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Weather Laws.-No. 7.

REVOLVING STORMS .- (Continued.

A NEW HYPOTHESIS.

The hypothesis I propose to offer to account for revolving storms, is, as it will be here stated, substantially new. It is proper to state, however, that Professor Ferrel has suggested the same forces as the cause, and demonstrated that these forces would produce the rotation of the air mass and the progressive translation of its center in lines closely corresponding to those it is found revolving storms pursue. My hypothesis is:

1. Revolving storms are mere eddying whirls in one of the great air currents flowing between equator and pole, and from pole to equator.

2. These whirls, while floating in the main with the current, are driven poleward by the centrifugal force of the earth's rotation applied continuously as a force of impact upon the equatorial side.

3. The motion of rotation is produced by the difference in the centrifugal velocity of the equatorial side of the buoyant mass of air and the polar side.

4. The buoyancy of the revolving air mass may be caused by heat, moisture, electrical repulsion, or all of them cooperating.

5. That when a mass of air rises to the top of the incumbent strata by eruption rather than by diffusion, such a mass becomes, to all intents and purposes, "A fluid mass of matter withdrawn from the action of gravity" as fully as the oil globules in Professor Plateau's beautitul experiments. (See Smithsonian Reports, 1863-64-65-66).

6. Being withdrawn from the action of grayity, the ascending column is free to be acted upon by molecular attraction and the force of terrestial rotation (i. c., the earth's centrifugal force).

7. Calling the eastward velocity of the equatorial side of an ascending air mass, "a," and the eastward velocity of the polar side "b," then do we know that because the diameter of the circle nearer the pole is smaller than the diameter of the circle nearer the equator, that the equatorial side of the air mass or cloud is at the instant of ascension, being hurled eastward through space at a greater rate than the polar side. Hence "a" is greater than "b," and the equatorial side of the cloud or air mass moves eastward with a velocity equal to a-b.

This force is applied, of course, upon the equatorial side, and is constant, wherefore there is produced accelerated motion. But the cohesive force of the buoyant air mass, or vapor mass, tends to draw it into a globular shape about a center, and the centrifugal force being applied to the circumference produces rotation about the vertical axis.

The rotation begins slowly when the figure is that of an upright cylinder. But the velocity of rotation being greatest where the gravity is least, and this being at the top of the cylinder, the top rapidly expands while the base of of an inverted cone, or the "funnel shape" so often spoken of in rotary storms. The rotary force about this vertical axis is greatest at the top of the ascending column. It tends always to expand into a ring with an open space in the center. (See Fig. 3, Smithsonian Report for 1863, page 216). But this open space cannot become a vacuum and the result is an uprush of air to supply the place of that added to the "a fluid mass of matter withdrawn from the action of gravity," and becomes subject to the same forces, and becomes a part of the widely expanding ring. The phenomena is then, from that point on, an automatic self-feeding machine, with cumulative forces made up by changing the direction of a portion of the earth's force of rotation.

Every phase and feature of the revolving storm, whether upon the earth or upon the sun, can be explained by this hypothesis.

The uniform course of rotation in each hemisphere; the fact of opposite courses in the two polar hemispheres; the course of the storm centers, the whirlwind, water-spout, sand-storm, hail-storm, rain-storm, tornado with or without a funnel, the hurricane, cyclone, and great typhoons, and the gentle, rotary breezes which blow about the center of the great air-whirl when the force of rotation has about expended itself and left merely a high barometer at the

outer edge of the ring, and a feeble, low barometer under the center of the once terrible annulus, mark different stages of development modified by the difference in the materials found for being drawn into the vortex.

This hypothesis offers a rational explanation of the skipping or bounding of the funnel point. The rotary disk at the top of the atmosphere is lifted by arial waves, and the funnel point is lifted with it, and here rides in the air, and there strikes the earth, twisting and wrenching off trees, tearing down houses, and destroying life.

The question of whether the revolving mass can or cannot form a funnel, depends upon the size of the ring relative to the elevation of it above the earth's surface. Hence the storm may have a funnel in a valley and this may be truncated in crossing ridges, and reformed in the next valley. Again, the storm which bounds may (as has happened as often as it has happened the other way,) smite the hills and eave the lowlands untouched.

By this hypothesis it will be seen that every storm has its moment of greatest, overturning, resultant force of the wind. This is neither when the storm-whirl is in its infancy, nor yet when it is in its old age, but is rather at that moment when the combined upward rush and whirling velocity is greatest. It is easily shown that this cannot be when the ring is a thousand miles in diameter, for then the vertical thickness of the air-whirl extends from the top to the bottom of the atmosphere, and great lifting power is precluded, and the result is merely a center of low pressure about which the air flows in isobars of increasing depth. It is also easily shown that this cannot be at the moment of tomaing the air-whirl. In its incertion the rotation is slow and the upward rash of air consequent is not great. But in . a certain middle part of the career of such an air-whirl the velocity of rotation becomes great-the ring is then most rapidly expanding; then the air beneath it is also given its greatest rotary motion, and the suction from above is then greatest. This represents the tornado and hurricane stage of such a storm.

Many of the whirlwinds never expand into tornadoes or waterspouts. Many waterspouts and tornadoes are broken in pieces hefore attaining the age of the hurricane, and many hurricanes never expand into the dignity of the cyclones or typhoons. The causes which break these whirls to pieces are doubtless chiefly interference, surface obstruction and watery vapor. Sometimes the air-whirl parts and flies into two storms, and these occasionally also suffer bisection. How and why this occurs will appear by examining Fig. 8 of Plateau's experiments. (Smithsonian Report for 1863, page 223).

n this hypothesis if the paths of the great ærial currents underwent periodic or seasonal displacements, feddies and whirls which take place within them would be displaced into the new paths also, and regions near the upper and lower limit in the latitude of each current, would undergo periodic variation in the relative frequency and intensity of this class of phenomena

During the winter these storm centers traverse the plains in much lower latitudes than in the summer, and in the summer the storm the cylinder is contracted, assuming the figure tracks reach their northern limit. As I stated in the introductory to these papers, whatever may be predicated of the summer months, may generally be asserted to be true of the hot periods of secular time, and whatever is true of the winter months is also true of cool periods in secular time. Therefore if this doctrine is true then must the storm tracks shift northward in hot years and southward in cool ones. Tiere is a possible exception to this so far as the meexpanding ring. The uprushing air is again teorology of the plains are concerned, and I watch with interest the storm record and rain record of Kansas, for this year and next, to determine the point.

> I have pointed out that the effect of an increase in solar energy would be to shift the thermal equator northward, and to cause this displacement to take place more upon a continent than upon an ocean. The limits of this displacement I have not attempted to define, and it is possible that upon the plains the center of summer's heat may be found so far north as to bring the trade winds across the Gulf of Mexico by a nearly due west line, and cause them to be turned upward along the foot of the Rocky Mountains by the combined influence of the barrier and the heated suction of the arid plains. Such an arrangement would cause the present drought to break first where it first began, and the waters thus distributed along the foot of the Rocky Mountains would become the principal feeder for the water

supply of the eastern plains for a brief period. We have a means of knowing whether this takes place or not, in the observations of our streams. If the streams heading near the base of the mountains rise in flood of considerable duration in August and September, while the streams in eastern Kansas run low, then shall we knew that the water is coming in at the 'back door." But if, on the other hand, the streams of the eastern plains catch the rise now booming in the upper Mississippi, and the rise proceeds westward, then shall we know that the water supply is returning by the 'front door." In the former case western Kansas will have heavy rains while the plains are still highly heated, and the clouds will rise on east winds and clear off with west winds In the latter case the clouds will rise on south winds and clear off with north winds

In our wet years the storm centers pass south of us, and in our dry years they pass to the north of us, and we are in their average track in the average year.

When the storm track passes south of us, the wind changes from south to southeast, then east, and clears off east of north. When it passes north of us then the wird and it from south to west, and west to arthwest in clearing

When the shirts are by the eastward, in a ma-When the shi's are by the eastward, in a majority of our strems we have from average to wet years, ard when the shift is the other way, we have from average years to extreme droughts. Storm centers passing to the south of us bring us warm winds that have traversed the Galf of Mexico or the wet regions lying and of the storm track. soutil of the storm track.

Storm centers which pass north of us also pass west of us, (excepting a few which leap the Rocky Mountains,) and by observing the course of the whirl it will be seen that the wind which strikes us has first swept the land west of us-and this though the wind sets our wind-vanes due south or southwest.

This is obviously true of all our whirling storms and rotary winds, and the tendency of the day is to make nearly all of our weather phenomena depend upon circular movements of local winds, and these to depend upon the movements of the great air currents which appear also to flow either in vertical or horizontal circles and elipses.

In the hypothesis proposed to account for revolving storms, the cause of the uprising of an initial mass of vapor or warm air is the only part offering any difficulties. It is at present difficult to understand why there are not more of these revolving storms, if there should be any. It is difficult to understand why all such storms are not attended at some part of their course by a destructive vortex.
C. W. Johnson.

Something About Corn.

Corn is King. Of all the crops of the United States it is the most valuable. Hence anything about corn will be of interest to a large majority of farmers.

Corn requires a comparatively large amount of nitrogen. One hundred bushels contain 128 pounds of nitrogen. The same amount of oats 92 pounds, and of wheat 170 pounds. These figures include both grain and straw. As only about one-third the number of bushels of wheat as of corn grow on an acre, a crop of corn takes twice as much nitrogen as a crop of wheat. But corn, like clover, possesses the peculiar ability to derive nitrogen from the soil. Ninety per cent. of this is returned when the corn is fed on the ground, therefore it would take an almost infinite number of years for corn to exhaust the soil if it was fed on the ground. Excuse so many italics but that is the great point. Raise all the corn you can if, as in Illinois, it pays better than any other crop, but feed it on the soil. Corn as a crop has been badly maligned. Fed to the stock on the farm and it is less exhausting than either oats or wheat. Another advantage of feeding your corn on the premises is that you save much in freight.

Although corn obtains nitrogen not only from the air but from the soil, you may increase the yield by supplying it with free nitrogen, and the easiest way to do this is by plowing under green clover. Every corn farmer knows that 'clover sod is mighty good forn corn," although he might not be able to give the scientific reason therefor. The reason is, first, that clover holds in its structure large quantities of nitrogen. If we take an acre of red clover, one of rye, one of oats, one of peas and one of barley, taking the stubble and roots to the depth of ten inches, we will find that the peas will cohtain two and one-half as much, the wheat and oats about ten per cent. more, the rye three times as much and the clover nine times as much nitro-

gen as the barley. This shows what a large amount of nitrogen clover holds in its roots and stems. When we plow clover under and plant to corn, this nitrogen is furnished to the corn; and it should be remembered that it is furnished gradually just as fermentation and decomposition frees it, saving a supply for earing time when the success of the crop most require it.

The second reason why clover is good for corn is that corn is a tropical plant flourishing best at a high temperature. The fermentation of the clover underneath furnishes and produces this heat first at the roots of the corn where "it will do the most good,"

It should not be forgotten that the presence of the clover in the soil helps it mechanically. Another great advantage of clover as a fertilizer is that its roots penetrate to a great depth. Clover roots have been followed to a depth of seven feet. These roots bring up to the surface available and valuable plant food which would else be forever hid in those inaccessible depths.

Taking into consideration these facts it is not to be wondered at that raises clover upon which to summer the nogs to which he feeds his cloversod corn in the fall and winter. Herein lies the great secret of the eternal fertility of the soil even on a corn farm. A clover field is a hog's paradise in summer. On those sunny slopes of honey-sweet red clover a hog will grunt his stemach's satisfaction all day and thank the blessed fate that permitted him to enjoy what is, to him, nature's sweetest blessing. Running over the field the manure is distributed just where the elements of fertility are taken away while the clover that the hogs do not eat is trampled down to become incorporated in the soil. The hogs will keep fat all summer on the clover alone and in the fall will be ready to eat prodigious quantities of clover sod corn and fatten as hogs never fattened before.

On account of the great depth to which the roots of the clover penetrate it is well suited to withstand drouth. Hence it will be a valuable crop for "drouthy Kansas." It may be said that Kansas is a new state and Kansas farmers need not trouble about renovating worn out land. This is true. But Kansas farmers must be careful or they will have such land on their hands before they know it. No matter how new or how rich your land it will always pay you to maintair that fertility by every reasonable means.

Rye is a good manurial agent in the fertilization of corn ground. But if the season is a dry one, look out. I have known farmers to plow under a heavy crop of rye in the spring, plant to corn, and because the season was dry, raise no corn. The rye underneath would keep the ground loose and ventilated and consequently increase the deleterious effects of the drouth. This same objection applies to stable manure. Besides the greater part of the valuable elements of the manure are absorbed in the growth of the stalk leaving very little for the ear. As a result you will have plenty of fodder but little corn. Do not apply stable manure to your corn. Save it for wheat. Above all do not apply manure to the hill. It is all bosh and foolishness. It starts the corn to grow in the spring perhaps, but that is all and does not pay for the

I have got into trouble in some of the eastern journals by advocating shallow plowing for corn. You will always find plenty who, like Poor Richard, are ready to counsel

"Plow deep while sluggards sleep

And you will have corn to sell and keep," yet I am still in favor of shallow plowing for corn now and all the time. I am not going into a discussion of the matter for I should fail to convince you perhaps if you are a believer in deep plowing and have all my trouble for nothing; but I shall give you a couple of reasons for my belief of and practice of shallow plowing. For be it understood that I am a practical farmer and when I talk of plowing for corn know just what I am talking about.

First, corn is a shallow feeder. You have but to examine it to convince you that this is so. You will find nearly all the roots near the surface. A few it is true penetrate to a considerable depth but these imbibe water almost entirely. Corn being a shallow feeder it will be good policy to keep the elements of plant food near the surface. For this reason I would not plow more than four or five inches deep for

Second, as I have before remarked corn is a tropical plant flourishing best at a temperature of 90 or 95 degrees. Hence the roots stay within a few inches of the surface where it is warmest in summer.

I do not think that the farmers of Kansas will make the mistake that many farmers have made that of raising corn exclusively. This has been too much the case sn Illinois. But the soil of Kansas is so well suited to so many other crops, especially wheat, that the farmers of Kansas can always easily practice a judicious rotation of creps.

I had intended to say something in this article of the planting, cultivation and feeding of corn, but it is too long already and I must make it into a future one. JOHN M. STAHL. Camp Point, Ill.

Timber and Rainfall.

I come now to speak of what I conceive to be he best means to be employed for the purpose of influencing the rainfall of the country. After a somewhat careful examination of the subject, I am convinced that extensive tree planting is the most successful as well as the best paying method that cap be adopted for

this have before stated that during dry times the atmosphere frequently becomes charged with moisture almost to saturation and yet without producing rain. There are two methods, as stated, by which it may be raised to super-saturation: One is to add to its vapor by local evaporation, and the other to reduce the temperature till the same end is reached. Living forest trees affect the humidity in both these ways. The winds that sweep over the plains, where no grasses or belts of timber exist to interfere, flow directly on the surface, absorbing and carrying away both the surface moisture and the radiant heat, thus keeping up the temperature to such a degree that condensation cannot possibly take place.

The presence of timber belts checks these driving winds and deflects them upwards into a higher and colder region where their temperature is reduced, by which they are brought near to the point of saturation. That this is the effect of the elevation of the atmosphere to a higher altitude is proven by the influence of mountain ranges on the rainfall of adjacent countries. Wherever the vapor laden winds from the ocean have to pass over a chain of mountains where they are forced to a considerable altitude, the moisture they contain is condensed and falls in copious showers on the windward slope of the chain, while the winds descending on the other side become dry and thirsty, producing a desert condition. Timber belts have a tendency to produce a like effect. on a smaller scale, of course, in lifting the currents of air and producing rain.

But this is not the only way in which trees influence the rainfall. The roots of trees are constantly imbibing water from the soil, whence t is carried by the circulation of the leaves, where it is exhaled in the form of invisible vapor to the air. The amount of water thus exhaled from vegetation is very large. A good sized tree has been known to thus give off several barrels of water in twenty-four hours. The amount exhaled by an extensive forest is immense, and can but have an important influence on the humidity of the atmosphere.

This exhalation added to an atmosphere already approaching saturation, will frequently eventuate in super-saturation and the precipitation of rain.

In the conversion of the water of the plant into vapor, a large amount of heat is absorbed and rendered latent, so that it is a cooling process, reducing the temperature at the same time that it increases the humidity of the air,

thus operating in two ways to bring about the desired result—a fall of rain.

Again rainfall is largely influenced by electricity. Just how this force is brought to bear to produce the condensation of vapor into raindrops, I do not now stop to inquire. Trees have a wonderful power as generators and conductors of electricity, and through this agency exert a strong influence over the production of

Now if the above reasonings are correct and I certainly think they are, it follows that the extensive planting of forest trees has an important effect on the rainfall of a country preportant effect on the rainfall of a country preparation of timber, while, on the other portant effect on the rainfall of a country pre-viously destitute of timber, while, on the other hand, the general denudation of a timber country of its forests, is generally followed by an important diminution of the rainfall of that region. I shall not enter, in this place, on the proof of these statements though there is abundance of it at hand. It is sufficient here to state the fact that the growing of trees has an to state the fact that the growing of trees has an ameliorating effect on the climate, not only in its humidity but also in regard to its temperal ture, which is greatly modified as to its ex-tremes of both heat and cold. When we con-sider that to these benefits are to be added those that are to be derived from timber belts in breaking the force of the wind, and from the growth of timber for use in the arts, we see the importance of every man, who owns land in this climate, engaging at once in planting timber belts wherever they may be needed for these purposes.

L. J. TEMPLIN.

Karm Stock.

The Angus Cattle.

The American Cultivator gives a fine cut of a pair of these cattle which seem to be gaining in favor in this country and a sketch of the breed in its native country of Scotland.

The Angus breed of cattle is derived from the less elevated parts of the counties of For- that we to-day have only a small, delicate anifar and Kincardine, Scotland. Forfarshire was mal in their stead, many pale red or red and may be regarded as one of the races which are intermediate between the mountains and the richer plains. The older breed of this district was horned, but with a tendency to produce hornless animals, and those who undertook the improvement of the breed bred off the horns; that is, they selected the hornless ones to breed

About the commencement of the present, or the latter part of the last century, the agriculture of this part of Scotland, began a course of rapid improvement, and with it the improvement of these cattle. This breed has a certain resemblance to the Galloway, and a mixture of blood at some period no doubt has taken place, their limbs than the true Galloways, and have not the depth of rib which the latter breed exhibits.

