

KANSAS FARMER

ESTABLISHED, 1863.
VOL. XXV, No. 6.

TOPEKA, KANSAS, WEDNESDAY, FEBRUARY 9, 1887.

SIXTEEN PAGES WEEKLY.
PRICE, \$1.50 A YEAR.

Las Animas, Bent County, Colorado.

Special Correspondence Kansas Farmer:

Twenty years ago it was said and firmly believed that Colorado would never become an agricultural State; that outside of its mineral resources the people would, of necessity, be compelled to import all the products usually produced on the farm, and that the State would only be productive in its minerals and live stock interests. That this prediction was hastily made and untimely, one has only to refer to the agricultural reports or visit the State and learn for himself. After several days spent in looking over the country surrounding Las Animas, the county seat of Bent county, and getting some idea of the improvements, productions and the opportunities presented for the homeseeker and investor, I will, though briefly, note a few points thereon.

Bent county is 110 miles long by 84 in width, and is bounded by Kansas on the east. Its surface is chiefly level prairie, and better watered than any similar area of western Kansas. Considerable timber is found along the streams, and where planted and properly cared for, makes an excellent showing. There are about 6,000,000 acres of land, of which only about 150,000 is patented or deeded. Millions of acres are open and subject to be entered under the provisions of the government land laws. The county has been under the control, by possession only, of stockmen, whom, as is well known, always discourage any attempts at farming, but the day for an absolute monopoly of the vast public domain by one class of producers only, is a thing of the past. In conversation with many of the prominent cattlemen whose 250,000 head of live stock roam almost at will over nature's great pasture—Bent county, I learned that they see the irresistible tide of immigration rolling on westward and pouring over into southeastern Colorado by the hundreds now every day. He knows that the day is past for free range, and that all Bent county, like central and western Kansas, will soon be in possession of the united thousands of homeseekers whose energy, faith and labor have developed all Kansas up to that standard that her prosperity is the fireside talk of millions of homeseekers all over the States of the entire Union. That the soil is rich and can be made to produce, a person has to only go and see it for himself. One of the greatest advantages of Bent county is that a large portion of its territory is so situated that, if needs be, it can be irrigated, thus positively insuring a crop, no matter what may be the condition of the elements above. Strange as it may seem to an Eastern man, though it is true, that where a farmer once runs a farm by irrigation he seldom ever leaves or abandons it for the old way. Here in this county can be seen everything that is grown on the farm in this latitude. Open dry weather during the winter months is the general rule, and even now as I write it is very comfortable without an overcoat. More days of sunshine and no fears of a drought ever troubles the granger night or day who is as it is called, farming under the ditch. On either side of the Arkansas river, which courses through Bent county in an easterly direction, at from twenty to forty miles and nearly one hundred miles in length, will, if one may judge from present indications, be one entire farm and garden, and in a very few years. Lands can now be had, though at the rate that entries are being made at the United States land offices at Lamar and

Pueblo, it will be but a short time before the choice selections will have been taken and settled upon.

BOOMING LAS ANIMAS.

This place now contains about 900 inhabitants, whose pride is shown by the neat and tasty dwellings, surrounded by trees, all over the townsite. There has never been any exertion made to get up a boom for the reason that it was practically a stockman's town. Last year, merchandising aggregated nearly half a million dollars outside of the live stock business. It now has the main line of the Santa Fe road, and a strong company has undertaken the building of the Kit Carson, Las Animas & Southern road, fifty miles of which is graded. The Santa Fe running east and west and this new road north and south through the county gives an



IDEAL FEED MILL AND HORSE POWER COMBINED.

outlet in four directions and makes Las Animas a railroad center of considerable importance. The funds, \$25,000 in cash, is now in bank to build a new court house, which will be commenced at once, and a union school building to cost \$10,000 will be built this coming spring. A hotel company has been incorporated with a capital of \$10,000, and the site selected on which to erect a hotel at once. Not that there are now two good hotels, but that the increasing business needs another. All branches of trade are represented that are usually found in towns of its size, yet there is and will be room for more as the tide of emigration pours in and takes possession of the fine lay of land surrounding the town for miles and miles. The townsite originally contained 640 acres, of which 480 are now owned and controlled by the actual settlers and citizens of the town. The title to the townsite was obtained of the United States under the law governing townsites, thus insuring a good and perfect title.

On the 23d, 24th and 25th of this month (February), under the direction of the Mayor and City Council, there will be offered at auction to the highest bidder 1,176 town lots. This will give investors an excellent opportunity to put money into real estate in the county seat of one of the best and richest counties in all the State of Colorado. After months of travel over this Western country, I have not found a better opportunity where money invested will be surrounded by a better country nor one that makes better promises for the future. I find also that one can buy town property of private individuals at very favorable figures.

"PROVISO."

Las Animas, Col., February 5, 1887.

Guinea fowls are great insect destroyers.

Shall We Burn Our Cornstalks?

An essay read before the Hiawatha Farmers' Institute by H. F. Mellenbruch.

In order to answer this question properly we have to take into consideration not only the immediate object we desire to attain, but also the indirect results that follow.

The principal object is to get the stalks out of the way, so that they do not bother us in the cultivation of the corn. The question to be answered practically by each farmer in his own mind is: How can I do this with the least labor and expense, and with the best results to succeeding crops and the condition of the land. Theory will not do much good here, but experience and observation are the only true guide.

Judging from this criterion, I have aban-

doned the burning of stalks for the following reasons:

1st. It costs less labor to cut the stalks with a stalk-cutter than to cut, rake and burn them. A boy can easily cut six or eight acres a day with a single cutter. With a double cutter—one that takes two rows at a time—a man, of course, can cut twice as much. The cutting, raking and burning is not only slower, but the weather may be unfavorable, and the process still slower, and cannot be done well or in good shape. On land designed for small grain all that is necessary is to break down the stalks, so as to facilitate their being plowed under in good shape, leaving the land smooth.

2d. My most important objection to burning stalks is that we rob the soil by doing so. The ashes, the only fertilizing remains of the stalks on the land are generally blown away into the hedges and sloughs. When we haul off the corn and burn the stalks and the wind blows off the ashes the process of impoverishing the soil is greatly increased. Drop by drop the spring runs dry if restoring rains do not refill the source or fountain from whence it flows. The fields that have the stalks burned may be likened to a barrel of cider that is sapped at both ends—the supply will soon be exhausted.

But it is not only fertility that is restored to that extent by plowing under the stalks. The decomposing stalks absorb moisture and retain it longer than the ground, so the roots of the growing corn seek these favored places, ramify therein and are thus sustained through a period of drought.

There is still another important point speaking in favor of plowing under the stalks. It makes the ground more loose and mellow, so as to freely admit air and moisture, and prevent washing. New land is naturally more loose than old land. There may

be an excuse to the farmer that has new land to burn his stalks, especially if he has not stock enough to eat off the husk, which bother most in cultivation. Besides, new land generally has heavier stalks, and more chinch bugs (which some persons claim to be able to destroy by burning the stalks). But this I think is a mistake. For although they hibernate to some extent in stalks, they leave them during the first real warm day in spring and seek green pastures, and these warm days generally come before the stalks are burned.

I have also heard it stated as a claim in favor of burning the stalks, that thereby much of the seeds of weeds would be destroyed.

But this plea hardly deserves notice. For where farming has been so slothful as that the seeds of weeds can be raked together and burned with the stalks to any appreciable extent, there will still be enough seeds left to insure an abundant crop of the same kind next year.

On account of the reasons here given I would answer with an emphatic no to the question assigned to me for discussion; and as far as my observation goes, the most successful farmer either never did burn stalks or has abandoned the practice.

Ideal Feed Mill and Horse Power Combined.

It affords us pleasure at all times to make mention of meritorious articles to our readers, and in this connection desire to call attention to the Ideal Feed Mill and Horse Power Combined, an illustration of which appears on this page. The mill has been advertised quite extensively in our columns and has found a large sale throughout the United States as well as in foreign countries, which is constantly increasing.

It is a triple-gear machine, built similar to a horse-power, with a grinding mill in the center elevated sufficiently to be out of the way of the gearing, and is nearly as compact as the old-style feed mill.

The grinding burr makes thirty revolutions to one of the horses, and the tumbling rod sixty, thus giving sufficient speed to make it efficient in doing all the work required of a machine of this kind.

The burrs are provided with riders to protect the grinding surfaces and prevent them cutting each other. One set of these burrs it is claimed will do as much service as two or three sets of similar burrs not having protection. This feature is covered by letters patent granted the manufacturers, and is regarded of special value.

The mill will be sent on ten days trial to any responsible party subject to the warranty placed upon it. Write the manufacturers, STOVER MANUFACTURING CO., Freeport, Ill., for illustrated catalogues and prices, which will be sent on application.

Few things are more necessary to success in life than decision of character. With it a man can rarely fail—without it he can rarely succeed.

A soul conversant with virtue resembles a fountain; for it is clear, and gentle, and sweet, and communicative and rich, and harmless, and innocent.

It is a mistake to imagine that the violent passions only, such as ambition and love, can triumph over the rest. Idleness, languid as it is, often masters them all.

The Stock Interest.

DATES CLAIMED FOR STOCK SALES.

MARCH 15.—Wm. P. Higinbotham, Manhattan, Kas., roadster, trotting-bred and general-purpose horses.
MAY 17.—Wm. P. Higinbotham, Manhattan, Kas., Short-horn cattle.
JUNE 30.—A. H. Lackey & Son, Short-horns, Peabody, Kas.

Disease Affecting the Eyes of Sheep.

By E. A. A. Grange, Professor of Veterinary Science, Michigan Agricultural College.

During the summer and autumn of last year, my attention was called to a disorder among sheep, which affects their eyes in such a manner, that it will sometimes leave them blind in one or both organs; fortunately, though, the disease yields to treatment in the majority of instances, not, however, before going through a stage of very acute inflammation, causing much inconvenience and suffering to the afflicted animal.

The disease, as I have had occasion to observe it, breaks out in a flock, attacking one animal after another, in such a manner as would naturally give one the impression that it is of a contagious nature. At the same time, a very large proportion which are exposed seem to be armed with that peculiar weapon, "immunity," which renders them proof against an invasion.

In comparing my observations of the complaint, with descriptions of the diseases of sheep, by various authors, I was struck with one account, by a well-known writer upon veterinary topics (Youatt), who, writing in the early part of the present century, and quoting, in substance, an old shepherd says: "That sheep, when wandering over the moors, will sometimes accidentally tread upon a lark's nest; that the old bird, becoming alarmed as to the safety of her offspring, will rise up, like a game chicken, and spur the intruder in the eyes, and it (the sheep) is then said to be 'lark-spurred.'"

From the above it can be imagined how popular the term "lark-spur" would become among attendants upon sheep; besides, it was an easy way of accounting for the appearance of the malady. Under the circumstances, the disease was frequently left to run its course, and as a result, cataract, with total blindness, was a common termination. So common has the term "lark-spur" become in some countries, that it is applied to nearly all diseases affecting the eyes of sheep by certain people.

In naming the disease, I think the most appropriate term which can be applied to it is "Enzootic Ophthalmia;" for, like other enzootic diseases, it attacks a number of animals in a certain locality, or it may be confined to a single farm, while the term ophthalmia is now universally applied to certain diseases of the eye, both in human and veterinary medicine.

The cause of the disease, like the cause of many similar enzootics, is still wrapped in deep obscurity. I need hardly say that I do not believe in the lark-spur theory. Then there are those who say it is the result of fatigue, overdriving upon dusty roads, for instance, or exposure to cold after shearing, or indeed at any time, and that sudden changes of the weather are liable to bring on an attack. Although it may be true that any debilitating influence, such as exposure, etc., is liable to render an individual more susceptible to the complaint, yet I cannot think that they alone will produce it. Indeed, it seems to have no respect for the condition of the animal, breed or sex, age or size, or other circumstance that I can suggest, unless I take advantage of that now fashionable way of accounting for the existence of certain maladies, and con-

demn it as a "malarial trouble;" for it is not at all improbable that a specific virus floating in the air, and finding a suitable habitat in some sheep, will perform its various eccentricities.

Symptoms.—The complaint is easily recognized, as several animals in a flock will become suddenly blind, without any apparent cause. Taking a casual look at the malady, one cannot help being impressed with the similarity between this disease and pinkeye in horses; but closer observation will show with tolerable certainty that they are two distinct disorders.

On watching the course of enzootic ophthalmia in sheep, from day to day, we will find, first of all, that the sight of the eye, instead of presenting that bright, glistening appearance, characteristic of it, will be dull or opaque looking, the eyelids will be inflamed, and the animal will not be able to tolerate light, but be constantly blinking, tears will flow profusely over the cheek, and there will be more or less discharge (of tears) from the nose. In the course of a day or two the eyes will appear redder and larger, which condition will often be accompanied with, or followed by, angry-looking sores upon the sight. These are seen, sometimes, to eat their way through the eyeball, and allow the internal structure of the eye to escape; that is, the fluid portion; when the internal structure becomes involved, a cataract and permanent blindness is liable to be the result.

This ulceration never occurs in pinkeye in horses, that I am aware of, nor does it in mild cases in the sheep.

The constitutional symptoms, like the local, vary considerably with the individual. In some I have found but slight fever, while the clinical thermometer would indicate considerable elevation of temperature in the next one examined—ranging from 102 to 105 deg. Fahr. Some animals lose their appetite; while others eat tolerably well, the bowels become more or less constipated, unlike pinkeye, is there that disturbed condition of the alimentary canal so often noticed in the horse. Nor does there appear to be the same tendency for sheep to abort, as there invariably is with the mare in the latter half of pregnancy.

While the constitutional symptoms of pinkeye appear to be much severer in the horse than the constitutional symptoms of the disease resembling it in sheep, yet the opposite is the case with regard to the local symptoms.

Treatment.—Of this disease should be both local and constitutional, and the surroundings of the animal should also be properly considered.

The affected sheep should be placed by themselves, in a comfortable, dry shed, well-aired, darkened to prevent unnecessary irritation from sunlight. The eyes should be thoroughly fomented with warm water every day until the acute symptoms subside, or say for about four days. After fomenting I have found great benefit from the application of a weak solution of nitrate of silver, say about five grains to the ounce of pure rain, or distilled water. If the eye is ulcerated, touch the ragged sores with the pure lunar caustic occasionally. In applying fluids to the eyes, a few drops may be shaken from the end of a small vial, or a common quill run through the cork, makes a convenient way of putting in the medicine. I have also used a camel hair brush or soft feather; either will answer very well. Of course the attendant will require an assistant to hold the sheep, while the medicine is being applied.

The constitutional treatment may be directed, first of all, to the bowels, and if they are not operating regularly, a

saline purgative should be given, say Epsom salts, four ounces dissolved in half a pint of hot water and allowed to cool. About forty-eight hours after the purgative has done its work, should the inflammation still remain in the eyes, diuretics may be given. Among others, I have found relief following the administration of nitrate of potash when prescribed as follows: Take three drachms of nitrate of potash, and dissolve it in eight ounces of water. One ounce of the mixture to be given morning and evening. If at the end of a week from the time of the first dose, the inflammation has not entirely subsided, the diuretic may be repeated.

During the treatment, the sheep should be fed upon laxative diet, such as roots, bran mash, linseed, and the like.

Stock-Raising Necessary to Successful Farming.

A Pennsylvania farmer thus expresses himself in the *Thoroughbred Stock Journal*:

Owing to the great depression in business which has prevailed for several years past, caused, it is supposed, by overproduction of iron, coal and manufactured goods, production was reduced, wages were lowered, and laboring men were obliged to economize in their living expenditures. Meats being relatively dearer than bread and vegetables, less meats were consumed, the demand for cattle became less and prices lower. Owing, also, to the immense increase of cattle in this country, by the herding business on the plains of the far West, and to the restrictions placed by Great Britain on our exportation of live stock to that country, the supply has exceeded the demand, and consequently the common cattle have been low, and raising them here in the East generally unprofitable.

Indeed, some shrewd farmers have declared that ordinary cattle could only be raised at a loss; that the hay they consumed would bring more money directly after harvest than the cattle fed upon it would fetch in the spring following. Some men, who are considered good farmers in Bradford county, sold off their cattle several years ago, and have since then sold their hay, asserting that they make more money thereby than by raising cattle and feeding the hay on the farm, and that they save themselves all the anxiety and drudgery which the care of cattle requires.

There are some farmers, like Mr. T. B. Terry, of Ohio, who believe, or profess to believe, that good tillage is manure, or, at all events, will answer instead of manure, and produce good crops for a long period of time; and that so long as they can obtain good crops by good tillage, they are not going to borrow trouble about the future. They raise clover and plow it under. They know, what all intelligent farmers know, that long-rooted plants like clover push their roots far down into the subsoil, arrest and appropriate the fertility which has escaped from the surface and sunk beyond the reach of most of the cereals and grasses, bring it back, transform it into a blooming mass of luxuriant herbage, which renders the soil mellow by its dense shade, and when plowed under, soon decomposes and furnishes a ready supply of plant food for the hungry young rootlets of grain crops to feed upon. This system of clover farming adds nothing to the soil which was not there already, but it draws from below, and collects and places within the reach of crops the fertility which was scattered and unavailable. Sir J. B. Lawes, as an experiment, has raised wheat on the same field for thirty years in succession, without applying a particle of manure or other fertilizer or raising clover, and

still gets five or six bushels to the acre. He has found that notwithstanding the very best of tillage, the field slowly and steadily deteriorated, and the crops become less and less. The result of his experiment is in exact accordance with reason.

"Let a farm once become impoverished," says Mr. Lawes, "I know of no way by which that farm can be restored to its first condition from its own resources." It must be done, if done at all, by the help of manure obtained from abroad.

Mr. W. J. Chamberlain, President of Iowa Agricultural college, says: "The whole of the soil is greater than a part, and that constant subtraction will diminish even the largest minuend."

The history of agriculture in all ages proves that where fertility is extracted from the soil it must in some manner be returned; that "nothing can be created from nothing;" that "where nothing is given, nothing should be required."

Farmers living near large towns, and selling their produce from their own wagons to consumers at retail prices, may find it to their interest to buy their manure instead of keeping cattle to make it on their farms. The advantages derived from their locality may enable them to keep their land in good condition without keeping cattle. But farmers who live far away from the towns and cities, who are obliged to pay freights for transportation and commissions to sellers, cannot afford to buy manure, even if they could obtain an adequate supply. Their chief, if not their only resource, must always be to keep cattle and sheep, to convert their straw, stalks, hay, roots and coarse grain into manure, to be applied to the soil frequently, regularly and in sufficient quantities to raise good crops; because it is only the good crops that are profitable, and make farming a desirable occupation. Lime, plaster, kainot, marl, guano, and South Carolina rock are aids to agriculture when they can be cheaply obtained, but the main dependence of farmers always has been, and always must be, the manure obtained by feeding domestic animals on the farm. The history of the world in all ages, and the experience of the present day, clearly prove the necessity of stock-raising for successful agriculture. Except in the cases mentioned, where farmers live near good markets, and can buy manure in sufficient quantities and at reasonable prices, there is no other way of escape from soil exhaustion than in keeping good stock to consume the coarse grain and bulky products of the farm and manufacture them into manure.

Good tillage merely enables the farmer to extract the heart's blood from the soil so long as a drop remains. Clover has no power to entrap and appropriate the nitrogen from the atmosphere, as some people suppose. It is but a powerful pump, to bring back the fertility which has sunk into the subsoil, beyond the reach of most other plants.

Commercial fertilizers, valuable when used in connection with barnyard manure, are merely stimulants to plant growth, and like stimulants to the human body, only hasten on the period of general debility and exhaustion. The sewage of the cities, and their privies, will never be utilized to any great extent. The sea will never give back the immense mass of rich soil which the rivers transported to its depths. No system of farming has ever been devised, or ever will be devised, which will supersede the necessity of keeping stock. Whether profitable or not, so that it is not kept at a loss, stock must be kept by the great body of farmers the world over for the benefit of their farms. In England, so long ago as 1859, it

was said by the Hon. Henry R. French that "the cattle kept and fattened are reckoned to afford no profit beyond their manure. At that time English breeders of thoroughbred stock were obtaining fabulous prices for superior animals, with pedigrees as long as the genealogies of their nobility. If the common cattle of this country have not paid for their keeping, let the farmer try to improve them. Raising good stock, like raising good crops, always pays. The scalawags, so common in this country, resembling Pharaoh's lean kine, able to devour anything on the farm within their reach and still remain lean, are not generally profitable.

The only means to successful farming is to keep cattle and "to keep the best."

In the Dairy.

Dairy Notes.

By T. D. Curtis, in *Rural New Yorker*.

BAD VENTILATION OF STABLES.

It is a singular fact that in nine-tenths of the cases, the fresh air is let into the stable at the rear of the cows, instead of in front of them. The result is that the cold air drops down behind the cows, in its way to their heads, and sweeps along with it the odors from the smoking droppings, added to the constant exhalations from the cows' bodies, for them to inhale at every breath. Some have even argued that this is the correct way of introducing pure air because animals turn their tails to a beating storm! They forget that the animal seeks to protect its eyes, and to avoid a strong current which interferes with breathing, while its head is still in the midst of plenty of fresh air. The cases of a cow in a storm and a cow in a stable are not the same. Any animal closely confined will instinctively turn its face to the light and its nose to the fresh air. Usually there is some upward draft in front of the cows, but often there is none, while few make a free use of absorbents or deodorizers. On entering, the air is loaded with offensive effluvia and almost suffocating. And then the dairyman wonders why his milk tastes and smells of the stable!

No amount of careful milking and handling of the milk will prevent this mishap under such circumstances. The odors and flavors which have been inhaled by the cows have mingled with their blood and poisoned their bodies, and the milk secreted from the blood is loaded with these odors and flavors before it is drawn. See that ventilation is perfect.

HEADS TO THE CENTER OR TO THE WALL?

Which is the more convenient, to turn your cows' heads to the wall and feed at the sides, letting the droppings gather in a passage-way between them in the rear, to be taken out on a sled or cart driven through, or to have the cows face together, so that all are fed from a single passage-way, while the droppings are scattered along the two sides, occupying twice the space needed? Or do you want to shovel them out through the window holes in piles against both sides of the stable, to stand until they are drawn out in the spring, when you are in a hurry with your work, or be left all summer rotting and leaching, while your crops suffer for lack of them? Would it not be better to put the cows' heads to the walls, giving them the benefit of fresh air, with proper ventilation from their rear up through the roof of the barn? Wouldn't it make the cows healthier and the product sweeter? Then would it not be better to have the droppings all together behind and between the two rows of cows, and haul

them out at least once a day, either spreading them "where they will do the most good," or piling them on your manure heap, under the manure shed to rot?

CLEANLINESS VS. FILTHINESS.

Governor Seymour once said, before the American Dairymen's Association, that "cleanliness is a comparative term," and he requested the speakers to be exact in stating what was necessary to be done to secure cleanliness. This was a good idea. But I have observed that while everybody has some idea of cleanliness, there are some who appear to have no idea of filthiness! To them everything is clean. These are the ones that make a good share of the store butter, so much of which has gone into the market as grease. They keep their cows in the reeking atmosphere of a dirty stable, milk in a slovenly way, and never half clean anything that is used about the dairy. But how can they be reached and instructed? They think they are clean, and it will not do to tell them they are filthy. The cream-gathering or almost any system that will prescribe exact rules for managing the cows and handling the milk is a blessing to such dairymen and the community. This class of dairymen do not attend dairy conventions or read agricultural papers, yet they are a numerous class and need enlightening.

WHY DON'T THE CREAM CHURN?

I have just received a communication from a correspondent in East Saginaw, Michigan, asking why it takes three to six hours to churn his cream. I confess I don't know. The puzzle to me is why the butter comes at all, if it takes so long. Sometimes no butter can be churned from cream. Dr. Sturtevant mentions an instance where the cow had gone farrow a long time. Two cases of cream that could not be made to yield up its butter to the persuasions of the churn were mentioned at the convention of the Iowa State Dairymen's Association in 1884. Nobody was able to explain the reason why. It was a condition that came on suddenly, without any apparent cause. My correspondent's trouble came suddenly on the 28th of November last, just after the churning had been done in fifteen to twenty minutes. The temperature of the cream was 60 to 64 deg. He wants to know if it is in the food, which is "some oats, carrots, barley meal, cornstalks, and millet for hay." At the time of writing, eighteen churnings had acted in this way. The cream is probably viscous and ropy, though he says nothing of its appearance. But if the butter refuses to separate in two or three hours, why should it separate at the end of five or six, if there is no change of condition but what the churn produces? Perhaps some of the readers of the *Rural New Yorker* can explain the matter. I confess, with Dr. Sturtevant, that I am every day puzzled with unexpected results, and "feel I do not know about dairying as I used to think I did."

A GOOD DAIRY.

John Allen, of Lyndonville, Vermont, says, through the *Manchester Mirror*, that his dairy herd has for years averaged "300 pounds of butter per cow or a little better." There are other such herds in the country, and there is still profit in such dairies, notwithstanding low prices. The marvel is that so many dairymen are content with 150 pounds of butter per cow, when it is possible to double the yield without materially increasing the expense. Many cows are kept at a loss. Is not here a hint as to one of the best ways of cheapening production.

A sample copy of the *Normal Advocate* sent free to any one. Address *Normal Advocate*, Holton, Kas.

BREEDERS' DIRECTORY.

Cards of three lines or less, will be inserted in the *Breeders' Directory* for \$10.00 per year, or \$5.00 for six months; each additional line, \$2.00 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

M. D. COVELL, Wellington, Kas., fifteen years an importer and breeder of Stud Book Registered Percherons. Acclimated animals of all ages, both sexes, for sale.

PROSPECT FARM.—H. W. McAfee, Topeka, Kas., breeder of Thoroughbred Clydesdale Horses and Short-horn Cattle. A number of choice bulls, also horses for sale now. Write or call.

THOROUGHbred AND TROTting HORSES and Poland-China Hogs bred and for sale. Write for pedigrees. O. B. Hildreth, Newton, Kas.

CATTLE.

WM. BROWN, Lawrence, Kas., breeder of A. J. C. C. Jersey and Holstein-Friesian Cattle. Stock for sale. Bulls, \$50 to \$100; Heifers and Cows, \$50 to \$150. Send for catalogue.

H. H. DAVIDSON, Wellington, Kas., breeder of Polled Angus and Galloway Cattle. The largest herd in the State. Choice stock for sale at all times. Correspondence and orders solicited.

F. R. FOSTER & SONS, Topeka, Kas., breeders of Herefords. Bulls for sale.

OKWOOD HERD OF SHORT-HORN CATTLE.—All recorded. Choice-bred animals for sale. Prices low. Terms easy. Imported Earl of Gloster 74522 heads herd. C. S. Eichholtz, Box 1208, Wichita, Kas.

F. McHARDY, breeder and importer of Galloway Cattle, Emporia, Kas. Young stock for sale at reasonable prices. Liberal credit given if desired. Mention *KANSAS FARMER*.

