the green crop may begin as early as wished, after some length of stalk has been secured, it is advisable to wait until the oat head begins to expand and when the peas are passing from the bloom. The best plan is to secure the green fodder as close to the maturity stage as possible consistent with about three weeks of use for soiling.

"Oats and peas make highly nutritious and palatable food. They also give the earliest green fodder to be secured from plantings of the same season, and follow nicely after winter rye for soiling. This crop is coming more and more into favor. Oats and peas should only be planted early in spring, as these plants as a rule will not thrive from May or summer seedings.

"If not all fed green, the balance of the crop may, with advantage, be plowed under or cured for hay.

"The expense for seed is not great. Oats may be bought in the market at prices varying from 15 to 25 cents per bushel, according to location. The pea seed purchased by this station this spring, cost 90 cents a bushel laid down at the home depot. In buying be sure and get Canada field pea seed.

"Green oats and peas are eaten with a relish by horses, cattle, sheep and swine."

Handling Bees.

On cool or rainy days, when bees are not working, it is best to molest them as little as possible. They are not in a condition to be tampered with on such occasions, and it makes them irritable to such an extent that it is many days before they forget the insult. Early in the morning or late in the evening has also the same effect upon them; so that the most satisfactory time of operating is during the day, when they are busily engaged at work gathering honey, and a large portion of them are in the field and out of the way. During the honey season, they can be thus handled with impunity, and without the aid of smoke. There is much in the manner we operate with them as to their irritableness. They will bear a great deal of careful inspection without making any resistance, but rough usage, sudden jars, quick motions, etc., they will resent and make a sturdy defense. It is only necessary to study their nature and work accordingly, and it is very interesting to see how readily they will submit to kind treatment.

Send \$1.35 to KANSAS FARMER office for one year's subscription to KANSAS FARMER and Chicago Weekly Inter-Ocean.

Nervous

People wonder why their nerves are so weak; why they get tired so easily; why they do not sleep naturally; why they have frequent headaches, indigestion and

Nervous Dyspepsia. The explanation is simple. It is found in that impure blood feeding the nerves on refuse instead of the elements of strength and vigor. Oplate and nerve compounds simply deaden and do not cure. Hood's Sarsaparilla feeds the nerves pure, rich blood; gives natural sleep, perfect digestion, is the true remedy for all nervous troubles.

Hood's Sarsaparilla

Is the One True Blood Purifier. All druggists. \$1.

Hood's Pills cure Liver Ills; easy to take, easy to operate. 25c.

April Notes.

Plant corn at the first opportunity.

Roll the oats, the wheat and the meadow.

Be sure the soil is in a good tilth before planting the corn.

Don't plant tender vegetables until danger from frost is past.

Keep the stock out of the pastures until the ground is well settled.

The use of good seed is one of the essentials in growing a good crop.

Plant potatoes reasonably deep, so that level cultivation can be given.

In all cases use plenty of seed. It is better to thin out than to replant.

A good garden and small fruit plat will furnish half the eating for the family.

See that all young stock make a thrifty start to grow by feeding the dams well.

Make the change from grain to grass gradually and in this way lessen the risk of scours.

Provide good pasturage for the growing pigs. They will grow faster and keep healthier.

When the teams are stopped to allow them to rest, pull the collars away from the shoulders.

Set out the trees for the orchard at the first opportunity. The sooner the work is done the better.

Now is the best time to hatch turkeys, geese and ducks, and all the hens that will sit should be put to work.

When it can be done it will be found a good plan to make the ration for the work team part corn and part oats.

Make the conditions of germination as favorable as possible, so as to secure a strong, vigorous plant at the start.

In making the most out of the pastures it will be found a good plan to let sheep follow cattle rather than to keep all together.

Push the early-hatched chickens and market them while the prices are good. Better prices can be realized now than later.

With all crops it is quite an item to get them planted in good season, and in a majority of cases it will be better economy to hire a little extra help than to get behind now.

Generally a safe rule in planting is to cover the earliest planting rather shallow, increasing the depth of covering as the season advances and the soil gets warmer and drier.

One advantage in having the soil in fine tilth when the planting is done, is that the cultivation can be commenced much earlier, and this gives a better opportunity for keeping down the weeds.

Plan to have a good small pasture convenient to the stables, especially for the teams, where they can be turned for a few hours every evening. This will be better than to let run out all night.

One of the essential items in securing a good germination with seeds and a good start to grow with trees and plants, is to have them come in close contact with the soil. This should be looked after closely when the planting is done.

Eldon, Mo.

N. J. SHEPHERD.

Unequaled Service

Denver to Chicago via Kansas City is given via the UNION PACIFIC and Chicago & Alton railways.

Through Pullman Sleepers, Pullman Dining Cars and Free Reclining Chair Cars leave Denver Daily. The Union Pacific is the great through car line of the West. Ask your nearest ticket agent for tickets via this line.

E. L. LOMAX,
Gen. Pass. and Ticket Agent,
Omaha, Neb.

Irrigation.

SMALL FRUIT CULTURE BY IRRIGATION.

PART I.—Water Supply, Storage and Distribution.

By Profs. S. C. Mason and F. C. Sears, Kansas Experiment Station.

The uncertainty of the strawberry crop, even in the more favored portions of the West, from the lack of rain at the critical time when needed to develop the fruit, makes it a wise precaution that the means should be at hand for irrigating as needed. In the eastern counties of the State, where the annual rainfall is usually ample for this crop, if properly distributed, we find comparatively few seasons, when the berry patch would not be benefited, at some period of its growth, by the liberal application of water, and now and then a season occurs when the entire crop will be dependent upon such a timely rescue. As we go west from the Missouri river, the need of supplementing the rainfall with irrigation steadily increases, as will be shown by the precipitation tables of the past twenty years. The probability that extensive systems of irrigation ditches will ever be established in eastern Kansas need not be discussed here, but that thoughtful gardeners and fruit-growers in the East, as well as in the West, are waking up to the fact that it will pay them to invest in some means

a ditch of ample capacity and sure supply, a tank, reservoir or earth-walled pond should be built and the water allowed to accumulate till enough is on hand to flow rapidly over the desired land, or down the furrows, as the plan may be.

If the ground to be watered is not more than an acre or so, a wooden tank will be very satisfactory and economical of water. A main supply pipe of good capacity should be laid below the reach of frost and plows to a convenient point for distribution. The lateral pipes may be carried along the ground and uncoupled when the season is over. They should be fitted with three-fourths inch hose bibs, and carried out so that two or three fifty-foot lengths of hose will reach to any part of the ground. Woven cotton hose has proved the most durable for such work.

Our station irrigation at the college has been done from a two-inch main connected with the city water-works, and even with the pressure that we have here, about sixty pounds, the flow becomes so reduced by the time it has passed through several lengths of hose that the work of getting over land with water from one outlet is quite slow.

We sometimes turn the hose into the furrows running along the rows of plants, but when they are in full leaf and maturing the fruit we have found that a given quantity of water is worth much more when showered directly onto the matted rows than when run

ing a competent engineer before beginning such a work, much labor and expense may be saved and sometimes absolute danger avoided.

In planning a reservoir for irrigating a certain field, it should be located on the highest point of the land, so that a slight fall may be secured from it to all parts of the ground. Our station land at the college has a fall of six inches in a hundred feet in the lower part, which gives a very nice grade to work on. A little higher up, there is a fall of a foot in a hundred, and this gives about as rapid a flow in furrows as is comfortable to handle. With a slope much greater than this, it is better to abandon the section line direction of the fields and lay the rows off in such a direction as to give only the right amount of fall. Our ground at the Garden City sub-station is, in spots, so nearly level that the lateral ditches have to be raised a little above the level of the soil in order to get the water over the ground.

WELL IRRIGATION.

The depth from which it will pay to raise water for irrigation must depend upon the value of the crop which can be produced by it. That it can be made profitable to pump from shallow wells for all sorts of garden crops, orchard trees and small fruits has been shown too often to need further proof.

With a fruit that has been made to produce from two to four or five hundred dollars' worth of berries to the acre as often as the strawberry has

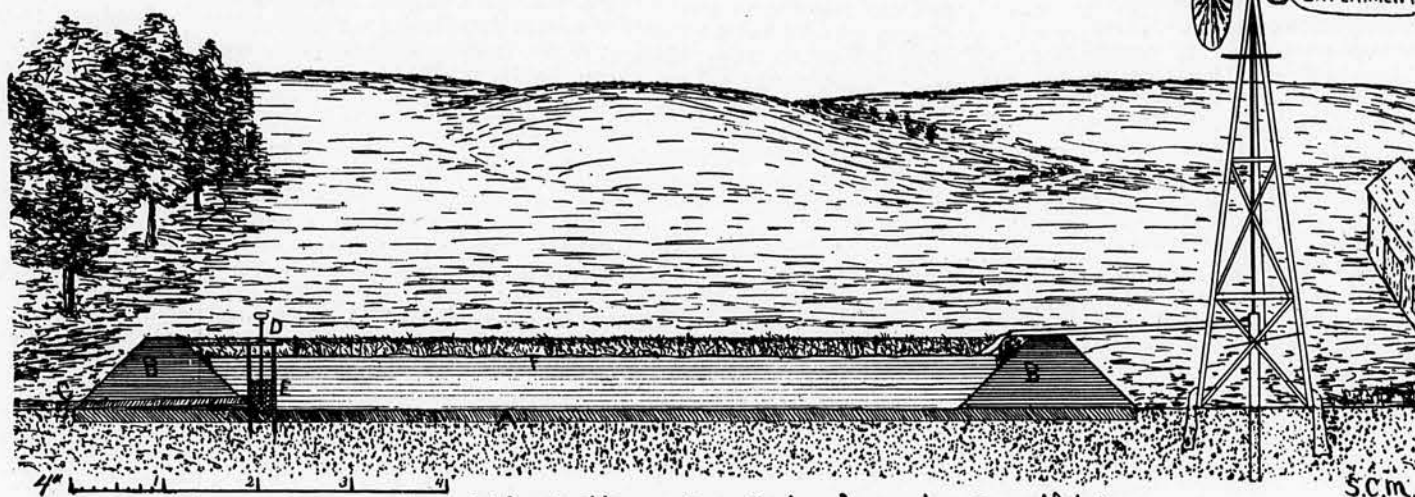
foot deep. An inch in depth over an acre would require one-twelfth of this, or 3,630 cubic feet. A pond sixty feet square on the bottom would contain 3,600 cubic feet of water for every foot of depth, if the sides were square, and with sloping sides somewhat more, so that, as nearly as we can approximate, a pond of this size will hold, for every foot in depth, water enough to cover an acre an inch deep, or one acre inch.*

As it is desirable that the berry-grower should know somewhat nearly how much water he is using, and how much he has on hand at a particular time, a pond of these proportions is recommended as a convenient one, or if a larger one is required, 60x110 feet would hold two acre inches to a foot in depth, when four feet deep.

By having a gauge marked in feet and inches, set on the valve platform and reading from the bottom of the outlet upwards, the depth of water is readily seen; and by taking readings on opening and closing this valve, the volume of water used can be pretty closely calculated. A record book of this for the season would develop much valuable information for future use.

BUILDING THE POND.

Plate I. gives an ideal sectional view of a pond 60x60 feet, with location of pump, outlet-box, and valve shown. The banks are shown as six feet high, three feet wide on top, and the sides with a slope of "one to one," or 45°. Such a bank would be fifteen feet wide on the bottom. This would add thirty



Scale 8 ft. to 1 inch. A. puddled bottom; B.B. Embankments; C. outlet box; D. Valve rod & platform; E. Valve surrounded by wire screen; F. water line

Sectional View of Irrigation Pond 60x60 feet

of getting water onto their crops, is becoming apparent to all.

The means most readily at hand for getting a supply of water in a position ready for use are pumping by windmill or other power from wells; pumping from streams or ponds with engines or by horse-power; impounding storm waters in ponds, or "tanks," as they are called in the southwest, above the level of the fields to be irrigated; and occasionally the utilizing of water from a hillside spring favorably situated.

It should be recognized as a fundamental principle, by any one planning to irrigate, that a volume of water equal to two or three inches in depth over the surface of the land to be irrigated must be available for immediate use. Applying less than this at once, unless it is sprinkled on with a hose, is of little benefit, and allowing a small stream from a spring or pump to run on to the land is generally worse than useless.

An instance is recalled where a farmer attempted to irrigate a potato patch directly from his well, and that, too, with a windmill and pump of small capacity. Some wooden spouting was provided, leading out to the ends of the rows; the mill was then turned into the wind and the confiding irrigator went about his other work. He doubtless pronounced irrigation a failure when he found that the water of a day's pumping had not wet the ground a hundred feet from the spout, having soaked into the earth with little benefit to anything.

Unless the water can be drawn from

down the spaces between the rows and allowed to soak out laterally to reach the plants. A thorough showering is worth more than the same water used in several light applications. This work should always be done in the afternoon and evening, and in special stress at ripening time we have kept the hose going half the night. This is much better for the plants than to put the water on during the heat of the day, under a clear sky and with a dry wind blowing.

Doubtless the cost of wooden tanks of sufficient size has kept many from attempting to irrigate, and we owe a debt of gratitude to the pioneers in pump irrigation in the western counties, whose very lack of means to buy expensive wooden tanks compelled them to solve the problem in another way. They built their reservoirs of the material they had nearest at hand—the fine prairie loam. The successful methods of puddling the bottoms and sides of these ponds to prevent seepage, of putting the outlet box in securely, and of protecting the sides from washing, though all based on old and well-known engineering practices, have been discovered for themselves by these prairie irrigators and adapted to their conditions of work.

The problem of building a dam to hold storm water is a much more difficult one than that of providing a pond to hold a few day's pumping, as a much greater volume of water must be stored, and the added danger of the breaking of the dam by the storm flood must be provided against. By consult-

ing a competent engineer before beginning such a work, much labor and expense may be saved and sometimes absolute danger avoided.

Having a well of sufficient capacity, and the mill or other pumping power in position, the pond is usually placed near enough to allow the water to be run into it from a spout. The height of the walls of the pond should be anticipated, and the delivery spout of the pump carried up high enough to allow a good fall over the top of the wall into the pond. There will be occasional cases where the pump and mill must be over a well, pond or spring, in a ravine or draw, while the pond must be on the proper ground to run the water from, on to the land. Here a forcing cylinder on the pump and proper supply pipe to the pond will have to be provided.

The mistake is often made of building the pond too large. For a twelve-foot mill or less, a pond sixty feet square is usually large enough.

An acre of ground contains 43,560 square feet; hence it would require 43,560 cubic feet of water to cover it a

feet to the diameter of the pond, making it 90x90 feet on the outside. Such a bank will give a cross section, as at B, Plate I., of fifty-four square feet, and will contain fifty-four cubic feet, or two yards, of earth to every running foot. Where a smaller volume of water is sufficient, a bank four feet high will answer every purpose, and by making it three inches narrower on the top, but with the same slope to the sides, it will give a cross section of twenty-seven feet, and contain only half as much earth as the other.

* Such a pond actually contains, at four feet deep, 18,408½ cubic feet, or 12 9-10 per cent. more than four acre inches. The first foot would contain 3,721½ feet; the second, 3,609½; the third, 4,225½; and the fourth, 4,487½ feet.

(To be continued.)

A Wonderful Tonic.

Topeka, Kas., February 11, 1896.—I have taken a number of bottles of Hood's Sarsaparilla and regard it as an excellent tonic. Mrs. Sadie Kelly, A., T. & S. F. Shop.

Hood's Pills cure all liver ills.

No Room for Doubt.

When the facts are before you, you must be convinced.

The facts are that the UNION PACIFIC is leading all competitors, is the acknowledged dining car route, and great through car line of the West.

The line via Denver and Kansas City to Chicago in connection with the Chicago & Alton railroad, with its excellent equipment of Free Reclining Chair Cars, Pullman Palace Sleepers and Pullman Dining Cars, demands the attention of every traveler to the East.

Ask your nearest agent for tickets via this route.

E. L. LOMAX,
42 Gen. Pass. and Ticket Agent.

COST OF RAISING CORN IN KANSAS.

Kansas is certainly a great corn State. Statistics show that the average annual yield for all the thirty-four years, bad seasons and good, since 1861 has been twenty-seven bushels per acre for the entire State, ranging in different years from nine to forty-eight and four-fifths bushels. The product for twenty-five years ending with 1895 has had an annual home value averaging more than \$31,000,000, and a total value in that time exceeding \$776,000,000.

Secretary Coburn, in the March quarterly report of the State Board of Agriculture, presents a detailed showing from sixty-eight long-time, extensive growers in forty-five counties which last year produced 140,000,000 bushels, giving from their experience "on such a basis as others can safely accept" each principal item of cost in growing and cribbing an acre of corn, estimating the yield at forty bushels. About two-thirds of those reporting prefer planting with listers and the others use the better known check-row method after the land has been plowed and harrowed.

The statements of all these growers summed up, averaged and itemized show as follows:

COST OF RAISING AN ACRE OF CORN.	
Seed.....	\$0.07
Planting (with lister or with check-row planter, including cost of previous plowing and harrowing).....	.77
Cultivating.....	1.03
Husking and putting in crib.....	1.18
Wear and tear and interest on cost of tools.....	.25
Rent of land (or interest on its value).....	2.41

Total cost.....	\$5.71
Cost per bushel.....	.14
Average value of corn land per acre.....	29.25

The condensed showing made by the forty-three growers who plant with listers, or have found that method preferable, is thus:

Seed.....	\$0.07
Planting.....	.44
Cultivating.....	1.06
Husking and putting in crib.....	1.16
Wear and tear and interest on cost of tools.....	.25
Rent of land (or interest on its value).....	2.44

Total cost.....	\$5.42
Cost per bushel.....	.13

Statements of cost where the land is plowed, well harrowed, and planted with the ordinary check-row machine, summarize for each item as below:

Seed.....	\$0.07
Planting.....	1.03
Harrowing.....	.24
Planting.....	.25
Cultivating.....	.98
Husking and putting in crib.....	1.18
Wear and tear and interest on cost of tools.....	.30
Rent of land (or interest on its value).....	2.35

Total cost.....	\$6.40
Cost per bushel.....	.16

Commenting on these figures, Secretary Coburn says: "In none of these calculations has there been made any allowance for the value of the corn stalks, which ordinarily, under the crudest management, should offset the cost of harvesting the grain, and under proper conditions should have a forage value much in excess of such cost. Taking these into every estimate, as should rightly be done, the showing of cost per bushel would be very sensibly diminished. In the results of this investigation it will likewise be noted that the rental for these Kansas corn lands, or the interest figured by their owners on the investment represented, averages more than 8 1/2 per cent, or a net rate higher than the capitalist, general banker or money-lender dreams of realizing.