They are driven from their native counties into Yorkshire, Norfolk and Leicester, where they are fatted and then find their way to the Smithfield market, where their beef is considered among the best. One most excellent quality of this breed is their peculiar quietness and docility. They are very easily managed, few losses are incurred from their injuring one another in their stalls, and the power of disposing of a greater number in the same space which the former varieties would occupy, and their extremely quiet disposition, render them well adapted to stall feeding, and cause them to lay on fat rapidly.

Forfarshire is a famous turnip county, and there the cattle are kept in straw yards during six months of the year, rec-iving turnips with their fodder every day in summer. It is recorded of one of the oxen, when slaughtered, that he yielded 240 pounds of rough tallow. The record of one heifer gives her weight, dead, at 2000 pounds. The bone of her fore leg has been preserved, and was not thicker than that of a red deer. When killed her brisket was only eight inches from the ground, and her inside fat was equal to one-fourth her weight. Mr. McCombie of Tillyfour was a breeder and feeder of this kind of cattle, and a short time before his death he exhibited before the queen 400 head of this breed.

The color of the Angus cattle is mostly black, with a few white spots, and sometimes brindled and dark red. At three years of age they will make from 850 to 900 pounds dead weight. Their meat is finely mottled, which renders it a great favorite in the Smithfield market. Being smaller than the Short-horns they will gain in weight, where the large animals would scarcely hold their own. They have been imported into this country to some extent, and are everywhere tavorably spoken of. They would make a class of beef for which there is a great demand, their meat being so well mottled, and their tallow being more internal than ex-

Mr. Joseph H. Rea, of Carroll County, Mo., purchased a lot of these cattle of Mr. Grant of thrifty or otherwise undesirable animals. the Vicoria farm near Ellis in this state, who

"So far as I have experimented with them, I can say that they have made a very favorable impression on me, though I have not tested them sufficiently to give a decided opinion yet in regard to all their merits. I hope to learn more as I continue to feed them. They fatten very easily, and will make good selling cattle when ready for market. However, they will not be as large as the Durhams of the same age, so I am undecided as to which would be the most profitable to raise in this state, the Polled Angus or the Durhams. With plenty of corn and tame grass, the Durhams will be very hard to beat in size and capacity to take on flesh, which makes them profitable to raise and feed for beef. On the other hand the Polled Angus cattle will out-sell them on the beef markets, and they are much more pleasant to handle on a farm. Having no horns, they do not endanger the lives of other stock by being with them, they can be turned to straw and hav stacks and your stacks will not be horned down. You can turn them in your orchard or a lawn where there are small trees and they will not twist them down, as horned cattle do. When it comes to shipping there are no horns to get hung in the slats of the cars or under the other cattle, and in consequence pull them down and endanger their lives by being tramped under foot. I believe them to be a very hardy and shifty kind of cattle, that will likely stand the cold better than some other kinds, consequently well suited for the grazing territories of the west. I would advise western men who have Texas cows to try Polled Angus males, and by so doing get rid of the long horns, as they are undoubtedly a nuisance, and should be abated."

Short-Horn Breeding.

Under the head of "Suggestions to Shorthorn Breeders," a correspondent of the National Lire-Stock Journal has the following to say, which is endorsed by the editor of the Journal:

"Having recently engaged in the breeding of Short-horns, I attended one of the so-called fine-stock sales recently held in the west, for turkey raiser: the purpose of seeing and learning what I There is no doubt but that the chief cause of

of level, square, or plumb. In my early manhood I attended the state fairs of Ohio, about regarded as Short-horns by such breeders as the vant, and others I might name. In my opinion they were real Short-horns, grand and stylish

ually the breeders have bred to paper so fine a dip of the little Jersey-ashy red. If this is it in mine.

"Wishing to post myself on pedigrees, I would take a sale catalogue and go to a breeder and ask him about the pedigrees of certain anso myself. I thought many were far from being as good as some grade steers I have seen, and I must say many new beginners felt disappointed and disgusted to see so little real good stock on sale.

"I may not understand the wants of farmers but they are less compact in form and longer in just engaging in fine stock-raising, but, if I do, I am sure those so-called fine-stock sales will some of these days find themselves without a dozen or so of young turkeys, we make a bidders. I frequently hear the remark that 'I bors would laugh at me if I took such stock home. I will say that there were a few young roofed, tight coop, the front of which opens inthings on sale handsome enough, but they lacked size, and, I think, constitution. For one, I say let there be better stock on sale. This scraping the fag-ends of all creation together to make a sale out of, won't do. Better make steers out of many bulls and spay the delicate heifers and turn them to beef, than to have them used as breeders. Many of the e offered are a disgrace to the name of Short-horns, and not worthy the name of grades. So things ap-NEW BEGINNER.

The Sheep Owner's Opportunity.

The paramount consideration, with the average flock owner, is to realize the greatest profit from his investment of capital and subsequent care and attention. To the question, How is this most certainly to be secured? The Journal has often answered, and now reiterates, get the best stock within your reach; so breed and feed these as to secure the highest development, create and preserve for your flock and its products such a reputation as will insure a ready market at good relative prices; try very few experiments; stay on solid ground, even though the flashes of profit promised by a deviation, or the shadows of temporary disappointment, may invite you to walk in new fields. No matter what the blood, or how nearly perfect the animals may be, intelligence, liberality, and kindness on the part of the shepherd will make them better; and with such improvement will come additional profit—profit through increased weight of fleece; profit through heavier and better developed carcasses; profit through a heavier percentage of lambs, and their speedy and more perfect development; profit by reason of securing outside prices and ready sale for whatever is placed on the market, because of its superior quality; and, finally, the advantage of freedom from the many hardships and annoyances inseparable from attendance upon un-

Though every flock owner cannot have that no one is so circumstanced that he cannot with certainty and comparative rapidity advance the excellence of su h as he may possess. Animals of great excellence, representing all varie ties or all breeds, can be had at prices within the reach of every breeder. Feed is plenty, labor is cheap, information upon any point of doubt can be had for the asking, prices are good, and demand active-in short, the opportunity and incentive for a general advance all along the line of those engaged in sheep husbandry are at hand, and those who do not in tend to avail themselves thereof had better stand aside, for there are unmistakable signs of a forward movement .- National Live-Stock

Foot-Disease In a Cow.

The common disease in cows and sheep which appears by watery blisters on the feet and between the claws of the hoof, followed by raw spots which are difficult to heal, is known as aphthous fever. Sometimes it is accompanied by similar blisters on the lips and tongue. when it is called "foot and mouth disease." It is a fever, or blood disease, and is contagious and troublesome, but not serious, and easily submits to treatment as follows: Give one pound of salts, and when that has operated, give one ounce of hyposulphite of soda daily; wash the sore spots with water and soap, and dress them with an ointment made as follows, viz: Melt four ounces of lard and one ounce of spermaceti together, add one ounce of acetate of copper (verdigris,) and stir thoroughly, and while still fluid add one ounce of turpentine and stir until cold. Keep for use. This ointment is excellent for any raw sores or galls, and may be usefully kept in any stable.—American Dairy-

Loultry,

Care of Turkeys.

The following "turkey talk" by Fanny Field contains all the advice necessary for an amateu

could. Some things appeared to me a little out the mortality among young turkeys is their exthe most convenient manner for them to pick

posure to wet before they are fully feathered. and swallow into their crops. These require- Skill will come in doing what is necessary, and The ordinary turkey raiser trusts a good deal ments will be found in old plastering, broken the years 1853 to 1855, and saw what were then to the instinct of the mother turkey, and the mother turkey if left to herself squats down with some of the gristle and meat attached. It Renicks, Vances, Hadleys, Dr. Watts, Sulli- just where night happens to overtake her; gets up early in the morning and wanders around in the wet grass in search of food, and as a naturoans mainly, and a few whites and reds. I ral consequence more than half of her brood you that they like and need it. The instincts fail to see them now, or their equal. Individ- die of chills and cramps before they are a of the hen in summer, with a proper range, month old, and more than likely the other half will teach it what and where to collect the vais gobbled up by some four footed prowler. Dew is about as fatal as poison to young turkeys once known as Angus. This breed of cattle white spotted, and some looking as if they had before they are fully feathered, and it you expect to raise your turkeys, and make the rearimproving the breed, then I do not want any of ing of them profitable, you must keep them out of the grass when it is wet with dew until they are about two months old.

I have a large, well lighted, gravel floored shed, where I can confine my young turkeys in imals. The answer would often be, 'Oh, that's the morning, until the sun has dried the dew not much better than a grade, yet recorded in off the grass, and on rainy days they are kept the American Herd Book.' Well, I thought in the shed all day. The mother hens are conin the shed all day. The mother hens are confined in slat coops placed along the rear of the shed. Where one raises turkeys in large numbers I think some such arrangement would pay, but the ordinary farmer, who only raises a few dozen for market each year, would not care to go to the expense of putting up such a building, and for their benefit I will describe a pen that I have found very useful: For a family of square pen by placing boards sixteen inches cannot buy anything on sale here.' My neigh- wide and six feet long on edge and fastening them in position. At one side is a large, slantto the pen. There is no floor in this coop, but as it is perfectly tight, except the augur holes for ventilation, and we always set it in a dry spot where the rain cannot wash under it, and move the coop and pen often, the young turkeys are always dry and comfortable.

But where the ground is damp and the rain would be likely to wash under the coop there should be a board floor covered with gravel, which should be cleared out and renewed often. For a few days after the poults are hatched, whether you raise them with a hen mother or a turkey mother, they must be confined to this coop and pen. Then if all appear strong and well and the weather favorable, open the pen and give the young liberty after the sun has completely dried the dew off the grass. Should a sudden shower come up while our young turkeys are out in the fields you must turn out and drive them to the coops. If any are chilled take them to the house, dry and warm them thoroughly, give them a good feed, with plenty of ginger or red pepper in it, and then return to the mother hen. See that your turkeys come home every night. At first, if you raise them with a turkey mother, you will have to hunt them up and drive them home, but if you feed regularly every morning and always at night, they will soon learn to come home as regularly for their supper as the cows.

After they are fully feathered, and have throws out the red on their heads, which usually occurs at about three months, young turkeys are hardy, and may be allowed unlimited range at all times; and from this time on as long as the supply of insects lasts, they will thrive on two meals a day. Keep your turkeys growing right straight from the shell, and you will find that it will pay when pay-day comes. Some farmers, as soon as their young turkeys are feathered, turn them out to get their living the best way they can until a few weeks before Thanksgiving; then they stuff them for a few weeks, and wonder why they do not equal in his turkeys growing all the time from the day they were hatched. Where insect forage is abundant turkeys will pick up the greater part of their living for three or four months, and in such localities it will do to turn them out after they are three months old without any breakfast, but I think they should always have a handful of grain at night, even if they come home with full crops.

Points in Poultry.

At a late meeting of the Lancaster, Penn. Agricultural and Horticultural Society, Dr. C. A. Greene read the following essay upon the subject of poultry raising:

For forty years, with occasional interruptions, it has been my fortune, as boy and man, to care for poultry, and some experience I have gathered during these years, I propose now to make public for all who are interested in the matter, and for convenience sake I will arrange the facts under different head.

Hens, if properly kept, are a source of profit and comfort to the owner. The eggs can be increased in size and rich-

ess by proper feeding of the fowls. They require a variety of food, and get exessiyely tired of one kind. The egg contains almost all the constituents

of the human body, and hence the hen must have a variety of food to construct it. The hens cease laying when improperly fed,

or when in a diseased condition. They require a warm, clean, properly ventilated house for winter months.

If by neglect vermin infest the bird roosts and house they should at once be removed, as they are deleterious to the health of these friends of man.

The dropping of the hens should be occasionally removed. They should not be allowed to accumulate. The floors should be covered with loam or sand.

As hens require a deal of water, drinking only a small quantity at a time, it should be supplied abundantly, and kept clean and fresh. As they require and must have carbonate and phosphate of lime for their shells, it must

be given them in unstinted quantities, and in

oyster-shells, and best of all in fresh bones, should be cut up on a log with a hatched every day; the strife made by the fowls to get at it when offered to them, will plainly prove to riety of food required. In winter, when housed, man must supply it to them.

As hens have no teeth, and drop their food into their crops unmasticated, in order to digest it, they must have access to stones and gravel, which being swallowed, take the place of teeth in their stomachs, hence they must have a liberal supply of gravel.

The application of sulphur sprinkled upon the fowls, while roosting or otherwise, with a pepper-box, will destroy vermin. Coal-oil applied to their roosts in small quantities, will also kill parasites. Two or three drops of whale oil, dropped occasionally on the back of a hen or any other bird, will kill lice.

The nests must occasionally be renewed and kept clean. Straw is better than hay. Tobacco stems covered with straw is an excellent prevention of insect breeding, especially when they are sitting.

When clucking and not needed for mothers, the quickest way to stop their chicken-raising desire is to put them in boxes or cages without anything to lay upon except the boards.

A few fowls in separate pens are much mor profitable and more easily kept healthy than in large numbers.

They require and must have in winter green food, such as grass, turnips, beets, or cabbage leaves.

Corn and wheat middlings, corn unground, oats, bread, and other slops from the house, should all be fed, changing as often as twice a Hens should be killed when three years old,

as they lay less eggs every year after the third, and they naturally become diseased, and are not so good eating when older. French poultry fanciers feed fowls designed

for market with barley and steamed yellow carrots. This feed is remarkable for its rapid fattening qualities.

Apiary.

Aids and Helps to Bee-Keepers.

At the outset I wish to state that I shall not, perhaps, present anything new to experienced bee-keepers, but simply hints and helps to beginners. I am almost constantly receiving letters from those who seek to know the best way to commence bee keeping. Many seem to think it a matter requiring much knowledge and instruction. One of the most frequent questions is: "Would you advise me to undertake it without previous study and some practical knowledge?" The answer to this is plain. If you wish to keep cows, you buy cows, and begin to learn to milk by milking them. If you wish to keep poultry, you buy as many fowls as you can afford, and having done this you are interested to know more about their proper care, and you read about them, watch them, and are a poultry keeper without more ado. I advise you to go about bee keeping in the same way. Buy a few stands, or even one, then get the theweight those of their neighbor who has kept ory from bee books and journals; watch your bees and continue the practice with the theory. There is nothing about the matter that is mysterious in a practical sense now, thanks to those who have practically investigated the "myste-

ries" for us. If you can afford to spend the money and can get Italian bees in just the right hives, that is, of course, the easiest way. If not, buy just what you can get, and as soon as convenier. transfer the bees to good movable frame hives and then Italianize. Decide what hive you will adopt, and do not allow yourself to think it must necessarily by a "patented" hive. The best hives, and those most widely in use at the present by successful and scientific bee keepers, are covered by no patents, and can be manufactured at one dollar and a half each-or less. Always use good material, and knowing the dimensions of the hive you adopt, you can easily obtain widths and lengths that can be cut with

little waste. A word right here to my old, experienced brother bee keepers. You who have purchased hives, etc., let me offer you a money-saving hint. Obtain a good foot-power saw, manufacture your own hives and save 50 per cent. You can easily cut up material for twenty hives per day. With it you can manufacture everything needed, from a complete hive down to a "prize" dovetailed section box. The "Barnes" (Rockford, Ill.) combined saw is good for this purpose. I have found it of the greatest practical benefit, and I doubt if there is, or can be, a more useful article to the apiarist than a thoroughly good foot power saw. Beginners in bee keeping will find it a pleasure to make their own supplies, and will take pride in doing it well, and carefully.

That little "all" once in a savings bank, or the few dollars wisely laid away in the "ancestral stocking," will come very handy by-andby to purchase from your nearest supply dealer the honey and wax extractors, comb foundations, and other necessities for your apiary. One piece of advice I deem very necessary: Remember you cannot expect to begin where other people have arrived by years of practical labor and study. There is no "royal road" to success in this business, any more than in other branches of industry. Perseverance, patience. and, withal, a little courage, are the requisites.

in no other way. J. G. BINGHAM.

Forticulture.

Electro-Horticulture.

It has often been remarked by Arctic explorers that plants which require several months to ripen their fruit in temperate climates, complete the same round of budding, blooming and maturing in a few weeks under the continuous sunshine of the Arctic summer. A corresponding rapidity of growth is shown by annuals in sub-Arctic latitudes, as in northern Norway, where the summer sun, though never reaching a high altitude, yet remains above the horizon from sixteen to twenty hours a day.

A species of corn which flourishes in Canada failed to ripen in Kentucky, though the warm season there is some weeks longer than in Canada. The superior rapidity with which vegetation pushes forward during periods of full noon and light nights has also been widely noticed; these facts of general observation, with others of a more experimental character, going to show that many of the plants of our temperate climate thrive in proportion to the duration of the daily (direct or indirect) sunshine they enjoy, rather than according to the temperature of the air.

A curious confirmation and extension of these observations in regard to the influence of light upon vegetation is furnished by the recent experiments of Dr. C. W. Siemens, testing the influence of the electric light upon certain plants. These experiments were described by Siemens at considerable length at a late meeting of the Royal Society in London. According to the report of the London Times, the method pursued by Dr. Siemens was to plant quick-growing seeds and plants, such as mustard, carrots, ruta-bagas, beans, cucumbers, and melons, in pots, dividing the pots into four groups, one of which was kept entirely in the dark, one was exposed to the influence of the electric light only, one to the influence of daylight only, and one to daylight and electric light in succession. The electric light was applied for six hours each evening-from 5 to 11-and the plants were then left in darkness during the remainder of the night. The general result was that the plants kept entirely in the dark soon died; those exposed to the electric light only or to daylight only throve about equally, and those exposed to both day and electric light, throve far better than either, the specimens of mustard and of carrots exhibited to the society showing this difference in a very remarkable way. Dr. Siemens considers himself as yet only on the threshold of the investigation, but thinks the experiments already made are sufficient to justify the following conclusions :

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1. That electric light is efficacious in producing chlorophyl in the leaves of plants, and in promoting growth.

2. That an electric center of light equal to 1,400 candles placed at a distance of two meters from growing plants appeared to be equal in effect to average daylight at this season of the year; but that more economical effects can be obtained by more powerful light centers.

8. That the carbonic acid and nitrogenous compounds generated in diminutive quantities in the electric arc produce no sensible deleterious effects upon plants inclosed in the same

4. That plants do not appear to require a period of rest during the twenty-four hours of the day, but make increased and vigorous progress if subjected during daytime to sunlight and during the night to electric light. 5. That the radiation of heat from powerful

electric arcs can be made available to counteract the effect of night frost, and is likely to promote the setting and ripening of fruit in the open air.

6. That while under the influence of electric light plants can sustain increased stove heat without collapsing, a circumstance favorable to forcing by electric light.

7. That the expense of electro-horticulture depends mainly upon the cost of mechanical energy, and is very moderate where natural sources of such energy, such as waterfalls, can be made available.

