

THE KANSAS FARMER

ESTABLISHED, 1863.

TOPEKA, KANSAS, JULY 9, 1879.

VOL. XVII. NO 28

THE KANSAS FARMER.

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Topeka, Kansas.

Strawberries.

I have been engaged in strawberry culture for the last twenty-five years, and fruited nearly every variety that have been introduced during that time, and by a thorough system of weeding out varieties, I now have a selection that I confidently believe I can grow here with the certainty that a crop of corn can be grown. I have grown the Wilson ever since its introduction and always regarded it as one of the best market varieties, but the Dr. Warden has excelled it the past season in every respect, and I think I can realize as much from one acre of Dr. Warden's as on two acres of Wilson's. The Dr. Warden is uniformly large from first to last. A large proportion of them first-class berries that sold readily in Chanute the past season at 20 to 25 cents per quart, while the Wilson, after a few pickings ran down to second-class berries that we could hardly sell at half the former price; and the good taste of the Dr. Warden is that it stands high on the stem, and colors up sometime before it is thoroughly ripe, (and very solid when perfectly ripe,) giving the shipper several days in which to market them and if he has other varieties getting over ripe, he can ship them and let the Dr. Warden remain on the plants with safety until he has more time to gather them. It is also an excellent amateur berry, as it comes in a few days after the Wilson, and continues to bear long after the latter is gone. It is of large size, handsome appearance, excellent quality, and so firm that it is one of the very best for canning, preserving, etc.



The Dr. Warden Strawberry.

The Cumberland Triumph is a very large, handsome berry of the best quality, and will prove, I think, nearly as profitable as the Dr. Warden. The Champion is a very fine berry a favorite of my old Horticultural friend, Dr. Warden, of Ohio. The Charles Downing is one of the very best amateur berries, but rather soft for distant transportation. Monarch of the West is a good berry; the Captain Jack is also a very promising variety, but Great American and Forest Rose were a complete failure with me this season.

I set last April a year ago, two thousand plants, embracing a general variety, including those named, on sandy loam one-half mile south of Chanute, on Prospect Hill. The ground was ploughed as for corn, the plants set in rows six feet apart, a row of corn set between the rows of plants for shade; the stalks were allowed to remain until the crop of berries was gathered, to break the force of sun and wind, the plants ploughed and the weeds kept down. In December I mulched the plants with castor bean hulls and old prairie hay. The late frost killed the three first setting of bloom, cutting the early crop short. The dry weather the last of May and first of June reduced the late crop, but notwithstanding all these disadvantages, we gathered five hundred and sixty-one quarts, besides what was eaten in the patch by the family and visitors.

Chanute, Kansas.

Entomology in the Schools.

The legislature of Kansas has placed the above branch of science on the list of studies upon which applicants must pass in order to obtain an "A" grade certificate. From this it is presumed that it is intended to be taught in the common schools of the State. This is such a decidedly progressive movement that many, even among the teachers are not prepared to endorse it. That it is an eminently wise pro-

vision will not admit of a doubt when the subject is carefully examined from a common sense standpoint. It should be remembered that we live in an eminently practical age. The tendency of the age is to bring everything down to practical utility. People are awakening to the fact that there is little benefit practically or aesthetically in spending a large proportion of our school days in pouring over the dead languages and the ancient classics to the neglect of those branches of knowledge that have a direct bearing on the well being of society. What advantage is it to a boy or girl of the present age to spend months, if not years, in the study of all the loves and hates, the caprices and intrigues, the lewdness and debauchery of the gods and goddesses of the ancient Mythology? That there are many good things in the ancient languages none will deny, but all these excellencies have been translated into the English so that no man need go further than his own mother tongue to get all these good things. The folly of making such things constitute so large a portion of a good education is further manifested when we consider that such has been the advance of knowledge in modern times that there is now far more of direct practical utility, that which has an important bearing on the happiness of the race, than can possibly be learned by any one man in the longest life time. We conclude therefore, that it is wisdom on the part of our law makers to direct the attention of teachers and pupils to those subjects that are of practical importance.

Another point worthy of special notice is the fact that Kansas is and will always continue to be an agricultural State. It is true we have in this State water and wind power enough, when utilized, to do the manufacturing of the world; but this does not and never can do away with the fact that this State has the finest agricultural lands in the world, and even when the manufacturing resources of the State are largely developed it will only make her agriculture of still greater importance. Whatever, therefore, has a direct bearing on the agricultural interests of the State will have an increasing importance with the development of her resources.

That entomology is of this nature does not admit of a moment's question. A knowledge of this with geology and botany, is of so much importance to the agriculturalists that we cannot conceive of a man's being an intelligent farmer and yet be ignorant of these branches of knowledge. It is well therefore that this branch has been placed on the list to be studied by our teachers. And now our State and county Superintendents, instead of using their influence to have these very useful branches stricken from the list, should insist on the teachers of the State qualifying themselves to teach them in the common schools. And the farmers of the State should insist that their children be instructed in these eminently practical and useful branches of knowledge.

L. J. TEMPLIN.

Hutchinson, Kas.

Plagues and Pestilences.—I.

Year by year the agricultural interests suffer by the prevalence among farm animals of fatal, spreading diseases. Over twenty millions of dollars' worth of swine die annually from the pestilence known as cholera, yet it is well known to persons who have carefully investigated this plague, that it may be wholly arrested and stamped out.

In 1856 the cattle plague broke out in England, and before it was stamped out over 200,000 cattle died of the disease. In March, 1866, the act went into effect requiring the slaughtering of all animals exhibiting symptoms of the disease, and the removal and quarantining of those exposed. The number of deaths in England had reached an aggregate of 7,310 per week, when the act was passed, and was on the increase. In one month it declined to 3,361. By the end of the third month the death rate was 500; by the end of the fourth month it was 160, and by the end of the fifth month it was 11. In three more months it had wholly ceased.

The same treatment will eradicate hog cholera from our land, and it is the only treatment that will afford final and complete relief.

Suppose glandered horses were suffered to run at large, to be driven through the streets and quartered in public stables, and to drink at public water troughs, how long before the horses of the country would be destroyed?

Suppose we suffered rabid dogs to run at large without let or hindrance? The suffering of a man to keep upon his premises cholera-hogs, or sheep with the rot, or with scab, or cattle with splenic fever or any suspicious disease, is no less a criminal folly.

If the first few lots of hogs that exhibited

cholera symptoms, along the banks of the Ohio in 1856, had been slaughtered, "sick and well," "big and little," and the pens disinfected, the hog pestilence would have been stamped out of this country. If the government had paid for these hogs, the total cost would have been less than the sum now expended for "a commission to investigate."

The need of the farming interest is a rigid law for the slaughtering of all animals exhibiting symptoms similar to those exhibited in the spreading diseases, and the complete destruction of all pens, sheds, buildings and the like, where the infected animals have ranged or been quartered.

With human plagues, we cannot kill the unfortunate victims, but a state that does not provide for the protection of the lives of the uninfected, fails to discharge the first duty of government—"the protection of the lives of its subjects." A state that will not protect its people from the pestilences which sweep off the domestic animals of value, fails to protect its people in their property.

These plagues and pestilences which affect man and his beasts, have much in common. All of them are difficult to cure, when established in the blood of the victim; all of them are easily kept out of the blood when all cooperate to that end. Out of a living organism, the substance which causes these plagues is easily destroyed or escaped from; in them it cannot be destroyed at all after absorption from the spot of first landing. It makes no difference in the truth of this statement which one of the prevalent theories we adopt. If we adopt the germ theory, then we destroy the organisms and germs which propagate these diseases. If we adopt the molecular-change, or retrograde-metamorphosis theory, then we destroy all retrograding molecules wherever they may be found, and enough is now known to teach us where to look for them.

A discovery of my own throws some light on this point, and I had hoped to be able to turn a little money out of it, on hog cholera.

The germs of decomposition are of two distinct orders. One of them must have oxygen in the medium where they work, and the other cannot abide where this gas is held in solution. In ordinary processes of decay, the oxygen breathers pervade an infusion as long as oxygen is held in solution; when it is absorbed they appear as the scum or pellicle on the surface, and there only can they thereafter thrive.

The non-oxygen breathers, by resting spores, fall from the air also into the infusion, but there they remain dormant until the oxygen is absorbed, then they commence to devour, consume or decompose the organic matters held in solution. They pervade the infusion and render it turbid and cause the emission of foul odors. These facts were pointed out by Pasteur and verified by Tyndall.

Now the exigencies of my food-preserving process, demanded that I should determine whether the germs of disease were capable of acting as the germs of decay, (or decomposition), or not. The hog cholera flesh was chosen, and the hog cholera germs taken as a type of the others. It did not take long to discover, by chemical methods, what Dr. Edmund Klein discovered by direct microscopical examination, that arterial blood does not contain the germs of hog cholera. True he does not mention the kind of blood he drew. I only assume that it was arterial by the fact that he drew it from the living animal, and would be most apt to get arterial blood in that way. I discovered the hog cholera germ acted like the vibrios, while Dr. Klein discovered that the vibrio doing the mischief belonged to the genus bacillus. Now no bacillus can live in oxygenated infusions, nor can any vibrio within my knowledge.

The germs of the hog cholera then (for I adopt the germ theory) do not live and work in arterial blood, nor upon any surface exposed to the air direct. They are not communicated by inhalation, for that would land them upon surfaces exposed to the air, where they could not work. They do not bore through the membrane which separates the blood cells of the lungs from the air cells, for that would expose them to arterial (oxygenated) blood only, where they could not work. They are swallowed then, and from the surface of the alimentary canal, after oxygen is all absorbed, they begin active operations. Here they multiply, and in due time penetrate the mucous membrane, and either enter the venous circulation by direct absorption, or they are taken up with the chyle and poured into the portal vein, and presently pervade liver and spleen—organs whose office appears to be to filter venous blood and remove from it certain ingredients and convert some others into a combustible sugar, suitable for

consumption in the heat-maintaining apparatus. But the venous blood, loaded with germs, is also poured into the heart, and from thence it passes to the lungs and receives a charge of oxygen. Here the bacillus discovered by Dr. Klein, as the cause of the disease, is, by full exposure to oxygen, killed outright, and the dead plasma of these organisms probably engorges the lungs with first, mucus, and finally with pus-like matter. The resting spores of the organism are not, however, so easily destroyed. Some of them pass through the arteries and are landed upon the skin, clogging the capillaries, and there, when first imbibing deoxygenated blood, beginning again their decomposing work, rupturing venous capillaries and staining the skin with purple, or venous discolorations, and from these nidi pouring into the larger veins a fresh supply of the leaven of the disease.

The contagium is probably poured into the air to some extent from the lungs after the softening of that organ has begun. But the great source of the infection, as I pointed out in the FARMER over a year ago, is the excrementaceous matters, or droppings.