"Further, it should be understood that the thrifty Kansas farmer does not measure the profit of his crop by the narrow margin shown in such statistics between the items of 'cost' and 'value.' He does not, as a rule, anticipate selling his corn by the bushel at the figures given as 'value,' nor expect more if he did so than a moderate return, one year with another, for his labor and investment; it is the conversion of it on his farm into beef, pork, poultry, dairy and similar products from which comes the surplus to make the comfortable homes and build the schoolhouses, colleges and churches that are such common objects on his horizon and so largely the measure of his ambition."

Those of our friends who are about to renew their subscriptions will do well to note the following clubbing list—KANSAS FARMER one year and

any of the following at prices named: The Weekly Inter Ocean, \$1.35; New York Tribune, \$1.25; Topeka Capital, \$1.50; Topeka State Journal, \$1.50; Topeka Advocate, \$1.50; Kansas City Journal, \$1.30; Kansas City Star, \$1.25. Our columns have been so crowded for the last few weeks that it has not been possible to run advertisements of our premium offers. But by referring back a few weeks you will find them. Our subscription list is doing remarkably well, but we can always stand a little more of this kind of prosperity.

Our "Special Want Column," contains numerous bargains every week and our readers cannot afford to overlook it every issue. This week Geo. L. Epps, of Topeka, makes an important announcement of money received to loan exclusively on farm lands. This column is especially designed for advertising the "wants" of our subscribers at minimum cost.

Gossip About Stock.

Attention is called to the new advertisement of R. G. Mason & Co., of Kirksville, Mo. While the wording is new, the name of this firm has often appeared in KANSAS FARMER. Any one desiring fine poultry, pet stock or dogs should write for their catalogue.

It is not often our best breeders of live stock give their finely-bred animals away, but on page 1 of this issue one of our advertisers makes this unheard-of offer. We want our readers who are in need of improved stock to take advantage of this. Write at once.

"Individual merit by inheritance," is the motto of T. F. B. Sotham, of Chillicothe, Mo., who holds his annual sale of fifty choice Hereford cattle on April 15, 1896. It has been his custom to reserve stock from private sale and reserve them exclusively for public auction. There is no better opportunity offered than this sale to secure Herefords of fine breeding and individual excellence. The catalogue is a veritable encyclopedia of Herefordism, and no fancier of the breed should be without one nor fail to be present at the sale.

The Cloud County Live Stock Association, at Concordia, held their annual election and re-elected the following officers: President, W. S. James; Secretary-Treasurer, Alan Laing, and the following Vice Presidents: H. M. Spalding, D. F. Poore, M. S. Layton and James Burton. The breeders and farmers of Cloud county have also organized the Cloud County Agricultural Association, with the following officers: President, Hon. H. S. Wheeler; Vice President, H. S. Bosworth; Recording Secretary, Hon. Ed. Marshall; Corresponding Secretary, W. S. James. These enterprising movements will result in great good to northwest Kansas and awaken new interest.

J. H. Veitch, passenger agent of the C. & M. & St. P. railway, at Kansas City, is owner of "The Old Homestead" Hereford farm, Martinsville, Ind., which place is managed for him by Geo. N. Sprague, who for years contributed to the production of the stars of the Hereford breed in Ohio and Illinois. The foundation stock of this farm comes from the herd of Gudger & Simpson, of Independence, Mo., and all are strongly bred in Anxiety blood and are fine individual types. The first crop of bull calves, five in number, will be included in the Sotham sale, at Chillicothe, Mo., April 15. "These youngsters," says Mr. Veitch, "are bred in the purple and developed under a master hand."

Mr. E. E. Axline, Oak Grove, Jackson county, Missouri, announces that he will hold a public sale of Poland-Chinas, Thursday, October 1, 1896. His herd has been reinforced by the best individuals and breeding that is possible to obtain from the best herds, both north and south, while his spring pig crop now on hand fully guarantees his climbing toward the top and keeping company with the top breeders of the United States. Last week he shipped a pair of fine pigs to Purcell, I. T., two young sows went to Colorado and an extra young boar to Alabama. He finds that one extra good one sent out sells more in the same neighborhood. Just now he and the "gude wife" are busy shipping out Plymouth Rock eggs from the best strains. Free Poland-China catalogue on application.

A. Allardice, 113 Adams street, Chicago, writes: "Before we leave Mr. Crummer, we wish to correct an impression that he seems to have, and that is, that we do not handle strictly American goods. Allow me to state that our goods are bought here in America, raised here in America, and manufactured in the city of Chicago, which is in America. As for me being a good fellow, although a little over-enthusiastic, if Mr. Crummer knew what we do in reference to the cure of hog cholera, it would take a good deal more ballast to hold him down than it does us. As far as our proposition to the KANSAS FARMER is made, he thinks it would not be a test, but



AVERAGE grain makes about 500 bundles to the acre.

Think of lifting each of these 500 bundles about one foot higher than necessary! That's what you do with the old style of Binders. That's what you save with the New CHAMPION Binder.

Each bundle weighs about 25 lbs., or in all, 12,500 lbs. per acre.

Think of lifting 12,500 lbs. one foot high! It's a good deal of a job and you wouldn't want to do it if you could avoid it.

Of course no Binder chokes in tying every bundle, but with the old style of Binder and certain conditions of ground and grain, there is one chance of choking with each bundle, because the extra power required to compress the bundle makes the bull wheel slip. Why take 500 chances per acre?

At least 5 minutes are required on the average, to clean out one "choke." That's an immense amount of time if counted for each bundle in an acre. Why take the chances? You don't need to with the New CHAMPION Binder.

Every time a big bundle is bound by the old style of Binders there is great strain on the machine and sudden jerk on the horses' shoulders. 500 jerks per acre! Pretty hard on the poor horses, isn't it? How would you like to be struck 500 even light blows per hour?

Why do you take these chances and submit to these misfortunes? That's what you do with the old style of Binders. You needn't take any of them with the New CHAMPION, and the New CHAMPION built on correct principles costs no more than the imitations. You have put up with these drawbacks because you didn't know they could be prevented. The force-fed elevator and eccentric binder wheel of the New CHAMPION Binder prevents them all. Other Binder makers try to do this, but have to use a steep elevator, low master wheel and flat binder deck. The New CHAMPION has an easy-slope elevator, high master wheel and steep binder deck. You know which is right.

The Warder, Bushnell & Glessner Company, the makers, Springfield, Ohio, and Chicago, have agents in nearly every town in the country.



he thinks if I would go to Kansas City, Omaha, or the Chicago stock yards, take a bunch of fifty or 100 shoats that have been exposed to cholera, use them as scavengers to clean up the pens, as the scalpers do, until they are thoroughly infected and the disease has developed, then remove them to a separate yard and keep them alive for thirty or forty days, I would make a crucial test. Allow me to state that I will present Mr. Crummer sufficient of our goods to make a test like the one he speaks of, and are perfectly willing to abide by the results, knowing that we will never lose a hog; also, we want to tell him, that while at the same time we kill the germ under the hog's feet, we use a conditioner and treat the hog internally. This proffer of goods will be free, f. o. b. here, without any string attached, except the following of the directions given. As for his treatment of canker or sore mouth, it would be rather too much trouble for a man with a herd of 8,000 or 4,000 hogs to catch them one by one and apply his lotion by tickling them on the nose with a feather. If he will use our goods they will immediately arrest and cure that disease, and save the balance of the herd from taking it."

1,000 Peach Trees with freight prepaid to any station east of the Mississippi river, 2 to 3 feet, for \$25. Other sizes in proportion. List of varieties or samples sent on request. R. S. JOHNSTON, Box 17, Stockley, Del.

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Grows the best New and Standard Fruits and Ornamentals. Own the largest and oldest experiment grounds in the West. Offer new Apricots, Raspberry, Strawberry and Apple. Catalogues free. A. H. GRIESE, Box J., Lawrence, Kas.

Evergreens and Forest Trees

At \$1 per 1,000 and upwards. Price list free. Address C. A. COCAGNE & CO., Mention FARMER. Sawyer, Door Co., Wis.

NORTH TOPEKA NURSERIES

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Litson : Nursery.

Fruit trees, Berry plants, Evergreens and Ornamental shrubbery at wholesale to the planter. Write for free price list.

W. H. LITSON, JR., Nevada, Mo.

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GOVE CITY, KAS.
It is acknowledged by all who have used reliable Seed Houses on earth. Price 2 to 3 cents each; other seeds cheap in proportion. Sample packet sent FREE on receipt of stamp. Catalogue free to all. Give us a trial.

POTATOES \$1.50 a Bbl.
Largest growers of POTATOES for Seed in America. The "Rural New Yorker" gives Salzer's Early Wisconsin a yield of 750 bushels per acre. Prices dirt cheap. Our great Seed Book, 148 pages and sample 14-day Radish for 6c. postage. JOHN A. SALZER SEED CO., LaCrosse, Wis.

PURE EARLY OHIO SEED POTATOES.

From Northern-grown seed. Comparatively free from scab, and solid. 45 cents a bushel. Write for prices on large amounts.

D. A. WILLIAMS, Silver Lake, Kas.

CHOICE SEED POTATOES!

Extra Early Six Weeks, 55 cents per bushel. Early Kansas, 50 cents per bushel. Early Ohio, Early Beauty of Hebron, Early Rose, Early Sunrise, 30 cents per bushel. Medium and late varieties: Snowflake, Blue Victor, Burbank, White King, Late Rose, 30 cents per bushel. Potatoes good average size and sound, put up in sacks or barrels and delivered to railroad depot here. Address

EUGENE R. HAYES, Topeka, Kas.

Carman No. 1 Seed Potatoes, \$1.00 Per Bushel

F. O. B. I have got a chance to secure a few bushels of these celebrated potatoes, from the American Bottoms, of Illinois, grown under straw mulch, and guaranteed true and sound. Ten per cent. discount on ten bushels. I can recommend this potato.

CLARENCE J. NORTON, Morantown, Kas.



Choice Standard and New Varieties grown and stored in the Cold Northwest. Send for handsome illustrated Catalogue, containing article describing method of raising and handling. Small shipments at car-load freight rates. Samples free. E. W. Allen, Wolverton, Wilkin Co., Minn.

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Early Six Weeks.....60c. per bushel
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All the above varieties good size and sound, in sacks or barrels, delivered to any railroad depot here.

Address TOPEKA PRODUCE CO., 304 Kansas Ave., TOPEKA, KAS.

HENRY W. ROBY, M. D., SURGEON.

Office 118 Sixth Ave. West, TOPEKA, KAS.

The Home Circle.

Resurrection.
BY ERNEST McGAFFEY

The moonbeams touched the cedars tall
That stood by Jesus' tomb,
All faintly, as the candles will
That light a spacious room;
While here and there a lonely star
Looked earthward through the gloom.

A hush was on the darkened land,
A calm lay on the sea,
A silence fraught with meaning vague
Of miracles to be;
And loosed from midnight's failing grasp
The wandering winds went free.

And when the rock-bound sepulchre
In darkness stood alone,
With trace of moon and waning star
Across its outlines thrown,
Nor door was seen, but in its stead
A rough-hewn, mighty stone.

But when the dawn-burst filled the skies
And night was changed to day,
A flash of mystic wings was seen
Within the morning gray,
The angel messenger who came—
And rolled the stone away.

AN EASTER MISSION.



IT WAS the night before Easter. A bevy of young and middle-aged women, a few of them accompanied by male escorts, were busying themselves about the altar of St. Mark's church, transforming that portion of the sanctuary into a garden of flowers, palms and growing plants. Sid Venner, the popular young lawyer of Stillville, stood in the shadows apart from the group, nervously pulling his mustache and looking somewhat out of sorts. He started and straightened up as a man and a woman entered the church and came down one of the dimly-lighted aisles. The lady—a tall, beautiful girl, with a reed-like grace of movement—was in advance. As she passed close to Sid she recognized him and stopped.

"Oh, Mr. Venner, isn't it a shame?" she broke out, in a charmingly impulsive way. "The Easter lilies ordered from the city did not come. I am so disappointed, and mortified, too, for all the other ladies have furnished something for the church decorations, and I promised the lilies, you know, and now I can do nothing at all. Mr. Macgregor has been searching the town for flowers, but can find none. Dear! dear! if one of you gentlemen could get some Easter lilies somehow—somewhere—I would—well, I'd be eternally grateful!" This half-laughing, half-despairing outburst was addressed both to Sid and her stylishly-dressed escort, who had stopped just behind her, but it seemed to the lawyer that the appeal was specially directed to him. His heart was thumping like a trip-hammer, but he spoke quite calmly:

"I shall be glad to win even your gratitude, Miss Lloyd. I will get the lilies for you."

"Oh, will you truly? Can you?"

"I can and will."

"You need not trouble yourself, sir," spoke up the other man, in a voice as cold and cutting as steel. "If Miss Lloyd wants Easter lilies I will get them for her—provided they are to be had."

The significance of the tone and words was not to be mistaken. There was a moment of profound silence; then Sid Venner, with admirable self-control, said:

"I have given you my word, Miss Lloyd. My offer has no proviso attached to it." He smiled audaciously in the flushed, scowling face of Bruce Macgregor; then bowed easily to Helen Lloyd, as he added: "The lilies will be here in good season, I promise you. But to fulfill my mission, I must be off at once. Good night." He strode down the aisle to the church door, and was gone.

Just as the town clock struck nine Sid Venner, seated in a piano-box buggy behind a quick-stepping horse, went spinning out of Stillville along the road leading eastward. "Fifteen miles to Princeton," he mused, with a grim smile. "A drive of 30 miles before I sleep. But I happen to know Squire Wymple has a lot of Easter lilies on his place, and I must have them at all hazards. Wonder if Bruce Macgregor will dare to follow me. I saw him watching me as I drove out of the stable."

Sid, it need scarcely be said, was over head and ears in love with Helen Lloyd. His suit had seemed to progress favorably enough until Bruce Macgregor appeared on the scene. Then there was a change. Macgregor was the city cousin of Alice Hartley, and Alice was the particular friend of Helen Lloyd; so it was but natural that the young man and Helen should be thrown much together. In fact, he all but monopolized that young lady's society. During the entire period of Lent—a most propitious season for cozy tete-a-tetes—he had been Alice's guest and Helen's devoted slave. Sid had sternly held himself under control as he watched his own chance of happiness slip away from him. He was stunned, crushed, humiliated, and in the bitterness of the disappointment could not understand that he was really to blame for the coldness that gradually came between him and the girl. He had no doubt that Macgregor and Helen were infatuated with each other.

It was a surprise to him when she spoke to him in the old familiar way to-night. It made his blood tingle. One thought was uppermost in his mind now. He must get the Easter lilies. He must show Helen that obstacles were not to be considered by him where her wishes were concerned. Squire Wymple, the justice of the peace at Princeton, was his closest friend, and he had often been the squire's guest at his pleasant home just outside of town. It was nearing midnight as Sid approached the Wymple homestead. The house was dark and apparently deserted.

"All in bed, I suppose," he mused, as he reined up at the roadside and jumped to the ground. "Carriage gate locked. I'll just hitch here and walk to the house."

He took a lighted lantern from the buggy, passed through a small gate



"I HAD TO COMMIT BURGLARY TO GET THEM."

and walked toward the house. A big watchdog came bounding toward him, barking viciously.

"Down, Tiger; down! Don't you know me, old fellow? Come, Tiger."

In an instant the animal began to express his joyful recognition of a valued friend by wagging his tail, whining and jumping up and down round the newcomer. Sid went to the door and rang the bell. There was no response. After trying for 15 minutes to rouse somebody he was forced to the conclusion that the family was away from home.

"Here's a go!" growled Venner. But after a minute's reflection his face brightened and he made his way to the large greenhouse at the rear of the dwelling. He examined the door by the light of the lantern and found it securely locked. Fortunately, however, he discovered a sliding panel of glass

Highest of all in Leavening Power.—Latest U. S. Gov't Report

Royal Baking Powder

ABSOLUTELY PURE

which he opened without difficulty. He crawled through the aperture and soon found several pots of beautiful Easter lilies in bloom. On a leaf torn from his blankbook he wrote a few words of explanation to Squire Wymple, leaving the note on the shelf from which he took the flowers. A few minutes later he was hurrying toward his buggy, carrying four pots of Easter lilies. As he approached the road he was astonished to see two vehicles instead of one. In the second one sat a man, who called out to Sid:

"Is this Mr. Venner?"

"It is. Ah, Mr. Macgregor, is that you? Beautiful night for a drive, eh?" Sid coolly placed his property in the rear of the buggy-box.

"What have you there?" asked Macgregor, with an attempt to appear unconcerned.

"The Easter lilies I promised to get for Miss Lloyd," replied Sid, as he stepped into his buggy and took up the reins.

"Will you sell them to me?"

"Hardly."

"I suppose I can get some where you got those?"

"You'll have to ask the dog. The people who live here are not at home, but the dog and I are old friends. Good-night, Mr. Macgregor."

He wheeled his horse round in the road and sent him dashing away at his best speed toward Stillville.