In the discussion which followed the reading of the paper it was pointed out that the evidence seemed to show the practical identity of solar and electric light with respect to their action on vegetation; and it was suggested that the method of subjecting plants to electric light might afford great facilities for the scientific investigation of the influence exerted by light, as compared with other agencies, in promoting the formation of the active principles or most valuable constituents of plants, such as the quinine of the cinchona bark, the gluten of wheat, etc. Before concluding his observations, Dr. Siemens placed a pot of budding tulips in the full brightness of an electric lamp in the meeting room, and in about forty minutes the buds had expanded into full bloom.

Nurserymen and horticulturists have remarked the rapid growth trees make in Kansas as compared with localities further east. The above experiments would seem to indicate that the main cause of this is the large percentage of cloudless weather, very clear atmosphere and bright moonlight, which are characteristic features of the country stretching east from the base of the Rocky Mountains, known as the plains.

Warm and airy stables, great cleanliness with the animal and her products, judicious feeding of cows, and feeding of pastures, are the indispensable means to supply milk in quality, quantity and soundness, capable of resisting decay.

Entrons of Husbandry.

NATIONAL GRANDS.—Mistor: J. J. Woodman, of Michigau; Secretary: Win. M. Ireland, Washington, D. C.; Treasurer: F. M. McDowell, Wayne, N. Y. BERCUTIVE COMMITTEE.—Henley James, of Indiana; D. Wyatt Aiken, of South Catolina; W. G. Wayne, of New York.

KANSAS STATE GRANGE.—Master: Wm. Sims, Toperas, Shawnee county; Secretary: P. B. Maxson, Emporia, Lyon county; Treasurer; W. P. Popence, Topera.

ka, Shawnee county; Secretary: P. B. Maxson, Emporia, Lyon county; Treasurer; W. P. Popence, Tope-ka.

Executive Committe.—W. II. Jones, Holton, Jackson county; Levi Dumbauld, Hartford, Lyon county; J. S. Payne, Cadmus, Llin county.

County Deputies.—J. T. Stevens, Lawrence, Douglas county; T. B. Tyers, Beatty, Marshall county; E. R. Powell, Augusta, Butler county; C. F. Morse, Milo, Lincoln county; A. J. Fope, Wichita, Sedgwick 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. W. Cone, Topeka, Shawnee County; J. Mechons, Holton, Jackson county; Charles Disbrow, Clay Centre, Clay county; Frank B. Smith, Rush Centre, Rush county; G. M. Summerville, McPherson, McPherson county; J. S. Payn, Cadmus, Linn county; Charles Wyeth Minneapolis, Ottawa county; F. M. Wierman, Mildred, Morris county; John Andrews, Huron, Atchison county; George F. Jackson, Fredenia, Wilson county; D. C. Spurgeon, Leroy, Coffey county; James W. Willams, Peabody, Marion county; R. T. Ewalt, Great Bend, Barton county; C. S. Worley, Eureka, Greenwood county; James McCornnick, Burr Oak, Jewell county, L. M. Earnest, Garnett, Anderson county; M. P. Clark, Kirwin, Phillips county; George F. Larned, Pawnee county, A. Huff. Salt City, Sumner county; J. Mams Faulkner, Iola, Allen county; W. J. Ellis, — Miami county; George W. Black, Olathe, Johnson county; W. D. Covington, Smith county; F. F. Williams, Eric, Nossio county; J. O. Vanorsdal, Winfield, Cowley county; George W. Black, Olathe, Johnson county; W. D. Campbell, Red Stone, Cloud county; Arthur Sharp, Girard, Crawford county; P. P. Maxson, Emporia, Lyon county; A. M. Switzer, Hutchinson, Emporia, Lyon county; A. M. Switzer, Hutchinson, Empora, Lyon county; A. M. Switzer, Hutchinson, Reno county; S. N. Wood, Cotonwood Falls, Chase County; George Read, Hutchinson, Reno county; S. S. Wood, Cotonwood Falls, Chase County; G. S. Kreeland; Keene, W

We solicit from Patrons, communications regarding the Order. Notices of New Elections, Feasts, Instal-lations and a description of all subjects of general or special interest to Patrons.

A Grange Pic-Nic.

I have just returned from a trip through Miami and Linn counties. The wheat crop of these two counties is not up to the average owing to the fact that much of it was winter killed, and besides, later, those pestiferous little insects, the chintz bug, has materially injured it both in yield per acre as well as grade.

The corn crop is looking fair yet it is uneven on the fields, and on some farms very weedy. Besides there are hundreds of acres next to wheat fields dead and dry enough to burnkilled by the bugs.

Flax is looking well and will make a fair crop-not weedy.

The oats are short in straw but well filled and will yield splendidly unless the prairie pests destroy them.

I have no where in Kansas seen better timethy meadows than they have.

The Patrons of Linn county held a grand basket pic nic in a beautiful grove a half mile from the young and prosperous city of Pleasanton. There were one thousand happy people present. Happy because they had an abundance of shade, cold water, ice, and stirring music by the Pleasanton band, and above all full baskets.

The exercises of the day began at 10 o'clock, a. m., by an address of welcome by the president of the day, Bro. Lattimer, who was followed by our worthy master, Simres, of the Kansas state grange, in a sharp, ringing address of over an hour's length. It has been my pleasure to listen to him on many former reunions, but never have I heard him express himself so forcibly yet so eloquently.

And then followed the dinner-and such a dinner. Talk about a dinner at Delmonico's, at the Grand Central, or the Grand Pacific. I ard Oil Company's latest scheme: never enjoyed one half so much as I did this one furnished by the matrons of Linn county,

After dinner Col. Waugh, of Johnson county delivered an address occupying one hour, who was followed by H. C. Liverman of the Olathe Grange Star on the necessity of co-operation among Patrons. This address was listened to with lively interest by every one present. Ero. Liverman ought to lecture to every grange in this state, for he presents this subject in a clear and logical manner.

After short addresses by others, the meeting adjourned with much good feeling, satisfied that the interests of the Patrons of Husbandry had been materially advanced by this re-union.

G. W. Gordon, Kas.

The Pennsylvania System of Co-operation.

Patrons who have an interest in the business arm of the order will agree with us in the opinion that we cannot too often refer to the subject of co-operative purchases of domestic supplies and sales of farm produce. There is no difficulty in convincing those who attend their grange meetings regularly of the social and educational advantages of the grange; these stand out so prominently that "he who runs may read," and every observing patron will testify to the fact that farmers in the grange have, during the past six or eight years, advanced in knowledge and improved in their social relader. These, we say, are undisputed facts, uni- land grab. versally admitted, and if there were no other objects attainable in the grange than those above stated the larger portion of the present membership would cling to the organization on corporation like the Standard Oil Company to account of the pleasures to be derived from its educational and social features.

But there is another important and prominent feature in the farmers' organization which is equally necessary to its advancement and perpetuity. It is co-operation in business. We admit that wealthy land-owners, who have plenty of means outside of the income derived from farm products, need care but little whether they pay one profit or half a dozen on their domestic supplies, farm implements, etc.; but the great mass of the agricultural population

are comparatively poor, and have been kept so for generations by paying tribute, in the shape of profits, to all other classes, and by being compelled by taxation to pay more than twothirds the expenses of local, state and national governments. This is the class of which the grange is largely composed, and it is for the benefit of this class that the business arm o the order is maintained. Yet, strange as it may appear, a large portion of the membership fail to make use of the means provided for their direct benefit. These are the patrons whom we desire to interest in this article. The reasons they usually give for not supporting and upholding the regular business houses of the order are so flimsy and unfounded that we will not take space to notice them at this time. We make the assertion, after considerable experience and careful investigation, that the business arrangements made by the present executive committee of the Pennsylvania state grange are superior to any ever heretofore adopted, either in this or any other state. The experience of the past two years has fully demonstrated this fact, and the patrons who have steadily availed themselves of our present purchasing system, with one accord, bear testimony to the truth of this assertion,-Farmers Friend.

Not At War.

The Patrons of Husbandry, as an organization of farmers and producers of the soil, are verily not at war with any people or class of people. Neither are they in love with political demagogues, who frewn upon their inherent rights; with corruptionists, who hesitate not to swindle them of the taxes they pay for support of state and national governments; with monopolists, who would crush them to the earth with their rule or ruin principles; with middlemen, who are the stool-pigeons of the monopolists; with extortionists, who have neither conscience nor fear of the devil to do wrong; or with a great majority of the lawyers of to-day, who are the agents of the class just enumerated, and always lying in ambush to trick the unsuspecting farmers. With all of these the Patrons of Husbandry cannot claim fellowship.

Now to rid ourselves of the enemies of the Patron and farmer all it is essentially necessary to do is to deal directly, or more nearly so, with honest manufacturers, through our authorized grange agents, than we have in the past; and the more directly we deal, or require our home merchants to deal, the less necessity for middlemen, and the fewer of them there will be unless they manage to live on wind, and they do not have the appearance of being able to do so now, and remain as sleek and fat as they are.

Likewise, if lawyers are too numerous, de away with so much litigation, then the lawyers will be fewer in number, unless they are given more offices, and that remains with the farmers, for the farmers and all those who stand with them are in the majority in these United States if they will but unite their strength and inde-pendly resolve that they will no longer yield obedience to the cruel exactions of their would-be masters. We have heretofore had a great be masters. We have heretofore had a great deal of talk upon these subjects, and some action. Now let us have more action; and such action as will tend to our mutual benefit in many more ways than one .- Farmers Friend.

Another Constricting Serpent.

The Petroleum World, published at Titusville. Pa., gives the following account of the Stand-

During the past few months the Standard has had agents through the northwest buying lands, principally in Minnesota, for which in every instance cash has been paid. None but the best wheat lands are being taken. These purchases have already amounted to 40,000 acres in Minnesota alone. Two weeks ago a man was sent quietly from Pittsburg to superintend a large portion of this land. Of the 40,000 acres, 20,000 will be broken up and cultivated in wheat this year. Purchasing agents are still in the northwest, and the work of gobbling lands continues. This purchasing committee travels in a special car, and when they encounter a tract of land that suits them, it is at once absorbed. Much of this property is in the shape of land grants to railroads. It is the intention of the Standard to possess a million acres of the choicest wheat lands before another year. The chances are that they will have this enormous quantity inside of six months, as the work of buying is being carried on in the most princely manner. Whole townships and counties are passing in blocks into the hands of the Standard. It is said to be the most gigantic land speculation that any country has ever known, and yet so secretly has it been carried on that nobody outside the giant oil monopoly knew of it until 40,000 acres had been gobbled

-These enormous purchases are being made from the profits of the Standard's oil business, a large percentage of which comes in the shape tions to a much greater degree than those of of rebates from railroads. None of the capital their class who have held aloof from the or- stock of the company is being tied up in this

> Discussing the big speculation, a prominent railroad man says: "In this, railroad managers can see some of the results of permitting a exact drawbacks and rebates on shipments." Aside from rebates on freights, a large portion of the Standard's profits comes from their manipulation of the oil markets These are but two of the sources whence the monopoly can draw for the capital they are now investing in these western lands. A corporation that can increase its assets to \$22,000,000 in ten years on a capital of \$100,000, control legislatures and the three great trunk lines of the country, is probably not pressed for funds.

The opinion obtains among those who are

cognizant of this move of the Standard, that the object is to get control of the wheat market as they now control the oil market. They will be large producers of wheat, and if necessary, large buyers as well. It is thought their power over the railroads, as shown in the transporta tion of oil, will enable the Standard to say to the world just how much it shall pay them for its daily bread.

At a late meeting of the New York Board of Trade, the committee on transportation made a strong report, charging corrupt practices upon the railroads in packing the New York legislature and even with sending delegates to the national conventions. It is said the whole railroad system is a plan "for the distribution of wealth and commerce to the many for the benefit of the few," and says: "Unless charges for transportation are based upon the cost of service, and regulated by law, the railroads are virtually owners of the country; indeed it is more advantageous to the railroad managers than if they had a proprietary interest in all property; for with charges for transportation based upon the principle of what the tariff will bear, and with the railroad managers sole judges of this question, they can tax all production and commerce to the extent of the entire profit without the trouble or responsibility of ownership."-Grange Bulletin.

The farmer knows as well as any one the real value of money, and is there any one better adapted to spend it economically than he? Growing out of these thoughts are questions which can be discussed with profit in our granges. The time spent there should not be entirely occupied in the lighter questions discussed in our social gatherings. Singing, recitations and the gossip of the day are all well in their place. They are a great relief to the monotony of the farmer's life, yet even these may be interspersed with subjects of a graver and more important bearing. At the same time the great idea of the universal brotherhood of man should never be lost sight of. The idea inculcated should not be that we are here for the purpose of preying one upon an-other, but our object should be to benefit each other as far as possible.

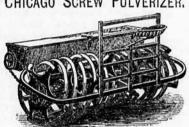
CENTRALIA, Nemaha Co., June 25. - Again the rain falls in gentle showers. It has been some time since we have had rains, and the surface of the ground was getting rather dry, especially that which has not been thoroughly cultivated. But we have needed rain more on account of the chinch-bugs, which are very bad in some localities, doing a great deal of damage to small grain. They made their appearance early this year, I suppose on account of so much dry weg per. Fall wheat was out of their way, but they worked some on rye, and now they are taking the spring wheat. One piece of spring wheat in this neighborhood, which one week ago was as promising as I ever saw, is now all dead, except a small corner. The bugs are just beginning on mine, as I see by the white spots in it. If they will leave the corn, I will not complain, but I will hate to see that go. I think I have as fine a prospect for corn as I ever saw.

Stock is doing well; no disease from which it is suffering. Hay will be short, and as there is such a large amount of stock (5,873 horses, 35,251 neat cattle, 302 mules, and 882 sheep,) for the size of the county, there will be a scarcity of hay. A. L. Sams.

Keep your bowels and kidneys in healthy state by the use of kidney wort.

Advertisements.

CHICAGO SCREW PULVERIZER.



Does Pulverization pay?

EL PASO, Ill., Nov. 25, 1879 — Have been using the Screw Pulverizer three seasons. This year have used it wholly—have not used a plow at all. Planted eighty five acres to corn, prepared and cultivated wholly with this machine, and nothing else. Produced over sixty bushels per acre. Matured ten days earlier, and averaged more than twenty bushels per acre more than adjoinin fields, plowed and cultivated in the ordinary way. The less cost and more corn per acre would more than pay for machine complete on 45 acres.

E. S. Fursman.

ABILENE, Kas., Nov. 10, 1879.—I seeded 3.400 acres of wheat with these machines this Fall, and found they did the work well. The stand of wheat is now the best I have ever seen on new land. It will pulverize and seed the ground in better shape, and very much cheaper, than it can be done by the old method of plowing—backsetting—dragging and drilling, R. J. WEYMESS, Trustee.

Sond for Pamphlets, free, with Letters from over Sixty Men using the Machine, and Cuts showing these Knives in Cultivator Frames for Corn or Cotton,

Address the Manufacturers, CHICAGO SCRAPER & DITCHER CO.

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The Largest German Paper in the State. Devoted to the

Interests of the State of Kansas,

If you want to reach or communicate with the Ger man speaking people of the state, advertise in or sub-scribe to, the STAATS-ANZEIGER. PHIL. SCHMITZ, Publisher, 209 Kansas Avenue, Topeka.

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miles south west of Neosho Falls, Woodson County



CHAMPION HAY GATHERER.

Saves expense of Winrowing and Shocking. This Rake gathers the hay perfectly clean from the swath from 400 to 700 pounds at a time and carries it to the stack. The Rake is then backed from under the hay Will adjust itself to uneven ground. Has been thoroughly tested. Saves from 50 to 75 per cent over the commen way. Price \$25 Parties wishing to buy Rakes or the right to manufacture them can get terms by addressing S. B. GILLILAND, Salisbury, Mo.



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TOPEKA, KANSAS,

Have on hand

\$100,000 TO LOAN

In Shawnee and adjoining Counties on good Farm security

At 8 and 9 per cent.,

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CHUMO CONTRACTOR

OVER 11,000 IN USE THE BEST IN THE MARKET MADE ENTIRELY OF GALLVANIZED IN AGENTS WANTED ZIMMERMAN FRUIT DAYER CO. Cincinnati, O



We send on 30 Days' Trial our ELECTRO. VOLTAIC BELTS, BANDS, Supensories, Trasses, and other appliances, to those sudering from Phances, to those sudering from the verying behildity, Weaknesses, or Lost Vitality from any cause; or to the affilied with Ebaumatism, Speedy cures guaranteed. Oar Illustrated Pamphlet Free. Address VOLTAIC BELT CO., Marshall, Mich.

W. W. MANSPEAKER. WHOLESALE AND RETAIL GROCER.

227 Kansas Avenue, Topeka, The largest Grocery House in the State.

Goods Shipped to any Point.

We buy for Cash; buy in large quantites; own the block we occupy, and have no rents to pay, which enable us to sell goods

VERY CHEAP. Farmers and Merchants in country and towns west of Topeka are invited to send for circulars and price list.



CURES WHEN ALL OTHER MEDICINES FAIL as it acts directly on the Kidneys, Liver, and Bowels, restoring them at once to healthy action. HUNTS REMEDY is a safe, sure and speedy cure, and hundreds have testified to having been cured by it when physicians and friends had given them up to die. Do not delay, try at once HUNT'S REMEDY.

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Washburn College



The Fall Term Opens on

Wednesday, Sept. 14, 1880.

Four courses of study optional—Business, Scientific, Classical, Preparatory and Collegiate.

Excellent rooms for young men in the College Hall at from 25 to 50 cents per week. Good table board at \$2.00 per week.

The Hartford Cottage for young ladies is now completed. Rooms furnished for the most part at from 20 to 50 cents per week. The domestic arrangement is on the Mount Holyoke plan. Each young lady aids in household work to the extent of about an hour a day, un'er the personal supervision of the matron. In quality of instruction, in attractive and comfortable facilities for room and board at exteremly low rates, and in Increasing appliances of Library, Cabinet and Apparatus, the College now offers unusual inducements to youth of both sexes desirous of securing a thorough education. Address,

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MILLER BROS. Junction City, Kansas, Breeders of Recorded Poland China Swine (of Butler county Ohio, strains); also Plymouth Rock and Brown Leg-horn Fowls. Eggs, \$1.50 per 13. Descriptive Circu-lar and Price List free. Nurserymen's Directory.

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Breeders' Directory.

HALL BROS, Ann Arbor, Mich., make a specialty
of breeding the choicest strains of Poland-Ch
Sulfolk, Essex and Berkshire Pigs. Present prices a
less than last card rates. Satisfaction guaranteed. few splendid pigs, jilts and boars now ready.