Mere contact with, nor approaching, infected animals, is not sufficient to communicate the disease to well ones, except in rare cases. My knowledge of these facts gave me, in 1877, absolute control of the plague, as I have comments to show.

The bearing of this discovery upon the general laws of disease, can hardly be over-estimated. A summary of this relation was presented to the Kansas State Medical Society at its last meeting, but whether it was published or not I do not know, but may be briefly epitomized as follows:

1. The site of the first lesion will enable us to determine the point where the contagium of a spreading disease is first established in the animal organism.

2. The site of the first and usually most serious lesion, will enable us to determine whether a disease germ enters the system by swallowing or by inhalation; those affecting the alimentary organs being swallowed, and those affecting the air-passages being inhaled.

3. Diseases communicated by inhalation, emit their infecting matters by the breath, and on absorption enter the arterial blood at once, and being borne to the skin, produce red eruptions which erode to the air; diphtheria being an exception as to eroding the skin, and whooping-cough as to absorption into the blood.

4. Diseases communicated by swallowing, affect the stomach and bowels first, producing, usually, gastric and enteric fevers, and on absorption, enter venous blood, giving dark discolorations to the skin, but in these erosion does not open out to the surface until done by sloughing or gangrene.

5. Diseases under No. 3 are conspicuous for affecting the throat—larynx, especially; they also exhibit a greater thinning of the walls of the arterial side of the heart than of the venous side; they also affect the kidneys (an arterial organ) more than the liver and spleen. Those under No. 4 chiefly affect the stomach and bowels, are attended by aggravated fluxes, or constipation, and by fetid, frothy discharges, loaded with the germs of the disease; they soften the venous heart more than the arterial, and the liver is more affected than the kidneys.

Both classes affect the lungs sooner or later; the former establishing acute inflammation, the latter by mucous engorgement, producing hepatisation and suppuration. Both affect the brain, the former by exciting active delirium from the action of the germs upon its substance, the latter by producing chiefly stupor and coma, from improper nutrition of that organ.

6. Diseases caused by the arterial ferments, or air-breathing germs, generally afford exemption from a second attack; diseases produced by the venous ferments, or non-air-breathing germs, are rarely attended with exemption after one attack.

With this key, almost any one can classify these diseases, and learn therefrom wherein lies the chief danger of "catching" the disease. Small-pox, measles, scarlet fever, erysipelas, chicken-pox, sheep-pox, cow-pox, epizootic influenza, glanders, distemper, whooping-cough, diphtheria, mouth disease in sheep, and some others, are germ diseases, caused by air-breathing germs, and they are propagated by germs emitted into the air and drawn into a new landing by mere approach, hence they are highly infectious.

Diseases caused by non-air-breathing germs are typhoid fever, typhus fever, plague, rinderpest, Asiatic cholera, yellow fever, dengue, hog cholera, splenic fever, Texas cattle fever, and some others. These diseases, probably, do not

emit infectious particles into the air from the breath, and if they do they are not drawn into a favorable nidus by the breath, and hence near approach, attended with reasonable precautions, does not infect.

It is not denied that by breathing, germs of these diseases are drawn into a position where they may be carried to a favorable nidus by being swallowed; but I am of the opinion that the great source of these infections is the food and drink into and upon which these germs fall in abundant shower. From the dried fecal matters they ascend into the air, by gusts of wind or air currents, and presently fall either upon articles of food commonly eaten uncooked, as fruits, vegetables, melons, etc. They also, in cities and villages, fall into reservoirs, wells and cisterns, and upon house-tops, whence they are washed into cisterns; they fall into milk, on the dishes from which we eat, etc.

In cholera, hog cholera, rinderpest, yellow fever and plague, they are showered in greater abundance than in typhoid fever and typhus fever. In the animal plagues they fall upon the grass, and so favor an abundant spread of their kind. Out of the blood, and especially out of the organisms affected, these germs are remarkably easy of destruction; landed, and especially after absorption into the blood, they "run their course," for a chemical that will kill them will also kill blood globules, blood, tissue and all, if given in a dose sufficient to kill them in the blood.

Malarial fevers not being diseases which one afflicted individual can give to another, are not here considered, though they too have been, as I believe, placed in their proper category.

This is a portion of the things determined by my investigations of the "hog cholera," whereof from time to time I have given your readers notes. The whole argument, and many of the experiments, and all the authorities, have been laboriously collected into a book, which I have, as yet, been unable to have published, and now think of re-writing, under the title of these papers, and in it gather together all the substantial and essential facts in regard to the nature, cause, mode of treatment, means of prevention, mode of dispersion, etc., of the several plagues and pestilences.

C. W. JOHNSON.

The committee appointed by the legislature of this state to investigate railway abuses, began its service in New York city last week, and on the very threshold of the subject, unveiled a system devised in contemptuous disregard of all interests, except that of the powerful corporations that are enabled through it, to divert business from its legitimate channels, building up or tearing down private interests, as may suit the selfish designs of the autocratic potentates. It was shown on the same evidence of the Assistant General Freight Agent of the New York Central railroad that special rates to favored shippers, were common, the will of the railway managers alone directing the distribution of favors and that will guided only by selfish desire. It was shown that freighters were often taken to or from competing points at a loss to the carriers, recovery being made from defenceless points. Favored shippers in Utica and Syracuse it appeared were able to command service at one-half, or one-third the rates regularly charged to all others in those places. The unsophisticated freight agent could see no harm in such an arrangement. He was utterly oblivious to the effect on business conducted by men against whom the discriminations were made.

Another rule, adopted by Dick Turpin, has such ineffable simplicity that the ingenious agent speaking for his masters, was fain to commend it to the committee as perfect in the abstract and charming in its operation. It was in substance, "Charge what the article transported will bear." Thus, when potatoes are high carry them across the state for thirty cents a barrel—more if they will bear it—but when they are low take them for ten or fifteen cents. No reference to cost of carriage, that is an element not brought into calculation, for it tends to make railway business complex in the method of charging. The beneficence of the rule will be perceived by farmers who are by it enabled to see how prices for the products of their lands are saved from wide fluctuations. If they go high in New York the railway manager kindly steps in to check the cupidity of his rural customer by absorbing the rise—unless he allows it to be diverted to the local shipper who has a special rate. Is it any wonder that farmers of the interior feel the depression resting upon their business through the operation of such a monstrous usurpation of their rights?—The Hus-ban-dian.

Farm Stock.

The Holland Cow.

Hon. Jas. Birney, Minister to the Netherlands, read an essay before the Bay City, Mich., Institute, on dairying in Holland. He says of the cows of that country:

"Holland is the paradise of cows, but the term 'Holstein' is a misnomer, and the 'Holland,' or 'Dutch' cow is really superior to the 'Holstein.' The Holland cattle are regarded as the best known for yield of milk and cheese-making. A dairyman who carries on a large business near Utica, New York, gives as the result of his experience that the milk in Holland cows yield is greater in quantity, richer in quality and better adapted for butter and cheese making than that of any other species he has knowledge of. The genuine Holland cattle are almost invariably white and black. Some few of them are of a mouse or Maltese color, but they are regarded as of a depreciated or half-breed stock. One family of them is so definitely marked that when seen at a distance one would suppose that they were black, with a perfectly white cloth bound around their bodies. In traveling all through Holland scarcely a specimen of any other color will be seen. The Holland cattle are thoroughly short-horns, more so, indeed, than the Durham. Their shape is very symmetrical, with long, straight back, small head and trim limbs. They are of large frame. In disposition they are notably gentle and manageable. Their pastures are not enclosed by fences, but by shallow ditches. Over these they rarely leap.

During the pasturing season they run upon the lot set apart for them. During much of the time they are clothed with a blanket of hempen cloth which defends them from the fogs of the night and the flies of midday. They are milked with punctuality. When the milker takes his seat, with a cord always at hand he ties the hind legs together, and with another attaches their tail, so that it cannot be whisked about. Over the large vessel into which the milk is poured, when the pail becomes full, a fine strainer is placed so as to catch all foreign particles. The most perfect care is taken of the lots in which they feed. Every few days a man will go over them with a shovel or rake in hand and scatter the droppings and supply the land with some fertilizing substance to keep the grass in healthy vigor. They practice here upon the theory that it is just as necessary to feed land as it is to feed animals. During the winter the cows are confined in brick houses, constructed to afford the greatest possible comfort and convenience under the same roof, and at one end of the building the dairyman or herdsman has his family. Between the residence and the stable is a large apartment used for the care of the milk and the cleansing of the vessels in which it is carried to market. It is supplied with a stove and a well of water. The stable is oblong, with a hall through the center, from which all food is supplied, the head of the cows on either side being turned toward the center. The flooring is of brick, and the cows stand upon a brick platform five feet six inches in width. Immediately behind this is a gutter of the depth of eighteen inches which catches all excrement; still back of that is an aisle or walking place. The gutter is thoroughly cleansed every morning, and a stream of water made to pass through it. The manure is all taken to vats in the yard and preserved for use.

Above the rear of the cows a pole or cord is extended through the entire length of the stable. To this the tail of each cow is attached in such a way that when she lies down it is always suspended sufficiently to prevent its contact with dirt. Sand being plenty and cheaper than hay is used for bedding. By this arrangement the cows are kept entirely clean, and the milk never takes the odor of the stable. The watering, feeding and milking of the cows is done with the regularity of clockwork.

The Breeding and Management of Sheep.

The *Western Rural* publishes the following pleasant sketch on the sheep:

Naturalists have failed to discover the sheep in a truly wild state in any part of the world, although several animals have been found which bear a close resemblance to this animal, such as the *sauffon*, the *ovis montana*, or big horn, etc. The milk of the sheep was used by the ancients as food long before the flesh was brought into requisition. Commentators are of opinion that the Hebrew word which the translation of the Bible has rendered "fat," should have been translated "milk." From the writings of Virgil and other ancient authors, it is evident that in the pagan times, milk was a customary offering to the gods.

From the scriptures we learn that Jabal, the son of Adah and Lameh, of the posterity of Cain, was the first nomadic shepherd, or according to the language of Holy Writ: "The father of such as dwell in tents and have cattle." This was about five hundred years before the deluge.

Two thousand years before the birth of Christ the flocks of Abram and Lot were so great that Palestine could not afford them sufficient pasturage; and although nearly 4,000 years have since elapsed, the shepherds of Arabia and Tartary, in the magnitude of their flocks, and their system of managing them, bear a close resemblance to the nomades of the Scriptures. Not many years ago, Sir James Chapman, when traveling near Aleppo, met a party of Turcoman shepherds who had more than 300,000 sheep and goats; and Dr. Shaw, another celebrated traveler, mentions with astonishment the immense flocks of the Arabs.

