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J. H. Sanders Jr. 14953 S. 35089 O. heads our herd. Three of his get sold for \$865; entire get at sale averaged over \$200; get during his term of service exclusive of public sale brought over \$2,700. Thirty-eight pigs getting ready to go out. Among our 14 brood sows are Black Queen U. S. Corwin 29801 S., Silver Bar U. S. 30884 S., Black Queen Hadley 1st 36374 S., Annie Black Star 38631 S. and Ruby Rustler 4th 36355 S. Write, or, better, visit the herd. G. HORNADAY & CO., Fort Scott, Kas.

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Breeds and has for sale Bates and Bates-topped SHORT-HORNS. Waterloo, Kirklevington, Filbert, Cragg, Princess, Gwynne, Lady Jane and other fashionable families. The grand Bates bulls Winesome Duke 11th 115137 and Grand Duke of North Oaks 11th 115735 at head of the herd. Choice young bulls for sale now. Visitors welcome. Address W. L. CHAFFEE, Manager.

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Registered stock. Send for 44-page catalogue, prices and history, containing much other useful information to young breeders. Will be sent on receipt of stamp and address. J. M. STONEBRAKER, Panola, Ill.

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Bull Hill Gold Tunnel Stock

we are recommending, and have a limited amount of TREASURY stock, full paid and non-assessable, that we can sell at 3 cents a share. This Tunnel site runs under the famous Bull Hill and cuts many valuable veins. Eight hundred feet of work already done. Prospectus, map, etc., furnished if desired. Send orders to

THE MECHEM INVESTMENT CO.,

Colorado Springs, Colo.

Agricultural Matters.

LIME ON TIMOTHY AND ON CLOVER.

The conditions under which farming is done in Kansas are in general so different from those which prevail in the Eastern States that it is sometimes taken for granted that expedients valuable there are not applicable here. Some recent experiments with the use of lime at the Rhode Island Experiment Station may, however, be studied with advantage here. In describing the use of lime as a fertilizer the report of that station says:

LIME AND TIMOTHY.

"The field on the plain, west of the twentieth-acre plot experiment, on which clover seed failed to 'catch' in 1893, and which was therefore plowed at midsummer and reseeded in the fall of 1894, after receiving a top-dressing upon the two acres of four and one-half tons of air-slaked lime, produced the finest crop of timothy hay thus far grown upon the farm. The grass came up thick and uniform, without admixture of weeds or foul growth of any kind, and was of good color. A heavy rain storm the last of June laid down the grass upon a greater part of the field, most of which, however, straightened up sufficiently to make clean cutting with the mowing machine possible. Persons long familiar with the station farm fail to recall ever having seen growing upon it so fine a field of grass. Seven good two-horse loads were taken from the two acres in the first crop. Timothy generally fails to give an aftermath sufficient in amount to pay for cutting, and the growth upon this field is interesting for the reason that the second growth was mainly upon the north half of the field, which had received in 1892 a light dressing of air-slaked lime (1,400 pounds per acre). The application of air-slaked lime in 1894 was uniform over the field, as was the application of fertilizers and cultural treatment, so that the excess of second crop on the north half of this field must apparently be attributed to the benefit arising from the extra application of air-slaked lime. It is well known that one effect of air-slaked lime upon light soils is to flocculate the finer particles, thereby improving its mechanical condition and making it more retentive of water. It hardly seems possible that the addition of so small a quantity of lime to the north half in excess of that applied to the south half could cause any well-marked difference in the mechanical or physical conditions tending to change the per cent. of water in the soil upon the two sides of the field, yet the difference in the amount of second-crop growth was very evident, even to a casual observer. Little, if any, difference was noticed in the growth of the first crop upon the north and south sides.

LIME AND CLOVER.

"A triangular piece of ground immediately west of the field of timothy and of the same width contains about three-fourths of an acre. Both lots were in one field in 1892 when air-slaked lime was applied at the rate of 1,400 pounds per acre on the north half of the field. No further application of lime has been made to the triangular piece. In that year the piece was subdivided for the trial of various forms of phosphatic fertilizers, some of which, as slag meal, contained lime. In the spring of 1894 this piece was plowed and sown to oats and clover. In 1895 the growth of clover was very prominent upon the north side of the piece which received air-slaked lime in 1892 at the rate of 1,400 pounds per acre and only a little less marked upon a strip at the south side where the slag meal was used the same year in the phosphate experiment. A section of the piece south of that line and north of that to which slag meal was applied was very noticeable because of the almost entire absence of clover; only a few scattering plants appeared in the growth of sorrel which partially covered the ground. This piece was plowed September 13 and fertilized with one ton of air-slaked lime per acre. One and one-half bushels per acre of 'Excelsior' winter rye was sown September 30 with twelve quarts of

timothy, six pounds of cleaned red-top and twelve pounds of red clover seed.