OSHUA FRY, Dover, Shawnee county, Kansas, Breeder of the best strains of Imported English Berkshire Hogs. A choice lot of pigs from 2 to 8 nonths old for sale. Prices to suit the times. Correspondence solicited.

FOR SALE. Scotch and black & tan ratter pups, \$10 each; shepherd pups, \$15 to \$25; also pointers and setters. These are lowest prices. All imported stock. A. C. WADDELL, Topeka.

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 applicatioe. E. F. CADWALLADER, Louisburg, Ks.

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

JAMES A. BAYLES.

Lees' Summit, Jackson County, Mo., Has the largest and best Nursery Establishment in the West. Correspondence promptly answered.



SouthernKansas Swine Farm.

THOROUGHBRED POLAND-CHINAS and BERK-SHIRE Pigs and Hogs for sole. The very best of each breed. Early maturity, large growth, and fine style are marked features of our hogs. Terms rea-sonable. Correspondencesolicited.

RANDOLPH & RANDOLPH.

Emporia, Kansa

RIVERSIDE FARM HERD OF POLANDS, Established in 1868.

I have in my herd the sow that took first money and sweep-stakes, and the sow and bear undersix months that took first premium at Kansas City Exposition in 1573, and the sow, boar and litter that took first premium and sweepstakes over all at the meeting of the Lyon County Agricultural Society in 1879. Thase pigs are all of my own breeling, and are com-petent for oper and out nothing but first-class pigs. All stock har lanted, "Vipped as ordered on receipt of money."

Shannon Hill Stock Farm



G. W. GLICK, Atchison, Kansas



THE AMERICAN POULTRY YARD.

(Weekly). Both publications are exclusively devoted to Poultry. Published by H. H. STODDARD, Hartford, Conn. The Poultry World is sent post-paid for \$1.25 per year; the American Poultry Yard for \$1.50. Both papers for \$2.00. A stries of 12 magnificent chromos, each representing a standard breed of fowls sent for 75 cents extra, to all subscribers of either publication.



HIGH CLASS POSLIN, C. C. GRAVES, Browneville, Ma. (NEAR SEDALIA.) Breeder & Shipper. EGGS FOR HATCHING for Illustrated Catalogue,

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C. C. HUNTER, Proprietor, Florist, Seedsman and Market Gardener, HOUSE PLANTS A SPECIALTY.

Corner 3d and State streets, Concordia, Cloud Co., Ks.

THESORGOHANDBOOK

A Treatise on Sorgo and Imphee Canes, and the Minnesota Early Amber Sugar Cane. The EDITION FOR 1880 is now ready, and will be sent free on application. We can furnish PULIS CANE SEED of the best variety.

BLYMYER MANUFACTUBING CO., Cincinnati, O. Sugar Cane Machinery, Steam Engines, Circular San Hila, Portalis Grain Hills, Charch and School Belin, &c. Attention, Owners of Horses!



is the only permanent and reliable pai for sore-necked herses or mules that has ever been produced, and has been to produced and has been greatly improved since Jan.

1, 1880. The new pad of proper sizes, with iron loops in top, can be buckled close at the top if desired. Being of smooth metal, they do not wear the mane, and always dispense, when needed, their medicinal virtues. There are over a million and a half of them in use. Pads made of other material can only temporarily have any curative properties whatever, and soon become worthless by abrasion in cleansing them. use, Paus made of other material can only tempora-rily have any curative properties whatever, and soon become worthless by abrasion in cleansing them. The Zine Pads are sold by leading Saddlery Houses throughout the country, and harness makers general-ly. Ask your harness maker for them. Mannfactur-ed by ZINC COLLAR PAD CO. Buchanan, Mich.



FIFTEEN different machines with which Builders, Cabinet Makers, Wagen Makers, and Jobbers in Miscella-neous work can compete as to QUALITY and PRICE with steam power manufacturing; also ama-

tuers' supplies, saw blades, designs for Wall Brackets and Builders's scroll work.

Machines Sent on Trial.

you read this and send for catalogue W. F. & JOHN BARNES, Rockford, Winnebago Co., Ill

THE KANSAS FARMER.

E. E. EWING, Editor and Proprietor,

TERMS: CASH IN ADVANCE.

The greatest care is used to prevent swindling humbugs securing space in these advertising columns. Advertisements of lotteries, whisky bitters, and quack doctors are not received. We accept advertisements only for cash, cannot give space and take pay in trade of any kind. This is business, and it is a just and equitable rule adhered to in the publication of THE FARMER. TO SUBSCRIBERS.

Subscribers should very carefully notice the label stamped upon the margin of their papers. All those marked 28 expire with the next issue. The paper is al 28 ways discontinued at the expiration of the time paid for, and to avoid missing a number renewals should be made at once.

A PREMIUM OFFER.

The Farmer For 75 Cents.

The Kansas Farmer will be furnished from the first of July till the end of the year 1880 to single subscribers for 75 cents, and every old subscriber forwarding a new name with the money will have his own subscription extended one month. Now, friends, let us see if the list of subscribers to the "Old Reliable" cannot be doubled by January 1st, 1881, so that we can start a boom for clubs with the New Year. Every farmer and grange patron should feel it a religious duty to assist the publications, which are enlisted in their cause, and fighting the gigantic usurpations and monopolies which are springing up on every hand. Postage stamps are convenient for small remittances.

They Know It All.

The greatest obstacle to the advance of agriculture and the lifting up of the mass of farmers is the monster delusion, "We know it all.' This moral leprosy has impoverished millions of acres of the finest land, has produced millions on millions of profitless, scrub stock, and brought poverty, coarse fare and scanty schooling to tens of thousands of farmers and farmers' families. The majority of farmers, even in this day of light and progress, believe they have nothing to learn; that they understand, perfectly all about their business. Ask one of per, No. He does not believe in book farming. He takes half a dozen other papers he will complacently tell you. Go over his list and you will find they are composed of story papers, mostly filled with imaginary love stories, and ters, with scarcely a useful thought or hint to likely to be violent political party sheets, which and office-holders, and doubledyed scoundrels public question of importance will be discussed in the entire volume.

Our know-all farmer's spare time has all been consumed in wading through this valueless, to much of what is now allowed to run to waste. Kansas. him, stuff, and he rises from its perusal with the complacent air of satisfaction that he possesses a thorough knowledge of governmental affairs, and is ready to lose half a day at the busiest season to attend a party meeting or discuss "politics" with the "biggest man" in the kins, sweet corn, and several garden vegetables, hibition, and no pains will be spared by the of-

own immediate business. He knows what he for the table do not discover they are dried has learned by dint of practice from his boyhood. Commencing on his father's farm, with a small addition he has picked up from observation in his limited sphere, and gleaned from his neighors and hired help. This is in nine out of ten cases the sum and substance of a life's acquisition in the department of knowledge, which above all, it is his interest to understand most thoroughly, and become familiar with every new discovery and principle in progressive farming. The very name of an agricultural paper curls his lip with contempt. He is planting crops, and breeding farm stock as the business of his life and the sole dependence for his daily bread, and yet scarely reads a word relating to these great interests. He takes his grain to a city buyer who never turned a furrow in his life, and he tells our know-all farmer more about wheat than he ever heard before. A drover or cattle buyer stops at his pasture field or cattle yard, looks over his herd, and points out good and bad qualities in his stock that he has never discovered, and tells him more about stock and the stock business, than he has learned in twenty years, and yet he will continue to hug his delusion that agricultural and stock literature are great humbugs, that he can add nothing to his store of knowledge by reading journals which make a specialty of such subjects as he is depending on for his daily

The active workers who are striving to advance agriculture by making it, if not less a business of manual labor, one of vastly greater enlightened mental labor than it has ever been. find this blind conceit so prevalent among farmers, that they have little or nothing to learn of their own vocation, one of the greatest obstacles to progress. This adamantine barrier to be sure is slowly giving way, but its removal is as tedious and painful as blasting granite and

tunneling mountains. The active and persistent inventors of farm overcome the native repugnance to innovations a million or more bales of cotton has, in one to our subscription list. From the first of July of farmers, in the matter of improved machin- year, been added to the cotton crop of the till the first of January, 1881, we will furnish ery and implements for cultivating the soil, but it was a hard struggle. Hussey, the inventor of the reaping machine, had to endure the scoffs and sneers of the agricultural class for years before the reaper was introduced to the

harvest field. Now that this feature of progressive farming has conqured, the danger threatens, on account of the lack of a general knowledge of the true principle of a more advanced agriculture, to swamp the average farmer, with expense for costly tools. His father and grandfather knew as much about agriculture as the present satisfied heir, used economic implements best suited to the farming of their day. The son and grandsen attempts to use implements of a more costly kind, and designed for a more enlightened system of agriculture, than the routine practice of his ancestors. The consequence is that his ancestors increased their every farmer may have the light of science to worldly goods slowly but surely, while the farmer of to-day, who has not added to his kind of government protection farmers need grandfather's stock of agricultural knowledge, Let them take a short cut and direct course to it out has adopted the extravagance of modern living, and modern inventions in farm implements, finds himself in all probability gradually growing poorer.

The manufacturer keeps well posted in the mands of the age in which he lives. The mecanic takes every advantage he can derive from labor saving machinery and the motive powers on what they can capture and filch from the of steam, electricity, gas, water, etc. Steam, community. Our present condition of governthe telegraph, the telephone, the daily bulletin, the printer's types, are all made use of by the commercial classes to quicken thought, and acquire accurate information, while King Stork to shape and manage public affairs, every man of them almost, studies the journal which makes a specialty of his particular business. All but the farmer: he alone among this busy mass is found lagging behind, indifferent to the new truths that are being discovered in his line of business. Is it at all a matter of surprise to find that those engaged in other pursuits and callings look upon him as the ass of the social world, the patient beast created by Providence to bear the burthens which other members of the human family choose to lay upon his shoulders?

Saving Fruit.

We have frequently pointed out the profit that might be made on the fruit and vegetables which go to waste annually on many farms by the use of an evaporator. Evaporated fruit is taking the place of the old-fashioned sun and ovendried article, and sells more readily and for double the price of the latter inferior product. these know-alls if he takes an agricultural pa- In the article of sugar corn, which farmers, and especially the house-wife, wishes to preserve with all its richness and flavor of the "roasting ear" state, the evaporator is found to produce even a better article than canning, a process which cannot be accomplished by the other sentimental moonshine, by very poor wri- skill and appliances in vogue on the farm. If canned corn is enjoyed it has to be purchased be found in a number. The balance are most at a high price from the grocers. A farmer gives his success through the Ohio Farmer, in thunder from frontispiece to finis about offices utilizing the fruit and vegetables which grew on Eleventh Annual Fair of the Shawnee his farm by the use of an evaporator, much of in the opposition party. Probably not a single which would doubtless have been a total loss without the use of this modern machine. His experience may encourage others to pursue the He says:

"Four years ago last winter I procured a nearly all kinds of fruit, large and small, that are usually raised on a fruit farm; also pump-Now let us inquire what he knows about his nearly that many persons eating them prepared products until told. I have dried of apples each year from 800 to 3,000 pounds, and realized from eight to fourteen cents per pound in Philadelphia and Pittsburgh, while common fruit sold at the same time from one and onehalf to three or four cents per pound. My dried peaches, pared, brought me twenty-five cents per pound readily, and last year thirty for my best. Raspberries I sold for from twenty-eight to thirty cents per pound, requiring a fraction over three quarts to make a pound of dried ones. I did not sell any pitted cherries last season, but did some unpitted at nine cents per pound. I can not tell how many cherries it will take to make one pound after drying. I am satisfied that if we can sell at home or anywhere else so they will net us five or six cents per quart we would not do better to dry them, though I think pitted cherries sold in our markets for about twenty-five cents per pound last season.

When I can not get as much as forty cents per bushel for green apples I dry all I can and think it pays better. Peaches will net us at least \$1 per bushel green, when pared and dried; and from fifty to seventy-five cents per bushel to dry them without paring. Since I have used this dryer the raspberries I have dried have netted me more than those I sold without drying. Last season I dried 1,500 pounds, and sold most of them at thirty cents

The Value of Science to Farming.

"The announcement was made a few days ago in Washington, that the cotton crop of the present year will be the largest ever known fully 5,600,000 bales, worth \$300,000,000. It was also said that much of the increase was due to the operation of the entomological experts employed by the government in discovering means for checking the ravages of the cotton worm."

The above paragraph contains food for similar results may be achieved.

In order to reach results so desirable and profitable to farmers, the agricultural colleges age stamps, will have his subscription extended throughout the country should be placed on a

working basis, the result of whose labors should W. W. Cole's Great Circus and Menag- follows: One at Preble, Cortland Co., 1859, by be to teach such branches of science as can be applied directly to practical agriculture. Where they are in the hands of black letter classes, D. D.'s, L. L. D.'s etc., they should be rescued and placed on a practical, useful basis. The agricultural interest should move en masse on congress and the state legislatures, have experimental stations and small, experimental farms established in all parts of the country where the natural change of soil and climate demand a change in our routine practice, and be econom ically conducted, as in Germany, in order that guide and assist him in his labors. This is the by filling congress and their state legislatures with the wisest and most active practical farm ers. Men of snap and business in their makeup are most needed in our law-making halls men who are intent hurrying through with new inventions and discoveries which effect his the most useful business of the session and business and adapts his practice to the de- then adjourning, and not the class who at present compose the bulk of our legislators, the hawks and birds of prey of society, who live ment is not unlike that which the frogs were visited with when they elected a stork for their king. We do not want either King Log or but active, intelligent men selected from the

Burning of a Printing Office.

ranks of productive industry.

The publishers of the Southern Live-Stock Journal, published at Starkville, Mississippi, met with a great misfortune, last month, in the total destruction of their office, including a new power press, by fire. We sympathize with the Journal in the loss and interruption to its business which is a consequent result; but the proprietors propose to push ahead and have the lamage repaired as speedily as possible.

The Live-Stock Journal is doing a noble work for Mississippi, in battling against the usurpation of cotton and in favor of more live-stock and a diversified farming. By the best information we can gather, eastern Mississippi is an admirable grass and stock country, and the latter interest is making rapid progress under the impulse of a stock association whose membership has increased rapidly within a year.

No little of this better condition of things is due to the efforts of the Southern Live-Stock Journal. We hope its usefulness will not long be checked by the recent mistortune to its worthy publishers, and that Mississippi, under its enlightened teaching will be given over to the rule of farmers and stock-breeders in place of politicians and lawyers.

Agricultural Society.

The premium lists for the fair of this society are out, and copies can be obtained by applicasame course and add to their income by saving tion to the secretary, J. W. Campbell, Topeka,

The exhibition will open on the Society's grounds, Topeks, October 5th, and continue dryer, and have had it in use ever since, drying four days. The premium list embraces a wide range of articles, and the premiums are liberal. Every inducement is given to insure a fine exsatisfactory and profitable success.

The Web-Worm.

This pest is doing much damage to garden and other crops in western and southwestern Kansas. The letters of our correspondents describe its ravages. The web-worm is comparatively a new insect enemy to the settlers of the western part of the state. It made its appearance in 1873, but it appears to have absented itself since then to the present season. The State Board of Agriculture has sent Prof. Popence, Entomologist of the State Agricultural College, to examine and make a report of this insect for the Second Quarterly Report of the Board.

The Campaign Discussed.

We are in receipt of a 26-page pamphlet entitled "Constitutional Prohibition, of the Liquor Traffic, Considered from a Moral, Legal and Financial Standpoint," by J. R. Detwiler, P. G. W.C. T., of the Good Templars of Kansas. Price: single copies, 10 cents; 12 copies, \$1; 100 copies \$6,. Parties desiring an effective campaign document, will find this work adapted to their demands. Send for a specimen copy to the author at Osage Mission, Kansas.

County Clerks.

If there are any county clerks' offices in the state not supplied with a copy of the KANSAS FARMER, we will mail a free copy on receiving notice of the omission. The stray law provides that a copy of the KANSAS FARMER be kept on file in every county clerk's office in the state, for convenient reference for persons having lost stock by straying.

Our subscribers are requested to examine the slip attached to their paper and not allow their subscriptions to expire without renewing. Ev ery subscriber to the FARMER could easily obcountry. In every department of agriculture the FARMER to single subscribers for 75 cents, and every old subscriber furnishing us with a new name and enclosing that amount in post-

erie.

From the Dayton (Ohio) Journal, May 12th,

CIRCUS-OVER TWELVE THOUSAND PEOPLE ATTEND.

No show of this kind has given more general the city yesterday. Monday night the weather had been of an unfavorable character, but it cleared up bright and smiling Tuesday morning, and people came in from all parts of the awaited the approach of the street procession, thronging the sidewalks. In the afternoon the tent was crowded beyond expectation, all the seats were filled and many took places on the grass. In the evening the rush was still greater, and all available standing room being occupied, numbers went away. In the two performances there were over 12,000 people in the

The show was well worth the patronage. It was one of the best that has visited Dayton. The features were all of the best character. Their menagerie was well selected. Among the animals was one of the largest of elephants and the smallest of monkeys, a baby of five days; two sea elephants, and lions, and leopards fat and powerful as oxen ready for the market. In the ring the trained stallions elicited much admiration. The leaper Gardner leaped over six camels and three elephants. The second best leaper and the most graceful was Harry Long. He was received with loud applause, and his leaps showed him to be well trained; they were graceful and conducted with the ease of a bird on the wing. Miss Maggie Clair went through a remarkable performance with rings while suspended in mid-air. De Comas arial bicycle act was a pleasing novelty and the performing stallions were equally admirable. Mr. and Mrs. Bates, the giants, accompanied the circus, and proved themselves fully up to expectations, the greatest of men and women. In the evening the tent was lighted y a fine electric light.

This famous show will exhibit at Topeka or Monday, July 19th.

The Drive-Well Patents.

The following extract from the Lansingburg Courier, of New York, will be read with much satisfaction by parties who have drive-wells in Kansas and who are threatened with prosecution, [or are already being prosecuted by the drive-well swindler patentees :

The actions by Wm. D. Andrews, G. H. Andrews, and Nelson W. Green, commenced in June, 1879, against a large number of our townsmen, in the United States Circuit Court ants, by moving the case of defendant Thomas Richardson, of this village.

driven well on Bull's Head fair grounds be- midity, and growing weather, in other words, to tween Troy and Albany at the state fair in largely increase the quantity and better distriball of which retain their natural flavor so ficers and managers of the fair to make it a 1858. The complainants fished about for six ute our rainfall. and a half days and asked over 700 questions. only stopping at last from sheer exhaustion, not (it seems to me) may be solved by a little dishaving been able to shake Mr. Atwood in the cretion in working our common roads. least, nor to develop any new facts.