In ancient times sheep were watered regularly during the heat of summer; and that is a remarkable scene in illustration of the manners and customs of the Orientals, where Jacob visits his uncle Laban and finds the sheep collected at the well, and Rachel preparing to water the flocks. Afterwards Jacob became a sheep-breeder, and it is evident that to him we are indebted for the improvement which has taken place in the color of wool. It is generally admitted that sheep were originally black or brown, until Jacob by his celebrated stratagem succeeded in obtaining a different color. When he separated from Laban, he probably selected the whitest and best, and there is every reason to suppose that the improvement progressed from his day, for in the time of David the flocks were as white as snow, and Solomon in his Canticles compares his mistress' teeth to a flock of sheep newly washed. In his essay on wool Lucock asserts that the improvement in color soon spread into Arabia, and thence into Persia, Syria and Egypt.

The Jews gave names to their sheep, as we learn from the Scriptures, which contain many beautiful allusions to the tender care of a shepherd for his flock. The prophet, speaking of the Messiah, said: "He shall feed his flock like a shepherd; he shall gather the lambs in his arms, he shall carry them in his bosom, and gently lead those that are with young."

The Book of Psalms contains many allusions to pastoral life, such as, "The Lord is my shepherd, I shall not want; He maketh me to lie down in green pastures; He leadeth me beside the still waters." David, the renowned King of Israel, was a shepherd, and his first feat of bravery was performed in defence of his flock, and when the prophet Nathan wanted to reproach him for compassing the death of Uriah, he made use of an illustration which the king understood very well—the affection of a poor man for his pet lamb, which "ate of his meat, drank of his cup, and was unto him as a daughter."

Nearly all the historical account of sheep which have been handed down to us, show that in the earliest ages of the world, and even in the most salubrious climates, sheep were regarded with affection, and watched over with tender care and solicitude. And when such attention to the wants of these animals was necessary for their preservation in the most congenial climates, where nature provided amply for their sustenance, it is plain that the exertions of the sheep-breeder must be greatly increased in cold countries like the northwestern states and Canada, where winter is very severe, and snow sometimes covers the ground for four months.

Sheep had been raised in England long before Julius Caesar invaded that country. In the time of Agricola the Romans established a woolen factory at Winchester, and from that day, until the present, the manufacture of woolen cloth has been fostered and encouraged in England. It was her woolen manufactures that first raised her into opulence and power, and enabled her flag

"To brave a thousand years,
The battle and the breeze."

Pasturing sheep has a tendency to improve grass-land, as their droppings contain ingredients which fertilize the soil. There is a Swedish proverb which says that "sheep have golden feet," an evident allusion to the great improvement which takes place in impoverished land when it is converted into pasture for sheep. The size of sheep and the quality of the wool are materially affected by the peculiarities of the soil and climate of the locality where they are raised. Hence the adaptation of the various breeds to the places where they are fed. In Europe those sheep which are fed on hilly downs or healthy mountains are remarkable for their light carcasses and fleeces of medium quality, and are known as short-wooled sheep, while the heavy sheep, which are fed on rich lowland pastures, are known as the long-wooled.

Without entering into a discussion of the comparative merits of the fine-wooled and coarse-wooled sheep, we would remark that the former have for many years been considered the most profitable for the production of wool, and the latter for mutton, and each breed is peculiarly adapted to certain climates and soils. Lately long wool has been in great demand for the manufacture of delaines and fabrics of similar kind, and an advance has also taken place in the price of mutton, and these circumstances have tended to enhance the value of heavy, long-wooled sheep.

A good selection of ewes is the first step towards successful sheep-breeding. None but the choicest and best should be chosen for the breeding flock. They should be as nearly matched in size and age as possible, as "like produces like." The second step is the selection of a first-rate buck, and this should be done regardless of expense, for a few dollars saved in the purchase of a buck may be trebly lost on account of the inferior quality of his offspring.

Cattle Diseases.

A very fatal disease has broken out among the cattle on that part of the Divide of which Greenland can be received as the center, and which has caused serious apprehensions in the minds of stockmen in our state.

The first symptoms of the disease were first noticed about two weeks ago, and these were found in the vicinity of, and in the immediate trail of Mexican lumber haulers who were the owners of several hundred head of oxen which they had brought from southern Colorado and New Mexico this spring to haul lumber for the different lumber firms of this city.

The disease was so fatal and pronounced that the stockmen of this part of the Divide became

alarmed, and upon investigation they came to the conclusion that it is attributable to the presence of these southern cattle, and the whole neighborhood demanded that the Mexicans and their cattle should leave, and consequently they notified them of their conclusions, and at this writing they, the Mexicans, have left for their southern homes.

The disease is of the nature of a bloody murrain, or at least that is the name given it. Cattle of all ages are effected, and it commences, as says our informer, with a loss of appetite, a sudden shrinking away of the animal and a rapid loss of flesh. The excrements of the animal are of a bloody nature, and in from three to six days the animal dies. A post mortem examination shows the smaller entrails of the animal to be full of matter resembling clotted blood, the kidneys enlarged and also full of blooded matter. No report of the condition of the heart, liver, lungs, or stomach, has reached us.

From the above very brief and indefinite diagnosis of the disease, has been formed the opinion that it is the bloody murrain, but which we think is very unsatisfactory, and may be very inaccurate.

Together with others, we have urged upon the Governor, on account of the importance of the matter to stockmen of the state, that he send competent persons to ascertain just what this disease is, and to know whether it is contagious or not. We have urged this, knowing that the Governor has not delegated to him especial powers in the matter, but thinking as he is the head of our state government, he can well afford, on account of the vital interests at stake, to assume a few prerogatives not granted to him by constitution or statute. But so far nothing has been done.

At this writing we learn that the disease is subsiding somewhat, and hope that the end has been reached. So far less than two hundred head have died, and great care has been taken to find and bury the dead animals.—*Colorado Farmer.*

That Heavy Fleece.

In the *KANSAS FARMER* of June 25th are reported some heavy fleeces from the Solomon Valley. A splendid showing, and no rubbing it out for any valley in any country. But Solon Steere is made to read, a Merino ram shered 40 lbs.

We are willing Kansas should beat the world, and can't see why she should not. We have supposed there could not be a finer opportunity to do this than in the Solomon; but we want to know more about this 40 lbs. fleece than is told in this brief report.

Who bred the sheep; his age; what family of Merinos; when was he sheared last, and what did he shear at each former shearing; how many days was this fleece growing; what did the same weigh after being sheared; how was he fed during the last year; what was the condition of the wool; do your neighbors believe this; is a fair and equal 365 days one year's growth of fleeces?

Turn on the lights and let the whole truth be known and make us believe the report. Send us a sample of the fleece. R. M. Bell.

Parties having that heavy fleece please respond. We publish the item as a news item. We do not vouch for its truth. We thought it a heavy story when it met our eye, but we had no authority to deny it. [Ed.]

Keep the Cows Healthy.

It is now generally conceded that milk unduly retained in the udder of the cows is absorbed. The flow is decreased, and the animal gradually goes dry. Once this process begins, it is next to impossible to bring the cow back to her full flow. This is not so bad, however, as to allow the bag to become inflamed, and thus poison the milk. This being the case from any cause, the milk should never be used. The milk may not show signs of taint to the eye; it may even taste well, or so nearly right as not to cause alarm; and yet it will taint the entire mess, and in the end the whole will become little better than poison when made into cheese, since then the putrefactive process still goes on. If the cow shows any tenderness or redness about the udder, or if it be hard or swollen, discard the milk until the animal is again all right. Through this care certain dairymen are able to get extra and uniform prices for their butter and cheese, and especially for the milk sold for family use. In the end they make the most money, for consumers and reputable dealers are apt to be shy of those who have from time to time sold them such milk, or its butter and cheese.

Poultry.

Eggs from Different Breeds of Poultry.

Fanny Field, a lady correspondent of the *Ohio Farmer*, says that "after repeated experiments with the different varieties of fowls, and comparisons with others who have experimented in the same direction, I have concluded that the laying capabilities of the principal varieties are about as follows:

"Light Brahmans and Partridge Cochins—eggs, seven to the pound; lay one hundred and thirty per annum.

Dark Brahmans—eggs, eight to the pound; lay one hundred and twenty per annum.

Black, White and Buff Cochins—eggs, eight to the pound; lay one hundred and twenty-five per annum.

"Plymouth Rocks—eggs, eight to the pound; lay one hundred and fifty per annum.

"Houdans—eggs, eight to the pound; lay one hundred and fifty per annum.

"La Fleche—eggs, seven to the pound; lay one hundred and thirty per annum.

"Black Spanish—eggs, seven to the pound; lay one hundred and forty per annum.

"Leghorns—eggs, nine to the pound; lay one hundred and sixty per annum.

"Polish—eggs, nine to the pound; lay one hundred and twenty-five per annum.

"Bantam—eggs, sixteen to the pound; lay ninety per annum.

"I regret very much that I did not keep account of the cost of food consumed by each variety."—Ex.

One half the care and labor required to earn fifty dollars tilling some crop, will produce that amount for the farmer if bestowed on his flock of fowls. If you propose to him to persistently neglect his best cow from one end of the year to the other, he will set you down as a candidate for a lunatic asylum, yet a common sized flock of fowls, such as are kept at most farmsteads, will yield as much value yearly, if properly treated, as a first rate cow.

Some farmers make it a practice to keep their poultry in their orchards from early spring until cold weather sets in, and they find that it pays. A picket fence should be built around the orchard, high enough to prevent their flying over, with suitable buildings in the corner of the yard to shelter them at night. Thus situated the poultry will thrive and prosper, keeping themselves in good condition, and the increase of eggs will be greatly augmented by their usefulness enhanced to their owners at least, on account of the myriads of insects and worms they destroy, and which will more than repay the cost and labor of building the fence. By keeping them inclosed in this manner, a large number of fowls may be retained in the orchard, and the continual scratching which is done by them will prove advantageous both to the soil and trees themselves.—*Poultry Yard.*

Tomatoes for Chickens.

A bed of tomato plants set out in one corner of the poultry yard and enclosed by a temporary lath fence, until the fruit begins to ripen, and then thrown open to the young chicks, will be found to be a great treat to them as well as a very profitable source of food. The young birds almost live on them for a while, and the fruit is healthy and nourishing. Try it, fanciers.

EGGS IN CASE OF TROUBLE.—The white of an egg is said to be a specific for fish bones sticking in the throat. It is to be swallowed raw, and will carry down a bone easily and certainly. There is another fact touching eggs which it will be well to remember. When, as sometimes occurs by accident, corrosive ammonia is swallowed, the white of one or two eggs taken will neutralize the poison and change the effect to that of a dose of calomel.

Hen Lice.