Long before church time the next morning Sid called with a carriage for Helen Lloyd. He had the lilies, and he took her to the church to dispose of them as she saw fit. "I had to commit burglary to get them," he told her, "but I could do even that for you, Miss Lloyd."

After that it was easy to reach an understanding. They were entirely alone in the church, and the nodding palms and graceful Easter lilies were discreetly silent about the little scene that was enacted in their shadows.

"And to think you were jealous of Mr. Macgregor!" pouted Helen, after it was all settled. "Foolish man!"

And when the Easter anthem was sung by the choir that morning Miss Lloyd's friends remarked the unusual power and feeling with which she rendered those passages expressive of great joy and exultation.

A few days later Sid Venner received a letter from Squire Wymple, in the course of which the squire wrote: "You are welcome to the flowers, of course, but who is Mr. Bruce Macgregor? A gentleman of that name hunted me up Sunday morning and wanted me to issue a warrant for the arrest of Sidney Venner for robbing a greenhouse. Think of that! I had to tell him that I was the victim, and you a privileged character."

The rapidity with which croup develops calls for instant treatment; and yet few households are prepared for its visits. An admirable remedy for this disease is Ayer's Cherry Pectoral. It has saved hundreds of lives and should be in every home where there are young children.

Smooth roadway. Quick time. Perfect passenger service. Uniformed train porters for the convenience of first and second class patrons. Through sleeping cars between Chicago, Buffalo, New York and Boston. Unexcelled dining car service. No change of cars for any class of passengers between Chicago and New York city via the Nickel Plate Road. J. Y. Calahan, Gen'l Agent, 111 Adams street, Chicago, Ill.

Such ills as
**SORENESS,
STIFFNESS,**
and the like,



ST. JACOBS OIL
WIPES OUT
Promptly and Effectually.

Her Easter Egg.

She loved to paint, and many days she toiled
To find the shades that blended well together;

So careful was she lest it should be spoiled,
She handled it as carefully as a feather.
But when, alas! she went to fondly stroke it
She let it slip upon the floor and broke it.
—Judge.

Her Terrible Revenge.

Jeannette—I hear that horrid James-ley girl won Cholley Smythe away from you.

Eleanora—She did, but I got even. I rot the design of her Easter hat and made one just like it.—Chicago Record.

The great domestic stand-by, Dr. Bull's Cough Syrup, is now recognized to be a family necessity. Keep it handy.

HOME-SEEKERS' EXCURSIONS.

Santa Fe Route—One Fare (Plus \$2) for the Round Trip.

These tickets will be sold to various points in Oklahoma, Texas, Arkansas, Missouri, Arizona and Indian Territory. Dates of sale will be April 7 and 21, and May 5, with final limit of twenty-one days from date of sale. For tickets and all particulars, call on J. P. ROWLEY, City Ticket Agent Santa Fe Route, Topeka, Kas.

FREE TO INVALID LADIES.

A lady who suffered for years with uterine troubles, displacements, leucorrhoea and other irregularities, finally found a safe and simple home treatment that completely cured her without the aid of medical attendance. She will send it free with full instructions how to use it, to any suffering woman sending name and address to
MRS. L. HUDNUT, South Bend, Ind.

DIRECTIONS for using CREAM BALM:

Apply a particle of the Balm well up into the nostrils. After a moment draw strong breath through the nose. Use three times a day, after meals preferred, and before retiring.



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ELY'S CREAM BALM opens and cleanses the Nasal Passages, Allays Pain and Inflammation, Heals the Sores, Protects the Membrane from colds, Restores the Senses of Taste and Smell. The Balm is quickly absorbed and gives relief at once.

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THE DR. J. H. McLEAN MEDICINE CO.
ST. LOUIS, MO.

EASTERTIDE.

There is no death, the lilies say.
We hide our tiny souls away
When hoary Winter comes to blight
Our tender leaves and blossoms bright.

But when the Southland's gentle breath
Comes softly back to banish death,
Beneath the trembling mould we cry:
Hail, resurrection! None shall die.

Sweet prophets of the life to be,
I know this self-same spark in me,
That neither time nor distance knows
And yet is comrade with the rose.

Dear Mother Earth, within thy breast
This better part of me shall rest
No longer than the seeds that bide
The coming of the Eastertide.

CHARLES EUGENE BANKS.

HOW EASTER DAY IS FIXED.

It has been over 1,500 years since the rule was adopted which makes Easter the "first Sunday after the first full moon after the sun crosses the line." By this arrangement of things, Easter may come as early as March 22, or as late as April 25, but must forever oscillate between the dates mentioned.

The word "Easter" is said to be from the German "oster," (rising), and is the Christian passover or festival of the resurrection of Christ. The English name for the day is probably derived from that of the old Teutonic goddess Osten, whose festival occurred at about the same time as our celebration of Easter. The proper time for celebrating the festival was a theme which gave rise to much heated discussion among early Christians. The question was fully considered and finally settled at the council of Nice, 325 A. D., by adopting the rule which makes it fall upon the first Sunday after the first full moon occurring after March 21. During the present century Easter has fallen from one to four times on every date between March 22 and April 25, except March 24, which has been skipped entirely.

EASTER GREETINGS.



—Golden Days.

In Days to Come.

He pressed a kiss upon her brow.
"Darling!" he cried, impetuously;
"I love you more than all the world besides."

"Alfred," rejoined the woman of the future, "that is all right, but I positively cannot afford to get you a new silk hat for Easter."

Whereat he wept miserably, and insisted that it served him right for having married such a brute.—Puck.

KEYSTONE WOVEN WIRE FENCE

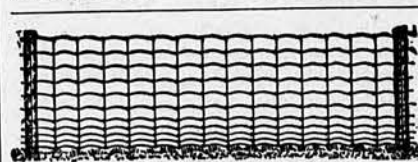


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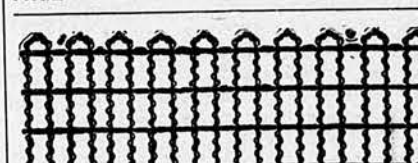
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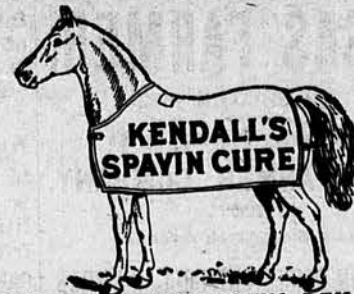
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BLUPOINT, L. I. N. Y., Jan. 15, 1894.
Dr. B. J. Kendall, Co.—I bought a splendid bay horse some time ago with a spavin. I got him for \$30. I used Kendall's Spavin Cure. The spavin is gone now and I have been offered \$150 for the same horse. I only had him nine weeks, so I got \$120 for using \$2 worth of Kendall's Spavin Cure.

KENDALL'S SPAVIN CURE

SHELBY, Mich., Dec. 16, 1893.
Dr. B. J. Kendall, Co.—I have used your Kendall's Spavin Cure with good success for Curb on two horses and it is the best liniment I have ever used.

Price \$1 per Bottle.
For sale by all Druggists, or address
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ENOSBURGH FALLS, VT.

Washburn College, Topeka, Kansas.

For catalogue, address the Registrar, Washburn Academy. For information, address the Principal.

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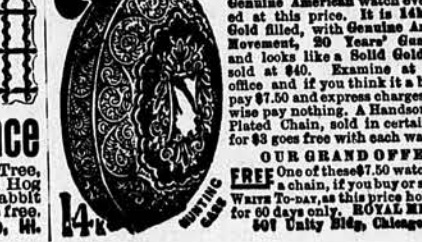
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Bee Hives and supplies. Have twenty years experience in bee-keeping and manufacturing hives. Write us for prices.

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OUR GRAND OFFER.
FREE One of these \$7.50 watches and chain, if you buy or sell SIX Wares To-day, as this price holds good for 50 days only. **ROYAL WFG CO., 501 Unity Bldg., Chicago, Ill.**



BY STANLEY WATERLOO.

It is Easter. It is the day perhaps nearest to the hearts of those who hold the Christian faith. It is the anniversary of the day upon which the gentle crucified Jew, Jesus, whom we accept as the Son of God, came forth alive again from a coffin made from a space hewed in a rock and blocked by a great stone.

That rising was in the sequence of events which made Christian the world of to-day. That rising was what is making strong the course of the controlling mass among the creatures who flit about upon this particular planetary crust, and who have a belief in their own immortality. Had the more potent portion of humanity not accepted Christ as risen, there would have been some other belief, some other hope and grasping for after-death welfare among the inhabitants of this one among the millions and billions of planets revolving in all space. The rising completed the Christian story. The Son had gone to the Father as an emissary, forever pleading in behalf of the creature we call man, Himself a man, He went back to Heaven to be ever our Ambassador. And so it is that throughout the Christian world it is the sweetest of all hopeful days, this anniversary of that day when Christ ascended to His own again.

What matters it that learned skeptics say that Easter is but the adaptation to Christian use of an ancient holiday in glorification over life and spring and the birth of all things. It matters not what the beliefs or legends were before, since we accept the story of the Child of Bethlehem, and stake our future upon the promise of the man grown who died for us. The heathen legends of the early man are but as nothing, whether the Son of the Ruler of the Universe came to us nearly 2,000 years ago or yesterday. We accept the belief and we are happy in Easter day.

It is wonderful and very sweet, the thought of that morning when the gentle, murdered Man, who was both Man and God, felt from the Father the quickening pulse and knew that His

awful trial was over and that the world had been redeemed.

It was of all mornings the most beautiful, if we may judge from the weak human story, or if we judge from our own conception of what it must have been. The gloom of night was dissipating, the lighter haze of morn was apparent upon the far distant Judean hills, though there was darkness in the valley still.

But in an instant, just as the morning broke, all changed. There was a rustling of wings, the wings of angels, in the semi-darkness; the huge stone which filled the entrance of that cavern tomb rolled away as lightly as if it were something a wind might lift. There was a sudden light about the place and, at the same moment, above the far eastern hills, the sun, earth's light and one of God's ownings, flung forth a million brilliant banners. It was day. And, just as day came, went from earth the Son who is pleading for us with the Father.

It is very sweet and wonderful, the story of this Easter day, one of the greatest observed in our religion. It is the day recognized as full of all hope and promise. It is beautiful in the manner of its observance, with its flowers and its ringing anthems and with its atmosphere of the springtime and of faith and courage. It is blessed, this Easter day.

An Easter Crush.

It was an Easter bonnet reposing on a chair.
The professor never saw it, as himself he seated there.

"Will you be at church to-morrow?" he asked to break the hush,
And she madly, wildly answered: "No, 'twill be an awful crush."

—Detroit Free Press.

Little Needed for Him.

Wife—Now I hope, dear, you will get a new tie for Easter. I want you to be in keeping with me.

Husband—Why, what are you going to get?

Wife—A new hat, cloak and dress, of course.—N. Y. World.

At Eastertide.

The birds carol hymns at Easter-tide,
The bells chime through this old world wide,

The trees put forth their tender buds,
And fashion dons her new spring duds.

—Life.

As Things Go.

Mrs. Bingo (proudly)—My Easter bonnet cost five dollars more than Mrs. Kingley's.

Bingo—It ought to. I'm worth only about half as much as he is.—Truth.

KANSAS FARMER.

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Published every Thursday by the

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KANSAS FARMER CO., Topeka, Kas.

The United States Supreme court has settled the "long and short haul question" by upholding the law, which forbids a higher rate for the short than for the long haul.

In a spirited article in the *Arena* for April, Richard J. Hinton suggests that the battle of Armageddon is soon to be fought. His alarm at the developments of the ambitious and ponderous policy of Russia is very great.

The British reports of foreign trade for January and February show an increase of 19.3 per cent. over the corresponding period last year. The increase in imports was 13.9 per cent. and the increase in exports was 23.2 per cent., and all this in free trade England.

A Wichita dispatch states that the railroads have reduced grain rates to the gulf. The following are given as the new rates: Kansas City to Galveston—corn, 29 cents; wheat, 33 cents. Wichita to Galveston—corn, 27 cents; wheat, 31 cents. Kansas City to New Orleans—corn, 29 cents; wheat, 33 cents. Wichita to New Orleans—corn, 28 cents; wheat, 32 cents.

English statistical investigators find that there has been an actual and a very considerable decrease in the consumption of wheat in Great Britain during the last few months, compared with the same period last year. Two causes are cited as contributing to this result. First, meats and vegetables have been cheap and abundant, so that people who usually economize by reducing their diet largely to one of bread, have found it possible to indulge in greater variety of food. Second, the season has been favorable to the prosecution of industries which, sometimes, or even usually, shut down during portions of the winter months. Wages have been more continuously earned than usual, so that people have been able to procure more than formerly of other articles, even if they had not been quite as cheap as bread.

Secretary Morton gets a good many severe criticisms from the press and some rebukes from Congress. A good deal is deserved, for he has shown, in some respects, scant appreciation of the opportunities of his department. He has, however, made a vigorous and commendable fight on the old abuse known as the seed distribution, and should have been sustained by Congress in his attempt to abolish the needless expense. Another commendable act of the Secretary is the order by which he has extended the civil service rules to a large proportion of the employees of his department. Finding an efficient force of trained officers in the various divisions of his department he made few changes, none so far as the public knows, for partisan reasons. He has placed the department on such footing that for now and all the future, merit and efficiency, and not partisan

influence, must determine the tenure of office in nearly all positions in the Department of Agriculture.

WAR NOT WANTED.

There is just at present no war scare in the United States, and while there is about the usual amount, perhaps a little more than the usual amount, of friction among European nations, there cannot be discovered any ominous threat of a general European war such as some generations ago prevailed as almost a chronic condition. The nations have learned that a good deal of talk, a good deal of diplomacy, is better, cheaper and leads to more desirable results on all sides than anything in the nature of armed contest. The fact that most of the leading nations are heavily in debt and that the voice of the creditor is against war, is also to be taken into account. But the increase of the war spirit in this country is a most noticeable circumstance. There has been a vast amount of real disappointment because the Venezuelan incident is being adjusted without a fight. There has been hope of an engagement with Spain on account of the Cuban situation. Some have even hoped that this country might become involved with the Turk over the Armenian outrages.

It is a notable fact that the utterances of the money lenders on all of these have been for peace at any cost. There are those who expect profit from the existence of war and who favor it on this account. These are in general those who have nothing to lose.

With either the capitalist who opposes war as endangering his fortune, or the "soldier of fortune," who has nothing to lose and may find his opportunity in the commotion of war, the questions of rights, of patriotism, of humanity, are not a part of the consideration. Whether there are any considerable numbers who are purely unselfish in their positions on such subjects is an open question.

The farmer, who, in general, takes the most unselfish view of public questions and supports what he thinks is right, even at his own cost, is sometimes led to consider the belligerent side of a war prospect in the belief that the greater demand for products will stimulate industries and that the good done in this way may offset the evils of war. This view is more prevalent with reference to proposed wars on the other than on this side the ocean.

Can the farmer afford to take this view? War is essentially destruction; destruction, not only of human life, but of the products of human effort and of the gifts of nature. The labors of the farmer and of the artisan are devoted to bringing forth the things needed for human comfort and well-being. The organization of modern society is so close that no great disaster can be suffered by any considerable proportion of the human race without being shared by all civilized peoples. The aspects of a war in which this country might be involved, especially a war with England, would be those of a fight with our best customer for farm produce. It might be difficult for England to get along without supplies from American farms, but it would be also inconvenient for American farmers to get along without the largest and best customer for farm products. Without the export demand—chiefly English—bear operators in wheat would have the price at their own sweet will, the surplus of meats would remain in farmers' hands and the domestic demand would be supplied at prices in which, to say the least, there would be no profit. The cotton of the Southern farmer would suffer like stagnation. But would there be any scaling down of obligations.

Possibly revolution may come some time in the form of war on abuses and growing oppressions, and such revolution may be beneficial in its results. Better if all needed changes in the social and economic order can be made by peaceful methods. War is only tolerable as a means to an end. In itself war is a curse. It is a curse whose blight extends to the entire race of civilized men and is especially severe on that people who are engaged in it. Let the dogs of war await the command of humanity rather than be loosed at the behest of greed.

IRON IN A TRUST.

The iron industry has long been recognized as first in importance among the manufacturing interests of this country—first, because of its magnitude, and second, because of the universality of the use of iron. Processes have been improved and the product cheapened until, from the abundance produced in this country, iron has recently been sold in England, the country against which the bars of protection have been erected so as to foster the "infant" iron industry of the United States. But the infant has grown large and powerful, as is shown by the following dispatch:

CHICAGO, March 30.—The iron and steel industry, first in point of importance in America, is now in the absolute control of a few men who are banded together by the strongest bonds of common interest and who have, at a conservative estimate, not less than \$300,000,000 at their disposal.

The details of the transaction by which the simple commercial combination was effected, were mapped out in New York last week and the final move was made in Pittsburgh, Pa., and Birmingham, Ala., to-day.

The men in this immense combination are in a position now to say how much iron ore shall be converted into iron and steel and at what price it shall be sold.

The steel rail pool fixed a price of \$28 a ton on steel rails at Pittsburgh, and all other mills sold at the same price with the freight from Pittsburgh added. This meant that the Illinois Steel Company could sell at \$29 and the Colorado Fuel and Iron Company at \$33. The mill that could name the lowest freight rate took all intermediate sales.

The new pool makes a price of \$20 a ton on steel billets at Pittsburgh, which is \$3 over its former prices.

All Western sales agents have been notified of the advance and also have been notified to guarantee no sales for later than April delivery.

The late Senator Plumb used to threaten to aid the free traders in so modifying the tariff as to counteract the pernicious extortions of the trusts. The fact that iron can be made in this country so cheap as to enable producers to sell it on the English market, suggests the propriety of the Plumb method of allowing a little foreign competition to clip the disposition to extortion manifested by the arbitrary addition of 14 per cent. to the price of iron and its products.