The next witness (who is now under crossexamination) was Mr. James E. Kirwan, of wan ninety-four questions in six and a half hours, proving plenty of wells constructed by him in Lake county, in 1848 and 1849, and fully corroborating Mr. Atwood as to the Albany state fair ground well. The cross-examination is now on its fourth day, and has not developed any new facts-except in one instance mentioned hereafter-because they have not in over two hundred questions touched upon a single subject pertinent to the case, nor relative to the issue.

They struck a vein accidentally, however, on Wednesday afternoon, and called out new matter not competent on direct examination on account of the pleading in the case, and by which they will be bound. It is as follows: He constructed a drive-well at the Catholic Orphan Asylum in Albany, near St. Mary's burying ground, April or May, 1861. Also one at Greenbush, Rens county, for a Mr. Stants, on grounds occupied by one Baldwin, corner of Columbus street and Broadway, [in 1855, constructing several at or near Willis' Milis, Erie county, N. Y., some twenty miles from Buffalo, in 1851.

Now the importance of this testimony will be seen when it is known that Green did not apply for a patent until 1866, and that he swore on his examination in the Cameron case, and papers or letters. also in his interference with Mudge, that his first idea of a driven well did not take place until after September, 1861, and his first experiment (which in fact he did not make at all, nor was he present when it was done by Mudge, Carmichael, Robinson and Sugget, at Cortland, N. Y.,) was in October, 1861. Mr. Keach has documentary evidence, the nature of which we have been permitted to examine, but withhold machinery and their ubiquitous agents have thought. By the investigation of entomologists tain the name of one or more neighbors to add for prudential reasons-certified to by proper officers, which make it admissable, that will completely upset the theory of Mr. Green.

Mr. Green, as Mr. Keach asserts, cannot get on the witness stand to support his patent, or the rebuttal of what has been brought out on this trial.

The defendant will establish other wells, as

Moses T. Taltman, who still has the pipe (recently pulled up) with which the well was constructed and the date cannot be upset, as he has recently found the receipts of the railroad company for the freight on such pipe and the pump which came with it from Syracuse, with the exact date. He will have the pipe present to insatisfaction than Cole's circus that exhibited in troduce in evidence. A well was also driven, long before the war, at Brott's hotel in Waterford, two miles or less from this village, and can be proven by dozens of the best citizers there. And still another on the county fair neighboring country to see the show. It had grounds at Salem, N. Y., in 1858, proven by peen well advertised and an expectant crowd parties of the best of character, and who will swear positively as to dates, etc.

This case can be fought to the end or court of last resort, unless the complainants back out before it reaches there. And when such men as A. E. Powers, R. C. Haskell, David Judson, Fuller, Warren & Co., Alexander Gregory, of Albany, S. S. Parks, Thos. Mills, and other interested parties, put their shoulders to the wheel, it will move forward and not turn backward.

We shall keep the public posted hereafter as

to the progress of this case.

More About Rainfall.

I have been very much interested in the articles by Mr. Johnson on "Weather Laws" and the discussions thereon.

It seems to be well settled that it takes water to make rain, and with this view one of our local newspapers, gave an editorial advocating the building of dams along our principal streams four or five miles apart. This seems to be akin to your own ideas when you call attention to the vast engineering capacity, and expense attending dam building for the purpose of promoting a rapid efflux of water.

Now my own idea is quite different, while we will not disagree upon the proposition that it is highly desirable to retain a portion of our rainfall or prevent its rapid flow out of the

Here in the eastern central part of western Kansas where the country is somewhat rolling aside from its eastern slope of six or seven feet to the mile the efflux is rapid, but becomes less so, as our land "is riven by the plough." Indeed, I doubt not that a well plowed old field will hold in reserve as much as a dam of one-tenth

The buffalo wallows that appear everywhere on every acre of reasonably level land upon the plains, holding from one to two or three barrels of water each, become a leading factor n holding water for a few days, after being filled by heavy rains; we always have a humid and growing atmosphere when they are full?

Now let me improve upon this idea derived from our now extinct buffalo, and build dams for the Northern District of New York, have at of greater capacity than their wallows-but not last been brought to an issue which will prove the few and expensive ones anticipated by you interesting to our readers, if not the complain- and our local editor. Let us, in working our roads on every section line, where they should be, make a pile at each depression from one to Mr. Keach moved the case on the sixth day four feet, according to the nature of the ground, of this month, at the American House in this and when necessary provide for drainage above village, before Examiner William Lansing, of this. This would make dams very numerous; Albany. His first witness was Anson Atwood, they would appear along every section line, and of Dunnellen, N. J., who testified in two and a no doubt the result would be for all ordinary half hours and in thirty-seven questions to the dry seasons to lengthen out the periods of hu-

The whole question of dams for this purpose

But in an exceptionally dry year, such as the present promises to be, when the whole country is dry from the crest of the Rocky Mountains Greenbush, N. Y. Mr. Keach asked Mr. Kir- eastward to the Atlantic coast-then like the "failure of all signs in a dry time"-our dams when located would themselves be dry.

Then is a good time to give our land a year of rest according to the custom of the ancient Jews, having first prepared for the emergency by laying up a store from the abundance of the past. Martin Allen.

Hays City, Kas.

Rice Corn.

ED. FARMER: I have received and planted package of rice corn. Will you, or some of our readers, please say, through the FARMER, now I must proceed to remove the hull or huck from the kernels after the corn is ripe? Plenty of rain but too late to save the wheat and oats. Chinch bugs are damaging corn.

A. X. HENSHAW.

Arkansas City, Han., June 6th. Post Office Addresses.

When parties write to the FARMER on any ubject whatever, they should give the county and post office both. Some of the new post offices are not put down in the post office directory, and when the county is not mentioned, the post office clerks do not know where to send

A Word of Good.

One of the most popular medicines now before the American public, is hop bitters. You see it everywhere. People take it with good effect. It builds them up. It is not as pleasant to the taste as some other bitters as it is not activity drink. It is more aller the add feel. a whisky drink. It is more like the old fash-ioned beneset tea that has done a world of good If you don't feel just right try hop bitters.— Nunda News,

What Ails You?

What Alls You?

It is a disorded liver giving you a yellow skin or costive bowels, which have resulted in distressing Piles or do your kidneys refuse to perform their functions? If so your system will soon be clogged with poisons. Take a few doses of Kidney wort and you'll feel like a new man—nature will throw off every impediment and each organ will be ready for duty.

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Communications.

Mt. CARMEL, Crawford Co., (85 miles southeast of Topeka,) June 27.-The FARMER comes regularly to hand, full of good things. We are having a terrible "wet rain" just now. The ground is soaked full, as it has been raining for the past twenty-four hours, and not much prospect of its clearing off soon.

Wheat all cut and mostly in stack, and far better than many anticipated. The straw is short but well filled. Oats are ripe and will be a short crop as well as short straw. Corn in fine condition and clean, but have some fears where close to wheat fields of being badly hurt by the chinch bug. They are bad in thin wheat. Let me say right here, before I forget it, that I verily believe that if farmers would try a little they could kill off or materially lessen that enemy to wheat, oats, and corn, it they would only try. Let me suggest a novel plan for destroying millions upon millions of them, as it seems they are calculated to be destroyed by myriads when they get upon the corn. My plan is this: Take a sheet of tin or iron, cut it so as to make it funnel-shaped, have it come to a point or large enough to surround a hill of corn, and about three feet long; have a hinge to it so you can open and close it about a hill of standing corn; strike the hill with a stick or something and the bugs will fall to the ground; new you have them; pour in a little kerosene oil or a solution of carbolic acid, or a strong lye, (made of concentrated lye,) or what is cheaper still-hot water, and I assure you bushels of them could be killed in that way. Any tinsmith can make them at a small cost, and if you have three or four boys or hired hands you can make terrible havoc in their rank and file. I have often thought that I would get several made, and shall, though the bugs are scarcer on my farm this year than ever before, owing perhaps to my killing by rubbing, scalding and burning the past season. I hope some of my farmer friends will try it.

It is now nearing the season to sow turnips Let every farmer who has hogs, sheep, cattle, or stock of all kinds, put in three to ten acres of either turnips or rutabagas, and you can save many bushels of corn and have one of the most wholesome crops for your stock, raised. Any good, clean ground that will grow corn will grow turnips. My mode is to plow the ground tolerable early, say now, or in a week or ten days, and just before you are ready to put in the seed, harrow well. Afterward sow broadcast about the 20th of July, and run over lightly with harrow or brush, and your work is done until pulling time comes about.

Will the FARMER, or some one else, give us the best varieties of strawberry, raspberry and blackberry for Kansas?

P. S .- Later. Cleared off. Wind in the northwest; cool and nice, with corn booming. I like the grange column in the FARMER exceedingly well, as well as the rest of the paper. Why could not the grange be made one of the permanent institutions of our land, as well as do a little work for ourselves in that way, as to keep a thousand and one middlemen, who reap a fine "harvest" in a short time and then "retire from the care and anxiety of the world?" I am a granger as well as a greenbacker, and would like to see the cause spread. E. B. Cook.

STERLING, Rice Co., June 21.-Farmers are now in the middle of wheat harvest, and ac cording to the statements coming in from different neighborhoods, wheat promises a better yield than was generally expected. It has never been so plump before in this county The supposed yield is from five to fifteen bushels to the acre, the fifteen bushel patches being no doubt exceptional ones.

Corn, generally, was planted late on account of the contined drouth. It is doing very well considering the chances it has had. Oats an entire failure. The early planted potatoes are also a failure, and as to to the later planted patches the "fates" are against them. By the 'fates" we mean the Colorado bug! the cinnamon bug!! the grey bug!!! the black bug!!!! the tobacco worm !!!!! and the web-worm!!!!!! Six distinct armies! The last named appears to be the most destructive. We have fought the bugs first by hand-picking before the first brood of eggs was hatched, and destroyed all the eggs we could find. Next when the sluggs appeared we knocked them off into pans and destroyed them, at the same time also picking off the tobacco worms. But pending this too slow a process, I procured some London purple and sprinkled the vines, and I found, this morning, that the patch was nearly entirely rid of the bugs; they had either died or given the patch over to their successors-the web-worm, at least these have possession and it appears propose to devour it. This seems to be the most obdurate pest in the whole catalogue, that has ever infested this county. Seven years ago (1873) they made their appearance and licked up our gardens and every toder herb, and from present appearances they will do so again this season. Hand-picking is out of the question; they are too numerous. Either they are poison-proof, or else they have a well-ordered discipline in their hosts, so that when the ad vance guard falls a victim the rear takes its place at once. Will not some one make these pests a study, and give us their history and suggest a remedy? Reports are coming in from different neighborhoods of large fields of corn being devoured in the course of a few days. It appears that the "tumble-weed" is their

A few weeks ago our prairie was swarming with myriads of small, buff-colored moths, and so also in 1873. I cannot speak from fact but I ery goods.

make for the next best thing.

choice food, and when that is all used up they

rather guess these moths are the fruitful ances try of this countless progeny, and that possibly they deposit their eggs upon the tumble-weed; that next time when these moths make their appearance if farmers will plough all their tumble-weed patches under deep, they would not suffer so severely from the web-worm.

J. B. SCHLICHTER.

POMONA, Franklin Co., June 30 .- Wheat cutting is ended and stacking is being vigorously pushed, while the weather is perfect. Some few are threshing without stacking, and the quality of the grain is excellent though the yield is only medium. Several neighbors have threshed, and each one has had a yield of about twelve sushels per acre. "Turkey" wheat is a very popular variety in this section on account of its hardiness and the more than usual certainty of its making a crop. It is a red, bearded wheat and is excessively hard, so much so that many millers supply themselves with apparatus for softening it by steam before grinding. As a rule it does not make quite the whitest flour, but the bread from it is very sweet, moist and palatable. Local millers pay five cents less per bushel for it, while shippers, at least those at Carbondale, pay the same as for other wheat.

Corn adjacent to wheat ground is troubled somewhat by chinch bugs, but not seriously, and the prospect for a big crop was never better, if so good at the time of year. Old crop corn is literally all gone-used up.

Buyers are starting the price of new wheat at 60c to 75c per bushel. F. D. COBURN.

ALEXANDER, Rush Co.—The weather has been so dry that the settlement is very thin. There have been three showers since last October. Corn looks well, but there will not be any wheat in this county this season. Pampas and sorghum will be plenty. Stock looking well. Farmers somewhat encouraged since the last rain in this month. W. H. WEST.

A Decided Novelty.

The Messieurs De Comas, a troup of ærial bicycleists, now with W. W. Cole's great circus and menagerie, have invented an ingenious contrivance, which is certainly devised with the express intention of breaking somebody's neck, and it is more than probable that one of the famous De Comas will be "the man that is laid out." Their performance consists of riding an ordinary bicycle upon a wire something over fifty feet from the ground, and to this is attached a trapez of the usual manufacture, upon which two of the brothers accomplish a number of thrilling exploits while the bicycle rider propels them from one end of the canvass to the other with the velocity of the wind.

W. W. Cole, the well known circus manager, exhibits a pair of sea elephants as an extra attraction to his great shows.

The Age of Miracles

is past, and Dr. Pierce's golden medical discov-ery will not raise the dead, will not cure you if your lungs are half wasted by consumption, or your lungs are half wasted by consumption, or your system sinking under cancerous disease. It is however, unsurpassed both as a pectoral and alterative, and will cure obstinate and severe disease of the throat and lungs, coughs and bronchial affections. By virtue of its wonderful alterative properties it cleanses and enriches the blood, thus curing pimples, blotches, and eruptions, and causing great eating ulcers to heal. Seld by druggists.

Womens' good Newport ties for \$1.00 at

"No medicine can be compared to Marsh's "No medicine can be compared to Marsh's golden balsam for the throat and lungs. It has cured me of a lingering cough and sore lungs, after vainly using everything else."—[G. F. Thompson, Sedalia, Missouri.

Marsh's golden balsam is for sale by every

druggist in Topeka, and by prominent dealers everywhere. Large bottles 50 cents and \$1.00. Don't fail to try it.

Troublesome Children,

that are always wetting their beds ought not to be scolded and punished for what they cannot help. They need a medicine having a tonic ef-fect on the kidneys and urinary organs. Such a medicine is kidney wort. It has specific ac-tion. Do not fail to try it for them.

None of our readers will fail to see the adwettisement of the Economy Hay Press, manufactured by Geo. Ertel, of Quincy, Ill. Without doubt this is one of the great laborsaving inventions of the age, and no one should fail to confer with him who is at all interested in the subject.

Humbugged Again.

I saw so much said about the merits of hop bitters, and my wife who was always doctoring, and never well, teased me so urgently to get her some, I concluded to be humbugged again; and I am glad I did, for in less than two months use of the bitters my wife was cured and she has remained so for eighteen months since. I like such humbugging.—H. T., St. Paul.

For the cure of chills and fever, dumb ague, and all miasmatic diseases, there is nothing equal to the Marsh ague cure. It is a safe, cheap and sure remedy. Never known to fail. Price only 50 cents—liquid or pills. For sale by all directions. by all druggists.

President Hayes.

The validity of Mr. Hayes' title may always be questioned, and his administration criticised but the payment of one dollar gives a valid title to one bottle of Dr. Pierce's Golden Medical Discovery, and its administration can never be criticised in cases of coughs, colds, incipient consumption, and general debility, for leading physicians of all schools endorse the discovery and prescribe it in their practice. Sold by drugation

For the Fourth.

A large assortment of Children's Lace Bonnets and Ladies Ruches just received at Mrs. E. C. Metcalf's and will be sold at a bargain, also great reduction in her fine stock of Millin-

Re-Working Butter.

Hundreds of tons of white butter are bought every year, worked over by dealers, colored up and sold for double the price paid the farmers. This fact should convince farmers that they should put their own butter into the best shape for market and so realize all they can from it. It must have the bright golden color of June, which nothing but Wells, Richarnson & Co's perfected butter color can give. Use this color, pack your butter in the best manner; and you will get the top price.

DIABETES.—A sure cure. To this distressing complaint, thousands fall victims. It requires no description. Those who suffer from it know the symptoms perfectly. The unfailing cure for it is Hunt's Remedy, the great kidney and liver medicine. This great medicine (which is the only known remedy for Bright's disease) has cured more dishetes the any published the second control of the control of th has cured more diabetes than any and all other medicines put together. If afflicted by kidney, liver, bladder, or urinary diseases, try Hunt's remedy, reader. Sold by all druggists. Trial size 75 cents.

Plow Shoes

At Skinner's \$1.25, former price \$1.65.

Messrs. H. H. Warner & Co.: Gentlemen: have been afflicted with a disease of the kidney for the past two years and have tried numerous remedies with only partial and temporary relief. Your safe kidney and liver cure was recom-mended to me, and after taking it the pain and distress left me and I am to-day feeling strong and well. I am perfectly satisfied that Warner's safe remedies are the medicines needed, and can cheerfully commend them to others.
G. W. Stamm, Editor "The Industrial Era."
Albia, Iowa, June, 1880.

Eight and nine per cent, interest on farm loans

Ten per cent. on city property.
All good bonds bought at sight.
For ready money and low interest, call on

A. PRESCOTT & Co.

ANNOUNCEMENTS.

I am a candidate for the office of Probate Judge subject to the decision of the Republican primary election. D. A. HARVEY. I am a candidate for re-election to the office

of Probate Judge, subject to the Republican primary election. G. W. Carey. PRESCRIPTION FREE For the speedy cure of Seminal Weakness, Loss Manhood, and all disordeas brought on by indiscr tion or excess. Any Druggist has the ingredents Addioss DAVIDSON & CO., 78 Nassau St., N. Y.i

Markets. TOPEKA MARKETS.

133	Produce.	

LETTUCE-per do	z bunches	.25
ONIONS "		.25
ASPARAGUS- "		.25
RADISHES- "		.30
	per doz	.60@75
NEW BEETS.	• • · · · · · · · · · · · · · · · · · ·	.000010
PEAS-		75
BUTTED_Por Ib	Choice	.08@.10
CHEERE Porth	- choice	
POCCE Dender E.		,09@10
EGGS-Per doz-Fi	esh	.10
BEANS—Per bu—	Vhite Navy	
piedium		1.75
" Common .		1.50
NEW POTATOES-	-Per bu	1.00@1.25
P. B. POTATOES-	-Per bu	.75

Retail Grain. Wholesale cash prices by dealers, corrected weekly by Edson & Beck.