"A field of four and a half acres at the northwest corner of the plain, because of the failure of previous grass seeding to 'catch,' was plowed early in the spring of 1894, and sown to oats and clover. Before seeding, air-slaked lime at the rate of 1,750 pounds per acre was thoroughly harrowed in and a home-mixed fertilizer made up as follows, was used broadcast: Nitrate of soda, 100 pounds; tankage, 100 pounds; dissolved South Carolina rock, 200 pounds; fine ground bone, 200 pounds, and muriate of potash, 200 pounds, making 800 pounds of the mixture per acre. A rather severe drought about the time the oats ripened and later threatened the existence of the young clover plants, but growth began with the coming of the autumn rains. The mowing machine with the cutter bar set well up from the ground was once run over it to clip off any tall growth of weeds or clover. The clippings were allowed to lie on the ground as a mulch, and the clover presented an even stand and thrifty appearance when the ground froze at the approach of winter. In the spring of 1895, the clover was found to have passed the winter in excellent condition and immediately started a very uniform growth. The first crop was cut June 20, and was considerably damaged by subsequent wet weather. As no grass seed was sown with the clover this field was plowed September 5 to 11, and seeded September 27 with sixteen quarts of timothy and six pounds of cleaned red-top seed per acre. No additional application of lime was made, but a moderate dressing of fertilizer, compounded from various chemicals on hand at the end of the season's work was used, making a dressing equal to about twenty-seven pounds of nitrogen, seventy-four pounds of potash and twenty-five pounds of phosphoric acid per acre."

Saving Seed Corn.

As to seed-saving in general, I have in former years advised farmers to buy such of their seed as the crops of which did not grow to fair results in their section. I have done so for several reasons. It generally pays to have the best seed. It is much trouble to save of the scores of kinds generally raised on the farm and in the garden. But even farm products have become so much lower accordingly than seedsmen's prices that a new factor must be taken into the question.

Can a farmer afford to pay \$1 to \$2.25 for seed corn when he must sell the corn for 10 to 25 cents? Similar questions might be asked in reference to all our crops and the answer could not be general.

If the seed grown on the farm is not up to fair standard, the increased yield from good seed might easily pay the cost of the new seed. But if you have fairly good seed it is hardly probable that it would pay to buy except it be in crops that a small amount of seed plants a large area, or only buy what will be for stock seed another year.

There is much difference. For instance, the high-priced seed oats will cost \$3 to \$5 per acre and a fair yield would bring but enough to sow twenty acres, while even the highest-priced corn would not cost over 25 cents per acre and a fair yield would bring enough to plant three hundred acres.

Last season I protested against the high price of Kaffir seed, 5 to 6 cents per pound or 1½ to 3 cents as the very lowest in large quantities, where farmers were getting but one-fifth to one-half cent per pound, yet five pounds would plant an acre bringing enough seed to plant five hundred acres. So in some cases the buying of high-priced seed even for stock seed is quite a serious item, while in others it amounts to but little.

I am not to say that seedsmen's profits are too large, but farmers' profits are too small and in many cases do not afford fair days' wages for time expended in actual work on the crop, that he cannot afford to buy the seed. So I should now advise that much more home seed be saved. Let the choicest be selected of that grown on your own farm and in the neighborhood, and you

have at least the satisfaction of knowing what you plant, and such careful experimenters like Geo. T. Pettit know that home-grown is the best in many lines, which accords with my own experience, but in other lines much larger yields can be had by getting other seed. There is room for much local study on the question.—J. M. Rice, in the *Epitomist*.

Seepage From Subsoil Storage.

EDITOR KANSAS FARMER:—A valuable letter from Prof. Hilton contains the following questions: "How far into the meadow from the edge of the subsoiled ground could you notice the benefit, and was there any variation in the line—that is, was the spread greater in some places than others, and if so, what, in your opinion, were the conditions that modified or limited the spread in other places?"

