

KANSAS FARMER

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(Continued on page 20.)

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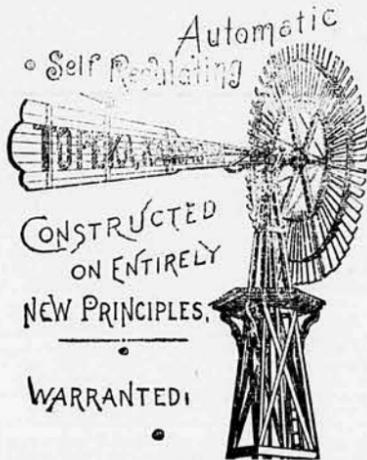
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KANSAS THE BANNER STATE.

The KANSAS FARMER presents reports from special correspondents in seventy counties of the State, showing a very good condition of things generally among the farmers. Wheat is the best we have had since 1884; it is about all harvested and saved. Heavy yields are reported in many cases. The average will be fully equal to that of our best year--twenty-two bushels to the acre. The corn acreage is the largest ever reported in any one year in our history, and the stand and condition are reported good in every part of the State. With favorable weather we will have 200,000,000 bushels to show for the work of 1888. In the new counties farmers are in happy mood; corn, millet, grasses of all kinds growing vigorously and garden vegetables in luxuriant growth. Alfalfa, sorghum, rice corn and Kafir are in best possible condition. Rye is good everywhere. A few localities suffered from dry weather and chinch bugs in early June, and an occasional field of corn has been attacked along the edges by bugs, but these exceptions are really very few. The truth is, that Kansas, as a whole, is in excellent condition, with encouraging prospects all along the line. There is plenty of time yet to make up for all shortages in the earlier part of the season.

Anderson.--Wheat almost a failure; some fine pieces. Oats, three-fourth crop. Rained nine days of the last twelve, ground full of water; no plowing done for the last two weeks. Corn is looking fine. Flax will be about an average crop. Chinch bugs damaged oats.

Atchison.--Wheat about all cut, very good. Corn growing fast; ground too wet. Oat prospects good.

Barton.--Wheat harvest well along, quality good, yield much above what was anticipated two weeks ago. Oats poor, not yet ripe. Corn is flourishing.

Bourbon.--Wheat all harvested, will yield about fifteen bushels to the acre; chinch bugs did some damage to wheat and oats. Oats harvest commenced, will make 20 per cent. above an average crop. Corn never before promised better at this time in the season, all the early planting laid by. Flax never looked better.

Brown.--Fall wheat 125, some have commenced cutting it; spring wheat 75. Oats above an average--110. Corn is gaining a joint or two every day. We are having plenty of rain.

Charlton.--Rain plenty and no floods. Wheat the best we ever raised, and oats will be the same. Corn gained more than it lost in the cool of the spring. Stock is in perfect health, fat beef on the range now. Corn in silk and tassel in the best fields.

Cheyenne.--Wheat heading out short, rye and oats the same, apparently well filled. Flax A No. 1. Corn small for the time of year, but color good and growing rapidly. Alfalfa, clover and timothy doing excellently. Potatoes bid fair for an abundant yield. All kinds of vines, trees and garden vegetables in good condition; the same is true of cane, millet and broomcorn.

Clark.--Wheat is fair. Oats cut short by the dry weather first half of June. Corn never promised so well as now, some is tassel and shooting ears. Millet will be good. Some cotton planted, doing well. Five rains since the 19th, ground thoroughly wet.

Clay.--Abundance of rain during the present month. Crops of all kinds in fine condition. Wheat being harvested.

Coffey.--Wheat all in shock, filled well and in good condition. Oats very large acreage, about one-half harvested, and never was better in quality and amount to acre. Corn most all laid by and in splendid condition. Millet good.

Cowley.--Wheat in this county all in shock and perhaps never was better; acres and acres of wheat was plowed up in the spring that would have made a good crop. Oats are simply immense, acreage very large. Corn looks fine; all laid by and a great deal of it in tassel.

Davis.--Wheat excellent; oats fairly good, some very good; corn cannot be beat; plenty of rain.

Dontphan.--Wheat about one-half in shock, a good crop. Barley and oats promise a good yield, except in a few places where the growth is too rank. Corn is growing nicely but is irregular on account of having been replanted after the heavy rains.

Douglas.--Wheat is good, harvesting retarded by continued heavy rains. Oats promise a large crop. Corn is promising well. Potatoes short.

Ellis.--Wheat short in straw and some of

it is thin, but all of it seems to have good, well-filled heads and will probably average fifteen bushels or more per acre. Oats fair. Corn that has been well cultivated is fine. Rye, sorghum and millet--our never-failing crops--are about up to their usual satisfactory standard.

Finney.--Wheat in this county will be good on irrigated land. Oats on the high land not irrigated is very light, but many fields under irrigation will yield from seventy-five to 100 bushels per acre. Corn is doing well, and the prospect was never better for a large yield. June has been rather dry for small grain, but there has been no drought to hurt corn or cane.

Ford.--Early oats harvested, heavy crop. Corn rank and good color, a little weedy. Heavy rains recently. Heavy crop of rye harvested. Millet six to ten inches high and could look no better. Farmers sowing sorghum for fall feed.

Garfield.--Rye and oats were damaged by dry weather early in the month. Farmers now harvesting these crops. Oats are short but well headed. Corn is the crop that farmers are "banking" on; it is in excellent condition. Rain abundant the past ten days, and all crops outstanding are doing well.

Gove.--Wheat short but well filled and will make a good yield. Oats a good crop, a little short. Rye about all harvested, a heavy yield. Corn looking splendid. Plenty of rain for all crops.

Grant.--Early-sown fall wheat good. Oats shortened by dry weather the first three weeks of the month. Early potatoes and gardens injured by dry hot weather. Corn doing well but needing rain in parts of the county.

Greeley.--Rye and winter wheat being harvested. All small grain filling well for new land, but straw is short. Corn doing A No. 1. Alfalfa, red clover, broomcorn, cane, etc., growing splendid.

Harper.--Wheat an average crop, will yield twenty-five to forty bushels per acre. Oats a fine crop. Corn making a splendid growth and nearly all laid by. Some farmers are listing their wheat and talking of listing their oats ground to corn. Several hundred acres of flax sown and some cotton planted. Potatoes fair. Sorghum sown for feed and planted for sirup. This county looks like one great garden.

Haskell.--Wheat good; oats short; corn, cane and millet never looked better. Heavy rains recently. Present outlook very flattering.

Jackson.--Corn looks well, oats a fair crop, flax tolerably good. A few good pieces of wheat. Rye is good. Had dry weather the fore part of this season, but the last few weeks have been wet.

Jefferson.--Wheat badly damaged by chinch bugs and since by wet weather; I cannot estimate the damage at this time. Oats will be a good crop, much better than was expected. Corn, though not large, is in excellent shape--clean, and generally a good stand; some damage by chinch bugs where there was wheat adjoining.

Jewell.--Wheat prospects are fine, though the acreage is small. Oats are going to make a heavy crop. Acreage of corn larger than ever before and present prospects could not be better. Plenty of rain.

Johnson.--Wheat is being harvested, will average fifteen bushels per acre. Good crop of oats; recent rains are aiding the late sown. Corn in fine condition, but not far advanced. Chinch bugs damaging corn in some localities. A little damp for harvesting.

Kiowa.--Wheat in shock, average about twenty bushels per acre. Oats will make a fair yield. Prospects for corn were never better. Flax very fine.

Leavenworth.--Wheat is about all ready to cut and one-third or more is now in shock; heavy rains the past ten days interfered with harvesting; the yield will be heavy. Oats coming on finely. Corn is clean and about waist high, promises an extraordinary yield.

Lyon.--Wheat is harvested, all saved and nearly all in stack; the yield per acre will be good. Oats will be cut this week, crop is exceptionally good, Corn could not be more promising.

Marshall.--Prospects for oats is No. 1. Corn is small but in good condition. Wheat good. Flax and potatoes are good; in fact, all crops except apples are good. We are having plenty of rain.

McPherson.--Wheat light, probably ten bushels per acre. Oats uneven; east half of county pretty much good and long enough to bind, but west half very short, most of it is being headed; the latest, however, still growing and will make the most oats, though they will be lighter. Corn very good, only where next to wheat fields quite a number of rows destroyed by chinch bugs. Plenty of moisture in the ground now, splendid growing weather for corn. Some farmers taking advice of Prof. Blake and listing corn in wheat and oats stable.

Meade.--Large acreage of oats put in. Corn looking fine, large amount planted. Alfalfa looking fine, cutting second crop of last year's seedling now.

Miami.--Wheat hurt with bugs. Oats hurt by dry weather in first half of June, now doing well and will be a three-fourths crop. Corn a good stand, clean, and doing exceedingly well. Pastures in excellent condition. All in all, we are in good shape.

Montgomery.--Wheat nearly all cut and the threshers will start this week. Some report thirty and forty bushels per acre. Prospect for corn was never better. Oats never gave better promise.

Morris.--Corn growing rapidly, never looked better. Oats will be about two-thirds of a crop.

Nemaha.--Wheat is being harvested and

will make a fair yield, some pieces somewhat shrunken by bugs. Oats in good shape now, large acreage. Corn prospects very good, except for the chinch bugs which are attacking it in some sections.

Neosho.--Wheat in shock, a little damp owing to the wet weather, good yield, quality extra good. Largest oat crop ever raised. Large acreage of corn, good stand. Flax doing well. Castor beans looking well.

Norton.--All small grain suffered some during the dry spell, but a soaking rain came in time to make a splendid crop. Farmers from all parts of the county bring favorable reports of crops of all kinds.

Osborne.--Seasonable rains during the month and the crop prospects are excellent. Wheat is heavy and is now being harvested. Oats, short but well filled. Corn, late but the prospects are good for the heaviest crop ever raised in this county.

Pawnee.--Wheat is about half crop. Rye generally middling. Oats a failure generally. Potatoes badly injured by the hot sun and drying winds from the south; mulched potatoes look best. Corn is good every place and did not suffer except where it was listed north and south. A good deal of late corn, millet and sorghum is still being put in on stubble ground.

Phillips.--Wheat and oats looking fine (outside of the "hailed" district). A large acreage of corn; looks fine and is growing rapidly.

Pratt.--Wheat harvest about over; yield from twenty to thirty bushels per acre. Oats short, but late rains bringing them out, will make twenty to forty bushels per acre. Corn never looked better.

Rawlins.--Wheat in the western half of the county is good, but in the eastern part it has been a little dry. Oats good, spring wheat good, potatoes good. Corn good, but weedy; too wet. Rye good, never saw it any better; clover that was sown in the spring looks splendid.

Reno.--Wheat being out, will make about twenty bushels to the acre. Oats a little over. Hay, a light crop. Corn in splendid condition. Millet injured by chinch bugs. Having plenty of rain now. Prospects good for a full crop of corn.

Republic.--Wheat average prospects good for fifteen bushels. Never seen a better prospect for oats. Corn is growing rapidly. Too much rain of late. In fact everything that rain can cause to grow is doing well. This is my twentieth year in State, prospects fair for this to be the best crop year since here.

Riley.--Wheat is all in the shock and ranges from good to very good. Oats extra good, some pieces already out. Corn is backward, but looks well.

Russell.--Small acreage of oats, wheat poor owing to dry weather. Corn looking fine, large acreage planted.

Scott.--Dry weather for the last two weeks has caused wheat and oats to head out short, but this fairly well filled. Corn looks extremely well. Soaking rains on 24th and 25th.

Sedwick.--Wheat mostly out, a fair crop, sample plump, acreage small. Oats fine, well headed, clear of smut, large acreage. Corn very promising, large acreage and mostly laid by. Rains have been seasonable.

Sheridan.--Wheat will not be an average crop on account of dry weather. We had no rain here from the 25th of May till the 24th of June. Early sowed oats will not make over half a crop. Corn, as a general thing, looks pretty well.

Sherman.--Very little wheat sown, prospect excellent. Oats short in straw, but heading out well. Corn doing splendidly, large acreage. Plenty of rain. Potatoes, rye, corn and millet all in first-class condition. Rye is being harvested.

Smith.--Wheat is well headed out, harvest will be late. Rye is extra good. Oats, where clean, will be the best crop for four years; best where sown on fall plowing. Corn looks splendid and the acreage is very large. Millet, sorghum, and potatoes look fine, as in fact everything does.

Stafford.--Wheat all harvested, yield about twelve bushels on an average, per acre. Oats about one-half crop; some late pieces pretty good. Corn doing finely with recent rains. Millet, alfalfa and milo maize growing splendidly.

Sumner.--Wheat all harvested, and saved in good shape; estimated yield for the whole county is twenty-five bushels per acre. Oats being harvested in good shape, largest crop known in the history of the county; estimated yield, average sixty-five bushels per acre. Corn tassel and silking.

Trego.--Wheat and rye harvest is in progress with a promise of a good yield. Straw short, but grain generally plump. The corn crop is in fine condition and growing rapidly. Late rains have been of great benefit to millet and sorghum sown late, of which there is a large acreage.

Wabunsee.--Wheat harvested, a good crop. Oats being out, about half a crop. Corn is waist high and clean of weeds. Millet looking well.

Wallace.--Harvesting of rye commenced, good crop. Oats promise a good yield. Corn and potatoes are doing well.

Washington.--Wheat prospect is flattering in quality and quantity. Corn was never better. Oats promise a large yield. Silk worms about all in cocoons, making just thirty days from the egg to cocoon, fed on Osage orange leaves.

Wichita.--Oats did not head out so full as was anticipated. Wheat harvested and will make full half crop. Corn exceeding all expectations. Young fruit and forest trees making fine growth.

Wilson.--Wheat is in shock in good condition, yield good and the berry plump. Oats good, two thirds in shock. Corn in excellent condition, acreage larger than any previous year. Clover and alfalfa sown this spring. Plenty of rain.

Woodson.--Wheat out, good crop, acreage small. Oats fine crop, best for years, being harvested; good acreage. Corn looks very fine, tassel and silking, very large acreage. Millet never looked finer; large acreage.

(2) Woodson.--Wheat all cut; weather past week bright and warm. Oats cutting commenced. Corn could not do better under any circumstances. Flax nearly ripe and looks fine. Everything in fact is doing all that plenty of rain and fine weather can make them do.

One dollar is all that we now ask for this paper one year.

Twenty-nine Years' Rainfall.

Mr. Secretary Graham, of the State Agricultural college, published some interesting facts and figures a few weeks ago in the Industrialist, which we copy, as follows:

As this college possesses the only nearly complete record of rain-fall during the growing months of May, June and July, for the past twenty-nine years, it is here published as a matter of interest to those who desire to compare the rain-fall of this with that of previous seasons. Beginning with 1859, the record is as follows:

Table with 5 columns: Year, May, June, July, Total. Rows list years from 1859 to 1887 with corresponding rainfall data.

Totals.....116.20 132.41 132.40 381.01
Average..... 4.00 4.56 4.56 13.13

An examination of this table will show several interesting facts. Among them may be mentioned the one that these three months furnish nearly one-half of the rain record of the year; that in the twenty-nine years there are fifteen Mays, sixteen Junes and fifteen Julys, with records below the mean; and, considering the three months together, there are fourteen seasons with records below the mean, and, of these, eight show a deficiency in each month of the three; that it has required 381.01 inches--thirty-one feet, nine inches deep--of rain-water to "make" the crops of the past twenty-nine years; that the total rain fall of the twenty-nine Junes and Julys is almost exactly equal, as is, of course, the average of those months; that disastrous crop years may be detected by a glance at the total column for these three months.

To the ever-recurring question, "Is the rain-fall of Kansas increasing?" must be returned the answer, I don't know. There is no record of rain-fall that the writer has ever seen that answers the question one way or the other. The division of any record now in existence into periods of any length for the sake of comparing one with the other is arbitrary and unscientific. To illustrate: By dividing the total column in the above table into two periods of fourteen years each, and omitting the year 1886, we have a total rain-fall for the first fourteen years of 171.23 inches, and for the second 201.78 inches, or a gain in the second period over the first of 30.56 inches. But suppose we bring our periods down to the end of 1887, and thereby omit the record of 1859, we shall have a total for the first period of fourteen years of 172.49 inches, and for the second 190.63 inches, or an increase of only 18.14 inches by merely changing our starting point one year; and yet there is no better reason for beginning with one year than with any other.

Averages, like charity, cover a multitude of sins; and the attempted proof, by means of averages, that the rain-fall of Kansas is increasing must be received with distrust until a careful scrutiny of the record, with a knowledge of how and by whom it was made, has been had.

Come to the bridal chamber, Death!
Come to the mother, when she feels
For the first time, her first-born's breath,
And thou art terrible!

The untimely death which annually carries off thousands of human beings in the prime of youth, is indeed terrible. The first approach of consumption is insidious, and the sufferer himself is the most unconscious of its approach. One of the most alarming symptoms of this dread disease is, in fact, the ineradicable hope which lurks in the heart of the victim, preventing him from taking timely steps to arrest the malady. That it can be arrested in its earlier stages is beyond question, as there are hundreds of well-authenticated cases where Dr. Pierce's Golden Medical Discovery has effected a complete cure.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

AUGUST 8.—H. M. Valle, Short-horns, Independence, Mo.

GLANDERS AND MAD ITCH.

The following paragraphs are copied from a late report of Paul Paquin, M. D. V. S., State Veterinarian of Missouri:

GLANDERS.

Regarding this malady, I desire to draw your attention to a few interesting occurrences of a not remote date. They were not in this quarter of the year, but in my last report I was too crowded to speak of it. They illustrate the benefit of State laws against contagious diseases.

In Jackson county there lives a man who traded glandered horses. The State Veterinarian traced some of the cases in other counties and attended to them, as is his duty. The matter of such unjust and criminal trading of diseased stock was brought to the grand jury, the man was indicted, he then pleaded not guilty in a criminal suit, but was found guilty, and had to pay all the damage he had caused to various individuals by his transaction, amounting to over \$1,000. (See State v. Grubs, Kansas City session of last fall court, Judge White on the bench.)

Now, people do not realize that such trading is a criminal offense, and very few know or think that glanders is transmissible to man and is more deadly in the latter.

In Nodaway county civil suit was won in a similar case. In that county I found a poor fellow, Mr. Hiram S. Pierce, with abscesses broken out at various parts of his body. He had contracted the mortal disease from his horses, which had been traded to him, he said, under the belief that they had distemper. They had glanders, however.

One horse placed legally in quarantine in Lafayette county was run away from quarantine to Kansas City. The proprietors acted in good faith in ignorance of the law and under the advice of a knowing (?) horseman, who treats animal diseases in Kansas City, and who denied the existence of glanders. I called two graduate doctors of veterinary science and both sustained my opinion. Then I made inoculations on a guinea pig, and he died with glanders. I have kept the specimens as evidence. The man who so unjustly claimed knowledge of contagious animal diseases and endangered life and property by thus interfering in the State Veterinarian's duties forgot, or did not know, perhaps, that there is legal punishment provided against such things. It were well for all unscrupulous men to remember the State laws on these points. The safety of the people and their property demand that such laws be enforced when deemed necessary, and that practitioners of veterinary medicine and dealers in horses and mules be most careful, and act always with the utmost prudence. The graduate veterinarian knows his duty and causes no trouble of course.

MAD ITCH (SO-CALLED.)

Almost all stockmen have heard of this disease of cattle, and many have seen it. But very few people know as yet what it really is. For most of people think it is an impaction of the third stomach, due to eating corn cobs or refusals of hogs, stubbles, withered or frozen grass, fibrous forage, leaves, want of water, etc. Indeed, it is true that such causes may and do bring about impaction of the third stomach, and that with this malady there are forms of delirium, simulating madness

to some extent, but the true cases of mad itch are entirely different, as I will endeavor to show. If they occur with impaction, they surely occur without it, hence, impaction is not the essential cause. Without discussing impaction of the stomach, (or dry murrain, with inflammation, etc.) I will at once proceed to describe the results of some experiments and studies I made to ascertain the nature and causes of this fatal and common affection. This experiment was the first important one carried out in connection with the State Veterinarian's laboratory, for the equipment of which the last Legislature voted \$5,000. Although more experiments are necessary to find the missing links, we have gone far enough to warrant the publication of the results obtained, for they are contrary to accepted views and lead us to the immediate adoption of better and more successful preventive measures.

On the 27th of November, 1887, I reported officially at Huntsville, Randolph county, Missouri, and found there that cattle had died from so-called mad itch. The cattle began to rub their heads on one side or under the jaws, made a sore and swelled place, became wild, ran like mad, bellowed, attacked anything in their way, and within a few hours from the first symptoms of sickness, fell and died with little or no struggle. It was evidently what is popularly known as mad itch, a disease that I have seen every year in Missouri since 1885, when I came into office, and one which nowhere has as yet been treated successfully, so far as I can learn. It is a disease which, in Missouri alone, destroys hundreds of cattle yearly. I have ample proof to sustain my statement. It was in fact this deadly malady that the veterinary authors failed to describe satisfactorily, according to my views.

Now, mark the condition in which this stock was and had been in:

Mr. James Hammitt, Jr., was the proprietor. His cattle were a few miles from Huntsville, in a good, clean pasture, where there were or had been no hogs. Consequently there had not been, nor could there be any partly-chewed corn cobs or stalks that hogs threw away and that are said to cause mad itch. The food in fact was good and had been so all the time. The whole pasture was in all appearance in a healthy condition and there was a pond of apparently good water in an adjoining lot, from which the cattle had been drinking for months.

But mark the following: In the pasture itself was another pond. On account of the extremely dry summer of 1887 it had dried up. No cattle had drank there for months. It was an old pond, full of fungus and micro-organic ferments awaiting a proper moisture for their vegetation, if not vegetating and flourishing in the less dry nooks of the place. Now, a few days before the cattle fell sick it rained and this pond was partly filled with water. Then for the first time in months the cattle left the pond in the adjoining lot and drank out of this more convenient. It was at that period that mad itch began. Five head died in quick succession. One slightly sick recovered, if my notes are correct.

Now, mark again. When I came on the ground it was just after a frost. The cattle thus prevented from drinking in this freshly filled pond, went back to the clean one. They were for a while in this condition. During this frost, germ life in the filthy pond was doubtless greatly destroyed.

After inquiring carefully into all the phasas in the cases, I gave it as my opinion that frost would arrest the disease and that change of pasture ought

to be a preventive. As a matter of fact there was no case of mad itch after these conditions were fulfilled. Medical treatments for the sick were of no avail.

January 31, 1888, I visited officially a place called Rollinghome, in the same county. There I found an outbreak of the same disease among a lot of 2 and 3-year old cattle, owned by Mr. Elliott Palmer. The cattle would show signs of slight hitch in one limb perhaps, or the first symptom seen was rubbing of the head on stumps, fences, etc. At an early period there were symptoms of wildness, such as slabbering at the mouth, running aimlessly over the field, bellowing in a sonorous mad manner, running at little animals within reach, attempting to hook any one that excited their gaze. At another place, two years ago, I myself was chased uncomfortably out of a stable by a brute thus affected, and the sight of a dog, or hog, or chicken would make the patient furious. The same symptoms were present here. Death always occurred within a short time—six to thirty-six hours from the appearance of the first symptoms.

Now, here were cattle almost precisely in the same condition in which the Hammitt cattle were. Well cared for, well fed and well watered. There was no possible chance for them to eat any corn cobs or stalks chewed by the hogs, or left on the ground. There were no stubbles nor indigestible food capable under any ordinary circumstances of producing impactions of the stomachs or inflammation of their walls.

The lot in which the cattle were kept had been frozen hard for some time. A few days previous to the occurrence of the disease it thawed out a few inches deep. The footprints on the surface of the inhabited grounds became filled with water from which cattle could drink.