WARREN, SEXTON & OFFORD, Maple Hill, Kas., importers of thoroughbred Rex Polled Cattle. Bulls and heifers for sale. Railroad station, St. Marys.

D. H. FORBES, 198 Kansas avenue, Topeka, Kas., breeder of Short-horn Cattle. Six head of Bulls, from 7 months to 3 years old, for sale now on easy terms.

FISH CREEK HERD OF SHORT-HORN CATTLE consisting of the leading families, headed by Sharon Duke of Bath 2d, 64450. Young stock for sale. Also Bronze Turkeys. Visitors cordially invited and welcome. Walter Latimer, proprietor, Garnett, Kas.

DR. W. H. H. CUNDIFF, Pleasant Hill, Mo., proprietor of

ALTAHAM HERD

and breeder of fashionable Short-horns. Straight Rose of Sharon bull at head of herd. Fine show bulls and other stock for sale.

GUERNSEYS.—Elm Park Place, Lawrence Kas. L. Bullens, dealer in registered Guernsey Cattle. Young stock for sale. Telephone connection to farm.

FRANK H. JACKSON, Maple Hill, Kas., breeder of Hereford Cattle. Young thoroughbred Bulls always on hand for sale. Choicest blood and quality.

T. M. MARCY & SON, Wakarusa, Kas., have for sale. Registered yearling Short-horn Bulls and Heifers, of each thirty head. Carload lots a specialty. Come and see.

J. S. GOODRICH, Goodrich, Kas., breeder of Thoroughbred and Grade Galloway Cattle. Thoroughbred and half-blood Bulls for sale. Sixty High-grade Cows with calf. Correspondence invited.

CATTLE AND SWINE.

C. H. HOLMES & CO., Grinnell, Iowa, breeders of Jersey Cattle and Duroc Jersey Swine. Prices to suit the times. Send for catalogue.

PLATTE VIEW HERD.—Of Thoroughbred Short-horn Cattle, Chester White and Berkshire Hogs. Address E. M. Finney & Co., Box 790, Fremont, Neb.

ROME PARK STOCK FARM.—T. A. Hubbard, Wellington, Kas., breeder of high-grade Short-horn Cattle. By ear lot or single. Also breeder of Poland-China and Large English Berkshire Swine. Inspection invited. Write.

SWINE.

WALNUT GROVE HERD OF POLAND-CHINAS. V. B. Howey, proprietor, box 103, Topeka, Kas. My hogs are strictly thoroughbred, of the finest strains in America. All breeders recorded in Ohio Poland-China Record. Chief Commander No. 6775 at head of herd. Pigs for sale, from 2 to 10 months, from \$10 to \$25.

W. H. BIDDLE, Augusta, Kas., breeder of Pure-bred Poland-China Swine, from most noted strains. Also pure-bred Bronze Turkeys. Have a choice lot of early birds at \$4 to \$5 per pair. Pigs at reasonable rates.

W. W. WALTIRE, Carbondale, Kas., breeder for seven years of Thoroughbred CHESTER WHITE Hogs. Stock for sale.

J. M. McKEE, Wellington, Kas., breeder of Poland-China Hogs—A. P. C. R. Five kinds of Poultry. Choice pigs and fine fowls for sale. Prices low. Write.

ROBERT COOK, Iola, Kas., thirty years a breeder of Poland-China Swine of the very best and most profitable strains. Breeders registered in O. P. C. R.

ELM GROVE HERD OF REGISTERED POLAND-China Swine, Z. D. Smith, proprietor, Greenleaf, Washington Co., Kas. Has on hand pigs of all ages at reasonable prices. Write for what you want or come and see. Satisfaction guaranteed.

WM. PLUMMER, Osage City, Kansas, breeder of Recorded Poland-China Swine. Also Light Brahma Chickens. Stock for sale at reasonable rates.

F. M. LAIL, MARSHALL, Mo., breeder of the finest strains of

POLAND-CHINA HOGS AND PLYMOUTH ROCK CHICKENS.

Eggs in season, \$1 for 13. Catalogue free.

BAHNTGE BROS., Winfield, Kas., breeders of Large English Berkshire Swine of prize-winning strains. None but the best. Prices as low as the lowest. Correspondence solicited.

SWINE.

OUR ILLUSTRATED JOURNAL.—A full and complete history of the Poland-China Hog, sent free on application. Stock of all ages and conditions for sale. Address J. & C. STRAWN, Newark, Ohio.

SHEEP.

MERINO SHEEP.



Berkshire Hogs, Short-horn Cattle, and thirty varieties of high-class Poultry. All breeding stock recorded. Eggs for sale in season. Write for wants and get prices. HARRY McCULLOUGH, Fayette, Mo.

F. W. ARNOLD & CO., Osborne, Kas., breed Merino Sheep, Poland-China Hogs (breeders all recorded in O. P. C. R.), Langshan and Wyandotte Chickens. Eggs, \$1 per 13. Young pigs and rams for sale. Write for terms.

IMPROVED REGISTERED MERINO SHEEP, Poland-China Hogs, Light Brahmas, Plymouth Rocks and Bronze Turkeys—all of prize-winning strains, bred and for sale by R. T. McCulley & Bro., Lee's Summit Jackson county, Mo.

SHROPSHIRE-DOWNS.—Ed. Jones, Wakefield, Clay Co., Kas., breeder and importer of Shropshire-Downs. A number of rams and ewes for sale, at lowest prices, according to quality.

H. V. PUGSLEY, Plattsburg, Mo., breeder of Merino Sheep. Ewes averaged nearly 17 lbs.; stock rams, 34 lbs. to 38 lbs. Extra rams and ewes for sale. Also Holstein Cattle.

POULTRY.

7 TOULOUSE GEESE EGGS—\$1.50; Wyandotte, Plymouth Rock and Black Cochins eggs, \$1.50 per 15, \$2.50 per 30. I. H. Shannon, Girard, Kas.

WM. B. SCOTT, Emporia, Kas., for seven years a breeder of pure-bred Plymouth Rocks and Large English Berkshire Hogs. Eggs and young pigs for sale.

MAMMOTH BRONZE TURKEYS—Pure stock, beautiful plumage and good size. Single bird \$4; one pair \$8; trio \$12. Boxed and delivered at the express office free of charge. Nothing shipped C. O. D. Address W. T. Sanders, Breckenridge, Mo.

FRANK L. WOLFF, Topeka, Kas., Box 83, breeder of

LIGHT BRAHMAS AND BUFF COCHINS. Send stamp for Circular.

TOPEKA POULTRY YARDS.—Wm. A. Eaton, Topeka, Kas., breeder of Plymouth Rocks, Light Brahmas, Partridge and Black Cochins. Can furnish W. & B. Leghorns and W. F. B. Spanish. Eggs \$2.25 per 13.

A. B. DILLE, Edgerton, Kas., breeder of Wyandottes, A. P. Rocks and Mammoth Bronze Turkeys. Eggs \$1 per 13. Turkey eggs 25 cents each. Satisfaction given. A few choice M. Bronze Turkeys at \$5 per pair.

SUNFLOWER POULTRY YARDS.—T. S. HAWLEY, Topeka, Kansas, breeder of PURE-BRED POULTRY. Leading varieties.

FAIRFIELD POULTRY YARDS—E. C. McNemar, Fairfield, Wabasha Co., Kas., breeder of choice Plymouth Rocks. A few choice cockerels and pullets for sale. Write for prices.

MARMATON VALLEY POULTRY YARDS Fort Scott, Kas.—F. G. Eaton, breeder and shipper of Thoroughbred Lt. Brahmas, P. Rocks, Wyandottes, B. Leghorns, B. Javas, B. Cochins, Mam. B. Turkeys, and P. Ducks. Fowls for sale at all times. Send for circular. Correspondence solicited and cheerfully acknowledged.

A. D. JENCKS, North Topeka, Kas., a No. 1 Plymouth Rock breeder. A few more choice Cockerels and Pullets for sale. Premium stock.

COLLEGE HILL POULTRY YARDS.—Pure-bred Brown Leghorn and Houdan Fowls for sale. Eggs in season. Send for prices. W. J. Grifing, College Hill, Manhattan, Kas.

REPUBLICAN POULTRY YARDS. PLYMOUTH ROCKS.—W. E. Doud, Eureka, Kas., breeder of Plymouth Rocks. Eggs, \$1.50 per 13. Birds for sale at from \$1 to \$5 each.

EUREKA POULTRY YARDS.—L. E. Pixley, Eureka, Kas., breeder of Wyandottes, B. B. B. Games, P. Rocks, B. and W. Leghorns, Buff Cochins and Pekin Ducks. Eggs and birds in season. Write for what you want.

N. R. NYE, Leavenworth, Kas., breeder of the leading varieties of Land and Water Fowls. DARK BRAHMAS a specialty. Send for Circular.

SHAWNEE POULTRY YARDS—Jno. G. Hewitt, Prop'r, Topeka, Kas., breeder of choice varieties of Poultry. Wyandottes and P. Cochins a specialty. Eggs and chicks for sale.

ONE DOLLAR PER THIRTEEN.—For Eggs from my choice Plymouth Rock Fowls and extra Pekin Ducks. Mark S. Salisbury, Box 31, Kansas City, Mo.

MISCELLANEOUS.

S. A. SAWYER, Fine Stock Auctioneer, Manhattan, Kas. Riley Co., Kas. Have *Geats* English, Short-horn, Hereford, N. A. Galloway, American Aberdeen-Angus, Holstein-Friesian and A. J. C. C. H. R. Herd Books. Compiles catalogues.

HENRY MOHRE, EUDORA, Kas., Manufacturer of *AUREKA HOG REMEDY* and *Condition Powders* for all kinds of stock. Package of 3 pounds, \$1.00, or one dozen \$8.00. Correspondence solicited and promptly answered.

TIMBER LINE HERD

Holstein - Friesian Cattle.

We have for sale forty head of Registered and Grade Holstein Cattle—young and up to 6 years old, male and female. Also a few P. C. Swine, age 3 to 6 months, and 75 head for spring and summer trade. None but first-class stock sent out, and all stock guaranteed as represented. Farm at Andover, Kas. Address us at Winfield, Kas., Cowley Co., Box 667.

W. J. ESTES & SONS.

Correspondence.

Mammoth Clover.

Kansas Farmer:

I am requested to reply to the questions regarding mammoth clover in your issue of January 19. I have grown it to some extent and have obtained considerable information regarding it, from farmers in various parts of the country; but there are some things connected with its growth in different sections that still need to be learned. It is not an annual, but will live as many years as the common red clover. I cut a field of it in Michigan last year, for the third time, which stood as well on the ground as a field of the common red by the side of it, which was cut for the second time. In the locality of your correspondent, northwestern Kansas, the common red clover seems to approach a biennial in character; even more than usual, the plant, weakened after the first crop is cut, being more readily winter-killed than in milder climates. I have no conclusive evidence that the mammoth variety would hold out longer than the other, but there are some indications that it would. I hope any one who has had experience with this point will communicate it to the *FARMER* or to myself, as inquiries are being received in regard to it.

The mammoth clover is sold by most of the large seed dealers and will be distributed this spring by the Department. Its chief merit seems to be its greater vigor, making it more desirable for poor soil, both for fertilizing purposes and for pasture. It starts, however, later in spring, and does not grow as late in the fall as the common red. It will not ripen seed after the first crop of the season is cut for hay.

A. A. CROZIER.

Dep't of Agriculture, Washington, D. C.

Culture of Mangel Wurzel.

Kansas Farmer:

The behavior of this root during the excessive drouth of last summer and fall so surprised me, that I feel constrained to draw the attention of Kansas farmers to its culture. The soil should be in good tilth, well manured, and made fine to a good depth. Sow from beginning to middle of April, in rows two feet apart; for horse-culture three feet. Compact the seed after sowing, either with the feet or roller.

When the young plants have attained two leaves they must be hoed on each side of the row. When large enough, thin out to nine inches apart. Cultivate often, bearing in mind that the oftener the soil is stirred during the whole growing season, the larger will be the product, and the better its quality.

The lower leaves during the growing season can be pulled off and feed to hogs, cows and chickens. They devour them greedily, and thrive wonderfully upon them.

This is the surest crop on the farm, since the plant will withstand the severest drouths. No insect attacks it. The leaves form alone an excellent food for every species of domestic animal during four months in the year. No edible root has yet been brought into use which has an affinity with mangel wurzel in respect to its imperishable qualities. The white turnip is in March entirely divested of its nutritive powers; the Swede turnip in April becomes shrivelled, and is almost refused by stock; the potato, after this time, entirely sprouts away all its vigor, diminishes in bulk, and dries up; but not so with this root under consideration. It is not only ready for use in the autumn, the winter, and spring, but may, if required, be continued throughout the summer, undiminished in weight and still abounding in saccharine juices.

Fed to mares with colt, brood sows and ewes, the results are most excellent. The health of themselves and the thrift and vigor of their young essentially depend upon succulent food being fed at a season when grass cannot be supplied.

In gathering the roots in October, care should be taken to cut off the leaves about an inch above the crown, as they will not keep well if the crown is cut off. Convey them to the cellar and pack in long heaps, eight feet wide at the bottom; begin by forming the outside lines with the largest roots, tops outwards, filling the inside with the smallest. They keep well out of doors in pits. The only advantage of storing

them in the cellar is that they can be fed more conveniently during the winter months.

I prefer the Giant Red and Yellow Tankard to other varieties; the Imperial Sugar is a firmer and richer root, but it takes severe labor to dig the crop, while the two first named varieties are easily pulled by hand.

Last year I procured my seed from F. Barteldes, Lawrence. While every root crop was suffering from drouth and insects, this crop was vigorous and green, producing thirty tons to the acre, and individual roots, ten, twelve and fifteen pounds. To every Kansas farmer I would say, give this crop a trial.

JOHN W. ROBSON.

Cheever, Dickinson Co., Kas.

Apples for Market.

Kansas Farmer:

In number of January 26 inquiry is made for best varieties of apple to plant 100 acres. As your correspondent does not give his location, it is difficult to give any kind of a direct answer to his question. If he will examine transactions of State Horticultural Society for 1883, he will find answers to his question from almost all the counties of the State. He does not state where he intends to market his product, and much depends on this in answering his question.

If I should plant an orchard of that extent here in the Cottonwood valley, the amount of summer varieties would be governed by the home demand; the fall fruit on whether I intended to do much in evaporating or drying. Of winter varieties I would use the following in the order named: Ben Davis, Winesap, Missouri Pippin, Rome Beauty, Willow Twig, Jonathan, Newtown Pippin and Rawles' Janet. In other parts of the State it would probably be best to change some of these and add others, but a portion of them would be suitable in any part of the State.

If I may be bold enough to offer any suggestions to this unknown correspondent, I would like to ask whether he has fully examined the magnitude of his undertaking, whether he has counted all the cost in this venture, and whether he has qualified himself by study and practice to make a success of it? I would by no means discourage any one in an undertaking of this kind, but the fact that wrecks of orchards are abundant and the story that meets me almost daily from some one of money lost in this work, makes it almost a duty to warn any man who contemplates such an undertaking to be very certain that he has the ability and endurance to carry it through. The prize lies at the end of the race, and years of patience, toll and waiting, often mixed with loss and disappointment, will be yours before you reach success. But if you endure all these with patience, and never lose confidence, prosperity will surely be yours at last. Think for a moment how many men have ventured their all in sheep husbandry and come out nearly if not quite bankrupt. Some men have made money at it, but more than ten times their number have lost in the venture. The successful management of 100 acres in fruit demands more attention, skill, study and care than the handling of a flock of sheep, and the returns are much farther off. The expense of the land and first cost of the trees is only the beginning of expenses. After it comes planting, tending, trimming, fighting borers, contending with rabbits, replacing the dead trees, and the same round of labor and expense year after year till the "time of the harvest" comes, and many who are weak or timid "faint by the way." If after considering this fully you are still determined on the undertaking, go in to win, and continue without wavering and you will prosper in the end.

J. W. BYRAM.

Cedar Point, Chase Co., Kas.

Ice House for Hay.

Kansas Farmer:

I will answer Mr. Cook, of Wichita. Build your ice house three feet larger each way than the block of ice desired, so as to allow eighteen inches between the wall and ice to pack solid full of hay; break a lot of rock over the bottom, throw in twelve inches of hay on the rock, fill all crevices with fine ice and put one foot of hay on top. The secret is to seclude it from the air.

To the inquirer of best assortment of apples, I would say plant half of all the different varieties of Ben Davis, as it brings the highest price in market.

Burr Oak, Jewell Co. H. E. FAIDLEY.

About Sowing Oats.

Kansas Farmer:

In reply to the correspondent who wants hints on sowing oats, I will give you my plan after twenty years experience. First. Plow in the fall if possible, four or five inches deep, as I find that fall plowing always makes a heavier grain than spring plowing. Second. If your ground is too solid in the spring, tear up the surface with cultivator or grain drill as soon as ground is dry enough, and if your ground is clean enough to permit it, drill in with a common grain drill, sowing from one and a half to two bushels per acre. If sown broadcast, seed may be sown first and covered afterward with drill, cultivator or harrow, as will best do the work. Sow from two to two and a half bushels per acre. Be sure and cover well; that is, stir the surface till all the seed is covered. Third. Be sure and sow good seed. Oats that have heated or moulded either in the stack or bin, should not be sown, as the germ may have been spoiled.

Sow as early as the ground will permit; the middle of February is not too soon, although I think there is some risk of losing the seed and labor; but the risk is not too great to overbalance the chances of a crop of good heavy oats. I think March is the month in which to sow oats as a rule, but it may be sown sooner or later with good results if the season proves favorable.

If this article will help some brother farmer to grow a crop of good oats, I shall be satisfied. Will be glad to see this subject ventilated by readers of the *KANSAS FARMER*, whether or not their ideas are the same as my own.

A SOWER.

Notes from Russell County.

Kansas Farmer:

Our winter thus far has been rather singular. December was the coldest we have had in seven years, and nearly the whole month of January as pleasant as and not colder than October is sometimes. It is now cold again—the first of February.

Stock as a whole is doing well. There are a few cases of sickness among last spring's calves, from eating too much corn-stalks, and a few cases of blackleg. There have been quite a number of cases of fatal sickness among last spring's colts reported, and thus far no cause discovered. Sheep are doing well, and with the exception of one case of dipping for scab, just before the cold storm in November, resulting in a loss of about 700 in one night, no serious losses have been reported.

The dry weather of the past month has been very hard on the winter grain, and as there is but a small acreage sown, there will necessarily be a short crop.

Feed of all kinds is plenty, and more shelter for stock than ever before known in this county.

We are going through a severe attack of railroad bond fever. It has already cost us \$135,000, and the fever is not broken yet. We, as farmers, would like very much to have you urge the Legislature to eradicate the disease from the State; use severe measures, if necessary, for it is ruining the interests of the farming community to build up the towns; for really the farmers and day laborers have all the taxes to pay, and the towns and cities get the majority of the wealth brought in by railroads.

And we would like to have another matter brought before the Legislature this winter that is of great importance to the rural population of the State, and that is the equal distribution of all county taxes for school purposes (except for building and furnishing school houses) according to the necessities of the several districts. Our reason for this is, that there are so many school districts from the towns, where there is a large number of school children and a small amount of taxable property, so that they are not able to have but a short term, and cheap teachers for that. If the perpetuity of our form of government depends on the education of the masses—and it certainly does—this matter must be attended to in the near future.

RUSSELL CO. FARMER.

Percheron Horses in Chicago.

An exemplification of the fact that the quick and heavy draft teaming of Chicago is done nearly exclusively by grade Percheron horses was shown during the late Illinois State fair. Auxiliary to the great Percheron exhibit at the fair, a grand street and fair-

ground parade of Percheron business teams was organized. The procession, nearly two miles in extent, contained the two, four and six-horse turnouts of over one hundred and fifty of the most extensive wholesale merchant and manufacturing houses of Chicago. The quality of these high-grade Percheron teams, as regards individual appearance, compared favorably with many of the pure-bloods on exhibition at the fair, which shows the adaptability of the Percheron cross on native stock. Grade Percheron horses are always in demand at high prices in all markets, and farmers can make no mistake in breeding them. Mr. M. W. Dunham, of Wayne, Illinois, the extensive importer and breeder of pure Percheron horses for breeding purposes, has on hand about 500 head registered with extended pedigrees in the Percheron stud-books of France and America.

Gossip About Stock.

On Tuesday, March 15, 1887, Wm. P. Higginbotham, of Manhattan, will hold his first annual sale of standard-red trotting and other horses. This is a very important sale, and no doubt will be largely attended by breeders and farmers generally. See advertisement elsewhere.

Messrs. C. H. Holmes & Co., Grinnell, Iowa, who breed Jersey cattle and Duroc-Jersey swine, in remitting for their advertisement in the *FARMER*, say: "We find that we have for sale four high-bred Stoke Pogis bulls, 1 and 2 years old, a carload of high-grade Jersey dairy cows, and twenty-five choice Duroc-Jersey sows, safe in far row to our premium boars. Will be sold at a bargain if taken soon."

RICHMOND, Surrey, Jan. 22.—[Copyright, 1887, by James Gordon Bennett.]—The Galbraith Brothers, of Janesville, Wis., purchased here to-day the well-known Shire stallion Enterprise of Cannock, admitted to be the handsomest British work horse ever foaled. Enterprise won the Champion cup at the great draft horse show at Islington. He will be shipped in a few days and will be shown at Chicago and at other exhibitions. Since the purchase of the champion Clydesdale stallion Druid six years ago this is believed by competent judges to be the finest draft horse ever secured by American purchasers. The price paid is not named, but is known to be a large one.

Hogs for Texas.

Messrs. James H. Campbell & Co., the widely known live stock merchants of Kansas City, have at last succeeded in inducing some of the merchants of the southwestern portion of Texas to purchase some of the fine hogs raised in Kansas, Missouri and Nebraska and shipped to the Kansas City market for sale. To-day they will make a shipment of extra fine fat hogs to a firm of dealers in Laredo, Tex., which is something like 1,800 miles from Kansas City. These hogs are purchased for their lard-producing qualities, and their product will be marketed in old Mexico.

Messrs Campbell & Co. deserve a great deal of praise for their enterprise and business sagacity in this matter. With fine facilities for handling live stock, they are always able to bring buyers and sellers together under favorable advantages for both. Those having cattle, hogs or sheep for sale will do well to put themselves in communication with this firm. They are at all times in correspondence with buyers from all parts of the East and South, and are, therefore, never at a loss to find a favorable market for all stock entrusted to their care.

With such enterprising firms as James H. Campbell & Co. in her midst and working in her interest, it is no wonder that our city has attained her present greatness. Let us have more such men. All the friends of Messrs. James H. Campbell & Co. will be proud to know of their success in all their undertakings. Enterprise, a thorough knowledge of their business and of the wants of their customers, and a strict regard for integrity and fair dealing with all with whom they come in contact, have given Messrs. James H. Campbell & Co. the first place in the live stock trade of the whole country. We wish them the greatest success.—*Kansas City Journal*, February 4, 1887.

Stewart's Healing Cream, for chapped hands, face, or gentlemen to use after shaving. The cheapest and best article for the purpose in the world. Please try it. Only 15 cents a bottle at drug stores.

The Busy Bee.

Hints to Beginners.

In writing this, the twenty-fourth paper to beginners, it would be more to my taste if I could commence with a concise and glowing account on monthly management, but, alas! I look out on our apiary and see hives covered with snow and the temperature most down to zero and the thought strikes me, what shall I say to the beginner? what shall I tell him to do? and then my mind runs on many things to say, but will they answer? Shall I say, sweep the snow away! that would be, to say the least, timely advice. still I say, no, don't do that! it keeps them warm, let it bank up as it may on all sides; but the front, I say most decidedly, keep clear from snow. I hear lots of older heads than mine saying he is wrong! but, dear reader, I cannot be convinced that I am wrong up to the present time, so I say, keep the entrance clear of snow; bees must have ventilation, and as long as the entrance is clogged with snow they do not get it. I have heard of cases where the bees in a hive have wintered nicely where the hive was covered with snow all winter, but this is an exception and not by any means the rule. I also know of bees who have all died from the entrance being blocked with snow; this I think the rule and not the exception. If bees are wintered on the summer stands, there is nothing can be done to help them, unless, you have some stocks who went in without a full supply of winter stores; if this is the case, on the first pleasant day, raise the cover and place some cream candy on top of the frames directly over the cluster and under the cushions.

If you are wintering inside, be very careful to keep the room at an even temperature; do not allow it to get too warm or too cold, and above all do not allow any dampness; bees can stand a long siege of cold weather, but they cannot stand dampness; it is sure to prove fatal. If you go in the rooms where they are, move very quietly so as not to disturb the bees, as perfect quiet is one of the principal features of successful indoor wintering.

I cannot close without again calling your attention to the numerous works on bee lore that are now in circulation and if you do not avail yourself of these long winter evenings, you are losing valuable time; study them well; read everything that any of the writers has to say and then you will be competent to draw your own conclusions.—W. B. Treadwell, in *Bee-Keeper's Magazine*.

The Grandest Sale of the Season.

I will sell at my farm, one and one-half miles southeast of Neosho Rapids, Lyon county, Kas., on Thursday, February 24, 1887, and to continue until sold (sale to commence at 10 o'clock a. m. sharp), the following described property, to-wit:

Stock—One yearling horse colt, 23-year-old mare colts, 2 match sorrel colts 4 years old, well broke, 3 brood mares, 1 large work mule, 1 work horse, about 100 head of stock hogs from 3 months to 1 year old. All the horses are English Coach and Norman graded.

Four thousand bushels of corn in crib, about 100 tons of good bottom hay, 1 large stack of straw, about 1,000 ranks of dry stove wood and a lot of native and pine lumber, 200 bushels of potatoes, 300 fence posts, and all my household goods and furniture.

Cattle—Seventy cows, 35 2-year-old heifers, 44 2-year-old steers, 10 yearling steers, 18 yearling heifers, 2 bulls, 7 calves. All the cattle are thoroughbred Short-horns and best grade.

Implements—One Deering self-binder, 1 Champion self-binder, 3 grain drills, 1 one-horse drill, 3 riding cultivators, 3 walking cultivators, 3 John Deere riding plows, 5 fourteen-inch walking plows, 2 eight-inch

plows, 2 double-shovel plows, 2 corn planters and check rows, 1 hay stacker, 1 stalk cutter, 2 mowers (Champion), 2 hay rakes, 3 harrows, 1 iron double harrow, 2 farm wagons, 1 feed wagon, 1 new top buggy, 1 spring wagon, 1 corn sheller, 1 Big Giant corn crusher, 7 sets of double harness, 1 set of buggy harness, 2 iron and 2 wooden road scrapers, 1 fanning mill, and all my household and kitchen goods, and other articles too numerous to mention.

Terms of Sale—Nine months time with 10 per cent. interest. Five per cent. off for cash. Ten dollars and under, cash. Good bankable paper required.