After a protracted fight with these parasites, in which all known and published remedies had been tried with but partial success, T. Grierson, of Naples, N. Y., gave the roosts and hen house a coat of tar, applied while nearly at boiling heat, with an old brush, filling all the crevices and well-known hiding places of the insects with the hot, sticky material, and finished the work with dusting plenty of flour of sulphur over it. The remedy proved effectual and none of the insects have been seen since.

Apiary.

How to Italianize.

The excellent qualities of the Italians as compared with the black bees, says the *Rural New Yorker*, are so much in favor of the former that all amateur bee-keepers should supersede their common stock with Italians as soon as practicable. The Italians have been cultivated so many decades, perhaps centuries, in the valleys of northern Italy, and in appearance differ from the common bees only in having the three first segments of the abdomen of a bright yellow color.

To Italianize a colony, it is by no means necessary to sell or kill off the black bees. All that is required is to remove the old queen, and in her place introduce a fertilized, pure Italian. The queen is the mother of every bee in the hive. She lays the eggs from which all workers, drones and queen-bees are developed. Hence, when a pure Italian queen becomes sovereign in a hive, her progeny will be pure Italians, and as the life of those bees that are hatched in spring, or early in summer, and have to collect the honey of the season, is but about three months, while those hatched in the fall, that go through the winter, live only about seven or eight months at the most, it will take but a comparatively short time until the old bees have disappeared from the stage and their places are filled with the children of the new queen.

If one has no pure Italians from which to raise a queen, the only alternative is to procure a young, tested queen from a reliable breeder. By a "tested queen"—a colloquial phrase among bee-keepers—is understood a queen that has been fertilized, and the purity of whose progeny has been ascertained. An investment in such a queen is a valuable acquisition to the apiary. An untested queen, though she can be bought cheap, is at best but a game of chance—a lottery—upon the fortunate turns of which no prudent bee-keeper will stake the value of his

stock. Many and plausible arguments have of late been brought forward both for and against the practice of selling "dollar queens." We would advise those of our readers who may desire to purchase queens, that in the choice between quality and cheapness, they should invariably choose quality. If a breeder can furnish a tested queen, young and healthy, and warranted to be fertile, pure and prolific, for one dollar, then well and good; she is all that can be wished for; but if there is the least chance of her having imperfections that will interfere with her fruitfulness, or of having met a black drone, or that she has not been fertilized at all, she should be rejected; and rather than buy such a mother, one should pay from three to five dollars for one that is known to be perfect.

A pure queen obtained, it remains but to introduce her to the colony. On a mid-day, when the bees are busy gathering honey, and most of them are absent in the fields, blow a little smoke into the hive to quiet the bees; then carefully take out and examine one frame after another until the old queen is found. Having found and destroyed her, together with all queen cells that may be under construction, the frames should be replaced. Next catch the new queen by the wing (always by the wing, as she may be seriously injured if grasped about the body), and inclose her in a small wire-gauze cage, made by bending the gauze over a finger and uniting the edges, leaving it open at one end, and close up this opening with a wooden plug, or by bending the edge. When thus caged, place the cage between two frames, so that her majesty can help herself to honey from the comb. Only in very rare instances, when the bees have been a very long time without a queen, and have lost all hope of rearing one, is it advisable to introduce a valuable queen to a colony without caging her; but having been in the cage from thirty-six to forty-eight hours, the bees will have made her acquaintance, and she can then be released. Again, blow a little smoke into the hive, and if the bees should be much agitated, sprinkle them with a little peppermint water; then open the cage, dab her back with a drop of honey, and let her go out among them. If they take but little notice of her—content themselves with sipping off the honey, and then go on with their work—she is safe, and can be left without fear; but if they clinch her, and form a ball around her, she must again be put into the cage for a day or so, when the trial may be renewed. Once acknowledged ruler of the colony, she is out of danger, and in due process of time the black bees will die out and the hive be filled with active, amiable Italians.

Miscellaneous.

Extracting Cream.

And now advices come from the dairy savans of Sweden that centrifugal force is to be applied to the separation of cream from the milk, and the process of making butter and cheese be greatly simplified and cheapened. An account of the experiment has been published in the Record of the Swedish Royal Agricultural College. Mr. Arrhenius, in the account referred to, affirms that the application of centrifugal force is likely to have an important bearing on the manufacture of butter as well as cheese, and in conclusion he says:

"It must be remarked that a revolution seems about to take place in the dairy business by the application of centrifugal force for the separation of cream from the milk. Experiments in this direction have been made in Germany, as well as in our own country, by Dr. G. de Sava. A dairy, constructed on this system, has already been completed in Kiel. Much may still be lacking in the construction of the apparatus hitherto used for the purpose, that by continual observation and invention may be supplied, and which again will lead to such a simplification of this system that it may be practically adopted. We may therefore look forward to a time, not far distant, when milk-pans and milk-rooms will be useless; for the milk then will, immediately after the straining, be put into the cream-extractor or skimmer, in which the milk and cream are immediately converted into butter and cheese, only a few hours after milking; and hence our dairy utensils will thereby be rendered useless."

Cure for Colic in Animals.

A correspondent of the Massachusetts *Ploughman* gives the following cure for colic in horses, which is convenient at all times and easily applied. He says he has never known it to fail: Spread a teaspoonful, or more, of fine salt on the back of the animal over the kidneys and loins, and keep it saturated with warm water for twenty or thirty minutes, or longer if necessary. If the attack is severe, drench with salt water. I have a valuable bull, weighing nineteen or twenty hundred, which had a severe attack of colic a year ago last summer. I applied salt to his back, as above, and it being difficult to drench, we put a wooden bit in his mouth, keeping it open about two inches, and spread salt upon his tongue, which together with the salt upon his back, relieved him at once, and within a very short time equilibrium appeared fully restored. I have for several years past successfully applied this treatment to other animals in my herd.

Too Much Salt in the Butter.

Albert D. Shaw, writer from England, says: "I am assured by butter dealers here, that bad salt is one of the chief causes of our failure in getting prices for our butter in this market."

Brown's Grove, Pawnee County.

June 20th.—I take great pleasure in reading reports in your excellent and interesting paper from different counties. I should like to hear from every county in the state that is settled. I am glad to hear that some counties are in a flourishing condition with good prospects ahead—this county (Pawnee), I am afraid is a little too far west. The elevation is too great, consequently we have a great deal of high wind and drought; the settlement in this county has nearly all been made in the last two years; people come here poor and have not much of a start yet; this season has been so dry there is but very little growing for man or beast. It is very discouraging, and no doubt there will be some suffering. I am glad to hear some are trying the tame grasses with some degree of success. I would be glad indeed to see a field of beautiful clover, and in my opinion the future of this country depends greatly upon the success of its cultivation. It appears to me the buffalo grass will amount to nothing when the country becomes fully settled up. It takes too much land to graze one creature now. Mr. Editor, I would like all who report, to be explicit in regard to location, so we may know what part of the state they are in. Some, do not give even the county, and brother farmers, please write often, give dates and facts so that when we read the FARMER, we may feel that we have something reliable. Some people tell us the eastern part of the state in its early settlement was just as dry as this part is now. Is that a fact? Can red currants be raised in this state? Is the Kansas currant as good as the red or white? I may say in regard to drought in this part, that it has been so severe that very little plowing has, or can be done. W. C.

Gardener, Johnson County.

June 21.—Corn never looked better and cleaner at this season of the year. All other crops are a total or partial failure. Wheat comes the nearest to a full crop—a little over half of last year's yield per acre, and were it not for the chinch bug would be of better quality; yet there are some fields fully up to last year, and many more which will hardly average eight bushels per acre. Oats and flax are thin on the ground and generally very short, and will come far short of a full crop. Castor beans are not a success with most of our farmers; many are plowing them up and seeding to millet, yet there are occasional fields that never looked more promising. Fruit of all kinds is remarkably scarce. There is occasionally an orchard which has a fair show of apples, cherries, none; same with pears, plums are scattering. Raspberries would have been plenty, but the extremely dry weather cut the crop short. The Kittenwin blackberry is fruiting well considering the canes were so badly winter-killed. Early potatoes are almost a failure. There are enough tubers in the hill, but they are small. We had the best rain last Friday night that we have had for a year, and which did us a world of good. It came in good time for early planted corn which is just tasseling. Many of our farmers in planting their corn this spring followed the planter with a cultivator, throwing a ridge over the planter mark. This they lay until the corn was well sprouted. They then crossed their ridges with a heavy harrow, thereby leveling the ground. The result was that the corn came up free from weeds in the hill. Had the early season been wet, the planter marks would not have held water, thereby rotting the planted corn. We think this a great improvement over the too common practice of doing nothing to the planted corn until it is large enough to plow. I wish to say a word more to the numerous readers of the FARMER, particularly those who are interested in the Bee culture (which every farmer ought to be). The honey season will soon commence, and if you wish to secure an abundance of delicious honey. Take an empty hive and set on a level with the alighting, and as close as you can place it in front of your bee hive containing a strong swarm, raising the hive just high enough so your bees can enter from all sides, and your bees will fill it with clean, pure honey, without a particle of bee bread. The first cold snap that comes in the fall, your bees will all go back into the old hive when you can remove your box full to some dry place, and thereby have an abundance for all seasons of the year. No farmer can afford to live without bees. They are indispensable to the health and comfort of almost every one, although they do sting if you pinch them. Their disposition is not unlike that of the mule; if you show fear they soon know it, and will master you. G. M. W.

Anthony, Harper County.

June 30.—Although Anthony Township dates its existence, as a farming country, from April of last year, our report of crops will compare favorably with other counties. Wheat is all harvested, and has proved much better than was anticipated. Since the last rains, which were general over southern Kansas, corn has improved wonderfully and bids fair to make a large crop. Oats will be short. Much land is open for pre-emption, and any one wishing good farms at \$1.25 an acre, can find no better opening than to come to Harper County. At present settlers come via Wichita, but after the first of September the railroad will be extended to Wellington, in Sumner County. A general invitation is extended to all wishing homes in this garden land of southern Kansas. C. M.

Sterling, Rice County.

June 20th.—Our long-continued dry weather has come to an end. Had no rain since the 26th of May. In some other parts of this county there was no rain for six weeks. During all this time the wind has been blowing almost constantly, with scarcely any dew at night, yet corn continued to grow all the while. Oats very short. Wheat will not average one-third of a crop. Chinch-bug is making its appearance in some localities. We have had gentle showers for the last three days, and to-day it is raining almost incessantly. We are in the midst of harvest. Farmers have not been able to cut any for two days on account of rain. There is a very large acreage of corn, which looks generally good. There was a very fair showing for fruit in the early part of the season, but the hail demolished about half of it in this vicinity and in other parts of the county all of it. Dry weather has made havoc with small fruit. Money is scarce, times hard and "greenbacks" plenty. We live in hopes, but they

are not based on the "greenbacks" but rather in "buying the greens." But as the FARMER is not a political paper it is not expected to discuss the political issues of the day; but as some of these issues are considerably green, it might not be out of place, at least, to draw the attention of our farmers to the green part, especially now as the "greens" are scarce after so much dryness. Well, the most important issues for the farmer at present is to raise more greens and look more closely after the "greenbacks," and let the greenbacks take care of themselves. I think I shall stick to my party and raise all the corn and wheat and pork I can until after the next presidential election, and then if I don't get to be a post-master, or road-overseer, or councilman, or some such functionary, I will go on in the same old, substantial ways. I know there is gold and silver and even greenbacks in our rich, Kansas soil, and if we only plow deep enough, we will surely find it out to our own personal satisfaction. S.