There was in the lot an old, deep pond which had been frozen all winter. A few days before sickness of the cattle began, Mr. Elliott had cut through the ice, the water had bulged through the openings and he watered his stock with water coming mostly from the bottom of that pond. Some animals had a gradual change of food from hay to hay and corn. One of those that died had no change, he was fed hay and corn all winter. Others had change of the kind of hay only. After the first death, the cattle were removed to an adjoining pasture, through which circulated a brook carrying water from the pond spoken of, and some of the surface water of the lot where the disease started. In this place two cattle took the disease and died. The rest were removed to still another lot, a drier and higher one. At this place no sickness and no deaths occurred.

So far as I have been able to investigate, I have come to the following conclusion:

1. Mad itch, so-called, is a blood disease, due in all probability to a specific germ or ferment developing in water, food, or field, or yard under special conditions of moisture, etc.
2. The symptoms of nervous disorders, the madness, in other words, result from either the congestion of nervous centers, or the action upon them of a special poison, generated by the germs in their growth in the body, or such symptoms may be due to both these influences.
3. Impaction of the stomach, or inflammation of any part of the alimentary tract, is not necessary to produce the malady, although such conditions may favor it.
4. The affection most resembling mad itch, is hydrophobia, or rabies, due to bites of mad dogs. But the fact that

cattle only seem to suffer from mad itch, does not favor the idea that it is identical with hydrophobia. Again, the duration of the disease is, it seems to me, too short to admit of this hypothesis with our present knowledge.

5. To my mind, the symptoms suggest the name of specific *cerebro meningitis* of cattle. Possibly, though, further studies may suggest another name. The fact of its being a blood disease may suggest a more appropriate title.

As direct result of these investigations, we are but in possession of important practical points in regard to the prevention of the disease. In this direction I am justifiable, I think, in recommending the following:

1. Remove all the cattle from the place where the disease appears from the moment one is found sick, and place them on drier and higher soil.
2. Change kind of water and even food if possible, although this latter precaution does not seem to be a necessity unless it be impure or indigestible food that be used.
3. Clean ponds as often as possible, say yearly.
4. Do not allow cattle to drink the first water from ponds that had dried up or become low.
5. If the disease appears in feed lots, where the condition of the yard may afford proper soil for the germs, practice removal of stock again.

Good Rules for Riding and Driving.

When the horse is taken out for either riding or driving, it should not be allowed to move at a fast pace for the first mile or more, otherwise, as its stomach is then full, it may injure its wind and bring on the heaves. A good rule to observe before putting the horse up to a fast gait is to let it dung three times. This relieves the bowels to a moderate extent. If necessary to stop when out, and a cold wind prevails, put the horse under cover and blanket; if one is not to be had then hitch on the lee side of some building. If in summer, put in a shade as clear from flies and mosquitos as possible; if there is no net cover with a cotton sheet or light blanket. The best strap for hitching is one that buckles round the neck, as it holds more securely than a halter or bridle rein, which are liable to be slipped. In crossing a river or bay in a steamboat or other conveyance in cold weather, or facing a raw or strong wind on the road, hang a short thick blanket from the neck spread in full breadth over the chest, to guard from taking cold. When the exposure ceases, remove it. Returning home from a ride or drive of some extent, and the horse is sweaty, let the last mile be done slowly that it may be cooled a little before reaching the stable. Some blanket as soon as the harness is taken off; others contend that it is better to rub as dry as possible and then blanket. But which may be preferable will depend something on the weather and the nature of the horse, whether to dry quickly, or to sweat longer and copiously.

Examine the shoes, and if gravel or any hard substance has got between them and the hoofs, pick it out. During this time, the horse may safely take two to four quarts of water, at a moderate temperature if in summer, and warmer if in winter. After being well cooled give all the water the horse will drink. Now wait a short time and then feed a little hay at first, after which his ration of grain or meal. Never let a horse stand or wade in water when he is hot, as it would endanger foundering him unless the water is quite warm, and perhaps even then. If ever forced to do this, exercise him well after it, and when stabled, rub the legs thoroughly dry down to the hoofs, then he would probably escape foundering.—*American Agriculturist.*

In the Dairy.

STARTING A CREAMERY.

This is No. 2 of a series of articles prepared by Major Henry E. Alvord, for *American Cultivator*.

The one thing all-important to the success of a new creamery is to secure the cows. These must be sufficient in number, and located within a reasonable distance of a central point, to insure the economical conditions necessary to successful management. Consequently, one of the early efforts in starting a creamery is to obtain from the cow-owners of a locality absolute pledges to contribute the milk or cream from a certain number of cows to the new enterprise, provided it is started within a specified time and at a specified point, or at least within a certain radius.

Certain expenses to the cow-owner are incidental to a change from private farm dairying to the factory system. Churns, butter-workers, etc., representing more or less of an investment, must be set aside, a practical loss of so much property. And there is the necessity, usually, for an absolute outlay of a sum ranging from \$2 to perhaps \$5 per cow, to provide the appliances for handling the milk uniformly by all the patrons. This expense at the start, together with the apparently inherent distrust of new things so common among American farmers, form obstacles hard to overcome, and often discouraging to the projectors of a co-operative creamery.

Time is therefore necessary to overcome these objections. One by one the cow-owners must become convinced of the advantages of the new plan and won over to its support. Repeated meetings, conferences and private arguments must be resorted to, and progress often seems very slow. It is by no means uncommon to find just about half the farmers in a town or district who cannot be induced to "go in" at first, but who are determined to wait and see if the thing proves a success before they join.

This is a most unfortunate position, and one against which every argument should be directed. If in the cream-gathering system but one farmer in three on a certain road or in a certain vicinity joins the creamery, the wasteful conditions will exist which are so generally to be found in connection with the unsystematic supply of milk in most of our towns and cities. Scattered patrons make an expensive and comparatively unprofitable creamery. The successful creamery is the one which takes in nine-tenths or 99-100 of all the milk-producing farmers on a given area, and the more compactly situated they are the better for the business. Where half those who ought to be patrons, and perhaps think they will be, after a time, hold off to see how the new venture turns out, it should be apparent to all that these waiters and watchers are themselves the greatest obstacle to success. Numerous cases could be cited where out of 200 farmers in a neighborhood 100 combined to start a creamery, and the rest waited, watched and criticised. Very likely the creamery, although an improvement on the old plan, was far from satisfactory, because it had not cream enough to do an economical business. More cows were all that was needed to make a complete success. Yet the doubting hundred stood in the way of their own interests and that of their neighbors. They waited and waited for the creamery to become a success, when that might be accomplished any day by their becoming its patrons.

No number of farmers can be advised to start a creamery until three-fourths of all cow-owners who naturally should

be co-operators, have consented to be so, or at least 300 cows, and preferably more, have been secured, so well located that one man, or two at the most, can daily collect all the cream and deliver it at the factory.

THE CROPS FOR ENSILAGE.

As stated in an address before the Massachusetts Board of Agriculture, I have made ensilage from eight or ten different plants or crops, although never more than seven kinds in one year. For excellence of food produced I should place them in this order: Hungarian grass, sorghum, or Early Amber cane, Soja or Japanese bean, Indian corn, peas and oats, Southern cow peas, meadow grasses, rye and clover. I never saw better ensilage than that made from Hungarian grass or millet, cut when just beginning to show the heads. Yet, all considered, the one favorite, most successful and almost universal crop for ensilage is maize or Indian corn, the great agricultural plant of America. Corn as a crop for ensilage has conspicuous and unrivalled merits. For quantity, I would recommend the tall Southern or Virginian "horse-tooth" corn, white and semi-flint. The best quality of ensilage is claimed for the larger kinds of sweet corn, but unless great care is taken the product resulting will be very acid. For general economy, the common field corn of the neighborhood is perhaps as good as any. If one wishes to make a crop of corn and also a crop of ensilage, and does not care to have the ears go to the silo, there can be little doubt about it.

The crop can be raised in the usual ways, in hills or drills, the ears plucked from the stalks while in the milk, and of course without husking, and thrown in small piles or spread a foot deep under a shed to cure, and the stocks then cut and ensiled. In this way the usual crop of ear corn can be obtained, and from six to eight and sometimes ten tons of ensilage to the acre. The ensilage thus made usually comes as near to being sweet as any I have ever seen.

Ordinarily, however, a special kind of corn will be specially grown for ensilage, to secure the greatest possible tonnage per acre. For this purpose select a strong soil in good heart, and manure heavily with stable manure, broadcast or in drill. I prefer manure broadcast, plowed in lightly if green, and if well composted, harrowed in after plowing. Get suitable seed and plant in drills from 2½ feet to 3½ feet apart, according to size of corn, condition of soil and mode or facilities of cultivation. Hand labor must be avoided as much as possible, and may be entirely superseded on good land until cutting. The plants should grow from three to five or six inches apart in the row. The aim is to have every plant receive light and air enough to grow rapidly and reach maturity, if allowed time. The quantity of seed corn will vary from one-half a bushel to a bushel for an acre.

It is economy to stimulate the young plant and crowd the growth by feeding generously. Superphosphate or any good commercial fertilizers may be applied in the drill. It is important to supply plenty of ammonia in the form of animal manure. The plant should approach maturity before being cut for the silo. This rule should be applied to any crop grown for ensilage. For the best effects in feeding, we want plants that are just about to perfect their seed. In corn, wait until the ears are fully formed, or until the kernel is glazed, before cutting. Thus treated, a crop of twenty or thirty tons of green fodder may be obtained from an acre. Crops of thirty tons per acre are rare,

however, and the average is below twenty tons rather than above it.

I have never yet seen thirty-two tons of green corn growing on an acre. I never expect to believe that one acre in New England ever produced forty tons. John Gould, of Ohio, reports twenty-three tons of ensilage corn per acre from eleven acres, and that this, with the product of five acres of field corn and one ton of wheat shorts, keep fifty-four head of cattle and three horses through the winter. The field corn was fed as cobmeal, and its stalks dry. He also states that a neighbor produced on twelve acres corn which, made into ensilage, proved equivalent in feeding to the usual hay crop from 200 acres of the same farm, being average Ohio meadow land.

Mr. Gould's statement, taking the winter as covering six months, shows that the fifty-seven animals thus kept that period on the crops from sixteen acres each received daily fifty pounds of dried corn fodder, two and one-half pounds of cob meal and about two ounces of bran. This seems pretty light feeding, although bulky, yet it is said this herd was milked all winter, and exceeded in milk produced any other herd contributing to the neighboring butter factory, and also that the milk was regarded as excellent in quality.

The best crop of ensilage corn I ever saw weighed was raised under my supervision at Houghton Farm in 1883. There was used in the same field some special ensilage seed corn, common white Southern corn and Early Amber cane, the latter alone and scattered thinly in the drills of corn to grow with it. The weights obtained from accurately measured acres, the material weighed while passing fresh cut from the field to the silo, were as follows: Special ensilage corn, twenty-seven and one-half tons; common white Southern corn, twenty-one tons; the latter mixed with cane, twenty-nine and three-fourths tons; and the sorghum alone, twenty and one-fourth tons. Next to corn I would place sorghum and Hungarian grass, although if I had the experience of others with clover as ensilage that might be preferred. Rye is largely grown for the silo and liked by some. I have examined fair ensilage made from rye, but have not been fortunate enough to preserve this crop in a satisfactory shape as an article of food. It yields far less tonnage to the acre, but is more substantial than corn. An animal which will eat up thirty pounds of corn ensilage clean will hardly dispose of twenty pounds made of rye.

The advantage of using rye for this purpose lies in the fact that where land is scarce and high and manure plenty, the fields can be kept constantly at work. After a crop of ensilage corn has been secured, rye can be sown which will be ready for the silo before it is time to plant corn again; then another crop of corn to be followed with rye.

All the leguminous plants that have been tried make good ensilage, but they are so highly nitrogenous as to make too rich a food to use alone in any quantity. Again, ensilage made from nearly all of them is very disagreeable to handle, because of its pasty character and strong odor. The Japanese Soja bean deserves more attention. The cow pea is one of the best plants in the South for ensilage. Though the plant will not ripen its seed in New England, it will make a profitable growth of green forage almost anywhere in Massachusetts.

Oats and beans mixed give a heavy crop and make better ensilage than either alone. The clovers are largely used, and although usually extremely unpleasant, I have never seen clover ensilage so black and slimy or with so loud a smell as to prevent cattle from eating it with avidity. The most satisfactory way to use clover or any similar growth for ensilage is to cut it and put it into the silo in alternate layers,

six or eight inches thick, with dry straw or swale or other coarse hay or fodder, also cut. The result is a mass much more comfortable than clover alone, safer to feed and of almost equal feeding value. In England any grass suitable for hay is cured in the silo instead of drying, if the season is unfavorable for haying.

Dairying in Montgomery County.

EDITOR KANSAS FARMER:—The most practical new enterprise here is the creamery, that starts out on its own basis. Messrs. Barr & Lord have erected a creamery on their farm near town, and are using the DeLaval separator for their own milk, and gather cream from the country in all directions. They also buy butter and eggs and poultry, paying cash. It is changing the whole system of produce to a cash basis. The tendency will be to improve the dairy stock and depend more upon the produce of the dairy than of beef. There are two creameries in the county now. The farmers are realizing almost double this year for their dairy produce.

D. W. KINGSLEY.

Independence, Montgomery Co.

Soiling Cows for Butter.

I have received the following letter:

Butter-makers in this section have great difficulty in producing good butter, because of the injurious effects of various weeds and grasses. I propose to try soiling a few cows. What would you advise me to plant for them? I have irrigated land and can raise any variety of corn, all the sorghums, alfalfa, Johnson grass, millet and oats. Clover and timothy do not do well, as the climate is too hot.

My correspondent labors under the same difficulty as others in his section of country, where irrigation is necessary in producing good butter. If he has good water, a great deal of his trouble is ended; but if he must use such water as is used for irrigating, I am afraid that he cannot produce the desired article. I speak from experience in California, where I had to use the water brought from the Sierra Nevadas by canal. Ours, in fact, was only butter in name; that made in the mountains adjacent thereto in summer was tolerably good—regular butter men driving their herds in spring to those mountains, making and packing their butter there, and driving the herds back in the fall to the valleys. Your weeds and any wild grasses will not injure your butter in the spring if fed off when they are quite young, as we feed off all bottom grass here in the spring, when first started.

Soiling is your only preventive, and in fact it is the only way to make any grade of cattle pay, whether kept for milk or butter. Sow rye, or in your case barley, in the fall; this in the spring is your first green feed, followed by clover or alfalfa. As soon as your ground is warm, sow sweet corn in drills, three or four feet apart, according to the quality of your land. Southern white corn is used as a general rule, but experience has taught me that sweet corn of any variety is the cheapest. This you sow every two weeks, in quantity according to the size of your herd. The first two sowings in your locality, with thorough deep plowing, will not require irrigating.

For winter feeding you require no better fodder than this cut young and properly cured, which will be an easy matter, as you have not to contend with the rains that we have. Fed alternately with your barley hay properly saved, this will keep your cattle in prime condition, with four quarts of wheat bran daily. You cannot grow timothy hay without irrigating, except in some secluded valley. I have grown it four feet high, in such a place, without irrigating, in the foot-hills of California; in other localities it must be irrigated. It will pay you better to grow carrots than timothy if you must irrigate. What you term Johnson grass, I presume is Bermuda grass; this is our very best early pasturing grass, sweet, tender and nutritious, but when old no stock will eat it. Or perhaps yours is what is termed there Bunco grass (Cal.), a useless dangerous grass for all live stock; if so, I would advise you to burn it off. I have seen the prickles or thorns of it come through the hides of cattle. Carrot-raising is inexpensive if cultivated as recommended some time since in this journal.—Gerald Howatt, Country Gentleman.

WEATHER PREDICTIONS.

By Prof. C. C. Blake, Topeka.

[Correspondence and remittances for the KANSAS FARMER on account of this Weather Department should be directed to C. C. Blake, Topeka, Kas. See advertisement of Blake's Almanac on another page.]

WEATHER PREDICTIONS FOR AUGUST—RAINFALL.

In Quebec and the New England States it will be pretty wet after the 10th. New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia and West Virginia will average about normal. North and South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana and Eastern Texas will each have a small excess, with pretty large excess in some spots; but Western Texas will be deficient. Arkansas will have the usual amount for the time of year; Kentucky and Tennessee will be a little deficient in the eastern part, but during the first of the month there will be a little excess in the western part. There will be some excess in Ohio; but Ontario will have less during the last of the month. Indiana and Illinois will have about the usual amount of rain, while Michigan will be a little deficient and Wisconsin will average considerably deficient. Iowa will be deficient for most of the month, especially in the northern part, with a little more rain toward the southern or southeastern part. Missouri will have moderate rains scattered through the month, making the total amount a little less than usual. Eastern Kansas will have considerable rain during the first half of August, and then there will be more dry weather, making the total rainfall for the month a little more than the ordinary average. Western Kansas will not have so much the first of the month but more the last half, and making the average for the whole month slightly more than usual for August. Colorado and Western Nebraska will be a little deficient, while the eastern half of Nebraska will average about normal. Dakota will be about normal or a little deficient, while Montana will have moderate rains. Wyoming will have an average; but New Mexico and the Indian Territory will have a little less. On the Pacific coast the total precipitation will be small in Southern California, somewhat deficient in Oregon and only fair in Washington Territory.

TEMPERATURE.

The temperature for July and August this year should be pretty hot, and would be if it were to be dry; but as there is to be considerable cloudiness and rain this summer, we did not in our Almanac predict much excessive hot weather except for the last half of July, as we calculated that the clouds would cut off so much of the sun's rays, and the moist ground would absorb so much heat in converting the water into vapor, that the atmosphere at the earth's surface would not be raised to about 100 deg. in the shade for any great length of time during the summer. We think that August will have fair ordinary temperature, with both hot and moderately cool spells. But in the extreme northern States we think there will be times when it will be very near a frost, as there will be spells there when it will be cool and still at night after the clouds have cleared away; but in all other sections we do not expect frosts. As a rule the temperature for August will depend upon the clouds, being pretty hot in those sections that do not have much cloudiness or rain, and cooler where it is more cloudy. But there will be so much moisture in the air this summer that it will be more disagreeable to the person than hot dry weather would be, though the moist atmosphere is much better for most kinds of vegetation.

THE NEXT WHEAT CROP.

We have personally been engaged in farming in Kansas for a number of years, and know it pays to "make hay while the sun shines." Our experience has been that in unfavorable seasons a large amount of labor would return very poor results, while in other years half the labor would produce much better results. We found that a mixture of brain and muscle paid better than all brain or all muscle. Before we were able to calculate the weather, we would put in a crop of winter wheat in good shape, and as it formed a nice mat over the ground when winter set in, we congratulated ourselves that we had performed our whole duty, and that the chickens were so nearly hatched that we could almost count them. But when that cruel, snowless winter was

o'er, and we had to plow up that field which looked so fine in the fall, we concluded that we could not count the chickens till they were entirely hatched. All that labor and seed had been wasted simply because we did not know how to calculate what the weather was to be. We had used our muscle, but allowed our brains to lie dormant. When we had succeeded in calculating the weather we avoided such losses. In the summer of 1878 we were living at Decatur, Illinois, and as times were very hard there, the farmers were nearly discouraged. In July, 1878, we were talking with two of our friends. One was a German, who owned an eighty-acre farm, on which was a nine hundred dollar mortgage. The other was an American, who owned a very large farm, on which was a twenty thousand dollar mortgage, as he had been steadily running behind for several years. Both mortgages were past due with nothing to pay principal nor interest, and both men expected to lose their farms and then "go west." We advised them to hang on "like death to a dead soldier," and not surrender even in the "last ditch" as long as they had a round of ammunition left; that the season of 1878-9 in Illinois would be a splendid one for winter wheat, and that if they put out all the winter wheat possible, and then mortgaged their wives' spring bonnets for a few dollars to fee their lawyers for staving off the judgments till they could thresh the wheat from the shock in July, 1879, that they would make enough to pay up the interest and part of the principal, and thus save their farms. "By schminy! I'll do it," says my German friend, and the other seconded the motion. But the sheriff came for the German in March, 1879, with an execution. By hard begging and manipulating, the execution was stayed till after harvest, when the German came to town, saying: "Where's der sheriff; I wants to find mit the sheriff." He found the sheriff, paid off the execution and had a few hundred dollars left. His crop averaged over forty bushels to the acre, and he sold it for a dollar a bushel, from the machine. The other man paid off his entire mortgage of \$20,000 and had \$3,000 left. Didn't weather-calculating pay that time? It will pay nearly as well the coming season, especially in Kansas, as farmers in other States do not generally take the KANSAS FARMER and hence will not see our predictions, and will not put in much fall wheat, thus making prices better.

In our Almanac we gave full particulars as to the next wheat and other crops, and the kind of weather that will prevail throughout the season. We have not space for it all in this article, but the substance is that we advised farmers in the winter-wheat belt to put in a very large crop this fall, with the assurance of reaping a very bountiful harvest next summer. If the corn is not down too much, we favor putting the wheat in the corn ground, and to do so, would use a broadcast seeder, which any merchant can order from Kansas City. By working the seeder while riding horseback between the corn rows the wheat can be easily, evenly and cheaply sown. We have had a great deal of practical experience in Kansas farming as well as in the sidereal fields among the stars, and if Kansas farmers will join hands with us, we will make this glorious old historic State blossom as the rose. Nature has done her share—she has opened her big book wide before us and all she asks is that we read it properly. If we do so we are wise—if we fail to thus use our brains properly we waste our muscle in vain.

Verification.

In our general predictions for June we said that the weather would average wet in most places with both hot and cool spells, and that while the rains might interfere with harvesting during the last half of the month, yet that the wet and cool spells would kill the chinch bugs and do more good than harm; that on the whole it would be a very nice month for crops; that but very few places would suffer from drouth, though there would not be so much rain in the eastern States.

We have examined all the daily charts of the Signal Service and find that our predictions for June have made 100 per cent. of verification. We do not ask our readers to take our word for it; but let them take the daily reports of the Signal Service and compile the figures as to temperature and rainfall and see if the prediction we published

for June in our Almanac and in the KANSAS FARMER of May 24 are not strictly correct. Some few spots may have been too dry, and people living in such spots, who do not see the Signal Service Reports, may conclude that their own neighborhood is an index of what the weather has been throughout the United States, and thus conclude that our predictions have failed; but those who take broader views will judge more correctly. As to the weekly predictions by States which we published throughout the month of June, we did not expect to make 100 per cent. of verification on such details, and so stated at the start; but we find that the per cent. of verification has been strictly in accordance with the amount of labor which we have been able to place upon the calculations. For instance, take the rainfall for the week ending June 16, which was published in this paper June 7. That was the most elaborate in detail of any weekly prediction we have made, and as we wished to make a fair test so that we could demonstrate whether it were possible to predict such minute details, we worked hard for twelve days in making the calculations for that week, and had the help of all the tables which we have accumulated in the last thirty years. By a careful examination of all the Signal Service Reports it will be seen that we made a verification of 95 per cent. For the week previous it was 90 per cent., and for subsequent weeks from 80 to 90 per cent.

Hence we have demonstrated the possibility of making detailed predictions for short time and for limited locations that will be nearly perfect. But one man cannot do it all. We know of no mathematical rule whereby we can crowd twelve days' labor, of twelve to fourteen hours per day, into each week. Even astronomical mathematicians cannot continue to live on thin air without sleep; and we have to take a large amount of time to make the calculations for our monthly predictions which we are now doing in great detail. We have therefore concluded to drop the weekly predictions, as we cannot multiply time, and give more time to monthly calculations. But we have demonstrated the possibility, and in time shall employ experts to assist, when we expect to resume the weekly predictions and make them more elaborate than ever.

In this paper of June 14 we said: The last week in June will give considerably more rain throughout that part of the United States east of the Rocky mountains than will the week which ends June 23. The Signal Service reports now show that the rainfall was nearly twice as much during the last week of June as during the previous week, though some places in Kansas and other States did not have so much. The verification for last week was fully 90 per cent.

Weather Predictions.

[This letter was intended for our last issue. —EDITOR.]