Free lunch served. JAMES O'TOOLE.
L. F. PRUYN, Auctioneer.

From Morton County.

Kansas Farmer:

This is the extreme southwest county in our State. Take the A. T. & S. F. to Syracuse, where well-equipped stages leave every morning for the future capital of Morton county. Richfield and Frisco are the towns contesting for county seat. Morton county is principally settled by Kansas people who have come further west to profit by past experience, to secure themselves a home and this time to hold on to it. Government land in this county is pretty well taken, but the actual settler with his family can easily secure a quarter section yet vacant. We have but very little use for the average old batch—who comes here, proves up his claim and leaves for parts unknown. One great advantage this county has over other western counties is, water is found universally shallow, the average depth being only forty feet. All the railroads in Kansas are heading for Morton county, this being the best outlet to the great Southwest. Crops were good last year, although the acreage was small. Every one who planted a crop has plenty of feed. Range cattle are looking fine, with nothing to eat but the "old government" buffalo grass. F. T. B.

An English experimenter finds that, contrary to general opinion, a growth of ivy over a house renders the interior entirely free from moisture.

A good stock of assorted merchandise and store building in a live town (value about \$10,000) to exchange for good land. Address P. O. Box 13, Cherokee, Kas.

Mr. Geo. Pinney established the evergreen business in Sturgeon Bay, Wis., nearly twenty-five years ago. He now claims to have the only nursery of the kind in the State, and to do a business in that line second to none in America. His advertisement appears in another column.

"Gardening is an employment for which no man is too high or too low." This is the quaint but apt quotation on the beautiful illuminated cover of Vaughan's New Seed Catalogue for 1887. It is one of the richest and most elegant of the season, avoiding entirely the "flashiness" so common in many of these publications. Address with two stamps, J. C. Vaughan, Chicago.

ROYAL



BAKING POWDER

Absolutely Pure.

This powder never varies. A marvel of purity, strength and wholesomeness. More economical than the ordinary kinds, and cannot be sold in competition with the multitude of low-test, short-weight alum or phosphate powders. Sold only in cans. ROYAL BAKING POWDER CO., 109 Wall Street, New York.

NOW--THE TIME TO SPECULATE.

ACTIVE FLUCTUATIONS in the Market offer opportunities to speculators to make money in Grain, Stocks, Bonds and Petroleum. Prompt personal attention given to orders received by wire or mail. Correspondence solicited. Full information about the markets in our Book, which will be forwarded free on application.

H. D. KYLE, Banker and Broker,
38 Broad and 34 New Sts., New York City

BEST STEEL GALVANIZED WIRE

WOVEN WIRE FENCING

80c. PER ROD.

McMULLEN'S

Twisted Wire Rope Salvage.
All widths and sizes. Sold by us or any dealer in this line of goods. FREIGHT PAID. Information free. Write The McMullen Woven Wire Fence Co., 158 & 160 W. Lake St., CHICAGO, ILL.

GOOD ENOUGH

FAMILY OIL CAN.

The most practical, large sized Oil Can in the market. Lamps are filled direct by the pump without lifting can. No dripping oil on floor or table. No faucet to leak and waste contents or cause explosions. Closes perfectly air tight. No Leakage—No Evaporation—Absolutely safe. Don't be humbugged with worthless imitations. Buy the "Good Enough." Man'd. by

WINFIELD MAN'G. CO.,
Warren, Ohio.

Sold by First-Class Dealers Everywhere.
SUPPLIED BY JOBBERS.

COLLEGE OF THE SISTERS OF BETHANY.

TOPEKA KANSAS

BETHANY COLLEGE

Under care of the Protestant Episcopal Church.
For Girls and Young Ladies exclusively. Boarding and Day Pupils.

Twenty-six Officers and Teachers.

Faithful Maternal oversight for all entrusted to our care. All branches taught—Primary, Intermediate Grammar, and Collegiate; French, German the Classics, Instrumental and Vocal Music, Elocution, Drawing, Painting.

The Music Department employs eight teachers, and twenty-four pianos and three organs. In the Art Department the Studio is fully equipped with casts, models and copies.

Send for Catalogue to T. C. VAIL, Bursar, or BISHOP P. VAIL, President, Topeka, Kansas.

EMPORIA BUSINESS COLLEGE

EMPORIA, KANSAS.

PROF. O. W. MILLER. PRESIDENT.

FOUR GRAND

4 Grand Offers to every reader of KANSAS FARMER. Read every word of this advertisement, as we know at least one of them is exactly what you want. We are sure you have some old family picture, of some dear and departed relative or friend you would like to have enlarged, and finished in a handsome portrait, or Imperials made of it.

OFFER No. 1 If you will send us the names of three Agents, or some one you think would make us good agents, and any small picture, together with \$2.75 we will make One Dozen Imperials, Satin Finish, Gilt Edge and one extra from same original, beautifully finished in Water Colors, placed in \$x10 gold mat, (our regular price is \$10), and send the \$10 worth of pictures by mail prepaid. Old, faded, scratched or spotted originals, we carefully touch up before copying, retouch negative before printing, and put in new background when necessary. Give color Hair, Eyes, Jewelry, Drapery and Complexion, so we will know how to finish the water color portrait.

OFFER No. 2 If you prefer a larger portrait and no Imperials, if you send us the three agents' names and small picture, with \$3.75, we will make one 11x14 portrait (1/2 life-size if ordered Bust) in Water Color, and send by price for above portrait is \$16; perils a d one extra Water or the 11x14 portrait, worth \$16, must be sent with the as we positively will not fill an order at these prices after March 1, 1887. Our object in offering at so low a price is to obtain a good agent in your vicinity at once.

OFFER No. 3 Any one ordering one of our PHOTO EMPIRE EQUIPMENTS for making March 1, 1887, will receive one Negative Box, worth \$2.50, FREE 80-page book "How to make Photos," and 5x8 Portrait made by Empire Camera, sent prepaid for 24 cts. (None free.)

OFFER No. 4 THE ELECTRO RADIANT MAGIC LANTERN NO. 2 is equal to any other Lantern sold for \$25. It projects on Screen a picture 8 feet in diameter, and our price is only \$12, and if you order one before March 1, 1887, we will place in the box one dozen slides, with 2 1/2 in. pictures, free of charge. Send money by P. O. Order, Registered Letter, Draft on N. Y. or Express prepaid. References. Large Magic Lantern Catalogue.

FOR YOU

Catalogue and confidential prices to general agents for copied and enlarged portraits sent for stamp. If you are not prepared to-day to accept any of these 4 grand offers, cut this ad. out for future use, as it may not appear again.

Address **EMPIRE COPYING CO., 381 Canal St., N. Y.**



FLORAL GUIDE FOR 1887

Now ready, contains 2 Colored Plates, hundreds of Illustrations, and nearly 200 pages—32 pertaining to Gardening and Flower Culture, and over 170 containing an Illustrated List of nearly all the FLOWERS and VEGETABLES grown, with directions how to grow them where the best SEEDS, PLANTS, and BULBS can be procured, with prices of each. This book mailed free on receipt of 10 cents, and the 10 cents may be deducted from the first order sent us. Every one interested in a garden, or who desires good, fresh seeds, should have this work. We refer to the millions who have used our seeds. Buy only Vick's Seeds at Headquarters. **JAMES VICK, SEEDSMAN,** Rochester, N. Y.

CATARH

SAMPLE FREE

So great is our faith we can cure you, dear sufferer, we will mail enough to convince, free. B. S. LACROIX & Co., Newark, N. J.

PAINLESS PREGNANCY AND PARTURITION POSSIBLE. (80,000 Sold.)

Tokology, by Alice B. Stockham, M. D., is a noble book for a noble purpose. Sample pages free. Cloth, \$2.00; Mo. occo, \$2.75. **SANITARY PUBLISHING CO., Chicago.**

CONSUMPTION

I have a positive remedy for the above disease; by its use thousands of cases of the worst kind and of long standing have been cured. Indeed, so strong is my faith in its efficacy, that I will send TWO BOTTLES FREE, together with a VALUABLE TREATISE on this disease, to any sufferer. Give Address and P. O. address. DR. T. A. SLOCUM, 121 Pearl St., N. Y.

RUPTURE

Have you heard of the astounding reduction for DR. J. A. SHERMAN'S Famous Home Treatment, the only known guarantee comfort and cure without operation or hindrance from labor! No steel or iron bands. Perfect retention night and day, no chafing, suited to all ages. Now \$10 only. Send for circular of measurements, instructions and proofs. Get cured at home and be happy, office 294 Broadway, New York.

The Home Circle.

One Perfect Day.

I said to Time, in its hurried going,
O listen, I pray, to me;
Bid the swift hours stop in their ceaseless
flowing,
A boon I would beg from thee.

Forth from thy hand the years have been fleet-
ing,
And filling my life so fast
That the tears and the smiles have been meet-
ing,
And blending through all my past.

When the star of a hope has arisen,
Too oft it has set in despair,
And my soul has been bound in its prison
By trial and trouble and care.

So I ask thee, O Time, from thy giving,
One jewel to shine o'er my life,
And to light up the darkness of living—
To guide me through discord and strife.

Neither fame, neither wealth with its glitter,
Neither station nor rank do I seek,
But a blessing that seems to me fitter
For hearts that are human and weak.

Unto me, then, O Time, from thy treasure,
Give in thine own gracious way,
The gem that is wrought by Omnipotent meas-
ure,
Give me, O give me, one perfect day!

When each thought shall be pure as the white-
ness
Of love in its holiest ray;
When each deed shall be full of the brightness
That beams through one perfect day.

When no grief nor no sadness can meet me,
Nor even a cloud on the way,
When earth's joy and earth's gladness all greet
me,
Through the hours of one perfect day.

And I heard then a voice that was thrilling
With peace and wonderful might—
'Twas the power of a promise fulfilling,
The prayer I had prayed that night:

"The soul that would drink of unalloyed
sweetness,
Though it be for the briefest time,
Must rise from the plains of incompleteness,
Must climb to the heights divine.

"Time in its annals, through all of the ages,
In the whole of its masterful sway,
Has never inscribed on one of its pages,
The royal seal of one perfect day.

"Only through self and self-depriving
Can the path be cleared that may
With the aid of God and earnest striving,
Lead up to one most perfect day."

—Ella Dare, in *Inter Ocean*.

Woman's Sphere.

The era of superstition and idolatry is dead, and from its moulding dust a new era has been born—an era of progress, advancement and equal rights. Let us welcome it with gladness.

Woman is no longer the slave of antiquity, nor is her sphere bounded by walls of the kitchen or the cottages of a century ago; but she is the equal of man, not only in the domestic circle, but in the business affairs of life. Her sphere has been rapidly widening until to-day she is recognized as a worthy competitor of man in almost every calling where brain and tact are necessary to success. She is the queen of the home, mistress of the school-room, and the pride of the counting-house. She is leaving the dingy workshop, where muscle and endurance are the chief requisites for attaining excellence, and is entering the higher and more cultivated fields of action, where the elevating influence can be felt and appreciated. Actual experience has proved that she is more faithful to duty and can be trusted further than the average man, and that she actually excels him in the neatness and accuracy of her work.

There is a great demand for young women who have a practical education to enter the wide field of business as clerks, book-keepers and cashiers, and having the capacity to act as such. Why should they not?

Women, as a rule, have a keener sense of right and wrong than men, and would not allow partyism to prejudice them against the good qualities of any one. In voting she takes or would take the superiority of the candidates and the needs of the people into full and careful consideration, and as the result of her good judgment casts her vote where mankind would derive the most needed benefits from it. A woman's finer intellect and clearer insight enable her to fit herself for any position or office our land can give, and execute the duties of it with success and becoming dignity. She is held equally responsible for violation of the laws of our State, and why should she not have an equal right in making them? And echo answers, Why?

JENNIE FRANC KUNGLE.
Topeka, Kas.

NOTABLE STONES.

The Emerald, a Stone of Wonderful Beauty.

[St. Louis Globe-Democrat.]

Up to quite recently it was thought that the emerald was unknown to the ancients, and when Pliny described stones of a soft green luster he was speaking of the malachite, but the researches of the antiquaries have settled this point among many others, and by the discovery of great numbers of emeralds in the tombs of the Greeks and Romans have proved beyond a doubt that the emerald was as well known, though perhaps not so abundant, as the diamond. Although the emerald was common enough specimens of engraved stones of ancient origin are very infrequent, the most reasonable explanation being that the stone was exempt from the hands of the lapidary on account of its wonderful beauty, which it was deemed sacrilege to mar. From almost the earliest periods of history stones of a green color have been used for ornamental purposes. The green stone hatchets of Brittany, the jade axe-heads of New Caledonia, the serpentine implements of Africa, the Chinese ornaments, and the green jade and Amazon stones which the Mexicans were so fond of carving, served for examples in ancient times. The emerald was prized not only as an ornament, but valued for its supposed supernatural powers, as a talisman, and even as a medicine. It was supposed to be helpful to the eyes, hence was worn as a seal to be looked at; it was thought to endow the wearer with courage; it drove away evil spirits, calmed the fears, then extremely common, of evil deities, and was thought to prevent the falling sickness of epilepsy. It is evident, however, that the gem was rare among the Romans until the times of the emperors, when it was largely imported from the East, and

THE BEST SPECIMENS OF THE GEM known are among those discovered in the graves and sarcophagi of the royal and princely personages of the latter empire. One of the finest collections of emeralds in the world is that composing two necklaces found in the tomb of a Roman empress. One was of sixteen natural emeralds in crystal form, fastened together with gold, and the other of ten crystals set in double golden chains.

At present the emerald is a comparatively rare gem, but it was not always so. After the discovery of America thousands of precious stones of this kind were sent from America to Europe; such, in fact, being their abundance that the value of these gems was brought down to a mere trifle. Those were the palmy days of Spain, when the nobles were fairly covered with jewels whenever they appeared in public. The Spaniards who came with Cortez searched in vain for the mines whence the Mexicans obtained the wonderful emeralds and turquoises that were seen in such abundance, but never found them, nor were they discovered until quite recently. Some of these mines are now known to be in New Mexico, and the Navajo Indians wear turquoises of remarkable beauty as heirlooms, and will not for any consideration part with them. When Cortez returned home from America he brought with him five emeralds of wonderful size and beauty, and presented them to his bride. One was in the shape of a rose, another in the shape of a horn, the third like a fish with golden eyes, the fourth like a little bell, the fifth in the shape of a cup set with pearls. The whole assortment was lost, together with two emerald vases, WORTH 300,000 DUCATS

each, when Cortez was shipwrecked on the coast of Barbary in 1529. Various expeditions have been fitted out at different times for the purpose of recovering these gems, the locality of the shipwreck on the coast of Barbary being perfectly well known, but none were successful. Much wonder has been excited by the disappearance of numerous stones of great size and beauty which were presented by the conquerors of the new world to European potentates, but a comparatively easy method of accounting for the disappearance has been overlooked. When a valuable stone has once been stolen from the treasury of a king the thief cannot dispose of it in its original form, for it is too easy of identification, so he breaks it up, and of it several gems of less weight and value are formed; these can be easily sold without fear of detection, the identity of the jewel is

completely lost, and this plan accounts in a satisfactory way for the complete disappearance of many valuable stones. In addition to this fact, there has for ages been a constant draft of precious stones toward the East, and after they go none return.

The finest emerald in Europe is said to belong to the Emperor of Russia. It weighs but thirty carats, but is perfectly transparent and of wonderful brilliancy. The cabinets of the continent contain a large number of uncut stones brought from America by the Spaniards at the time of the conquest and kept in their original conditions as curiosities. A historic specimen of the jewel was a gem given by the Empress Irene to the Emperor Charlemagne. A hollow in it contained a piece of the true cross and

A STRONG GOLDEN CHAIN

made it available for use as a talisman. It was buried with his body, and when his grave was rifled it was taken along with the other gems found there. In 1811 it was presented to Napoleon by the citizens of Aix la Chapelle, and he wore it round his neck at the battles of Austerlitz and Wagram. He afterward gave it to Hortense, who wore it till her death, when it returned to a place among the crown jewels of France. The Sultan of Turkey has an emerald weighing 125 ounces, and another of 300 carats mounted in the handle of a dagger. The finest specimens of the natural emerald in the world are those presented to the shrine of Loretto by Don Pierre Daragon, formerly viceroy in Peru. The specimens consist of a mass of white limestone, crowned with crystals or emeralds more than an inch in diameter and of exquisite luster. The name Emerald Isle as applied to Ireland is believed to be from a fine emerald which Pope Adrian sent set in a ring to Henry II. as the sign of his investiture with the sovereignty of the island. The East Indian princes have many emeralds of large size, and some of them have been engraved with great care, but perhaps the best specimen of modern engraving on this stone is that executed by Carlo Costanzi during the last century. The work required two and a half years. When the French army was occupying Spain, it was under command of Marshal Junot, who had much more cupidity than reverence. On one occasion, when he was visiting the cathedral of Toledo, the officials exhibited to him the treasures of the place. Among them was the Virgin's crown of gold and adorned with many excellent gems, among which was a large emerald which formed the very top of the crown. Looking at the gem for a time

HE COOLLY TWISTED IT OFF

and put it in his pocket. "This ought to belong to me," The origin of the emerald is supposed to be vegetable. It is always found in fossil formations and often among fossil shells. What its coloring matter is has not yet been exactly determined, but it is believed to be organic. A very singular fact about the emerald is that when first extracted from its native rock it is so soft that it may be crushed to pieces, even ground to powder by the fingers. When this fact was told it was ridiculed by those who thought they knew better, but it is said to be placed beyond all doubt by the investigations and reports of scientific men who made special efforts to determine the truth of the assertion, and upon visiting the mines and examining the newly extracted stones they found that softness was one of the most prominent qualities, and that the emeralds had to be laid aside a few days after their discovery until they had dried and hardened. Emeralds of considerable beauty are found in several localities of the United States, particularly in North Carolina and Georgia.

The ancient imitations of the emerald were very numerous, and far superior to any that modern ingenuity has been able to produce. Many so-called monster emeralds have come down from ancient times, but the lapidaries of our own age have always found them to be imitations made of glass of such exceeding hardness as to almost defy detection. The Holy Grail of Venice is of this kind. It was brought to Europe by the Crusaders in the twelfth century, and was believed to be made of a single emerald, was jealously guarded by the republic of Venice for ages, and is even now held in great reverence, though its value as a precious stone has been destroyed by the discovery that it is of glass. The principal mines of emeralds in ancient times were in Scythia, Arabia and Africa. At present emeralds are

found in many parts of the world, the best coming from Russia and Siberia. The emerald has no fixed price like the diamond, and the fluctuations of the gem during the past 300 years form one of the most curious chapters in the history of precious stones. About the year 1600, according to the best authorities, emeralds, particularly from America, were so plentiful as not to be worth more than \$5 a carat. Since the beginning of the present century the emerald has from some cause become very rare, and its value now exceeds that of the diamond. Fine emeralds, without crack or flaw, to which this stone is exceedingly liable, are worth \$200 per carat, and the value increases in much greater proportion in the case of larger stones.

Though sages may pour out their wisdom's treasure,
There is no sterner moralist than pleasure.
—Byron.

Pride hath no other glass
To show itself, but pride; for supple knees
Feed arrogance, and are the proud man's fees.
—Shakespeare.

A wife as sweet as he deserved,
A steady-natured and wise-hearted one,
Who toiled with him, not holding work the end
Of their joint life, but kept a margin clear
For studious thought, for books, for all that
helped
The mother and the woman to be true.
—Lucy Larcom.

"Thou must thyself be true,
If thou the truth wouldst teach;
Thy soul must overflow if thou
Another's soul wouldst reach;
It needs the overflow of heart
To give the lips full speech.

"Think truly, and thy thought
Shall the world's famine feed;
Speak truly, and each word of thine
Shall be a fruitful seed;
Live truly, and thy life shall be
A great and noble creed!"



Cuticura
A POSITIVE CURE
for every form of
Skin and Blood
Disease
from
PIMPLES to SCROFULA

SKIN TORTURES OF A LIFETIME INSTANTLY relieved by a warm bath with CUTICURA SOAP, a real Skin Beautifier, and a single application of CUTICURA, the great Skin Cure. This repeated daily, with two or three doses of CUTICURA RESOLVENT, the New Blood Purifier, to keep the blood cool, the perspiration pure and unobstructed, the bowels open, the liver and kidneys active, will speedily cure Eczema, tetter, ringworm, psoriasis, lichen, pruritus, scall head, dandruff, and every species of torturing, disfiguring, itching, scaly and pimply diseases of the skin and scalp, with loss of hair, when physicians and all known remedies fail. Sold everywhere. Price, CUTICURA, 50c.; SOAP, 25c.; RESOLVENT, \$1. Prepared by the POTTER DRUG AND CHEMICAL CO., Boston, Mass. Send for "How to Cure Skin Diseases."

PIMPLES, blackheads, chapped and oily skin prevented by CUTICURA MEDICATED SOAP.

HUMPHREYS'
HOMEOPATHIC VETERINARY SPECIFICS
For Horses, Cattle, Sheep,
Dogs, Hogs, Poultry.
USED BY U. S. GOV'T.



Chart on Rollers, and Book Sent Free.
CURES—Fever, Congestions, Inflammation,
A. A.—Spinal Meningitis, Milk Fever,
A. B.—Strains, Lameness, Rheumatism,
C. C.—Distemper, Nasal Discharges,
D. D.—Bots or Grubs, Worms,
E. E.—Coughs, Heaves, Pneumonia,
F. F.—Colic or Gripes, Bellyache,
G. G.—Miscarriage, Hemorrhages,
H. H.—Urinary and Kidney Diseases,
I. I.—Eruptive Diseases, Mange,
J. K.—Diseases of Digestion.

Price, Bottle (over 50 doses), .75
Stable Case, with Manual, (500 pages with
chart) 10 bottles Specifics, bottle of Witch
Hazel Oil and Mediator, \$8.00

Sent Free on Receipt of Price.
Humphreys' Med. Co., 109 Fulton St., N. Y.



HUMPHREYS'
HOMEOPATHIC
SPECIFIC No. 28

In use 30 years. The only successful remedy for
Nervous Debility, Vital Weakness,
and Prostration, from over-work or other causes.
\$1 per vial, or 5 vials and large vial powder, for \$5.
SOLD BY DRUGGISTS, or sent postpaid on receipt of
price.—Humphreys' Medicine Co., 109 Fulton St., N. Y.

Free Treatise For the Weak,
Nervous and
Debilitated;
How to regain
Health, Strength
and Vigor. **Home Treatment**

for Nervous and Mental diseases. TRIAL SENT.
Address DR. J. W. BATE & CO.,
233 S. Clark street,
CHICAGO, ILL.

SURE cure for epilepsy or fits in 24 hours Free to poor.
Dr. Kruse, M.C., 2336 Hickory St., St. Louis, Mo.

The Young Folks.

The Song of Steam.

Harness me down with your iron bands;
Be sure of your curb and rein;
For I scorn the power of your puny hands
As the tempest scorns a chain.
How I laughed as I lay concealed from sight
For many a countless hour,
At the childish boast of human might
And the pride of human power.

When I saw an army upon the land,
A navy upon the seas,
Creeping along, a snail-like band,
Or waiting the wayward breeze;
When I marked the peasant faintly reel
With the toll which he daily bore,
As he feebly turned the tardy wheel
Or tugged at the weary oar;

When I measured the panting courser's speed,
The flight of the carrier dove,
As they bore the law a king decreed,
Or the lines of impatient love—
I could not but think how the world would
feel,
As these were outstripp'd afar,
When I should be bound to the rushing keel,
Or chained to the flying car.

Ha! ha! ha! ha! they found me at last,
They invited me forth at length,
And I rushed to my throne with a thunder-
blast,
And laughed in my iron strength;
O then he saw a wondrous change
On the earth and the ocean wide,
Where now my fiery armies range,
Nor want for wind or tide.

Hurra! hurra! the waters o'er,
The mountain's steep decline,
Time—space—have yielded to my power;
The world! the world is mine!
The rivers the sun hath earliest blest,
Or those where his dreams decline
The giant streams of the queenly west,
Or the Orient field divine!

The ocean pales where'er I sweep—
I hear my strength rejoice;
And the monsters of the briny deep
Cower, trembling, at my voice.
I carry the wealth and lord of earth,
The thoughts of his god-like mind;
The mind lags after my going forth,
The lightning is left behind.

In the darksome depths of the fathomless
mine,
My tireless arm doth play;
Where the rocks never saw the sun decline,
Or the dawn of the glorious day,
I bring earth's glittering jewels up
From the hidden caves below,
And I make the fountain's granite cup
With a crystal gush o'erflow.

I blow the bellows, I forge the steel,
In all the shops of trade;
I hammer the ore and turn the wheel
Where my arms of strength are made;
I manage the furnace, the mill, the mint;
I carry, I spin, I weave,
And all my doings I put into print
On every Saturday eve.

I've no muscle to weary, no breast to decay,
No bones to be "laid on the shelf,"
And soon I intend you may "go and play,"
While I manage this world myself.
But harness me down with your iron bands,
Be sure of your curb and rein;
But I scorn the power of your puny hands,
As the tempest scorns the chain.

How Shot and Bullets are Made.

Few people who have not penetrated the mysteries of a shot tower know much about the manufacture of shot and bullets. The trip to one of these towers is not without its reward.

Mr. C. C. Tracy is superintendent of one of New York's shot towers. Entering the factory the first thing seen is an enormous fly-wheel, nearly as large as that of the great Corliss engine, which is a part of the sifting and sorting machinery. Passing through, and leaving behind the rumble of the heavy engine, a patter like that of hail is heard. Looking down, one sees a tank of water twelve feet deep. Into this the shot continually rain.

"This is No. 6 shot," said Mr. Tracy. "It falls from the first landing, a distance of 140 feet. About three-fourths of it is found to be of the desired size, No. 6, as it comes from the water. The remainder is of different sizes, and a certain small fraction is imperfect and must be melted again. Now, if you are ready for a hard climb, we will go upstairs. I have been here twenty-one years. These stairs did not formerly bother me at all, but now they catch my knees a little."

At the first landing stood a man with leather gloves, leather apron and sponge at nose, before a vast cauldron filled with molten lead. He was using a large ladle, with which he replenished a cast-iron pot standing in a sort of box like a cistern top. Down through the bottom of this pot, perforated like a colander, the globules of lead fell.

"You know," said Mr. Tracy, "that the discovery of this process came about all by accident. Some roofers were repairing a church spire. One of the workmen happened to notice that the solder which fell

from his lofty perch was found in tiny globes upon the ground beneath the steeple. From this fact he argued that the roundness of shape must be caused by the effect of the long passage through the air, and the principle of the shot tower was evolved. Till that time all shot was moulded. Lead melts at about 590 deg. F. This lead, which the man is handling, has a temperature of something like 1,500 deg. You may imagine it is pretty hot. This little kettle holds 7,000 pounds of lead, which all goes down in about two hours. We get pig lead from Omaha and Newark. Generally we carry 375 tons of shot in stock."