WHEAT-Per Du. No. 2	. //
" Fall No 3	.70
" Fall No 4	.6
CORN - White	.2
CORN — Trinte	
Yellow	.2
OATS — Per bu,	.30
R Y E - Per bu	.5
BARLEY-Per bu	.50
FLOUR—Per 100 lbs	2.90
" No 2	2.7
" No 3	2.5
" Rye	2,9
CORN MEAL	.90
CODY CHOD	
CORN CHOP.	.6
RYE CHOP	1.2
CORN & OATS	.91
BRAN	.50
SHORTS	:60
Butchers' Retail.	
BEEF-Sirloin Steak per lb	121
" Round " " "	10
" Roasts " " "	10
	6
" Fore Quarter Dressed, per lb	0
Aina	7
By the carcass	61
MUTTON—Chops per lb	10

Hide and Tallow. Corrected weekly by H. D. Clark, 135 Kansas Ave.

Corrected weekly by H. D. Clark, 185 Kansas
HIDES—Green
Green, calf.
Bull and stag
Dry flint prime
Dry Saked, prime
Dry damaged
TALLOW
SHEEP SKINS.

Poultry and Game. Corrected weekly by McKay Bro's., 294 and 92 Kansas Avenue.

Chicago Wool Market.

Tub washed bright 45 to 46c per lb; do dingy and coarse 40 to 42c; fleece washed medium 40 to 45c; do fine 36 to 40c; do coarse 35 to 37c; unweshed medium 27 to 30c; do coarse 20 to 25c; do fine bright 24 to 26c; do heavy 17 to 22c; bucks fleece 16 to 18c. Consignments from western lowan, Nebraska and Kansas sell at about 2a per lb less than this range, and burry and poor conditioned lots at 3 to 5 cents less. Colorado wool (unassorted) is quoted at 25 to 28c per b for medium to fine; at 22 to 24c for coarse to medium; at 22 to 24c for black.

St. Louis Wool Market.

Tub—choice clean 42 to 44c, No. 2, 38 to 40, low and dingy 33 to 35; Unwashed—medium 23 to 27½, fair do 24 to 25½, low or coarse and dark de 21 to 23c, choice medium combing 26 to 27½c, low do 21½ to 25, choice or scleeted lots sell slightly higher than above figures, while burry black and cotted ranges from 5 to 15c per 15 less.

Kansas City Produce Market.

WHEAT—Sales yesterday were for cash and June, 74c for No. 3; and 80c bid for No. 2; lower grades in light demand. CORN—Dull and lower for June; No. 2 mixed, sold at 25%, with subsequent bids going down to 25c.

St. Louis Live Stock Market.

HOGS—Fairly active and lower; Yorkers and Balti mores, \$4 15 to 4 20; packing \$4 20 to 4 20 heavy ship ping, \$4 30 to 4 35; receipts, 4,100; shipments, 2,700.

Markets by Telegraph, July 7.

New York Money Market.

MONEY-2 to 3 per cent. GOVERNMENT BONDS Coupons of 1881...... New 5's..... New 4½'s (registered)... Coupons... New 4's (registered)... Coupons...

SECURITIES. SECURITIE
PACIFIC SIXES—95: 123.
MISSOURI SIXES—\$1 08½,
ET. JOE—\$1 07½,
C. P. BONDS—\$1 14;
U. P. BONDS—firsts, \$1 14½.
LAND GRANTS—\$1 13.
SINKING FUNDS—\$1 17½.

Kansas City Live Stock Market.

CATTLE—Receipts 1,363; shipments, 1,184; best sales at \$4 15. HOGS—Receipts 1,980; shipments, 954; sales at \$3 70 to 3 90; bulk at \$3 80 to 3 85 market closed weak with empty pens. SHEEP--Receipts and shipments, none; 100 pounds avegage, \$3 55; 89 pounds average, \$2 90.

----St. Louis Produce Market.

FLOUR—Unchanged.
WHEAT—Cash sharply declined; No. 2 red, 90%
to 89c; No. 3 do, 85 to 84; No. 4 do, 78c,
CORN—Lower; 343%c.
OATS—Lower; 243% to 26c.
PORK—Qniet; jobbing, \$12 30,

Liverpool Market.

BREADSTUFFS—Market unchanged, FLOUR—10s to 12s, WHEAT—Winter, 9s 9d to 9s10d spring 8s 6d to

ts 4d.
CHEESE—50s.
OATS—6s 2d.
PORK—Sides, 60s.
BEEF—64s.
BACON—Long clear middles, 36s; short clear middles, 37s.

BACON—Long clear middles niddles, 37s. LARD—Cwt. 37s. TALLOW—Good to fine, 33s 6d, RYE—At London, 41s to 41s 6d.

Chicago Produce Market.

FLOUR—Dull and nominal.
WHEAT—Steady and in fair demand; No. 2 red
WhEAT—Steady and in fair demand; No. 2 red
Wabash, 90c; No. 2 spring, 88% to 89c, cash; 88% to July
24%. August, No 3 spring 80c; rejected, 62% to 63c.
CORN—Steady and firm; 34% to 34% coash; 34% to
34% July; 34% to 35c August.
OATS—Dull, weak and lower; 24% bid July; 22%
to 22% August.

OATS—Dull, weak and lower; 24/4c bid July; 22/5 to 22%c August, RYE—Steady and unchanged, BARLEV—Firmer; 711/4 to 72c. PORK—S rong and higher; \$11 95 eash; \$11 95 bid July; \$12 05 bid August; \$12 v2/4 to 12 05. September, LARD—Steady and in fair demand; \$6 56 eash and July; \$6 70, August; \$6 72/4 to 6 75 September.

Chicago Live Stock Market.

FLOUR, GRAIN AND HAY.

MAY—Upland, 24 to 26; second bottom, 21 to 22; bottom hay, 19 to 20.

FLOUR—Colorado, 3 40 to 3 45; Graham, 3 00 to 3 25.

MHAAT—Belted corn meal, 2 00.

WHEAT—2 00 to 2 20 % cwt.

CORN—1 35 to 1 40 % cwt.

OATS—Colorado, 2 00 to 2 25; state, 1 85 to 2 60 % cwt.

BARLEY—1 75 to 1 85 % cwt.

PRODUCE, POULTRY VEGETABLES.

—Per dozen, ranch 15 to 17c; state, 12 to 14c.

ar.—Ranch, # lb, 25 to 35c; creamery, 30 to 35; oor, 8 to 15c. Onions—5 to 5½c & b; eastern, 2 00 to 2 50 % ewt, Turkers—Dressed, 16 to 18c % b, Chickens—Dressed, 15 to 16c % b; % doz 4 00 to 5 00

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.

50 New Style Cards, Lithographed in bright colors, 10cts 60 Ag'ts Samples 10c. Conn, Card Co., Northford, Ct.

GEM CITY BUSINESS COLLEGE,

QUINCY, ILLINOIS.
Fall School opens September 1, 1890. Board only
\$3.00 per week. Send for catalogue.
D. L. MUSSELMAN, Principal.

ROSES AND GFRANIUMS.

100 by express, \$5; 50 by mail, \$3; 25 for \$1.75; 14 for \$1.10; 20 Greenhouse and Bedding Plants for \$1.10, Lists free. T. MONTGOMERY, Mattoon, Ill.

KANSAS

and Farming Interests Its rapid incerease in population and wonderful development of material resources-its dry and wet seasons-its advantages and disadvantages, all can be learned in the KANSAS FARMER, now in its 18th year, the oldest Agricultural Journal in the New West, an 8-page Weekly Farm and Family paper. 100 contributors among the practical farmers, fruit-growers, and breeders of the West. Crop Notes, farmers' letters, from every county in Kansas. The FARMER is the official paper for publishing the Strays of the State.

SUBSCRIPTION PRICE: Postage paid, 1 copy, 1 year, \$1.50. 1 copy, 6 months, \$1.00. 1 copy, 3 months, 50 cents.

Sample Copy Free to any Address.

E. E. EWING, Editor and Publisher,

Topeka, Kansas. UNIVERSITY OF KANSAS.

Session of 1880-81 Begins September 8, 1880.

The University of Kansas enters upon its fifteenth year with greatly increased facilities for affording thorough collegiate instruction. Expenses from \$150 to \$300. This includes board in private families, books and inciden-

tals.

The Collegiate Department comprises the following courses: Classical, scientific, modern literature, civil engineering, natural history, chemisty, and preparatory medical.

The Preparatory Department devotes three years to training for the Collegiate,
The Normal Department embraces three courses: Classical, scientific, and modern literature, and is especially designed for those wishing to prepare for teaching in the higher grades.

The Law Department has been established

The Law Department has been established two years, and is now one of the most impor-tant features of the institution. Course of two

years; tuition \$25 per annum.

The Musical Department is under the charge of a competent instructor. Instruction given in piano, organ, and vocal music.

For catalogue and information address

REV. JAMES MARVIN, Chancellor, Lawrence, Kansas.

HOGS—Receipts, 23,000; shipments, 4,300; shipments, 4,300; shipping, steady and in fair demand, at \$120 to 4 90; butchers, weak; Texans, 10c lower, at \$2 35 3 00 for cows, \$2 90 to 3 45 for steers; stockers nominal, \$2 80 to 3 35. SHEEP—Receipts, 200; shipments, none; nominally unchanged; common to choice, \$3 00 to 3 75; lambur unchanged; common to choice, \$3 00 to 3 00 to

A Country Campbell Printing Press

Size of Bed 31x46 inches, just thoroughly over-hauled and put in complete order, will be sold chesp for cash. The press is furnished with springs and steam fixtures and will do as good work as a new press. Aprly at the office of the

KANSAS FARMER,

CHRONIC

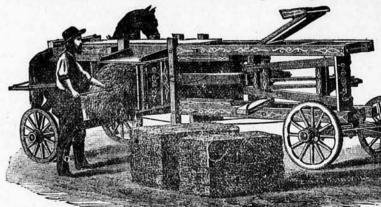


Looseness of the bowels result from imperfect digestion, as d this again from stomachic irregular-lities and interruptions. The cause lies in the torpidity of the liver and the cure is, take Simmons liver regulator to aid digestion, to stimulate the dull and sluggish liver and to regulate the bowels.

was afflicted with diarrhoza. Numbers of physicians prescribing for me missed my case—their medicine, mostly stringent, agravating my condition. I was advised to use the Simmons Liver Regulator. This medicine soon indicated the proper diagnosis—an impure n atter, secreted from a disordered liver, and coursing the passage of the bowels, irritated and indamed to a diseased condition. In a few weeks the medicine corrected it, I was restored to perfect health and have remained so over two years, no symptoms having returned. I use it in my family as a specific for all disorders originating in disordered liver.

JAMES G. TISON, Bagdad, Texas."

The Celebrated Economy Hay Press.



This Press is known and represented in every State and Territory in the United States. It is the best and cheapest Hay Press of all. 200 of them are annually built and sold. Every one is warranted, or no sale.

See Send for Circulars, giving full information.

GEO. ERTEL, Patentee and Manufacturer, QUINCY, ILL.

BALING



DEDERICK'S HAY AND STRAW
PIRESSES are guaranteed cheaper at
price than any others as a gift or no
sale. If inexperienced purchasers are
confused by manufacturers of inferior machines who
claim their presses are best, then order a press of
each on condition that you keep the best, and advise
all that DEDERICK'S PIESS will be there. The
absence of all others will then convince you that DEDERICK'S PRESSES newyond competition. Grand
Centennial and Paris World's Fair Prizes, and all the
United States Fair Premiums for years past for
DEDERICK'S PRESSES. Beware of presses infringing Dederick's Patent Press and Bale.
Address for Catalogue. P. K. DEDERICK & CO.

Address for Catalogue. P. K. DEDERICK & Co., Albany, N. Y.

Literary and Domestic

Gentlemen Friends.

BY MARGARET B. HARVEY.

As regards this subject, we find two distinct schools of opinion. Carried to an extreme, one teaches that the desire of gaining the admiration of gentlemen should be the one end and aim of a young lady's existence. The other lifts its hands in holy horror at any but the most casual acquaintance with the opposite sex, and declares that friendship between man and woman is, in the nature of things, impossible.

Extremes, as we have been told over and over again, are to be avoided. But if I were compelled to choose between the two pointed out above, I unhesitatingly aver that I would prefer the first. There is more sense in it, for it recognizes the existence of that holy God-given instinct, which leads to beauty and love and happiness. No matter if it be recognized only in a blind, ignorant way-the recognition is the great fact. The other is a compound of prudery, self-conceit and unutterable coarseness; caviling at the way our Creator made us. No matter if it be veiled under the semblance of virtue-the evil lurks in it, nevertheless. The former says that men and women were intended to live together as members in one great family, the latter that men and women are bent on each other's destruction, and cannot be trusted together.

Emphatically I say it; I do believe in gentlemen friends. Not lovers, precisely, though I believe in them, too-a friend may develope in to a lover. Perhaps the good, old-fashioned, much abused word beaux will do. I believe, can associate as freely as she would with her brothers, but who, being of no kin to her, strange to say, would more readily do her a favor, and who have not the vanity to suppose she is pining away for them.

Any girl who has missed companionship such as this, has missed one of the sweetest pleasures of youth. As well might a bud not blossom, a bird not sing.

Would nine girls out of ten take half the pains and pride that they do now, in their manners, dress, and accomplishments, if they thought no man would ever see them? I trow not. I wouldn't myself.

I know what one class of social reformers will say to all this. They will talk a great deal about "safety," and so forth, in which respect they are scarce one whit ahead of old conservatists, whose cry is "propriety," and the whole category, I assert just this. Young women of ordinary respectability, who associate with young men of about the same standing, are very much more likely to be pure in mind and heart than those who associate with young women alone. Girls, when they get together, at times, talk of things of which they would never dream, if in the society of gentlemen-and 'tis the same with men.

The conversation of men and women, when together, must necessarily be of matters of interest to both-and so they are gradually led away from thinking of themselves, and of petty, idle, doubtful concerns. Nothing, I believe, like this so effectually puts a restraint upon the tongues of both.

"Flirting." Well, that depends upon what you mean by the word. If you mean conscious seeking for admiration, pretended love making, attracting the notice of strangers in the street, in short, a heartless desire for the mere gratification of vanity: I say, flirtation is highly reprehensible. But if you mean an earnest desire to give pleasure a little innocent railing and harmless chatter, a graceful, charming courtesy, flirting is as proper and as healthful as laughing. Let the heart be right, and the outward conduct will, sooner or later, regulate itself.

The world moves. Women do to-day in all guilelessness, what they couldn't have done fifty years ago without laying themselves open to severe criticisms. We may gain just an inkling of the ancient state of affairs, by reading a little book of essays, written by a lady of the old school. In speaking of Mrs. Emma Willard and her physiological researches, the writer states most naively that Mrs. Willard hesitated to make her discovery (Circulation by Respiration) public, for fear she could not do so, without the violation of feminine propriety! What must be thought of a state of society in which such a sentence could be written? Or rather, in which such a consideration could ever have had weight?

If we believe our grandmothers and old aunts the time really was when women did think in just the above strain, as a consequence of the false training that they received. In those days it was not considered propen for a lady to go into a gentlemen's office, or to write him a letter even on business. Woman's competing with man in the everyday affairs of life has arranged all that, and women are as good as ever they were. In fact, people are beginning to remember that slips from virtue were more commor in other duys than they are now; and to learn that hedging in women, so far from protecting them, is, in fact, insulting all men by implying that they are scoundrels.

Of this be sure-whatever is not wrong is right. Furthermore, "Evil be to him that evil thinks." A young man and a young woman, who are good and pure in heart and life can safely be trusted with perfect liberty; a young man and a young woman who are not so, can defy all hindrances.

There are, however, restraints to be respected, in the association of young gentlemen and ladies. But they should not be like prison

walls, frowning and horribly suggestive; rather should they be like the light wire fence in the park, invisible until touched.

Keep every man at a certain distance,-not in any manner of aggression, but rather by a negative influence. Your own delicacy ought grease I can sell for less, but if ye want to lay to be the best guide here; and no one can teach you. Only, be sure that you are sincere, that there is no pretension about you, and it is safe to say that you will get as much respect as you

Let no man touch you, except when you shake hands. A real gentleman may fasten your cloak in such a way that you will scarcely know it. He may admire an article of dress without examining it. If he wishes to look at a piece of jewelry, take it off and hand it to him Put on your overshoes yourself. If any young man should forget himself once, say nothing, but draw yourself quietly away, he won't do so the second time. If he does, still say nothing, but leave the room.

In fact, notice nothing annoying. Your very absence of remark will express your displeasure far more effectually than words. There's always a way of retreat; the door. You won't be troubled very often,-if you are, you will most likely bring it on yourself.

We hear various cautions expressed regarding kissing, embracing and the like. I can scarce understand why we should. It passes my comprehension how, under ordinary circumstances, and concerning parties who are not lovers, any such counsel should be necessary. If you are fully protected by your own self-respect, no true gentleman will ever advance far enough to think of kissing you.

I have used the term "true gentleman." This brings me to consider who your friends ought to be. Certainly, not anybody and everybody; then, in beaux, gentlemen with whom a girl not any chance acquaintances, picked up here and there. No man ought to have the privi lege of visiting at your house, who is not known to be respectable, and who has not been introduced to you in a proper manner by some one in whom you have confidence. If you exercise care in forming acquaintances, you won't have to be very anxious about their behavior after wards.

Yes, a better day is coming, a day of simplicity, truth and purity, a day held up as one of the ideals toward which the Christian Church is to advance, in which men and women shall dwell together as "brethren and sisters." To those who are worthy, the day has already dawned. -Rural New Yorker.

Buying and Selling.

The following good story is published by an eastern exchange. We don't know that any of our Kansas grocers would act so dishonestly, but it is well enough for farmers to not be too credulous. There are few of them so credulous as Mr. Robby :

"Here comes Robby, from Sleepy Hollow, with a load of butter. We are short, arn't we, Jonas ?"

"Yes, all gone but the bad lot, and they are all crying for something good."

Robby, from his wagon, "Nipper; I've got

some butter for ye." Nipper is busy and does not hear.

"Hello there, Nipper, come and see this butter."

Nipper slowly clesed his order book, directs the delivery boy to hop around with the codfish, shifts a yellow ham near the door from one peg to another, cocks his stovepipe on the back of his head, thrusts a thumb in each armhole of his vest, and shuffles slowly toward the street as though about to squint at the state of

the weather. "Why, Robby, what you got there?" "Butter, Mr. Nipper."

"Butter, hey? Now, if ye had eggs I might buy. Butter's dull, Robby."