EDITOR KANSAS FARMER:—We have had but little rain in the south half of Jackson county since in March, and consequently oats and grass are very short and in some fields will be difficult to harvest; early potatoes also have been cut short. Farmers had become very much discouraged, fearing that the corn crop would be cut short should the drouth continue much longer. Your correspondent, among the rest, had become considerably concerned in regard to the matter, and each week, on receipt of the FARMER, hastily turned to the page on which to find the weather predictions of Prof. C. C. Blake, that has appeared for several weeks in the FARMER, to see what the predictions were for the following week, hoping to get a little comfort—as a drowning man, etc.—from finding it stated that we were to have rain in this, northeastern Kansas, and for several weeks past we received but little consolation, for week after week it was recorded that northeastern Kansas was to be deficient in rainfall. In the last number of the FARMER we have it stated for the week ending June 23 that "the northwest quarter and the west half of the southwest quarter of the State will have about enough rain, with a little less in the northeast quarter, etc." Now, as Jackson county lies in the northeastern quarter of the State, we can testify that Prof. Blake has missed it by more than a jugful of rain-water; yes, more than overflowed cisterns and overflowed water-courses. There has been more rainfall in this part of

WHAT

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the State from the 17th to the 23d of June than has fallen in the same length of time for the past three years. The rain gauges indicate that rain has fallen during that time to the depth of seven and one-half to ten and one-half inches. Now while we had been having the Professor's prediction about correctly fulfilled for several weeks past and were beginning to conclude that there may be something worthy in the matter for our consideration, and one that if true and trustworthy would be a good thing for the farmer to guide himself in his work on the farm and relieve his mind of a good deal of anxiety in regard to when to commence certain operations on the farm in safety and likely to result in profit. But we confess that the bountiful rainfall of the past few days has washed our faith—what little we possessed, and it was very little that we ever had, in weather prophets—all out of us. We are under the impression, and one we have entertained for many years, that the false prophets are not all dead yet.

J. W. WILLIAMS.

Hoyt, Jackson Co., Kas., June 23.

June Weather Report.

From Prof. Snow's June weather report at the University, Lawrence, we quote as follows:

The most prominent feature of the month was the rainfall, which has been only twice exceeded in twenty-one years (June, '76, and September, '84). This extraordinary precipitation was so well distributed as to prevent disastrous floods and secure the best possible condition of the growing crops. The temperature was slightly below, and the cloudiness and wind velocity were slightly above their normal values.

Mean Temperature.—73.10 deg., which is 0.55 deg. below the June average. The highest temperature was 94 deg., on the 16th; the lowest was 52 deg., on the 2d, giving a range of 42 deg. The mercury reached 90 deg. six times. Mean temperature at 7 a. m., 69.32 deg.; at 2 p. m., 80.97 deg.; at 9 p. m., 71.07 deg.

Rainfall.—3.31 inches, which is 3.54 inches above the June average. Rain, in measurable quantities, fell on twelve days. There were eleven thunder showers. The entire rainfall for the six months of 1888 now completed has been 20.53 inches, which is 3.75 inches above the average for the same months in the preceding twenty years.

Send for a circular of the music department of Campbell Normal University, Holton, Kas

KANSAS WEEKLY WEATHER REPORT.

Furnished by the Kansas Weather Service.
Abstract for the week ending Thursday,
June 28, 1888:

Rainfall.—The rainfall averaged 1.3 inches over the State the past week, which is slightly above the June normal. Dividing the State by the third standard parallel into two slightly unequal portions, we find the northern portion received an average of 1.57 inches, or 62 per cent of the whole amount, and the southern part an average of 1.01 inch, or 38 per cent of the whole amount. The counties south of the Arkansas river, south of Greenwood, east of the Neosho river and east of Russell, Rooks and Phillips, received an excess, while in the other counties, including Saline, a deficiency occurs, which is greatest from Saline to Greenwood and in the northwestern counties.

Temperature and Sunshine.—The temperature has generally been below the average in the middle and eastern counties, with but a small per cent. of sunshine, while in the western counties these conditions have been normal.

Results.—As to the condition of corn at close of the week there is but one voice, "never was better at this time of year;" it is in silk in the south. Wheat harvest has about ended in the southern, still in progress in the middle, and has commenced in the northern counties. Oat harvest has commenced in the southern and middle counties. Rye and hay harvests are in progress in the western, and flax is ready for harvest in the southern counties. Millet gives fine promise. Threshing is now in progress in the southern, and to a small extent in the middle counties. New wheat and oats are now appearing on the market. In Pratt and Kingman the recent rains failed to revive the early potatoes, while in Coffey the damp weather is rotting the potatoes in the ground. Chinch bugs are at work in Osborne, but have diminished in the south and east. Web worms are at work on the weeds in Coffey, Chase and Lyon, and are disappearing in the south.

TOPEKA REPORT.

For the week ending Saturday, June 30, 1888:
Temperature.—Highest at 2 p. m., 89° on Saturday the 30th; lowest at same hour, 65° on Wednesday the 27th. Highest recorded during the week, 91° on the 30th; lowest, 87° on the 27th and 28th.

Rainfall.—Rain fell on four days. Total, 1.74 inches.

The Way They Talk About Crops.

Here are some stray sentences culled from our State exchanges, representing all sections:

All Kansas is full of the signs of promise. From every quarter comes reports that the promise of good crops is nearly as good as ensured and that the whole State will be made glad with as bountiful a crop as this wonderfully productive land ever presented. Kansas isn't very heavy on raising strawberries, yet we gathered over two bushels of berries in our garden on beds of less than two square rods.

Kansas will head the procession when the returns are in, from the great fertile prairies that never looked so beautiful as now.

There was a good rain Sunday. Tuesday brought several showers, some being quite heavy. Then Wednesday night the rains fairly poured down.

The wheat promises a heavy yield and the estimate throughout the State is a crop of 20,000,000 against less than 9,000,000 bushels last year, when the chinch bugs and dry weather nearly destroyed the crop. So far the corn has every condition favorable.

Did you speak of wheat? Well, a gentleman whose veracity is unquestionable says that in a drive of eight miles on June 18, he saw thirteen harvesters at work in fields adjoining the road, besides seeing many fields already in the shock. This wheat will probably average thirty bushels per acre.

Commencing this side of Kansas City the corn, yellow, sickly and thin, gradually grows better and stronger, and on reaching grand old Coffey, one can see on every side hundreds of acres of dark, green corn, reaching from knee to shoulder high, which in only a few more weeks will line the pockets of our farmers with gold.

Four inches of rain Tuesday evening, and two Wednesday night, is doing very well for drouthy Kansas.

Oxford will furnish over \$7,000 worth of

twine to farmers to bind the present crop, besides a good portion of the crop will be harvested with headers.

During the past two weeks it has been raining all round and Tuesday afternoon our time came. And it was a regular old-fashioned soaker.

Inquiries Answered.

CASTRATION OF COLT.—Subscriber's colt was badly handled. It will have to be thrown, the sack opened, and the cords removed properly. Great care must be taken or the colt will be killed. The work ought to be done by a skilled person.

MR. SWANN'S BOOK.—I want to ask through the FARMER what Mr. Swann means in his book on the bottom of page 45 and top of page 46. About six weeks since I wrote him for an explanation, inclosing stamp for reply, but have not heard from him.

—We cannot answer the question.

PICKLES.—A subscriber wants a good recipe for making pickles on a large scale. We published one two or three years ago, and promised to hunt it up and republish, but have not found it yet. Cannot Mrs. Hunter, Mrs. Brown, Phoebe, Wyble, or some other of our correspondents help us out? Send in soon, please.

STRAWBERRIES.—Will some of the readers of the KANSAS FARMER give me some information in regard to raising strawberries. We have tried it three years and they have not borne once since they were planted.

—Without taking time to explain the reason, we advise that you consult by letter some one of our small-fruit advertisers, and he will send you a catalogue of instructions. Fruit plants are not all fruitful; some are sterile.

FIELD ANTS.—In response to the question about how to get rid of field ants, Dr. Bohrer, of Chase, Rice county, sends the following: Bury a bottle in their hill so as to let the mouth be on a level with the surrounding surface. The ants will tumble in by thousands and cannot get out. Put them into boiling water or into fire. A few bottles used as above directed will in a few days trap all the ants on any farm in Kansas. Let the bottles be clean inside so there will be nothing for the little pests to hold on to in their efforts to climb out.

SORE FEET.—Will some one give me information in regard to sore feet or scalded, as I am in great pain. I walk all day and when I go to bed I can't sleep.

—There is no better way to avoid that kind of sore feet, when one is compelled to walk over plowed ground, than to go bare-footed. If you cannot do that, then have shoes made by measure of your feet, with wide solid soles that will not yield to every irregular pressure. Don't bathe the feet in cold water. Use tepid water, and when well dried, rub them well with the hands, and if you have any liniment of any kind about the house, rub a little on the feet, all over; rub dry with the hands.

Gossip About Stock.

Remember that we can supply "Haaff's Practical Dehorner," the best book on the subject ever published, for only \$1.25, or we will send it and the KANSAS FARMER one year for only \$2.

Our first page illustration represents the class of sheep bred by U. P. Bennett & Son, Lee's Summit, Mo. This firm has a neat advertisement in another place and which we commend to all who may need stock in their line of breeding. This firm has been long established and their reputation as careful and first-class breeders of practical stock is second to no other breeders in the country. Write for their new descriptive catalogue and mention this paper.

Mr. A. A. Crane, Osco, Henry Co., Ill., writes the *Breeder's Gazette*: "On May 14 I started to Portland, Oregon, in the interest of my business, and I had a very enjoyable trip. I arrived in western Idaho in five and a half days over the Union Pacific railroad; spent about ten days and returned by the Northern Pacific, via St. Paul. I find the cattle business very much depressed. I went out of my way to see a lot of cattle that had been fed on ground wheat, and they were in fine condition, but were lacking a healthy market on account of Armour's inevitable meat chest, which you will see at every place the train stops for meals on the Union Pacific, and I am told that these dressed-beef chests, labeled Kansas City, are even out at Seattle, the terminus of the

Northern Pacific railroad. I see the monster in his glory while he sets the price on the Western steer and also makes the price to the consumer. Just so with the wheat interest out there. Minneapolis and monopoly have their foot on that industry, and you can get a sack of flour for \$1, the same as at New York, while the finest wheat is but 50 cents in Idaho and \$1 per bushel at New York. Such is monopoly. I am glad to say, however, that the horse interest is not troubled by pools and trusts, and we have a healthy state of affairs, regulated by the law of supply and demand. I brought home with me fifty-three head of fine horses, and I rejoice that I have one interest untrammelled by trusts. Cattle and sheep are all doing finely on blue grass and a superabundance of good pure water to their heart's content. Everything looks promising except our income."

Book Notices.

CHAUTAQUAN.—A valuable historical article on the Chautauqua Lake country appears in the *Chautauquan* for July, by Francis Newton Thorpe, Ph. D., lecturer in the University of Pennsylvania. It is accompanied by maps bearing the dates, 1660, 1743, and 1755.

Pansy is a choice publication; it will specially meet the wishes of that class of our readers who prefer that their children should read something having a religious tendency, on Sunday. The subscription price is but a dollar a year. The publishers, D. Lothrop Company, Boston, will send a sample copy for 5 cents—or samples of all their magazines (four) for 15 cents.

THE FORUM.—Senator Wade Hampton, of South Carolina, who contributed an article to the June number of the *Forum* on "What Negro Supremacy Means," has another article in preparation for the same review, which will be a statement of what Mr. Cleveland's administration has done towards reunifying the North and the South and nationalizing the Southern people.

NEW WORDS.—J. S. Oglvie, of New York and Chicago, has in press and will soon publish, in his 25-cent paper-covered Fireside Series, a book by Anna Randall Diehl, entitled "Two thousand words and their definitions" which are not found in Webster's Dictionary. It is a book which every teacher and student who wishes to keep up with these progressive times should have.

QUINCE CULTURE.—This is an illustrated book of 139 pages devoted exclusively to the quince and its culture. It will find many readers among Kansas horticulturists, for the quince is a sterling fruit, and not many of them are raised in the State. The author is W. W. Meech, A. M., Secretary of the Vineland Horticultural Society. Published by Orange Judd Company, 751 Broadway, New York.

SCIENCE OF THOUGHT.—Three introductory lectures by F. Max Muller, delivered at the Royal Institution, London, March, 1887. The book contains three essays: (1) The Simplicity of Language; (2) The Identity of Language and Thought; and (3) The Simplicity of Thought. The appendix consists of Max Muller's correspondence on "Thought Without Words" with Mr. George Romanes, the Duke of Argyll, etc. This book will be especially useful to students and teachers. Thought is the lever of human progress. Published by the Open Court Publishing Company, 169-175 LaSalle street, Chicago, Ill. Retail price, 75 cents.

AGRICULTURAL REPORT.—The twentieth annual report of the Missouri State Board of Agriculture is received. It is a volume of about 500 pages, containing much interesting matter relating to different departments of agriculture. Articles on sheep husbandry, farm homes, apple growing, vegetable gardening, shallow culture for corn, grass to soil conservation, fall plowing and shallow culture for corn, insects injurious to vegetation, farm water supply, breeding of good-paying, healthy stock, some needed changes, practical botany, scientific agriculture and horticulture, wool examinations, women on the farm, and Experiment Station reports make up the most interesting features of the book. Much of the matter is really very valuable.

The body is more susceptible to benefit from Hood's Sarsaparilla now than at any other season. Therefore, take it now.

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CURES Nervous Prostration, Nervous Headache, Neuralgia, Nervous Weakness, Stomach and Liver Diseases, and all affections of the Kidneys.

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Recommended by professional and business men. Price \$1.00. Sold by druggists. Send for circulars.

WELLS, RICHARDSON & CO., Proprietors, BURLINGTON, VT.

KANSAS FAIRS.

A complete list of the fairs to be held in Kansas this year:

- Kansas State Fair Association—Topeka, September 17-22.
- Western National Fair Association—Lawrence, September 8-8.
- Anderson County Fair Association—Garnett, August 28-31.
- Bourbon County Fair Association—Fort Scott, September 11-14.
- Brown County Exposition Association—Hiawatha, September 4-7.
- Caney Valley Fair Association—Grenola, September 26-29.
- Chase County Agricultural Society—(Cottonwood Falls), Elm Dale, September 26-28.
- Cherokee County Agricultural and Stock Association—Columbus, October 11-14.
- Cheyenne County Agricultural Association—Wano, September 15-18.
- Clay County Fair Association—Clay Center, September 4-7.
- Coffey County Fair Association—Burlington, September 10-14.
- Cowley County Fair and Driving Park Association—Winfield, September 8-7.
- Kansas Central Agricultural Society—Junction City, September 21-23.
- Ellis County Agricultural Society—Hays City, October 2-4.
- Franklin County Agricultural Society—Ottawa, September 17-21.
- Harvey County Fair Association—Newton, September 11-14.
- Jefferson County Agricultural and Mechanical Association—Oskaloosa, September 11-14.
- Jewell County Agricultural and Industrial Society—Mankato, September 18-21.
- LaCygne District Fair Association—LaCygne, September 4-7.
- Linn County Fair Association—Mound City, September 17-21.
- Pleasanton Fair Association—Pleasanton, September 18-21.
- Marion County Agricultural Society—Peabody, September 5-7.
- Montgomery County Agricultural Society—Independence, September 4-8.
- Morris County Exposition Company—Council Grove, September 25-28.
- Nemaha Fair Association—Seneca, September 18-21.
- Sabetha District Fair Association—Sabetha, August 28-31.
- Osage County Fair Association—Burlingame, September 11-14.
- Osborne County Fair Association—Osborne, September 11-14.
- Ottawa County Fair Association and Mechanics' Institute—Minneapolis, September 25-28.
- Phillips County Agricultural and Mechanical Association—Phillipsburg, September 18-21.
- Pratt County Agricultural Society—Pratt City, September 4-7.
- Hutchinson Fair Association—Hutchinson, October 2-5.
- Blue and Kansas Valley Agricultural Society—Manhattan, September 18-21.
- Plainville Fair Association—Plainville, September 25-28.
- Rush County Industrial Fair Association—LaCrosse, September 19-21.
- Saline County Agricultural, Horticultural and Mechanical Association—Salina, September 11-14.
- Smith County Agricultural Society—Smith Center, September 19-21.
- Washington County Live Stock, Agricultural and Mechanical Association—Greenleaf, September 12-14.
- Neosho Valley District Fair Association—Neosho Falls, September 24-28.

Walking advertisements for Dr. Sage's Catarrh Remedy are the thousands it has cured.

All desiring employment should write to B. F. Johnson & Co., 1009 Main St., Richmond, Va. See their advertisement.

Barley is somewhat better than oats to sow early for soiling purposes. It grows up to cutting size more quickly, and just before heading out is especially rich and succulent for cows giving milk.

A Trial by Jury.

That great American jury, the people, have rendered a unanimous verdict in favor of Dr. Pierce's Pleasant Purgative Pellets, the standard remedy for bowel and stomach disorders, biliousness, sick headache, dizziness, constipation and sluggish liver.

The Home Circle.

To Correspondents.

The matter for the Home Circle is selected Wednesday of the week before the paper is printed. Manuscript received after that, almost invariably goes over to the next week, unless it is very short and very good. Correspondents will govern themselves accordingly.

Written for the KANSAS FARMER.

A Retrospection.

BY JULIA F. COLEMAN.

The breeze is murmuring
Through prairie grasses tall,
While the mellow harvest sunshine
Shimmers o'er it all.

My glance is wandering
O'er the billowy plain,
And I see the reapers
Binding golden grain.

But visions of the fields
That lie beyond my sight,
Come floating back to me;
For in my heart to-night,

Far away where shadows
In valleys green grow long,
And nature all is singing
A sweet, triumphant song;

Where velvet carpets wide are spread
On forest-crowned old hills,
And sunbeams bright are ling'ring
On the dancing rills.

And so I fain would rest
This evening in some glade,
Where oft beneath the hills
I watched the twilight fade.

Sabetha, Kas.

Over the Hill from the Poor-house.

I who was always counted, they say,
Rather a bad stick any way,
Splintered all over with dodges and tricks,
Known as the "worst of the deacon's six,"
I, the truant, saucy and bold,
The one black sheep in my father's fold,
"Once on a time," as the stories say,
Went over the hill on a winter's day,
Over the hill to the poor-house.

Tom could save what twenty could earn,
But givin' was something he never could learn.
Isaac could half of the Scriptures speak,
Committed a hundred verses a week;
Never forgot an' never slipped,
But "Honor thy father and mother" he
skipped.
So over the hill to the poor-house.

As for Susan, her heart was kind
An' good—what there was of it, mind;
Nothin' too big, an' nothin' too nice,
Nothin' she wouldn't sacrifice
For one she loved; an' that 'ere one
Was herself, when all was said and done.
An' Charley an' Becca meant well, no doubt,
But any one could pull 'em about.

An' all our folks ranked well, you see,
Save one poor fellow, an' that was me;
An' when one dark an' rainy night
A neighbor's horse went out of sight,
They hitched on me as the guilty chap
That carried one end of the halter strap.
An' I think myself that view of the case
Wasn't altogether out of place.
My mother denied it, as mothers do,
But I'm inclined to think 'twas true.

Though for me one thing might be said,
That I, as well as the horse, was led;
For the worst of whisky spurred me on,
Or else the deed would have never been done.
But the keenest grief I ever felt
Was when my mother beside me knelt,
An' cried an' prayed till I melted down,
As I wouldn't for half the horses in town.
I kissed her fondly then and there,
And swore henceforth to be honest and square.

I served my sentence—a bitter pill
Some fellows should take who never will;
And then I decided "to go out West,"
Concludin' twould suit my health the best,
Where, how I prospered I never could tell,
But Fortune seemed to like me well;
An', somehow, every vein I struck
Was bubblin' over with good luck;
An', better than that, I was steady and true,
An' put my good resolutions through.

But I wrote to a trusty old neighbor and said:
"You tell 'em, old fellow, that I am dead,
An' died a Christian; 'twill please 'em more
Than if I had lived the same as before."
But when this neighbor he wrote to me,
"Your mother is in the poor-house," says he,
I had a resurrection straight-way,
An' started for her that very day.
An' when I arrived where I was grown,
I took good care that I shouldn't be known,
But I bought the old cottage through and
through.
Of some one Charley had sold it to,

And held back neither work nor gold
To fix it up as it was of old.
The same big fire-place, wide and high,
Flung up its cinders toward the sky;
The old clock ticked on the corner shelf—
I wound it and set it a-goin' myself;
An' if everything wasn't quite the same,
Neither I nor Manly was to blame.
Then—over the hill to the poor-house,

One stormin', blusterin' winter's day,
With a team and cutter I started away,
My fiery nags as black as coal,
(They somewat resembled the horse I stole).
I hitched and entered the poor-house door;
A poor old woman was scrubbin' the floor;
She rose to her feet in great surprise,
And looked quite startled into my eyes.

I saw the whole of her troubles' trace
In the lines that marred her dear old face.
"Mother!" I shouted, "your sorrows are done!
You're adopted along o' your horse-thief son!
Come over the hill from the poor-house."

She didn't faint; she knelt by my side,
And thanked the Lord till I fairly cried.
An' maybe our ride wasn't pleasant and gay,
An' maybe she wasn't wrapped up that day,
An' maybe our cottage wasn't warm and
bright.

An' maybe it wasn't a pleasant sight
To see her a-gettin' the evenin's tea,
And frequently stoppin' and kissin' me;
An' maybe we didn't live happy for years
In spite of my brothers' and sisters' sneers,
Who often said, as I have heard,
They wouldn't own a prison-bird,
(Though they're gettin' over that, I guess,
For all of them owe me more or less).

But I've learned one thing, and it cheers a
man

In always a-doin' the best he can,
That whether on the big book a blot
Gets over a fellow's name or not,
Whenever he does a deed that's white,
It's credited to him fair and right.
And when you hear the great bugle's notes,
An' the Lord divides the sheep an' goats,
However they may settle my case,
Wherever they may fix my place,
My good old Christian mother, you'll see,
Will be sure to stand up for me.

So, over the hill from the poor-house.

—Will Carleton.

CONSTELLATIONS OF THE RE-DEEMED.

Extracts from a sermon by Rev. T. De Witt Talmage, at Winfield, Kas., June 24, 1888, on the subject above named.

Every man has a thousand roots and a thousand branches. His roots reach down through all the earth, his branches spread through all the heavens. He speaks with voice, with eye, with hand, with foot. His silence often is thunder, and his life is an anthem or a doxology. There is no such thing as negative influence. We are all positive in the place we occupy, making the world better or making it worse, on the Lord's side or on devil's, making up reasons for our blessedness or banishment; and we have already done a mighty work in peopling heaven or hell. I hear people tell what they are going to do. A man who has burned down a city might as well talk of some good that he expects to do, or a man who has saved an empire might as well talk of some good that he expects to do. By the force of your evil influence you have already consumed infinite values, or you have, by the power of a right influence, won whole kingdoms for God.

It would be absurd for me to stand here, and, by elaborate argument, prove that the world is off the track. You might as well stand at the foot of an embankment, amid the wreck of a capsized rail train, proving by elaborate argument that something is out of order. Adam tumbled over the embankment sixty centuries ago, and the whole race, in one long train, has gone on tumbling in the same direction. Crash! crash! The only question now is, By what leverage can the crushed thing be lifted? By what hammer may the fragments be reconstructed?

I want to show you how we may turn many to righteousness, and what will be our future pay for so doing.