Mr. Tracy climbed to the second landing, 185 feet above the ground. There the writer was introduced to a furnace and cauldron for larger-sized shot. The view from the windows was superb. Twenty feet above is the roof of the tower. Any one who has mounted to the second landing is quite ready to rest a few moments while the process of shot-making is explained. "Lead shot," said Mr. Tracy, "though sometimes made of lead alone, is almost always formed of an alloy of arsenic and lead. The arsenic is introduced in the form of arsenious acid or the sulphuret. The object of the addition of the arsenic is to render the hard, brittle qualities of the lead softer and more ductile, and of the proper consistence to take the globular form. Owing to the rapid decomposition of the arsenic, it is treated by itself in the bottom of the melting kettle. A cover is placed over the substance, and its stem, which rises up through the kettle, is fastened down. The lead is then added above the cover, and when melted the cover is lifted out of the liquid mass, which instantly becomes permeated with the arsenic beneath. The alloy thus produced contains forty-five pounds of arsenic to the ton of lead, and is known as 'temper.' This again is added, in the proportion of 1 per cent., to the pure lead, and thus the shot alloy, containing a very small percentage of arsenic, is produced. The 'temper pots' hold about a ton of metal each.

"After the shot have reached the bottom of the well they are at once lifted out by an elevator and thrown upon an inclined drying table, over which they slide, falling finally into a wire-gauze rotating cylinder. Then they are rolled and ground together, and in this way the minute burrs upon them are removed. From the cylinder another elevator lifts the shot upon a screening table. This consists of a series of planes arranged at gradually decreasing heights. Between each two there is an interval. The shot, being started at the head of the highest plane, will, if perfect, roll from one plane to another, jumping over the intermediate spaces. If imperfect, however, it tumbles and goes back to the melting kettle. The good shot, after passing this ordeal, reach the separators.

"It should be explained that there are usually several tables, each being devoted to a different size of shot. The little leaden globes are next elevated to the top cylinder of a series, arranged on an incline. They are conical in form, and covered with perforated sheet brass. Each cylinder serves as a sieve for a particular size of shot, retaining that and allowing all smaller sizes to escape. The shifting goes on until each cylinder has picked out the particular class of shot to which it is adapted. The sizes of shot are standard. The smallest is known as 'dust,' and then comes 'No. 12,' which is .05 inch in diameter, 2336 shot going to the ounce. The sizes then increase by one-hundredths of an inch up to twenty-three hundredths, of which there are twenty-four shot to the ounce. The shot being assorted, polishing alone remains to be done. This is accomplished by placing the shot, together with plumbago, in a box, which is rapidly rotated. The glossy black smoothness is thus imparted. The shot are then weighed, bagged and ready for sale."

"Are not the fumes of the lead and arsenic very injurious to the workmen?" Mr. Tracy was asked.

"Well, there is no denying that some men are affected by the fumes engendered in the process of manufacture. Some system cannot stand it. One of our employes showed signs of poisoning. He grew feeble and gave up his place. But, after a vacation of seven months, he returned to us again, and remained nine years in perfect health. It is difficult to lay down a general rule. Our men are all healthy. Painters, corrodors and smelters are much more exposed to noxious fumes than are those engaged in making shot."—*Mail and Express.*

INJUSTICE CORRECTED.

Convincing Verification of Widecast Public Statements.

To the readers of the Kansas Farmer:

In common with many publishers and editors, we have been accustomed to look upon certain statements which we have seen in our columns as merely adroit advertising.

Consequently we feel justified in taking the liberty of printing a few points from a private letter recently received from one of our largest patrons, as a sort of confession of faith to our readers. We quote:

"We have convinced ourselves that by telling what we know to be true, we have produced at last a permanent conviction in the public mind. Seven years ago we stated what the national disease of this country was, and that it was rapidly increasing. Three years ago we stated that a marked check had been given it.

"The statistics of one of the largest life insurance companies of this country shows that in 1883 and 1884, the mortality from kidney disorders did not increase over the previous years; other companies stated the same thing. It is not presumptuous for us to claim credit for checking these ravages.

"Seven years ago we stated that the condition of the kidneys was the key to the condition of health; within the past five years all careful life insurance companies have conceded the truth of this statement, for, whereas, ten years ago, chemical analysis to determine the condition of the kidneys was not required, to-day millions of dollars in risks are refused, because chemical examination discovers unsuspected diseases of the kidneys.

"Seven years ago we stated that the ravages of Bright's Disease were insignificant compared with other unsuspected disorders of the kidneys of many misleading names; that ninety-three per cent. of human ailments are attributable to deranged kidneys, which fills the blood with uric acid, or kidney poison, which causes these many fatal diseases.

"The uric acid, or kidney poison, is the real cause of the majority of cases of paralysis, apoplexy, heart disease, convulsions, pneumonia, consumption, and insanity; over half the victims of consumption are first the victims of diseased kidneys.

"When the recent death of an honored ex-official of the United States was announced, his physician said that although he was suffering from Bright's Disease, that was not the cause of death. He was not frank enough to admit that the apoplexy which overtook him in his bed, was the fatal effect of the kidney poison in the blood, which had eaten away the substance of the arteries and brain; nor was Logan's physician honest enough to state that his fatal rheumatism was caused by kidney acid in the blood.

"If the doctors would state in official reports the original cause of death, the people of this country would be alarmed, yea, nearly panic stricken, at the fearful mortality from kidney disorders."

The writers of the above letter give these facts to the public simply to justify the claims that they have made, that "if the kidneys and liver are kept in a healthy condition by the use of Warner's safe cure, which hundreds of thousands have proved to be a specific, when all other remedies failed, and that has received the endorsement of the highest medical talent in Europe, Australasia and America, many a life would be prolonged and the happiness of the people preserved. It is successful with so many different diseases because it and it alone, can remove the uric acid from the blood through the kidneys."

Our readers are familiar with the preparation named.

Commendation thereof has often appeared in our columns.

We believe it to be one of the best, if not the best ever manufactured. We know the proprietors are men of character and influence.

We are certain they have awakened a wide-spread interest in the public mind concerning the importance of the kidneys. We believe with them that they are the key to health, and that for their restoration from disease and maintenance in health, there is nothing equal to this great remedy.

The proprietors say they "do not glory in

this universal prevalence of disease, but having started out with the purpose of spreading the merits of Warner's safe cure before the world, because it cured our own senior proprietor, who was given up by doctors as incurable, we feel it our duty to state the facts and leave the public to its own inferences. We point to our claims, and to their public and universal verification with pride, and if the public does not believe what we say, we tell them to ask their friends and neighbors what they think about our preparations."

As stated above, we most cordially commend the perusal of this correspondence by our readers, believing that in so doing we are fulfilling a simple public obligation.

Everybody Likes It.

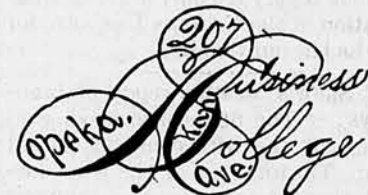
Any person sending fifteen cents to the Advertising Department of the Wabash Route, St. Louis, Mo., will receive by return mail a handsome, well-bound book, entitled, "Social Amusements," containing all the latest and most novel Parlor Games, Charades, etc. The best publication ever issued for anyone giving an evening party.

Free Tuition. Expenses Light. KANSAS STATE AGRICULTURAL COLLEGE.

Endowment \$500,000. Buildings \$100,000. Apparatus \$50,000.

17 INSTRUCTORS. 400 STUDENTS.

Farmers' sons and daughters received from Common Schools to full or partial course in Science and Industrial Arts. Send for Catalogue to Manhattan, Kansas.



Journal sent free on application.

NEW Sample Book of beautiful cards, 14 Games, 12 tricks in magic, 436 Album verses. All for a 2c. stamp. STAR CARD CO., Station 15, Ohio.

Beautiful Cards. Agents' sample book and full outfit for 2c. stamp. EAGLE CARD WORKS, Northford, Conn.



NEW CARDS, 40 Samples and AGENTS' CANVASSING OUTFIT for 2c. stamp. CARD WORKS, Northford, Conn.

WORK FOR ALL. \$30 a week and expenses paid. Valuable skills and particulars free. P.O. VICKERY, Augusta, Maine.

A BIG OFFER. To introduce them, we will GIVE AWAY 1,000 Self-Operating Washing Machines. If you want one, send us your name, 1c. stamp, and express office at once. The National Co., 23 Day St., N.Y.

WANTED Ladies and Gentlemen to take nice light work at their homes. \$1 to \$5 a day easily made. Work sent by mail. No canvassing. Steady Employment Furnished. Address with stamp CHAS. W. F. G. CO., 294 Vine St., Cincinnati, Ohio.

WE WANT YOU! A live energetic man or woman needing profitable employment to represent us in every county. Salary \$75 per month and expenses, or a large commission on sales if preferred. Goods staple. Every one buys. Outfit and particulars free. STANDARD SILVERWARE CO., BOSTON, MASS.

DO YOUR OWN PRINTING

DARLING & JOHNSON, Topeka, Kas., Fine Job Printers and manufacturers of

RUBBER STAMPS!

for printing cards, envelopes, marking clothes, etc. Also Stencils for marking sacks. Make money by writing us.

"Way Down South"

In the Land of Cotton is published "DIXIE LAND," the great Southern Home Journal—8 pages, 48 columns, elegantly illustrated—all for only \$1.00 per year, and an elegant premium free to every subscriber. The best thing for agents ever offered. Sample copies free. Something entirely new and original. Send \$1.00 and get paper (and premium) by return mail. Premiums range in value from \$20 to \$500.

Address DIXIE PUBLISHING CO., 932 Main street, Dallas, Texas.

VIOLIN OUTFITS. Consisting of Violin Box, Bow, and Teacher, sent to any part of the United States on 10 days' trial before buying. Violin OUTFITS at \$4.50, \$15 and \$25 each. Send Stamp for Beautiful Illustrated 32-page Catalogue of Violins, Guitars, Banjos, Cornets, Flutes, Strings, etc. Lowest prices. Mail orders a specialty. C. W. STORY, 26 Central Street, Boston, Mass.

KANSAS FARMER.

ESTABLISHED IN 1883.

Published Every Wednesday, by the
KANSAS FARMER COMPANY.

OFFICE:
273 Kansas Avenue, Topeka, Kas.

H. C. DeMOTTE, - - - - - PRESIDENT.
H. A. HEATH, - - - - - BUSINESS MANAGER.
W. A. PEPPER, - - - - - EDITOR-IN-CHIEF.

SUBSCRIPTIONS:
One copy, one year, - - - - - \$1.50.
Five copies, one year, - - - - - 5.00.
An extra copy free one year for a Club of eight, at \$1.00 each.
Address **KANSAS FARMER CO.,**
Topeka, Kansas.

NEW ADVERTISEMENTS.

D. R. Sperry & Co.—Profit Farm Boiler.
Charles P. Willard & Co.—Two-horse-power Engine.
Challenge Wind-mill and Feed-mill Co.
James O'Toole—Grand Sale of the Season.
E. D. Van Winkle—For Sale.
H. Dubois—For Sale.
D. S. Grimes—What I Would Do.
Wm. P. Higginbotham—Public Horse Sale.
I. F. & D. L. Snediker—For Sale.
Samuel Wilson—Stray Beauty Potato.
Brady, Dorman & Co.—A Bargain.
The McMullen Woven Wire Fence Co.

Prof. Blake says, "February will be the coldest month of the winter." He says it will be "more steadily cold" than was January.

Mr. Joseph Merk, horticulturist and landscape gardener, of Deming, N. M., writes us a very friendly letter in commendation of the KANSAS FARMER, for which he has our thanks.

Prof. Snow's weather report of January says: "The fifth consecutive cold January, of the fifth consecutive cold winter. The total run of the wind surpassed that of any preceding January, although the maximum velocity has often been exceeded. The rainfall was nearly normal, and the cloudiness and humidity were considerably below the average."

THE LEGISLATURE.

An act was passed last week and approved by the Governor to provide for the registration of voters at county seat elections. The object is to prevent fraud.

A bill to repeal all laws authorizing municipalities to vote aid to railroads was defeated in the House; a bill to reduce the amount that may be voted from \$4,000 a mile to \$2,000, or \$2,500 a mile seems to meet with pretty general approval. The theory of bond-voting is wrong; but the people have adopted the practice, and without a constitutional prohibition, there is no way to restrain it except to limit the amount.

A bill to remove unfaithful officers summarily is recommended for passage in the House.

A bill to provide for the improvement of county roads is favorably reported by the Senate. The substantive part of the bill is that whenever a majority of the resident landholders within one-half mile on either side along the line of any regularly laid out road within the terminal points mentioned in the petition, shall petition the Board of County Commissioners of any county in this State for the improvement of any road as located or any part thereof, it is made the duty of such County Commissioners to cause the same to be improved as provided in the body of the bill. The parties having charge of and conducting the work are appointed by the County Board, and consist of three persons, resident landowners of the county, to be known as road commissioners, whose duty it is to do the work in conformity with profile and specifications filed with the County Clerk.

One bill, already favorably acted on by the Senate prohibits the encumbering of certain exempt property without consent of both husband and wife.

It is proposed in one bill to grant

more power to the State Board of Railroad Commissioners, so as to enable them to enforce their recommendations.

A petition asks for the removal of S. T. Walker, Superintendent of the Olathe Deaf and Dumb Asylum, for alleged cruelty to the inmates.

A good deal of discussion has been aroused on the bill proposing a uniformity of text books for the schools of the State and for the printing of the books by the State.

Irrigation is receiving a good deal of attention. Several bills have been introduced relating to that subject, one of them to prevent cutting banks of ditches maliciously.

One bill is entitled an act to authorize city and township treasurers of school districts to register all warrants or orders drawn upon them and not paid for want of funds, and providing for the payment of the same in the order of registration.

The temperance bill was made special order for yesterday afternoon.

It is intended by one bill to make intoxication a misdemeanor, punishable by imprisonment in the county jail from one day to thirty days.

A labor bill proposes to make eight hours a day's work in the absence of special contract otherwise.

To protect pensioners, a bill was introduced providing that money which may have been received by any debtor as pensioner of the United States within the three months next preceding the issuing of an execution or attachment or garnishment process, cannot be applied to the payment of the debts of such pensioner when it is made to appear by the affidavit of the debtor or otherwise that such pension money is necessary for the maintenance of a family supported wholly or in part by said pension money.

To protect mechanics and common laborers on public buildings, one bill proposes means.

The number of bills introduced up to Monday evening was 241 in the Senate and 465 in the House. The time of the session is now a little more than half passed, and while the work is far advanced, it will be impossible to dispose of more than one-fourth of the business now on hand. And the important appropriation bills are not yet introduced.

Free Passes on Railroads.

The President approved the inter-State commerce bill, last Friday, and the discussion has begun concerning the provisions prohibiting the issuance and use of what are commonly called free passes. The law was enacted to regulate inter-State commerce, that which is carried on "among the several States," and has no relation to local transportation within any of the several States. Hence, the provisions of the bill which bear upon the pass business apply to those passengers that are carried from one State to another over one line on the same trip. But the discussion is developing an interest on the part of many persons, some of whom are connected with railroads and some are not. The query with both classes is whether the provisions of the new law will or may be used as inducement to do away with the pass business in the States.

It is time that State Legislatures put a stop to free transportation of persons who are able to pay their way, excepting employees. The number of free passes issued by railroads is very large. Were the exact figures given, they would astonish the people. Every strong railway company in the country has a division in its official business devoted exclusively to this particular matter. A record is kept of every pass

issued, and it has been stated many times by prominent railroad men that the business in that line is not only large but is growing larger every year, and that it has become one of the serious problems of railroad management how to reduce its dimensions or abolish it entirely. Charles Francis Adams, President of the Union Pacific railroad company, made a startling statement on the subject before a Congressional committee. Having forgotten what it was, we do not pretend to state what he said, but it impressed itself upon the minds of thoughtful people.

It has gone so far that a great many people apply through friends for passes, just as persons do who want some office or place of employment in the public service. Only an hour or two ago a case came under the observation of the writer of this. A lady called at the office, and in the course of a brief conversation it was made evident that she and a friend had travelled several thousand miles within a few weeks or months on free passes, and yet their husbands were not railroad men, nor were the ladies in railroad employ. But they have friends who have influence with the companies.

The pass business is grossly unjust to the people and ought to be wholly abolished. There is no good reason why three-fourths of the traveling people should pay the fare of the remaining one-fourth. Let every passenger pay his own fare, and then there will be gain enough in receipts to justify a reduction of the cost of traveling. Whatever is now lost by reason of free transportation ought to be saved to the people who do pay. By abolishing the pass system and reducing the rates from three cents a mile to two cents a mile, the resulting increase of travel would soon pay the companies more than they received before the reduction. Where one hundred persons travel on a three-cent mileage rate, one hundred and twenty-five would travel at a two-cent rate, and that, with the additions made by requiring all passengers to pay equally, would more than make up for all losses by reason of reducing rates.

Our Legislature ought to require of the State Board of Railroad Commissioners that they investigate this subject thoroughly and report the facts found to the Governor to be transmitted to the Legislature.

Kansas Farmer and Weekly Capital.

A good many inquiries reach us in regard to our clubbing rates with the *Weekly Capital and Farmers' Journal*, particularly as to whether it makes any difference where the subscribers receive their papers. Our terms, unless qualified, are general always, and it matters not where the paper is to be sent, nor whether subscribers to both papers want them sent to different places. When \$1.50 is forwarded for the KANSAS FARMER and *Weekly Capital*, the papers will be mailed to the same address or to different addresses, just as the subscriber or subscribers desire. One person may want the FARMER, a neighbor may want the *Capital*; by joining, one of them sends the money for both, and the papers will be mailed as requested.

Great Special Offer!

Two important weekly papers for the price of one paper. The KANSAS FARMER, price \$1.50 a year, and the *Topeka Weekly Capital*, price \$1.00. Both papers for \$1.50. This offer holds good only until March 1, 1887.

A lot of horses at San Francisco became frightened a few days ago and jumped into the bay. One of them landed on a beach five miles away, after swimming for twelve hours.

Farmer Funston on the Cattle Disease Bill.

Through courtesy of Hon. E. H. Funston, member of Congress from the Second Congressional district, we have a copy of the *Congressional Record* for January 29, containing his remarks on the pleuro-pneumonia bill. We make a few extracts—

I do not feel like letting this bill go to a vote without saying a word in its favor. While it may not be perfect in every respect, it certainly is the result of much thought and deep interest in a matter which so vitally concerns the material prosperity of our land, and which affects not only the owners of live stock but a much larger class who consume the meat and dairy products of this country. It is not legislation in favor of any special class of persons, but it is legislation in which every man, woman, and child are interested, and none more than the poor man who does not own a hoof in all the broad land.

It is a question of food for the millions. Shall it continue to be within the reach of all, the poor as well as the rich, or shall we permit a disease most fatal in its character, and which has for centuries baffled the efforts of the most skillful veterinary surgeons, to plant itself firmly in our land, destroying our magnificent herds of cattle, breaking up the animal industry of the farm, and in consequence of which advancing the prices of the products of the herd and the dairy beyond the reach of those who cannot indulge in luxuries.

It is a mere business question which presents itself. Shall we meet it in a business-like manner, or shall we dally with it until it has spread beyond our reach or where it will require millions of money to eradicate it, whereas to-day it requires but thousands? The gentleman from Mississippi (Mr. Morgan), my colleague on the committee, objects to the bill because the amount, \$250,000, is insufficient, in his judgment, to carry out its purposes. My only answer to him is: then let us increase it sufficiently at least to destroy all affected animals, which would materially check the spread of the contagion, if not eradicate it altogether; at least it would hold it in check until the meeting of another Congress, when further legislation can be had under additional light on the subject. What we want now is thorough organization, with power from the government to do something. As matters have been, the government agents have been in many cases refused access to the infected herds, and are told that "whatever is done must be under the laws of the State, and as the State has no law on the subject, nothing can be done."

* * * The only thing left for us to do now is to eradicate it in the quickest way possible, which is by the death of the animal infected. The three-fourths compensation at their sound value may seem to be too much when considered strictly in the light of obligation, but when we reflect that many infected animals have recovered; also that a less compensation than three-fourths would be an inducement to the owner to conceal the existence of the disease in his herd, it is thought to be wise to do that which would most likely revert to the public good, which is to pay a sufficient amount to secure its exposure by the owners of the infected animals.

In this we have the example of European governments that have struggled with the disease for many years. France allows one-half value before the disease, if they are found to be affected, and three-fourths if only contaminated. England one-half of value before disease. Germany three-fourths. Austria the mean value of the animal before the disease. Belgium the same. Holland one-half value for those diseased and full value for those suspected; and Sweden two-thirds of value before the disease. * * *

The interest at stake is too great to permit dallying with this matter. It would be trifling with the wealth and prosperity of the country. Already the existence of pleuro-pneumonia has caused us the loss of millions of dollars by shutting us out of foreign markets. England has in consequence of it forced us to slaughter our fat cattle in their ports of entry immediately upon landing, thus giving no opportunity to recover from the bruises and shrinkage of a sea voyage, and also forcing us into market wherever we may land and for whatever we can get at the time. The trade with England in stock or store cattle for the purpose of fattening, which was fast becoming one of the most profitable exports of this country has been destroyed, and millions of dollars annually flowing into this country through that channel has been turned in other directions.

Our exports of cattle have dropped from \$17,000,000 in 1884 to \$10,000,000 in 1886, and during the same period our exports of fresh beef have dropped from \$11,000,000 to \$9,000,000, and cheese from \$11,000,000 to \$7,000,000, and butter from \$3,000,000 to \$2,000,000, making a falling off in the two years mentioned of \$14,000,000; and yet we hesitate about giving \$250,000 to change that condition of things, to say nothing of the preservation of the cattle interests of this country, valued at over \$1,200,000,000.

There is a family in Glascock county, Georgia, consisting of a man, his wife and three children, whose aggregate weight is less than two hundred pounds.

Inquiries Answered.

INSURANCE.—The name of the Superintendent of Insurance is Richard B. Morris.

POTATO CROPPING.—I want to plant two or three acres of potatoes this spring, but not having the money to buy what seed I want, I wish to pay for them by giving a share of the crop. What share should I give?—One bushel in twenty would be about right.

ENSLILAGE.—I am interested in ensilage. Could you procure that little book of Mr. Karskadon's for me?

—The price of the book is 50 cents. Address T. K. Karskadon, Keyser, W. Va. It is much the most complete work on the subject that we know of.

TILING.—Is there any place in Kansas where tiling is made? If so, what can it be had at, and where can it be had? The tiling wanted to put in wells, as they are very deep—from 90 to 200 feet, and some sand. What is best to wall with as the wells are dug?

—We made inquiry on the subject two years ago, and did not learn of any Kansas pottery establishments. Tiling sold in Topeka was then brought from St. Louis. But if our correspondent will write to the Mayor of Fort Scott, he may learn something to his interest. There was some work of this kind done there a few years ago. We never knew anything better than wood-curbings for walling as the digging proceeds.

ONION CULTURE.—Can you give us something on onion culture, time of planting, mode of cultivation, kinds, probable yield, and whether there is reasonable certainty of a crop in Kansas, etc.?

—In last week's FARMER, our correspondent will find something on the subject. Onions do well in Kansas, the yield is anywhere from 200 to 1,000 bushels per acre, an average, probably, of 300 to 400. We would advise the use of several varieties of seed to begin with, as an experiment. The Early Red, Wethersfield Large Red, Red Globe, Globe Danvers, are all good varieties. The El Paso is a Mexican variety, very large, and if it can be grown successfully here, it will be profitable. Several responsible seed dealers advertise in the KANSAS FARMER. Send for their catalogue, mentioning this paper.

WEIGHT OF CATTLE.—Can you inform me through the KANSAS FARMER a correct rule for ascertaining the weight of live cattle?

—We suppose our correspondent means some way other than weighing. "Measure the girth close behind the shoulders, then measure the length from the fore part of the shoulder blade along the back to the bone at the tail, in a vertical line with the buttocks. Now multiply the girth, in feet, by itself, that product by the length, in feet, and this last product multiplied by ten and divided by three will give the dressed weight of the quarters." The quarters of a beef weigh a little more than one half as much as the living animal. As an example, say the girth is 6 feet and the length is 5 feet; 6 multiplied by itself gives 36; that multiplied by 5 gives 180, which multiplied by 10 gives 1,800, and that divided by 3 gives 600, which, according to the rule, is a little more than half the live weight. The animal would weigh very nearly 1,200 pounds. But there is no absolutely unfailing rule, except that of weighing.

FRUIT TREES.—As I intend to plant quite a number of fruit trees next spring, what kind would you recommend as best suited for our climate of the following: Apples, peach, cherries, plums, quince, pears, apricots, and crab apples? which kind of each is the best for market? which is the best keeper? and which is most winter proof?

—Our correspondent dates his inquiry at Topeka, hence we understand he wants information that will apply to Shawnee county and the region round about. The State Horticultural Society recommends for this part of the State—Summer apples, Early Harvest, Carolina Red June, Red Astrachan, Cooper's Early White, Dutchess of Oldenburg; fall apples, Maiden's Blush, Rambo, Lowell, Fameuse, Jonathan; winter apples, Winesap, Ben Davis, Missouri Pippin, Rawle's Genet, Jonathan, Willow Twig.—Peaches, early, Amosden's June, Alexander, Hale's Early; medium, Stump the World, Crawford's Early, Old Mixon Free, George the Fourth, Large Early York; late, Heath Cling, Crawford's Late, Smock, Ward's Late Free.—Pears, early, Bartlett, Osband's Summer, Clapp's Favorite, Flemish Beauty; medium, Bartlett, Sockel, Flemish Beauty; late, Vicar of Winkfield, Lawrence, Winter Nellis, Duchesse d'Angouleme.—Plums, Wild Goose, Miner,

Emigrant.—Cherry, early, Early Richmond, May Duke; late, English Morello, Common Morello; late, Richmond. As to quinces and apricots, take counsel of your nurseryman.

PUNCTURING FOR COLIC.—I read in the Veterinary column of this week's issue what I believe to be a slight error. The question is asked by some person as to the practicability of puncturing in a case of flatulency of the horse, *where the puncture should be made?* Here is where I take exception to the writer in answer to the question of where should the puncture be made? The writer says to operate there is no definite rule. The secret of success is to puncture the colon, and advises the left side or flank as being the place usually selected. As the colon is the organ sought to be punctured, I select for that operation the right side or flank in the horse and the left side of the ox. There is just the difference, and in my opinion a material difference, because the transverse colon in inflation is always more prominent in the right than in the left flank of the horse, and *vice versa* in the ox. It is unsound to be indifferent as to where the puncture is made. If too near the spine the depth of muscles is too great to insure success, and if too low in the flank, where the colon settles to its proper place in the abdomen, the puncture will be too low, with tendencies to leak. Whenever it becomes necessary to puncture, and that is when you know that your horse will die from suffocation, make the puncture as described on page 14; make it in the space between the two last false ribs on a parallel line from point to hip. A. W. HOOVER.