There comes a dispatch from Washington, bearing the same date as the above quoted Chicago dispatch, in which it is stated that the Supreme court of the United States has just rendered a decision in a noted case in which it was complained that railroads make to interior points lower rates on foreign merchandise than on that originating at the port at which the foreign goods are entered. The court of last resort says that this discrimination in favor of the foreign goods may be made where the inland rate is made a part of the through rate from the foreign country.

Whatever may be the justice or injustice of this decision, certain it is that as a selfish proposition people in the center of the continent have no cause of complaint. It is stated that the indiscriminate about which the seaboard complains, amounts, in some cases, to as much as 50 per cent. in favor of the foreigner. Possibly this may enable the foreign maker of goods of iron to check the vaulting extortions threatened by the new iron trust.

Great Britain has long held that her naval equipment must be superior to that of any other nation. Later she has almost concluded that it must be greater than that of any two other nations. A still later suggestion is that her power to do battle on the seas should be greater than that of all other nations combined. She has lately awakened to the fact that bread is even a more important munition of war than ships, guns, powder and ball. Therefore, her latest thought is that since her production of grain is annually \$150,000 short of her consumption, and war might interfere with foreign supplies, she must have constantly on hand at least one year's store of grain.

Irwin, Green & Co., of Chicago, report that "the shipment of wheat from Chicago by rail to interior mills has assumed a surprising magnitude. The total for last week was 643,484 bushels, against 236,742 for the same week last year, and the total since the beginning of January is 5,428,292 bushels, against

978,742 for the corresponding portion of 1895. It is five and a half times greater than last year, when it was so large as to attract attention and cause much comment, yet the present movement seems by many to be accepted as a matter of course. Yet it is estimated by those who are keeping track of this feature in the business that the filling of orders already received will bring down our stock of winter wheat to not more than 4,000,000 bushels, and at the present rate of decrease the stock bids fair to be completely exhausted by the middle of May."

GOOD AS OLD WHEAT, INTERESTING AS A NOVEL.

The time was when an agricultural report was considered as useless rubbish. A standing joke was that it had been written by some political chump who would scarcely know a field of oats from a patch of potatoes, and that it was filled up with stale platitudes about impracticable and unremunerative methods on the farm. It may not be easily told just when the change took place and life got into these reports, but certain it is that the latest report of the Secretary of the Kansas State Board of Agriculture is a book of absorbing interest, and is filled with information of practical value, information essential to every farmer who would succeed and not fail in the close competition of the present epoch. No man can follow antiquated methods in farming now and succeed in avoiding loss and eventual bankruptcy. The very latest developments in agricultural science are briefly presented in the report under consideration.

The branch first taken up is corn culture. Late investigations have suggested and practical tests have proven methods whereby this great crop may be helped to resist drought and may be increased in productiveness under all circumstances. All has not yet been learned about this important subject, and it has not been possible to include in this report all that is known, but Secretary Coburn has wisely included as much as the meager printing fund at his disposal would permit and has drawn from many sources of information.

Part II. treats with equal thoroughness of the sorghums, including Kafir corn, millo maize, etc. The great value of these has been long in coming to be generally recognized. Natives of the arid uplands of Africa, they have drought-resisting powers remarkably developed. Their yields of both grain and fodder are surprising, but little known, and their value as feeds is even yet but imperfectly determined even by experts. The man who makes himself master of the information contained in this report is likely to increase his acreage of these plants, whether he farm in the humid portions, in the eastern, or in the sub-humid portions in the western end of the State.

Part III. consists of a full report of the twenty-fifth annual meeting of the State Board of Agriculture. The addresses delivered at this meeting fill ninety pages of the printed report. In them, besides the address of welcome by Governor Morrill and the response by President Potter, sixteen subjects are treated. These are by persons selected and invited by the Secretary on account of their especial qualifications to deal with the subjects assigned. They are valuable to all farmers, but most of them have reference more peculiarly to conditions which prevail in Kansas.

It is a great pity that enough copies of this report could not have been printed to supply each farmer in Kansas with one. It is impossible for even the least appreciative to read its pages without having stirred within him an aspiration and a determination to get further up into the front ranks of those who, on account of putting mind as well as muscle into their work, are leading the farming world and enjoying a degree of prosperity not possible to the mere plodder.

A SLIGHT COLD, IF NEGLECTED, OFTEN ATTACKS THE LUNGS. "Brown's Bronchial Troches" give immediate and effectual relief.

SYNOPSIS OF GOVERNMENT CROP REPORT FOR MARCH, 1896.

DISTRIBUTION AND QUALITY OF THE CORN CROP OF 1895.

The crop was in the aggregate the largest ever reported. The low price of wheat and cotton in 1894 induced many farmers to substitute corn for those crops, and the return was on the whole bountiful. It was good in quality as well as quantity throughout the northeastern section, though this section continues to import far more than it exports. In Maryland and the Virginias, while the yield was reduced by drought, its quality was fair. All the cotton States report an unprecedented yield of high quality, but largely held back because of low prices. The central or "surplus" States report a considerable part yet in the field and still more in crib, awaiting a better market; crop fairly good, but injured somewhat by insects and dry weather. Product greatly reduced in Kansas and Nebraska; nearly a failure in the Dakotas and Montana, where much must be imported. Acreage small on the Pacific slope, and very little exportation beyond county lines.

The merchantable proportion, 88.1 per cent., against 82.4 last year, amounts to 1,895,706,000 bushels, of an average value of 25.6 cents and a total value of \$485,247,000. The unmerchantable, 11.9 per cent., 255,433,000 bushels, has an average value of 15.4 cents and a total value of \$39,339,000. The aggregate, 524,586,000, is less by \$20,400,000, or 3.7 per cent., than the corrected figures from returns for December 1. The percentage sold beyond county lines is 21.9, nearly five-thirds of the 13.4 per cent. so sold last year. The amount remaining in farmers' hands is 49.8 per cent. of the total, or 1,072,000,000 bushels in all, more than two and one-fourth times the 476,000,000 so held last year. The proportion and the percentage are both unprecedented, the nearest approach to these figures having been in March, 1890, when they stood 45.9 and 970,000,000.

The following table shows for eight years the exports of corn (including meal) for the seven months July to January, with the mean export value for the entire fiscal year. The year noted is that to which the crop belongs:

Year.	Bushels.	Price.
		Cents.
1888.....	32,270,587	47.4
1889.....	43,191,766	41.8
1890.....	20,842,909	57.4
1891.....	33,780,470	55.1
1892.....	24,472,873	53.0
1893.....	39,079,689	46.2
1894.....	10,504,555	53.5
1895.....	55,810,155	

The total corn crop of 1895 is placed at 2,151,139,000 bushels of which 1,072,273,700 bushels or 49.8 per cent. was reported as on hand March 1, 1896. The amount retained and consumed in the county where grown is reported to be 1,679,258,200 bushels or 78.1 per cent. of the entire crop, leaving 471,880,800 bushels or 21.9 per cent. as the amount shipped out of the county where grown.

DISTRIBUTION OF THE WHEAT CROP OF 1895.

In the States northeast of Pennsylvania, where not enough is raised for home consumption, the crop is reported as fair in quality and quantity. In the South, as in the great central winter wheat States, there was a very short yield, light in weight, generally of inferior quality, due to unfavorable weather and insects. In those States there is this year little or no surplus. Crop rather poor in California, but fairly good in the irrigation States and Territories. The spring wheat States report a very large yield, of various quality; it is generally good where not injured by smut and other effects of bad weather. A large proportion is already shipped. Very little feeding to animals, except of inferior grain, is reported.

The total wheat crop of 1895 is placed at 467,103,000 bushels, of which 123,045,290 bushels, or 26.3 per cent., was reported as on hand March 1, 1896. The amount consumed in the county where grown is reported to be 193,742,240 bushels, or 41.5 per cent. of the entire crop, leaving 273,360,760 bushels,

or 58.5 per cent., as the amount shipped out of the county where grown.

THE WHEAT CROP OF THE WORLD.

The following is an estimate of the world's wheat crop, by countries, for the year 1895, as compared with the preceding four years, exclusive of countries for which neither official returns nor commercial estimates are to be had, such as China, Morocco, Ceylon, etc. Wherever available, official figures, either preliminary or final, have been used. It is unfortunate that in some important wheat-growing countries official returns of wheat production are not made. In such cases commercial estimates have been used.

In the countries of the Southern hemisphere the wheat harvest takes place from November to February, and the estimates given for these countries are for the twelve months ending Oc-

WHEAT CROP OF THE WORLD.

Countries.	1891.	1892.	1893.	1894.	1895.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
United States.....	611,790,000	515,940,000	396,132,000	460,267,000	467,103,000
Ontario.....	33,611,000	29,690,000	22,416,000	20,507,000	18,183,000
Manitoba.....	23,923,000	14,909,000	16,108,000	17,714,000	32,777,000
Rest of Canada.....	5,101,000	5,102,000	4,126,000	6,362,000	6,500,000
Total Canada.....	62,635,000	49,701,000	42,650,000	44,583,000	57,460,000
Mexico.....	15,000,000	14,000,000	15,000,000	18,000,000	14,000,000
Total North America.....	689,415,000	579,650,000	453,782,000	522,850,000	538,563,000
Argentina.....	32,000,000	36,000,000	57,000,000	80,000,000	60,000,000
Uruguay.....	2,805,000	3,292,000	5,703,000	8,915,000	10,000,000
Chile.....	18,000,000	16,500,000	19,000,000	16,000,000	15,000,000
Total South America.....	52,805,000	55,792,000	81,703,000	104,915,000	85,000,000
Austria.....	41,074,000	50,174,000	43,660,000	48,190,000	41,200,000
Hungary.....	189,294,000	142,558,000	158,425,000	141,858,000	146,000,000
Croatia-Slavonia.....	6,597,000	7,071,000	8,223,000	8,786,000	6,200,000
Bosnia-Herzegovina.....	1,800,000	2,000,000	2,000,000	2,000,000	2,000,000
Serbia.....	8,000,000	10,000,000	8,651,000	7,509,000	9,400,000
Roumania.....	48,491,000	63,942,000	60,115,000	43,587,000	68,503,000
Turkey in Europe.....	22,500,000	20,000,000	20,000,000	20,000,000	21,500,000
Bulgaria.....	40,902,000	40,441,000	35,987,000	30,600,000	37,000,000
Greece.....	5,675,000	4,500,000	5,500,000	5,500,000	4,000,000
Italy.....	141,466,000	115,685,000	135,227,000	121,595,000	106,181,000
Spain.....	71,349,000	82,288,000	93,484,000	105,600,000	92,000,000
Portugal.....	7,000,000	6,000,000	5,500,000	9,000,000	7,000,000
France.....	219,261,000	310,836,000	277,509,000	347,537,000	339,123,000
Switzerland.....	2,500,000	4,000,000	3,300,000	4,500,000	5,000,000
Germany.....	85,750,000	116,215,000	110,040,000	110,681,000	110,000,000
Belgium.....	16,500,000	19,500,000	17,300,000	19,800,000	18,000,000
Netherlands.....	3,504,000	5,380,000	4,971,000	4,846,000	5,000,000
Great Britain.....	74,401,000	60,407,000	50,800,000	61,038,000	38,545,000
Ireland.....	2,615,000	2,214,000	1,666,000	1,532,000	1,100,000
Denmark.....	4,666,000	4,964,000	4,661,000	4,162,000	4,500,000
Sweden.....	4,341,000	4,343,000	3,893,000	4,467,000	3,785,000
Norway.....	250,000	250,000	275,000	275,000	260,000
Russia (50 governments).....	168,767,000	241,611,000	371,851,000	385,078,000	326,000,000
Poland (10 governments).....	12,683,000	24,444,000	21,603,000	17,328,000	16,000,000
North Caucasus (3 governments).....	72,000,000	71,402,000	68,307,000	62,460,000	60,000,000
Finland.....	126,000	113,000	100,000	130,000	10,000
Total Russia in Europe.....	253,576,000	337,570,000	461,861,000	445,005,000	402,100,000
Total Europe.....	1,201,512,000	1,410,338,000	1,514,048,000	1,547,559,000	1,468,219,000
Transcaucasia (7 governments).....	46,747,000	47,000,000	47,000,000	47,000,000	47,000,000
Western Siberia (2 governments).....	10,000,000	15,000,000	19,997,000	32,325,000	25,000,000
Total Russia in Asia.....	56,747,000	62,000,000	66,997,000	79,325,000	72,000,000
British India.....	256,704,000	206,640,000	268,539,000	252,784,000	234,379,000
Asiatic Turkey.....	45,000,000	44,000,000	48,000,000	45,000,000	46,000,000
Persia.....	20,630,000	18,567,000	20,000,000	22,000,000	22,000,000
Japan.....	18,277,000	15,741,000	16,848,000	16,000,000	16,500,000
Cyprus.....	2,000,000	2,000,000	2,000,000	2,000,000	2,200,000
Total Asia.....	399,358,000	348,948,000	422,384,000	417,109,000	393,079,000
Egypt.....	11,140,000	8,252,000	10,000,000	12,000,000	14,000,000
Tunis.....	7,000,000	8,000,000	4,000,000	10,700,000	7,500,000
Algeria.....	26,184,000	19,979,000	20,274,000	23,900,000	24,800,000
Cape Colony.....	2,813,000	3,500,000	4,014,000	3,195,000	2,542,000
Total Africa.....	47,137,000	39,731,000	38,288,000	54,795,000	48,842,000
New South Wales.....	3,764,000	4,089,000	7,032,000	6,708,000	7,263,000
Victoria.....	13,153,000	14,110,000	15,282,000	15,736,000	11,807,000
South Australia.....	9,086,000	6,639,000	9,531,000	14,047,000	8,027,000
Western Australia.....	480,000	305,000	443,000	537,000	176,000
Tasmania.....	663,000	967,000	1,051,000	860,000	899,000
New Zealand.....	5,904,000	10,581,000	8,642,000	5,046,000	3,727,000
Queensland.....	215,000	405,000	477,000	426,000	562,000
Total Australasia.....	33,875,000	37,096,000	42,458,000	43,360,000	32,461,000
Recapitulation by continents:					
North America.....	689,415,000	579,650,000	453,782,000	522,850,000	538,563,000
South America.....	52,805,000	55,792,000	81,703,000	104,915,000	85,000,000
Europe.....	1,201,512,000	1,410,338,000	1,514,048,000	1,547,559,000	1,468,219,000
Asia.....	399,358,000	348,948,000	422,384,000	417,109,000	393,079,000
Africa.....	47,137,000	39,731,000	38,288,000	54,795,000	48,842,000
Australasia.....	33,875,000	37,096,000	42,458,000	43,360,000	32,461,000
Grand total.....	2,424,102,000	2,471,555,000	2,552,663,000	2,690,588,000	2,566,164,000

tober 31 of the years indicated at the head of each column. The unit of measure used is the Winchester bushel, which has a capacity of 2,150.42 cubic inches. Where the original quantities are stated by weight they have been reduced to bushels on the somewhat arbitrary standard of sixty pounds of wheat to the bushel.

An analysis of the table reveals the fact that the total world's product increased from 2,424,000,000 bushels in 1891 to 2,566,000,000 bushels in 1895. The largest crop harvested occurred in 1894, the total amounting to 2,691,000,000 bushels. A comparison of the figures in the summary statement shows that the wheat crop of 1895 fell short of that in 1894 in each of the six continents except North America, where the increase was chiefly due to the rapid development of Manitoba's wheat fields. Another striking feature

countries a considerable decline in the total crop of 1895 as compared with the preceding year is noticeable.

Three countries—Western Siberia, Transcaucasia, and Finland—have not heretofore appeared in similar tabulated statements, and it is believed that the systematic arrangement of the various parts of the Russian empire will be regarded with favor by those who interest themselves in the subject.

The figures for Hungary for 1892 given in the table differ from those published in the official "Magyar Statisztikai Közlemények," new series, Part XI., by 5,000,000 hectoliters (14,189,000 bushels), an error of that amount having been detected in the figures on winter wheat given in that publication.

W. E. Chipchase, 224 South Charles street, Baltimore, Md., found Salvation Oil a sure cure for sprains and inflammations.

Scott's Emulsion

is Cod-liver Oil without the fish-fat taste.

You get all the virtue of the oil. You skip nothing but the taste.

50c. and \$1.00 at all druggists.

DO NOT GROW SOBBY POTATOES.

A gentleman recently exhibited at this office some specimens of potatoes which were exceedingly fine except for the attacks of the "scab." This farmer, as well as many others, seems to have forgotten that there is a sovereign remedy for scab in potatoes.

First, avoid planting on land where scabby potatoes have grown.

Second, soak the seed for one hour and a half in a solution prepared by dissolving two ounces of corrosive sublimate in sixteen gallons of water.

The Rent Problem.

EDITOR KANSAS FARMER:—Your issue of March 12 contains a communication from A. M. Hedges, of Jamestown, Kas., on "Rents and Wages," also one from Mr. H., of same place, on "Land Rent."

We have no rent question in the United States as yet, except in certain localities where rents are too high and will remain so as long as the tenant farmers continue to bid against each other and cling to the same spot.

It cannot be settled by a law fixing rentals, as there are too many inequalities of soil, location and other conditions to enumerate. If a just law could be enacted, Mr. H. would still need another to compel the land-owner to lease his land, for he might prefer to farm it himself if he considered the legal rent too low.

What we need in this country is more small farms, occupied and tilled by their owners. The rent problem can be solved by the tenants becoming land-owners. They can get good lands now in Kansas and other Western States at low prices and without any cash payment. Any industrious, reliable farmer can buy good land in this (Pratt) county at \$1,000 to \$1,600 per quarter section on ten years' time at 6 per cent. interest without \$1 to pay down. All that is wanted is to know that he is honest and industrious and has the necessary teams and appliances to farm with. Some Illinois "tenants" have availed themselves of these opportunities to become "landlords," and although the last few years have been the most unfavorable ever known they are well pleased with the change. So long as these conditions last will not this solve the tenant problem for Mr. H.? Of course, this will not last many years, for it is only a day's drive eastward now to where farms rent very high and are in good demand. Good farms rent here in Pratt county for one-fourth the crop.