First—We may turn them by the charm of a right example. A child, coming from a filthy home, was taught at school to wash its face. It went home so much improved in appearance that its mother washed her face. And when the father of the household came home, and saw the improvement in domestic appearance, he washed his face. The neighbors happening in, saw the change, and tried the same experiment until all that street was purified, and the next street copied its example, and the whole city felt the result of one school boy washing his face. That is a fable, by which we set forth that the best way to get the world washed of its sins and pollution is to have our own heart and life cleansed and purified. A man with grace in his heart, and Christian cheerfulness in his face, and holy consistency in his behavior, is a perpetual sermon; and the sermon differs from others in that it has but one head, and the longer it runs the better. There are honest men who walk down Wall street, making the teeth of iniquity chatter. There are happy men who go into a sick room, and, by a look, help the broken bone to knit, and the excited nerves drop to calm beating. There are pure men whose presence silences the tongue of uncleanness. The mightiest agent of good on earth is a consistent Christian. I like the Bible folded between lids of cloth, of calfskin or Morocco, but I like it better when, in the shape of a man, it goes out into the world—a Bible illustrated. * * * Not one of us yet knows how to pray. All

we have done as yet has only been pottering, and guessing, and experimenting. A boy gets hold of his father's saw and hammer, and tries to make something, but it is a poor affair that he makes. The father comes and takes the same saw and hammer, and bullds the house or the ship. In the childhood of our Christian faith, we make but poor work with these weapons of prayer, but when we come to the stature of men in Christ Jesus, then, under these implements, the temple of God will rise and the world's redemption will be launched. God cares not for the length of our prayers, or the number of our prayers, or the beauty of our prayers, or the place of our prayers; but it is the faith in them that tells. Believing prayer soars higher than the lark ever sang; plunges deeper than diving-bell ever sank; darts quicker than lightning ever flashed. Though we have used only the back of this weapon instead of the edge, what marvels have been wrought! * * *

As stars, the redeemed have a borrowed light. What makes Mars and Venus and Jupiter so luminous? When the sun throws down his torch in the heavens the stars pick up the scattered brands and hold them in procession as the queen of the night advances; so all Christian workers, standing around the throne, will shine in the light borrowed from the Sun of Righteousness—Jesus in their faces, Jesus in their songs, Jesus in their triumph. Christ left heaven once for a tour of redemption on earth, yet the glorified ones knew he would come back again. But let him abdicate his throne, and go away to stay forever, the music would stop; the congregation disperse; the temples of God be darkened; the rivers of light stagnate, and every chariot would become a hearse, and every bell would toll, and there would be pestilence in heaven. But Jesus lives, and so all the redeemed live with him. He shall recognize them as His comrades in earthly toil, and remember what they did for the honor of his name and for the spread of his kingdom. All their prayers and tears and work will rise before him as he looks into their faces, and he will divide his kingdom with them; his peace—their peace; his holiness—their holiness; his joy—their joy. * * *

Look up at the night, and see each world shows its distinct glory. It is not like the conflagration, in which you cannot tell where one flame stops and another begins. Neptune, Herschel and Mercury are as distinct as if each one of them were the only star; so our individualism will not be lost in heaven. A great multitude—yet each one as observable, as distinctly recognized, as greatly celebrated, as if in all the space, from gate to gate, and from hill to hill, he were the only inhabitant; no mixing up—no mob—no indiscriminate rush; each Christian worker standing out illustrious—all the story of earthly achievement adhering to each one; his self-denials, and pains, and services, and victories published. * * *

In looking up, you find the world in family circles. Brothers and sisters—they take hold of each other's hands and dance in groups. Orion in a group. The Pleiades in a group. The solar system is only a company of children, with bright faces, gathered around one great fire-place. The worlds do not straggle off. They go in squadrons and fleets, sailing through immensity. So Christian workers in heaven will dwell in neighborhoods and clusters. I am sure that some people I will like in heaven a great deal better than others. Yonder is a constellation of stately Christians. They lived on earth by rigid rule. They never laughed. They walked every hour, anxious lest they should lose their dignity. But they loved God, and yonder they shine in brilliant constellation. Yet I shall not long to get into that particular group. Yonder is a constellation of small-hearted Christians—asteroids in the eternal astronomy. While some souls go up from Christian battle and blaze like Mars, these asteroids dart a feeble ray like Vesta. Yonder is a constellation of martyrs, of apostles, of patriarchs. Our souls, as they go up to heaven, will seek out the most congenial society. Yonder is a constellation almost merry with the play of light. On earth they were full of sympathies and songs, and tears and raptures and congratulations. When they prayed, their words took fire; when they sang, the tune could not hold them; when they wept over a world's woes, they sobbed as if heartbroken; when they worked for Christ, they flamed with enthusiasm. Yonder they are—circle

of light! Constellation of joy! galaxy of fire! Oh, that you and I, by that grace which can transform the worst into the best, might at last sail in the wake of that fleet and wheel in that glorious group, as the stars, forever and ever!

* * * * *
Brethren, it doth not yet appear what we shall be. Wisdom that shall know everything; wealth that shall possess everything; strength that shall do everything; glory that shall circumscribe everything! We shall not be like a taper set in a sick man's window, or a bundle of sticks kindled on the beach to warm a shivering crew; but you must take the diameter and the circumference of the world if you would get any idea of the greatness of our estate when we shall shine as the stars forever and ever.

Lastly—and coming to this point my mind almost breaks down under the contemplation—like the stars, all Christian workers shall shine in duration. The same stars that look down upon us looked down upon the Chaldean shepherds. The meteor that I saw flashing across the sky the other night, I wonder if it was not the same one that pointed down to where Jesus lay in the manger, and if, having pointed out his birth-place, it has ever since been wandering through the heavens, watching to see how the world would treat him. When Adam awoke in the garden in the cool of the day he saw coming out through the dusk of the evening the same worlds that greeted us on our way to church to-night.

* * * * *
But here the figure of my text breaks down—not in defeat, but in the majesties of the judgment. The stars shall not shine forever. The Bible says they shall fall like autumnal leaves. It is almost impossible for a man to take in a courser going a mile in three minutes; but God shall take in the worlds, flying a hundred thousand miles an hour, by one pull of his little finger. As, when the factory band at nightfall slips from the main wheel, all the smaller wheels slacken their speed, and with slower and slower motion they turn until they come to a full stop, so this great machinery of the universe, wheel within wheel, making revolution of appalling speed, shall by the touch of God's hand slip the band of present law and slacken and stop. That is what will be the matter with the mountains. The chariot in which they ride shall halt so suddenly that the kings shall be thrown out. Star after star shall be carried out to burial amid funeral torches and burning worlds. Constellations shall throw ashes on their heads, and all up and down the highways of space there shall be mourning, mourning, mourning, because the worlds are dead. But the Christian workers shall never quit their thrones—they shall reign forever and ever.

Washburn College, at Topeka, Kansas, admits both sexes, and is one of the best Colleges in the State. The fall term begins September 12.

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The Young Folks.

Glorify the House.

Wide open throw the shutters, and
The curtain throw aside,
Let in the sun's bright messengers
In all their golden pride.
What matter if from costly rug
They take the rainbow bloom?
They'll shower gems on it instead,
And glorify the room.

Glad are the tidings that they bring
From wood, and field, and hill,
From singing bird and humming bee,
And little dancing rill.
Before them many shadows fly,
They banish thoughts of gloom;
Then, with a welcome, let them in
To glorify the room.

With them comes health—upon the weak
They many blessings shed,
Their kisses strengthen tired eyes,
And touch pale cheeks with red;
No place too drear for them to seek
Its darkness to illumine;
Thank God that we can let them in
To glorify the room. —Vick's Magazine.

I come, I come! ye have called me long;
I come o'er the mountains with light and song;
Ye may trace my step o'er the wakening earth
By the winds that tell of the violet's birth,
By the primrose stars in the shadowy grass,
By the green leaves opening as I pass.
—Mrs. Hemans.

O spring, thou fairest season of the year,
How lovely soft, how sweet dost thou appear!
What pleasing landscapes meet the gazing eye!
How beauteous nature does with nature vie;
Gay scenes around the fancy doth invite
And universal beauty prompts to write.
—George Webb.

When all our hopes are gone,
'Tis well our hands must still keep toiling on
For others' sake;
For strength to bear is found in duty done,
And he is blest indeed who learns to make
The joy of others cure his own heartache.
—Maria Upham Drake.

Died two months ago, and not forgotten yet!
Then there is hope a great man's memory
May outlive his life half a year.
—Shakespeare.

The New Building Erected in New York for Railroad Men.

Every one knows of the liberality which is often manifested by capitalists toward their employes or toward those who have indirectly helped them to build up their enterprises. This is strikingly illustrated by the donation of Mr. Cornelius Vanderbilt of the great building at the corner of Madison avenue and Forty-fifth street, New York, for the use of railroad men. It is indeed a magnificent building, handsomely finished, well, even luxuriously, furnished, and fitted for a club room, restaurant, social hall and reading room. According to the statement of Mr. Vanderbilt:

"It will be under the control of a board of trustees, in which the several railroad companies centering at the Grand Central station will be represented. The trustees have granted permission to the railroad branch of the Young Men's Christian Association of the city of New York to use the building for the benefit and enjoyment of persons in the service of the New York Central & Hudson River railroad, the New York, New Haven & Hartford railroad, the Wagner palace car, the express, and of any and all companies that may be entitled from time to time to use the Grand Central station. The understanding is that such rules shall be adopted for its control as shall be in harmony with the purposes for which it has been founded and for the maintenance of that order and conduct which will assure to those coming within its walls the largest participation in its privileges. Its practical management will be in the hands of committees composed of railroad employes."

On the first floor is the great library with 6,000 volumes, and around it the bath rooms, social rooms and meeting rooms. Almost the entire third floor is given up to recreation rooms, all handsomely fitted up with chairs, lounges, tables, books and papers, and cheerful with light and warmth. On the fourth floor is an immense room with elegant single beds for railroad men compelled to remain over night in the city. In the reading room are the regular issues of ninety-five daily, weekly and monthly papers; in the social hall are checkers, chess, dominoes, a piano and other appliances for enjoyment, while elsewhere are the gymnasium, bowling alley and restaurant where the best of meals are served in first-class style at moderate cost. The building cost \$100,000, and is to be kept open daily, Sundays included. All persons employed on the railroads centering at the Grand Central depot, Forty-second street, are entitled to all the privileges of the build-

ing for the small fee of 10 cents per month, and the management is by a board of trustees. In the large hall or assembly room there will be lectures and concerts, addresses by eminent speakers and practical scientists; there will also be classes in drawing, penmanship and vocal music.

On the evening of October 3, last, the new building was "dedicated" with imposing ceremonies, including music and some very witty speeches. Mr. Depew delivered the "oration of the evening." Fifty years ago, he said, there were only 250 miles of railroad and 1,000 employes; now there are 130,000 miles of railroad and 700,000 employes, with more than \$7,000,000,000 capital invested in the business. It is the creation of very recent days, and the spirit that dictated this building is one that the wisest ancient nations never knew—the spirit of Christianity.

The style of the building is Romanesque; the material sandstone, topped with varicolored bricks and touches in dark red terra cotta. The roof is finished in Akron fluted tiles, glazed dark brown. The vestibule is beautifully tiled, the stairs are chiefly in oak, the nooks separated by graceful lattice work, and the fire-places handsomely paneled. The reading room is eighteen by twenty-five feet, finished in polished cherry, and the main hall furnished with cane chairs for 400 persons. The basement is so finished in white enameled brick and tiles as to give a most delightful sense of neatness, and around it are the bathing rooms, which have the very finest finish of any rooms in the building. Even the faucets are of polished silver; all the bowls and slabs are of Italian marble, and the huge tubs of solid porcelain cost \$250 each. Such are a few of the delights of the great social place presented to the railroad men by Cornelius Vanderbilt.

An Austrian paper claims that the first lightning-rod was constructed by a monk in Bohemia. The apparatus which he set up in the garden of the curate of Prenditz, in 1754, was composed of a pole surmounted by an iron rod supporting twelve curved up branches, and terminating in as many metallic boxes, filled with iron ore and closed by a boxwood cover, traversed by twenty-seven sharp points which plunged at their base into the ore. All the system was united to the earth by a large chain. The enemies of Diwisch, jealous of his success at the court of Vienna, excited the peasants of the locality against him, and under the pretext that it was the cause of the great drought, they made him take down the lightning-rod, which he had utilized for six years. What is more curious is the form of this first lightning-rod, which was of multiple points like the one which M. Melseu afterward invented.

A clock recently patented in France is an imitation of a tambourine, on the parchment head of which is painted a circle of flowers, corresponding to the hour figures of ordinary dials. On examination two bees, one large and the other small, are discovered crawling

among the flowers. The small bee runs rapidly from one flower to another, completing the circle in an hour, while the large one takes twelve hours to complete the circuit. The parchment surface is unbroken, and the bees simply laid upon it, but two magnets connected with the clock-work inside the tambourine move just under the membrane, and the insects, which are of iron, follow them.

There are 20,000 miles of telegraph wire under ground in England and 23,000 in Germany. It is said that underground wires diminish the speedy signaling from 25 to 75 per cent. over long distances.

As love casteth out fear, so does fear cast out love.

Hood's Sarsaparilla

This successful medicine is a carefully-prepared extract of the best remedies of the vegetable kingdom known to medical science as Alteratives, Blood Purifiers, Diuretics, and Tonics, such as Sarsaparilla, Yellow Dock, Stillingia, Dandelion, Juniper Berries, Mandrake, Wild Cherry Bark and other selected roots, barks and herbs. A medicine, like anything else, can be fairly judged only by its results. We point with satisfaction to the glorious record Hood's Sarsaparilla has entered for itself upon the hearts of thousands of people who have personally or indirectly been relieved of terrible suffering which all other remedies failed to reach. Sold by all druggists. \$1; six for \$5. Made only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar



LEWIS' 98% LYE

POWDERED AND PERFUMED (PATENTED)

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ESTABLISHED IN 1882.

Published Every Thursday, by the
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	One inch.	Two inches.	Quarter column.	Half column.	One column.
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Governor Martin has concluded not to appoint a State Veterinarian this year.

Mr. John F. Coulter's communication in reply to Mr. Irvine on "Two Truths to be Learned," is received, and will appear in our next issue.

The Kansas Weather Service report for June shows the temperature to have been above 90 deg. on ten different days between the 4th and the 30th.

"A Word for the Trees," is the title of a communication addressed to the *KANSAS FARMER*. It will be printed in our Horticultural department next week.

Hon. Walter N. Allen, of Jefferson county, says he is harvesting the best wheat he ever raised in Kansas. He thinks it will turn off forty bushels to the acre.

During ten days ending last Thursday, rain fell in this part of Kansas every day, more or less, and some days the fall was heavy. Farmers could do nothing in the fields, but corn grew as fast as ever corn grew before.

W. P. Brush writes from Providence, Butler county, Kansas: "Weather hot. Wheat being threshed, is running from 16 to 34 bushels per acre, average 24. Oats as high as 75 bushels per acre. Corn best I ever saw. Some fruit. Grass tip-top."

Messrs. R. E. Reynolds & Co., Wiggins' Block, Cincinnati, Ohio, have opened an exposition for Kansas, at the Centennial Exposition in that city. Persons wishing to forward specimens for exhibit, should correspond with those gentlemen at once.

Mr. Butler's reply to Mr. Ferreira, on "Farmers and Protective Tariff" is received, except the first page—that is missing; but being purely introductory, it can be spared and not detract from the merits of the article. Mr. Butler's paper will be printed next week.

GREAT IS CORN.

The *KANSAS FARMER* suggests that an organization be immediately formed for the purpose of erecting at the capital of the State a grand structure—say a BRIDGE, with approaches, to represent two ideas, *strength* and *passing over*, and that the materials used be corn for the heavy parts, and other cereals in straw and head, for drapery, with grasses for the lighter and finer adornments.

St. Paul has her Ice Palace; Sioux City has her Corn Palace; let Kansas at her capital city have a GRAIN BRIDGE to represent two of the foundation ideas of progress, suggestive of the support which a well developed agriculture gives to a State in its passage along the years from the primitive to the fully developed plane of wealth, power and influence.

What say you, men of Kansas? Shall we work the great facts of our wonderful history into form for the eye to see and thus speak to the world by symbol? Shall we build an oracle with the products of our farms? Shall we fashion a structure of grain which will instantly present to the beholder the things which have been our support? Shall we build an emblem of the most stupendous realization that has yet appeared in human history—Kansas? Shall we raise this ideal arch-way, this grain bridge, and shall we call it the Bridge of Ceres?

Men and women and children from our sister States and from foreign countries would come by hundreds and thousands to look upon this fresh wonder of the west.

Loose Reasoning About the Tariff.

We are in receipt of a long letter from a friend at Reading, Massachusetts. It is altogether too long and the reasoning too loose to be useful, but we will quote two paragraphs which will sufficiently show the writer's way of thinking on this subject.

1. Now farmers of Kansas, you have had tariff protection ever since 1861. Now if it is such a good thing for you, why are so many of your farms plastered over with 10 per cent. mortgages, and your products so low you can never lift them off? Now let me show you how it works. Farmer A has raised a large crop of corn, so has many other farmers. This makes the price low. Mr. A must sell his corn, for he is in want of many other things, so he goes to the market to see what he can get for his corn; he finds 15 cents per bushel is the best he can do; it seems to him rather small pay; he goes home and tells the good wife about it. "Well," says the wife, "here is a report in an English paper that corn is selling in that market for 30 cents per bushel." Now to illustrate, we will suppose the English market near enough so the farmer can go in one day, and back the next; so he loads up and starts early and reaches the market and finds a ready sale for his corn at 30 cents per bushel. But when he gets his money he finds it is not like that he has at home, so he looks around to see if there is not something that he wants that he can buy with the money. He soon finds plenty of goods that he needs at home, and he can exchange his money for them and get them a little cheaper, too; so he spends his money and takes home the goods, and the whole family is made happy by the trade. Double the price for the corn and a little cheaper goods that he wanted to consume. Now farmers of the West, here is a pen-picture of free trade, that Henry Butler and many other shallow thinkers are trying to frighten you with and prevent you from doing. This they call protection.

It would be better if our correspondent would suppose *supposable* things. He knows the price of corn is not twice as high in the English market as it is in the American market; he knows the English market is not near enough so the American farmer can reach it in one day and return the next; he

knows the "pen picture" of "double the price for the corn and a little cheaper goods" is not a perfect picture or a true statement of fact. Ordinarily, the difference between the price of grain in the home market and the English market, is the cost of transportation, and the last publication of rates which we have seen puts wheat at three (3) cents a bushel from New York to Liverpool.

2. Now here is a point I wish to show you; it is an argument the protectionists always leave out. Now just bear in mind that when we trade with any foreign nation we must pay for them in some kind of labor products. Now don't forget this. If foreign pauper laborers, as they are called, will give or exchange two day's work for one of ours, what then? Who needs protection now? Then you see a tariff is no protection to labor on the whole, because we exchange our surplus products for theirs. And if we get two days work for one, what nonsense to make laws to prevent this exchange of commodities, and call it protection to labor.

They do not give us two day's work for one of ours. We do not pay for foreign goods in labor products; that is to say, we do not pay for them in barter; we pay money for what we buy, and if we purchase in England we must pay in gold. Under the low tariff regime from 1850 to 1860 we paid to foreigners, chiefly Englishmen, nearly \$400,000,000 in gold for commodities that we purchased from them *more than they purchased from us*. Under a high tariff since 1874 to the present time, foreigners have paid us about \$1,500,000,000, more than we paid them, and about one-fourth of that was in gold.

Our own market is worth a great deal more to us than the foreign market.

We are in the lead in agriculture, in manufactures, mining and commerce. iron, coal, copper, lead, zinc and wood in exhaustless quantities; our farmers raise wool, cotton and flax, and they raise grain and cattle enough to feed a population much larger than we now have. We have all the elements of wealth among ourselves. Let us develop them. Let us afford all possible opportunities for our own people to work; let us make everything for ourselves that we can make, purchasing from foreigners only what we do not or cannot produce ourselves. Let us be as nearly as possible independent of all other nations for every necessary thing; then, in time of trouble we need not send abroad for needful things as we had to do in the beginning of the slaveholders' rebellion.

As to the prices of farm supplies, the American market is as cheap as any for Americans, and it is not our business to take care of other people in other lands.

Kansas farmers ought to save all the hay possible. And wherever a farmer has prairie grass to spare, in quantities sufficient to justify the expense, he should make it into hay while in good condition and bale it for market. Millions of tons of good hay are wasted in Kansas every year.

Philadelphia butchers complain of the new high license law of Pennsylvania, and this is the reason of their complaint, as a New York paper puts it: It seems that a free-lunch counter, plentifully stocked with the usual meats, was an attribute of every Philadelphia bar-room. Under the new order of things, liquor men claim that to continue such institutions would eat up the small margin of profit they will now make. Hence the free-lunch counter has disappeared, and with it the big percentage of patronage which reached the meat market. It is therefore in order to condole with our Philadelphia brethren over the enforcement of the high license law and the consequent disappearance of the free-lunch counter.

The Modern "Trust" is a Common Enemy.

The people are imperceptibly letting slip from their rightful hold many privileges which ought never to be surrendered. Among the gigantic agencies through which communities, States and nations are drained of substance is the "Trust." It is a combination of men engaged in like callings for the purpose of establishing and maintaining prices at rates which they agree are for their interests without reference to rights of other men or of other vocations. People in cities are quite as much affected by these stupendous monopolies as are people in the country. Shoemakers, butchers, blacksmiths, clerks and laborers feel the pressure the same as do farmers and the men who help them. Here is a forcible protest from the *Shoe and Leather Review*. It says: "The worst feature about these excrescences upon commercial life is that they constitute a species of glaring and palpable dishonesty and flagrant rascality which is able to evade and defy any existing law. This being the case it is time that Congress reinforce the arms of justice by new laws which shall be equal to the object of suppressing the new evil. No tariff legislation can ever reach the trusts as a system. Tariff or no tariff, their operations will continue to be the same as long as the laws are powerless to reach them. Of all the trusts in existence there are but one or two which could by any possibility be affected by a total abolition of all customs duties. The most nefarious are those which grow up out of the abuse of franchises lightly surrendered by municipal and legislative bodies to scheming monopolists, who secure privileges on the pretext of affording a public benefaction, and once secure in their monopoly use it to grind and oppress the people from whom their powers are derived. The most iniquitous trusts in existence are those which control light, fuel and traffic. Recent legal events have exposed to some extent the methods pursued by those plunderers of the people.

"Congress should deal with trusts with a firm hand. In former days when laws were made for the purpose of administering justice, impartial but inexorable, combination or conspiracy to increase the cost to the consumers of any commodity of common use, was a capital offense. It would seem to-day when laws are made by lawyers for lawyers, and when justice pursues offenders with a leaden heel and a sword of lath, as if our legislators would benefit by the infusion of some of the stern spirit of bygone days into their deliberations. It is quite within the power of Congress to enact laws which shall deal definitely and directly with all trust combination; whereby the cost of living and of articles of common consumption are increased beyond legitimate competitive value, whether known by the name of trusts or under any other appellation. In these respects there are worse offenders than municipal "boodlers," plundering the public at will, and they will continue to do so until new laws on our statute books declare that their operations are only to be continued with the alternative of State's prison."

A Missouri correspondent writes to encourage Prof. Blake. He says: "I think Blake has proven that men can foretell the weather. Here are six or seven cold winters in succession and one great drouth—a most remarkable one—all foretold minutely. I understand that the remarkably warm winters were also foretold, but do not know it. I do know that the cold winter and drouth of 1886 were accurately foretold, and some striking peculiarities were specified nearly a year before each occurred."

Concerning the wool market at St. Louis, Messrs. Haygey & Wilhelm, in their last circular, say: "Our wool market is more animated and firmer in feeling than at any time during the season, and both manufacturers and speculators are making every available effort for all receipts, thus enabling us to sell all grades and all shrinkages as quick as we can open, examine and set prices on consignments. The prospect of any action being taken on the tariff bill during the present session of Congress, is entirely ignored by purchasers, and is no longer a factor in prices."

The other day when Mr. Mills called up the tariff bill Mr. Kelly, of Pennsylvania, suggested on his individual responsibility, that the bill be laid aside until the next session, its fate then to depend upon the results of the November elections, and that the surplus be kept down by an entire repeal of the tobacco tax. Mr. Mills rejected the suggestion, and made a counter proposition that the Republicans should fix an early day for taking a final vote on the bill. Mr. Reed, of Maine, declared that Mr. Kelly spoke for himself alone, and that the Republicans would insist upon pointing out the defects of the bill in detail. At the present rate of discussion, the House will not reach a vote on the bill before adjournment. It looks very much as if both parties in Congress intend to carry the bill over, in the meantime using it as campaign material.