Burlingame, Kas.

Money and Mortgages.

Kansas Farmer:

There are two ideas brought out in last week's paper that I would like to comment on a little. First. Are not the people ready to demand of the government to issue money directly to the people at a low rate of interest? Why the farmers as a class do not agitate for this can only be explained by their habit of following their party leaders. Any man, if he thinks at all, can see that those who have special privileges, like national banks, will want to keep them, and will labor against any other system. All capitalists find it to their interest to perpetuate a system by which they can get the fruits of labor without laboring themselves. Capital runs the political machine, therefore there is absolutely no remedy for us, except by our own action. No need of waiting for the old parties to free us from the injustice of monopoly. Monopolies have been fastened on to us on account of our ignorance, indifference and the habit of voting for party instead of principles. We have to study and think more and take a more active part in politics. Let any man ask himself the question, what harm there could be to the general welfare if the government would issue all the money and loan it under proper regulation to those that can give satisfactory security. Then try to realize the benefit it would bring to farmers and all classes except those that are loaning money. Then if you have concluded that there should be a change (as you will if you think about it), work and vote with that object in view, and in time the reform will be accomplished.

The other point is in regard to mortgages. You truly say if mortgages are not paid the farmers will become renters. A reform in the money policy would help some, therefore every debtor should work for that. But we know not when that will be accomplished. Therefore, every farmer who has a mortgage on his farm should think of becoming a renter. Suppose your mortgage is \$1,000 on a 160 acres—\$80 to \$100 is the interest. According to my experience and observation for a series of years, good and bad, the average value of crops per acre are about \$9 to \$10. Renters pay from one-third to one-half for the use of land in this State; 160 acres, if all in use, the rent would be \$480 to \$800. If only half in cultivation and some benefit from the prairie, from \$300 to \$500. So that the interest would be from \$200 to \$700 less than rent. Now why can't a man do as well when he owns the farm as he will be obliged to do after he is reduced to a renter? The difference between paying interest on even a large mortgage and renting will soon pay a mortgage. So, take courage, brother, and work your mortgaged

farm like if you had rented it; work hard and with judgment; adapt your expenses to your income, and keep the idea ever in mind that you are going to pay that mortgage, and if you are really in earnest you will succeed. Leonardville, Kas. M. SENN.

Hedges Along the Public Highway.

Kansas Farmer:

Notwithstanding former failures, I was glad to see that an act requiring farmers to keep hedges cut down along public highways had been introduced in the House. I believe it to be for the interest of the farmer as well as the traveling public that hedges be kept down to a reasonable height.

I wish to note the objections of one of your correspondents (P. P. Elder): First.—That if such an annual trimming is for the benefit of the public, the farmer compelled to do the work should be paid therefor. Now, as private property cannot be taken for public use without compensation, presumably the farmer has been paid for his land to be used for the purpose of public travel, then it logically follows that he has no right to raise trees or hedges on the line of the highway, which, by their natural growth, will occupy a large part of the roadway, to the undoubted detriment of public travel. The farmer has sold to the county or State, as the case may be, a strip of land through his farm (forty feet or more in width), for the purpose of public travel, and he hasn't the shadow of a right to occupy that ground, or any part of it, with anything which will impede or obstruct public travel.

Another objection of your correspondent to the bill is that "the hedge is a wind-break, holding the snow back from the road, and affording a comfortable shade in hot days to camp or ride under, for the relief of campers and fastidious gentlemen."

Now, it is my observation that a hedge or other fence does not "hold the snow back," that is, the snow, when drifting, lodges on the leeward, and not on the windward side of the fence. To illustrate: A road runs east and west, and has a high hedge on each side; whichever way the wind blows, whether north or south, a drifting snow will lodge in the road. I have a practical example before me: The road runs east and west past my house. My neighbor on the north has a hedge which is fourteen years old and has never been trimmed. Several times in years past I have had to open my fence and let the public travel through my orchard, the road being impassable—drifted full of snow. Now for the "comfortable shade in hot days!" "Land of Goshen!" "Shades of the great departed!" Whoever has traveled in a hot day between two high suffocating hedges, under a blazing sun, with flies swarming from the hedges upon the horses, will know how to appreciate this. Then to think of the æsthetic part of the business—fastidious gentlemen camping under its grateful shade. Plenty of campers in this part in warm weather, plenty of lofty hedges, but haven't seen any one select them to camp under. I think a man might get a start that way, though. Little things may help a man to rise—a little hedge thorn on the ground where a man sits down, for instance.

One most serious objection to these overgrown hedges along public highways is that they endanger human life at railway crossings, by hiding the approaching train. There have been several narrow escapes in this county and one serious accident, a lady being seriously hurt, and the carriage demolished by the engine, which was not heard on account of a high wind and could not be seen for the intervening fifteen-foot hedge. In the interest of the sacredness of human life, cut down the hedges at least in the vicinity of railroad crossings.

From an æsthetic point of view, there is no pleasanter prospect than a grass-grown roadside. Every farmer knows this is impossible with a tall hedge on either hand; nothing but noxious weeds can grow; the whole landscape is shut off from the travelers' view—nothing to be seen but a narrow strip of blue sky overhead, and the monotonous thorny prospect on either side. Isolation is complete; with a sense of relief he emerges from the dreary waste of thorns, and pronounces an anathema upon the legislature which refuses or neglects to "down the hedge." EDWIN SNYDER.

Oskaloosa, Kas.

Book Notices.

Co-OPERATION.—Following the excellent monograph on "Co-operation in a Western City," by Albert Shaw, Ph. D., the American Economic Association announces the publication of a history of "Co-operation in New England," by Edward W. Bemis, Ph. D., to be issued February 5. Dr. Bemis has made a careful study of co-operation, and this work will be a practical guide for co-operators, and contain many facts to interest the students of the labor problem. Price, 75 cents. Copies may be had of Dr. Richard T. Ely, Secretary, Johns Hopkins University, Baltimore, Md.

GARDENING FOR PROFIT.—Peter Henderson has revised and enlarged his work of the title above given and brought its matter down to date of publication—1887. There is no need to recommend what Peter Henderson says about gardening, for he is an old, experienced and successful gardener, who knows what he is talking about. This book will be useful to every intelligent gardener, because it covers the entire range of work connected with gardening. We have no hesitancy in recommending it as in every way worthy public confidence. Price \$2. Published by O. Judd Co., 751 Broadway, N. Y.

CAULIFLOWERS.—With plain, practical, and explicit directions in minute detail, for the cultivation and management of this crop, from the sowing of the seed to the marketing of the product. It will tell you which are the reliable varieties; how to prepare the soil; how to fertilize and what to use; how to sow the seed and grow the plants; how to protect them from insects; how to plant and cultivate; how to manage the crop; how to market the crop; how to cook them; how to pickle them. By Francis Brill, practical horticulturist. Price by mail, postage paid, 20 cents. To dealers, 100 copies \$10. Eight copies by mail, \$1.

THE PEOPLE'S ATLAS OF THE WORLD.—We have examined somewhat carefully this volume and do not hesitate to give it our hearty endorsement. The scope of the work is tersely set forth in the author's preface note. He says: "The simple purpose of this work is to present the greatest number of facts and the largest amount of practical information ever given in any atlas, the whole so classified, condensed, and illustrated, and brought out in such portable size and form as to furnish its possessor with the most convenient, instructive, and helpful handbook of its class ever published." This excellent work has been prepared by Rev. W. H. De Prey, D. D., the well-known editor of the "People's Cyclopaedia of Universal Knowledge." The amount and variety of information contained in this volume will surprise any one who will give it even a casual glance. Though called an atlas, and though well supplied with maps, yet this feature of the work is one of its least valuable parts. It draws from the whole field of human knowledge pertaining to the physical and visible. It is not confined to things terrestrial, but in its comprehensiveness includes a brief history of celestial discoveries and gives a summary of the results of modern scientific investigation in astronomy. Its graphic illustrations are both apt and numerous. A glance at the chart illustrating the public debt of the United States from 1790 to 1884 will give a clearer and more correct knowledge of the subject illustrated than could be obtained by prolonged and painstaking study of the numerical statements which this chart so aptly represents. The form of the volume and the handsome style of binding in rich half morocco, make it equally desirable for the library or the center table. The work is issued by Phillips & Hunt, New York, and the Morning Side Publishing Co., of Chicago, Ill., are the sole agents for the publishers for all the territory lying west of Ohio and east of the Rocky mountains. Any of our readers wishing further information regarding this valuable work may address the Morning Side Publishing Co., Chicago, Ill.

The blindness of the understanding is as much to be pitied as the blindness of the eyes; and it is neither laughable nor criminal for a man to lose his way in either case.

General C. M. Clay, who has handled a great many sheep, says it won't do to use the old-fashioned shepherd's crook on modern heavy sheep. The way to hold them is to put the arm around the neck.

Horticulture.

Practical Treatment for the Prevention of Mildew.

What follows is taken from a French treatment of the subject, by G. Foex, and published in a recent report of the Department of Agriculture, Washington, D. C.:

PODECHARD POWDER.

Good results have likewise been obtained in the Cote-d'Or by the use of a powder made in the following manner: A lime milk is prepared out of, lime, 5 kilograms; water, 10 kilograms; and a solution of sulphate of copper out of, sulphate of copper, 10 kilograms; boiling water, 20 kilograms.

The two liquids are allowed to cool to 25 deg. C. (77 deg. F.), mixed, and then poured upon 100 kilograms of quicklime, which is allowed to slake. This powder probably acts like the copper mixture of Gironde.

This remedy which has given positive proofs of its efficacy in Burgundy, has not been tried in the South, and it is consequently impossible to know yet whether it will prove effective in the climate of that region. Nevertheless, on account of the ease of application, which is greater than in case of the copper mixture of Gironde, it deserves to be tried with care.

SULPHATED STAKES.

Stakes sulphated with a view to their preservation, have served to completely protect certain vineyards in the Cote-d'Or. The small number of branches of each vine tied in a bundle of three or four upon the support, and the frequent rains which wash the latter and carry the dissolved sulphate of copper to the leaves which are very near, explain this phenomenon. In order to increase the efficacy of this arrangement, it has been proposed to bind the branches with straw bands dipped in the sulphate of copper. The employment of this means, besides, being quite expensive, has given no result in the vineyards of the Mediterranean region, probably because of the lack of moisture during the summer.

THE AUDOYNAUD PROCESS.

Mr. Audouyraud has proposed to apply the copper to the leaves in the form of "blue water" or ammoniacal sulphate of copper, which enables us to get the substance in a very finely-divided state, and consequently to greatly reduce the amount required per hectare. The liquor is prepared in the following manner:

In a stoneware or glass jar place 2 kilograms of sulphate of copper upon which pour two or three liters of warm water, and stir with a stick or glass rod to hasten the solution. When the liquid is cold add about one liter of commercial ammonia (22 deg. Beaume), then, in a suitable cask, mix enough water with this liquid to make from 100 to 150 liters, which is the amount that should be put on one hectare. The Riley spraying machine, with a receiver like that constructed by Mr. Vermorel, of Villefranche (Rhône), appears to be the most convenient instrument for distributing this liquid. Although this process has not yet been carried out practically, it is probable that it will give satisfactory results if, like the copper mixture of Gironde, it is applied as a preventive.

CHOICE OF MATERIAL.

Sulphate of copper is a salt found in commerce in the form of large translucent crystals of an azure blue. When pure it contains:

Oxide of copper.....	31.84
Sulphuric acid.....	32.06
Water of crystallization.....	36.10
	100.00

The copper being the acting agent upon *Peronospora*, it is important to ascertain the purity of the sulphate pur-

chased. Now, we frequently find in commerce double sulphates of copper and iron, or of copper and zinc, which are sold as sulphate of copper. Mr. Millardet gives the following methods of determining the purity of this salt:

By pouring some drops of lime water or milk of lime into a solution of sulphate of copper (1 to 10) we obtain a sky-blue precipitate from pure sulphate of copper; a rusty blue from the double sulphate of copper and iron; and a dirty white from the double sulphate of copper and zinc.

The lime which has given the best results so far is quicklime.

APPARATUS AND RECEPTACLES FOR HOLDING THE COPPER COMPOUNDS.

The sulphate of copper attacks iron and zinc, and ought, therefore, to be kept in vessels of copper, lead, wood, or earthenware.

SUMMARY.

Although the processes which have just been described deserve to be tried in the South (except the sulphated stakes), the "copper mixture of Gironde," is the only one that can be employed immediately on a large scale with certainty of success.

THE COPPER MIXTURE OF GIRONDE.

Description of the process.—A process which was discovered recently in Gironde gave in 1885 the most satisfactory results. It consists in spraying the vines, during their growth, with a mixture of sulphate of copper and lime. This is prepared in the following manner: On the one hand, 6 to 8 kilograms of sulphate of copper are dissolved in 100 liters of cold water; on the other hand, 15 kilograms of quicklime are slaked in 30 liters of water. When the sulphate of copper is completely dissolved, and the lime has formed a homogeneous mixture, the latter is poured into the copper solution, the mixture being stirred meanwhile. We thus obtain, if the sulphate of copper is pure, a clear blue precipitate, which settles to the bottom of the vessel in which the operation is carried on. This substance should be stirred up at the time of using, in order to put it in suspension in the water.

Action of the remedy.—The action of the remedy, which we have just described, is due to the copper which it contains. The presence of this metal, even in a very minute quantity, in drops of dew or rain on the upper surface of the leaves, prevents the germination of the spores of the conidia which may have been brought there by the wind. Thus forestalled, the disease cannot establish itself upon the leaves.

Mode of application of the remedy.—The copper mixture should be distributed by sprinkling in little drops on the upper surface of the leaves. Two or three spots thus produced suffice to completely preserve a leaf, and they become sufficiently adherent and coherent, as soon as they have dried, to remain until the leaves fall.

The sprinklings were made in Gironde, in 1885, with a simple broom of heath, which was plunged into a bucket or watering-pot containing the mixture. This plan of operating gives satisfaction, so far as the distribution of the substance is concerned, but it has the inconvenience of being somewhat slow, and it requires much hand labor; therefore apparatuses have been devised which permit more rapid operation at a less expense of muscle. The one which gave the best results at the trial held in Montpellier, in February, 1886, was that of Mr. Delord, 9 rue St.-Gilles, Nîmes.

Time when the treatment should be made.—The salts of copper having the effect, as we have seen, of preventing the disease from becoming established, their use should be preventive. The vines should, therefore, be treated before May

15, at which date the *Peronospora* has sometimes made its appearance in certain places in the department of Hérault. In operating at so early a date only a small portion of the leaves can be reached, the greater number developing between this period and the 1st of June; in practice, therefore, it is better probably to sacrifice, if need be, some of the first leaves, and make the treatment only when the vegetation has reached a sufficient development, say, in Hérault, from the 1st to the 15th of June.

Probably its action will not be limited to the destruction of *Peronospora*, but will tend to the destruction of several other fungus diseases of the vine.

The horticultural editor of the German town *Telegraph* says it is his opinion that the time to prune fruit trees for fruit and a perfectly healed stump, is between the 15th of June and the 20th of July.

The Cause of Consumption.

Scrofula, manifesting itself in blotches, pimples, eruptions, salt-rheum, and other blemishes of the skin, is but too apt by and by to infect the delicate tissues of the lungs also, and result in ulceration, thus ending in consumption. Dr. Pierce's "Golden Medical Discovery" will meet and vanquish the enemy in its stronghold of the blood and cast it out of the system. All druggists.

The *Rural New Yorker* has found that pieces cut from the seed end of the potato yielded at the rate of 188.96 per acre. Pieces from stem end with similar conditions of soil and cultivation, yielded at the rate of 165.20. Seed end pieces appear above the ground first, but there is little difference in the time of maturity.

A Flat Contradiction.

Some one has told you that your catarrh is incurable. It is not so. Dr. Sage's Catarrh Remedy will cure it. It is pleasant to use and it always does its work thoroughly. We have yet to hear of a case in which it did not accomplish a cure when faithfully used. Catarrh is a disease which it is dangerous to neglect. A certain remedy is at your command. Avail yourself of it before the complaint assumes a more serious form. All druggists.

GARDEN SEEDS CATALOGUES

Francis Brill, Hempstead, Long Island, N. Y.

Hedge Plants by the 1,000,000

KANSAS STATE NURSERY, North Topeka, Kas.

MILLIKEN'S GREENHOUSE, EMPORIA, KAS.

A general stock of Greenhouse and Bedding Plants, Flowering Shrubs, Shade and Ornamental Grape Vines, Small Fruits, etc. Send for Price List.

ROBERT MILLIKEN, EMPORIA, KAS.

Sibley's Tested Seed

Catalogue free on application. Send for it.

HIRAM SIBLEY & CO., ROCHESTER, N. Y. & CHICAGO, ILL.

J. L. STRANAHAN, BROOMCORN Commission House.

Liberal advances made on consignments. 194 Kinzie street, CHICAGO, ILL.

STRAWBERRIES! - RASPBERRIES

Send five 2-cent stamps for my new *Small Fruit Manual*, with prices of plants for 1887. It is a complete guide to small fruit culture, with illustrations of old and new fruits.

B. F. SMITH, Lock Box 6, LAWRENCE, KANSAS.

BERRY BOXES.

PEACH BASKETS, Fruit and Vegetable Packages of all kinds. Send for Catalogue and Price List. C. COLBY & CO., Benton Harbor, Mich.

GRAPE VINES.

LARGE STOCK OF CONCORDS with other varieties, also a GENERAL NURSERY STOCK, seventeenth year. Price lists. THE VINELAND NURSERIES, ST. JOSEPH, MO.

SWEET POTATOES.

SENT OUT TO BE SPROUTED ON SHARES. No experience required. Directions for sprouting free. Also SWEET POTATOES FOR SALE. Address T. J. SKINNER, Columbus, Kas.

379 FRUIT TREES

Varieties: Vines, Plants, etc. Apple, Pear, Peach, Cherry, Plum, Quince, Strawberry, Raspberry, Blackberry, Currants, Grapes, Gooseberries, &c. Send for Catalogue J. S. COLLINS, Moorestown, N. J.

Vaughan Seed Store

OUR 1887 CATALOGUE TELLS THE WHOLE STORY FOR THE GARDENER, THE FARMER, AND THOSE WHO LOVE PLANTS AND FLOWERS. SEND 2 STAMPS. J. C. VAUGHAN - 42 LA SALLE ST. - CHICAGO.

Trees! Trees! Trees!

We are Headquarters for FRUIT TREES and PLANTS; also RED CEDARS and FOREST TREE SEEDLINGS for Timber planting and Nursery. Largest Stock! Lowest Prices! Write us for Price Lists. Address: BAILEY & HANFORD, MAKANDA, JACKSON CO., ILL.

Hart Pioneer Nurseries

OF FORT SCOTT, KANSAS. A full line of Nursery Stock, Ornamental Trees, Roses and Shrubbery. We have no substitution clause in our orders, and deliver everything as specified. 220 Acres in Nursery Stock. Reference: Bank of Fort Scott. Catalogue Free on application. Established 1857.

SEEDS Fresh, Reliable: Wholesale at Retail. Free by mail a 2 and 3 cents per large package. Seed store, open 24 hours every day. Mammoth Seed Farms! One Acre of Glass! Beautiful Illustrated Catalogue FREE. H. W. BUCKBEE, Rockford Seed Farm, Rockford, Ill.

LEE'S SUMMIT STAR NURSERIES.

Offers for spring trade, a full line of nursery stock, including Apple, Peach, Plum, Pear, Cherry, Grapes and Mariana Plum, Strawberry, Evergreens, Bulbs, etc. Wholesale and retail. Also introducing the wonderful new apple, the *Cano*, and the hardest of blackberries, the *Frederick*, which is two weeks later than the Snyder, and more productive. With the advantage of a Frost Proof building, 60x80 ft., I make Winter Shipments and car lots a specialty. Catalogues and prices sent on application. M. BUTTERFIELD, Prop., Lee's Summit, Mo.

SEND TO THE KANSAS HOME NURSERY

For Price List of all FRUIT & ORNAMENTAL TREES OF REAL MERIT. For the Western Tree-Planter. A. H. GRIESE, Lock Box 1247, Lawrence, Kas.

WRITE TO THE YORK NURSERY CO.

FORT SCOTT, KANSAS, For Catalogue and Prices.

BURPEE'S

SEEDS,

W. ATLEE BURPEE & CO., PHILADELPHIA, PA.

Will be sent FREE to all who write for it. It is a Handsome Book of 128 pages, with hundreds of illustrations. Three Colored Plates, and tells all about THE BEST Garden, Farm and Flower Seeds, Bulbs, Plants, Thoroughbred Stock and Fancy describes RARE NOVELTIES in VEGETABLES and of real value, which cannot be obtained elsewhere. Send postal for the most complete Catalogue published, to



What Mr. Beyer says: "Please accept my best thanks for the splendid seeds received from your firm. It would be a rather lengthy list if I should name all, but I will say that amongst 35 first, and 3 second premiums awarded me at our fairs in Northern Indiana and Southern Michigan, 25 first premiums were for vegetables raised from your seeds. What firm can beat AUGUST BEYER, So. Bend, Ind. Seed of this quality I am now ready to sell to every one who tills a farm or plants a garden, sending them FREE my Vegetable and Flower Seed Catalogue, for 1887. Old customers need not write for it. I catalogue this season the native wild potato. JAS. J. H. GREGORY, Seed Grower, Marblehead, Mass."

The Poultry Yard.

Turkeys on the Farm.

Kansas Farmer:

There are a great many people who think it does not pay to raise turkeys on the farm, and give as their reasons that they are hard to raise, and they are vicious with chickens, and bother the garden, especially the cabbage, tramp through grain fields, and that besides all that, the market for them is so low it don't pay on that account.

Having had thirteen or fourteen years' experience in raising turkeys I feel competent to answer all such objections raised against them. That they are tender when quite young I admit, but that is so easily overcome by confining the hen with her brood in a yard, or even lariatting her as a cow or horse on grass, for a few days, feeding the young ones on clabber cheese mixed well with pepper, they will get along very well, except in cold, wet or bad stormy weather. Our plan is to give the first clutch of eggs from each turkey hen to a chicken hen, as they are better mothers in early spring than turkey hens are, and by that way we get a double crop; and besides all that, the weather is usually drier and warmer by the time the second hatch comes off, consequently less loss to the young ones from following their mother through the grass in search of insects.

As to their bothering chickens, I think that depends a good deal on the variety kept. We have suffered but very little inconvenience on that line ourselves, and with the exception of last year, have never been troubled with them in the garden, and they have always had free access thereto. A neighbor lady told me only a few days ago that hers and a neighbor's flock ran at will in her cabbage this year and did not disturb them in the least.

As to the turkey market being low, (which is all true at present), I want to say there is nothing raised on the farm that is as profitable as turkeys, if you have the right kind; for from the time they are fairly started till the middle or last of November, they forage their own living, and that consists very largely in insects that are oftentimes more damaging to the growing crop than all they do in tramping through the grain fields.

I said, if you have the right kinds very much depends upon that, for I have tried both the right and the wrong kinds. Till a few years ago we kept the black or common turkeys, when I was induced to try the "Mammoth" Bronze turkeys; so I sent and got a pair of them late in the spring, costing something over \$3—a big price, but have never regretted it, for if I had got them before my black hen's first clutch had fertilized would have got all back in extra weight that year; and last year from a yard I had let out to raise from on the halves (of increase only) the lady to sell all of her share would realize from \$23 to \$25 from three hens, and at only 7 cents per pound dressed. Another neighbor lady sold, several days before Thanksgiving last November, upwards of \$30 worth of turkeys. So, when we remember it really costs less to raise a turkey than a chicken, even at the present low prices, it does pay to raise turkeys on the farm. Young Bronze gobblers of last year's hatch now will weigh from eighteen to twenty-five pounds, and I have had them at that age to weigh thirty-two pounds, and forty pounds at past one year old, in ordinary living condition.

W. H. BIDDLE.

Augusta, Butler Co., Kas.

"CATARRH—The Cause and Cure." Mailed to your address free. Star Publishing Co., St. Louis, Mo.

Fragments of stone are said to be as healthful for pigs as charcoal.

Canadian cheese factories refuse to receive the milk of cows which are allowed to feed on slough grass or drink stagnant water, claiming such milk will always prevent the manufacture of good cheese.

A Fortune for You.

All is new; capital not needed; you are started free. Both sexes; all ages. Wherever you live you should at once write to Hallett & Co., Portland, Maine; they will send you free, full information about work that you can do and live at home, earning thereby from \$5 to \$25 and upwards daily, from the first start. Some have made over \$50 in a day. The best chance ever known by working people. Now is the time—delay not.

Tutt's Pills

will save the dyspeptic from many days of misery, and enable him to eat whatever he wishes. They prevent

Sick Headache,

cause the food to assimilate and nourish the body, give keen appetite, and

Develop Flesh

and solid muscle. Elegantly sugar coated. Price, 25cts. per box.

SOLD EVERYWHERE.



FREE
Prettiest Illustrated SEED-CATALOGUE ever printed. Cheapest & best SEEDS grown. Gardeners trade a specialty. Packets only 3c. Cheap as dirt by oz. & lb. 100,000 pkts new extras free.
R. H. SHUMWAY, Rockford Ill.

600 ACRES. 13 GREENHOUSES. TREES AND PLANTS
We offer for the Spring trade a large and fine stock of every description of FRUIT and Ornamental TREES, Shrubs, Roses, Vines, SMALL FRUITS, Hedge Plants, Fruit Tree Seedlings and Forest Tree Seedlings. Priced Catalogue, Spring of 1887, mailed free. Established 1862.
BLOOMINGTON (PHENIX) NURSERY
SIDNEY TUTTLE & CO. Proprietors, BLOOMINGTON, Ill.



SEEDS SENT FREE.
Warranted. Fresh, Reliable. Tested seeds cheap. Illustrated Catalogue sent free. Prices lowest. Packets 3c. Gardeners say our seeds are the best. Thousands of choice packets given away. Special wholesale price list to Market Gardeners.
ALNEER BROS.,
Rockford, Ill.

EVERYTHING FOR THE FARM AND GARDEN.
HEADQUARTERS AMERICAN GROWN
GRASS SEEDS
All orders accompanied with cash filled at lowest market prices on day of receipt.
J. M. McCullough's Sons,
134 and 136 Walnut Street, (Catalogue free.) CINCINNATI, O.

FIRE - DRIED.

90 DAY IMPROVED LEAMING CORN and RILEY'S FAVORITE YELLOW DENT, four varieties of Oats, Saskatchewan Wheat, SEED POTATOES, BEANS and VEGETABLES. I won \$100 SPECIAL PREMIUM at Nebraska State Fair for best exhibit in the State. Send for my price list.
Address **JAS. W. BOUK,**
Box 28, Greenwood, Cass Co., Neb.
[Mention KANSAS FARMER.]