Agnes City, Lyon County.

June 21st.—The harvesting has commenced. Wheat is well filled, but will yield only half a crop. Corn is looking better than I ever saw it at this season. There is a larger acreage planted this spring than last. The larger part of the corn has been laid by for this season. Oats will be a fair crop, so will spring wheat that was early sown with drill. Late sowing and that sown broadcast will be a poor crop. We have been having all the rain that was necessary for growing crops, and yet there has not been any heavy rains to raise the streams this spring until the last week. Farmers feel confident of a large corn crop. Hogs on the rise; some sales at \$3, live weight; about all sold. We are having a large emigration in this township, and still there is room for more. Those that have energy and enterprise can find cheap farms, that will make good homes, in a splendid country, good soil and timber, water that cannot be excelled in any country. E. C. EDWARDS.

Patrons of Husbandry.

NATIONAL GRANGE.—Master: Samuel E. Adams, of Minnesota; Secretary: Wm. M. Ireland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y. EXECUTIVE COMMITTEE.—Henry James, of Indiana; D. W. Aiken, of South Carolina; H. Ellis, of Ohio. KANSAS STATE GRANGE.—Master: Wm. Sims, Topeka, Shawnee county; Secretary: P. B. Maxson, Emporia, Lyon county; Treasurer: W. F. Pope, Topeka; Lecturer: J. H. Martin, Mound Creek, Miami county. EXECUTIVE COMMITTEE.—W. H. Jones, Holton, Jackson county; Levi Drummond, Hartford, Lyon county; J. S. Payne, Cadmus, Linn county. COUNTY DEPUTIES.—J. T. Stevens, Lawrence, Douglas county; T. B. Tyers, Beatty, Marshall county; E. B. Powell, Augusta, Butler county; R. E. Morse, Miami county; A. J. Pope, Wichita, Sedgewick county; A. P. Reardon, Jefferson Co., Post Office, Dimond, Leavenworth county; S. W. Day, Ottawa, Franklin county; G. A. Hovey, Belleville, Republic county; J. E. Barrett, Greenleaf, Washington county; W. V. Cone, Topeka, Shawnee county; J. McComas, Holton, Jackson county; Charles Dabrow, Clay Centre, Clay county; Frank S. Smith, Bush Centre, Bush county; G. M. Summerville, McPherson, McPherson county; J. S. Payne, Cadmus, Linn county; Charles Wyeth, Minneapolis, Ottawa county; F. M. Wierman, Mildred, Morris county; John Andrews, Huron, Atchison county; George F. Jackson, Fredonia, Wilson county; D. C. Spurgeon, Leroy, Coffey county; James W. Williams, Topeka, Marion county; R. E. Morse, Great Bend, Barton county; C. S. Worley, Eureka, Greenwood county; James McCormick, Burr Oak, Jewell county; L. M. Earnest, Garnett, Anderson county; D. P. Clark, Kirwin, Phillips county; George Fell, Linn county; Pawnee county; A. Huff, Salt City, Sumner county; James Faulkner, Iola, Allen county; W. J. Ellis, Miami county; George Amy, Gladstone, Bourbon county; W. D. Ching, Smith county; P. O. Kirwin, J. H. Chandler, Rose, Woodson county; E. F. Williams, Erie, Neosho county; J. O. Mansfield, Winfield, Cowley county; George W. Bryan, Osage county; W. J. Campbell, Red Stone, Cloud county; John Rehrig, Fairfax, Osage county; L. S. Fleck, Bunker Hill, Russell county; J. K. Miller, Skirting, Rice county; W. D. Rippee, Severance, Doniphan county; Arthur Sharp, Girard, Crawford county; P. B. Maxson, Emporia, Lyon county; A. M. Switzer, Hutchinson, Reno county; S. N. Wood, Cottonwood Falls, Chase county; G. S. Kuehnard, Keene, Wabasha county.

TO OFFICERS OF SUBORDINATE GRANGES. For the use of Subordinate Granges we have a set of receipt and order books which will prevent accounts getting mixed up or confused. They are: 1st. Receipts for Dues, 2nd. Secretary's Receipts, and 3rd. Orders on Treasurer. The set will be sent to any address, postage paid for \$1.00. We solicit from Patrons, communications regarding the Order. Notices of New Elections, Feasts, Installations and a description of all subjects of general or special interest to Patrons.

A Glance at the Situation.

At this season of the year the farmers throughout this broad land are in the midst of toilsome labor on their broad acres of ripening cereals, fruits, etc., and it is to be feared that many connected with our beneficent order are disposed to give little thought to grange duties. The Patron of Husbandry, published at Columbus, Miss., thus glances at the situation in the following reasonable editorial remarks, which we reproduce for the benefit of those of our brethren in the north who may be inclined to grow lukewarm in grange work: "If they will not take time to attend the meetings of the grange, it would be well for them to give a little thought to the situation. They and their children, perhaps, are in the fields sweltering in the hot sun or dripping in the rain, and have no time, perhaps, to seek shelter from either to make and secure their crops. And when they have made them, and are ready to sell, they must give away the larger part for the support of an army of middlemen of various kinds and degrees, and to maintain a vast system of railroad and steamboat lines. Most of these middlemen, from the well-dressed drummer to the lordly cotton buyer and merchant, are indulging in ease, or hastening to summer resorts where they seek recreation during the heat of midsummer. The farmer has no time to watch the movements of trade or state of the markets, nor to calculate from the reports of the growing crops what the aggregate yield will be, unless he is a regular attendant of his grange, or a constant reader of a grange and agricultural paper. Perhaps he cares little for these things any way. But the merchant and cotton buyer are not only fully posted with the markets, but their boards of trade are in daily session, and they are always prepared to act intelligently in their respective departments.

"Thus it will be seen that the farmers are at a great disadvantage. They work hard, their pleasures and recreations during the summer months are few and simple, and their reward, when the final account is rendered, is sadly disproportionate to the labor and hardships they have undergone. "Why is this? Mainly because the farmers work more with their hands and less with their brains than the middlemen do. And this disparity in the toil and hardships and rewards of the two classes will continue just as long as the farmers reject the opportunities offered by the grange." The Material Advantages of Co-operation. It is especially important that patrons, knowing the many benefits and advantages arising from our order, should keep before the minds of their co-laborers on the farm who do not belong to the order, all the facts necessary to inform them of its principles, purposes and intentions; for we hold that no farmer who once becomes thoroughly conversant with its fundamental principles and purposes can hesitate for a moment about joining the order. It is our duty to elevate our fellow-workers; and in no better or more simple way can this be accomplished than by increasing the boundaries of the grange, and instilling into the minds of farmers the personal interest each has in the order and its co-operative movements. We feel that we cannot too strongly or too frequently present this subject to patrons. The co-operative business feature of the order is the great lever that must move agriculturists. Self-interest is the ruling passion in humanity, and farmers as a class are but human in this respect. They must see that the grange will pay in dollars and cents before they will come in. Members of the order have it in their power to convince their neighbors of the pecuniary benefits of our co-operative system. It is not necessary that any of our confidential arrangements be unlawfully revealed, but we can show our neighbors that the material advantages which result from the co-operation of many people are very considerable and not to be lightly regarded; that to sell to the best advantage, and to buy as cheaply as possible, is to increase the profit of farming, and, consequently, any plan which is likely to enable farmers to do these two things, must be considered worthy of serious thought and attention. That the grange organization is capable of doing this for its members is so well known and accepted a fact that no true patron thinks of denying it. Mistakes may occur, of course, but that is the fault of individuals and not of the system, which is calculated to insure satisfaction if but carefully carried out.—Farmers' Friend.

How Shall We Buy and Sell.

"Buy for cash and in quantity" is a fundamental maxim of the grange, and practically worth a whole volume of finance. The want of ready means has interfered with the average farmer's taking advantage of this simple rule. Do what we may, when the coffee and sugar and boots are wanted, the pocket-book is empty, and purchases are made in a retail way, on the credit system, to be paid "after harvest." He wonders why he never gets along in the world. Sometimes he sees the big leak, but seems to be powerless to stop it. The grange has opened up the way by obtaining a capital fund by a small loan from each member, to be used as a purchasing fund for the commodities the farmer wants. Many granges find it more convenient and cheaper to distribute at the grange hall at fixed times than to open a store. Here retail quantities are sold at wholesale rates, the loss saved ranging from ten to twenty-five per cent. Rather a heavy interest to pay! This plan of distribution has commonly received favor and adoption more readily than a "store," with salesmen, shelves, counters, and all the other appurtenances of a grocery. The reason is simple enough—it costs next to nothing. The grange hall furnishes the store-room and a member will attend to the wants of customers at a nominal rate. It requires less capital. It avoids the accumulation of dead stock. It is simple in its management, requiring no complicated system of book-keeping, the simplest entries of purchase and sale answering every purpose. It takes away the temptation to buy on credit. In its distribution of profits it is substantially the same as the Rochdale plan—refunding to each one the difference between the wholesale and the retail price, but making the return at the time of the purchase instead of some future date. The capital may be turned over again and again. It induces members who want an article to turn out on grange rights. The main inconvenience is, it is apt to interfere or delay the evening's work.—Grange Bulletin.

A Word to Farmers' Sons.

Farmers' sons are quite apt to suppose that they can only attain to any coveted position in life through the avenue of some trade or profession. They look about and find the wealthy men nearly all belonging to these classes; they do not stop to consider that only the successful ones come to view; that for every one of these who has acquired wealth or distinction ninety-nine others have failed and disappeared, or have never risen to notice at all. They act on the belief that they are the only persons that can be called into public life, ignoring the fact that it is the training they get that constitutes the difference rather than the calling. A farmer of equal learning and culture with the lawyer would, we believe, find himself in just as good request, with, perhaps, many chances in his favor. If the farmer allows the professional man to monopolize all the advantages at the start, he must expect to find himself at a disadvantage all the way through.—Dirigo Rural.

Advertisements. Our readers, in replying to advertisements in the Farmer, will do us a favor if they will state in their letters to advertisers that they saw the advertisement in the Kansas Farmer.

A GOOD PLAN.