The Senate is discussing the river and harbor bill. A few days ago, on an amendment relating to the Muskingum river, Senator Edmunds took advantage of the occasion to deliver a just and deserved criticism of such use of public moneys. He said that after the vote on the Yadkin river, North Carolina, he had given up the idea of persuading a majority of the Senate (doubtless wiser and more patriotic men than himself) that any item could be rejected that was supported earnestly by a Senator from the locality. His respect for the Senate was such that he did not want to strive against manifest destiny and against the judgment of his fellows. It was useless and perhaps unjust for any one Senator to undertake to resist the judgment of a majority of the Senate in regard to a bill which contained so large a percentage of things which ought not to be done.

It is published that the order has gone forth from New York headquarters of the Salvation Army that the coming political campaign shall be made use of for the purpose of strengthening the organization in the United States, which is at present in a decidedly demoralized condition. The order emanates from Ballington Booth, who started the "army" in England, and who still presides over its destinies. Ballington has been appointed Marshal of the army of the United States. He intends to reorganize its shattered forces, heal up the dissensions among its officers, and carry on a vigorous war in the enemy's country during the Presidential contest. One of his principal ideas in connection with this scheme of reorganization is to utilize the political campaign for "salvation" purposes. Salvation Army companies will follow all political parades, and headquarters will be open in the neighborhood of political clubs and committee rooms. It may be well enough to suggest in advance that lawful public meetings, political as well as religious, are entitled to protection from unnecessary annoyance. One meeting has no legal right to disturb another.

NATIONAL FARMERS' ALLIANCE AND CO-OPERATIVE UNION OF AMERICA.

Such is the name of an organization of men and women operating among farmers having in view objects almost if not quite similar to those of the Grange and the Farmers' Alliance, and the American Farmers' Union. It was begun in Texas about fifteen years ago. Mr. Garvin, in his history of the Alliance in Texas, says, that it was started somewhere between 1870 and 1875, in Lampasas county, by a number of farmers, who associated themselves together in a defensive league, to resist the encroachments of land sharks, who proposed to rob them of their homes. The history of the move from its inception up to 1886, was not attended with much interest. It had grown by August, 1885, to the number of about 700 subordinate Alliances, and had changed its objects and workings, until they resemble very closely those of the present. From August 1885 to August 1886, a most prodigious growth was recorded; the increase was about 2,000 sub-Alliances.

At the regular session of the Alliance at Shreveport, La., October 12, 13, and 14, 1887, the following preamble and resolutions were adopted:

PREAMBLE.

WHEREAS, The wealth, strength and permanency of a government depends mainly on the prosperity and success of its agriculture and labor, and in this being kept in a healthy state, lies a vigorous germ of all true patriotism, and that pure and elevated moral public sentiment necessary to vitalize and keep in active operation the principles and teachings that alone will preserve and perpetuate republican institutions and the blessings of human liberty; and

WHEREAS, One of the prime objects of good government should be to promote the intelligence, loyalty and conservatism of its citizens, and afford them the highest possible facilities for securing and enjoying the full measure of liberty, prosperity and happiness; and

WHEREAS, Viewing with alarm the tendency in the government to reverse these cardinal conditions—a republican form of government and a free and prosperous people, by the concentration of its wealth and power in the hands of the few, to the impoverishment and bondage of the many, and the rapid growth of centralization and aristocracy; and

WHEREAS, Believing that if these baneful influences and tendencies are not checked and overcome, they will subvert the government, destroy its form and spirit, and in the end utterly impoverish and enslave the people; and

WHEREAS, Believing further, that the overthrow and certain destruction of these growing and menacing dangers to the institutions of the country and the liberties of the people depends on agitation, education and co-operation, carried on by the thorough organization of the masses, and especially of the agricultural and laboring classes, established on just and correct principles, non-partisan and non-sectarian in character, with clear and well-defined objects and purposes. Therefore, we, the Farmers' Alliance and Co-operative Union of America, in national convention assembled, in order better to perfect our organization and meet the necessities of our class and a public want, adopt and publish the following resolutions:

EDUCATION.

Regarding the education of the people as fundamental to good government in sustaining its institutions and multiplying its blessings, as well as an essential qualification for accomplishing our purposes, we shall at all times advocate and encourage it in the highest possible degree, among farmers and laborers and their children, by every means in our power. Through the means of investigation and discussion in our Alliance meetings, our press and public speakers, we propose to examine the various methods and systems of education in use, with the view to determine the best adapted to the wants and conditions of the agricultural and laboring classes, believing the correct theory when established, will embrace the moral, physical and industrial, as well as mental training of our children in every grade of schools; that this system will strengthen the attachment of these classes to their profession instead of alienating them from it, as the prevailing methods have a tendency to do; that it will better qualify them for success and happiness in life; will render the farm and shop more attractive and remunerative; give the means and time for more general thought and useful study; increase the opportunity and inclination to adorn the home and practice the social virtues; broaden the sphere of their knowledge and usefulness and give character and influence to husbandry and labor; and for these reasons we are especially friendly to industrial education, and shall labor to advance and build up the agricultural and mechanical schools and colleges of the country by extending them every possible encouragement and support at our command.

BUSINESS MATTERS.

In business matters we believe the prevailing system is in many particulars wrong, and that between the producer and consumer, the buyer and seller, the methods should be changed, the process shortened and the expenses reduced, and plans adopted that will more justly and satisfactorily distribute profits and give to labor a fair share of its earnings. We believe that in co-operation a remedy may be found for most of the evils and

inequalities growing out of the methods now in general use; that in co-operation exists, as we believe, the very essence of justice, fairness and equity; that when well understood and closely observed, its principles, by intelligent and honest management, may be successfully applied to most, if not all the business pursuits and enterprises of the country; that it possesses the elementary forces for solving the vexed question of capital and labor; and, hence, we shall urge the study and practice of co-operation in the Alliance as a mighty lever that will lift the burdens and weight from labor and the productive industries of the country that are lying with such crushed force upon them, and by which the possibilities of the Alliance for carrying out its good work may be increased and strengthened.

POLITICAL MATTERS.

Without disturbing political party lines or party affiliations, or provoking partisan feeling or strife, we shall boldly enter into the discussion and investigation of all laws, public measures and government politics that have a direct or remote bearing on the productive industries of the country and its material welfare generally; approving the good and condemning the bad, offering the ballot and other means in our reach such remedies for existing evils and threatening dangers as we believe the public interest demands.

We shall teach unfaltering hostility to all class legislation, the tyranny and oppression of monopoly, excessive taxation, the lavish expenditure of public moneys, and to every species of wrong and abuses practiced in government affairs, and shall denounce and expose fraud and corruption in public official places, whenever discovered, no matter from what source they may come.

We shall encourage and strive to increase the facilities among ourselves for a closer study and better understanding of the organization, powers and purposes of government; more attention to the laws of the country, local and general, the better to understand their scope and meaning, their influence on society and the public good, and thus educate ourselves in the science of economical government, elevate the standard of citizenship and qualify ourselves without bias, to judge correctly of the merits of candidates for office their efficiency after elected, and then to cooperate with them in the execution of the law, that it may be respected, order maintained and society improved.

We shall discourage law suits and litigation between members of the order, and shall teach and insist that all differences and misunderstandings should be settled and adjusted by arbitration in the Alliance; and in

GENERAL.

we shall strive to cement our brotherhood in the closest bonds of a common interest, and perpetuate our order by frequently meeting together and talking together on all matters that relate to our mental, moral, social and financial interest, and to educate, train and discipline ourselves to work together in carrying out the laudable objects of our orders.

We shall teach and strive to induce our membership to act upon the important truth that no great undertaking and reform like the Alliance movement can be successful without a clear understanding of the principles, purposes and plans, and an earnest and intelligent devotion to the cause; that harmony of feeling and action, coupled with a persistent effort, based upon the great central thought or fundamental idea, that in things essential there should be unity, and in all things charity and brotherly kindness to one another, and good will to all mankind, are necessary to insure strength, influence and final triumph to our cause; that the evils of which we complain, and the conditions we would improve are the growth of many years, aided largely by class legislation, and that it will require bold efforts and long and continuous struggles to change and better them; that it must be accomplished largely through a change of public sentiment, produced by agitation that will arouse and enlighten the masses, and that those who desire and intend to aid in the glorious work must enlist in the war.

We shall constantly strive to suppress personal, local, sectional and national prejudices; all unhealthful rivalry and all selfish ambition; and teach that, as citizens of one government, we should feel a common interest in its affairs, and that our patriotism and goodwill for one another should not be measured by sections or geographical lines to suit the purposes of politicians.

By our frequent meetings we confidently believe we shall be able to break up the isolated habits of farmers, improve their social condition, increase their social pleasures, and strengthen their confidence in and friendship for each other.

We propose to make the study and improvement of practical agriculture in all its branches a part of the Alliance mission, that its standard may be raised, its profits increased and its followers made more prosperous and contented.

We shall encourage more diversity of farming; the production of less cotton, more grain and meat; selling less raw material and more in manufactured articles.

In our meetings and through our press we shall discuss, and examine into the best and most approved methods of farming, the preparation of the soil; planting, cultivation, harvesting, handling and marketing of crops and farm and agricultural products generally; also the rearing of livestock, dairying, fruit-growing, gardening, etc., etc.; and in short, every branch of agriculture that goes to make up the full line of farm life, and render it pleasant and profitable.

Through our organization we shall endeavor to furnish facilities for, and shall encourage the study of the laws of business and trade, the best methods for buying and selling, and the transaction of all kinds of business it may be found desirable for farmers and laborers to engage in, and under all circumstances shall discourage the credit system.

We propose to attend to our own business affairs in our own way, and make no fight against any legitimate business, but shall oppose methods found to be contrary to justice and equity.

Believing that a strict observance and practice of these teachings, principles and purposes will insure our success we submit our cause to a fair and impartial public, invoking the blessings of heaven upon our undertaking.

DEMANDS OF THE NATIONAL FARMERS ALLIANCE UPON CONGRESS.

Resolved, That we, the National Farmers Al-

liance and Co-operative Union of America in convention assembled, advocate and endorse the following principles as in accord with the sentiments and demands of the tillers of the soil:

1. We deem, first, the recognition, by incorporation, of trades unions, co-operative stores and such other associations as may be organized by the industrial classes to improve their financial condition, or promote their general welfare.

2. We demand that all the public lands be held in small bodies, not exceeding three hundred and twenty acres to each purchaser, for actual settlers on easy terms of payment.

3. That large bodies of land held by private individuals or corporations, shall be assessed for taxation, at such rates as they are offered to purchasers, on credit of one, two and three years, in bodies of one hundred and sixty acres or less.

4. That, whereas, large bodies of our public lands have been sold to foreign capitalists, thus tending to the establishment of land aristocracy in this country similar to that which has reduced the people of Ireland, and other monarchical governments, to a condition of abject serfdom; we demand the passage of laws forbidding the ownership of lands by aliens, whose allegiance belongs to other nations, and that the public domain be held as the heritage of our own people and our children after us.

5. That all lands forfeited by railroads or other corporations immediately revert to the government and be declared open for purchase by actual settlers, on the same terms as other public lands.

6. We demand that all fences be removed, by force if necessary, from public lands unlawfully fenced by cattle companies, syndicates, or any other form or name of monopoly.

7. We demand the extinguishment of the public debt of the United States by operating the mints to their fullest capacity, in coining silver and gold, and the tendering of the same without discrimination, to the public creditors of the nation, according to contract.

8. We demand the substitution of legal-tender treasury notes for the issues of National banks; that the Congress of the United States shall regulate the amount of such issue by per capita circulation, that shall increase and keep pace with the growth of the country's population, and the expansion of her business interests. We further demand the repeal of the present National banking system.

9. We demand that the department of agriculture be made one of the departments of State; that it shall be increased in scope and efficiency, and in connection therewith, there shall be established a bureau of labor statistics.

10. We demand the enactment of laws to compel corporations to pay their employees according to contract, in lawful money for their services, and the giving to mechanics and laborers a first lien upon the products of their labor to the extent of their full wages.

11. That the laws relating to the suppression of the transmission of immoral, profane or obscene literature through the mails, be made more stringent, and be extended so as to suppress the transmission of such literature by any public carrier.

12. We demand that the United States Government purchase, by right of eminent domain, the telephone and telegraph lines, and operate them as adjuncts of the United States postal service.

13. That in view of the fact that the delegates to this body represent a majority of the cotton producers of the cotton belt of America, which belt produces over two-thirds of the cotton of the whole world, and in view of the further fact that two-thirds of the cotton in the cotton belt is demanded and used for export to a foreign power, which fixes the price on every pound of our cotton; and in view of the fact that the said power is debared from returning to this country a single yard of manufactured cotton, thereby making said power interested in crowding down to the lowest figure the price of cotton. We hereby demand that the United States government adopt a speedy system of reduction of the import duty on manufactured cottons, in such a way as to do justice to this, the greatest of all classes of producers.

14. We demand such a revision of the tariff as will lay the heaviest burdens on the luxuries and the lightest on the necessities of life, and as will reduce the incomes from imports to a strictly revenue basis.

15. That as a remedy against the unjust accumulation and encroachment of capital, we demand a graduated income tax.

16. That as upon the intelligence of the people depend the stability and perpetuity of our own free government, we demand for the masses a well regulated system of industrial and agricultural education.

17. That we oppose the continued influx of pauper labor from the monarchies of Europe, whose anarchic views and communistic doctrines are breeding discontent and disloyalty to law, order, peace and good government, and by an overplus of worthless labor, reducing our own laboring classes to starvation, we therefore demand more stringent laws to prevent this country being further used as an asylum for the communists and paupers of other countries.

18. We demand that the constitutions, both State and National, be so amended as to provide for the election of United States senators by direct vote of the people.

Persons interested in the movement will be advised as to all particulars by addressing "National Organizer," Topeka, Kas., in care of KANSAS FARMER. He will forward copies of constitution and by-laws to such persons as request them.

When a person writes for the press and has occasion to use a pronoun representing himself or herself in the first person, the letter and word I should be used, not we. The editorial "we" comes from one writer representing other persons beside himself.

The grasses that are really pests may be utilized when young. Crab grass, which is a persistent pest in the garden and fields, possesses but little value when fully matured, yet it affords excellent grazing when young. Sheep are very fond of it, while horses and cows will accept it when more desirable grasses cannot be found.

Horticulture.

DOUGLAS COUNTY HORTICULTURAL SOCIETY.

Special Correspondence Kansas Farmer.

By special invitation of the Secretary, B. F. Smith, I was found at the last session of the Douglas County Horticultural Society, held at the beautiful home of the Secretary, in the southern suburbs of historic city of Lawrence.

Notwithstanding the extreme heat and busy season it was estimated that there were over 250 persons present, representing the beauty and brains of both city and surrounding country. After reading and approval of the minutes of the May meeting, the large crowd gathered around the many tables, in regular picnic style, to enjoy the bountiful and sumptuous repast spread for the occasion.

The hour for business having arrived, President Reynolds called the meeting to order, following with a few pointed and appropriate remarks.

Committee on orchards reported that the apples were somewhat affected by the long dry spell, which prevailed in that vicinity for several weeks; but thought the late soaking rains would bring them out in good condition. Trees well loaded with fruit and splendid prospects for a large crop. Among several of the best varieties the Non-such appeared to be the most heavily laden with fruit, closely followed by the Summer Pearmain, Ben Davis, Winesap and Missouri Pippin; Early Harvest fuller than usual. Cherries almost a failure. Plums full, but greatly injured by the curculio. Gooseberries not half a crop. Strawberries cut short by dry weather; only about two-thirds of a crop. Raspberries somewhat injured by dry weather, but the last rain came in time to bring them out in fine shape, the vines being well loaded. Blackberries full and large, fine prospect. Mulberries abundant and unusually large. Grapes doing well; prospect of a large yield.

It was clearly the unanimous observation that cultivated orchards were by far the fullest of fruit and the least troubled with the numerous insect enemies of horticulture.

N. P. Deming read the following quotation from an article written by Prof. Hawn, of Leavenworth, which appeared in a recent issue of the *Rural World*:

The suggestion that an apple orchard deteriorates for the want of nourishment on a soil that produces thirty bushels of corn from an acre is preposterous, yet we quote from a recent popular address before the Kansas State Horticultural Society thus:

"The only way to continue bearing apple trees healthy, vigorous and fruitful, is by giving them full possession of the land, good cultivation, and supplying a sufficient quantity of manure to keep up the fertility of the soil. The neglect to meet the requirements is, in my opinion, the main cause of the premature decay of many of our orchards."

This refers to a region in Kansas where every load of manure carted into the orchard would hasten its destruction.

The last paragraph brought forth several pointed and animated criticisms, all of the speakers supporting and emphasizing the position taken by the address before the Kansas State Horticultural Society. The following resolution was then submitted and unanimously adopted:

Resolved, That the Douglas County Horticultural Society condemn the article of Prof. Hawn, believing that manure is not only beneficial, but that it is an absolute necessity to fertilize and cultivate bearing orchards.

Committee on insects reported the cut worm doing more damage than for years, and Mr. N. P. Deming recommended the soaking of corn in blue vitriol (one tablespoonful to a pail of water) to secure a protection. He also stated that he had successfully used a

mixture of coal oil and buttermilk as a chinch bug annihilator.

At this point Mr. Jos. Savage delivered his interesting and instructive lecture entitled "The Crust of the Earth," after which Rev. J. S. Brown, founder of the KANSAS FARMER, gave an eloquent description of the laying of the corner stone of Bunker Hill monument by Lafayette. Mr. Brown having the honor of being present on that historical occasion gave a most feeling and patriotic word-picture of the program as carried out.

Judge Emery was then called forward, and, after a few preliminary remarks upon the history of horticulture, said in substance, that the great need of the present time and generation is small farms, well tilled and irrigated. He ably and forcibly advocated the plan of irrigating all of the land surrounding the city of Lawrence. In the language of Commissioner Colman, he declared that the question of water for irrigation is of far more importance than that of the tariff. The Judge's points were well taken and ably sustained, and furnished food for thought. The seed thus sown may bring forth an abundant harvest, and the magnificent, fertile country surrounding the beautiful and cultured city may yet be adorned with thousands of Edens and become a veritable paradise. How lovely! How beautiful! And yet how profitable! As Lord Bacon said: "God Almighty first planted a garden; and, indeed, it is the finest of all human pleasures. It places man in the truest relation to the world in which we live. It is the fine art and poetry of agriculture. It is the painting in living colors."

The Douglas County Horticultural Society is composed of energetic, wide-awake, and intelligent men and women, and its influence and usefulness can scarcely be estimated. With "excelsior" for their motto, they are pressing onward and upward in their high and useful calling.

The KANSAS FARMER wishes this worthy society the most abundant success, and acknowledges the many favors and friendly greetings bestowed upon its representative. Especially are we indebted to President Reynolds, Vice President Savage, Secretary Smith, Rev. Brown, and others, for their public and enthusiastic endorsement of the KANSAS FARMER. Certainly our interests are mutual in building up horticulture and its kindred branches to their highest perfection.

Henry Manwarring exhibited some fine, large heads of cabbage, lettuce and cauliflower. Secretary Smith also made a splendid display of strawberries and raspberries. He has upon his place over thirty distinct varieties of strawberries, and is recognized as one of the most successful raisers of small fruit in the State.

We must not forget to mention that the meeting was highly entertained by the Haskell Indian school band, composed of eighteen Indian boys. They furnished fine music, and were highly complimented.

The July meeting will be held south of the Wakarusa, at the home of Dr. O'Lerry, at which a full attendance and an instructive and enjoyable time is anticipated. J. S. SOULE.

P. S.—This letter was prepared in due season, but was not received in this office early enough for publication last week.—EDITOR.

Shallenberger's Antidote for Malaria destroys the cause of disease, which quinine and other remedies do not pretend to do. It effectually neutralizes the poison in the system and thus prevents the chill. It contains no arsenic or poisonous ingredient of any kind, and may safely be given to an infant. Sold by Druggists.

SMALL FRUITS.

Essay read before the State Horticultural Society, at Holton, June 10, 1888, by Miss Cora Dixon.

I do not flatter myself by thinking that I shall say anything new upon the subject of berries. In writing this essay, I shall try to emphasize what has been better said than I could possibly say it. If this essay shall be the means of inducing a few persons to grow as many berries as they can eat, I shall feel amply repaid for my trouble. It is but a few years since strawberries were considered a great luxury, to be indulged in only by the wealthy, who could employ professional gardeners, skilled in the mysteries of their culture. Improvement and progress have dispersed these antiquated notions, and have placed a strawberry bed within the reach of all. During three or four months of the year, berries should fill a larger place in the family than the pork or flour barrel. Statistics show that the value of berries sold annually in our larger cities amounts to many millions of dollars; but the priceless value in enjoyment, in good cheer and health to the millions who grow, pick and eat their own berries, is beyond computation. With the planting of every strawberry bed on a farm, (where there was none before), the corner stone is laid for a happy home. But progress in strawberry and other fruit culture has done more than to invigorate health and increase our enjoyment. It has sharpened observation, brightened thought and inspired the development and stability of the noblest traits of human nature. No plainer object lesson was ever taught. No more impressive sermon was ever preached than that which nature has instilled in every root, in every leaf, in every expanding bud and every fading flower, which must wither that the more perfect fruit may spring into life. There is but little danger of a monopoly in fruit-growing. A man with a single acre or a small lot can engage in it. Very little capital is required to commence, and it pays a larger per cent. on the amount invested than almost any other business. I would advise the beginner to commence in a small way. He may have splendid theories, but without some practical knowledge he will fail if he commences on too large a scale. The strawberry was not cultivated by either Greeks or Romans. They were first cultivated during the reign of Richard III. In 1680, the Clapperton strawberry was originated by a Frenchman, supposed to be the first strawberry raised from seed. The interest in improved varieties of strawberries and other fruits was inaugurated by Andrew Knight, the first practical enthusiast, beginning his work about the opening of this century. While the names of Downing, Wilder, Thomas and others are household words, the name of Andrew Knight is remembered by but few, yet his work can hardly be overestimated. In early days many complained of the fickleness of the strawberry. They bloomed freely but set no fruit. Strawberry growers were not able to tell the reason. It is claimed that Nicholas Longworth, of Ohio, was the first to discover the cause of barrenness, which is imperfect blossoms. Most strawberry blossoms are hermaphrodite, or perfect, others being pistillate or staminate. The pistillate, or imperfect, must be planted near the hermaphrodite to be productive. The first great strawberry was the Hovey, originated by C. M. Hovey, of Boston, in 1834. John Wilson, of Albany, N. Y., originated the next most prominent strawberry, and named it Wilson's Albany. Its great productiveness led to the field culture of the strawberry and thousands

of acres were planted for market. The most valuable strawberries that appeared after the Wilson were the Downing, Crescent and Sharpless. All small fruits, with the exception of the grape, do best in a cool, moist, rich soil. The soil should be deeply and thoroughly worked. Do not plant before the ground is properly prepared, calculating on doing the work after planting. Plant in slightly depressed rows, as the strawberry has a tendency to raise itself somewhat out of the ground. Experience teaches that there is but one time in the year when it is safe to plant, and that is in early spring. I use the following plan for marking and planting; it originated with F. A. Childs, of Cherokee county, Kansas: Prepare three stakes five feet long and set them in range. Then with a wheelbarrow behind you, walk up and down the range of stakes, always moving the middle stake its length and the outside stakes twice their length. Plants should be of good size, well rooted, and from beds which have never fruited. After cutting off all dead leaves and runners, and shortening the roots to three inches, throw the plants into a pail containing sufficient water to cover the roots. A boy should take the pail of plants and place them in openings which you make with a spade. Thrust the spade in before you at an angle of forty-five degrees, about half the length of the blade, raise the spade to a perpendicular, then the boy places a plant just behind the spade with the roots spread out in the shape of a fan, and the crown even with the surface. Withdraw the spade, letting the earth fall into the opening, covering the roots; then with the foot press the earth firmly around the roots and the work is complete. From the time the plants are set until early in fall the ground should be cultivated carefully and thoroughly, as it keeps the plants in a growing condition and prevents a growth of weeds. I want to impress upon your minds this fact, that weeds must not be allowed to grow among strawberries. All blossoms and runners are to be cut off until July. By that time the plants are strong and able to send out several large runners at once. I have tried all systems and distances, and prefer the matted row, the rows five feet apart, plants from eighteen inches to two feet apart in the row, according to the habits of the variety. When the ground is frozen hard enough to bear a team, mulch. Several mulches are used—straw, chopped corn stalks, barnyard litter, prairie hay, etc. I prefer the prairie hay, the coarser the better, as it is less liable to be blown away, and will not seed the land with weeds. Cover the plants to the depth of an inch, the spaces between to any depth. In the spring, when all danger of frost is past, remove just enough of the mulch to allow the plants to come through. Mulching keeps the ground cool and also prevents the evaporation of the moisture so much needed by this fruit, and at the same time keeps it clean. No cultivation is necessary until after the fruit is picked.