"Is that so? Daisy heard as it had gone up." "Gone up!-well, yes; gone up the spout. Dick, take them turnips to Richfinger," turn-

ing away. "Won't ye look at this lot, Mr. Nipper?" "Robby, we're full. Jonas was just sayin' he couldn't store another tub. The town's

New York, and there are no buyers." " But this is an extra lot, from the best pasture, with the spring brook in it, where you used to catch trout, Mr. Nipper, and Daisy

made it with her own hands." "Yes, yes, but it looks salvey like-worked too much-no texture you see, and full of buttermilk; won't keep, Robby, won't keep. Then it lacks the gilt-edge tone and flavor. What

do you ask for it?" "Well, Daisy thought as how she ought to have fifteen cents."

"Too high, too high; can't buy; good morning."

"See here, Nipper, what'll ye give?" "Well, Robby, if I give you ten cents for that butter, Jonas will be as mad as a boiled lobster; Jonas will swear and make things lively. But you're an old friend, and I'm

going to do it and take the consequences." SELLING.

"Richfinger, come this way; I can show you an awful nice lot of butter; there it is. That's what I call elegant; made by Daisy Buttercup, the neatest and prettiest girl in the country. I used to spark her mother before she married. She's dead now; old friends, you know, and can't help dealin'. Look at the color-there's dandelions and buttercups; look at the texture—as free from salve as snow-flake, and if ye find a hair or bug, I'll make ye a present of

it. I daresay ye can scent the clover blossoms. Taste of it; notice the tone, the mellowness the aroma-equal to cream candy any time What do you think of it, Richfinger?"

"What's the price, Nipper?"

"Twenty-five cents to an old customer." "Pretty high' isn't it?"

"That depends on what ye're buyin'. Grease is grease, and butter is butter. If ye want the most important agent for supporting exisin the best grade, the gilt-edge, the gold-leaf, as it were, June butter-butter that'll keep, mind ye, ye might go further and fare worse. Let me tell ye that butter is on the rise; the town is cleaned out, and them New York chaps are out looking up round lots. That means a foreign demand, and great scarcity, sir-great scarcity."

Fashion Notes.

Surah is only a soft twilled silk. Puffs in the arm holes will be revived.

Jet is more fashionable than ever this season. All fashionable coiffures are worn low or half

All spotted and polka dotted goods will be nuch worn.

Shoulder kerchiefs of large size will be very fashionable.

A glint of red appears on almost every toilet that is not mourning.

Little elbow capes of lace, chenille and jet nake the most stylish summer mantles.

No matter how short the sleeves are, the loves must be long enough to cover the arm. Low shoes will be worn a great deal this summer to show the colors and embroideries on

The puffs on the tight sleeves are said to be more comfortable in warm weather. There ought to be some compensation for their ugli-

Hooks and eyes, in plain and colored steel have been introduced as substitutes for buttons.

The loops of ribbon used to trim grenadine gowns are of doubled face and watered and satin ribbon, and are sewed perfectly flat on the

The Princess saque, with a Spanish flounce at the bottom, continues to be the favorite form of dress for little girls.

Gold lace and colored lace is used for millinery purposes, for trimming parasols, fans and rich brocade and velvet dresses.

The Claudent scarf, of the popular shape that is rounded at the throat, is made up this season in the twilled Surah silk in checks or in plain colors.

Instead of woolen breakfast shawls there are now large quantities of India foulard, in bright colors and gay patterns, edged with Languedoc and Raguss laces, put on slightly fulled, not plaited.

Purple and yellow flowers are in vogue. The favorite purple ones are the heliotrope, lilacs, asters and large pansies: while the marigolds, artemisias and soft roses without foliage are the popular yellow ones.

Mantles made of lengthwise plaitings are among the new devices for keeping one warm in July. They are lined and weighted by gimp and jet ornaments, which keep the plaits in place.

Painted wall-flowers, mingled with artificial crape flowers, with garnet beads in place of pis tils, and painted aquatic plants and insects, are among the dress decorations seen by Don Juan of the Parisian.

Large hats with irregular, turned-up brime are elaborately trimmed with ostrich plumes flowers, gold braids and gold ornaments, and used for carriage drives, archery, garden and lawn parties, or on all occasion toilets are admissible. A pretty idea for a garden hat is to cover a large frame with puffed tulle and trimmed with a wreath of yellow mustard or cowslips. Country hats are of broad beaded leghorn, trimmed with a scarf of tulle or of coarse straw finished with a wreath of daises and a bow of black velvet, the brim faced with black velvet. These are useful but heavy

Diversity of Food.

No animal possesses so great a power of ac commodating itself to varied external conditions as man, and this is especially true in matters concerning diet. Without this power the glutted-glutted, and heaps of it is spoiling in distribution of mankind over the surface of the globe must have been more limited than it nov is. The difference of climate in different lati tudes not only gives rise to different persona requirements as regards food, but likewise mod ifies the character of the alimentary products that are to be found. As we pursue the com mon routine of living which custom and our condition in life have fixed, the diversity of

> hardly receives a passing thought. The Esquimaux are mainly an animal-feed ing people, and are fond of fat and marrow they relish a slice of raw blubber or a chunk o frozen walrus beef, Fire, they claim, would ruin the curt, pithy expression of vitality which belongs to its uncooked juices. Siberians sub sist mainly on fish or reindeer meat, boiled or fried in train oil, while bread is everywhere

> food in common use by the people of the world

The usual food of the laboring classes in Mexico is a thin cake of crushed Indian corn, under the name of tertilla, and, notwithstanding the great abundance of cattle in many places, the traveler can rarely obtain meat in the little country huts. The Guachos in the Argentine Republic live entirely on roast beef, with a little salt, scarcely ever tasting farinaceous or other vegetable food, while their sole beverage is mate, or Paraguay tea, taken without sugar.

The natives of Australia live upon fish when near the coasts, but when in the woods upon opossums, and almost any animal they can atch, and also a kind of grub which they find in decayed wood. From the earliest period the most general food in India has been rice, which

is still the most common food of nearly all the chests whose bottoms have been previously covhottest countries of Asia. In Ceylon beef is ered with ashes or pulverized chalk.—Elsaessivche Bienenzuechter. forbidden, being an abomination. The almost endless cocoanut forests provide the native with tence.

The Chinese have no prejudice whatever as regards food; they eat anything and everything from which they can derive nutrition. Dogs, rats, mice, monkeys, snakes, sea-slug, rotten eggs, putrid fish, unhatched ducks and chickens are embraced in their diet. Travelers say butter,cream,milk or whey are seldom ever seen in China. The sinewy parts of stags, fins of sharks, birds nests, are purchased by the wealthy at enormous prices. The Japanese eat largely of fish as well as rice, also of fewls both wild and tame. The flesh of whales is a common food in some parts among the poorer classes. In the dishes they make a plentiful use of mushrooms, bulbous roots and of beans. Beef and goose constitute the principal part of the animal food throughout Egypt, but the advantages of a leguminous diet are acknowledged by

the modern Egyptians. In many parts of Africa dates are the main subsistence of their inhabitants. All live on dates, men, women, and children, horses, asses and camels, sheep, fowls and dogs. The principal dict of the Kaffir is milk, which he eats rather than drinks in a sour and curdled state. One good meal a day taken in the evening, consisting of the curdled milk and a little millet, is almost all that he requires, and with this he is strong, vigorous and robust. A Kaffir will never touch pork, though he will eat fish, also the flesh of an ox, cooked or raw.

Natives of the Friendly Islands consume large quantities of yams, plaintains and cocoa nuts; while of their animal food the chief articles are hogs, fowls, fish and all sorts of shell fish, and the lower people eat rats. Hogs, fowls and turtle seem to be reserved for their chiefs. The inhabitants of New Caledonia subsist chiefly on roots, fish and the bark of a tree, which latter they roast and are almost continually chewing. It has a sweet, insipid taste. The victuals of the Hottentots are the flesh and entrails of cattle and of certain wild beasts, with several varieties of fruits and roots.

Thus it is seen that a great diversity exists as regards the food consumed by the human race in different parts of the globe. Instances are to be found where life is sustained upon a wholly vegetable, a wholly animal and a mixed diet. The mixed diet, however, may be regarded as that which, in the plan of nature, is designed for man subsistence.

The Clematis.

The barrenness and desolate aspect of farm nouses and out-buildings is certainly a great drawback to the beauty of our rural landscape The general appearance of the homes of farmers would indicate that their owners are too intent upon field work to have time or inclination to make their dwellings beautiful. Occasionally a climbing rose or Virginia creeper is seen, but rarely anything less common and familiar. There is no necessity for this sameness, for there are many climbers which are perfectly hardy, and which, once started, will thrive under very adverse circumstances, and among those the Clematis is extitled to a place in front rank. In this genus we have a great variety of form, color, and size, combined with perfect hardiness, and it may be made to flower freely through the entire season, from early ummer to late autumn. The Clematis is by no neans particular about soil, yet, like most plants, it will generally reward its cultivator for liberal treatment.

Canning Fruits.

There are in fruits and cereals three kinds of sugar-cane sugar, glucose and frucose, all three nearly allied, but still each one has peculiarities of its own, and yet one is easily changed to another. In the growth and maturity of plants these are continually changing. Cane sugar is easily converted into glucose When it is used for preserving fruits, if the sugar is boiled with the fruit, a large portion of the sugar is converted into glucose, which is not so sweet as the cane sugar, and the more acid there is in the fruit the more sugar it requires, because the acid aids in converting the cane sugar into glucose. Cane sugar will not produce alcohol, but glucose will, and alcohol is very frequently created into preserves, in which case the idea is prevalent that there was not sugar enough applied, when the fact is it was not properly used. If the fruit is first boiled then the sugar brought to a boiling heat, and the fruit put into the sugar, less of the saccharine principle will be required, and the fruit

How to Get Rid of Ants.

During a recent visit to Mr. Humann, in Ostheim, I had an opportunity of becoming acquainted with a very successful method of speedily getting rid of ants which are so troubesome in the apiary.

One takes small bottles, fills them half full of syrup or sweetened water, and puts them in the places where the ants have their passageways, in such a manner as the necks of the bottles lean against a wall or board, in order that the ants may easily fall into the trap and drown.

By means of camphor, ants can be driver from rooms where honey is stored.

In gardens, lime-dust operates very destruct ively upon them. Their hills, after being scratched open, are sprinkled with lime-dust, and then hot water is sprinkled on them.

To render jars of honey or preserved fruit

inaccessible to these insects, place the jars in

To Get Rid of Pests.

A few draps of carbolic acid in a pint of water will clean house plants of lice in a very short time. If mosquitoes or other bloodsuckers infest the sleeping rooms at night, uncork a bottle of pennyroyal, and these insects will leave in great haste, nor will they return as long as the air in the room is loaded with the fumes of that aromatic herb. If rats infest the cellar, a little powdered potash thrown into their holes, or mixed with meal and scattered in their runways, never fails to drive them

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

62 Golden Chromo, Crystal, Rose, Damask, Navy, &c., Name in gold and jet 10cts, Winslow &Co., Meriden, Ct. \$777 A YEAR and expenses to agents. Outfit Free P. O. VICKERY, Augusta, Maine.

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(over 60 samples), 10c. Davids & Co, Northford Ct.

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THE STRAY LIST.

HOW TO POST A STRAY.

FY AN ACT of the Legislature, approved Feb 27, 1806, section 1, when the appraised value of a stray or stray exceeds ten dollars, the County Clerk is required, within ten days after receiving a certified description and appraisement, to orward by mail, notice containing a complete description fasted strays, the day on which they were taken up, their praised value, and the name and residence of the taker up, the KANASI FALMEL, together with the sum of fifty cents cach animal contained in said notice."

How to post a Stray, the fees fines and penalties for not posting.

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

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

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

places in the township, giving a correct description of such sincy.

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

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

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

shall be advertised in the KANSAS FARMER in three successive numbers.

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

preof will be offered. The stray shall be delivered to the owner, on the order of the Justice, and upon the payment of I charges and costs.

If the owner of a stray fails to prove ownership within sweye months r-ter the time of taking, a complete title shall vest in the take "da.

At the end of a year after a stray is taken up, the Justie of the Peace shall issue a summons to the householder to appear and appraise such stray, summons to be served by the describe and truly value said stray, and make a sworm return of the same to the Justice.

They shall also determine the cost of keeping, and the benefits the takerup may have had, and report the same on their appraisement.

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

Any person who shall sell or dispose of a stray, or take the same out of the state before the title shall have vested in him shall be guilty a misstemeanor and shall forfeit double the value of such stray.

Strays for the week ending July 7.

Anderson county—Thos. W. Fester, clerk.

PONY—Taken up by W II Savage, Indian Creek tp. June
2, 1890, one bay horse pony 6 years old, 3 white feet, snip on
nose, ronched mane, collar marks, valued at \$49.

MARE—Also by the same one dark bay mare 6 years old
blaze face, shod on front feet, branded O on right shoulder
black mane and tail, valued at \$45.

MARE—Also by the same one clay bank dun colored mare
10 years old dark mane and tail, harness marks, valued at \$35.

Oyears old dark mane and tail, harness marks, valued at \$35.

Diokinson county.—T. J. Crozier, clerk.

MARE—Taken up by William Gugeller, Inberty tp, May
5 1880, one mouse colored mare 12 years old, 13½ hands high
reight about 800 pounds, sway backed, mane and tail mediim length; no brands, has collar and saddle marks, valued
title.

Mitchell county.-G. W. Clark, clerk. MARE—Taken up by Jacob Martzolf, Walnut Creek tp lay 31, 1880, one buckskin or light bay mare, black legs, anne and tail, stripe along the back, star in forchead, slight illar mark ou right shoulder, branded on the right hip w 6 1, about 8 years old, 12 or 14 hands high, weight about 700 r 800 pounds, valued at \$40.

or sop pounts, valued at \$40.

Miami County—B. J. Sheridan Clerk.

FILLEY—Taken up by J. A. Arbogast, Osage tp, May 24, 182, one light fron gray filley, dark mane and tail, about 14 hands high, no marks or brands perceivable, valued at \$40.

Montgomery county-Ernest Way, clerk. HORSE—Taken up by J P Rood, Caney tp, one gray horse about 12 years old, shoes on hind feet, collar and har-ness marks, valued at \$80.

Stafford county—Frank Cox, clerk.
MARE—Ta en up by Carroll J Hurt, York tp, May 11,
30, one chestnut sorrel mare, white stripe in face, valued 1880, one chestnut sorrel mare, white stripe in face, valued at \$50.

MARE—Also by the same, one hay mare, white stripe in face below the eyes, left fore foot white around the ankle valued at \$50. Sumner county-S. B. Douglass, clerk.

HORSE—Taken up June 11, 1880, by Daniel R Ogden, one am color horse 8 years old 15 hands high white in forchead, ndescribable brand of left hip and shoulder, shod in front, dun color Borse S years old, le hands high, white in forehead, indescribable brand of left hip and shoulder, shod in front, valued at \$50.

HORSE—Taken up May 15, 1880, by William, Chikaskia tp, one bay pony horse, branded it on left shoulder, saddle & harness marks, rope mark around the head under the eyes, leavy halter on, heavy mane and tail, supposed to be six years old.

Wabaunsee County,—T. N. Watts, Clerk,
MARE—Taken up by H. K. Johnson, Maple Hill tp, June
4, 1880, one light bay mare about 9 years old, sixteen hands
high, weight about 1100 pounds, valued at \$40.

Strays for the week ending June 23.

Harvey county—J. C. Johnston, clerk.

MARE—Taken up by Josiah Porter, Richland tp, June 1
880, one bay mare, 16 hands high, black mane, tail and legs
rous fest very large, pastern joints behind very crooked, 12
ears old, no brauds, valued at \$25.

MARE—Taken up by Frederic Warmbrodt, Richland tp,
May 28, 1880, one bay mare, 16 hands high, black mane, tail
und less had \$26 et of Circlet rous on the nock? A very old

Kingman county-Charles Rickman, clerk. ULE—Taken up June 10, 1880, by Robert Wood, Hoosie one bay mule about 13 hands high, no marks or brands ars old, valued at \$20.

Leavenworth county.-J. W. Niehaus, clerk. Leavenworth Country. J. W. Rienkus, cierk. FILLEY-Taken up by Wm Finley, Kickapoo tp, May 18 1880, one 2 year old clay bank filley, medium size, rather thin, no marks or brands, valued at \$20.

MARE—Taken up by Joseph Adair, Reno tp, June 7, 1880, owe dark sorrel mare about 8 years old, 15 bands hi. h. left fore and right hind foot white, white stripe in face, valued at \$40. Marshall county.-W. H. Armstrong, clerk.

Marshall county.—W. H. Armstrong, clerk, FILLEY-Takan up by James R Blaney, Cle r Fork tp, June 3, 1880, one light bay filley, white star in forehead, one year old, valued at \$15.

MARE—Taken up by John Mock, Watewille tp, May 9. 1880, one by mare three years old, valued at \$40.

GO17—Also, by the same, one black horse colt about 3 years old, blind in left aye, valued at \$25.

GO17—Also by the same one roan mare colt about two years old, had large rope around neck value of a \$25.

GO17—Also by the same, one yearling horse mule colt, MARE—Taken up by John Peterson, Waterville tp, May 7 1880, one roan mare, two years old, dark mane and tail, letters T 8 branded on left shoulder, valued at \$25.

GO17—Also by the same, one light bay gelding, star on forehea, about 2 years old, valued at \$35.

GO17—Also by the same, one sorrel yearling gelding colt.

Obborne county—C. G. Paris, clerk.

Osborne county—C. G. Paris, clerk.
HORSE—Seven years old, light bay, four white fact, while fact, mane and tail dark, collar marks, rather in itesh, 15 hands high, had on leather head halter, va. at \$40.

Smith county—E. Stevens, clerk.
COW—Taken up by James Clydesdale, May 23, 1880, Houston tp, one white muley cow, about 7 years old, valued at \$20

Sumer county—8. B. Douglas, olerk.

HEIFER—Taken up June 3, 1880, by L. Payne, Guelph tp, one red and white 3 year old heifer, two under bits over hair cryp on left ear, two under bits and slit in right ear, valued at \$1.00 km. Also by the same one red and white 5 year old cow, 2 sitts in right ear, half over crop and slit in left ear, valued at \$1.20 km.

Wabaunsec county-T. N. Watts, clerk. PONY-Taken up by Edward C Earl, Wilmington June 12, 1880, one bay horse pony 10 or 12 years old, weig about 503 pounds, saddle marks, no brands, valued at \$20.



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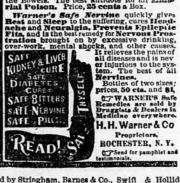
Hy you are young and entire, or any indisention, or are growing too less, as is often the case, they are to the the case, and the case, any there, and feel, that your system needs leanthing, toning or time guidaling without intoxicating.

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Hor Couon Cum is the sweetest, safest and best sak Children. One For PAD for Stomach, Liver and Kidneys is superior to allothers. Curer by absorption. 10 18 perfect. D. L. C. is an absolute and irresistible cure for drun-enness, use of oplum, tobacco and narcotics.