Anyone can learn to make money rapidly operating in stock by the "two-querring rules for success," in Messrs. Lawrence & Co's new circular. The combination method, which this firm has made so successful, enables people with large or small means to reap all the benefits of largest capital and best skill. Thousands of orders in various sums, are pooled into one vast amount, co-operated as a single whole, thus securing to each shareholder all the advantages of the largest operator. Immense profits are divided monthly. Any amount from \$5 to \$5,000, or more can be used successfully. N. Y. Herald Weekly, September 26, 1878, says: "By the combination system \$15 would make \$75, or 5 per cent; \$50 pays \$300, or 7 per cent; \$100 makes \$1,000, or 10 per cent. On the stock during the month, according to the market." Frank Leslie's Illustrated Newspaper, June 29th: "The combination method of operating stocks is the most successful ever adopted." New York Independent, Sept. 12th: "The combination system is founded upon correct business principles, and no person need be without an income while it is kept working by Messrs. Lawrence & Co." Brooklyn Journal, April 29th: "Our editor made a net profit of \$101.25 from \$20 in one of Messrs. Lawrence & Co's combinations." New circular (mailed free) explains everything. Stocks and bonds wanted. Government bonds supplied. Lawrence & Co., Bankers, 57 Exchange Place, N. Y.

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FRUIT TREES! Parties in Kansas who wish reliable Fruit Trees adapted to the climate of Kansas will get them in condition to grow by ordering of me direct. Also, Maple, Elm, Box Elder, Green Ash, and Catalpa of small size, cheap, for Groves and Timber. Also Evergreens of all sizes of the best possible quality. All the new Strawberries. Send for Price Lists. Address D. B. WIER, Lacon, Marshall Co. Ill.

Western Missouri NURSERIES, LEE'S SUMMIT, JACKSON CO, MISSOURI. (20 miles east of Kansas City, on the Mo. Pacific R.R.) These Nurseries are very extensive and all stock young and thrifty. We call the special attention of DEALERS AND NURSERYMEN

to our superior stock for fall delivery of 200,000 Apple trees two years old, 4 to 6 feet high; 50,000 Peach with Pear, Plum and Cherry, grapes and small fruits for the wholesale trade. With our system we can fit out Dealers promptly and on time. Wholesale prices will be printed by June. We desire every one wanting Nursery stock at wholesale to call and see us and stock, or send for prices before purchasing elsewhere. All stock will be boxed if desired.

James A. Bayles, Prop'r. SAM JEWETT.

Breeder of registered AMERICAN BERTINOS. Specialties. Constitution, density of fleece, length of staple and heavy fleeces. All animals ordered by letter guaranteed satisfactory to purchaser. Correspondence and examination of flock solicited. Sam'l Jewett Independent

COTSWOLD RAMS FOR SALE. Ten pure bred yearling and two-year-old Cotswold Rams bred in Canada from imported stock by James Russell, Toronto, Canada West Stock Association and Colonel Taylor, London. Also twenty ewes out of same flock for sale. Swain Bros. and Bates, Lawrence Kansas. P. O. Box 257.

HAYCOCK AND STACK COVERS. A good investment. Saves your Hay or Grain. Send for circulars. Gilbert Hubbard & Co., Chicago.

BERKSHIRES! The College Farm. We offer for sale a choice lot of young pigs now ready for shipment. These are by imported Mahomet, 1879; Gil Blas, and other noted sires and are from some of the finest families as Salles, St. Bridget, Lady Smiths, Lady Leonidas, &c. In quality and breeding we know these to be unsurpassed. We also offer a young

Short-horn Bull, a choicely bred "Young Mary," calved Aug. 30, 1878. Address E. M. SHELTON, Supt. Farm, Manhattan, Kansas.

Strayed or Stolen. \$5 00 Reward for Information! Strayed or was stolen from the subscriber living at Mission Creek P. O., on the 1st of April, one sorrel roan filley, 8 years old, about 14 1/2 hands high, very white in the face with a muddy white tail. One thorough bred bay pony horse colt, well built, one year old black mare and tall, no markings on the face. The above reward will be paid for information that will lead to the recovery of these animals. Address D. C. KEELER, Mission Creek, Kas.

Breeders' Directory.

L. A. KNAPP, Dover, Shawnee Co., Kas., breeder of Pure Short-Horn Cattle, and Berkshire Pigs. C. S. EICHLITZ, Breeder of Short-Horns, Berkshire and Bronze Turkeys, Wichita, Kansas.

J. FRY, Dover, Shawnee Co., Kansas, breeder of the best strains of Imported English Berkshire Hogs. A few choice Pigs for sale. Prices Low. Correspondence solicited.

D. R. W. H. H. CUNDIFF, Pleasant Hill, Cass Co., Mo., breeder of thoroughbred Short-Horn Cattle of fashionable strains. The bull at the head of the herd weighs 3000 pounds. Choice bulls and heifers for sale. Correspondence solicited.

HALL BROS., Ann Arbor, Mich., make a specialty of breeding the choicest strains of Poland-Char, Suffolk, Essex and Berkshire Pigs. Present prices less than last card rates. Satisfaction guaranteed. A few splendid pigs, jills and bears now ready.

Nurserymen's Directory. LEE'S SUMMIT and BELTON NURSERIES, Fruit Trees of the best, and cheapest. Apple Trees and Hedge Plants a specialty. Address ROBT. WATSON, Lee's Summit, Jackson Co., Mo.

A. WHITCOMB, Florist, Lawrence, Kansas. Catalogue of Greenhouse and Budding Plants sent free.

Miami County Nurseries. 11th year, large stock, good assortments; stock first class. Osage hedge plants and Apple trees at lowest rates by car load. Wholesale and retail price lists sent free on application. E. F. CADWALLADER, Louisburg, Kas.

Physician. MRS. DEBORA K. LONGSHORE, M. D., has removed her office to the west side of Harrison St., 1st door south of Sixth St.

Dentist. A. H. THOMPSON, D. D. S., Operative and Surgeon Dentist, No. 189 Kansas Avenue, Topeka, Kansas.

Teeth extracted without pain, by Nitrous Oxide gas, or laughing gas, at DR. STULTZ Dental Rooms, over Funk's Clothing Store, Topeka, Kansas.

Durham Park Herds ALBERT CRANE, BREEDER OF Short-Horn Cattle AND Berkshire Pigs, Durham Park, Marion Co., Kansas. Catalogues free. The largest and best herds in the West. Over 200 head of cattle and a like number of pigs. Prices Low. Address letters to DURHAM PARK, Marion County, Kansas.

GEO. M. CHASE, KANSAS CITY, MISSOURI, BREEDER OF Thoroughbred English Berkshire Pigs. ALSO—Dark Brahma and White Leghorn Chickens. None but first-class stock shipped.

WOOL-GROWERS Can rely upon immunity from contagious disease in their flocks after use of LADD'S TOBACCO SHEEP WASH. GUARANTEED an immediate cure for scab and prevention of infection by the terror to flock-masters. GUARANTEED to more than repay the cost of application by increased growth of wool. GUARANTEED to improve the texture of the fleece instead of injury to it as is the result of the use of other compounds. GUARANTEED to destroy vermin on the animal and prevent a return. GUARANTEED to be the most effective, cheap and safe remedy ever offered to American Wool-growers. No flock-master should be without it. I have the most undoubted testimonials corroborative of above. Send for circular and address orders to W. M. LADD, 21 N. Main St., St. Louis, Mo.

GREAT Cattle Sale. THOROUGHBRED SHORT-HORNS.

The Stock breeders of Jackson county, and H. S. Grimes of Cass county, Mo., will sell in KANSAS CITY, MAY 24, 1879, About 50 thoroughbred cattle, and about 30 high grades, consisting of bulls and heifers, mostly Bulls. This stock has, in almost every instance, been bred by the person offering it for sale. While our number is not large, Our Stock is of Superior Quality. TERMS OF SALE—Cash, or four month's satisfactory Taylor will be received. Catalogues ready May 10th, 1879. A. J. POWELL, Cor. See. Independence, Mo.

LEWIS & TUTTLE WOOL COMMISSION HOUSE. 211 & 213, Monroe St., Chicago. Liberal advance on consignments. Sacks furnished without charge. Quick sales and prompt returns. Write for further particulars. Reference, First National Bank, Chicago.

Administrator's Notice. Notice is hereby given to all concerned that the undersigned was on the 12th day of June, of A. D. 1879, appointed by the Probate Court of Shawnee County, Kansas, administrator of the estate of Joseph C. Miller, deceased. Those indebted to said estate will call and settle claims at once, and all persons having claims will present them to the said administrator or said probate court for allowance. JESSE C. CHESNEY, Administrator.

STRAYED! \$10 00 Reward. From near Topeka, one 3-year-old bay mare, rather small, branded on right shoulder with a T; also one 3-year-old mare, dirty brown with a few grey hairs mixed; blaze in face, both hind feet white, branded on right shoulder with T. A reward of \$10 will be given for information that will lead to their recovery. THOMAS WHITE, Topeka, Kan.

Scott's Improved Sheep Dip. Has been thoroughly tested for the last two years. We know that it will cure scab, and kill all insects that infest sheep. We are prepared to furnish customers with it on reasonable terms. Apply to A. Scott, Westmoreland, Pottawatomie Co., Kansas.

Agricultural Fairs.

The indirect benefits of the town, county and state farmers' fairs are even greater than those for which they are especially established.

The occupation of the farmer is favorable to independence of character, and not wholly unfavorable to independence of thought.

Among the Blooded Stock.

Mr. L. P. Muir has taken a run amongst the short-horn breeders, an account of which he has given in the Live Stock Record.

to Independence to see the many fine herds in that locality. Col. C. C. Childs has quite a good herd headed by the pure Kirklevington Duke 2d.

In noticing a seedling raspberry in last week's issue of the FARMER, sent by Mr. A. E. Chandler, we inadvertently suggested the name of Holman's Prolific, instead of Chandler's Prolific.

The Wool Market.

The outlook for the wool market in the immediate future appears to be good. F. J. Hiatt & Bros., extensive wool growers in Ohio, have been studying the wool market thoroughly and give their conclusions through the OHIO FARMER.

No More Hard Times.

If you will stop spending so much on fine clothes, rich food and style, buy good, healthy food, cheaper and better clothing, get more real and substantial things of life every day, and especially stop the foolish habit of employing expensive, quack doctors or using so much of the vile humbug medicine that does you only harm.

8 and 9
Eight and nine per cent. interest on farm loans in Shawnee county.

Markets.

New York Money Market. NEW YORK, July 8, 1879. GOVERNMENTS—Firm. RAILROAD SECURITIES—Strong.

graded amber, \$1 17 1/2 @ 20. No. 2 do., \$1 17 @ 1 18 ungraded white, \$1 14 @ 1 10. RYE—Unchanged.