Pratt, Kas. J. S. BARNES.

A Splendid Business Offer.

The FARMER takes pleasure in calling the attention of its readers to Perine's subsoil plows. That subsoiling is no longer an experiment has been satisfactorily proven and demonstrated. Mr. A. B. Perine, of this city, is the inventor, manufacturer and patentee of the original Perine's subsoil plow. No higher compliment could be attributed to the popularity of the plow, than the fact that other plow companies are trying to profit from its success, by attempting to imitate Mr. Perine's invention. During the months of February, March and April, 1895, Mr. Perine was not nearly able to supply the demand for his plows, and present indications are that he will experience another rush this season. He has enlarged his plant and secured additional machinery. But as a special inducement for early orders he will include a year's subscription to either the KANSAS FARMER or Topeka Advocate to those who will purchase a plow before May 1, 1896.

The prices of the genuine Perine subsoil plows are as follows:

No. 1 plow, for four horses.....\$12.00
Extra points..... 2.25
No. 2 plow, for three horses..... 11.00
Extra points..... 2.00

Address all communications and make remittances payable to

PERINE'S PLOW WORKS,
Topeka, Kas.

Horticulture.

REWARDS IN THE FLOWER GARDEN.

By Mrs. T. Lee Adams, Kansas City, Mo., read before the Kansas State Horticultural Society.

At the season when the quickening breath of the Almighty calls forth life in countless forms from the cold grave of winter, a divine quickening is in our souls. We are conscious that a mighty change is going on in the world of nature, "when the singing birds have come and the voice of the turtle is heard in our land." We feel it in the air. We see it in the sunshine. We hear it in the salutations with which men greet each other every morning. We should be lifeless not to be moved when creation is awaking with the miracle which divine power every year works in the resurrection of spring. It is a time when memory of the past is fresh and green in our hearts.

THE HOME OF OUR GRANDMOTHERS.

The garden walls, where the children ran,
To smell the flowers, and learn their names—
The children thought, since the world began,
Never were such garden walls for games.

There were tulips and asters in regular lines,
Sweet-williams and marigolds on their stalks,
Bachelor buttons and sweet pea vines,
And box that bordered the narrow walks.

Pure white lilies stood corner-wise
From sunflower yellow and poppies red,
And the summer pinks looked up in surprise
At the kindly hollyhocks overhead.

Morning-glories and larkspurs stood
Close to the neighborly daffodil,
Cabbage roses and southern wood
Roamed through the beds at their own sweet will.

Many a year has passed since then.
Grandmother's house is empty and still;
Grandmother's babies are grown to men,
And roses grow wild o'er the window sill.

Never again shall the children meet
Under the poplars gray and tall;
Never again shall careless feet
Dance through the rose-leaf-scented hall.

Grandmother's welcome is heard no more,
The children are scattered far and wide,
And the world is larger than of yore,
But hallowed memories still abide.

The children are better men to-day,
For the cakes, the rose leaves, the garden walks,
And grandmother's welcome so far away,
And the old sweet-williams on their stalks.

I remember reading of an Irish maiden who left her native shores for America, and grew sick at heart for home again. One day she left the heat and dust of the city for the country, and finding daisies among the waving grass, she, with clasped hands said: "Now God be praised, who, East and west, scatters such lovely things as these.

Around my mother's cabin door,
In dear old Ireland they grow,
With hearts of gold and slender leaves
As white as newly-fallen snow."
Then up she sprang, with smiling lips,
Though on her cheeks there lay a tear,
"This land is not half so strange," she said,
"Since I have found the daisies here."

So, we see that flowers bring up sacred memories and their silent language speaks comfort to lonely hearts.

Among my books is a memory sketch of a noble woman, which I read with deep interest, for I sat under her ministry, and my heart has warmed within me as I have listened to words of strength and encouragement spoken from her pure heart. During her last sickness, some lovely roses were sent her, and when handed to her, she said, though suffering: "How kind she is." Taking the flowers in both hands, she smelled them, and with tender voice and tearful eyes, said: "Jesus had thorns and I have only roses." Thus she forgot her pain in viewing the flowers. We should not think of the flowers simply in connection with adorning our bodies and homes, to be strewn in times of pleasure, or on occasions of sorrow and bereavement. We are learning more fully God's purpose in giving us flowers. The flower mission work grew from the act of a young girl in Boston in the summer of 1869. She had spent the day in the country and her hands were full of flowers. While waiting for a car a group of children surrounding her begged eagerly for "just one flower, please, miss." Young girls no older than she passed her with lines of care on their faces, looking wistfully at her fragrant bundle. They did not ask her for flowers as did the children, but the entreaty in their eyes she could not resist, so she held out flower after flower till not one remained. The laughter of the children and light in the eyes of the girls as they thanked her, remained in her

thoughts all day. That day's thoughts developed a means of brightening humanity. We are assured that though "many a flower is born to blush unseen," by man, its sweetness is not lost on the desert air, for God sees and delights in its beauty; teaching us that God sees pure and beautiful lives, even in seclusion. A very beautiful story is told of God naming the flowers, that they might answer when he called them. The stately rose, the modest violet, the starry daisy and all the other flowers raised their lovely heads as God passed along, and touching their petals, gave to each a name. But there was one so wrapped in contemplation of the blessed God that it forgot itself and even the name He had given. It said to God: "I have forgotten the name thou gavest me, so glad was I to gaze upon Thy face." And God answered: "It is well. Forget thyself and thou art happy indeed. But forget me not." And naming it again He called it "forget-me-not." This legend points a pretty truth, for the person who is lost to self and wrapped in the interest of God and humanity is the happiest.

Flowers have missions and preach eloquent sermons of truth and confidence, yet the flowers wither and grass fades, but let us remember that He who created flowers has given us promises; and the word of our God standeth forever. When the way seems dark and the promises obscure, let us turn to the flowers, and as they open their buds to welcome the sun, so may Divine Providence teach us to rejoice in the light of God's promises.

Mungo Park had been robbed by savages and left to perish in the wilderness of central Africa. Without food or clothing, 500 miles from an European settlement, surrounded by savage beasts and men, filled with terror, he saw nothing left but to die, when his attention was drawn to a delicate little flower. He said to himself: "Can He who planted, watered, and brought to perfection this little flower, in this obscure place, look with unconcern on the suffering of one made in His image and destined to live forever?" This thought caused him to press on and he was saved. Discouragements steal over us in spite of our exertions to resist and shake them off. They cast a shadow on every prospect and make us dissatisfied with everything we have done, and persuade us to believe we shall do no better in the future. I presume all know what it is to wrestle with despondency. God has sent the flowers as missionaries of hope. In nothing do we see so much grace and simplicity, and it should inspire us to cultivate a peaceful and contented disposition. Nothing is so like heaven as to live in the divine harmony of truth and love.

"Then let us consider flowers—
Emblems of our great resurrection,
Emblems of the brighter and better land."

More About Potato Culture.

EDITOR KANSAS FARMER:—The following letter was received from Sterling, Kas.:

MR. NORTON:—Sir: I want to know how close one dares to plant the Early Kansas potato. I hold the idea that nine out of every ten do not plant close enough, so the vines will shade the ground. Thereby hangs the secret in this dry country of ours. Mulch with the vines if you can. By so doing you keep the earth cool and the ground moist. Of course, the potato is much like a pig in a pen, it must be cared for, or if not, you fail.

I want to know something of the habits of the Early Kansas. Does it grow a vigorous and heavy vine, or is it like the Ohio, but few stalks and short tops? The best crop of potatoes I ever raised in Kansas was of the new Late Rose. They grew a tremendous top for me, so much so that in cultivating the last time the single trees would drag the tops of vines. I had them planted where I had had an old cow yard and had broke it up and sowed millet, but got nothing; corn next that was good, then wheat and then the potatoes were the fourth crop. I planted behind the plow, about fifteen to eighteen inches between the hills and the rows about every third furrow, with a twelve-inch plow. I plowed deep, cultivated often, and, as I said before, the vines were strong and very large, and I made it a point to get all the weeds out. When I cultivated I did it thoroughly and deep with a double-shovel plow with one horse, and soon after the last cultivation there came a heavy dashing rain which laid the vines flat on the ground and they never got up again, and no man that did not know which way they were planted, could tell by the vines, and until digging time the vines were a complete mulch and

there were no weeds of any kind. Well, the result was a tremendous fine lot of fine potatoes. I planted 100 pounds of seed and got seventy bushels, and all of the small ones were in the south rows. This is evidence sufficient to prove to any one that potatoes will bear close planting, rich soil and liberal cultivation. I ask you as a friend to give the information asked for.

P. A. MATHEWS.

This is the kind of a letter I like to receive, and as it is a sample of many others received, I trust that all will read it carefully.

The Early Kansas is not an extra early sort, but it is a good medium variety and the vines are medium, that is, a little larger than the Ohios and about as much smaller than the Peach-blows. They will stand the heaviest forcing and when on very rich soil can be cut to one eye and put one eye in a place, fourteen by twenty-eight inches. Thirty inches make it better to cultivate, but the vines do not quite cover the ground when put that distance. Instead of dropping the seed in the furrow behind the plow, it is better to put the seed on the edge of the unplowed ground and allow it to be turned under by the plow, this will avoid the danger of the horses tramping on the seed. He plowed deep and of course the seed was planted as deep. Here is a lesson. One man wrote that he marked out with the sulky plow wheel and dropped in the mark. This will never give satisfaction, either in yield or quality, and such potatoes kept over for seed will keep very poorly, and the next crop from such seed will likely be a bad failure.

When will people learn the importance of deep planting? The *Rural New Yorker's* trench system puts them in like a lister does corn, and the dirt is worked over them until they are ten inches deep. This has given a yield of 1,000 bushels per acre. No matter how deep planted, the crop will be less than four inches deep. Mr. Pugh says he plants five inches deep. Senator Taylor says he plants shallow, in order to aid digging, but further says that he plants four inches deep; hence he regards four inches as shallow. The man who planted in the wheel track did not get over one inch of dirt over the seed and could not possibly expect success.

One reason why these vines made such a great growth was the excess of nitrogen in the soil, that proved too much for the millet, and probably the seed was excellent and unsprouted, thus giving great vigor to the plants. If Mr. Mathews could have kept his seed in cold storage, and in as good condition as the original seed, there is no reason why he should not have had just such a crop every year. There is

WORLD'S FAIR MEDAL

Granted, Together With a Sixteen-Award Diploma, to the Deering Company for Its Light-Draft Roller Bearing Machines.

Through the courtesy of the Deering Harvester Co., Chicago, we are enabled to show our readers a picture of the much-talked-of World's Fair medal.

The Deering Company was awarded this medal in October, 1893, together with a handsome diploma, enumerating sixteen separate awards.



As our readers will remember, these awards were given to the Deering Company as a result of exacting field-trials of its binders, mowers and corn-harvesters, held during the Fair in 1893.

These trials created a decided sensation at the time, for they were the first official and scientific tests of the roller and ball bearing machines. The official judges were as much surprised as anybody at the remarkable saving in draft made by these bearings. At field trials of competing machines held by the same judges at Wayne, Ill., the lowest record made by a five-foot mower had been 152 pounds, while the Deering Ideal five-foot mower, under conditions if anything more difficult, made an average draft record of 85½ pounds.

At the Wayne trial, the so-called "light" open-elevator binder averaged 356 pounds draft, while the Deering Pony Binder, cutting the same swath, averaged only 285 pounds.

Trees, Shrubs, Plants, Bulbs!

Apple trees, large stock, \$30 per 1,000; special rates on large orders. Cherry, Pear and Plum, \$15 per 100. Strawberry, \$2.50 per 1,000. Blackberry, \$5 per 1,000. Concord Grape, \$1.25 per 100. Thirty Greenhouse Plants, \$1—mail or express. Price list free.

BONNER SPRINGS NURSERIES,
Bonner Springs, Kansas.

A Full Supply of All Kinds of Nursery Stock in

Pear, Peach, Apricot

Apple, Cherry, Plum, Grape Vines, Small Fruits, Evergreens, Roses, Shrubs, etc.
Send for descriptive list and prices. Address
J. F. CECIL, Nurseryman, North Topeka, Kas.

Plant Trees and Orchards in 1896.



Early Ohio Grape, Six Weeks Earlier Than Concord.

The old reliable Hart Pioneer Nurseries, of Fort Scott, Kas., have large supplies of choice stock for sale at special prices. 600 acres in nursery, 240 acres in orchard. Extensive growers for the wholesale trade. Write and obtain prices before placing your orders elsewhere. No transfer or exposure of stock. We take up, pack and ship from the same grounds. Send for our

Illustrated Planter's Catalogue and Price List.

We solicit your correspondence and invite inspection of our stock.

Reliable Agents Wanted.

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HART PIONEER NURSERIES,

FORT SCOTT, KANSAS.

a great big lesson here. Another point is, he put in the seed in fresh and damp ground, which is very important. Never furrow out ahead and allow the furrows to dry out, but put in the seed as quickly as possible. Deep cultivation the first time is necessary to allow the heat to penetrate the soil deep and create warmth in the soil and thus hasten growth; after this all cultivation should be very shallow, in order to avoid cutting the roots and mostly to avoid heating up the soil, as the season has become warmer and shallow cultivation acts to reduce the temperature over and above deep cultivation. Why, oh, why! will not the people heed this?

Whenever possible always run the rows north and south and then the south wind will not top the vines all over to one side. I have seen rows that ran east and west that, when they got ready to settle, the strong south wind blew them all over to one side and the row was shaded on the north side only, while the fierce heat shone directly into the hill. Here is another important point, and successful potato-growing is full of just such small but important points.

CLARENCE J. NORTON.
Morantown, Kas.

What Kind of Grapes Do We Ship to Kansas?

EDITOR KANSAS FARMER:—Will some of your readers kindly tell us what variety of grape we ship into this State in the fall (said to be from New York), and how they are cared for from gathering time until shipment? Is it a late variety of grape, or is it grown in the usual season and kept in cold storage until time of shipment? We think, with irrigation, Kansas ought to be able to grow her own grapes.

Independence, Kas. J. W. SIMPSON.

EDITOR KANSAS FARMER:—In reply to the above inquiry I will say that two varieties of grapes are now shipped from the East into Kansas in the fall—Concord, black, and a little later Catawba, dark coppery red. While New York furnishes the greater part of these, I have seen some from Pennsylvania.

While Catawba is a later grape than Concord, yet both varieties are stored for some time before shipment. I do not understand that artificial cold storage is much used, but the fruit, after being picked, trimmed and packed with great care, is stored in large, cool cellars or caves built into the limestone hills of that region.

I believe that when Kansas growers devote the attention and skill to grape culture that they ought grapes can be produced as cheaply here as in New York, and that with the development of cold storage plants, of which we only see the beginning, Kansas grapes can be made to supply our own markets well into the winter.

S. C. MASON.

State Agricultural College, Manhattan, Kas.

Thayer's Berry Bulletin for April, 1896.

The berry plant is a delicate little machine for the manufacture of fruit. From the offal of the earth it works out the most delicious products for man. For best results only best mechanisms can be used and the operator should thoroughly understand their construction, care, feeding and management.

The fine light-colored fibrous roots on every vigorous plant, are the feeding mouths, or suction pipes, that pump up food and moisture from below. The breathing leaves and feeding roots, drink in life, health, beauty from sun, earth, air and by the most secret processes in nature give us the most perfect combination of the useful and the beautiful.

Since a plant cannot move about in search of nourishment it follows that the best food and drink should be placed within its reach, ready at all times for its use. A plant can take its nourishment only in solution, therefore, both fertilizer and surrounding soil should be at all times fine, moist and mellow.

The loss from setting weak plants can never be overcome. The loss from careless setting can never be made good. The loss from poorly prepared soil can never be recovered.

The first three commandments in

successful fruit-growing are: Thou shalt not use poor plants. Thou shalt not set plants carelessly. Thou shalt not use ground until well fertilized and thoroughly prepared. Neglect these three things and all the woes of a careless grower shall be thine.

When plants are received, keep them in a cool place until ready for setting. Remove all old leaves and cut back long roots and broken branches. Never expose the fine, fibrous roots to sun, wind or heat. In setting, dip roots in water, spread as much as possible and set in fine mellow ground, with earth pressed firmly about the roots. The crown of the strawberry should be just even with the surface of the ground, neither too deep nor too shallow.

In the Dairy.

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

Cheese as Food.

The assumption that cheese is inferior as a nutritive agent to tinned meats, says the *Medical Press and Circular*, is by no means correct, and from analyses conducted on our behalf, we are in a position to state that Cheddar cheese of British manufacture contains a much higher percentage both of flesh-forming substances and of fats than meat, even of the finest quality. This view was held by no less an authority than the late Dr. Parks, of Netley, who persistently maintained that a cheese contained a very large amount of albuminoid material in a very small bulk, it was one of the best foods for soldiers in time of war. Dr. Thudichum, in his recent work, "The Spirit of Cookery," states that cheese "is the most valuable animal food obtainable," and that it is "from two to three times as nutritious as the same money-value of ordinary meat." With the purely agricultural aspect of the subject we are not directly concerned, but it is our duty to point out that argument frequently adduced that Cheddar cheese is less nutritious than meat, is based on an entirely erroneous assumption.

Effect of Feed on the Solids in Milk.

Dr. Babcock has recently made some experiments at the Wisconsin station to show the effect of insufficient food upon the solids in milk not fat. In discussing "The Relation Between Milk Solids and the Yield of Cheese," and referring to the milk delivered daily to the station creamery, he says:

"Nearly all of the milks examined in July and August were abnormal on account of the very low per cent. of solids not fat which they contained. As a general rule, mixed milk from herds contains about 9 per cent. of these solids, and the variation from this is rarely more than a few tenths either way, although the fats may vary several per cent. in the same milks.