BUIST'S GARDEN SEEDS
ESTABLISHED 1828.
Are always grown from selected seed stocks which insure not only the earliest vegetables, but those of finest quality, and guaranteed to give satisfaction or money refunded. Our handsomely illustrated Garden Guide mailed on application.
ROBERT BUIST, JR.,
Seed Grower. PHILADELPHIA.

GOOD THINGS FOR THE GARDEN AND FARM.
SEND FOR HANDSOME CATALOGUE FREE.
JAMES KING, 170 Lake St., Chicago.



Produce the Choicest Flowers, Vegetables and Crops. Doubles ALL YIELDS. NEW OATS, WHEAT, POTATOES, HARLEY AND VEGETABLES. **SEEDS WARRANTED.** 100,000 7 CENT Plants. Don't buy till you see catalogue With Prize Offer. **JOHN A. SALZER, LaCrosse, Wis.**

NORTHERN CROWN SEEDS
Currie Bros. Horticultural Guide for 1887, now ready, will be sent free on application. It contains many Rare Novelties in Flower and Vegetable Seeds. **CURRIE BROS.,** Seedsmen and Florists, Milwaukee, Wisconsin.

GRAPE VINES
Also other small FRUITS, and all old and new varieties. **GRAPES, Extra Quality. Warranted true. Cheap by mail. Low rates to dealers. Illustrated Catalogue FREE!**
Headquarters and lowest rates for **EMPIRE STATE & NIAGARA T. S. HUBBARD** Fredonia, N. Y. 1 for Green at 4.

NURSERY STOCK AT THE SOUTH ST. LOUIS NURSERIES
Established 1859.

We offer for the coming trade season the largest and most complete assortment of Nursery Stock **GROWN IN THE WEST**; embracing Fruit Trees of every description, Ornamental Trees, Roses, Shrubs, etc.
We make the growing of Std. and Dwarf Pear a specialty; and invite inspection from Nurserymen and Dealers. Wholesale price-list on application. Consult your interest by getting our prices before buying. Inducements and good accommodation for agents and dealers.
S. M. BAYLES, Prop., St. Louis, Mo.

EVERYTHING THAT IS NEW IN SEEDS IN RARE PLANTS
is offered and described in our **CATALOGUE No. 360**, which this year we send out in an illuminated cover. The Catalogue is replete with new engravings of the choicest flowers and vegetables, many of which can only be obtained from us; and contains, besides, 2 beautiful colored plates, and very full instructions on all garden work. Altogether it is the best ever offered by us, and, we believe, is the most complete publication of its kind ever issued. Mailed on receipt of 10 cents (in stamps), which may be deducted from first order. Please be sure to order Catalogue by the number.
PETER HENDERSON & CO. 35 & 37 Cortlandt St., NEW YORK.

OUR GREAT OFFER A COMPLETE VEGETABLE GARDEN FOR \$1.00
Our seeds are unsurpassed in the world, their purity and vitality being tested before sending out. Few are equal, none better. To prove their great superiority, and induce thousands of new customers to try them (knowing by experience they then become permanent customers) we will send free by mail on receipt of **ONE DOLLAR** (actual value \$2.50) our Special Introduction Box of seeds, containing large size illustrated packets of all the BEST New and Standard varieties, as follows:
New Early Peerless Cabbage, extra early, very large, fine solid heads of superior quality; New White Plume Celery, earliest grown, needs no banking up, very crisp and solid; French Asparagus Bean, most tender and delicious; New Charter Radish, early, crisp and handsome; Johnson's Christmas Melon, greatest novelty of the age, keeps all winter; Genuine Sureshot Cabbage, finest main crop cabbage; Bastian's Turnip Beet, earliest and deepest; New Baltimore Cantaloupe, sweet as honey; Improved Yellow Globe Danvers Onion; New Early Orange Sweet Corn, sweetest of all; Nantucket Sugar, the great Vegetable Cucumber, long standing; Large Bell Pepper; Saxify or Improved Sugar Parsnip; Marblehead Winter Squash; Long Smooth Blood Winter Beet. We will also put in each box 8 packets of **CHOICE FLOWER SEEDS** as a present for your wife, mother or daughter. Send a \$1 bill, postal note or check in an ordinary letter, and you will receive the box by return mail. These boxes sent for only \$1.00. **ORDER NOW** and get our **GARDEN AND FARM MANUAL for 1887**, a handsome book, with hundreds of fine new illustrations and colored plates, mailed **FREE** to all who write for it. Address **JOHNSON & STOKES, 208 CHURCH ST. PHILADELPHIA, PA.**

THE STRAY BEAUTY THE EARLIEST POTATO
THIS WORLD HAS EVER SEEN.
VERY PROLIFIC. EXCELLENT QUALITY.
BEAUTIFUL AS AN OIL PAINTING.

Mayflower Tomato, best early variety. Livingston's New Beauty Tomato, finest ever grown. Golden Globe Ruby Field Corn, early, productive, has yielded over 100 bushels per acre. One packet PYRETHUM ROSEUM, the celebrated Persian insect powder plant, which is death to all insect life, but harmless to man or beast. **GIANT GERMAN PANSIES.** One splendid climbing plant. **33 FULL-SIZE PACKETS.** directions for cultivating, and ONE beautiful everlasting flower. In all, post-paid collections for \$1.75; FOUR for \$3.00. This is an offer NEVER made before. **FOR \$1.00.** Our beautiful, illustrated, and descriptive 88-page catalogue accompanies each order. Address **SAMUEL WILSON, Seed Grower, MECHANICSVILLE, BUCKS COUNTY, PENNA.**

OFF WITH THE TARIFF ON SEEDS. RELIEF FOR THE PEOPLE. SEEDS AT YOUR DOOR AT WHOLESALE PRICES.

Having grown a large crop of the following seeds the past season, in order to introduce them, with our wonderful new potato into 30,000 more homes, we make this unprecedented offer: **FOR \$1.00** a box by mail, containing 33 packets, one each, of the following new and valuable seeds, and **ONE WHOLE POTATO, "STRAY BEAUTY"** acknowledged by all the EARLIEST POTATO THIS WORLD HAS EVER SEEN. Wilson's Early Blood Turnip Beet, earliest and best. Bastian's Half-Long Winter Beet, best winter variety. **WILSON'S BEST OF ALL BEANS**, good as string beans all winter. Shaker's Early Sugar Corn, best early kind. Early Short Horn Carrot, New Perpetual Lettuce, tender and crisp all summer. Kolb's Gem Watermelon, earliest and sweetest. Banana Muskmelon, sweet, spicy, delicious. Improved Yellow Danvers Onion. Mammoth Silver King Onion, grows three-pound onions from seed first year. Improved Guernsey Parsnip. Bliss's Everbearing Pea, bears all summer. Ruby King Pepper, finest sweet pepper ever seen. New Japanese Pumpkin, best cooking pumpkin ever grown in this country. Extra Early Round Red Radish. New Charter Radish, best summer variety. Brazil Sugar Squash, good for summer or winter. Valparaiso Squash, enormously productive, excellent quality, keeps all winter. Early Livingston's New Beauty Tomato, finest ever grown. Golden Globe Ruby Field Corn, early, productive, has yielded over 100 bushels per acre. One packet PYRETHUM ROSEUM, the celebrated Persian insect powder plant, which is death to all insect life, but harmless to man or beast. **GIANT GERMAN PANSIES.** One splendid climbing plant. **33 FULL-SIZE PACKETS.** directions for cultivating, and ONE beautiful everlasting flower. In all, post-paid collections for \$1.75; FOUR for \$3.00. This is an offer NEVER made before. **FOR \$1.00.** Our beautiful, illustrated, and descriptive 88-page catalogue accompanies each order. Address **SAMUEL WILSON, Seed Grower, MECHANICSVILLE, BUCKS COUNTY, PENNA.**

THE MARKETS.

By Telegraph, February 7, 1887.

LIVE STOCK MARKETS.

New York.

BEEVES—Receipts 2,700. Market a trifle firmer. Common to prime steers 4 20a5 30, choice to extra do. 5 40a5 60, bulls and dry cows 2 70a3 70.

SHEEP—Receipts 800. Market dull. Sheep 4 20a5 50, lambs 5 00a5 75.

HOGS—Receipts 14,800. Quoted steady at 5 50a5 60.

St. Louis.

CATTLE—Receipts 604. Market strong on all kinds. Choice heavy native steers 4 40a5 00, fair to good shipping steers 3 80a4 35, fair to choice butchers steers 3 10a4 20, fair to good feeders 2 85a3 65, fair to good stockers 2 15a3 00, common to choice Texans 1 85a3 55.

HOGS—Receipts 2,525. Market active and 5a10c higher on all grades. Choice heavy and butchers selections 5 30a5 45, fair to good packing 5 10a5 25, medium to fancy Yorkers 4 95a 5 10, common to good pigs 4 25a4 80.

SHEEP—Receipts 210. Market firm. Common to fair 2 60a3 70, medium to prime 3 80a4 80.

Chicago.

The Drovers' Journal reports:

CATTLE—Receipts 6,000, shipments 2,000. Market strong and active. Shipping steers, 950 to 1,500 lbs., 3 50a5 00; stockers and feeders 2 50a3 90, Texas steers 4 12 1/2.

HOGS—Receipts 14,000, shipments 10,000. Market was strong and higher. Rough and mixed 4 80a5 30, packing and shipping 5 00a5 40, light 4 75a5 15, skips 3 50a4 40.

SHEEP—Receipts 3,000, shipments 1,000. Market strong. Natives 3 00a3 85, Western 3 50a4 00, Texans 2 50a4 00, lambs 4 25a5 40.

Kansas City.

CATTLE—Receipts since Saturday 656. The offerings were light, especially for shipping grades, and market strong with values 5a10c higher, except for feeding steers, which were firm. Sales ranged 3 65 for feeding steers to 4 25 for shippers.

HOGS—Receipts since Saturday 4,944. Market strong, with values of choice heavy 10c higher and light 5c higher. Extreme range of sales 4 80a5 25, bulk at 4 95a5 15.

SHEEP—Receipts since Saturday 94. Market firm. Good to choice 3 25a3 75, common to medium 2 25a3 00.

PRODUCE MARKETS.

New York.

WHEAT—Shade lower. No. 2 red, 92 1/2a92 3/4c elevator, 94 1/2c free on board.

CORN—Lower. No. 2, 48a48 1/2c elevator.

St. Louis.

WHEAT—Active, but weak and lower. No. 2 red, cash, 80 1/2a81 1/2c.

CORN—Dull, but firm and higher. No. 2 mixed, cash, 34 1/2a35c.

OATS—Dull and easy. No. 2 mixed, cash, 28c bid.

RYE—Firm at 51 1/2a52 1/2c.

BARLEY—Unchanged.

Chicago.

The wheat trade was dull and dragging.

Cash quotations were as follows:

WHEAT—No. 2 spring, 77 1/2c; No. 2 red, 77 1/2a 78c.

CORN—No. 2, 35 1/2a36 1/2c.

OATS—No. 2, 25 1/2c.

RYE—No. 2, 54a54 1/2c.

BARLEY—No. 2, 51c.

Kansas City.

WHEAT—Receipts at regular elevators since last report 6,730 bus., withdrawals none, leaving stock in store as reported to the Board of Trade to-day 299,797 bus. There was a steady but quiet market to-day on 'change, no sales having been made.

CORN—Receipts at regular elevators since last report 10,927 bus., and withdrawals 2,190 bus., leaving stock in store as reported to the Board of Trade to-day 383,534 bus. The market was weak on 'change to-day. No. 2 was nominal except for March, which sold at 31c—1/4c lower than Saturday.

OATS—No. 2 cash, 26 1/2c bid special, no offerings.

RYE—No bids nor offerings.

HAY—Receipts 5 cars. Market firm. Fancy small baled, 8 00; large baled, 7 50; wire-bound 50c less.

OIL-CAKE—Per 100 lbs. sacked, 1 25; 21 00 per ton, free on board cars; car lots, 20 00 per ton.

SEEDS—We quote: Flaxseed, 85a90c per bushel on a basis of pure. Castor beans, 1 50.

BUTTER—Receipts large; dull and weak. We quote: Creamery, fancy, 25c; good, 23c; fine dairy, 20c; store, 13a15c; common, 8a10c; choice roll, 13a14c.

CHEESE—We quote: Full cream 13 1/2c, part skim flats 7a8c, Young America 13 1/2c, Kansas 6a7c.

EGGS—Receipts large and market active at 18c for fresh.

POTATOES—Irish, natives 40a45c per bushel, Nebraska and Iowa 55a60c, Michigan 60a65c,

Greeleys 75a80. Sweet potatoes, yellow 1 25a 1 50, red 75a1 00.

BROOMCORN—We quote: Short brush 4 1/2c, green hurl 5c, self-working 4 1/4a4 1/2c, long coarse 3 1/2c, crooked 1 1/2a2 1/2c.

PROVISIONS—Following quotations are for round lots. Job lots usually 1/4c higher. Sugar-cured meats (canned or plain): Hams 11c, breakfast bacon 9c, dried beef 9c. Dry salt meats: clear rib sides 6 70, long clear sides 6 00, shoulders 5 50, short clear sides 6 90. Smoked meats: clear rib sides 7 30, long clear sides 7 20, shoulders 6 50, short clear sides 7 50. Barrel meats: mess pork 13 00. Choice tierce lard 6 12 1/2.

Money Tells!

It is a well-established fact that A. D. Robbins & Co., 179 Kansas avenue, Topeka, Kas., can place large farm loans, of \$3,000, to any amount required, at lower rates of interest and less commission than any agency in Kansas, when security is satisfactory and title perfect. No unreasonable delay. Our business is strictly confidential—or we could refer you to parties where we have placed in past year \$5,000, \$10,000, \$15,000, \$20,000, \$40,000 loans. We are prepared to make better rates than ever. Send description of property and amount required, and apply to headquarters for large or small loans. When applying for loans give numbers of land, town or range, amount of improvements and number of acres under plow.

Address A. D. ROBBINS & Co., Topeka, Kas.

Farm Loans.

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

ELECTRO MEDICAL

Headquarters of the U. S. A. for the treatment of Acute and Chronic Diseases. Thirty years experience with medicine, nineteen years of that time a clinical experience with electricity.

Diseases under the following headings are cured by Electricity, Medicine and Ozone, except in the last stages of the same:

Skin Diseases,
Diseases of the Eye and Ear,
Female Diseases,
Diseases of the Respiratory Organs,
Diseases of Digestive Organs and Bowels,
Diseases of the Genito-Urinary Organs,
Diseases of the Brain and Nervous System,
Diseases of Fibrous and Muscular System.

Send for Circulars. I am permanently located in Topeka.

A. W. TIPTON, M. D.,
76 KING ROW, SIXTH ST., EAST.

THE TOPEKA SEED HOUSE

ORCHARD GRASS, BLUE GRASS, RED-TOP, All kinds of CLOVER, TIMOTHY, MILET, HUNGARIAN, AND OTHER FIELD SEEDS.

At Wholesale or Retail.

GARDEN -:- SEEDS!

We have a stock of fresh Garden Seeds, embracing many new varieties.

TWELVE PAPERS

Of any named varieties of Garden Seeds and two papers of Flower Seeds for 50 cents.

Send Money order or Postage Stamps, and write your address plainly.

Address
TOPEKA SEED HOUSE,
S. H. DOWNS, Manager,
No. 78 Kansas Avenue, TOPEKA, KA.

EVERGREENS
25 varieties; FOREST TREES, 30 varieties, all sizes. Prices from 50 cents per 1000 up. 50 varieties of TREE SEEDS. Lowest Prices. Largest Stock and Greatest Variety in America. Large Trees for Street and Park Planting in great variety, by the carload. Wholesale Lists free. GEO. FINNEY, Evergreen, Door Co., Wis.

RUSSIAN APRICOTS.

LOW PRICES!

Forest Trees for Timber Claims

All kinds of Fruit, Forest and Ornamental Trees, Shrubs and Plants.

A PAPER FREE for one year, devoted to fruit-growing, to all who buy \$1.00 worth of trees or plants. 1 Niagara grape, \$1; 6 Russian apricot, \$1; 12 Concord grape, \$1; 10 Dwarf Junberry, \$1; 150 Russian Mulberry, \$1, and 134 other \$1 sets per mail, postpaid.

Send at once for our Price List. Address
CARPENTER & GAGE,
FAIRBURY, JEFFERSON CO., NEBRASKA.

TAYLOR'S POTATOES

Send for my FREE

Sweet and Irish Seed Potato Catalogue.

EDWIN TAYLOR,

Potato Specialist,
Edwardsville, Kansas.

EXHIBITED AT ALL IMPORTANT WORLD'S INDUSTRIAL COMPETITIVE EXHIBITIONS SINCE THE YEAR 1867, MASON & HAMLIN ORGANS HAVE ALWAYS BEEN FOUND BEST AND AWARDED HIGHEST HONORS. SEND FOR CATALOGUE.

MASON & HAMLIN

PUREST & BEST MUSICAL TONE, GREAT-EST EXCELLENCE AND DURABILITY. THE MASON & HAMLIN COMPANY PLEDGE THEMSELVES THAT EVERY PIANO OF THEIR MAKE SHALL ILLUSTRATE THAT VERY HIGHEST EXCELLENCE WHICH HAS ALWAYS CHARACTERIZED THEIR ORGANS. CATALOGUE WITH FULL DESCRIPTION FREE.

ONE HUNDRED STYLES, ADAPTED TO ALL USES FROM THE SMALLEST YET HAVING THE MASON & HAMLIN CHARACTERISTIC. AT \$22.50 UP TO \$900.00.

J. H. LYMAN
255 KANSAS AVENUE, TOPEKA, KANSAS.
Send for Catalogues, Price Lists and Terms.

NO BLANKS!
No Charge for Tickets

Capital Premium \$5,000
Capital Premium, \$2,000
10 Extra " of \$1,000 10,000
20 " " \$500 10,000
50 " " \$100 5,000
3,000 " " \$25 75,000
96,918 Prem's, \$2 each, 193,836
100,000 Cash Premiums aggregating \$300,836.

NO BLANKS!

Our Business Platform.

The expenses and earnings of a paper with 100,000 circulation will approximate as follows: **RECEIPTS**—from advertising, 500 inches per issue, at the rate of 1c. a line per 1,000 of circulation, or \$1 a line for 100,000, for 52 issues, \$52.00; subscription, deducted from face value of Cash Premium Orders, \$100,000—total, \$436,800. **EXPENSES**—Issuing 100,000 of paper, postage, presswork, etc., \$1,800 per issue, \$93,600; editorial work, incidentals, \$20,000—total, \$82,400, leaving the splendid profit of \$381,600. Three-fourths of this profit will be made out of the sale of advertising space, and advertisers will pay \$1.00 a line simply because the paper has 100,000 circulation. If it had but 10,000 they would pay but 10 cents a line. Therefore, every subscriber, as a pro rata earner of advertising profits, is worth to a paper of 100,000 circulation \$3.81. We propose to keep the \$1c. as our share, and repay to our subscribers the \$3. In this proportion we will have \$31,000 as profit after giving back to subscribers out of the paper's earnings the sum of \$300,000 in Premiums. This is a plain statement of facts, and involves no necessity of resorting to illegal methods as an excuse for offering "numbered receipts" or "awards." It is simply proposed to make division with our subscribers of an equitable share of the profits which the use of their names as subscribers will secure.

No Premium Less than \$2, and TO \$25 EACH

FOR 3,082 FAVORITES.
In the adjoining list all are CASH Premiums, of which there are 96,918 of \$2 each, three thousand of TWENTY-FIVE DOLLARS each, and ranging from that amount to \$5,000—a Cash Premium for EVERY subscriber, none less than \$2, and

It Costs Nothing to Subscribe,
as the subscription price will be deducted when the Cash Premium is paid and subscription begins. There are no Blanks.

"WHAT PREMIUM WILL I GET?" SEND US and find out. Immediately on receipt of your letter, we will send you a sealed envelope containing an order for the amount of Cash Premium that will be due you, and there will be no suspense or uncertainty.

Remember, no Subscription Price Need be Sent, and No Charge for Tickets.

SOUVENIR OF ART AND POETRY. The sumptuous Art Collection ever offered by any paper, worth any dozen chromos or cheap lithographs. It is a collection of fine engraving Reproductions of famous paintings, interspersed with some of the choicest poetical selections in the language, embracing a wide range of subjects, printed on richly toned cream-colored plate paper, with protecting tissue facing each engraving, the whole protected with heavy ornamental covers holding the pages with rich silk-binding. When you receive it, it is complete (no frames to buy as with Ordinary Engravings), and your centre-table or library is embellished in a manner that a millionaire would respect and admire. This sumptuous Collection of Artistic and Poetical Gems will be sent only to all subscription applicants under this offer who send 48 cts. to defray the pro rata cost of advertising, postage, printing, etc., items not considered in estimates under "Our Business Platform."

CONDITIONS. There are no Blanks and no charge for Tickets—the question as to what Cash Premium Order you will get if you apply being answered at once by the contents of the Sealed Cash Premium Envelope, which will be sent by return train with the Art Souvenir. No answer will be made to any application which desires the Cash Premium Order without sending pro rata charges for the Art Souvenir, as we are expending a large amount in its production and for advertising—money that has no connection with the fund out of which the Cash Premiums will be paid.

IT IS IMPORTANT That you send us your name promptly, so that our list will be completed at an early date, and the full earnings from advertising be realized. Remember, the pro rata charges, 48c., must be sent in every case. No subscription price need be sent, as that will be deducted from the Cash Premium, for there are no blanks. A Cash Premium Order for \$2,000 goes with every Album Souvenir. **OBSERVE!** This is business from the word "Go!" If you send us your address and 48c. charges for the Art Souvenir, we will send you a single Cash Premium Order for not less than two dollars—for there are no blanks. The Cash Premiums paid through any bank, post, or express office. You run no risk, except of being benefited. Then don't wait, but take advantage of this opportunity now, TO-DAY.

Telegram instantly, acknowledging receipt when a Cash Premium Order for \$500 or more is received. Do not telegraph when amount is less than \$500.

CHICAGO FARM JOURNAL 629 1/2 W. VanBuren Street, CHICAGO, ILL.

Over 6,000,000 PEOPLE USE FERRY'S SEEDS

D. M. FERRY & CO. are admitted to be the LARGEST SEEDSMEN in the world. D. M. FERRY & CO'S Illustrated, Descriptive & Priced SEED ANNUAL For 1887 will be mailed FREE to all applicants, and to last season's customers without ordering it. Invaluable to all. Every person using Garden, Field or Flower SEEDS should send for it. Address D. M. FERRY & CO. Detroit, Mich.

CITY HOTEL, -:- CHICAGO.

State Street, Corner Sixteenth Street.

Rate \$1.50 Per Day.

Convenient to Stock Shippers. A good Family Hotel.

Table and Rooms first class. State Street, Archer Avenue or L. S. & M. S. Dummy pass the house to all parts of the city and depots.

W. F. GROUT, Proprietor.

An entirely reliable, legal and substantial proposition, made by that most delightful literary and Agricultural Magazine, the reliable, solid Farm Journal which is always found in the van of progressive journalism, and must not be confounded with any mush-room publication gotten up to back some illegal lottery or other chance scheme.

NO BLANKS
No Charge for Tickets.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING

BY AN ACT of the Legislature, approved February 27, 1886, section 1, when the appraised value of a stray or strays exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisal, to forward by mail, notice containing a complete description of said strays, the day on which they were taken up, their appraised value, and the name and residence of the taker-up, to the Kansas Farmer together with the sum of fifty cents for each animal contained in said notice.

And such notice shall be published in the FARMER in three successive issues of the paper. It is made the duty of the proprietors of the KANSAS FARMER to send the paper, free of cost, to every County Clerk in the State, to be kept on file in his office for the inspection of all persons interested in strays. A penalty of from \$5.00 to \$50.00 is affixed to any failure of a Justice of the Peace, a County Clerk, or the proprietors of the FARMER for a violation of this law.

Broken animals can be taken up at any time in the year.

Unbroken animals can only be taken up between the 1st day of November and the 1st day of April, except when found in the lawful enclosure of the taker-up.

No persons, except citizens and householders can take up a stray.

If an animal liable to be taken up, shall come upon the premises of any person, and he fails for ten days, after being notified in writing of the fact, any other citizen and householder may take up the same.

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township, giving a correct description of such stray.

If such stray is not proven up at the expiration of ten days, the taker-up shall go before any Justice of the Peace of the township, and file an affidavit stating that such stray was taken up on his premises, that he did not drive nor cause it to be driven there, that he has advertised it for ten days, that the marks and brands have not been altered; also he shall give a full description of the same and its cash value. He shall also give a bond to the State of double the value of such stray.

The Justice of the Peace shall within twenty days from the time such stray was taken up (ten days after posting), make out and return to the County Clerk, a certified copy of the description and value of such stray.

If such stray shall be valued at more than ten dollars, it shall be advertised in the KANSAS FARMER in three successive numbers.

The owner of any stray, may within twelve months from the time of taking up, prove the same by evidence before any Justice of the Peace of the county, having first notified the taker-up of the time when, and the Justice before whom proof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of all charges and costs.

If the owner of a stray fails to prove ownership within twelve months after the time of taking, a complete title shall vest in the taker-up.

At the end of a year after a stray is taken up, the Justice of the Peace shall issue a summons to three householders to appear and appraise such stray, summons to be served by the taker-up; said appraisers, or two of them, shall in all respects describe and truly value said stray, and make a sworn return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the taker-up may have had, and report the same on their appraisal.

In all cases where the title vests in the taker-up, he shall pay into the County Treasury, deducting all costs of taking up, posting and taking care of the stray, one-half of the remainder of the value of such stray.

Any person who shall sell or dispose of a stray, or take the same out of the State before the title shall have vested in him, shall be guilty of a misdemeanor and shall forfeit double the value of such stray and be subject to a fine of twenty dollars.

FOR WEEK ENDING JAN. 26, 1887.

Woodson county—I. M. Jewett, clerk.

STEER—Taken up in Toronto tp., November 27, 1886, one red steer, 1 year old, dim brand on left hip; valued at \$12.

STEER—Taken up in Toronto tp., December 16, 1886, one red and white steer, 2 years old, dim brand on right hip; valued at \$20.

PONY—Taken up in Liberty tp., September 1, 1886, one bay pony mare, about 5 years old, star in forehead, right hind foot white, branded on left shoulder and left hip with Spanish brand; valued at \$35.

MULES—Taken up in Everett tp., October 6, 1886, one brown mule with small white spot on left hip, lame in both fore legs; one dun mule, blind in both eyes, age unknown; valued at \$30.

Lyon county—Roland Lakin, clerk.