St. Louis Live Stock Market. ST. LOUIS, July 8, 1879. CATTLE—Receipts, 3,300; offerings altogether of grass Texans, which are active and 10c lower.

St. Louis Produce Market. ST. LOUIS, July 8, 1879. FLOUR—Unchanged. WHEAT—Active and higher. No. 2 red, 90 1/2 @ 91 1/2 cash; 91 1/2 @ 92 bid July; 91 1/2 @ 92 1/2 August; 90 1/2 @ 91 1/2 September.

Chicago Produce Market. CHICAGO, July 8, 1879. FLOUR—Dull and unchanged. WHEAT—Demand active; prices advanced but unsettled and irregular.

Chicago Wool Market. CHICAGO, July 8, 1879. The Drovers' Journal this afternoon reports as follows: HOGS—Receipts, 15,000; shipments, 5,100; market slow but higher; mixed packing, \$3 50 @ 3 75.

Kansas City Live-Stock Market. KANSAS CITY, July 7, 1879. The Indicator reports: CATTLE—Receipts, 600; shipments, 725; market active; native shipping steers, averaging 349 pounds, selling at \$4 40; native cows, \$3 15 @ 3 25.

St. Louis Wool Market. WOOL—Quiet and unchanged. Tub—choice, 32 1/2 @ 33c; medium, 27 1/2 @ 28c; dirty and low, 25 @ 27c.

Topeka Produce Market. Grocers retail price list, corrected weekly by J. A. Leo. Country produce quoted at buying prices.

Topeka Butchers' Retail Market. BEEF—Sirloln Steak per lb. 12 1/2. Round " " 10. Roasts " " 10.

Topeka Retail Grain Market. Wholesale cash prices by dealers, corrected weekly by T. A. Beck & Bro.

New Advertisements. Our readers, in replying to advertisements in the Farmer, will do us a favor if they will state in their letters to advertisers that they saw the advertisement in the Kansas Farmer.

U. S. SCALE CO. Terre Haute, Ind. Wagon Scales, R. R. Track and other. Warranted best in use. Sold cheap.

GREAT SALE OF SHORTHORNS! KENTUCKY SUMMER SERIES.

July 30, 1879—54 head from the herd of A. J. Alexander, Spring Station, Ky., will be sold at public sale, comprising choice representatives of the following families:

August 1—T. J. Megibben, Lair's Station, Ky., will sell at public sale 70 head of the following well known families:

August 2—Joshua Barton, Millersburg, Ky., will sell at public sale 60 head of Benick Rose of Sharons, Hilltop, Knightleys, Bell Bales, Paris, Miss Wileys, Rosemary, Young Marys, Young Phyllises, Cyrennes, Aarons, &c., including the fine sire, 4th Lord Oxford (31728) and other good bulks.

TARRANT'S SELTZER APERIENT. A man of noted health was asked how it was he seemed to be always well. "I am not particular in my meals; I eat what I like and whenever I feel under the weather, I resort to my Tarrant's Seltzer Aperient, which I always keep in the house."

The FEARLESS. Stands unequalled for ease of team, the Horse-Power runs, as shown by the records, with more than one-third less friction than any other. The only machine awarded a Gold Medal.

CENTENNIAL MEDAL. Full course of study in Ancient and Modern languages. Law and Normal Departments now established. Music by competent instructor.

University of Kansas. 1879.

COLLEGE OF THE SISTERS OF BETHANY. For Girls and Young Ladies. Exclusively under care of Protestant Episcopal Church, for boarding and day pupils.

BETHANY COLLEGE, TOPEKA, KANSAS.

TOPEKA LEATHER MARKET. Corrected weekly by H. D. Clark, Dealer in Hides, Furs, Tallow and Leather.

TOPEKA, : : KANSAS. Editors and Proprietors.

UNTIL January 1st. FOR 50 CENTS.

July 1st. to January 1st, 1880. FOR 50 CENTS.

Weekly Capital. Will be a complete family newspaper published at the low price of 1c.

One Dollar Per Year.

Every farmer in Kansas wants a newspaper published at the Capital of the State. It will give the latest telegraphic news from all over the world, full state news, news from the cities of the state, and a splendid miscellany of useful, interesting, and humorous reading matter.

BRIGHTEST, BEST, AND CHEAPEST Paper in Kansas.

A fit companion for the reliable old Kansas FARMER. Send in your name at once and begin the first issue July 1st.

TERMS: Cash in Advance.

1 year to any address, \$1.00. Postage paid, from July 1st to January 1st, 1880, 50 cents.

Sample copy of daily or weekly, (after July 1st) sent free to any address.

The reading matter of the FARMER and the WEEKLY CAPITAL is entirely distinct and different. That printed in the CAPITAL will not be put into the FARMER. The one is an Agricultural paper, and the other a Newspaper. The two will give every farmers' family a splendid combination at a price within the reach of all.

ADDRESS: HUDSON & EWING, Editors and Proprietors, TOPEKA, : : KANSAS.

Literary and Domestic.

Heart's-Ease.

BY MARY E. BRADLEY.

Of all the bonny buds that blow In bright or cloudy weather...

I had a little lover once, Who used to give me kisses...

The girls that went to school with me Made little jealous speeches...

"The garden is in bloom," he said, With lilies pale and slender...

"Am I your little heart's-ease then?" I asked with blushing pleasure...

Until I teased him—"Tell me why— I want to know the reason!"...

"The garden is in bloom," he said, With lilies pale and slender...

"Am I your little heart's-ease then?" I asked with blushing pleasure...

I listened with a proud delight Too rare for words to capture...

Life holds some stern experiences, As some of us discover...

A Chapter on Soups.

BY FLORENCE H. BIRNEY.

Soups are economical and nourishing, and need not always be made of meat...

Buy a cent's worth of bones, crack them well, cover well with water, and simmer for two or three hours...

The principle rule to be observed in making any kind of soup is to keep it from boiling hard...

Bread soup makes a good, nourishing breakfast, and will be found very palatable...

In this connection I may as well say that if you will place a couple of small sticks in the bottom of a tin pan...

For a very superior onion soup slice three or four onions in a saucepan, with a couple of tablespoonfuls of drippings...

Sorrel soup is a great favorite with the French, and is considered very healthy...

For squash or pumpkin soup take half a small squash or pumpkin, chop it fine and stew it gently with three onions...

I have never seen bean soup on a New England table, and do not think it is often made in New England...

Soak one quart of dried beans in lukewarm water over night. The next morning put them into four quarts of cold water...

Dried pea soup is made in the same manner, with the addition of a few tomatoes...

Never throw away bones left from any kind of fresh meat. In winter they will keep good several days...

For potato soup boil a pound of salt pork in three quarts of water until it is done...

For beef soup take a two-cent soup bone (part of the shank), wash it and put it in three quarts of cold water...

For tomato soup buy five cents' worth of bones; put them, after cracking well, into two quarts of water...

For tomato soup buy five cents' worth of bones; put them, after cracking well, into two quarts of water...

Farmers' Daughters.

I was talking to a farmer's daughter the other day, and naturally, it seemed, dropped into complainings, and we each revealed the fact that she was discontented...

I knew that all her life had been one round of cooking, and milking, and churning; of washing and scrubbing and ironing...

I, for one, do not blame the farmers' daughters for being dissatisfied. I know how much they have to make it so...

Holland tells us that farmers are afraid to be educated, or refined, or to cultivate the beauties of nature...

this we recognize more of truth than poetry. Perhaps it is true the world is what we make it; but the sad part of the truth is, that some of us cannot make it what it ought to be...

No matter what we may do to eradicate the baser part, we can never attain the higher standard we might have reached if loving and considerate parents had helped to prepare the way for us...

Man's Manner towards Women.

A vigorous writer suggests that the lamentable change which has come over the manner of gentlemen towards ladies may be due to a decay of fine manners in women...

It is not every man who is, like Thackeray's Col. Newcome, "that brother of girls," to use an Arab's epithet...

Other causes for this decay the writer finds in the independence of certain women, and in the neglect of another class to express their appreciation of little attentions...

That is the writer's way of putting it, and the references are legitimate, seeing that men are not martyrs who sacrifice themselves for a love of self-immolation...

The woman to whom comes the sudden reflection, "He didn't behave towards me as a gentleman should towards a lady!" should certainly ask herself, "Has my conduct towards him been that of a well-bred lady?"

A Hint to Mothers.

Now is the time when mothers send their babies daily out for an airing, which, as the Providence Journal well says, is a wise thing to do if they are only confided to competent hands...

Cream Slaw.

Cut the cabbage rather fine; sprinkle a little salt over it; thoroughly bruise the cabbage; then take three tablespoonfuls of salt, half a pint of sweet cream and four tablespoonfuls of vinegar...

Sour Cream Slough.

One gallon cabbage cut very fine, pint vinegar, pint sour cream, half cup sugar, tea-spoon flour, two eggs and a piece of butter the size of a walnut...

previously sprinkled with one table-spoon salt, one of black pepper and one of mustard.

CABBAGE SALAD.

Two quarts finely-chopped cabbage, two tablespoonfuls salt, two of white sugar, one of black pepper, and a heaping one of ground mustard...

Ice Cream Cake.

One cup sugar, 2 eggs, 1 1/2 cups flour, 5 table-spoons sweet milk, 1/2 teaspoon soda, 1 teaspoon cream tartar...

Cold Coffee.

I have always considered warmed-over coffee unfit to drink, but have found a way of preparing it so that it cannot be told from freshly-made...

Dried Fruit.

From a paper issued by the Agricultural Department at Washington, we find the following on the subject of American fruit: "The European demand for American fruits increases with the supply..."

Care of Cream.

Do not churn sweet cream, but allow it to ripen first. Sour cream will make more and better keeping butter than sweet...

From Cloud County.

June 27th.—We had it rather dry here the most of May and part of June, which almost ruined the spring wheat...

Highland, Morris County.

June 23d.—Plenty of rain the last few days. Ground too wet to plow corn but splendid for breaking prairie...

Advertisements.

In answering an advertisement found in these columns, our readers will confer on us a favor by stating that they saw the advertisement in the Kansas Farmer.

\$60 a week in your own town. Terms and \$5 outfit free. Address H. HALLETT & Co., Portland, Me.

\$77 a Month and expenses guaranteed to Agent Outfit free. Shaw & Co., Augusta, Maine.

50 Perfumed, Snowflake, Chromo, Motto eds. name in gold & jet, 10c. G. A. Spring, E. Wallingford, Conn.

\$777 A Year and expenses to agents. Outfit free. Address P. O. VICKERY, Augusta, Maine.

AGENTS WANTED for the Best and Fastest Selling Pictorial Books and Bibles. Prices reduced 25 per cent. NATIONAL PUBLISHING CO., St. Louis, Mo.