"Evidently some other explanation than added water must be sought for the low per cent. of solids not fat. That it is not characteristic of the cows from which the milk is obtained is shown by the fact that analyses of mixed milk from the same patrons in April and May gave over 9 per cent. of solids not fat, and this is also true with the analyses in October.

"The only unusual conditions which have been apparent during this season are directly attributable to the prolonged drought which commenced in May and lasted until about September 1. In consequence of this, pastures have been extremely short, and the little grass available has been very dry, partaking more of the nature of hay than succulent food. The effect of this has been to reduce the quantity of milk delivered in August to about one-half what it was June 1. Usually where the yield of milk is reduced through advanced lactation, or through change of food, the solids not fat are slightly increased, but in this case the opposite is true. It seems probable that insufficient nutrition is the chief factor in reducing the solids in these milks, as many of our patrons have fed but little extra to their cows even when the pastures were the poorest. This conclu-

sion is warranted by the fact that those patrons who are known to have fed considerable grain through the summer have supplied milk that contained about the average per cent. of solids not fat.

This is well illustrated in the following table in which analyses of milk delivered by a few patrons who are known to have fed their cows considerable grain during the summer are compared with analyses of milk from patrons whose cows received nothing except what could be obtained from extremely short pastures. As nearly all of the patrons gave some extra feed, only those are included who are known to have fed heavily or not at all:

MILK FROM PATRONS WHO FEED GRAIN.			MILK FROM PATRONS WHO DID NOT FEED GRAIN.		
Fat. Per cent.	Solids not fat. Per cent.	Cheese yield from 100 pounds milk.	Fat. Per cent.	Solids not fat. Per cent.	Cheese yield from 100 pounds milk.
4.66	8.81	11.94	4.22	8.25	10.31
4.15	8.99	11.34	4.48	8.16	10.74
4.43	8.76	10.66	4.03	8.26	9.91
3.87	8.71	9.80	3.87	8.02	9.38
4.51	8.87	11.43	3.49	8.26	8.95
Av. 4.28	8.82	11.03	4.02	8.19	9.86

"This condition has not been local, for numerous reports from other sections that have suffered from drought have shown unusually low yields of cheese from 100 pounds of milk, whereas the yield of butter from 100 pounds of milk has been about the average. Owing, however, to the small quantity of milk produced, the yield of butter per cow has been greatly reduced.

"The same effect was observed by Dr. Van Slyke in New York factories during the severe drought of July and August, 1893, the casein and the yield of cheese being found low, while the fat remained about the average for these months."

It may save you time and money to be informed that when you need a blood purifier Ayer's Sarsaparilla is the kind most in favor with the medical profession. It is the standard, and, as such, the only blood purifier admitted at the Chicago World's Fair.

MANLY VIGOR



ONCE MORE in harmony with the world, 2000 completely cured men are singing happy praises for the greatest, grandest and most successful cure for sexual weakness and lost vigor known to medical science. An account of this wonderful discovery, in book form, with references and proofs, will be sent to suffering men (sealed free). Full manly vigor permanently restored. Failure impossible.

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RADISHES, 45c. per pound, postpaid. Peas, Beans and all Vegetable Seeds at correspondingly low prices. It will pay you to let us hear from you before you buy. We are the Market Gardener and Farmer's friend. OUR PRICES SUIT THE TIMES.

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When good, live seed is sown, the planter's battle is half won. The seeds for wide-awake farmers and gardeners are

GREGORY'S HOME GROWN SEEDS.
Their vitality is assured. Everything that pays they grow. Get Gregory's Seed Catalogue for 1896 (mailed free) and you'll have a book worth reading. Filled with hard facts for planters.
J. J. H. GREGORY & SON, Marblehead, Mass.



More Brains

Are often required to determine what shall be "kept out" of a harvester than to say what shall "go into" it. It is so easy to do the wrong thing—and the wrong thing has such an inviting appearance—that less experienced manufacturers than the McCormick Co. frequently find themselves "putting their foot in it" and building a machine one season which they are obliged to abandon a season or two later.

Because a good thing is a good thing in its place, it doesn't necessarily follow that it is a good thing in a harvester or mower.

Fight shy of the machine whose best recommendation is that "it seems to have a bright idea" in its make-up. Remember this every day in the year: McCormick Machines will work where others fail.

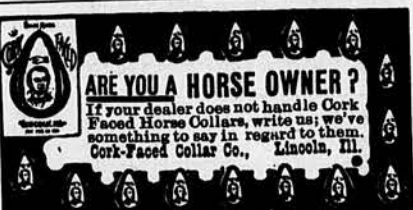
The makers of McCormick Machines have been at it for sixty-five years. By long experience they have found out how to build the best binders and mowers.

The new McCormick Light-Running Open Elevator Harvester and Binder, the McCormick No. 4 Steel Mower and the McCormick Corn Harvester are unequalled for capacity, light draft, efficiency of service and long life. Built, sold and guaranteed by the McCormick Harvesting Machine Co., Chicago.

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Simple and Compound Traction and Portable Engines are Unsurpassed. Then There Are The NEW RUMELY SEPARATORS. SELF FEEDERS AND WEIGHERS. MOUNTED HORSE POWERS. SUPERIOR SAW MILLS.

Write for our new Catalogue—Free.

M. RUMELY CO., LA PORTE, IND.

The Question of Freight Rates on Fat Stock.

EDITOR KANSAS FARMER:—A great deal of interest has been shown in regard to the outcome of the meeting of the Railroad Commissioners, at Topeka, on the 7th of April, for upon the result many thousands of dollars may be saved to the producers of the fat hog. At that meeting evidence that the new system of weighing cars has increased the freight paid to the railroad company will be introduced. This evidence will be conclusive and convincing beyond the shadow of a reasonable doubt and will come from sources that cannot be questioned. Plain figures will be introduced that will show that the shippers to the Kansas City market have been compelled to pay more money to the railroads for hauling their live stock to market during the first three months of 1896 than ever before during the corresponding periods of former years. It is a well-known fact that the railroads have at their command the shrewdest and best talent obtainable, but no amount of argument or eloquence can offset the plain fact that the shipper is now, and has been since the first day of January, 1896, paying more money than previously for similar service performed in previous years. We do not believe that the shippers are at all unreasonable in demanding that the rates be reduced in order that charges may not exceed what they were previous to the new system, for then the charges were large enough and it did not take the railroads all these years to find out that they were hauling stock at a loss or that they were not making money, and if such had been the case it stands to reason that rates would long since have been advanced to a point at which the poor railroads would not have to haul stock for accommodation. In these days of invention and comparatively cheap labor it is reasonable to presume that the railroads do not fail to take advantage of such factors to cheapen costs of running trains, and why it should be necessary every so often to put into effect new and higher rates it is not clear to the average mind. It appears that once in awhile some one ought to get the benefit of a reduction, but we defy the railroads to prove that cattle are being shipped to market at a less cost than in former years, and we can prove and will prove that the new rates are higher than the old.

ZEB F. CRIDER COMMISSION CO.

A breeder would have to have considerable confidence in his stock to give away \$1,000 worth as an advertisement and expect future sales to make it up. Willis Whitney, of Salem, O., has faith it will work. See his advertisement on page 1.

A DOCTOR'S SECRET.

How He Keeps Well in Spite of Exposure and Bad Weather.

One of the best-known eminent physicians of the United States, in speaking on good health, said: "The way I keep myself from getting sick, in the midst of all sorts of exposures, is as follows: I always keep my feet warm and dry, my head cool, body clean, eat moderately three times a day, use no tobacco or stimulus, sleep in a well-ventilated room, going to bed early, and, when exposed to any especial danger, such as March weather or contagious diseases, I take a dose of Pe-ru-na before each meal; consequently I am never sick. This is my secret."

Such a testimony should be heeded by all—the sick and well alike. Those who already are the victims of cough, loose or tight; la grippe, severe or mild; catarrh, acute or chronic; bronchitis, serious or trivial; consumption, lingering or quick, the remedy that relieves quickly and readily, cures quickly and permanently restores the health, is Pe-ru-na. Pe-ru-na, when once used in the family, becomes a household fixture. As a spring tonic and blood purifier, both to prevent and cure disease, Pe-ru-na has no equal. It cleanses, strengthens, soothes, purifies, invigorates, regulates and restores.

A sixty-four page book, instructively illustrated, on chronic catarrh and all catarrhal diseases, and written by Dr. Hartman, will be sent free of charge to any address by The Pe-ru-na Drug Manufacturing Co., of Columbus, O.

Publishers' Paragraphs.

Read the advertisement on page 1—"100 Pigs Given Away"—and write for particulars at once.

Asbestine Cold Water Paint is something that will interest every farmer at this season of the year, on account of its cheapness and great value. Look up the advertisement of W. E. Campe's Supply Co., Kansas City, Mo., in our "Special Want Column."

One of the encouraging features in the Chicago wool market is the removal of Messrs. Silberman Bros. from their present location at 108-14 Michigan street to 122-8 Michigan street, corner La Salle avenue. This building contains some of the best wool lofts in the city. Three good-sized commission houses vacate it and Messrs. Silberman Bros. take possession and will occupy the entire space heretofore used by the three—the seven-story building. Their large business requires them to seek larger quarters. They are anticipating plenty of consignments during the coming season.

OF INTEREST TO FRUIT-GROWERS.—We are in receipt of the annual spring catalogue issued by Wm. Stahl, of Quincy, Ill., giving a full description of all injurious insects to fruit, also preventives for same by use of fungicides. This catalogue gives a detailed account of the above in full. Any of our readers who are interested in fruit culture will do well to send for this catalogue, which is mailed free upon application. The subject of spraying the fruit trees, plants and vines to prevent the ravages of insects and fungous diseases is a critical one, and should be investigated by every fruit-grower.

Millions of Gold

In sight at Cripple Creek, Colo. Only twenty-three hours from Topeka by the Santa Fe Route, the only broad-gauge route passing right by the "Anaconda" and all the famous mines. See the nearest Santa Fe agent for all particulars, or write to Geo. T. Nicholson, W. J. Black, G. P. A., A. G. P. A., Chicago, Ill. Topeka, Kas.

A Look Through South Missouri for Four Cents.

The Kansas City, Fort Scott & Memphis Railroad Company has just issued a magnificent book of sixty or more photo-engraved views of varied scenery in south Missouri. From these views an accurate knowledge can be obtained as to the productions and general topography of that highly-favored section that is now attracting the attention of home-seekers and investors to the country over.

The title of the book is "Snap Shots in South Missouri." It will be mailed upon receipt of postage, 4 cents. Address J. E. Lockwood, Kansas City, Mo.

If you want KANSAS FARMER and Semi-Weekly Capital, send us \$1.50. Or, KANSAS FARMER and Topeka Advocate, send \$1.50.

LIVE STOCK AUCTIONEERS.

Live Stock Auctioneer. JAS. W. SPARKS, Marshall, Mo. Sales made everywhere. Refer to the best breeders in the West, for whom I sell. Satisfaction guaranteed. Terms reasonable. Write before claiming dates. Mention KANSAS FARMER.

ELI ZIMMERMAN, Hiawatha, Kansas, Live Stock and General Auctioneer. Pedigreed and registered live stock a specialty. Write for dates. Sales conducted anywhere in the country. Best of references and satisfaction guaranteed.

C. A. SAWYER, FINE STOCK AUCTIONEER—Manhattan, Riley Co., Kas. Have thirteen different sets of stud books and herd books of cattle and hogs. Complete catalogues. Retained by the City Stock Yards, Denver, Colo., to make all their large combination sales of horses and cattle. Have sold for nearly every importer and noted breeder of cattle in America. Auction sales of fine horses a specialty. Large acquaintance in California, New Mexico, Texas and Wyoming Territory, where I have made numerous public sales.



IT DOESN'T COST YOU ONE CENT

TO GET OUR CATALOGUE OF

WINDMILLS,

Pumps & Gasoline Engines

FAIRBANKS, MORSE & CO., Station "A," KANSAS CITY, MO.

THE STRAY LIST.

FOR WEEK ENDING MARCH 12, 1896.

Riley county—James R. Young, clerk. HEIFER—Taken up by N. G. Salberg, in Jackson tp. (P. O. Randolph), one red heifer, 2 years old, white in forehead, white under belly, white tip to tail; no marks or brands; valued at \$12.

FOR WEEK ENDING MARCH 19, 1896.

Lyon county—M. Q. Starr, clerk. STEER—Taken up by O. W. Kirby, in Center tp., P. O. Elco, one red and white spotted steer, coming 3 years old, tip off left ear, swallow-fork in end of right ear, indistinct brand on right hip, an appearance of brand on left hip, dehorned, medium size.

Cowley county—S. J. Neer, clerk. HORSE—Taken up by J. W. Searle, in Dexter tp., P. O. Dexter, March 3, 1896, one bay horse, weight 900 pounds, splits in right ear.

FOR WEEK ENDING MARCH 26, 1896.

Cowley county—S. J. Neer, clerk. HEIFER—Taken up by R. J. Stewart, in Otter tp., (P. O. Cloverdale), about September 1, 1895, one small red yearling heifer, white spot in forehead, white on belly, bush end of tail white, blind in left eye, no brand.

Crawford county—John W. Eokes, clerk. COLT—Taken up by A. J. Wilson, of Pittsburg, March 5, 1896, one dark bay two-year-old horse colt, both hind feet white; valued at \$10.

Cherokee county—T. W. Thomason, clerk.

MULE—Taken up by J. S. Mohle, in Pleasant View tp. (P. O. Opolis), February 26, 1896, one dark brown horse mule, fifteen hands high, weight between 900 and 1,000 pounds, supposed to be 6 or 7 years old, slit in left ear, pigeon-toed in front feet, harness marks; valued at \$25.

Osborne county—W. F. Vawter, clerk.

STEER—Taken up by Joseph Hirst, in Jackson tp. (P. O. Cheyenne), February 5, 1896, one red steer, 2 years old, branded R on right hip and notch in right ear; valued at \$17.35.

Woodson county—W. O. Eades, clerk.

STEER—Taken up by N. H. Hagerman, in Everett tp., four miles west of Neosho Falls, February 16, 1896, one red steer with white face, white belly and some white on back, dehorned, branded on right hip with horseshoe, supposed to be 4 years old, weight about 1,100 pounds; valued at \$35.

FOR WEEK ENDING APRIL 2, 1896

Barber county—B. D. Gaddie, clerk.

MARE—Taken up by Geo. L. Graves, in Elwood tp., March 7, 1896, one bay mare, five feet six inches high, left hind foot white, no brands; valued at \$20.

THOS. B. SHILLINGLAW, Real Estate and Rental Agency, 115 East Fifth St., Topeka, Kas. Established in 1884. Calls and correspondence invited.

TO BREEDERS!

IN ATTENDING THE

Great Hereford Cattle Sale

At Weavergrace Farm, at

Chillicothe, Mo., Wednesday, April 15, 1896,

Take the

Chicago, Milwaukee & St. Paul RAILWAY.

All trains stop at the farm on date of sale. Parties leaving Kansas City at 9:30 a. m. may attend the sale and return the same evening.

City Passenger and Ticket Agent, 800 Delaware St., Kansas City, Mo. J. H. VEITCH, Div. Frt. & Pass. Agent.

CREAM SEPARATOR INFRINGERS.

We notice, by the latest advertisement of our "would-be competitors" that they have succumbed to just what we predicted, the "slippery hold upon the stump" has given way, and they are "in the mire," and, although still slinging mud, we feel called upon to thank them for placing the

IMPROVED UNITED STATES SEPARATOR

out of reach of their mud-slinging, as they direct their *insinuating and intimidating advertisements* toward Infringers whose "agents and representatives—and many of the unfortunate buyers of their machines—have already been perpetually enjoined from the further use of the same;" which, even if any one had for a moment been hoodwinked into giving any weight to, would most assuredly and rightly place the Improved United States Separator where every truthful and honorable competitor knows it belongs, out of the range of their vituperations, as

No agent, dealer or user of the Improved United States Separator has ever been enjoined, or sued, or even molested, in its peaceful sale or use.

But how ridiculous their insinuations on their face, because if persons have been enjoined, they can not be selling or using the Separators. Any "wayfaring man, though a fool," knows that;

and it is very apparent to every experienced person that such advertisements are published in the hope of retaining the trade which the Improved United States Separator is winning away from them by its superior merits.

We call the attention of the dairy public still further to the fact that the Improved United States Separator has not only never had a suit brought against it by any one, and never been enjoined, but every person whom our mud-slinging competitors claim was enjoined under their trivial and greatly magnified scarecrow patent suit from using another Separator, entirely for-ign in every way to the Improved United States Separator, and in no way relating to it or affecting it, has since that decree of the Court purchased, and is now using, the Improved United States Separator, without molestation; and, therefore,

To Escape all Liability,

All dairymen who wish to be free from such liability of claims of infringement should

Buy the Improved United States Separator.

Then they have the Separator that not only excels all others on its merits, but all liability of infringement is avoided, as the Improved United States Separators are fully protected by our patents.

VERMONT FARM MACHINE COMPANY, BELLOWS FALLS, VT.

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.

SICK COW.—I have a cow that first began coughing then began to lose flesh. Her hair stands out and looks dead. Her nose runs now.

North Topeka, Kas. G. F. M.

Answer.—Your cow has symptoms of tuberculosis. Have her examined by a veterinarian, of whom you have several near you. If it proves to be that, medicine will do her no good, and be useless expense to you.

BAD TEETH—WORMS.—(1) I have a mare that holds her head on one side when she eats corn, and now she sometimes jerks her head up suddenly. (2) I have two others that have worms.

Jerome, Kas. J. A. V.

Answer.—(1) Your mare has defective teeth. Call in a veterinary dentist. Medicine will do no good. (2) Inject into the rectum twice a week, 1 ounce of turpentine mixed with four ounces of raw linseed oil. It will require several weeks to rid the worms out.