Insect Enemies.—Among the insect enemies of the strawberry, the white grub is one of the most destructive. It is the larva of the May beetle, June bug or Dor bug, being known by all of these names in different parts of the country. These beetles frequent meadows, pastures and uncultivated fields for the purpose of depositing their eggs in places where their young will be sure of plenty of food and not likely to be disturbed. These grubs live three years before passing through the pupa state and coming forth as beetles. During these three years of constant work upon the roots of plants they do much dam-

age to whatever kind they attack. It is not safe to set strawberries on freshly-plowed sod, but the land should be cultivated at least two seasons in some crop requiring frequent hoeing and plowing before using it for this purpose. There are many other insect enemies of the strawberry, but I shall only mention two of them, the strawberry worm and the leaf-roller. The first mentioned is a small, slender, pale green worm that attacks the leaves, eating large holes in them, and when at all abundant it soon destroys the entire foliage and, of course, prevents further growth of the plants. This worm is the larva of a small black fly (*Emphytus maculatus*). The leaf-roller is a pale green worm, the caterpillar of a handsome moth (*Anchylopera fragariae*). Its plan of action is to roll up the leaf and use first as a bed, then as food. A solution made of one or two teaspoonfuls of the dry Paris green or London purple to two or three gallons of water, sprinkled on the plants after fruiting, once or twice a week for three or four weeks, is recommended for their destruction. A better plan, where practicable, I think, is to burn dry straw over the plants, scattering it just thick enough to burn the leaves but not the crowns. The strawberry plantation should not remain upon the same land more than two years—one year is preferable. Insect enemies soon learn that old beds are a safe place for them to deposit their eggs. It is easier to set out a new bed of berries than to clear an old one of weeds, and the newer plantation bears much larger and finer fruit.

Black Raspberries.—The raspberry delights in a deep, rich loam, and as it is more readily injured by excessive moisture than any cultivated fruit, except the blackberry, the soil should be well drained and an elevated location selected if possible. After preparing the land the same as for the strawberry, plow out furrows seven to eight feet apart and plant in these furrows three and a half to four feet apart. Cultivate frequently, allowing no weeds to grow. Cultivation should be shallow, not more than two or three inches deep. When the plants have attained the height of ten or twelve inches, nip off the tips. The plants will then throw out laterals, and when they have grown a foot in length, cut off their points, unless plants are wanted. Layer the tips early in September for plants. The second and succeeding years pinch back the tips of the growing shoots when from twenty inches to two feet high. They cease to grow in height, but throw out laterals in all directions, balancing and supporting the main stem nicely, giving the plant the appearance of a small tree. The following spring cut back all laterals to the live wood, as they winter-kill more or less in this climate. Cease all cultivation the first of August, as stirring the soil any later has a tendency to induce a growth of immature wood unable to stand the winter. Whether the old canes should be cut away immediately after fruiting, or be allowed to remain until the following spring, is a disputed question. I have always allowed the old canes to remain, because I think that they are a great support to the new ones.

Blackberries.—The same suggestions given under the head of raspberries about soil, location, cultivation and pruning apply also to the blackberry, except that the plants should be allowed to reach a height of three feet before the tops are cut off. Sweet corn or potatoes may be grown between the

rows of blackberries and raspberries the first year. I have seen a crop of blackberries almost ruined by deep plowing, and again by taking the suckers and pulling up long roots for the purpose of propagation. It may be stated as an invariable rule that this fruit will not yield profitably both plants and fruit. No part of fruit-growing is of more importance than a knowledge of varieties. Those who are not acquainted with the different kinds should go to the nearest reliable fruit-grower and get his advice. Plant the old reliable varieties and let the man with plenty of time and money test the novelties. Of the different kinds of small fruits, I have selected the following as the best and most profitable for this part of the State:

Strawberries.—Crescent, Windsor, May King and Miner. Plant three rows of the Crescent or Windsor to one of the May King or Miner. Of the newer varieties I would add Jessie and Bubach as worthy of trial.

Raspberries.—Souhegan for early; Ohio for medium, and Gregg and Nemaha for late.

Blackberries.—Snyder and Taylor.

Fruit-growers, we should be honest and truthful. Truth is the essence of all worthy action in the world. It is at the bottom of all commercial, social and political life. Yet I fear truth is too rare on the earth. We should never recommend a tree or plant that we would not grow for our own use. We should be very sure that the variety is true to name. In selling berries by the quart, let us use the dry measure quart of 268.8 cubic inches, instead of the wine measure quart of 231 cubic inches, always putting as many large berries in the bottom of the box as on the top. I have known fruit-growers who followed this plan and their names on their packages insured an extra price in the market. If absolute truth shall govern all of our actions as well as our words, sooner or later prosperity will bless us. But should we fail to be prosperous when judged by the standard of dollars and cents, we shall attain a peace of mind that wealth alone cannot bestow. The fruit-grower should be the happiest man in the world, for he brings around him not only the entire food supplies that the land can produce, and in a fresh sound condition, but also more of beauty, active life and pleasure than falls to the lot of other mortals.

Spraying Apple Trees for the Oodlin Moth.

The essential point in this method of treatment is to have a small quantity of poison lodge in the depression in the blossom end of the apple before it turns down on its stem, the supposition being that when the newly-hatched caterpillar gnaws the skin preparatory to entering the fruit, it will eat sufficient poison to be killed. This end is best accomplished by applying the poison in a water spray by means of a force-pump and spray-nozzle, throwing the liquid above the tree so that it will settle in a fine mist. This should be done just after the blossoms have fallen, when the apples are about as large as peas. I believe that generally speaking one application will answer the purpose very well, unless there is a washing rain soon afterwards, in which case the application should be repeated.

I prefer London purple to Paris green, as it is cheaper, less liable to scorch the tree, more easily seen and in fine powder, and hence is more readily kept in suspension. A safe and effective proportion is three-fourths of a pound to

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This splendid, solid gold, hunting-case watch, is now sold for \$85; at that price it is the best bargain in America; until lately it could not be purchased for less than \$100. We have both ladies' and gents' sizes with works and cases of equal value. **ONE PERSON** in each locality can secure one of these elegant watches absolutely **FREE**. These watches may be depended on, not only as solid gold, but as standing among the most perfect, correct and reliable timekeepers in the world. You ask how is this wonderful offer possible? We answer—we want one person in each locality to keep in their homes, and show to those who call, a complete line of our valuable and very useful **HOUSEHOLD SAMPLES**; these samples, as well as the watch, we send **ABSOLUTELY FREE**, and after you have kept them in your home for 2 months, and shown them to those who may have called, they become entirely your own property; it is possible to make this great offer, sending the **Solid Gold Watch** and large line of valuable samples **FREE**, for the reason that the showing of the samples in any locality, always results in a large trade for us; after our samples have been in a locality for a month or two, we usually get from \$1,000 to \$5,000 in trade from the surrounding country. Those who write us at once will receive a great benefit for scarcely any work and trouble. This, the most remarkable and liberal offer ever known, is made in order that our valuable Household Samples may be placed at once where they can be seen, all over America; reader, it will be hardly any trouble for you to show them to those who may call at your home, and your reward will be most satisfactory. A postal card, on which to write us, costs but 1 cent, and if, after you know all, you do not care to go further, why no harm is done. But if you do send your address at once, you can secure, **FREE**, AN ELEGANT \$85, SOLID GOLD, HUNTING-CASE WATCH and our large, complete line of valuable **HOUSEHOLD SAMPLES**. We pay all express freight, etc. Address, STINSON & CO., Box 101, Portland, Maine.

eighty or one hundred gallons of water. Paris green may safely be used in the proportion of one pound to one hundred gallons of water. The poison should be formed into a paste with a little water, before stirring into the larger receptacle.

Of course it must be remembered that these substances are deadly poisons, and all reasonable care should be taken that no accidents occur through their use. Protect the hands of the operator with close-fitting gloves, and apply the spray so that it will not be breathed by men or horses. Keep stock out of the orchard for some time after the application is made, and do not spill the poison in quantity on the ground where it will be accessible to animals of any kind. Always keep the poison itself in tight vessels, plainly labeled poison, and out of the reach of children.

No danger need be feared from eating mature apples that were poisoned when the size of peas, for chemical analysis has shown that the extremely small amount of poison that lodges on the fruit is dissipated long before it matures.—*Bulletin No. 3, Ohio Experiment Station.*



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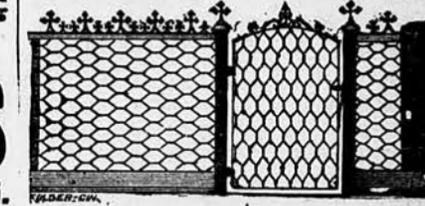
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The Poultry Yard.

Safe Cholera Cure.

EDITOR KANSAS FARMER:—Take one teaspoonful of common baking soda and one tablespoonful of fine corn meal, moisten with water, make into three or four little balls. Take hold of the bird's beak, draw the head well upward and drop one of the soda balls down its throat; allow it to swallow, and continue until all the dose is given. Repeat in four or five hours. After that I think the fowl will eat of its own free will. Sometimes they will eat at first without force work, but if very sick they will not. Then you will have to hold their nose and pour it down.

Some think cholera is caused by vermin and filth; perhaps it is, but I think one great cause is fermented food, sour milk, filthy drinking water, and too close confinement in small yards, etc. I learned the cure before I learned the preventive. I keep my fowl houses clean. I give no milk of any kind; feed no sour feed, and feed no condition powders. But I give them plenty of clean cold water, feed soft feed in the morning composed of equal parts of ground oats and wheat screenings with a very little corn chop scalded; give raw beef scraps two or three times a week, cooked beef scraps with potatoes two or three times a week mixed with soft feed. I keep plenty of ashes and burned bone before them. Give teaspoonful of cayenne pepper in feed in the morning twice a week, also a tablespoonful of soda in feed twice a week. Give whole oats at night; keep millet straw in the yards all the time for them to pick at and scratch in. The consequence is perfectly healthy fowls, eggs till you can't rest and no setting hens.

MRS. EMMA BROSIUS.

Topeka, Kas.

\$110 will pay for board, room and tuition for forty weeks at Campbell Normal University. Board in the family of the President.

As a rule, spring pigs are the best, and the most profitable, but occasionally it may be necessary or best to have fall pigs; and when this is the case, it is a good plan to have them come early.

Until the blood is cleansed of impurities, it is useless to attempt the cure of any disease. Rheumatism, which is traceable to an acid in the blood, has been cured, in numerous cases, by the use of Ayer's Sarsaparilla, external treatment being of no avail.

Many weeds can be made of valuable service to hogs that are penned, and will not only be relished, but will afford an agreeable variety. Purslane, ragweed, pigweed and other kinds, especially before they seed, will be acceptable in the pig pen.

No matter what may be the ills you bear from indigestion, a dose of Ayer's Cathartic Pills will ease you without question. Just try them once and be assured; they have much worse dyspeptics cured. You'll find them nice and amply worth the price.

For Sale.

For the benefit of the parties who circulate the story that I am out of the Hereford business, I now offer registered bulls at \$50 to \$100. E. S. SHOCKEY, Topeka, Kas.

The value of any kind of farm stock is very largely determined by its feeding the first year of its life. Breeding counts for much, though every successful breeder knows how greatly the character of a young animal is changed by innutritious or improper food.

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EXCURSION SEASON--1888.

Chicago to the Sea--From Chicago Via the Chicago & Grand Trunk Railway.

During the tourist season, June 1 to October 1, a full line of tourists and cheap excursion tickets, via the Chicago & Grand Trunk railway, will be on sale in Chicago at the office of the company, and at principal offices in the country, by which all seaside and mountain resorts in the East can be reached at very reasonable rates of fare. The route of these tickets is by the Chicago & Grand Trunk railway from Chicago, thence by Grand Trunk main line via Toronto, or by Great Western division, by way of Niagara Falls; or both Niagara Falls and Toronto may be visited on the same trip, connecting with steamers on the St. Lawrence river, passing by daylight the Thousand Isles and wonderful rapids of that noted stream, and under the world renowned Victoria bridge, to Montreal; thence to Quebec, river Saguenay, of the grandeur and solemnity of whose scenery no words can convey an adequate idea; White mountains, Lake Champlain, Lake George, Saratoga and Hudson river; or via Portland, the noted Casco bay, and watering places on the Atlantic ocean beaches in that vicinity.

In addition to regular sleeping cars, during the tourist season, a Pullman palace sleeping car is run on the train which leaves Chicago at 8:15 p. m., direct to Kingston wharf, and dropped there in order that passengers may enjoy a full night's rest and take the Richelleu & Ontario Navigation company's steamer at Kingston wharf, for a daylight ride down the river St. Lawrence to Montreal.

During the tourist season a Pullman sleeping car leaves Niagara Falls late in the afternoon at the Kingston wharf, via Hamilton, connecting with the Richelleu & Ontario Navigation company's early morning steamer at Kingston, as above.

Canadian baggage—passengers for Canada now have their baggage examined, passed customs and checked to destination, at our depot in Chicago, thereby avoiding annoyance or delay at the Canadian frontier.

In selecting a route east, during the summer season, no pleasanter, more attractive, or delightful trip can be found on the American continent, than that embraced in one of the many attractive routes of the Chicago & Grand Trunk railway from Chicago to New England and the sea, taking in Niagara Falls and the beautiful St. Lawrence river.

A full description of the routes and price of tickets will be found in *Summer Tours*, 1888, published by the company, and which will be mailed to any address on application to E. H. Hughes, General Western Passenger Agent, 103 Clark St., Chicago.

Farm Loans.

Ready money, lowest rates, and every accommodation on real estate loans; one to five years time as best suits borrower.

T. E. BOWMAN & Co.,

116 W. Sixth street, Topeka, Kas.

Many people shut up fowls in a small, close yard as soon as planting is done, and some do so earlier. Before doing so it is worth while to consider profit and loss in this matter. Unless they have a good, large yard, fowls confined lay but little in summer. The food consumed just keeps the birds alive; but they pass a monotonous existence.

Thirty Miles Disappear.

Thirty miles of journey is a big thing to disappear, but this distance has been dropped out between Kansas City and Chicago. How it happened is thus figured: The Chicago, Santa Fe & California railway is completed between Kansas City and Chicago, and the distance between the two cities is only 458 miles, measuring from Union Depot, Kansas City, to Dearborn Station, Chicago. This is exactly thirty miles less than by any of the old lines, so you have to travel thirty miles less, your freight has to be hauled thirty miles less, and practically the Santa Fe has made thirty miles disappear. A few years at this rate and Kansas will be in New England.

The preparatory department of Campbell Normal University is the most thorough in the West.

Hardware for Farmers.

D. A. Mulvane & Co., 713 Kansas avenue, Topeka, always keep a full line of hardware, and especially desire the patronage of every farmer, who will find it to his interest to inspect our complete stock of hardware of every description, including the cheapest and best line of gasoline stoves, refrigerators, barb wire, screen doors, tinware, ladders, wheelbarrows, etc.

Consumption Surely Cured.

TO THE EDITOR:—Please inform your readers that I have a positive remedy for the above named disease. By its timely use thousands of hopeless cases have been permanently cured. I shall be glad to send two bottles of my remedy FREE to any of your readers who have consumption if they will send me their Express and P. O. Address. Respectfully, T. A. Slocum, M. C. 181 Pearl St., New York.

Consumption Cured.

An old physician, retired from practice, having had placed in his hands by an East India missionary the formula of a simple vegetable remedy for the speedy and permanent cure of Consumption, Bronchitis, Catarrh, Asthma and all throat and Lung Affections, also a positive and radical cure for Nervous Debility and all Nervous Complaints, after having tested its wonderful curative powers in thousands of cases, has felt it his duty to make it known to his suffering fellow-men. Actuated by this motive and a desire to relieve human suffering, I will send free of charge, to all who desire it, this recipe, in German, French or English, with full directions for preparing and using. Sent by mail by addressing with stamp, naming this paper, W. A. NOYES, 149 Power's Block, Rochester, N. Y.

HUGH E. THOMPSON, BROOMCORN

Commission and Dealer in Broom-Makers' Supplies. Reference:—National Bank of Commerce. 1412 & 1414 Liberty St., Kansas City, Mo.

SMALL FRUIT PLANTS FOR SALE

Forty acres in Small Fruits, 100,000 plants sold this year. 900,000 to sell in fall of 1888 and spring of 1889. To those who desire to plant small fruits, my 1888 *Small Fruit Manual* will be sent free. B. F. SMITH, Box 6, Lawrence, Kas.

KANSAS HOME NURSERY

BEST HOME-GROWN TREES. Choice Fruit and Ornamental Trees of real merit for the Western Tree-Planters. Also best Fruit and Flower Plates. Water-proof. Samples by mail, 10 cents each; \$6 per 100, by express. A. H. GRIESA, Drawer 28, Lawrence, Kas.

SEED BUCKWHEAT! MILLET,

TURNIP SEED AND FRESH RUTA BAGA SEED.

At TOPEKA SEED HOUSE, Address DOWN'S ELEVATOR & SEED CO., 304 Kansas Ave., cor. Third St., Topeka, Kas.

Hart Pioneer Nurseries OF FORT SCOTT, KANSAS.

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

Mount Hope Nurseries

ESTABLISHED 1869. Offer for Spring of 1888. Fruit and Ornamental Trees, Grape Vines, Small Fruit and Shrubbery. All the old established sorts, and the desirable new ones. Red-rock prices. Quality of stock unsurpassed. We solicit club orders and by the carload. Shipping facilities best in the State. We are not publishing prices, but send us a list of your wants and we will price them to your satisfaction. A. C. GRIESA & BRO., Drawer 13, Lawrence, Kansas.

THE LAMAR NURSERIES.

Headquarters for Fine Nursery Stock Which is Offered at

HARD - TIME PRICES!

Dealers and Nurserymen supplied at lowest wholesale rates. Parties desiring to buy in large or small quantities will save money by purchasing our stock. We have Apple, Peach, Pear, Plum, Cherry and Evergreen Trees. Grape Vines in all varieties, and FOREST TREES a specialty. Osage Hedge Plants and Russian Mulberry in any quantity. Write for Prices. C. H. FINK & SON, LAMAR, Mo.

LA CYGNE NURSERY.

MILLIONS

Fruit Trees, Shade Trees, Small Fruits. Vines, Ornamental Trees, Etc.

TEN MILLION FOREST TREE SEEDLINGS.

ONE MILLION HEDGE PLANTS.

ONE HUNDRED THOUSAND TWO-YEAR APPLE TREES—Grown from whole root grafts.

FIVE THOUSAND IRISH JUNIPERS—Two-foot, SPLENDID WALNUTS, and other forest tree seeds and nuts, prime and fresh.

Full instructions sent with every order, and perfect satisfaction guaranteed. Send for full list and prices. Address

D. W. COZAD

Box 25, LACYGNE, LINN CO., KANSAS.

HIGH - CLASS

Jersey Bulls FOR SALE CHEAP.

DUKE OF WELLWOOD 14010—Three years old; solid color; black points. First prize at the St. Louis Fair, 1886; first prize and sweepstakes at Iowa State Fair, 1886; first prize at Kansas State Fair, 1887, and sweepstakes over all dairy bulls at Nebraska State Fair in 1887. He is the only bull known to his owner whose blood lines close up trace to the three greatest of all Jersey bulls—judged by the better records of their daughters, viz.: Mercury, Stoke Pogis 3d and Rex. Price \$100.

SIGNAL BOY 16178—Two years old; fawn—some white on legs and tail. Tracing to twenty butter tests, close up, ranging from 16 pounds to 22 pounds 8 ounces in seven days. No better blood. Individually fine. Sold for no faults—right every way. In good condition, but owner has no use for them. Price \$75.

Will take one-half cash down, balance in six months. Also, a few Yearling Heifers in Calif, at \$75 to \$100. Must be sold.

Address

CHAS. H. HOLMES, Beatrice, Nebraska.

For Sale!

Registered Berkshire Pigs from prize-winners. Foundation stock Duchess and Windsor Castle families. Largest and best in England or America.

Premium Langshan and Wyandotte Chickens. Eggs, \$2 for thirteen. Write for catalogue and price list before purchasing. J. L. BUCHANAN, Belle Rive, Ill.

REPUBLICANS.

THE UNION PACIFIC "The Overland Route,"

Will sell tickets at rate of One and One-third fare for the round trip from points in Kansas to parties attending the Republican State Convention to be held at Topeka, July 25, tickets good going July 24 and 25, limited returning to July 28.

PROHIBITIONISTS.

THE UNION PACIFIC "The Overland Route,"

Will sell round trip tickets from points in Kansas to McPherson, Kas., at rate of One and One-third fare to parties attending the Kansas State Prohibition Convention, to be held at Hutchinson, Kas., July 18. Tickets will be sold July 17 and 18, limited to return until July 21.

OUR NATIONAL ANNIVERSARY.

112th Birthday of the Greatest Country on Earth.

1776.—FOURTH OF JULY.—1888.

As this is the day we celebrate, *The Chicago, Kansas & Nebraska Railway*, (St. Joseph & Iowa R. R. Co. Lessee), "ROCK ISLAND ROUTE," will sell tickets July 3 and 4, 1888, between all stations distant 200 miles or less, or between points where the fare ONE WAY does not exceed \$6, at

ONE FARE FOR THE ROUND TRIP. Tickets good for return passage until July 5, inclusive.

CELEBRATIONS ALL ALONG THE LINE. Passengers not holding tickets will be charged full fare on all trains.

H. A. PARKER, JNO. SEBASTIAN, Vice Pres. & Gen'l Mgr. G. T. & P. A. Topeka, Kansas.

A New Question in Railroad Laws.

The Legislature of Iowa, during its last session, passed an act which authorizes the State Railroad Commissioners and fix rates of compensation for the carrying of freight by railway companies. Acting under authority conferred by the law, the commissioners prepared a schedule and directed the railway managers to adopt it. The companies object to the rates, asserting they are unreasonably low, and they brought suit in the United States circuit court before Judge Brewer to enjoin the commissioners from proceeding under the law. The petition alleges that the new Iowa law is unconstitutional, and in conflict with the inter-State commerce law; and it does not sufficiently define the offences for which it undertook to impose enormous penalties as common carriers for charging unreasonable rates. It is proposed to test the validity of the power conferred upon the commissioners by legislature to fix rates. It is claimed that the act of making a schedule is a legislative act, and that legislative power cannot be conferred by the Legislature upon the Board of Commissioners.