STEER—Taken up by Adrian Jardiner, in Elmdar tp., December 6, 1886, one red steer, 1 year old, white spot in face and on each shoulder, white back, tail and belly, no marks or brands visible; valued at \$12.

COW—Taken up by M. J. Collard, in Center tp., January 1, 1887, one red and white cow, 5 years old, dim brand on right hip; valued at \$15.

STEER—Taken up by C. Apel, in Center tp., January 1, 1887, one red steer, 1 year old, white face, no brands; valued at \$12.

STEER—Taken up by A. B. Hall, in Emporia tp., November 2, 1886, one red and white yearling steer, two rings in left ear; valued at \$14.

COW—Taken up by A. G. Osborne, in Fremont tp., December 22, 1886, one red cow, about 5 years old, branded with square brand on left shoulder and an indistinct brand on left horn supposed to be No. 17; valued at \$20.

STEER—Taken up by William L. Jones, in Emporia tp., November 30, 1886, one white steer, 1 year old past, blind in one eye, brand similar to J on right hip, no other marks or brands; valued at \$11.

HEIFER—Taken up by John Hale, in Center tp., December 1, 1886, one roan heifer, 2 years old, branded U on right hip, cross in right ear; valued at \$16.

Sumner county—Wm. H. Berry, clerk.

COW AND CALF—Taken up by J. A. Jeffries, of Greene, November 1, 1886, one 2-year-old roan cow, 1 as a red speckled 5-month-old bull calf; valued at \$17.

2 HEIFERS—Taken up by John H. Warrenburg, of Guelph, December 1, 1886, two 2-year-old cherry red heifers, a small swallow-fork in each ear and a small 66 branded on left hip and belted the left shoulder of each; valued at \$30.

PONY—Taken up by Jackson Jolly, in Valverde tp., January 15, 1887, one dark bay horse pony, 4 feet 6 inches high, both ears cropped, left hind foot white, shod all around; valued at \$25.

Wabaunsee county—G. W. French, clerk.

JENNET—Taken up by Jas. W. McComb, in Mission Creek tp., (P. O. Keene), one mouse-colored jennet, white under belly, 8 years old, no marks or brands; valued at \$20.

COW—Taken up by Frank Schmidt, in Alma tp., one yellow cow, line back, white under belly, about 12 years old, no marks or brands. (P. O. Alma); valued at \$15.

STEER—Taken up by W. R. Banks, in Wabaunsee tp., (P. O. Wagon), December 8, 1886, one red and white 2-year-old steer, no marks or brands visible; valued at \$25.

HEIFER—By same, one red and white 1-year-old heifer, short tail, piece off left ear, no other marks or brands visible; valued at \$14.

HEIFER—By same, one roan heifer, piece off right ear, no other marks or brands visible; valued at \$14.

HEIFER—By same, one red 2-year-old heifer, crop off both ears, white spot on right flank and hip, white

on belly, no other marks or brands visible; valued at \$17.

STEER—By same, one roan 2-year-old steer, no marks or brands visible; valued at \$25.

STEER—By same, one red 2-year-old steer, white in forehead and on belly and both flanks, white spot on left hip, little white on tail, no other marks or brands visible; valued at \$25.

STEER—By same, one red 2-year-old steer, white in forehead and on belly and both flanks, white on rump, white spot on left shoulder and brush of tail white, no other marks or brands visible; valued at \$25.

Ford county—S. Gallagher, Jr., clerk.

COW—Taken up by Lyman Lockman, in Dodge tp., December 23, 1886, one red cow, 3 years old, branded W on right hip; valued at \$10.

COW—By same, one white cow, 3 years old, branded W on the right hip; valued at \$10.

HEIFER—By same, one red heifer, 1 year old, branded (—) on both sides; valued at \$8.

BULL—Taken up by Z. P. Ball, in Dodge tp., one red bull, 3 or 4 years old, split in right ear, both horns knocked off, white on tip of tail; valued at \$25.

Phillips county—S. J. Hartman, clerk.

MULE—Taken up by Wm. A. DeVolt, of Walnut tp., one mare mule, supposed to be about 8 years old, shoes on front feet, mane and tail sheared, brown color, weight about 900 pounds.

Rooks county—J. T. Smith, clerk.

COW—Taken up by Isaac Edson, in Greenfield tp., one roan cow, white in face, crop off each ear, white on belly, 7 years old; valued at \$15.

Lincoln county—H. H. Gilpin, clerk.

HORSE—Taken up by Isaac Horton, in Logan tp., December 30, 1886, one bay horse, 15 hands high, both hind feet white, marks not known; valued at \$75.

Nemaha county—R. S. Robbins, clerk.

HEIFER—Taken up by P. J. Emmert, in Home tp., (P. O. Centralia), January 7, 1887, one 1-year-old roan heifer, tin label in left ear; valued at \$12.

STEER—Taken up by Patrick Cline, in Red Vermilion tp., (P. O. America City), November 15, 1886, one red 2-year-old steer with some white spots; valued at \$20.

Elk county—J. S. Johnson, clerk.

STEER—Taken up by C. Oliver, in Oak Valley tp., (P. O. Oak Valley), December 21, 1886, one white yearling steer, red ears; valued at \$13.

Shawnee county—D. N. Burdge, clerk.

BULL—Taken up by W. L. Firestone, in Mission tp., (P. O. Topeka), January 18, 1887, one red yearling bull, white in face and on flank and belly; valued at \$15.

Brown county—G. I. Prewitt, clerk.

COLT—Taken up by Andy Bowen, in Powhatan tp., January 14, 1887, one brown horse colt, about 8 months old, some gray hairs, blaze in face, no other marks or brands visible; valued at \$20.

COW—Taken up by B. Winkler, in Powhatan tp., January 11, 1887, one red cow with broken horns, star in forehead, 7 years old, no marks or brands visible; valued at \$20.

Labette county—W. W. Cook, clerk.

HORSE—Taken up by H. R. Davis, in Hackberry tp., December 10, 1886, one bay horse, white hind, white strip in face, black mane and tail; valued at \$30.

Meade county—W. H. Young, clerk.

COW—Taken up by Joseph Tothoroh, in Cimarron tp., (P. O. Byers City), December 28, 1886, one red cow, under-slope in left ear; valued at \$20.

COW—By same, one red-spotted cow, hole in right ear; valued at \$15.

COW—By same, one red-spotted cow, crop in left ear, figure 8 on both hips; valued at \$25.

Edwards county—J. S. Strickler, clerk.

COLT—Taken up by Jacob Gall, in Trenton tp., January 19, 1887, one 3-year-old gray mare colt, halter on; valued at \$50.

COLT—By same, one 9-months-old cream-colored horse colt; valued at \$15.

Ellis county—Henry Oshant, clerk.

MARE—Taken up by J. F. Jolly, three and a half miles east of Hays City, January 9, 1887, one dark bay mare, bald face, spotted sides, had on saddle and bridle when taken up, about 7 years old, no brands; valued at \$45.

Jackson county—Ed. E. Birkett, clerk.

HEIFER—Taken up by M. Brown, in Washington tp., (P. O. Rossville), January 3, 1887, one red yearling heifer with some white spots, brand supposed to be D on right hip; valued at \$15.

FOR WEEK ENDING FEB. 2, 1887.

Wabaunsee county—G. W. French, clerk.

STEER—Taken up by J. W. Borer, in Mission Creek tp., (P. O. Dover, Shawnee county), one red and white steer, 1 year old past; valued at \$12.

Osage county—R. H. McClair, clerk.

COW—Taken up by A. P. Cooper, in Olivet tp., January 1, 1887, one red and white cow, 5 years old, no marks or brands; valued at \$18.

COW—By same, one red cow, white face, 5 years old; valued at \$18.

HEIFER—Taken up by Jacob Voglesang, in Olivet tp., January 20, 1887, one dark red heifer, 2 years old, bit under left ear; valued at \$15.

Stafford county—H. M. Woolley, clerk.

HEIFER—Taken up by M. E. Salmon, in York tp., December 20, 1886, one dark red medium sized yearling heifer, white spots on body and white star in forehead; valued at \$10.

HEIFER—By same, one medium-sized 2-year-old heifer, white with small red spots on body, red neck, white spot in forehead, no marks or brands; valued at \$12.

Pottawatomie county—J. W. Zimmerman, clk.

COW—Taken up by James Cunneen, in St. Marys tp., November 17, 1886, one red cow, 8 years old, both ears slit, brown on hips, branded V three white spots on back; valued at \$25.

Riley county—O. C. Barner, clerk.

HEIFER—Taken up by F. H. Pierce, of Wild Cat, one small heifer, about 18 months old, all red except some white on belly.

Anderson county—A. D. McFadden, clerk.

STEER—Taken up by H. T. Hunt, in Reeder tp., December 18, 1886, one red and white spotted yearling steer, no marks or brands; valued at \$12.

Lyon county—Roland Lakin, clerk.

STEER—Taken up by Mrs. Sarah A. VanHassell, in Americus tp., one red and white spotted yearling steer; valued at \$10.

HEIFER—By same, one roan 2-year-old heifer, one horn broken; valued at \$4.

Bourbon county—E. J. Chapin, clerk.

STEER—Taken up by Jos. C. Hale, of Freedom tp., one yearling steer, red except white on belly, no marks or brands; valued at \$16.

Davis county—P. V. Trovinger, clerk.

HORSE—Taken up by Nathan Brown, in Smoky Hill tp., January 15, 1887, one bay horse, about 8 years old, branded on right shoulder, white hind feet, 16 hands high; valued at \$55.

FOR WEEK ENDING FEB. 9, 1887.

Ellis county—Henry Oshant, clerk.

STEER—Taken up by G. W. Gillion, in Big Creek tp., December 15, 1886, one red and white steer, about 2 years old, dim brand on left hip; valued at \$12.

STEER—By same, one black and white steer, 2 years old, branded C. N. on left hip; valued at \$12.

Wabaunsee county—G. W. French, clerk.

COW—Taken up by Augusta Muir, in Mill Creek tp., (P. O. Halifax), January 24, 1887, one red cow, a little

white in forehead and under belly, no marks or brands, supposed to be about 6 years old; valued at \$14.

Linn county—Thos. D. Cottle, clerk.

STEER—Taken up by William B. Melinda, in Potosi tp., December 20, 1886, one small red and white yearling steer, white face and white belly; valued at \$12.

PONY—Taken up by Robert Pierce, in Sheridan tp., November 25, 1886, one horse pony, blaze face, collar and saddle marks, 14 hands high; valued at \$15.

COW—Taken up by Frank Bloom, in Sheridan tp., December 18, 1886, one red cow, 6 years old, branded on left hip and point of left horn off; valued at \$12.

MARE—Taken up by Nora Dorsey, in Sheridan tp., January 7, 1887, one bay mare, under size, wearing one shoe, lame in left fore foot, white on nose and hind foot; valued at \$20.

Chase county—J. J. Massey, clerk.

STEER—Taken up by L. C. Rogier, in Bazaar tp., November 29, 1886, one red steer, 2 years old, branded on right hip with four straight bars, under-bit out of right ear, brand on left hip similar to H, white on belly; valued at \$25.

STEER—Taken up by H. Underwood, in Bazaar tp., November 29, 1886, one brindie and white spotted steer, 2 years old, indistinguishable brand on left hip; valued at \$25.

Miami county—H. A. Floyd, clerk.

STEER—Taken up by Samuel Anderson, in Stanton tp., January 1, 1887, one red yearling steer, no marks or brands visible; valued at \$15.

Johnson county—Henry V. Chase, clerk.

HORSE—Taken up by Frank Davis, five miles north of Olathe, one light bay horse, 10 or 12 years old, blind in right eye, spavin on left hind leg, two shoes on, above 15 hands high; valued at \$15.

Cowley county—L. J. Smock, clerk.

MARE—Taken up by P. B. Andrews, of Arkansas City, December 29, 1886, one black mare, 13 hands high, blaze in face, left hind foot and leg white, collar marks, indistinct brand on left shoulder, small sheep bell on; valued at \$20.

HORSE—By same, one iron-gray horse, 15 hands high, saddle-marked, indistinct brand on left shoulder; valued at \$40.

HORSE—By same, one bay horse, 15½ hands high,

small white star in forehead, indistinct brand on left shoulder; valued at \$40.

Sumner county—Wm. H. Berry, clerk.

PONY—Taken up by I. S. Burdick, in South Haven tp., January 10, 1887, one brown horse pony, 14 years old, Spanish brands on left thigh and shoulder, white spot in forehead; valued at \$20.

Jefferson county—E. L. Worswick, clerk.

HORSE—Taken up by John A. Wilson, in Oskaloosa tp., January 20, 1887, one sorrel horse, white strip in forehead, left ear cropped, Texas brand on left shoulder and hip, shod all around, probably more than 12 years old, about 15 hands high; valued at \$25.

COLT—By same, one strawberry roan mare colt, less than one year old, no marks or brands; valued at \$25.

small white star in forehead, indistinct brand on left shoulder; valued at \$40.

Ho! for Morton County!

The Southwest Corner County, and BEST County in Kansas

Fertile soil, fine climate, pure water—never-falling, cheap homes, health unsurpassed, and just the place you want to locate in.

For descriptive particulars, write to PIERCE & TAYLOR, Richfield, (county seat), Morton Co., Kansas. They are the oldest and best known firm in the county, and business entrusted to their care will receive prompt attention.

Correspondence solicited.

THIS PAPER is on file in Philadelphia at the Newspaper Advertising Agency of Messrs. N. W. AYER & SON, our authorized agents.

J. H. PRESCOTT, Pres't.

Ed. C. GAY, Secretary.

C. E. FAULKNER, Vice Pres't.

M. D. TEAGUE, Treasurer.

The National Mutual Fire Insurance Co.,

SALINA, : KANSAS,

MAKES A SPECIALTY OF INSURING FARM BUILDINGS AND STOCK

Against loss by Fire, Lightning, Tornadoes, Cyclones and Wind Storms.

Premium Notes in Force and Other Assets, \$12,000.

Your Insurance solicited. Correspondence invited. Agents Wanted. [Mention KANSAS FARMER.]

J. E. BONEBRAKE, Pres't.

THEO. MOSHER, Treasurer.

Kansas Farmers' Fire Insurance Company,

ABILENE, : : : KANSAS,

Insures Farm Property, Live Stock and Detached Dwellings

Against Fire, Tornadoes, Cyclones and Wind Storms.

CAPITAL, FULL PAID, : : : : \$50,000.

The last report of the Insurance Department of this State shows the KANSAS FARMERS' FIRE INSURANCE COMPANY has more assets for every one hundred dollars at risk than any other company doing business in this State, viz:

The Kansas Farmers' has \$1.00 to pay \$18.00 at risk; the Home, of New York, \$1.00 to pay \$48.00; the Continental, of New York, \$1.00 to pay \$80.00; the German, of Freeport, Ill., \$1.00 to pay \$70.00, the Burlington of Iowa, \$1.00 to pay \$75.00, and the State of Iowa has \$1.00 to pay \$79.00 at risk.

CHICAGO. KANSAS CITY. ST. LOUIS.

James H. Campbell & Co.,

LIVE STOCK COMMISSION MERCHANTS,

—FOR THE SALE OF—

CATTLE, HOGS AND SHEEP.

Rooms 23 and 24, Exchange Building, Kansas City Stock Yards.

Unequaled facilities for handling consignments of Stock in either of the above cities.

Correspondence invited. Market reports furnished free.

Refers to Publishers KANSAS FARMER.

LITTLE :: JOKER :: BUTTONS

For Marking Stock. Never Come Off.

PRICE \$5.00 PER 100, NUMBERED. SEND FOR SAMPLE.

LEAVENWORTH NOVELTY WORKS, LEAVENWORTH, KANSAS.

GARDEN CITY!

The QUEEN CITY of the Arkansas Valley.

Surrounded by the FINEST LANDS in Kansas. Lands cheap, but developing rapidly.

Now is the time to invest! Deeded Lands, \$4 to \$7 per acre.

Write for full information to B. F. STOCKS & CO.,

The leading Real Estate Firm in GARDEN CITY, KANSAS.

Cheap Homes!

MEADE COUNTY, KANSAS. Organized; county seat permanently located at Meade Center; free from debt; well watered; deep, rich soil; no waste land; fine building stone. Three Railroads coming at the rate of two miles a day. Land cheap, but rapidly advancing. MEADE IS THE BANNER COUNTY OF THE SOUTHWEST, having won a special prize this year for county exhibit at the Southwestern Exposition, fifteen counties competing, and another at Dodge City Exposition over all competitors. Now is the time to invest. For further information address J. A. LYNN, Land and Loan Agent, Meade Center, Kansas. All representations guaranteed.

The Veterinarian.

[The paragraphs in this department are gathered from our exchanges.—ED. FARMER.]

DROPSICAL SWELLING.—I have a mare about 14 years old, seemingly in good health, that has a swelling of the udder; commenced in the teats two weeks ago; udder is now as large as half of common-sized wooden pail; no milk or water in teats; mare will not have colt till April. Will veterinarian please give remedy. [The swelling is of a dropsical nature owing to a sluggish circulation, and is caused by insufficient exercise. Give the mare light work, and dissolve a teaspoonful of nitrate of potash night and morning in drinking water for four or five days.]

SWELLING ON THE WITHERS.—I would like to have your veterinary tell me what ails my mare. The first I noticed she could not get her head down to drink. That has bothered her about four months. She acts as if her neck was sore on top, but it is not. It seems to be swollen lately on the wither a little. Please tell me what to do for her. [Make a close examination and find out whether there is actually a swelling accompanied by pain at the region of the withers. If so, there is probably a fistula forming. It is important to know if such is the case, so we would be glad if you would write a little more fully and definitely on the matter.]

DISCHARGING AT THE NOSE.—I wish to ask your veterinarian a few questions about my horse, which has run from both nostrils of a light color. The horse coughs a little at times. The horse is in good flesh. I wish to know if it is glanders. Other horses that have worked with him are not sick. Will you please tell me what it is, and how to treat it. There is no veterinarian in our vicinity. You would do me a favor by answering these questions. [We could not give a diagnosis based upon the single fact that the horse discharges from the nostrils. If we did so we would be assuming a very grave responsibility. Horses suffering from simple catarrhal conditions of the nasal passages present symptoms so closely allied to glanders that it requires a personal examination by a competent veterinary surgeon to distinguish the difference. On this account we would advise you to consult such a person.]

DISEASE OF THE LIVER IN A MARE.—My elderly mare appears in good condition and is sprightly; except an occasional stumble or "letting down" behind, she travels well for two or three miles. She seldom goes up a hill without stopping; she whisks her tail and stamps with her left hind foot, or lifts it clean off the ground, or leans over so as to favor it. Then she starts as fast as she can walk, and, maybe, stops inside of a rod. If not allowed to stop, she will limp for some distance after getting on level ground. She sweats profusely in the hind quarters. She has been affected in this way for three or four months, and from the first she has not been put to hard work; but she is getting worse. After going two or three miles she now stops every few rods; what should be done for her? [The symptoms indicate disease of the liver, which may be due to too heavy feeding and want of sufficient daily exercise, or to some unknown cause. Give six drachms of Barbadoes aloes and follow this by injections of two or three quarts of milk-warm water every three or four hours until the horse is purged. Twice daily give one-half drachm of colchicum, two drachms of niter, and one-half ounce of powdered gentian. Do not overfeed; the diet should be laxative,

and the bowels should be kept loose, preferably by feeding roots, mashies or ground linseed, or by drachm doses of aloes if necessary. Allow free access to soft and good drinking water. Moderate daily exercise is very essential; and thorough grooming will be found very beneficial.]

A question likely soon to come to the fore is the practicability of tunnelling between England and Ireland. At one point the distance is under twenty-two miles.

A compost heap is rather unsightly, but if placed in the back yard or behind the barn it will not annoy any one. Refuse matter should be thrown on this heap. All will help make a valuable pile of manure, which can be utilized in the spring.

"Little, But Oh My."

Dr. Pierce's "Pleasant Purgative Pellets" are scarcely larger than mustard seeds, but they have no equal as a cathartic. In all disorders of the liver, stomach and bowels they act like a charm. Purely vegetable, sugar-coated, and inclosed in glass vials. Pleasant, safe and sure. By druggists.

E. BENNETT & SON,

TOPEKA, - KANSAS,

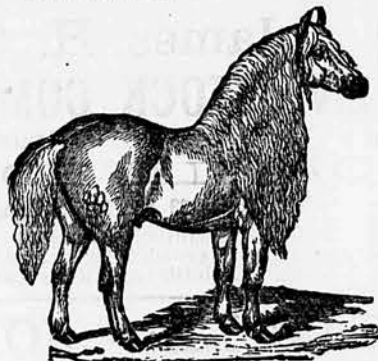


IMPORTERS AND BREEDERS OF
Percheron, Clydesdale and Coach Horses.

106 Head of Stallions just arrived from Europe. Good stock for sale on easy terms. We want the leading prize of Kansas State Fair. Please send for illustrated catalogue, free on application.

JOHN CARSON

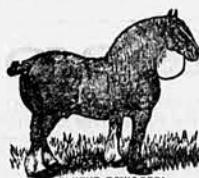
PLEASANT VIEW FARM,
WINCHESTER, : : : KANSAS.



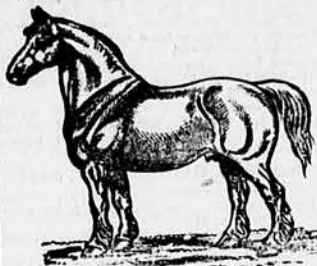
IMPORTER AND BREEDER OF
Clydesdale, Percheron-Norman & Cleveland Bay Horses.

Winchester is twenty-five miles west of Leavenworth on the Kansas Central Branch of the Union Pacific railroad. Correspondence solicited.

CLYDESDALE —AND— ENGLISH SHIRE HORSES.



ALL ANIMALS GUARANTEED.
We have in our barn for sale the winners of 70 premiums this fall, 44 of which are first, also 4 sweepstakes, 2 gold medals and 1 silver medal, including the Illinois, Minnesota and Wisconsin State Fairs. Nine shipments received this season. The largest importers of pure bred Clydesdales in the world. Resident purchasing partner in the old country. Send for Catalogue.
GALBRAITH BROS., Janesville, Wis.



JOHNSON BROS.,

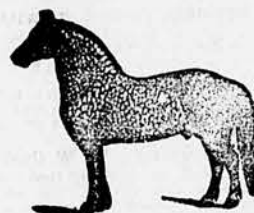
Garnett, - Kansas.



Breeders of and Dealers in Imported and High-Grade
French Draft Horses.
Choice Stallions for sale on easy terms. Write us and mention KANSAS FARMER.

J. L. HASTINGS,

Wellington, - - Kansas,



Dealer and Breeder in Imported and High-Grade
FRENCH DRAFT & CLYDESDALE HORSES.
Terms reasonable. Satisfaction guaranteed. Correspondence solicited.

OAK GROVE FARM

To the front for



CLYDESDALES
I have a choice collection of pure-bred Registered Imported Clydesdale Horses on hand and for prices away down. Terms made very easy. Each Stallion guaranteed a breeder. Send for Catalogue.

JOHN C. HUSTON,
Blandinsville, McDonough Co., Ill.
A. B. McLAREN, Superintendent

F. J. JOLIDON & SON,

ELVASTON, (Hancock Co.) ILL.,

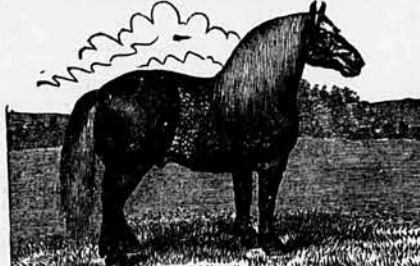
IMPORTERS OF
Percheron, French Draft,
ENGLISH SHIRE,
BELGIAN DRAFT,
AND
French Coach Horses.



Our last importation of 41 head arrived in fine condition October 16th, and together with those previously on hand form a choice collection of all ages. All stock registered. Prices and terms to suit the times. Personal inspection or correspondence solicited.
Elvaston is on Wabash R. R., 6 m. east of Keokuk, Iowa

RIVERSIDE STOCK FARM,

DEGEN BROS., Ottawa, Ill.



Importers and Breeders of French Draft and French Coach Horses. We have now over 75 head of imported French Draft Stallions and Mares on hand. Our importations this year have been selected from the best breeding district in France. Our stock is all recorded in France and in the National Register of French Draft Horses in America. Our French Coach Horses are the best that could be found in France. We will be pleased to show our stock to visitors. Correspondence invited and promptly answered.
DEGEN BROS.

Sexton & Offord,

In connection with Mr. G. M. SEXTON, Auctioneer to the Shire Horse Society of England, Importers and Breeders of

English Shire (Draft) Horses

RED POLLED CATTLE and LARGE YORKSHIRE PIGS,

Have a very choice collection on hand to be sold cheap. Correspondence solicited.

34 East Fifth Street, TOPEKA, KANSAS.



Percheron Horses.

ISLAND HOME STOCK FARM, GRASSY LAKE, MICH.—Largest number and finest stock to select from, many of them prize winners in both France and America, personally selected in France by one of the firm. All registered in French and American Stud Books. Prices reasonable. Stock guaranteed. Send for large illustrated cloth-bound catalogue, free. SAVAGE & FARNUM, Detroit, Mich.



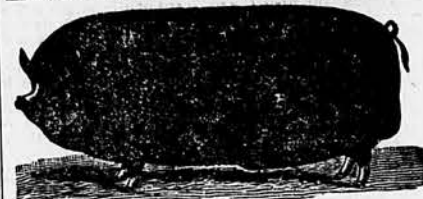
Chester White, Berkshire and Poland-China Pigs, fine Setter Dogs, Scotch Collies, Fox Hounds and Beagles, Sheep and Poultry, bred and for sale by W. Gibbons & Co., West Chester, Chester Co., Pa.

Send stamp for Circular and Price List.

CHOICE

Berkshire and Small Yorkshire PIGS and MAMMOTH BRONZE TURKEYS. We have a splendid lot of the above named hogs and turkeys for sale at hard time prices. Write for prices before making purchases if you need anything in this line. Satisfaction guaranteed.
WM. BOOTH & SON,
Winchester, Kas.

ENGLISH BERKSHIRES.



THE WELLINGTON HERD consists of twenty matured brood sows of the best families of home-bred and imported stock, headed by the celebrated HOPEFUL JOE 4889, and has no superior in size and quality nor in strain of Berkshire blood. Young sows, already bred, for sale. Your patronage solicited. Write. [Mention this paper.]
M. B. KEAGY, Wellington, Kas.

PLEASANT VALLEY HERD

Pure-bred Berkshire Swine.



I have thirty breeding sows, all matured animals and of the very best strains of blood. I am using three splendid imported boars, headed by the splendid prizewinner Plantagenet 2919, winner of five first prizes and gold medal at the leading shows in Canada in 1881. I am now prepared to fill orders for pigs of either sex, not akin, or for matured animals. Prices reasonable. Satisfaction guaranteed. Send for catalogue and price list, free.
S. McCULLOUGH,
Ottawa, Kansas.