PIGS COUGHING.—I have some pigs six months old that began to cough last fall and it seems to hang to them. Two of them died a few weeks ago, but I don't know whether it was from the cough or not.

Canada, Kas. A. S.

Answer.—The coughing may be from rusty pens. If so clean up. Mix together 1 part nitrate of potash and 2 parts sulphur and give a heaping teaspoonful in swill to each pig once a day for two weeks.

Deafness Cannot be Cured

by local applications, as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the eustachian tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, O.

Sold by druggists, 75c.

You can club any publication, no matter where published, with the KANSAS FARMER and save money. If you don't find what you want in our offers, send us your list and get figures.

The Solid Through Trains

of the Nickel Plate Road, equipped with the most modern constructed day coaches and luxurious sleeping and dining cars, illuminated throughout with the famous Pintsch gas lights and colored porters in charge of day coaches, are some of the features of this popular line that are being recognized by travelers seeking the lowest rates and fast time.

Seekers for Homes,

Who wish to start over again in some locality where good land is plentiful and climate is favorable, should post themselves relative to the irrigated districts of Kansas, New Mexico and Arizona, the dirt-cheap farms of Oklahoma, and the fruit tracts in southern Texas.

To find out the facts address G. T. Nicholson, G. P. A., Monadnock building, Chicago, or J. E. Frost, Land Commissioner, Topeka, Kas.

And the Santa Fe is the best line to almost every part of the Great Southwest.

Ho! for Cripple Creek.

Remember that the Chicago, Rock Island & Pacific is the only line running directly from the East to Colorado Springs, the natural gateway for the Cripple Creek district.

Colorado Springs lies at the foot of Pike's Peak at its eastern base, and Cripple Creek is part way down the southwest slope of Pike's Peak and near its western base.

Two all rail routes from Colorado Springs are offered you. One by the Midland railway up Ute Pass, via Summit, to Cripple Creek. Another over the Denver & Rio Grande, via Pueblo and Florence, to Cripple Creek. Take the Great Rock Island Route to this wonderful gold mining camp. Maps, folders and rates on application. Address JNO. SEBASTIAN, Gen'l. Pass. Ag't, Chicago.

Horse Owners! Try



GOMBAULT'S Caustic Balsam

A Safe Speedy and Positive Cure

The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes all Bunches or Eruptions from Horses and Cattle. SUPERSEDES ALL CAUTERY 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.

When you write mention Kansas Farmer.

MARKET REPORTS.

Kansas City Live Stock.

KANSAS CITY, March 30.—Cattle—Receipts since Saturday, 4,138; calves, 64; shipped Saturday, 9,0 cattle, no calves. The market was slow and generally steady. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.			
No.	Ave. Price.	No.	Ave. Price.
40.....	1.393 \$3.90	57.....	1.566 \$3.83
16.....	1.459 3.82 1/2	20.....	1.527 3.80
22.....	1.338 3.75	40.....	1.414 3.75
22.....	1.315 3.70	6.....	1.336 3.70
19.....	1.493 3.65	4.....	1.215 3.65
55.....	1.173 3.60	1.....	1.340 3.60
18.....	1.046 3.57 1/2	9.....	1.17 3.50
1.....	1.070 3.50	1 Can.....	1.000 2.90

TEXAS AND INDIAN STEERS.			
No.	Ave. Price.	No.	Ave. Price.
175.....	1.314 \$3.55	50.....	1.123 \$3.55
102.....	1.152 3.50	194.....	1.039 3.45
19.....	1.054 3.40	44.....	924 3.30
74.....	992 3.20	20.....	1.012 3.10

SOUTHWESTERN STEERS.

No.	Ave. Price.	No.	Ave. Price.
25.....	1.124 \$3.60		

TEXAS AND INDIAN COWS.

No.	Ave. Price.	No.	Ave. Price.
1.....	860 \$3.00	2.....	725 \$2.90
16.....	964 2.80	3.....	1.153 \$3.45
1.....	1.400 2.75	18.....	835 \$3.60
1 Ind.....	750 2.50	3.....	1.083 \$3.00

COWS AND HEIFERS.

No.	Ave. Price.	No.	Ave. Price.
21.....	1.230 \$3.65	19.....	1.216 \$3.65
42.....	1.116 3.60	4.....	1.235 3.50
28.....	927 3.40	14.....	1.080 3.35
11.....	922 3.30	5.....	1.184 3.25
28.....	970 3.20	43.....	719 3.15
81.....	1.077 2.75	3.....	883 2.75
8.....	1.000 2.55	2.....	1.110 2.65
1.....	1.093 2.40	1.....	1.088 2.50
2.....	98 2.15	1.....	920 2.35

STOCKERS AND FEEDERS.

No.	Ave. Price.	No.	Ave. Price.
27.....	559 \$3.80	7.....	567 \$3.85
40.....	1.149 3.70	20.....	1.220 3.70
85.....	452 3.30	74.....	934 3.25
2.....	1.135 3.00	3 stk.....	886 2.25

Hogs—Receipts since Saturday, 5,892; shipped Saturday, 478. The market was steady to 10c lower. The following are representative sales:

No.	Ave. Price.	No.	Ave. Price.
82.....	210 \$3.84 1/2	69.....	218 \$3.82 1/2
37.....	207 3.80	59.....	196 3.80
80.....	223 3.80	54.....	177 3.80
82.....	216 3.80	53.....	172 3.80
22.....	176 3.77 1/2	73.....	263 3.77 1/2
60.....	275 3.75	40.....	244 3.75
78.....	214 3.75	72.....	239 3.75
98.....	238 3.75	90.....	216 3.75
72.....	269 3.75	5.....	204 3.72 1/2
72.....	141 3.72 1/2	66.....	238 3.70
73.....	255 3.67 1/2	5.....	264 3.65
63.....	295 3.65	55.....	244 3.65
29.....	271 3.65	67.....	252 3.62 1/2
68.....	265 3.57 1/2	53.....	285 3.57 1/2
7.....	285 3.55	66.....	284 3.55
64.....	245 3.50	73.....	186 3.50
85.....	250 3.45	6.....	383 3.40
6.....	395 3.25	5.....	428 3.15

Sheep—Receipts since Saturday, 5,883; shipped Saturday, 781. The market was uneven. The following are representative sales:

No.	Ave. Price.	No.	Ave. Price.
44 spg. lbs.....	51 \$7.50	10 spg. lbs.....	38 \$6.00
45.....	56 3.25	374 Ks ew.....	71 2.90

Horses—Receipts since Saturday, 270; shipped Saturday, 118. The week's market opened with a fair attendance for Monday. The supply of horses is fairly large, but there is a scarcity of prime drivers, such as the eastern buyers wanted. The pluggy stock was slow and the market ruled barely steady with the low prices last week. There was no improvement in the demand for mules. Many buyers are expected at the market this week owing to the sale of high grade horses which takes place the latter part of this week.

Chicago Live Stock.

CHICAGO, March 30.—Cattle—Receipts, 11,000; market slow, steady; fair to best beefs, \$3.40 @ \$4.30; stockers and feeders, \$2.75 @ \$3.85; mixed cows and bulls, \$1.50 @ \$3.75; Texas, \$2.85 @ \$3.8.

Hogs—Receipts, 31,000; market steady for light, 3c lower for heavy light, \$3.85 @ \$4.15; rough packing, \$3.60 @ \$3.70; mixed and butchers, \$3.80 @ \$4.00; heavy packing and shipping, \$3.75 @ \$3.90; pigs, \$3.50 @ \$4.00.

Sheep—Receipts, 18,000; market 10c lower; native, \$2.75 @ \$3.75; western, \$3.40 @ \$3.75; Texas, \$2.75 @ \$3.00; lambs, \$3.75 @ \$4.00.

St. Louis Live Stock.

ST. LOUIS, March 30.—Cattle—Receipts, 4,803; market steady to strong; native steers, \$3.60 @ \$4.00; Texas steers, \$2.75 @ \$3.90.

Hogs—Receipts, 8,000; market 5 to 10c lower; heavy, \$3.60 @ \$3.90; light, \$3.70 @ \$3.95.

Sheep—Receipts, 1,500; market steady.

Chicago Grain and Provisions.

	March 30.	Opened	High'st	Lowest	Closing
Wh't—March.....					62
May.....	63 1/2	64 1/2	63 1/2	63 1/2	63 1/2
July.....	64	64 1/2	63 1/2	63 1/2	63 1/2
Corn—March.....					28 1/2
May.....	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
Sept.....	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2
Oats—March.....					18 1/2
May.....	19 1/2	19 1/2	19 1/2	19 1/2	19 1/2
July.....	20 1/2	20 1/2	19 1/2	19 1/2	19 1/2
Pork—March.....					8 47 1/2
May.....	8 83	8 83	8 55	8 57 1/2	8 57 1/2
July.....	9 00	9 03	8 75	8 80	8 80
Lard—March.....					5 01
May.....	5 17 1/2	5 17 1/2	5 10	5 10	5 10
July.....	5 32 1/2	5 32 1/2	5 25	5 25	5 25
Ribs—March.....					4 60
May.....	4 77 1/2	4 77 1/2	4 65	4 65	4 65
July.....	4 87 1/2	4 87 1/2	4 75	4 75	4 75

PURE EARLY OHIO SEED POTATOES.

A LARGE STOCK IN PRIME CONDITION FOR SEED. Full of new blood and vigor from Northern seed. Not "run out," rough or grub-eaten potatoes, but sound tubers of good size—some very large—free from sprouts, and by careful storage in a cellar built especially for potatoes, they have kept the vigor so essential to seed potatoes. The crop was raised by myself, several acres in one field yielding 330 bushels per acre. They will yield as well as Northern seed and are placed at prices in reach of everybody.

45 cents per bushel, in sacks, f.o.b., at Topeka. Ten bushels or more 30c per bu.

B. H. PUGH, Topeka, Kansas.

Kansas City Grain.

KANSAS CITY, March 30.—There was a disposition to-day to hold wheat a little higher, but buyers were very scarce. One car of choice red wheat was held at 76c and telegrams from Chicago quoted No. 2 red at 4c above the May, price. Very few samples were offered here.

Receipts of wheat to-day, 11 cars; a year ago, 5 cars.

Sales were as follows on track: Hard, No. 2, 2 cars 62c; No. 3, 1 car choice 55, 1 car poor 4c; No. 4, nominally 40 @ 44c; rejected, nominally 31 @ 38c; no grade, nominally 30 @ 35c. Soft, No. 2 red, nominally 73 @ 74c; No. 3 red, 1 car 67c; No. 4 red, nominally 50 @ 55c; rejected, 1 car 48c. Spring, No. 2, nominally 62c, 5 cars special 63c; No. 3, nominally 58 @ 61c; rejected, 45 @ 52c; white, nominally 48 @ 60c.

Corn prices were unchanged. Receipts were small and there was a fair scattering demand. May was quoted nominally at 24c and May white at 25c.

Receipts of corn to-day, 26 cars; a year ago, 29 cars.

Sales on track by sample: No. 2 mixed, 5 cars 23 1/2c; No. 3 mixed, 2 cars 22 1/2c; No. 4 mixed, nominally 21 1/2 @ 22c; white, No. 2, 3 cars 24c; No. 3, nominally 23 1/2c.

Receipts of oats to-day, 12 cars; a year ago, 1 car.

Sales by sample on track: No. 2 mixed, nominally 16 @ 16 1/2c, 1 car choice color 18 1/2c; No. 3, nominally 15c; No. 4, nominally 14 @ 14 1/2c; no grade, nominally 13c; No. 2 white, nominally 19c; No. 3 white, nominally 18 1/2c.

Hay—Receipts, 71 cars. Receipts to-day were rather large. There is just about enough demand to clean up the good hay each day. Timothy, choice, \$11.00 @ \$11.50; No. 1, \$9.50 @ \$10.50; No. 2 \$7.00 @ \$8.50; No. 3, \$4.50 @ \$5.50; choice prairie, \$6.50 @ \$7.50; No. 1, \$3.50 @ 6.25; No. 2, \$4.50 @ 5.25; No. 3, \$3.50 @ 4.25; No. 4, \$3.00; straw, \$3.50 @ 4.00.

St. Louis Grain.

ST. LOUIS, March 30.—Receipts, wheat, 12,512 bu.; last year, 9,846 bu.; corn, 92,335 bu.; last year, 9,985 bu.; oats, 79,326 bu.; last year, 21,900 bu.; shipments, wheat, 24,735 bu.; corn, 226,130 bu.; oats, 40,475 bu. Closing prices: Wheat—Cash, 69c bid; March, 58 1/2c; May, 59 1/2 @ 59 1/2c; July, 59 1/2c. Corn—Cash, 26 1/2 @ 26 1/2c; March, 26 1/2c; May, 26 1/2c; July, 27 1/2c. Oats—Cash, 18 1/2c; March, 18 1/2c; May, 19 1/2 @ 19 1/2c; July, 18 1/2c.

Kansas City Produce.

KANSAS CITY, March 30.—Butter—Creamery, extra separator, 18c; firsts, 16 1/2c; dairy, fancy, 16c; fair, 12c; store packed, fresh, 10 1/2 @ 11c; packing stock, 7c; country roll, fancy, 14c; choice, 11 @ 12c.

Eggs—Strictly fresh, 8 1/2c per doz.

Poultry—Hens, 6 1/2c; springs, 10c; broilers, 3 to 2 1/2 lbs., from \$3.00 @ \$3.50 per doz.; roosters, 15c; young, 17 1/2c; turkeys, hens, 11c; gobblers, 10c; old, 8c; ducks, 9 1/2c; geese, fat, 5 1/2 @ 6c; pigeons, 90c @ \$1.00 per doz.

Fruits—Apples, fancy, \$5.00 @ \$5.50 per bbl.; fair to good, \$3.50 @ \$3.75.

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"PURE BLOODED" BLACK TURKEYS.

the bronze turkey in England has done considerable in recent years to depose it of its quondam supremacy. The black is a handsome variety. All black fowls are handsome, American prejudices to the contrary notwithstanding. Black plumage means black beak and legs, or approximately so, with white skin. Black is the most lustrous plumage we have. In the sunlight the greens and purples are extremely beautiful. But black in this country, owing to unreasonable prejudice, is not a popular color. Only one black variety of fowls is widely popular—the Langshan. The Minorca narrowly escaped being popular. But black ought to be popular, for its wearers are usually hardy and always beautiful. So, with this prejudice in view, we need not wonder that black turkeys are comparatively few in number. The black turkey should be black throughout. The American standard makes "feathers other than black" a disqualification. But, despite this rigidity, the variety often "harks back" to its banded ancestors, and bands will show on wing feathers and tail. These bands do not hurt the flavor of the flesh, although they may prevent the bird from winning a prize. If the breeder of black turkeys will fatten all that show these bands—marks of heredity—and use only the solid colored specimens for breeders, this tendency will be reduced, though it is impossible to predict how many generations it will take to obliterate it wholly.—American Agriculturist.

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To make poultry a success, they should receive good care and management, the same as any other stock. When we want milk, lots of it, and good butter, we protect our cows from storms, and feed them what we think will produce rich milk and good butter. Hence we must have for our poultry a warm poultry-house where there will be plenty of sunshine and protected through the day as well as night from the storms.

The best feed I ever found to make hens lay was wheat, not threshed, but cut and fed to them straw-head and all. After they have picked the wheat from the heads, one has the straw for bedding. It would pay any farmer or poultryman to have wheat cut and saved, straw and all; have it loose or in sheaves, and feed what they need. When wheat is only 50 cents per bushel there is no feed so cheap as wheat.

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Milk is one of the greatest egg pro-

ducers known. The great trouble with many farmers is that they think the poultry can get through the entire year without feeding. Not long ago I hauled a load of corn to a man whose wife kept a lot of chickens. When unloading it every time an ear of corn would fall on the ground he would pick it up for fear a chicken might get a grain. Well, I thought that was tough on the poultry. Poultry requires feed the same as any other stock, and when eggs are 20 cents per dozen it will pay to give more attention to them.—E. Wing, in Orange County Farmer.

AMONG THE POULTRY.

The nonsetters are the best egg producers.

Geese are chiefly valuable for their feathers.

Do not discard a variety as useless after one trial.

It is poor economy to stint the feed of growing chickens.

The principal point when chickens are to be sold is earliness.

Keep a supply of ground bone where the fowls can help themselves.

Fresh earth in the poultry quarters for scratching and dusting is indispensable.

When the young chickens seem droopy examine them closely for lice, especially around the throat and under the wings.

As a general rule fowls of two years old make the best breeders. They should not be sold until others can take their places.—St. Louis Republic.

The Country's Egg Production.

The extent of the egg business of the United States is not generally realized. In 1880 the first hen census put the annual egg production at 456,875,080 dozen. Ten years later it had risen to 817,211,146, an increase of 360,336,066 dozen, and there is every reason to believe that the proportionate gain since then has been even greater.

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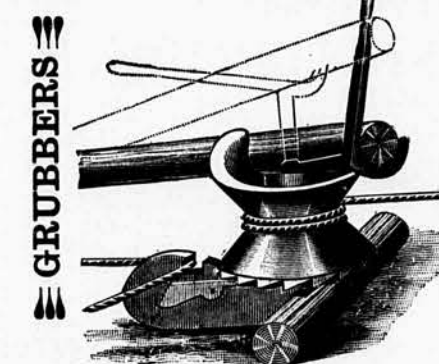
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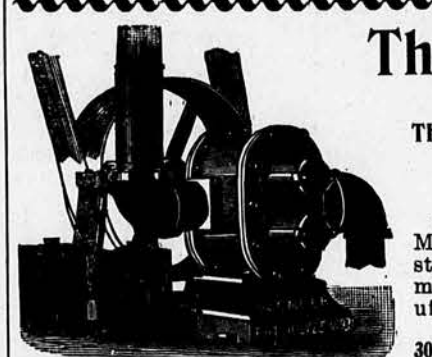
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Slaughtered in Kansas City.....	925,167	2,170,827	587,015		
Sold to feeders.....	392,262	1,376	111,445		
Sold to shippers.....	218,505	273,999	69,784		
Total Sold in Kansas City, 1895.....	1,533,234	2,346,202	748,244	41,588	

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CHOICE SOUND SEED SWEET POTATOES.—C. Yellow Nansemond, Yellow Jerseys, Red Nansemond, Southern Queen, 50 cents per bushel, put up in barrels and delivered to railroad depot here. Address Topeka Produce Co., 304 Kansas Ave., Topeka, Kas.