SCARCE BOOKS and Rare Photos. Catalogue, 3c. Catalogue, 3c. B. P. ELLIS & Co., Chicago, Ill.

\$12 A WEEK. \$12 a day at home easily made berry, send postal to originator. TRUE & Co., Augusta, Me.

60 Cards—20 Chromo, 10 Motto, 30 Ocean Shells Snowflake, &c. Name on, 10c. Clinton Bros. Clintonville, Ct.

18 Elegant New Style Chromo Cards with name 10 postal. GEO. I REED & CO., Nassau, N. Y.

AGENTS READ THIS. We will pay Agents a Salary of \$100 per month and expenses, or allow a large commission, to sell our new and wonderful inventions...

STEAM PLOWING AND THRESHING.—The best for the least money. J. RIBON, Jersey City, N. J.

\$1050 profits on 30 days investment of \$100 Proportional returns every week on Stock Options of \$20, - \$50, - \$100, - \$500.

Official Reports and Circulars free. Address T. POTTER WIGHT & CO., Bankers, 35 Wall St., N. Y.

SALESMEN WANTED \$125 A Month and Expenses. Terms and \$5 outfit free. Address H. HALLETT & Co., Portland, Me.

ST. LOUIS LAW SCHOOL. Term opens October 14, 1879. Tuition, \$20 per year. For circular address: KERRY HITCHCOCK, St. Louis, Mo.

FREE CATALOGUE of 2,000 NEWLY INVENTED AGENTS. World Manufacturing Co., 767 Broadway, New York.

IF YOU Want a FARM or HOME, with independence and plenty in your old age.

"The best Thing in the West," —IS THE—

ATCHISON, TOPEKA & SANTA FE R. R. LANDS IN KANSAS.

11 years' credit with 7 per cent interest. 3 1/2 PER CENT DISCOUNT FOR CASH. Fare over A., T. & S. R. R. refunded to purchasers of Land. Circulars giving full information sent FREE. Address:

A. S. JOHNSON, Act'g Land Com., Topeka, Kansas

ALL ABOUT KANSAS.

Parties wanting information about Kansas, should send to

ROSS & McCLINTOCK.

The old reliable Land Firm of Topeka, for information and papers. They buy and sell Real Estate, Place Loans, Rent Houses, Pay Taxes, Make Collections and take charge of property.

NO. 189 KANSAS AVENUE TOPEKA, KANSAS.

Retains responsibility to any of the Banks or Business Houses of Topeka.

Local Agents for 100,000 Acres of the Great Pottawatomie Reserve Lands.

Land! Land! Land!

HOMES FOR THE PEOPLE

350,000 ACRES

Bourbon, Crawford & Cherokee CO'S, KANSAS.

Still owned and offered for sale by the MISSOURI RIVER, FORT SCOTT AND GULF RAILROAD COMPANY

On Credit, running through ten years, at seven per cent. annual interest.

20 PER CENT DISCOUNT FOR CASH IN FULL AT DATE OF PURCHASE.

For Further Information Address

JOHN A. CLARK, LAND COMMISSIONER.

Fort Scott, Kansas

FREE TO ALL FLEETWOOD'S LIFE OF CHRIST.

528 Pages. Over 300 Illustrations. Free to all who send their address and six cents in postage stamps. Address: UNITED STATES BOOK & BIBLE CO., 174 & 176 Elm St., Cincinnati, O.

SOLDIERS!

War of 1812. War of Mexico. War of the Rebellion.

All kinds of bounty and pension claims promptly attended to. Ten years' experience. I never give up and I never fail. Fathers and mothers of soldiers are entitled to pensions. Can do quickly well one or 1000 miles from you. Pensions increased and arrangements collected. No fee unless successful. Best of references given on application. Address, with stamp, A. L. SHADER, Bantou, Champaign Co., Ill.

MAKE HENS LAY.

An English Veterinary Surgeon and Chemist, now travelling in this country, says that most of the Horse and Cattle Powders sold here are worthless trash. He says that Sheridan's Condition Powders are absolutely pure and immensely valuable. Nothing on earth will make hens lay like Sheridan's Condition Powders. These are one teaspoonful to one pint food. Sold everywhere, or sent by mail for eight letter stamps. I. S. JOHNSON & CO., Bangor, Me.

\$10 REWARD.

I offer the above reward for any information leading to the finding of the following horses, strayed from my premises, two miles southeast of Auburn post office, June 2: One dark sorrel mare with small white spot between the eyes, no other marks; weight 1300 lbs. Also a three months' old horse, color when shed same as mare. Also one five year old sorrel horse, pony with two white hind feet, blazed face and harness marks.

S. JOSLIN, Auburn, Kan.

Olathe, Johnson County.

June 26.—Wheat is about all cut. Some very good and some very poor. New land or sod was poor, making not more than six to ten bushels per acre. Old land from 20 to 20 bu. per acre.

Oats looks very well, but very short. Flax is very good, and a large breadth sown.

Corn is good and growing wonderfully. The early planting is now coming in tassel, and plowing corn is laid by for the season. Had I written a month ago, I should have reported not more than one-half what it is now. The late rains have helped corn wonderfully. Old corn is 28 to 30 cts, wheat 85 to 90, oats 80 cts. and in good demand.

Chintz bugs are numerous, but the wet weather is using them very roughly. If it had remained dry they would have done much damage.

Farmers should more and more carefully agitate this barbed fence wire. It is too dangerous for horse flesh to go about it. There are a great many horses crippled in this neighborhood by barbed fence, rendering some unfit for service for life. It should be an unlawful fence unless there is a board or rail on top, and bars mashed down. It experiments too deep in a man's pocket to lose a horse when he most needs him. L. W. Moll.

Greely, Anderson County.

June 22.—First, let me say that your correspondents' crop reports are very interesting, and of great importance. In no way can the Farmers of Kansas be better posted in regard to the amount as well as quality of productions of the state than through the correspondence of your subscribers scattered through every locality in the state. In no way can the farmers of Kansas be of greater benefit to each other than by dissemination of the exact truth as to the amount and yield of the various cereals, and the number and condition of the various kinds of marketable animals.

The season in this part of the country has been all a farmer could desire, excepting the last week in March, which was too dry and cold, injuring the winter wheat crop greatly. It was generally thought that the wheat crop was a failure, but under the influence of the spring and summer rains the prospects for a crop increased amazingly, and now the wheat is in shock. I think we shall have over a half crop, some pieces making a full crop.

Barton, Harvey County.

July 4.—I have been waiting for some old settler of this county to comply with the request of J. M. V. in paper, No. 23, but have waited so far in vain.

I came to this county last March from Iowa, therefore am not well enough informed myself to give much information to others, but this I do know, that I never saw a fairer prospect for corn than Harvey county now presents, and as for the spring grain crops, they are very light; a few fields will not be harvested. The cause was the dry weather in the fore part of the season. The winter wheat was somewhat injured by the same cause, but is nearly all harvested, and is of good quality. Plenty of rain now and prospect of prairie hay very good.

For raising stock I never saw the equal of this county. Cows, which last March could scarcely get up after lying down, are now in good flesh with a fine flow of milk, while dry cows are fit for the butcher. This is a good place for men who want to buy improved farms at reasonable prices. G.

Fox Creek, Chase County.

July 1.—I am very much interested in your articles on poultry; am glad to know the readers of the FARMER take an interest in that kind of stock, as I had the hen fever to a certain extent when living east. I am satisfied it is the most profitable stock a farmer can keep. My experience has been that Plymouth Rocks are the farmer's fowls. When eggs exclusively are wanted, then the Leghorns for me.

Corn is looking well as a general thing; some pieces were damaged by hail. Fall wheat mostly harvested and of good quality; estimated yield 12 to 18 bushels per acre; spring wheat very poor, oats ditto. Plenty of rain in last two weeks.

Would like to hear through the FARMER from some one of experience on the winter management of calves in this country. Quiz.

Lindsburg, McPherson County, Kansas.

June, 22d.—Wheat is cut and partly stacked, and has turned out beyond our expectation, plowing has also commenced for next crop, and a heavy rain in this vicinity has put the ground in fine condition. Corn is generally good, and will yield a fine crop. Potatoes are late, and oats very short. Small fruit of all kinds will give a good yield, but peaches none and apples but few.

The Salina and Southwestern railway, from Salina to Lindsburg will be pushed through and cars will be in Lindsburg by the 4th of July next. The little town is improving very fast, and has doubled in size since the first of March last. The Salina business men who made every effort to defeat the road are now building palace stores here.

I see in a late issue of the FARMER a correspondent speaking of sharpers. I have also a little experience on that subject (especially lightning rod men). The American Lightning Rod Company put up a rod on my dwelling. The amount was \$71.00. The person who did the job, whose name was Brown, presented a blank note filled out for the amount for my signature, the note to run twelve months without interest. I signed the note, and after twelve months when I tendered the amount to the company they showed the note, that it was running on twelve per cent. interest from date; this having been inserted above the printed part. I signed the note, and I had it to pay.

I would say to parties having lightning rods put up, and the payment to be on time, never to sign a printed note till you are satisfied that it is all right, then fill it out in your own hand writing. But better yet is, to give no note at all, if you possibly can help it.

An absconding rascal (a broom maker) left our town in a great hurry with the constable, after him. He is said to have gone to Smith County—pass him around.

We have organized a stock company in this county, called the McPherson County Park Association, for the purpose of buying and improving land for county fair ground. Our county fair will be held in McPherson between 1st and 10th of October next. L. N. Halmberg.

*If you had proven the note was altered after leaving your hands you could not have been compelled to pay. [Ed.]

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The largest Homeopathic College in the World. The twentieth Winter Session begins October 1, 1910, and closes Feb. 27, 1911. Clinical advantages unsurpassed; dissection material abundant; large, well lighted and comfortable rooms. Fees, \$50. For catalogue, address T. S. HOYNE, M. D., 317, Wabash Ave., Chicago, Ill.

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But while this superiority is admitted, it is frequently charged by dealers in other organs that the prices of the Mason & Hamlin organs are very high. This is not true. They are but little more than those of very inferior organs, being sold at \$54, \$66, \$78, \$84, \$99, \$106, \$108, \$114, \$128, to \$500 and upward, each. They are also sold for monthly or quarterly payments.

Purchasers are cautioned to remember that dealers in organs often recommend inferior instruments, because they get higher commissions for selling them. Insist on having a Mason & Hamlin Organ and you will have the best instrument of the class in the world, at a price but little more than that of very inferior organs.

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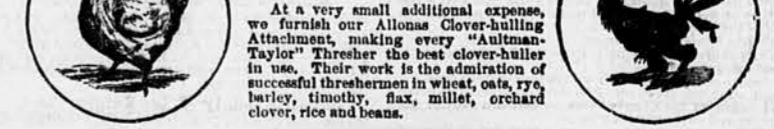
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