THE GOLDEN BELT HERD OF THOROUGHbred POLAND CHINAS.

Choice animals of all ages generally on hand at prices to suit the times. Orders for extra show Spring Pigs should be sent in at once. A few choice sows with pig, for sale. Breeders recorded in A. P. C. Record. Pedigree with every sale. Safe arrival and satisfaction guaranteed. Low rates by express.
F. W. TRUEDELL, Lyons, Kas.

THOROUGHbred POLAND-CHINAS



As produced and bred by A. C. MOORE & SONS, Canton, Ill. The best hog in the world. We have made a specialty of this breed for 33 years. We are the largest breeders of thoroughbred Poland-Chinas in the world. Shipped over 700 pigs in 1883 and could not supply the demand. We are raising 1,000 pigs for this season's trade. We have 160 sows and 10 males we are breeding from. Our breeders are all recorded in American P. C. Record. Pigs all eligible to record. Photo card of 43 breeders, free. *Swine Journal*, 25 cents in 2-cent stamps. Come and see our stock; if not as represented we will pay your expenses. Special rates by express.

Tomatoes, now smooth, were once ribbed.
Make up and turn over the compost heaps.
Spread out manure when the ground is not frozen.
It is said that wood ashes or potash will repel the wire worm.

Farmers in northern Indiana are shipping corn from Kansas.

Test seed corn by sprouting. This will be greatly wanted this season.

There is no use of a chick or a hen having the gapes for twenty-four hours. A few drops of camphor and water down the throat is a sure cure. I never knew a second dose to fail.

Itch, Prairie Mange, and Scratches of every kind cured in thirty minutes by Woolford's Sanitary Lotion. Use no other. This never fails. Sold by Swift & Holliday, druggists, Topeka, Kas.

Prof. A. S. Heath, in referring to the sensitiveness of the cow, says that in some instances fright has dried up the milk secretions, while in others it produces such relaxation as to cause an excessive flow of milk, which in either case is very hurtful.

If you have chapped hands or rough skin, use Stewart's Healing Cream. Only 15 cents a bottle. Gentlemen who suffer from a tender face after shaving are delighted with it. We only ask a trial. Stewart Healing Powder Co., St. Louis.

Mr. G. B. Bothwell writes the Rural World: "In the matter of selling wool, I have lost money enough in the last twenty years by not selling my wool at the right time and in the right place to purchase a fine farm and stock it, and my best luck has been in selling at my barns."

Catarh Cured.

A clergyman, after years of suffering from that loathsome disease, Catarh, and vainly trying every known remedy, at last found a prescription which completely cured and saved him from death. Any sufferer from this dreadful disease sending a self-addressed stamped envelope to Dr. Lawrence, 212 East Ninth street, New York, will receive the recipe free of charge.

Edwin Satterthwait says that it is extremely important to have the inner bark of the graft to meet the inner bark of the stock the whole length of the wedge. He condemns the practice of "crossing" the graft so as to make it touch in one place. See that there is contact throughout.

Lonergan's Specific

Cures Nervous Debility, Male and Female Weakness, and Decay. Price, \$1 per package; 3 packages, \$2. Address A. C. Lonergan, M. D., Louisville, Mo.

DEAFNESS CURE is a new and successful cure at your own home, by one who was deaf twenty-eight years. Treats by mail or by letter. No other remedy. Cured himself in three months, and now hears hundreds of others. Full particulars sent on application. T. S. PAGE, No. 41 West 31st St., New York City.

RUPTURE

RELIEVED AND CURED

Without any operation or detention from business, by my treatment, or money returned. Send stamp for Circular, and if not as represented will pay railroad fare and hotel expenses both ways to parties coming here for treatment.

DR. D. L. SNEDIKER,
Emporia, Kas.

I CURE FITS!

When I say cure I do not mean merely to stop them for a time and then have them return again. I mean a radical cure. I have made the disease of FITS, EPILEPSY or FALLING SICKNESS a life long study. I warrant my remedy to cure the worst cases. Because others have failed in no reason, now receiving a cure. Send at once for a treatise and a Free Bottle of my infallible remedy, Olive Express and Post Office. It costs you nothing for a trial, and I will return it to you.
Address Dr. H. G. ROOT, 182 Pearl St., New York.

ON 30 DAYS' TRIAL.

EGGLESTON'S ELASTIC TRUSS
Has a Pad different from all others, is cup shape, with Self-adjusting Ball in center, adapts itself to all positions of the body while the Ball in the cup presses back the Intestines just as a person does with the finger. With light pressure the Hernia is held securely day and night, and a radical cure certain. It is easy, durable and cheap. Sent by mail. Circulars free.
EGGLESTON TRUSS CO., Chicago, Ill.

THE PROFIT FARM BOILER
With Dumping Caldron.
Ground feed can be cooked in a box by dumping in boiling water, stirring in the meal, and covering tightly. Also make dairy and laundry stoves. Water Jacket Kettles to warm milk without scalding, and all sizes of Caldrons and Kettles.
P. D. DUFFY & CO., Batavia, Ill.

BURR STONE CHEAPEST & BEST MILL
WARRANTED TO GRIND FASTER, BETTER, AND MORE THAN ANY MILL MADE.
CHAS. KAESTNER & CO.
103 N. 5th St., CHICAGO, ILL.

THE CHICAGO COMBINED PATENT Flexible Harrow & Grain Cultivator.

All Steel Teeth. Best implement in use. Unequaled as a soil harrow and pulverizer. Works equally well in growing Wheat, Potatoes or young Corn. Adds 5 to 10 bushels per acre to the yield. 25 to 30 acres per day cultivated by one team. Will pay for itself in one year. Send for Illustrated Price List. H. A. STREETER, Manufacturer, 85 to 41 Indiana St., Chicago.

QUEEN OF THE SOUTH PORTABLE MILLS.
SELECT FRENCH BURRS, For Stock Feed or Meal for Family Use.
Six Sizes. Satisfaction Guaranteed. Write for Descriptive Circular.
Straub Machinery Co., CINCINNATI, OHIO.

DERICK'S HAY PRESSES.
are sent anywhere on trial to operate against all other presses. the customer keeping the one that suits best.
Order on trial, address for circular and location of Western and Southern Storehouses and Agents.
P. K. DERICK & CO., Albany, N. Y.

Freeman's Improved Sower.
Sows all Grains, Grass Seeds, Plaster, Salt, Ashes, Fertilizers, BETTER and FASTER than by any other method. SAVES SEED by sowing PERFECTLY EVEN. Attached to any wagon. Sows 80 Acres a Day. Crop ONE-FOURTH LARGER THAN WHEN DRILLED. The only practical Broadcaster made. Not affected by the wind. Fully warranted. Send at once for FREE Illustrated Catalogue "S." A pocket-book, memorandum and calendar FREE to all who mention this paper. Write to the Manufacturer, S. Freeman & Sons Mfg. Co., Racine, Wis.

Two-Horse Power Engine. \$150.

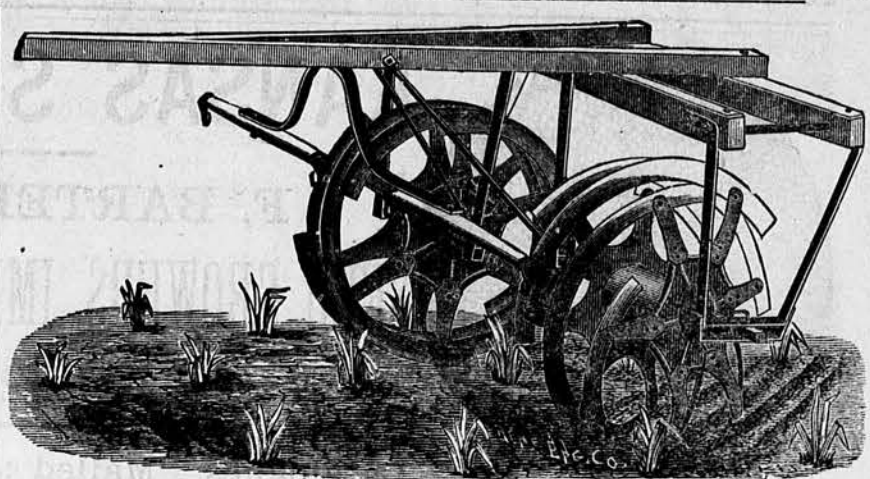
WITH STEEL BOILER.
Cheap, Reliable, Safe.
Automatic Boiler Feed. Automatic Pop Safety Valve Steel Boiler. Cost of running guaranteed not to exceed one and one-half cents per horse power per hour. Less than half that of any kerosene engine of equal efficiency. Nothing equal to it ever before offered for the price. Send for free descriptive circular.
CHAS. P. WILLARD & CO.
284 Michigan Street, Chicago, Ill.

The Lightning Hay Press.

SUPERIOR TO ANY OTHER PRESS made. Send for descriptive circular and price list. K. C. HAY PRESS CO., Foot of 6th St., Kansas City, Mo. When writing to advertiser mention Kansas Farmer

DUTTON GRINDER

Perfect Mowing MACHINE KNIFE GRINDER.
Weights but 13 Lbs.
Can be carried into the field and attached to Mowing Machine Wheel. Send for Descriptive Catalogue. Agents wanted in every County.
R. H. ALLEN CO., 189 Water St., New York.



For working Corn and Cotton, this Cultivator, as improved for 1886, is the best in the market. Full information FREE on application to

MAYWOOD COMPANY,
In writing mention KAS. FARMER.] Room 64, Metropolitan Block, CHICAGO, or MAYWOOD, ILL.

The Vaneless Monitor

—B—
UNEQUALED AS A FARM MILL.



SEND for CATALOGUE of WIND MILLS, Iron Pumps, etc. Address

SEARLES BROTHERS
GENERAL AGENTS,
No. 621 Commercial St., ATCHISON, KAS.

I WANT AGENTS TO SELL THE **MISSOURI STEAM Washer**

To men or women of energy and ability, seeking profitable employment, exclusive territory will be given with Agency. The Washer is made of metal and works on a new principle which saves labor, clothes and soap. Sample sent on a week's trial to be returned at my expense if not satisfactory.
\$600 to \$2,000 A year is being made by competent, shrewd agents. Intrinsic merit making it a phenomenal success everywhere. Send for my illustrated circular and terms of agency. J. WORTH, Sole Man'r, 1710 Franklin Ave., St. Louis, Mo.

AGENTS WANTED

A New Farm Implement BROWN'S FENCE-BUILDER!

Portable, simple, durable, strong. Builds a picket fence on the posts in the field, substantial, economical. The most practical machine yet devised.

JOHN P. BROWN,
Rising Sun, - - - Indiana.

THE LITTLE GIANT FENCE-WEAVER

Excels them all. Simple, durable, cheap and easily worked. Salesmen wanted. Particulars free.
WM. F. JESTER, Lock box 932, Wichita, Kas.

BLACKSMITHING on the FARM

Save time and money by using Holt's celebrated **FORGE and KIT of TOOLS** For \$20
Larger Size, \$25. Single Forge, \$10.
Blacksmiths' Tools, Hand Drills, &c.
HOLT MFG. CO., 78 Central Way Cleveland, O.



DANA'S WHITE METALLIC EAR MARKING LABEL, stamped to order with name, or name and address and numbers. It is reliable, cheap and convenient. Sells at sight and gives perfect satisfaction. Illustrated Price-List and samples free. Agents wanted.
C. H. DANA, West Lebanon, N. H.

MISSISSIPPI. HOMESEEKERS

desiring to locate in the South, in a section where there is both timber and prairie, sandy and clay lands, where the people are friendly, where the land is cheap and productive, where you can raise cotton, as well as all kinds of grain and fruits and where you can raise stock easier and cheaper than in the West. Write to **GERDINE & NIXON**, West Point, Clay county, Mississippi.

Do You Want a Home? Yes.

Then write to **WM. J. ESTILL & CO.**, Medicine Lodge, Kas. They have for sale over one hundred tracts of Choice Land in Barber county, Kansas, suitable for farms or ranches. Payments cash, or terms to suit purchaser. Those desiring to locate in the best part of Kansas should write at once. Particulars free. City property—addition of 80 acres to Medicine Lodge—in lots 60x150 feet, at low cash prices.

MINNESOTA. NORTH DAKOTA. ANTELOPE, MOUSE

—AND— RED RIVER VALLEYS

AND TURTLE MOUNTAIN DISTRICT.

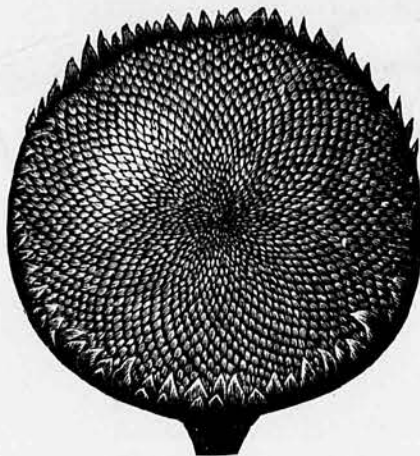
With 200 miles New Railroad, Good Markets, Numerous New Towns (including Rugby, an important junction, and Minot, Division Headquarters), Two Million Acres excellent government land, directly on the line of it. R. afford excellent opportunities for Stockmen, Farmers, Mechanics and Merchants. Come early and investigate, or for further particulars write to **C. H. WARREN**, G. P. A. St. P. M. & M. Ry., St. Paul, Minn.

FAY'S MANILLA ROOFING
ESTABLISHED 1866
Is CHEAP, STRONG, easy to apply, does not rust or rot. Is also a SUBSTITUTE FOR PLASTER, at Half the Cost, outlasts the building, CARPETS AND RUGS of same, double the wear of oil cloths. Catalogue and samples free. **W. H. FAY & CO.**, Camden, N. J.

POULTRY KEEPERS' GUIDE.
Price, 50 cts. (Stamps taken.)
This is a new Poultry Book, written and compiled by **Geo. F. MARSTON**, who is a well known authority on poultry topics. It tells all about how to manage poultry to obtain the best results, how to kill vermin, how to fatten quickly for market and the best plan for raising the chicks. It also tells how to raise capons, which is exceedingly profitable; also how to make Incubators and Brooders at a very small cost, that will do excellent work. Every one interested in poultry should have this book. Send 25 cts. stamps, and it will be sent by mail, post paid. Address the author,
Geo. F. MARSTON, Denver, Colorado.

TOPEKA Medical and Surgical INSTITUTE
This institution was Established Fourteen Years Ago, and is incorporated under the State laws of Kansas. During that time it has been a flourishing business and made many remarkable cures. The Institute is provided with the very best facilities for treating every kind of physical deformity, such as Hip-Joint Disease, Club Foot, Wry Neck and Spinal Curvature, having a skilled workman who makes every appliance required in orthopedic surgery. Incipient Cancer cured, and all kinds of tumors removed. Diseases of the Blood and Nervous System successfully treated. Nose, Throat and Lung Diseases, if curable, yield readily to specific treatment as here employed. All forms of Female Weakness relieved. Tape-Worm removed in from one to four hours. All Chronic and Surgical Diseases scientifically and successfully treated.

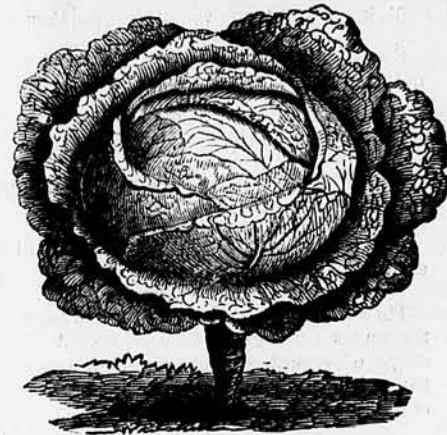
PATIENTS TREATED AT HOME.
Correspondence solicited. Consultation free. Send for circular and private list of questions.
DRS. MULVANE, MUNK & MULVANE,
No. 86 East Sixth street, TOPEKA, KAS.



KANSAS SEED HOUSE

F. BARTELDES & CO.,
SEED GROWERS, IMPORTERS AND DEALERS,
Lawrence, Kansas.

Catalogues : Mailed : Free : on : Application.



TWO-CENT COLUMN.

"For Sale," "Wanted," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.

FOR SALE—Clydesdale Stallion "None Such." Full-blood. Coal black, white stripe in face, and white hind feet; plump; 16 hands high; weight 1,600 pounds; girth, 6 feet 8 inches. A good server and sure getter. Will show colts, both yearlings and suckers, with any draft horse in Kansas. Bed-rock price. H. Dubois, Burlingame, Kas.

FOR SALE—Thirty Stands of Common Bees in Quinby box hives. Condition good. Terms reasonable. Address Mrs. E. D. VanWinkle, Pleasant Ridge, Kas.

FOR SALE—Three Yearling Registered Holstein Bulls. M. H. Alberty, Cherokee, Kas.

FOR SALE—Extra choice Light Brahma Cockerels. Also some June-hatched Wyandotte chickens cheap. M. D. Mulford, Guide Rock, Nebraska.

FOR SALE—Or exchange for Short-horns, the Thoroughbred Stallion "Ivanhoe." This horse is first-class. G. A. Laude, Humboldt, Kas.

FOR SALE—STALLIONS.—A seven-eighths blood Norman and one-eighth blood Morgan Stallion; has stood as a 17-hand horse, with 1,700 pounds weight; a good traveler, breeder, and stylish; dapple gray. Price \$800, or will trade for good Western land. Also Morgan Stallion and some good Grade Drafts cheap. An unrelated Shepherd Dog and Slut of the very best blood. The slut's sire sold for \$50 to a Texas stockman this winter. The pair for \$10. Write or come and see me at once. I make but this one offer. Address S. Stiers, Nortonville, Kas.

STALLIONS—For sale cheap. One Imported and one Grade Clydesdale, and two Grade Normans. Also Mares in foal, Fillies and Colts. W. H. Vanatta, Nortonville, Jefferson Co., Kas.

WANTED—A Pure-bred Victoria Boar. Address W. A. Bauer, Ellsworth, Kas.

EIGHT COTSWOLD RAMS FOR SALE—Address W. G. McCandless, Cottonwood Falls, Kas.

FOR RENT—For cash, a Farm of 800 acres, fourteen miles northeast of Council Grove, Kas. It has a good house and barn and well, 52 acres broke and 640 acres fenced with four strands of barbed wire. Address S. S. Cartwright, Topeka, Kas.

\$10 REWARD—Strayed, on Thanksgiving day, a tall, long and slim-bodied Bay Mare, 12 years old. Send information to P. D. Tyrrell, Box 344, Topeka, Kas.

WANTED—A Single Man for general farm work. Must be a good milker. Write Wm. Booth, Winchester, Kas.

BARTHOLOMEW & CO. Real Estate and Loan Brokers, 189 Kansas avenue, Topeka, Kas. Write them for information about Topeka, the capital of the State, or lands, farms or city property.

A BARGAIN!

Land to exchange for Stock. Apply in person or by letter to

BRADY, DORMAN & CO.,
Hutchinson, Reno Co., Kas.

C. W. WARNER & CO.,
Wholesale - Commission - Merchants,
Handle Butter, Eggs, Poultry, Fruit, Ranch Produce,
Flour, Hay and Grain, etc.
397 Holladay street, Denver, Colorado.

WHAT I WOULD DO!

I would send for our free Descriptive Circular—"Fifteen Years Among the Trees and Plants of the Rocky Mountains and the Wild West," and learn all about the most beautiful and hardy EVERGREENS on earth, of plants valuable for fruit, for medical uses, and for rare and beautiful flowers.

Address D. S. GRIMES, Nurseryman,
DENVER, COLORADO.

ESTAB'D 1869. A. D. FERRY & CO., COMMISSION DEALERS IN BROOMCORN
225 & 227 Kinzie st., CHICAGO.

We are not General Commission Merchants, handling everything, but are exclusively Broomcorn Dealers, and have an established trade with Eastern and Canadian Manufacturers, and can get best market value. Liberal advances. Correspondence solicited. Reference—Atlas National Bank, Chicago.

SHORT-HORN JOURNAL.

An eight-page Weekly Paper, devoted to the breed—the only one of the kind in England or America. Indispensable to all live short-horn men. Advertising rates very reasonable. Subscription price, \$1. Twenty-five per cent. commission to men forming clubs of five or more subscribers. Send in your name at once, so as to commence with first issue, January 1, 1887.

WILLIAM E. BEAN, Mt. Sterling, Kentucky.

FOR SALE!

The Snediker Flock of Sheep. Shear 9½ pounds. Having sold our ranch, the sheep are for sale at a bargain and on easy terms. For particulars, address

I. F. & D. L. SNEDIKER,
EMPORIA, KAS.

RED FRONT HOTEL,

CIMARRON, : KANSAS.

RATES \$1.00 and \$1.25 per day. Table and Rooms first-class. Stages leave the Hotel daily for Dighton, Ravanna, Meade Center, Montezuma, West Plains, Fargo Springs, Rain Belt, Stowe, Hess, Kal-Vesta and Kokomo. Stage office at the Hotel. D. BEATHON, Prop'r.

Farm Wanted!

Kansas Land wanted in exchange for a Jewelry and Book Store. Will exchange either or both stocks of goods for good farming land in Kansas. Largest and best stock of goods in the city, with a good cash trade and light competition. Population 4,000, State normal school, city water works, and city lit by natural gas. Other business reason for selling.

Address F. W. HOWARD,
Fredonia, Chautauqua Co., New York.

KANSAS ECONOMY INCUBATOR!

I have reduced the price of my little book entitled, "Directions for Making and Using the Kansas Economy Incubator," from 50 cents to 25 cents to readers of the KANSAS FARMER. My incubators have proved to be a perfect success, and

Every Poultry-Raiser Should Have One.

Send 25 cents for this valuable little Book, to JACOB YOST, TOPEKA, KAS.

HAZARD STOCK FARM

OF NEWTON, KANSAS.

Breeder of A. J. C. C. H. R.

Jersey Cattle.

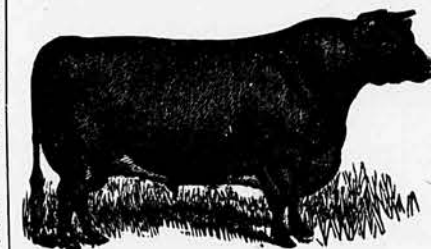
Stock for Sale at all times, of most Fashionable Breeding.

PEDIGREES TABULATED.

—Address—

S. B. ROHRER, Manager.

OAKLAND STOCK FARM.



W. S. WHITE, Sabetha, Kansas,
Breeder of High-class Short-horns, will sell some choice Females in car lots or singly, to suit purchasers. Also a few good Bulls. Prices low. Write or come.

KNABE

PIANOFORTES.

UNEQUALLED IN

Tone Touch Workmanship and Durability.

WILLIAM KNABE & CO.

Nos. 204 and 206 West Baltimore Street, Baltimore No. 112 Fifth Avenue, New York.

Kansas City Stock Yards,

KANSAS CITY, MISSOURI,

Are by far the most commodious and best appointed in the Missouri Valley, with ample capacity for feeding, weighing and shipping cattle, hogs, sheep, horses and mules. No yards are better watered and in none is there a better system of drainage.

Higher Prices are Realized

Here than in the markets East. All the roads running into Kansas City have direct connection with the Yards, which thus afford the best accommodations for stock coming from the great grazing grounds of Texas, Colorado, New Mexico and Kansas, and also for stock destined for Eastern markets.

The business of the Yards is conducted systematically, and with the utmost promptness, so that there is no delay and no clashing, and stockmen have found here, and will continue to find, that they get all their stock is worth, with the least possible delay.

Kansas City Stock Yards Company Horse and Mule Market.

FRANK E. SHORT.

CAPT. W. S. TOUGH.

F. E. SHORT & CO.,
Managers.

This company has established in connection with the Yards an extensive Horse and Mule Market, known as the KANSAS CITY STOCK YARDS COMPANY HORSE AND MULE MARKET. Have always on hand a large stock of all grades of Horses and Mules, which are bought and sold on commission, by the head or in carload lots.

In connection with the Sales Market are large feed stables and pens, where all stock will receive the best of care.

Special attention given to receiving and forwarding. The facilities for handling this kind of stock are unsurpassed at any stable in this country. Consignments are solicited, with the guarantee that prompt settlements will be made when stock is sold.

C. F. MORSE,
General Manager.

E. E. RICHARDSON,
Secretary and Treasurer.

H. P. CHILD,
Superintendent.

FIRST ANNUAL SALE!

OF THIRTY-FIVE HEAD OF

Standard-Bred Trotting STOCK!

Well-Bred Roadster and General-Purpose Horses, and FIVE SPAN EXTRA LARGE YOUNG MULES.

AT THE FAIR GROUNDS,

MANHATTAN, RILEY CO., KANSAS,

On main line of K. P. Division U. P. R. R., 118 miles west of Kansas City, and junction of M., A. & B. branch of A., T. & S. F. and Blue Valley branch U. P. north,

TUESDAY, MARCH 15TH, 1887,

At 10 o'clock a. m., positively.

No such opportunity has been offered in the West to buy this class of high-bred horses. The mares are bred to Doc Vail 2844 (Wallace) and the imported Cleveland Bay Stallion, X-L-All (386).

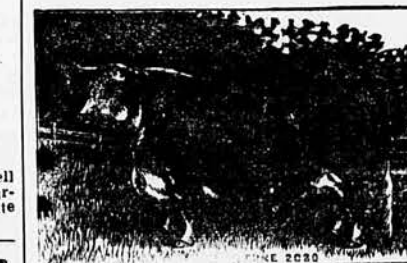
TERMS:—Cash, or eight months time on bankable notes at 10 per cent. interest. Catalogues sent on application.

S. A. SAWYER, Auctioneer.]

WM. P. HIGINBOTHAM,
Prop'r Blue Valley Herd and Stud, Manhattan, Kas.

First - Prize Hereford Herd

AT THE GREAT ST. LOUIS FAIR, 1885.



Herd comprises 300 head of choice Herefords, headed by the following first-prize and sweepstakes Bulls:

The celebrated FORTUNE 2080.

SIR EVELYN 9650, an illustrious son of Lord Wilton.

GROVE 4TH 13733, by the noted Grove 3d.

DEWESBURY 2d, by the famous Dollie.

Correspondence solicited. Cattle on exhibition at stables, 1604 to 1606 Bell street, Kansas City, Mo.

Address J. S. HAWES, COLONY, KAS.



SLICKER Is The Best Waterproof Coat Ever Made.

None genuine unless stamped with the above TRADE MARK. Don't waste your money on a gum or rubber coat. The FISH BRAND SLICKER is absolutely water and wind proof, and will keep you dry in the hardest storm. Ask for the "FISH BRAND" SLICKER and take no other. If your storekeeper does not have the "FISH BRAND", send for descriptive catalogue to A. J. TOWER, 20 Simmons St., Boston, Mass.