This is a new question in court. In the Granger cases, which went up from Iowa some years ago, the supreme court held that State Legislatures have authority to regulate railroad traffic and to prescribe rates. The question now raised is, whether Legislatures may delegate that authority to any other body. The point, we believe, is well taken. The KANSAS FARMER frequently urged the rule of legislation by the duly constituted body—the Legislature, assigning to commissioners only the duty of administering the law, if it be best to have commissioners. Legislation is a function of sovereignty and cannot be delegated; prescribing compensation for carriers is a legislative act; therefore a Board of Commissioners cannot lawfully fix rates of compensation for railroad companies.

Judge Brewer, at St. Paul, granted a temporary injunction a few days ago, and set the matter for hearing at Leavenworth, July 5. We expect him to enjoin the commissioners permanently, and the Legislature will then be called together, we suppose, to act on the matter, when the commissioners' rate schedule will be made law, or a different scale will be adopted.

The Work of Experiment Stations.

Prof. Shelton, director of the Kansas Experiment Station, in an article recently published in the *Industrialist*, called attention to what experiment stations may do and what they may not do, concluding with—"The need of greater accuracy in farm operations, and of more fixed facts as the basis of such operations, has always been insisted on; and the public very justly looks to the stations in the expectation that they will be able to place in clear definition many facts of agricultural practice. This, however, must be a slow and toilsome process, chiefly because of the great difference in farms, farming conditions, and the wants of farmers. There always will be a large class of supposed facts in relation to farming—things that must be taken for granted. The "rule of thumb" will hardly become obsolete during the lives of the present generation. And it is a thousand times better that we go on guessing than that we accept as general facts and principles truths which are only true under special circumstances and conditions.

"Recent experience at this station reveals the existence of an idea among the farming classes that one of the functions of the new experiment sta-

High - Pressure

Living characterizes these modern days. The result is a fearful increase of Brain and Heart Diseases—General Debility, Insomnia, Paralysis, and Insanity. Chloral and Morphia augment the evil. The medicine best adapted to do permanent good is Ayer's Sarsaparilla. It purifies, enriches, and vitalizes the blood, and thus strengthens every function and faculty of the body.

"I have used Ayer's Sarsaparilla, in my family, for years. I have found it invaluable as

A Cure

for Nervous Debility caused by an inactive liver and a low state of the blood."—Henry Bacon, Xenia, Ohio.

"For some time I have been troubled with heart disease. I never found anything to help me until I began using Ayer's Sarsaparilla. I have only used this medicine six months, but it has relieved me from my trouble, and enabled me to resume work."—J. P. Carzanett, Perry, Ill.

"I have been a practicing physician for over half a century, and during that time I have never found so powerful and reliable an alternative and blood-purifier as Ayer's Sarsaparilla."—Dr. M. Maxstart, Louisville, Ky.

Ayer's Sarsaparilla,

PREPARED BY
Dr. J. C. Ayer & Co., Lowell, Mass.
Price \$1; six bottles, \$5. Worth \$5 a bottle.

tions is to compile and disseminate information in matters likely to be of interest to farmers. Requests have already been received that bulletins be prepared on various special topics; as, for instance, black-leg in cattle, hog cholera, and "the best way to head off the chinch bugs." It is plain to us that the experiment stations were never designed to take the place of the agricultural press, agricultural colleges and farmers' institutes. They will be, undoubtedly, a valuable adjunct to the ordinary educational means; but it certainly is a misuse of funds to make the bulletins and reports of the stations simply essays, the subject matter of which is already before the public."

THE MARKETS.

By Telegraph, July 2, 1888.

LIVE STOCK MARKETS.

St. Louis.

CATTLE—Receipts 700, shipments 1,900. Market quoted steady and firm. Choice heavy native steers \$5 00a5 50, fair to good native steers \$4 50a4 90, medium to choice butchers' steers \$3 80a4 50, fair to good stockers and feeders \$2 40a3 75, common to good rangers \$1 75a3 75.

HOGS—Receipts 400; shipments Market steady and firm. Choice heavy and butchers selections \$5 50, medium to prime packing \$5 45a5 55, ordinary to best light grades \$4 80a 5 40.

SHEEP—Receipts 1,200, shipments 1,100. Market steady. Clipped sheep, \$1 60a4 25.

Chicago.

The Drovers' Journal reports:
CATTLE—Receipts 7,500, shipments Natives 15c higher; tops at \$5 80; rangers steadier; best grass steers at \$3 25. Choice steers, \$5 40a5 80; good, \$4 90a5 35; medium, \$1 30a4 80; common, \$3 50a4 20; stockers, \$2 00 a3 00; feeders, \$3 00a3 50; bulls, \$1 75a3 00; cows, \$1 25a3 00; range steers, \$2 25a3 25.

HOGS—Receipts 2,000. Market steady. Mixed, \$5 40a5 65; heavy, \$5 55a5 75; light, \$5 40a 5 55; skips, \$4 00a5 30.

SHEEP—Receipts 5,000. Market unchanged. Muttons, \$2 75a4 65; stockers and feeders, \$2 00 a3 40; Texan, \$1 75a3 65; lambs, per head, \$1 00a3 00.

Kansas City.

CATTLE—Some fancy 1,202-lb. two-year-old beef steers sold at \$5 40, and 1,543-lb. cattle of less style sold at \$5 00. Style more than weight regulated the price. The general feeling was stronger. Dressed beef and shipping \$4 75a 5 40.

HOGS—The light supply kept part of the buyers out of the market. Four packers bought packing grades and Canada buyers took pigs. The limited supply sold early at generally steady and firm prices. Some con-

sidered heavy grades strong and the \$5 45 hogs as higher than Saturday. On the other hand speculators claimed to have bought hogs earlier. The tops at \$5 45 were not nearly so good as the extra hogs at \$5 55 Saturday. The bulk of sales was \$5 25a5 35 against \$5 30a5 40 Saturday.

SHEEP—\$2 45a3 25.

PRODUCE MARKETS.

Chicago.

Cash quotations were as follows:
FLOUR—Steady, unchanged.
WHEAT—No. 2 spring, 79a79 1/2c; No. 2 red, 80 1/2c.

CORN—No. 2, 47 1/2c.
OATS—No. 2, 30c.
RYE—No. 2, 52c.
BARLEY—No. 2, 63c.
FLAXSEED—No. 1, \$1 15a1 30.
TIMOTHY—Prime, nominal.
PORK—\$13 50.
LARD—\$8 02 1/2.
BUTTER—Steady. Creamery, 15a18c; dairy, 13 1/2a17c.
EGGS—Steady. Fresh candled, 14a14 1/2c.

Kansas City.

WHEAT—Receipts at regular elevators since last report bushels; withdrawals, bushels, leaving stock in store as reported to the Board of Trade to-day, 30,871 bushels. There was a steady market on 'change to-day, with no sales on the call of any of the different grades, either for cash or future delivery. No. 2 red winter, cash and July, 87 1/2c bid, no offerings. No. 2 soft winter, cash, no bids nor offerings; July, 70c bid, no offerings.

CORN—Receipts at regular elevators since last report, bushels; withdrawals, 3,169 bushels, leaving stock in store as reported to the Board of Trade to-day, 73,460 bushels. Market steady on 'change; no sales on the call except No. 2. September at 46 1/2c—the first call on that month this year.

OATS—No. 2 cash, 19 1/2c bid, no offerings.
RYE—No. 2 cash, no bids nor offerings; July, 40c bid, 43c asked.

HAY—Receipts, old, 3 cars; new, 12 cars. Market firm. New, \$8 50; old, fancy, \$8 50 for small baled; large baled, \$8 00; wire-bound 50c less; medium, \$5 00a5 50; poor stock, \$1 00a2 00.

SEEDS—We quote: Flaxseed, \$1 00 per bu.

on a basis of pure; castor beans, \$1 00 for prime.

OIL-CAKE—Per 100 lbs. sacked, f. o. b., \$1 25; \$11 00 per 1,000 lbs.; \$21 00 per ton; car lots, \$19 00 per ten.

FLOUR—Quiet. Quotations are for unestablished brands in car lots, per 1/2 bbl. in sacks, as follows: XX, 95c; XXX, \$1 05a1 18; family, \$1 20a1 30; choice, \$1 55a1 65; fancy, \$1 70a1 75; extra fancy, \$1 80a1 85; patent, \$2 10a2 15; rye, \$1 40a1 60. From city mills, 25c higher.

BUTTER—Weak, with lower tendency. We quote: Creamery, fancy, 17c; good, 15c; dairy, 14c; good to choice, 12a13c; store-packed, choice, 10 1/2c.

CHEESE—We quote: Full cream, twins, 10c; full cream, Young America, 10 1/2c.

EGGS—Receipts fair and market weak at 10c per dozen for strictly fresh.

PROVISIONS—Following quotations are for round lots, job lots usually 1/2c higher: hams, 11c; breakfast bacon, 10c; dried beef, 9c; dry salt shoulders, \$5 75; long clear sides, \$7 35; clear rib sides, \$7 45; short clear, \$7 85; smoked shoulders, \$6 50; long clear, \$7 95; clear, \$8 05; short clear, \$8 55.

PORK—\$13 75.
LARD—\$7 50.

Topeka Markets.

PRODUCE AND PROVISIONS—Corrected weekly by W. W. Manspeaker & Co., 711 Kansas avenue. (Wholesale price).

Butter, per lb.	9 a 11
Eggs (fresh) per doz.	11
Beans, white navy, H. P., per bus	2 85
Potatoes (new)	25 a 70
Beets	25 a

RIVERVIEW

The Prettiest Young City of the Smoky Valley.

Beautiful Springs, Lake, and also, what the name implies,

RIVER VIEW.

Buy a home in or farm adjoining Riverview. Call on or address

THOS. E. FULGHUM,
Hays City, Kansas.

Kansas City Stock Yards,

KANSAS CITY, MISSOURI,

ARE BY FAR THE

Most Commodious and Best Appointed in the Missouri Valley,

With ample capacity for feeding, weighing and shipping cattle, hogs, sheep, horses and mules. They are planked throughout, no yards are better watered and in none is there a better system of drainage. The fact that

Higher Prices are Realized Here than in the Markets East,

Is due to the location at these Yards of EIGHT PACKING HOUSES, with an aggregate daily capacity of 3,300 cattle, and 27,200 hogs, and the regular attendance and sharp competitive buyers for the Packing Houses of Omaha, Chicago, St. Louis, Indianapolis, Cincinnati, New York and Boston. All the thirteen roads running into Kansas City have direct connection with the Yards, affording the best accommodations for stock coming from the great grazing grounds of all the Western States and Territories, and also for stock destined for Eastern markets.

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

G. F. MORSE, General Manager. **E. E. RICHARDSON,** Secretary and Treasurer. **H. P. CHILD,** Superintendent.

HAGEY & WILHELM,

WOOL COMMISSION MERCHANTS

ST. LOUIS, MO.

REFERENCES:—KANSAS FARMER Co., Topeka, Kas.; Boatmen's Bank, St. Louis; Dunn's Mercantile Reporter, St. Louis; First National Bank, Beloit, Kas.

GENERAL AGENTS FOR COOPER'S SHEEP DIP.
We guarantee sale and full returns inside of TEN DAYS from receipt of shipment.

CONSIGN YOUR CATTLE, HOGS & SHEEP TO Larimer, Smith & Bridgeford,

LIVE STOCK COMMISSION MERCHANTS,
Kansas City Stock Yards, Kansas City, Kansas.

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

The Veterinarian.

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

CURB.—I would like to consult your veterinarian about a 5-year-old gelding which is very fine. He has a curb on his right hind leg. Please inform me what is the best thing to do for it. He is not lame, but can't sell him in that condition. [Clip off the hair from the part and rub in for ten minutes a little biniodide of mercury ointment. Apply lard daily for three days and then wash off the blister and continue the lard till the part heals. At the end of three weeks blister again.]

PUERPERAL FEVER.—My cow dropped her calf one afternoon and seemed all right next morning except that she did not get rid of the afterbirth. In the evening I found her stiff and shivering; she finally fell down. Old neighbors said it was a case of hollow-horn; I bored the horn and put turpentine in, and also on the back. They said she would be all right. I went out at 9 a. m., and she got up. The next morning she was down breathing fast, as if she had fever; lived two days and nights and then died. [You lost your cow by carelessness and neglect, and hastened her death by cruelly boring the horns for a supposed disease that never existed.]

GRUB IN THE HEAD.—I have a flock of eighteen sheep, five yearling ewes and one or two old sheep, that have their lips and chops swelled quite bad. Some of them get over it in a short time and others seem to be so for weeks. I have one that is so weak it can just walk around. They run at the nose some if they keep swelled very long. My sheep last year were about the same, but they all lived through. There are other flocks the same around here. It is the young sheep, generally. I gave this one that is so bad some tar and put it on its nose, but do not think it did any good. My sheep have been housed in stormy weather and most of the time at nights since February 1. They had ventilation on the east side of the building. I have fed some grain, oats and buckwheat mixed. Sheep are in meadow now, I hope you will be able to give me a remedy. Since writing as above my sheep died. It was swelled quite bad under the chops. I opened the head and found five grubs. I opened the body and found the gall sack full and the liver stained with the gall. It was full of watery substance all through the stomach. Do you think it was grub in the head that caused it all? Can you give treatment for grub in the head? [Grub in the head is not regarded by our veterinary surgeons as injurious to sheep unless in large numbers. We know of no cure or means to dislodge them when once settled in the frontal sinuses. Many suggestions have been made from time to time, but all have proven failures. Instinct teaches an insect (*astrus ovis*) to deposit its eggs in the nostrils of the sheep during the spring and summer months. The egg is hatched by the warmth and moisture of these parts; the young grub then commences its journey to its winter habitation, the frontal sinuses, until developed the following spring. The journey of the young grub or larva frequently causes slight irritation to the sensitive membrane lining the nostrils and cavities of the head, causing the animal frequent fits of sneezing. Again after remaining all winter in its natural home the descent is made with the same results, occasionally causing a slight discharge. When ejected from the nostrils by the sheep sneezing, it speedily burrows in the ground. The

CHICAGO.

KANSAS CITY.

ST. LOUIS.

JAMES H. CAMPBELL & CO.,
Live Stock Commission Merchants,
FOR THE SALE OF CATTLE, HOGS AND SHEEP.

Rooms 23 and 24, Exchange Building, } Unequaled facilities for handling consignments of Stock in either of the above cities. Cor-
KANSAS CITY STOCK YARDS. } respondence invited. Market reports furnished free. Refer to Publishers KANSAS FARMER.

skin contracts, changing to a brown color, assuming the form of chrysalis, from which state in due time it emerges as the parent fly. A common preventive is smearing the nose with pine tar during the season the flies are prevalent.]

The marks of premature age may be effectually obliterated by using Buckingham's Dye for the Whiskers. It colors uniformly, and always gives satisfaction.

HUMPHREYS' HOMEOPATHIC VETERINARY SPECIFICS

That the diseases of domestic animals, HORSES, CATTLE, SHEEP, DOGS, HOGS and POULTRY, are cured by Humphreys' Veterinary Specifics, is as true as that people ride on railroads, send messages by telegraph, or sew with sewing machines. It is as irrational to bottle, ball, and bleed animals in order to cure them, as it is to take passage in a sloop from New York to Albany. Used in the best stables and recommended by the U. S. Army Cavalry Officers.

500 PAGE BOOK on treatment and care of Domestic Animals, and stable chart mounted on rollers, sent free.

- CURES
- A. A.—Fever, Congestion, Inflammation.
 - B. B.—Spinal Meningitis, Milk Fever.
 - B. B.—Strains, Lameness, Rheumatism.
 - C. C.—Distemper, Nasal Discharges.
 - D. D.—Bots or Grubs, Worms.
 - E. E.—Coughs, Heaves, Pneumonia.
 - F. F.—Colic or Gripes, Bellyache.
 - G. G.—Miscarriage, Hemorrhages.
 - H. H.—Urinary and Kidney Diseases.
 - I. I.—Eruptive Diseases, Mange.
 - J. K.—Diseases of Digestion.
- Stable Case, with Specifics, Manual, Witch Hazel Oil and Medicator, \$7.00
Price, Single Bottle (over 50 doses), .60
Sold by Druggists; or Sent Prepaid on Receipt of Price.
Humphreys' Med. Co., 109 Fulton St., N. Y.

Sex Controlled.

To prove it, will ship to any one, from stock farm Poland-China sow, bred to bring pigs all one sex, for \$16. Half with order, balance C. O. D. Will name sex of pigs at time of shipment of sows. My plan is a mechanical contrivance, absolutely accurate in results—cannot fail. Plan offered after proving. Result of ten years trial. Guarantee results as stated. If desired, send 2-cent stamp for sealed particulars of trials. For character, refer to Editor *Colman's Rural World*. Address W. H. GARRETT, Box 553, St. Louis, Mo.

Maple Grove Duroc-Jerseys.

We use only the choicest animals of the most approved pedigree, hence our herd is bred to a very high state of perfection. Pigs in pairs not akin. Stock of all ages and sows bred for sale at all seasons. Prices reasonable and quality of stock second to none.

J. M. BROWNING, Perry, Pike Co., Ill.

POLAND - CHINA PIGS!
135 FOR SALE.

Sired by six first-class boars, for season's trade. My herd is headed by STEM WINDER 7971.

Address F. M. LAIL, Marshall, Mo. [Mention KANSAS FARMER.]

LANEY & PFAFF,
GREEN RIDGE, MISSOURI.

THOROUGHbred
POLAND - CHINA HOGS
FOR SALE.

No poor pigs sent out. [Mention KANSAS FARMER.]

THE GOLDEN BELT HERD OF
Thoroughbred Poland-Chinas

This herd comprises the richest blood to be found in the United States, and in uniformity and style has no superior in this country. Choice animals of all ages and either sex for sale. Stock shipped from here over either the A. T. & S. F., Mo. Pacific or St. Louis & San Francisco R. R. All breeders registered in American P.-C. Record. Pedigree with each sale. F. W. TRUEDELL, Lyons, Kas.

OTTAWA HERD

Of POLAND - CHINA and DUROC - JERSEY Hogs. Twenty head of first-class boars from four to nine months old. Also seventy-five head of sows of same age, sired by Bruce 4695, C. R., Leek's Gilt Edge 2887, C. R., Whipple's Stemwinder 4701, Daisy's Corwin 4697. Dams—Mazy 2d 6214, Zelds 3d 8250, Maggie's Perfection 8210, Vone's Perfection 9424, Fay's Gold Drop 11676, Jay's Dimple 12172, Eureka Mayo 12176, and many other equally as well bred, and fine as can be produced by any one. Part of sows bred to gilt-edge boars of the most popular strains. Will sell at prices to suit the times. Never had any cholera in the herd. Write for prices.
I. L. WHIPPLE, Box 270, Ottawa, Kas.

Poland-Chinas

100 PIGS FOR SALE!

NEW BOARS:—Young America 3811, C. R., noted show hog and breeder; nine sweepstakes; sire of sweepstakes hog at Chicago fat stock show. Lord Corwin 4th, 1651; daisy show hog, of the highest premium blood. Lampe's Tom Corwin 6207; gilt-edge premium pedigree. SOWS:—Black Rosas, Gold Dust, Double Corwins, Black Bess, Black Beautys, Buckeyes, Dimples, Stemwinders, etc. Royal blood, gilt-edge pedigrees. Shipped to fifteen States and thirty-three counties in Kansas.
W. S. HANNA, OTTAWA, KANSAS.

MAINS' HERD OF POLAND-CHINAS.



Jas. Mains, Oskaloosa, (Jefferson Co.), Kas., is located two and a half miles southeast of Oskaloosa, on Maple Hill Stock Farm. All hogs eligible to Ohio Poland-China Record. A fine lot of spring pigs now ready, for sale at prices that will suit the times. Also some fall sows now ready to breed or will be bred if desired. Personal inspection solicited.

Gold Dust Herd of Poland-Chinas.



J. M. McKEE, WELLINGTON, KANSAS.

Tom Corwin 3d 5293 A. P. C. R. at head of herd. Strains representing Model, Give or Take, Gold Dust, Black Bess and Black Beauty. Have some choice male pigs for sale. Also eggs of F. Rock, Brown Leghorn and Light Brahmas, \$1.25 per 13; Toulouse Geese, 15c.; Pekin Duck 10c. each. Write; no catalogue.

For Berkshire Swine and Southdown Sheep that are first-class, or money refunded, call on or address J. M. & F. A. SCOTT, Box 11, Huntsville, Mo. [Mention KANSAS FARMER.]

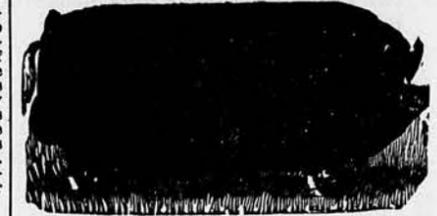
ORDERS TAKEN NOW

For SPRING PIGS sired by



ROYAL GRANITE 10105,
The best BERKSHIRE boar ever owned at "HAW HILL," and several other first-class sires. Enclose stamp for catalogue and prices.
SPRINGER BROS., Springfield, Ill.

PLEASANT VALLEY HERD OF Pure-bred Berkshire Swine.



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

ENGLISH BERKSHIRES.



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

LOCUST & GROVE & HERD

OF
LARGE ENGLISH BERKSHIRE SWINE.

Nothing sent out but what is a credit to Locust Grove Herd. Individual excellence combined with purity of breeding, is my motto. Prices to suit the quality of stock offered. Correspondence and inspection solicited. Orders booked now for spring pigs. Address as below, or better, come and see.

JAMES HOUK, Prop'r,
Hartwell, Henry Co., Missouri.

SELECT HERD OF LARGE BERKSHIRES!

G. W. BERRY,
BERRYTON, Shawnee Co., KANSAS.

My sows represent the Royal Duchess, Sallie, Hillside Belle, Charmer, Stumpy, and other families. These Swanwick and Humfrey families are larger, thicker-fleshed, set on shorter legs, and possess finer qualities than other hogs. Herd headed by British Champion III. 13481 and Dauntless 17417. My aim is to produce a type of Berkshires honorable to the Select Herd and the breed. Correspondence in regard to spring pigs invited.

BERRYTON is located nine miles southeast of Topeka, on the K., N. & D. R. R. Farm adjoins station.

ELY'S CATARRH

CREAM BALM
IS WORTH
\$1,000

To Any Man
Woman or Child
suffering from
CATARRH
Not a Liquid or
Snuff.

A particle is applied into each nostril and is agreeable. Price 50 cents at Druggists; by mail, registered, 60 cts. ELY BROS., 56 Warren St., New York.

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Suffering from the effects of youthful errors, early decay, wasting weakness, lost manhood, etc., I will send a valuable treatise (sealed) containing full particulars for home cure, FREE of charge. A splendid medical work; should be read by every man who is nervous and debilitated. Address,
Prof. F. C. FOWLER, Moodus, Conn.

Devon Cattle!

We are the largest breeders of this hardy, easy-keeping breed, one of the best for the West. Stock for sale singly or car lots.

RUMSEY BROS. & CO.,
EMPORIA, KANSAS.

Thoroughbred Cattle and Poultry

JOHN T. VOSS, GIRARD, KAS.,
BREEDER OF

THOROUGHBRED SHORT-HORN AND JERSEY CATTLE.

Stock for sale. Also FIFTEEN VARIETIES OF LAND AND WATER FOWLS of the very choicest stains. Send for Price Lists.

Inspection and correspondence invited.
Address JOHN T. VOSS, Girard, Kas.

Holstein - Friesian Cattle

Of European Herd Book Registry.



The sweepstakes bull PRINCE OF ALTIJDWERK (61 M. B.) at head of herd, has no superior. Cows and heifers in this herd with weekly butter records from 14 pounds to 19 pounds 10% ounces; milk records, 50 to 80 pounds daily. The sweepstakes herd. Write for catalogue. M. E. MOORE, Cameron, Mo. (Mention this paper.)

SHANNON HILL STOCK FARM.



G. W. GLICK, Proprietor,
Atchison, Kansas.

Breeds and has for sale Bates and Bates-topped

SHORT-HORNS

Including representatives of

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The Grand Bates Bulls,

8th Duke of Kirklevington No. 41798,
Waterloo Duke of Shannon Hill No. 89879,
At head of herd.