I HAVE.—The following varieties of good seed sweet potatoes: Yellow Jerseys, Yellow Nansemond, Red Nansemond, in barrels and delivered to railroad depot here. Address Eugene R. Hayes, Topeka, Kas.

PUBLIC SALE OF SHORT-HORN CATTLE.—At Sabetha, Kas., Friday, April 10, 1896, by John McCoy, of Sabetha, Kas., and L. J. Hitchcock, Salem, Neb. The offering consists of forty registered cattle—cows with calves at foot, heifers and seventeen extra bulls, all Cruickshank-topped. Write for catalogue.

MEADOW BROOK HERD OF SHORT-HORNS.—Registered bulls at reasonable prices. F. C. Kingsley, Dover, Kas.

DETECTIVE.—We want a man in every locality to act as private Detective under instructions. Experience unnecessary. Particulars free. Universal Detective Agency, Elst Bldg., Indianapolis, Ind.

A FEW BUSHELS.—Of the famous stock pea, \$1.20 per bushel f. o. b. Mammoth Springs, Ark. Address Walter Lukens, Pilot, Ark.

S. S. HAMBURGS, S. L. WYANDOTTES, DARK S. Brahmas. Finely bred, fine birds. Eggs \$1 for fifteen. Mrs. Lily McCully, Pontiac, Kas.

FARM LOANS.—I have just received sixty thousand dollars to loan upon improved eastern Kansas farms, upon the most favorable terms ever before offered. Interest seven per cent. per annum, payable annually, giving the borrower the privilege of selecting his time in the year when his interest will fall due. Farmers will appreciate the convenience and benefit of this arrangement. Also giving privilege of making payments on principal before maturity of mortgage. Geo. L. Epps, Room 20, Columbian Building, Topeka, Kas.

FARMERS!—Improve your poultry. The Black Langshan is the best winter egg-producing large fowl. Eggs for sale at \$1.50 for thirteen or \$2.50 for twenty-six. T. V. Codrington, 1701 Huntoon street, Topeka, Kas.

NURSERY STOCK SURPLUS.—Send for prices. Small fruit, apples, peaches, pears, cherries, dirt cheap. Frank Holsinger, Rosedale, Kas.

PLANTS BY MAIL.—Fuchsias, Coleus, Geraniums, Roses, Begonias, Carnations, etc., assorted, strong, well-rooted. Will send as samples, fifteen for 50 cents (2-cent stamps); for clubs of five, these (separate) for \$2. Satisfaction and safe arrival guaranteed. Try them. Tyra Montgomery, Box 186, Larned, Pawnee Co., Kas.

AUBURN POULTRY YARD.—Eggs for sale from prize-winning B. Langshans and S. S. Hamburgs. B. Langshan pen headed by first premium cock at the State poultry show at Topeka, 1896; first on Hamburg breeding pen. A few cockerels left for sale. Write for prices. Address W. E. McCarter & Son, Auburn, Kas.

EGGS! EGGS!—S. C. White Leghorn, \$1 per fifteen. From prize-winning stock. Knapp strain, scoring 88 to 89%. No inbreeding; free range. Mention FARMER. Elwood Rush, Shaw, Kas.

WANTED.—Buyers for Large English Berkshire boars. Bargains! O. P. Updegraff, North Topeka, Kas.

FOR SALE OR EXCHANGE FOR HORSES OR cattle, a new DeLaval hand separator, capacity 600 pounds per hour. Address Drawer V, Junction City, Kas.

EGGS.—Barred Plymouth Rocks, \$1 per fifteen. Mammoth Bronze turkey, \$1.50 per nine. Selected stock. D. Trott, Abilene, Kas.

160 ACRES.—Well improved, to exchange for unimproved land in eastern Kansas. Joseph Miller, Ramona, Marion Co., Kas.

KAFFIR CORN SEED.—Any quantity, sacked, 25 cents per bushel. W. D. Harry Grain Co., Conway, Kas.

MILLET SEED, CANE SEED, RED AND WHITE Kaffir corn, bought and sold in any quantity. If for sale send samples; state quantity. Kansas City Grain & Seed Co., Station A, Kansas City, Mo.

FOR SALE.—A very desirable eighty-acre improved farm at a bargain. Ten miles southwest of Topeka. Apply to Chicago Lumber Co., Topeka, Kas.

FOR SALE.—Forty good birds. Five W. P. Rocks, 5 B. P. Rocks, 5 Black Langshans, 2 Light Brahmas, 1 Black Java, 1 R. C. W. Leghorn, 3 R. C. B. Leghorns, 3 S. C. Buff Leghorns, 1 Golden Polish, 2 Partidge Cochins, 4 Buff Cochins, 3 S. L. Wyandottes, 1 White Cockerel, 2 Black Minorcas. All yearling cocks or cockerels, at \$1 to \$3. Some hens and pullets of the same kinds, at Valley Falls Poultry Yards. W. B. McCoy, Prop'r, Valley Falls, Kas.

ALFALFA.—Crop of 1895. Pure seed for sale. Address W. P. Haywood & Co., Lakin, Kas.

SPECIAL WANT COLUMN--CONTINUED.

EGGS FROM PRIZE-WINNERS.—Langshan, Leghorn, Plymouth Rock, Minorcas, Wyandotte and Hamburg fowls, bred in the purple. A few more pedigreed Yorkshire boars for sale. James Burton, Jamestown, Kas.

ORDER NOW!—Barred Plymouth Rocks exclusively. Eggs in season, \$1 for fifteen. Mrs. F. A. Hargrave, Richmond, Kas.

FOR SALE.—Six extra good summer boars, large enough for service—Wilkes and Admiral Chip strains—\$15 apiece. John Bollin, Kickapoo, Kas.

FOR SALE.—Dwarf broomcorn seed, German millet and Red and White Kaffir corn seed. Evans Bros., Sterling, Kas.

LIGHT BRAHMA EGGS FOR SALE.—From fine stock, \$1.50 per fifteen. Bert Killough, Richmond, Kas.

EGGS FROM HIGH-SCORING B. P. ROCKS.—I bought my birds direct from Mrs. Walters, of Emporia. They score from 92% to 93 points. Eggs from this pen \$2.50 per fifteen. From any other pen \$1.50 per fifteen. Buff Leghorns the same. Mrs. E. E. Bernard, Dunlap, Kas.

STRAWBERRY PLANTS.—Best varieties, \$1.50 per 1,000. J. C. Banta, Lawrence, Kas.

FOR SALE.—Pure-bred Duroc-Jersey boars. Good individuals and in line with World's Fair winners. J. F. Stodder, Burden, Kas.

PASTURE.—For 200 horses and cattle. Good feed, plenty pure water and shade. Frank Dickinson, Valence, Shawnee Co., Kas.

SCHOLARSHIP.—In business course or shorthand in a Kansas City business college for sale cheap. Address A. B. Frazer, 404 1/2 East Twelfth St., Kansas City, Mo.

FOR SALE.—An old established meat market, doing a good business. Will take good cattle or horses as part pay. Address Drawer V, Junction City, Kas.

WANTED.—Buyers for Large English Berkshires and improved types of Poland-Chinas, from prize-winners, at farmers' prices. Riverside Stock Farm, North Topeka, Kas.

FOR SALE.—One hundred and sixty acre farm, one 1/2 and a half mile from Bushong station, Lyon county, Kansas. Good spring. Price \$8 per acre. J. B. McAfee, Topeka, Kas.

FOR A PRACTICAL BUSINESS EDUCATION address Coon's National Business College, Kansas City. Self-help furnished students of limited means.

THE BLOOD IS THE LIFE.—For \$1 will send roots and herbs to make one quart Blood Purifier and one pint of Cough Syrup. Directions sent. C. E. Coburn, Box 178, Lynn, Mass.

SORGHUM SEED FOR SALE.—For prices, write S. J. H. Foote, Fort Scott, Kas.

WRITE.—To Alex. Richter, Hollywood, Kas., for information concerning sub-irrigation. Enclose 2-cent stamp for reply. Manufacturer of galvanized sub-irrigation pipe.

WANTED.—Sale bills, horse bills, catalogues and other printing, a specialty at the Mail job printing rooms, 900 North Kansas Ave., North Topeka.

SEVEN FIRST-CLASS BLACK JACKS.—For sale or trade. Prices reasonable. Sam Welchbaum, Ogden, Kas.

2,000 BUSHELS SEED SWEET POTATOES! for sale. Ten best kinds. Also plants in their season at bed-rock prices. Inquire of N. H. Pixley, Wamego, Kas.

SEED SWEET POTATOES FOR SALE.—All leading varieties. Plants in their season. Correspondence solicited. Address B. F. Jacobs, Box 122, Wamego, Kas.

EGGS FOR HATCHING.—See advertisement elsewhere. Belmont Stock Farm.

LIGHT BRAHMAS.—Old and young birds for sale, scoring 90% to 94 points. Score-cards furnished. Eggs \$1.50 per fifteen, from two high-scoring pens. Mrs. Emma Brostus, Topeka, Kas.

KAFFIR CORN AND CANE SEED.—My own raising, 35 cents per bushel. New sacks 15 cents. S. F. Glass, Marion, Kas.

SHORT-HORN BULLS.—Cruickshank-topped, for sale. Choice animals of splendid breeding. Address Peter Slim, Wakarusa, Shawnee Co., Kas.

SEED POTATOES AND CORN.—Early Ohio seed from Northern stock, large and fine, at 50 cents a bushel. Ninth-day yellow dent corn, first prize at World's fair, 75 cents per bushel. Sacks free. E. L. Jones, Box 224, Topeka, Kas.

WE MAKE A GOOD FARMER'S SPRING WAGON, two heavy backs and let-down end-gate, for \$55. Warranted. Kinley & Lannan, 424-426 Jackson street, Topeka.

FOR SHORT-HORN BULLS.—Calves and yearlings, extra fine, write D. P. Norton, Council Grove, Kas.

WANTED.—Readers of the KANSAS FARMER to try our "Special Want Column." It is full of bargains and does the business. For less than one dollar, 2-cent postage stamps are acceptable.

Salesmen Wanted! \$100 to \$125 per month and expenses. Staple line; position permanent, pleasant and desirable. Address, with stamp, King Mfg. Co., P. 29, Chicago, Ill.

TO CALIFORNIA in 2 1/2 days From KANSAS CITY, over the

Santa Fe Route!

The California Limited is a new, strictly first-class fast train, vestibuled throughout, lighted by electric gas, and running from Kansas City to Los Angeles and San Diego in two and a half days; to San Francisco, three days. Through compartment and palace sleepers, chair cars and dining cars. The California Limited leaves Kansas City 9:10 a. m., daily. G. T. NICHOLSON, G. P. A., Chicago.

J. G. Peppard 1400-2 Union Avenue, KANSAS CITY, MO.

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SEEDS

500 BERRY GROWERS WANTED to buy TWO MILLIONS STRAWBERRY PLANTS. Twenty-eight page illustrated catalogue tells about prices and how to grow all kinds of small fruits. Please mention this paper when writing. B. F. SMITH, Box 6, Lawrence, Kas.

SEEDS

ALFALFA SEED A SPECIALTY.

Cane and Millet Seeds, Kaffir, Jerusalem and Milo Maize Corn, Succulent and Hulleless Barley, Seed Oats. All crop of 1895. Write for our "How to Sow Alfalfa," and prices on seeds. McBETH & KINNISON, Garden City, Kansas.

MILLET AND CANE SEEDS

T. LEE ADAMS, 419 Walnut St. KANSAS CITY, MO. Poultry Supplies. Clover, Timothy, GARDEN SEEDS, Blue Grass Seeds.

ARTICHOKES! ARTICHOKES! ARTICHOKES!

The Coming Cheap, Necessary Hog Food—Something New. THE WHITE EUREKA ARTICHOKE.

Eureka—"we have found it"—the Artichoke that does not spread. Easily eradicated, immense yielder (500 to 900 bushels to acre), \$1.50 per bushel. White French and White Jerusalem Artichokes, \$1 per bushel; ten bushels or more 90 cents per bushel. Iowa Yellow Eureka Corn, matures in eighty-five days this latitude, 75 to 100 bushels to acre, \$1 per bushel. Leaning Corn, 75 cents per bushel. Early Amber and Early Orange Cane Seed, 35 cents per bushel. White Kaffir Corn, 30 cents per bushel; Red Kaffir, 35 cents per bushel; Improved White Kaffir, 35 cents per bushel; Improved Red Kaffir, 40 cents per bushel. All sacked 7.0 b. cars. Special prices car lots. Have also in stock Red Clover, Alfalfa, Timothy, Kentucky Blue Grass, Meadow Fescue. Seeds are cash. Cash is scarce, make it go as far as possible. Send to headquarters. Send for our article, "How to Make Money in Farming," backed by some of the best authority in the West. KANSAS CITY GRAIN & SEED CO., KANSAS CITY, MO. (J. I. Reynolds, Pres't, formerly of Trumbull, Reynolds & Allen.)

BUY FRESH KANSAS SEEDS FROM Kansas Seed House

F. BARTELDES & CO., LAWRENCE, KANSAS.

Grass, Field, Garden, Tree and Flower Seeds, all especially grown and selected for Kansas soil and climate. Our elegant catalogue for 1896 now ready and will be mailed free on application. Send for one now. We are headquarters for ALFALFA and KAFFIR CORN. Send for prices.

30 Pedigreed Poland-China Yearling Sows and Gilts, all bred and for sale.

The brood sows in my herd belong to the leading families, such as Chief Tecumseh 2d 9115, Orient 8181, Good Quality 4700, Iowa's Champion 2d 6278, Longfellow 29785 O., J. H. Sanders Jr. 13514 S. Herd boars used during 1895, Wren's Medium 12387 S. and Corwin White Face 9924 S. Sows and gilts for sale bred to Hadley Yet, a son of Hadley Jr. 13314 S., the great prize-winner, whose picture appeared in the Breeder's Gazette's last Christmas number. Write and describe what you want, or better, come and select what you wish out of the best bred and finished lot ever raised on the farm. For sale, a No. 1 jack, fifteen and one-half hands high. Warranted a breeder. W. H. WREN, Marion, Marion Co., Kas.



Sotham's Annual Sale At Home, Weavergrace Farm, Chillicothe, Mo., 1 p. m., Wednesday, April 15, 1896.

HAVING accurate knowledge of Herefords since father introduced them in 1889, I maintain there never was offered so prime a lot as 20 bulls and 30 heifers which Col. Woods and Col. Sparks will auction as above (5 bulls property of J. H. Veitch "Old Homestead Farm," Martinsville, Ind., are included).

Rich Color, Peerless Ancestors, Show Animals. My regular arrangements. Sale under cover, rain or shine. Complete details in 200-page catalogue 13. Free. Name this paper.

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CLOSING-OUT SALE OF LINWOOD HERD SHORT-HORN CATTLE

On the Linwood Farm, Linwood, Leavenworth Co., Kas., Wednesday, May 6, 1896.



Since the dispersion of the parent herd in Scotland, by Mr. Cruickshank, no such opportunity has been made for the purchase of this famous class of cattle. The offering will consist of sixty-five head, mainly of young cows and heifers, with a few extra fine bulls, the immediate descendants of such sires as Baron Victor 42824, Craven Knight 90823, Spartan Hero 77932, Baron Laverder 2d 72610 and other great sires. Constitution and feeding qualities have been for twenty years the prime requisites sought for at Linwood farm.

TERMS.—Three months time on approved notes bearing 8 per cent. interest. Write for a copy of free catalogue.

Linwood station is on the Union Pacific railroad, twenty-seven miles west of Kansas City.

W. A. HARRIS, Linwood, Kas.

F. M. WOODS, Auctioneer, Lincoln, Neb.

FORTIFIED AGAINST HOG CHOLERA!

Kill the Germs in the pen and under the Hogs' feet with Bannerman's Phenyle, a Disinfectant and Germicide, and feed your hog Anglo-American Food, a conditioner.

NOT WHAT WE SAY, BUT WHAT PROMINENT HOG BREEDERS SAY. I would as soon be without feed as without Phenyle Disinfectant. Have used it three years and never lost a hog. O. S. WEST, Paulina, Iowa.

Ship us two 100-pound kegs by express at once. Heard of your wonderful Remedy through James Hammond, of Scheller, Iowa. I am the largest farmer in the State of Iowa, having 8,000 acres, and carry from 3,000 to 5,000 hogs. C. J. COOK, Odebolt, Iowa.

Since I have been using your goods I have had no sickness in my herd of any kind. I am fully convinced by a proper use of them, there is no use to have cholera or any other sickness in a herd of hogs. JNO. M. STONEBRAKER, Panola, Ill.

Thousands more such testimonials on hand. Write for particulars.

THE ANGLO-AMERICAN STOCK FOOD CO., 113 Adams St., Chicago, Ill.

A SURE CURE FOR LUMPY-JAW

POSITIVELY GUARANTEED.



In 990 out of 1,000 cases is what Onstad's Lumpy-Jaw Capsules have averaged up to date. If you don't believe it, write us and we will prove it to you. The price is \$2 a box; capsule inserter 25 cents; and there is sufficient in each box to cure four ordinary cases.

Cost Not Quite 57 Cents a Head.

A diseased animal is worth nothing; a cured how much? ONLY ONE APPLICATION is required. Postpaid to any address on receipt of price. Write for circulars. Sold by Druggists.

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