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On Wednesday, July 28th, at Mt. Sterling, Ky., class Short Horns topped out with choice Duchess and Oxford Sires. Sale will begin promptly arrival of noon train.

On Thursday, July 29th, at Stock Place, near Winchester, Ky., VAN METER & HAMILTON will sell a very attractive draft of seventy (70) head from their very large herd of Short Horns; consisting of females safe in calf, or cows with young calves, a few choice young Bulls, and all of desirable age. On Friday, July 30th, at Winchester, Ky.,

B. A. & J. T. TRACY will sell their entire herd (60 head) of carefully and finely bred Short Horns, consisting of Rose of Sharon, Young Marys and Phyllisses topped with high bred Rose of Sharon and straight bred Duke bulls, also some high class Rose of Sharon bulls. On Saturday, July 31st, at Cloverland, near Lexington, Ky.,

WM. T. HEARNE will sell his entire herd (so head) of Short Horns, consisting of Frantics, Finesses, Craggs, Fennel Duchesses, Lady Bickerstaff's Hilpas, Kirklevingtons, and Young Marys. Twenty head of pure Bates, the rest are of choice families, by Bates Sires. Some are prize winners, and many of the young things are of great value.

On Monday, August 2d, at Lexington, Ky.,
WM. WARFIELD & CHAS. A. FARRA (both of Lexington) will sell sixty (60) head of well bred
Short Horns, representing those choice families which they have bred so skilfully for a great many years. On Tuesday, August 3d, at Lexington, Ky.,

WALTER HANDY, of Wilmore and C. S. SPILMAN, of Bryantsville, will sell seventy (70) head of choice Short Horns of the Foggathorpe, Mazurka, Mason Victoria, Young Marys, Phyllisses and Aurora families. Many of the young things are of rare individual merit, and will be in fine flesh and condition.

On Wednesday, August 4th, at Stony Point, Ky., J. ED SUDDUTH, of Stony Point, and R. BRENT HUTCHCRAFT, of Paris. will sell their entire herd (50 head) of Short Horns, consisting of Rose of Sharons, Young Marys Jessamines, Galatias, Ianthes, Desdemonas, and other good families.

On Thursday, August 5th, at Paris, Ky., WM. T. SYDNER, of Mt. Sterling, and ROB'T E. POGUE, of Helena, will sell sixty (60) Short Horns. 35 High Class Phyllisses, 30 extra Renick Rose of Sharon toped Cambrias, and Harriets, bred to Rose of Sharon Bulls, and a few others including the grand breeding sire Valeria Duke 28,669.

N. B.—Catalogues of each herd on application to the owners of the respective sale herds. Visiting breeders will have the opportunity to visit almost every prominent herd in Kentncky, both of Cattle and Horses.

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BO LIKEWISE.—Mrs. E. F. Morgan, of New Castle, Lincoln Co., Maine, says: "Five years ago I was a dreadful sufferer from uterine troubles. Having exhausted the skill of three physicians, I was completely discouraged, and so weak I could with difficulty cross the reduction of the control o

DEVERY INVALID LADY should read "The People's Common Sense Medical Adviser," in which over fifty pages are devoted to the consideration of those diseases peculiar to Women. Sent, post-paid, for \$1.50. Address, WORLD'S DISPENSARY MEDICAL ASSOCIATION, BUFFALO, N. Y. WORLD'S DISPENSARY MEDICAL ASSOCIATION, BUFFALO, N. Y.

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Karm Betters.

PURDYVILLE, Hodgeman Co., (285 miles west of Topeka,) June 15 .- We have been waiting for some one to speak from this part of the county, but think best to wait no longer lest the impression is that Hodgeman county is dried up and the settlers all blown away.

Wheat is a perfect failure. We had no rain since November till the 19th of May. Since then we have had three pretty good showers, but no real Kansas soaking rain. We are hoping and looking for one daily. A good many farmers have got discouraged and left for parts unknown. We have but nine families in our township, and as we know of no country where it rains just as the people wish it, we expect to stay here and make a desperate effort to make a living. If we cannot raise wheat we can try something else. We have good soil, good water, and a healthy climate. There must be something for a large portion of mankind to make a living at; if we can manage to stay here long enough to learn what it is.

We had a pretty good crop of rice corn and millet, melons, cucumbers, pumpkins and turnips, last year, from what we had out. It was our first farming in Kansas. We did not the agent, J. D. Miles, has quite a number en-(We had not read the FARMER then). Some of the settlers had the misfortune to lose their teams, and did not have the means of getting much ground broken, consequently there was not enough raised in the township to support it. Many of us are under lasting obligations to eastern Kansas for bread. This year we have enough planted to have an abundance. If we only get rain, we shall not have "to send a man out to rouse the sympathy of eastern Kansas." The man who said that, has not left his wife and little children in a strange land, and from two to four miles from a neighbor, and gone to hunt work in winter, where often it is all a man can do to make his own bread. I cannot speak for the whole county, but I can safely say there was not one in this part who would not gladly have given fifty dollars' worth of corn, if he had it, rather than have said, Give us bread for our families. .

Corn, rice corn, and potatoes, are looking well since the rain. There is about one hundred acres of corn planted in this township. (There were but two acres last year). We are trying to raise sweet potatoes and Texas peas. In short, we are trying everything recommended to a dry climate. I don't think we lack energy; it is knowledge and a little more rain we lack. We can gather a good deal of knowledge from the FARMER, but how are we to get the rain? Only by waiting for it.

How can I keep the ants from destroying catalpas as they peep through the ground? Mrs. WM. P.

ALCONA, Rooks Co., June 21.-The long faces the farmers wore during the spring, have shortened since the first of May, when we had our first rain since last November. Since that time we have had rains, I believe, every week. On the night of the 19th inst., we had almost a Kansas "pour down."

Wheat will be much better than was expected. It is very short in the straw and thin on the ground, but as a general thing the heads are large and well filled. Many pieces of wheat that farmers thought would not be worth cutting, will go from five to eight bushels to the acre; some pieces will go as high as twelve to fifteen bushels to the acre. Parties having the Early May variety are now harvesting it.

Corn is looking well, and the prospects now are (should nothing happen it and we get rain at the time of earing,) very flattering for a large crop of corn. Potatoes will be a short crop, if any at all.

There has been a great deal of millet sown this season in this county. I would like to have the opinion of some of the older farmers in regard to feeding millet to horses. Some claim it is injurious, and horses would die from the effects of eating it; others claim it the best hay they could get in this country for horses. My idea is this: to let the seed get ripe, and feed the horse all he will eat, and his regular feed grain besides would be injurious. Having never had any experience either in raising or feeding it, would be very thankful to hear from some that have. I am satisfied if it was cut before it is ripe, it would be much better for the rain came late we now look for fair cutting. horses than our prairie grass.

Stoner said he had a remedy for preventing rabbits from girdling trees, and if some one raised, would remind him of it this fall, he would tell them what it was. Please let us have the remedy now while it is yet fresh. By fall we may forget it until it should be too late. "Life is \$30 to \$35; yearlings held at \$15 to \$16, short" and we should not let a good thing go by, especially such a remedy as this, which is of so much importance to every farmer in the state of Kansas. G. M. BERGER.

FORT RENO, I. T., June 20 .- Even here in the center of the Indian Territory, the Kansas FARMER is taken and read by one, at least, with pleasure and profit.

There is not much farming done here; not that it is a barren waste, nor that it is a rocky, sandy, unproductive country, but on the contrary, a rich, warm soil, very productive, and yields good returns for the labor of farming it, where it has been tried, and one of the most ed them for some time but have now almost disbeautiful countries one could wish to see. The land lies well, being dotted with jack-oak groves, which, when clothed with verdure, as they are now, form a landscape that is beyond the ground with a hoe, then filled the furrows the power of any pencil to portray.

ranches as they are called here, that have been dirt and secured fine healthy plants. At the opened in the last year or so, up and down the same time we planted the same quality of seed

FARMERS, MONEY TO LOAN AT 8 PER CT

Commissions.

No Charge for Drawing or Recording Mortgage. Interest Annually, Address A. D. FISHER,

> Managor, Topeka, Kas.

North Canadian, on which Fort Rono is situa- but omitted the water, and the seed did not gerthe same river and the Wichita. The Wich- etables ever since the second week in May. itas and Camanches, who are more civilized But how tired we were sometimes only a wom-The Arrapahoes and Cheyennes, whose head- has destroyed our sweet potatoes, beets and peas. lington, two miles east of the post, are more them; they cover everything with a web somewild and roving, yet there are many who farm what similar to a caterpillar. Small fruits and and work at other industries. Many of them trees set last spring are looking well, especially are reliable and trustworthy men. The milithe catalpa trees. Stock of all kinds looking tary here have eight employed as scouts, and well. The cholera is prevalent among the rolled as a police force. Some work in the bake shop, others in the butcher shop, while many, both male and female, are used as cooks, waiters at the table, and as laundrymen at the schools.

But enough, for fear I will be accused of bidding for settlers, which I certainly cannot be, as none are allowed to stay here unless they are employed by the government in some way, or who are connected to the Indians by marriage. This rule has been enforced lately pretty rigidly.

It was very dry the fore part of the season, but lately we have had good rains that have made the corn and spring crops very fine. Corn retails for one dollar per bushel and other things in about the same proportion.

LARNED, Pawnee Co., June 27.—Everything looks prosperous again and bids fair for a splen- feet in diameter, with timber straight as did crop of the different varieties of corn, sorghum, millet and potatoes. Grass never neighbors about them, many of them sixty feet looked better at this season of the year on the in length without a limb. They look grand to south side of the Arkansas river. We have a Kansas man. Another peculiarity I noticed had an abundance of rain since the 9th of they are not twisted about and broken like June, but the hot winds seemed to check the other timber. They are a strong topped, deep growth of all crops until the last ten days.

done conside Ning. A sage to the Indian corn in rather slow-growing tree, but in Arkansas it is some localities, and have injured some few fields of millet. Farmers are putting in all soppleased was I with the the ground they can although it is late. We engaged a man there to gather a package of the have confidence in the soil and climate to the extent of a bountiful crop.

The rainfall has been very spotted in the county, especially west and north. The rain folks wish to try the cherry they can obtain and hail to-day was the heaviest I have ever seen in Kansas. I know of no damage except a few window lights broken, and we think it gathered except on orders, therefore order soon. will put a stop to the bugs and worms. I understand that hail stones were picked up near Mr. Ormidyz, weighing 21 pounds. Great damage was done to window-glass in that neighborhood. Corn and millet were also injured considerably. Our prospect never was better for a good crop than at the present. Many of

Wool is coming in, but there are no buyers; peaches yesterday, June 18th. Who beats us?

Mr. Sams, in FARMER No. 22, and others, in 18c to 25c is offered tors. Now is the time our wool men lose the benefits derived from an association. But men will only learn by experience; that is often a dear school but many will learn in no other.

W. J. COLVIN. N. B.-Chicago is the best shipping market, and Kinsey & Co. are the most reliable men in

COFFEE Co., June 6 .- Not hearing from our county since our fine rains, and wanting all to know how good we feel, I thought I would send a few lines. We had two fine showers a week ago which wet the ground six inches deep, and as I write it is raining again.

Small grain is a failure here on account of past drouths. Our 'prospects for hay were poorer than at this time last year, and though Corn is five feet high on an average, and the In a recent number of the FARMER, Mr. stand first-rate-never better, and our county may expect as good a crop as we have ever

> Stock all doing well, and in demand. Fat cows selling at \$2.25 on the farms; two-yearold steers average \$25; three-year-old steers, straight. These prices are for native stock.

ROXBURY, McPherson Co., June 28 .- The wheat in this section is mostly harvested and some threshing has been done, the average yield will not exceed ten bushels per acre; the quality is good. Oats are about the same as last year and unless rain comes soon will hardly be worth cutting. Corn looking well but is needing rain badly; the chinch bugs are damaging it to a considerable extent. Early potatoes look well but have not formed tubers of any size worth mentioning. The Colorado beetle infestappeared. Vegetable gardens are almost a failure. The seeds did not germinate from lack of moisture. We planted some seed by furrowing with water. As soon as the ground absorbed There are quite a number of new farms, or the water we planted the seed, covered with dry

ted, and farther south on the south branch of minate. We have had an ample supply of veghave made rapid strides in farming. They an can tell. A small green worm about the supply us with many of the necessaries of life. size of a knitting needle and one inch in length quarters for government supplies are at Dar- The ground seems to be perfectly alive with

> MOUND VALLEY, Labette Co., June 19 .notice in the FARMER frequent articles upon the subject of timber culture in this state, especially the series of letters now being furnished by Mr. Hanan. I think those letters very beneficial to the people of this state. Mr. H.'s experiments with the different kinds of timber will no doubt save the readers of the FARMER many discouraging mistakes.

So far as I have noticed, no one has ever mentioned the wild cherry, one of the most valuable timber trees found in the states. I have wondered why this tree is so neglected, and having business in Arkansas, whence I have just returned, I saw there the cherry growing to such perfection that I resolved to bring it to the notice of the FARMER folks.

Along the White river, in Washington Co., Ark., I saw many cherry trees from two to four needles, and heads towering away above their rooted tree and not easily injured by the wind. The chinc along and cabbage worm have I had always looked upon the cherry as a

So pleased was I with the trees I saw, that I seed and send it to me by mail, when ripe. I intend to plant the seed in nursery first and transplant after a year or two. If any of our seed, by ordering soon, of Mr. E. Boyd, Springdale, Washington Co., Ark. No seed will be

The soft maple, so beautiful and so much talked of, in this state is not a substantial tree. It is easily bruised and broken, and decays rap-

It is easily bruised and broken, and decays rapidly from any injury. It is apt to grow forked and often splits apart.

Wheat harvest is over; stacking nearly done. Not a big crop this year, but those who sowed will have bread enough and to spare. Oats promise a good crop and cover and spare. for a good crop than at the present. Many of our settlers have gone east and west to hunt and work to supply their families with provisions until fall.

Wool is coming in, but there are no buvers:

alluding to that two-hundred-dollar exemption law, do not seem to take in the whole of it, after all. The constitution exempts two hundred dollars from taxation, and the trustee, by his reduced valuation, makes it six hundred dollars. There is not one-fourth of the population of our county that pay a dollar tax on personal property. But a bare majority of such men can vote a heavy railroad tax upon any township in the state as often as the opportunity offers itself. In this way we pay a premium on shiftlessness. But I believe we can vote the whisky away from them anyhow. Brother farmers, hurrah for prohibition!

PERMANENTLY CURES KIDNEY DISEASES. LIVER COMPLAINTS, Constipation and Piles. DR. R. H. CLARK, South Hero, Vt., says, "In cases of KIDNEY TROUBLES it has noted like a charm. It has cured many very badeanes of PILES, and has nover fulled to not efficiently."

not eluciently,"

NELSON FAIRCHILD, of St. Albans, Vt.,
says, "It is of priceless value. After sixteen
years of great suffering from Piles and Costveness it completely cured me."

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pletely curing a severe Liver and Kidney IT HAS WILL POWER.

BECAUSE IT ACTS ON THE LIVER, THE BOWLES AND KIDNEYS AT THE SAME TIME.

Because it cleances the system of the poisonous humors that develope in Kidney and Urinary diseases, Bil-lousness, Jaundice, Constitution, Piles, or in Rheumatism, Neuralgia and Female disorders. KIDNEY-WORT is a dry veretable com-poundand can be sent by mall prepaid.

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A PAIR OF LIVING HUGE



Topeka, Monday, July

AN OVERWHELMING AND ABSOLUTE MONARCH

REIGNING TRIUMPHANT AND PRE-EMINENTLY GRAND. A PERFECT SEA OF CANYAS-CRESTED TEMPLES

PLOODED WITH THE DAZZLING ELECTRIC LIGHT.

ILLUMINATOR

ON EARTH.



A Bewildering, Brilliant, MICHTY ORION

which all other and glimmer with THE ONE GREAT SHOW OF THE WORLD

COLE'S

Circus, Menagerie, Aquarium AND CONGRESS OF LIVING WONDERS.

The Concentrated Marvels of Two Continents—Embracing 10,000 Fare and Exclusive Features. Positively the Grandest Show on Earth; representing a cyclopean array of the world's most choice wonders, is one VAST OBJECT-TEACHING AULDAMY.

W. W. COLE, Sole Firoprietor.

Who personally dictates each and every movement of this gigantic enterprise, a fact that is sufficient to guarantee an entertainment pure and perfect to a degree so eminently distinct from the usual routine of canvas exhibitions, that nothing objectionable or indecorous is ever discovered in this NEW AND TRULY MASSIVE SHOW.

One hundred daring Equestrians, five fanny Clowns, two hundred beautiful Horses, five hundred n, Women and Children. Travels only by rail, using its own cars. Costly and gorgeous Ward-es. Astounding effects

Dens of Zoological Wonders

ANOTHER GREAT SPECIALTY, THE

Wonderful Leaping Horse

And Six Famous Trick Stallions.

these equine wonders perform a number of incredible evolutions, ence surpassing anything the world has ever seen in the way of ALSO, JUST SECURED

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A mastodon in his way, and, as recorded, the largest beet animal ever bred. Perfect in every point, and a wonder to behold. So positive am I tala this auge beast is the largest of his kind ever bred, I make a standing proposition of \$0,000 for his equal in weight, beauty and enormous size. TRAINED ANIMALS A SPECIAL FEATURE.

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Together with his trainer, a real Palidor (bull-fighter) of Madrid. This animal waltzes, rears, jumps gates, and concludes with a sham bull fight, in which he oftimes is too "true to nature."

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More Wild Beasts, More Men and Horses, More Curiosities, Magnificent and Gorgeous Ward-Guards, Kings, Knights, Body Guards, Ladies of the Court, Soldiers, Battlemen, Horse-qualded. See the Grand Free Hippodromatic Street Pageant. Coming on our own Railroad Cars. Horses all in Fine Condition. All Railroads run to and from this New and Great Show at Cheap

REMEMBER, Only One Ticket Required to all advertised exhibitions of the Great Show of the Universe. Circus, Menagerie, Museum, Aquarium, Giants, and Trained Animal Exhibitions of Wonders. Doors open at 1 P. M. and 7 P. M. 1,200 cushioned opera chairs. Will also exhibit at Wellington Monday July 12: Winfield, Tuesday, July 13; Independence, Wednesday, July 14; Humboldt, Thursday, July 15; Ottawa, Friday, July 16; Lawrence, Saturday, July 17; Wamego, Tuesday, July 20; Junction City, Wednesday, July 21; Salina, July 22.

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