Fifteen choice young Bulls for sale now.

Correspondence and inspection of herd solicited, as we have just what you want and at fair prices.



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KNIGHT OF HARRIS 995 (2211),

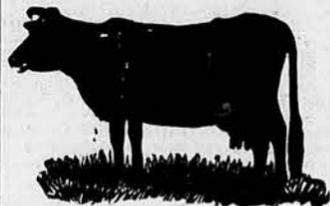
The property of H. W. McAFEE, will make the season at Prospect Farm, three miles west of Topeka, Sixth street road.

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Over 3,000,000 of them have been used. The most reliable and durable PAD for sore-neck horses or mules. Weather or wear has no effect on their curative properties. We solicit a trial. For sale by all saddlery jobbers. Ask your harness-maker for them and insist on having the ZINC PAD and no other. ZINC COLLAR PAD CO., Buchanan, Mich.

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Home of HASSELMAN'S BROWNIE 28777. Tested on Island of Jersey at rate of 83 pounds 12 ounces in seven days.

BREEDERS OF A. J. C. C. JERSEY CATTLE,

Offer a few choice-bred Bull Calves by such noted sires as the St. Lambert Duke 76 bull, ST. VAL-ENTINE'S DAY 15278, whose sire was a son of Stoke Pogis 3d 2235, and a grandson of Victor Hugo 197; COAST 14718.

Several of these Bulls are old enough for service, and are out of tested cows. To responsible parties, will give time or exchange for cows or heifers.

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LINWOOD SHORT-HORNS

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Substance, flesh, early maturity and good feeding quality the objects sought. The largest herd of Scotch Short-horns in the West, consisting of Cruickshank Victorias, Lavenders, Vilets, Secrets, Brawth Buds, Kinellar Golden Drops, etc., headed by Imp. Baron Victor 42824, a prize-winner and sire of prize-winners.

LINWOOD—Is twenty-seven miles from Kansas City, on Kansas Division Union Pacific R. R. Farm joins station. Inspection invited. Catalogue on application.

Kansas Hereford Cattle Co.,

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IMPORTERS AND BREEDERS OF

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BREEDING HERD AT GROVE PARK,

2 1-2 Miles Northeast of Lawrence, Kas., on U. P. R. R.

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CLYDESDALE, PERCHERON, CLEVELAND BAY

French Coach Horses.

AN IMPORTATION OF 125 HEAD,

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RED POLLED CATTLE.

We have on hand a very choice collection, including a recent importation of horses, several of which have won many prizes in England, which is a special guarantee of their soundness and superiority of form and action. Our stock is selected with great care by G. M. SEXTON, Auctioneer to the Shire Horse Society of England.

Prices low and terms easy. Send for catalogues to

SEXTON, WARREN & OFFORD, Maple Hill, Kansas.

COTSWOLD AND SHROPSHIRE SHEEP.

Imported and home-bred, of different ages—the farmer's general-purpose sheep. Spring crop of lambs, both breeds, very promising.

Also Merino Sheep for sale—To settle the estate of R. T. McCulley—L. Bennett, administrator, who is authorized to sell at private sale, in numbers to suit purchaser.

Short-horns—Choice young animals, of both sexes, by Benick Rose of Sharon sires.

Bronze Turkeys and Plymouth Rock Chickens, pure breeds.

Also Berkshire Hogs.—For prices or catalogue, address

U. P. BENNETT & SON, Lee's Summit, Mo.

HAAFF'S NEW PRACTICAL DE-HORNER. Fifty illustrations. New Tools. Cattle Tags. New Water-heater. Send for circulars. Agents wanted. Mention this paper.
H. H. HAAFF,
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ORGANS & SEWING MACHINES. 50 Styles. Cut Prices. Big Inducements. Goods sent on trial. New, perfect and warranted 5 years. Agents Wanted. Ask for Free Circulars at once. GED. P. BURT, 221 Wabash Ave., Chicago.

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Means of inter-communication between all points in the States of KANSAS and NEBRASKA.

This great system presents the most comprehensive grouping of Central Lines in the United States, touching all principal localities in KANSAS, NEBRASKA, ILLINOIS, IOWA, MISSOURI, MINNESOTA and DAKOTA.

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Joins the GREAT ROCK ISLAND ROUTE at KANSAS CITY and ST. JOSEPH FOR CHICAGO, and points EAST, and makes close connection with all the leading Railway Lines for ST. LOUIS and points EAST, SOUTH and SOUTHEAST; and with the famous ALBERT LEA ROUTE to ST. PAUL, MINNEAPOLIS, and points in the NORTHWEST.

By means of its central position, the substantial character of its construction, and its magnificent Passenger Equipment, consisting of restful RECLINING CHAIR CARS, magnificent PULLMAN PALACE SLEEPING CARS, AND ELEGANT DAY COACHES, THE CHICAGO, KANSAS AND NEBRASKA RAILWAY is enabled to offer superior advantages to its patrons, and to lead all of its competitors in time, security, comfort and accommodation.

Among the numerous Cities and Towns on

The Chicago, Kansas & Nebraska Railway,

Wichita,	St. Joseph,	Kansas City,	Clyde,
Wellington,	Nelson,	Bellville,	Clay Center,
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It is a line of modern construction, with the latest and best improvements, and traverses the most important portions of the States of KANSAS and NEBRASKA, where there are opportunities not found elsewhere for the Farmer, the Merchant, the Mechanic, the Laborer, the Professional Man, and all classes of business and industrial pursuits.

For tickets, maps, folders and other information, apply to your nearest Ticket Agent, or to

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Memphis Route,

KANSAS CITY, FT. SCOTT & MEMPHIS R. R.
(Formerly Gulf Route—Kansas City, Fort Scott & Gulf R. R.)

Offers you the most pleasant and desirable route to Kansas City and all points East, North and West; to Memphis and all points South.

At Kansas City, connections are made at Union Depot with all through trains for Chicago, St. Louis and the East; to St. Paul, Denver, San Francisco, Portland, and the West and Northwest. Via this line, entire train with Free Reclining Chair Car and Pullman Buffet Sleeping Car runs through to Memphis, Tenn.; through coach Kansas City to Bristol via Chattanooga and Knoxville. There is no other direct route from the West to Jacksonville, Pensacola, Nashville, Chattanooga, and all Southern cities.

This route, via Hoxie, is over one hundred miles the shortest line to Little Rock, Hot Springs, and points in Arkansas.

Write for large map and time-tables, showing through connections.

Before purchasing your ticket, call upon a ticket agent of this Company, or write to the undersigned for rates. Special rates and arrangements for parties and their movables, going South to locate.

Send for a copy of the Missouri and Kansas Farmer, giving full information relative to the cheap lands of Southwest Missouri. Mailed free.

J. E. LOCKWOOD,
Gen'l Passenger and Ticket Agent,
KANSAS CITY, MO.

Take care of your Horses and Cattle by using Dr. S. P. Cregar's

STOCK CAKE & ANTI-WORM REMEDY,

a cathartic stimulant for HORSES, CATTLE and other LIVESTOCK. This Stock Cake removes worms, purifies the blood and water, loosens the hide, acts upon the kidneys, regulates the system and puts the animals in healthy, thriving condition. Also is a Preventive Against Pleuro-Pneumonia in Cattle. Price 15 cents per cake.
Dr. S. P. Cregar, 1464 Wabash Ave., Chicago.

THE STRAY LIST.

HOW TO POST A STRAY.

THE FEES, FINES AND PENALTIES FOR NOT POSTING.

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

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

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

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

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

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

Any person taking up an estray, must immediately advertise the same by posting three written notices in as many places in the township giving a correct description of such stray, and he must at the same time deliver a copy of said notice to the County Clerk of his county, who shall post the same on a bill-board in his office thirty days.

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

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

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

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

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

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

They shall also determine the cost of keeping, and the benefits the taker-up may have had, and report the same on their 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 the stray, one-half of the remainder of the value of such stray.

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

FOR WEEK ENDING JUNE 21, 1888.

Cowley county—S. J. Smock, clerk.

MARE—Taken up by H. D. Wilkins, in Windsor tp., May 23, 1888, one gray mare, 4 years old, no marks or brands; valued at \$20.

MARE—By same, one 2-year-old bay mare, no marks or brands; valued at \$20.

Labette county—W. J. Millikin, clerk.

PONY—Taken up by Ira W. Clark, in Hackberry tp., June 1, 1888, one dun horse pony, H on left jaw, 5 years old, star in forehead, branded on left thigh, shod all round; valued at \$20.

Pottawatomie county—L. D. Hart, clerk.

STEER—Taken up by Henry Cox, in Rock Creek tp., June 7, 1888, one blue-black 3-year-old steer, J. S. on right hip; valued at \$25.

STEER—By same, one white 3-year-old steer, J. S. on right hip; valued at \$25.

STEER—By same, one brindle 3-year-old steer, O on right hip; valued at \$25.

Wichita county—H. A. Platt, clerk.

PONY—Taken up by A. F. Humbertson, in Leoti tp., May 25, 1888, one bay pony mare, weight 800

pounds, branded V on left hip, brand similar to T on left thigh, also indistinct mark on left shoulder; valued at \$25.

Sedgwick county—S. Dunkin, clerk.

MARE—Taken up by N. R. Fernell, in Minneha tp., (P. O. Wichita), on or about May 16, 1888, one dark bay mare, black points, 8 or 10 years old, about 15½ hands high, white spot in face, sweeny in left shoulder, no harness marks or brands; valued at \$60.

Neosho county—T. B. Limbocker, clerk.

PONY—Taken up by G. W. Allen, in Grant tp., May 11, 1888, one roan pony mare, 14 hands high, 5 years old, branded with letter "Y" on right shoulder.

COLT—By same, one brown mare colt, 10 months old. (P. O. address Odessa).

Hamilton county—T. H. Ford, clerk.

PONY—Taken up by A. B. Willis, in Richland tp., May 23, 1888, one light bay mare pony, no marks or brands, weight about 600 pounds; valued at \$15.

Harper county—H. E. Patterson, clerk.

MARE—Taken up by C. P. Bradford, in Lake tp., (P. O. Crystal Springs), May 28, 1888, one bay mare; valued at \$18.

COW—Taken up by T. E. Roy, in Banner tp., (P. O. Harper), May 21, 1888, one white cow with red neck, 4 feet 8 inches high, CC on left hip, 7 years old; valued at \$15.

Brown county—N. E. Chapman, clerk.

STEER—Taken up by Ambrose Kessler, in Walnut tp., one red 2-year-old steer, no marks or brands visible; valued at \$15.

FOR WEEK ENDING JUNE 28, 1888.

Johnson county—W. M. Adams, clerk.

HORSE—Taken up by J. M. Fay, in Shawnee tp., May 23, 1888, one bay horse, three white feet, star in forehead, about 14½ hands high, piece of rope halter on, 6 years old; valued at \$80.

Montgomery county—G. W. Fulmer, clerk.

MARE—Taken up by J. N. Chandler, in Parker tp., May 21, 1888, one black mare, 3 years old, no marks or brands; valued at \$30.

Chautauqua county—W. F. Wade, clerk.

PONY—Taken up by Z. T. Sears, in Hendricks tp., one bay pony, about 2 years old, white face, Spanish brands on both hips and left shoulder; valued at \$15.

Woodson county—R. M. Phillips, clerk.

PONY—Taken up by Aug. Todman, in Center tp., May 21, 1888, one roan horse pony, about 4 years old, 14 hands high, no marks or brands; valued at \$25.

FOR WEEK ENDING JULY 5, 1888.

Marshall county—J. F. Wright, clerk.

STEER—Taken up by Peter Carney, in Noble tp., (P. O. Vermillion), May 24, 1888, one red steer with white strip on right hip, white front feet, white on sides of legs and star in forehead; valued at \$15.

Wichita county—H. A. Platt, clerk.

PONY—Taken up by Watson Beeman, in Edwards tp., May 25, 1888, one bay mare pony colt, star in forehead; valued at \$18.

COLT—By same, one 1-year-old bay mare colt, one white foot; valued at \$15.

Hamilton county—Thos. H. Ford, clerk.

HEIFER—Taken up by A. A. Rogers, in Greeley tp., June 25, 1888, one red 1-year-old heifer, tip of tail off; valued at \$5.

HEIFER—By same, one red 1-year-old heifer, no marks or brands; valued at \$5.

HEIFER—By same, one red and white 1-year-old heifer, no marks; valued at \$5.

COW AND CALF—By same, one roan cow, 3 years old, no marks, calf at side; valued at \$14.

COW AND CALF—By same, one roan cow, 7 years old, no marks, calf at side; valued at \$15.

Shawnee county—D. N. Burdge, clerk.

STEER—Taken up by Peter Sim, in Mission tp., June 26, 1888, one red and white steer, branded with letter C on left hip and 99 on left side, indistinct brand on right hip; valued at \$20.

Johnson county—W. M. Adams, clerk.

MULE—Taken up by J. W. Williams, in Olathe tp., (P. O. Olathe), June 18, 1888, one mare mule, supposed to be 14 years old, thin in flesh, two shoes behind and one in front; valued at \$20.

Too Late to Classify.

WANTED, SITUATION—To run a farm or cattle ranch, by a man with first-class recommendations for doing all kinds of farm work and handling horses and cattle. Address T. B., Union Hotel, 1301 Grand Ave., Kansas City, Mo.

LOOK HERE!—The Topeka Woman's Exchange is located at 114 Seventh street west. The organization is serving hot meals and lunch, which for excellence cannot be equaled in the city. Ladies and gentlemen from city and country invited to call. Pleasant rooms, home cooking, prompt service. The object of the organization is to aid all classes in finding a home market for their products.

FOR SALE OR TRADE—A two-horse Sorghum Mill, L. Squire's No. 2 Pearl, with Smouse's self-skimming evaporator. Address H. D. Rice, Topeka, Kas.

WANTED—Live Agents to sell "The History of Tariff Laws," by R. W. Thompson, (Ex-Secretary U. S. Navy). The only complete work on this great subject. Address R. S. Peale & Co., Chicago, Ill.

ANNOUNCEMENT—I hereby announce myself as a candidate for the office of County Superintendent of Public Instruction, subject to the decision of the Shawnee County Republican convention. JOSIAH JORDAN.

ANNOUNCEMENT—I am a candidate for the office of County Superintendent of Public Instruction, subject to the decision of the Shawnee County Republican convention. E. G. SHULL.

Lawrence Business College and Academy. Largest, Cheapest and Best. A 70-page illustrated catalogue sent free. Address E. L. McIlravy, Supt., Lawrence, Kas.

STOLEN.

From Manhattan, Kas., Sunday night, June 24, 1888, one sorrel mare, medium height and weight, with barb wire marks on right side and hip, sore under left fore leg, a mark indicating injury in foaling, collar mark on top of neck, also mark on back of shoulder caused by harness; about 9 years old. A liberal reward will be given for information leading to her recovery. E. COLBURN, Manhattan, Kas.



JUDICIOUS AND PERSISTENT Advertising has always proven successful. Before placing any Newspaper Advertising consult LORD & THOMAS, ADVERTISING AGENTS, 45 to 49 Randolph Street, CHICAGO.

ATTENTION, FARMERS!

You no doubt are aware of the fact that the dairy business is the most remunerative part of farming, and that there is no reason in the world why Kansas should not rank foremost in the creamery interests.

Kansas Creamery Butter

to-day is selling at the highest market prices in Denver and the West, but there is not enough butter made in Kansas to supply this great Western demand. Colorado has to buy her creamery butter in Iowa and Illinois, and these States are getting all of this good money that should go to our

KANSAS FARMERS.

Every town of six hundred inhabitants and upwards should have a CREAMERY, which they can procure at a VERY SMALL COST.

We are so situated that we can furnish all necessary Machinery and Apparatus, and give full instructions for erecting the building, which we will be glad to do at any time.

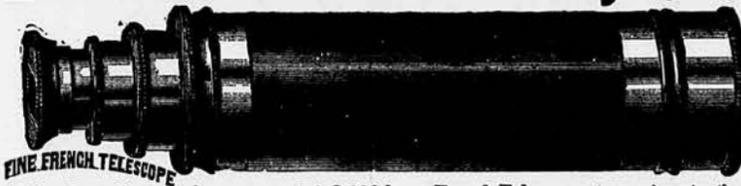
Let some enterprising farmer take hold of this, and work up a small stock company, and correspond with us.

We will be very glad to hear from anybody regarding this great industry.

OUR CATALOGUE FOR 1888 is now out. Send 2-cent stamp for same. Respectfully,

Creamery Package Mf'g. Co. KANSAS CITY, MO.

A TELESCOPE for Only \$1.00.



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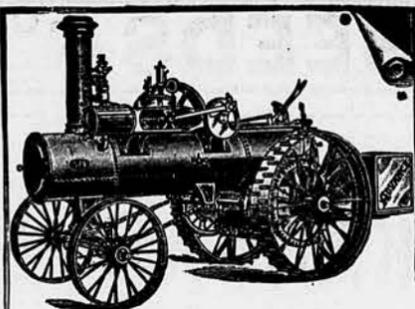
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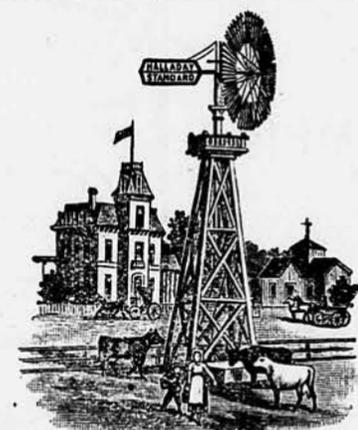
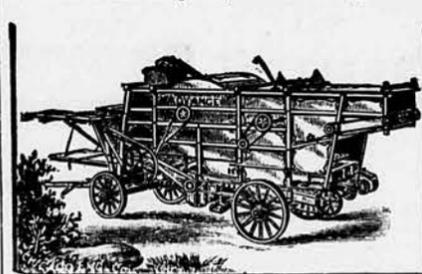
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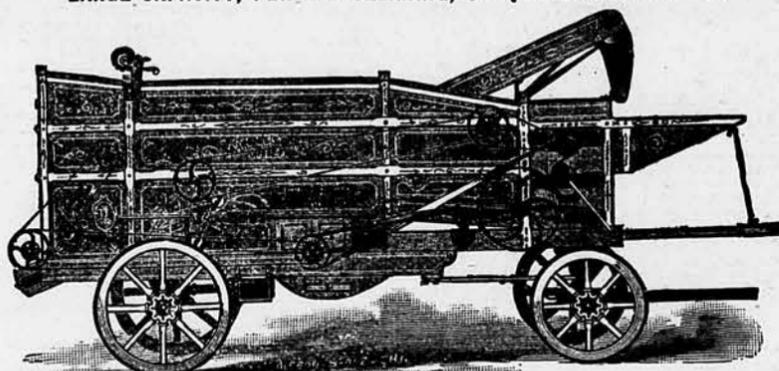


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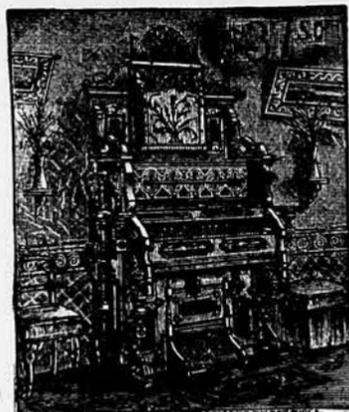
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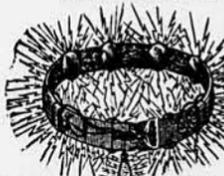
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BREEDERS' DIRECTORY. (Continued from page 1.)

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IF YOU WANT—Eggs or stock from prize-winning Light and Dark Brahmas, Langshans, Plymouth Rocks, Wyandottes and Pekin Ducks, at reasonable prices, send for circulars. C. A. Emery, Carthage, Mo.

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OAKLAND GROVE POULTRY YARDS—F. A. A'Neals, Topeka, Kas., breeder of Brown Leghorns, exclusively. Eggs \$1.50 per 15.

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HENRY DAVIS, Dyer, Indiana, breeder of high-class poultry. Two fine varieties. Prices reasonable. Stock for sale at all times. Eggs in season. Send stamp for circular. Mention Kansas Farmer.

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JOHN C. SNYDER, Constant, Gowley Co., Kansas, breeds PLYMOUTH ROCKS exclusively. No stock for sale. Eggs in season. Write for wants or send for circular, and mention this paper.

I. H. SHANNON, Girard, Kas., breeder of Wyandottes, P. Rocks, S. C. Brown Leghorns, Black Cochins. Eggs, \$2 for 15; \$3.50 for 30. Toulouse Geese eggs, \$2 for 7; Pekin Duck eggs, \$2 for 10.

PLYMOUTH ROCK COCKERELS—Two dollars each; three for \$5. Plymouth Rock and Pekin Duck eggs, \$1 per 15. Mark S. Salisbury, Independence, Mo.

MRS. EMMA BROSIUS, Topeka, Kas., breeder of M. Thoroughbred Light Brahmas—Felt pedigree strain, the most popular known. Mammoth Bronze Turkeys and Imperial Pekin Ducks. Having the finest stock that time and money can secure (believing the best the cheapest), am now prepared to furnish eggs at half the price Eastern breeders ask. Price of eggs: Light Brahmas, \$3 for 15, \$5 for 30; Mammoth Bronze turkeys, \$3 for 15 straight; Pekin ducks, \$2 for 11. No under-sized or inferior-shaped eggs sent out. Everything first-class; true value for money received.

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STRAYED—June 27, 1888, from 1200 Quincy street, Topeka, one black 8-year-old colt, two white feet, star in forehead, white snip on nose, long slim tail, small lump on left hind leg (outside) between hock and gambrel-joint. Had a web head-stall on when left. A small scar on under lid of right eye. B. F. Logan, 1200 Quincy street, Topeka.

FOR SALE—Twenty-five Sows, safe in pig, and ten Boars, ready for service, at \$25 each. Registered and delivered within one hundred miles of Lyons, free, on orders received before August 1. F. W. Truesdell, Lyons, Kas.

TWO-CENT COLUMN—(Continued.)

FARM FOR SALE—160 acres, with 50 acres under cultivation. Has grove, orchard, houses and other improvements. Located eight miles from Council Grove. Address Box 26, Boling, Kas.

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HAY LAND TO LET.—Nine miles southeast of Alta Vista. Two-thirds will be given for harvesting. Address S. S. Cartwright, Topeka, Kas.

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ANNOUNCEMENT.—I hereby announce myself as a candidate for the office of County Attorney, subject to the decision of the Shawnee County Republican convention. R. B. WELCH.

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FOR SALE—Great bargains in Boynton's addition to Topeka. Parties are doubling their money buying lots in this addition. The cotton factory is going up fast. Call on D. S. Boynton, 626 Kansas avenue, room 5.

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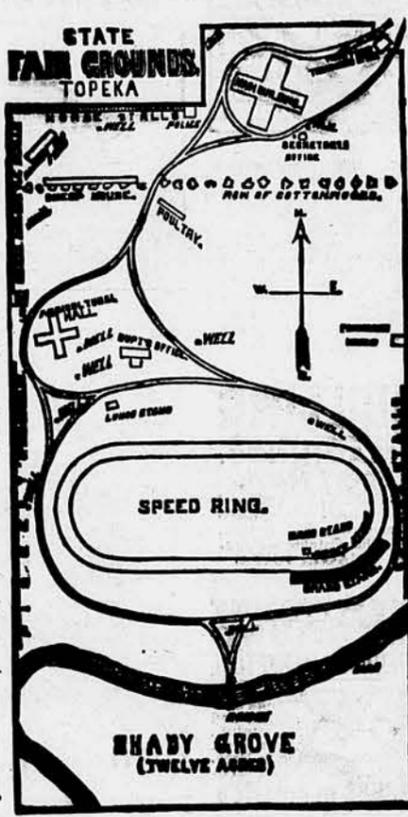
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