These questions refer to a letter in the FARMER of September 17, 1896. The benefit was all over the meadow, that was about 100 yards across from the plowed land, but much more noticeable near the subsoiled land than away. The grass was taller and much thicker near the line, and then gradually grew poorer. In one spot that was a trifle lower the seep seemed to go out much further, and in another spot where there was a slight rise it did not seem to do any good. This last spot of land was not in a direct line of the slope of the land, being at one corner and some higher.

This same meadow has a small draw running through it, and the grass on the other side of the draw is also much better, as the plowed land on that side is also subsoiled and naturally drains into this draw, with the exception of a small strip of two and one-half acres of corn that was planted on June 3 for fodder. This small strip was poor land and was never plowed deep, so I never expected anything but some short fodder, that I would cut with the mower, but the stalks grew to be the tallest of any corn in my neighborhood and the yield is equal to my best corn. The amount of fodder is actually the greatest I ever raised, and my man declares that he cut as many pounds of fodder on this two and a half acre strip as he did on nine acres of clover sod. I have never seen any evidence of any rainfall running off the surface of this subsoiled field since it was subsoiled in the spring, and my record shows that over twenty-five inches of water has fallen since that time. The soil on the subsoiled strip is good and about eighteen inches deep, underlaid with yellow gumbo, while the soil on the two and a half acres is only about five inches deep and the gumbo crops out in places. The second crop of hay was cut on this meadow September 24 and the crop was good and of a very superior quality, having no weeds at all and quite a lot of sweet blue-stem.

I am of the opinion that I have got an extra crop of grass and about as much more fodder from the two and a half acres of fodder as I should have had if I had never subsoiled the land above. The land is not very sloping, only about fifteen feet to the half mile. I never thought I should claim the benefits of subsoiling on land I never subsoiled, but it must be so.

CLARENCE J. NORTON.

Morantown, Allen Co., Kas.

English Blue Grass.

EDITOR KANSAS FARMER:—Kindly give in the FARMER a short treatise on the sowing, growing and profit in growing English blue grass. I live in a country where common blue grass is at its best. I wish to grow the large kind for its seed as a money crop.

Tina, Mo.

G. ALLEN.

Although many remedies are pushed into the market by spicily advertisements, Dr. Bull's Cough Syrup still takes the lead.

Great Rock Island Route Playing Cards.

Send 12 cents in stamps to John Sebastian, General Passenger Agent C. & I. & P. railway, Chicago, for the slickest pack of playing cards you ever handled, and on receipt of such remittance for one or more packs they will be sent you postpaid.

Orders containing 60 cents in stamps or postal note for same amount will secure five packs by express, charges paid.

SPECIFIC FOR SCROFULA.

"Since childhood, I have been afflicted with scrofulous boils and sores, which caused me terrible suffering. Physicians were unable to help me, and I only grew worse under their care. At length, I began to take



AYER'S

Sarsaparilla, and very soon grew better. After using half a dozen bottles I was completely cured, so that I have not had a boil or pimple on any part of my body for the last twelve years. I can cordially recommend Ayer's Sarsaparilla as the very best blood-purifier in existence."—G. T. REINHART, Myersville, Texas.

AYER'S

THE ONLY WORLD'S FAIR
Sarsaparilla

Ayer's Cherry Pectoral cures Coughs and Colds

FALL FESTIVITIES AT ST. LOUIS,

September 9 to October 24, 1896.

A Grand Continuous Reign of Mirth, Melody and Mystery.

The committee having in charge the St. Louis Fall Festivities, which have contributed so much to the pleasures of the good people of the Mississippi valley, as well as those residing in adjacent States, again announces its program covering the nineteenth annual season of mirth, melody and mystery. After a voluminous correspondence, carried on with the aid of Uncle Sam's postal service and mysterious messengers from foreign lands, it was decided that all the novelties of the world, including the queens of song, kings of humor, princes of melody and wisecracks of mystery, could by land, water and aerial flight, reach St. Louis September 9, 1896, and take their places on her carnival stage, where no curtain will drop between the twilights of September 9 and October 24.

The first attraction announced on the program of gilt is the opening of the thirteenth annual St. Louis exposition, which throws its doors open to the public September 9, and for forty days and nights, until October 24, will be the home for all wishing to be delighted with its magnificent displays and enraptured by the strains of Gilmore's and Innes' peerless bands.

The master of ceremonies next announces our newly-discovered but highly esteemed friend, King Hotu, supreme high chief of the Funny Fellows. The jolly king with his band of humorous chaps will entertain the young and old on Saturday afternoon, October 3, by a mirth-provoking parade through the decorated thoroughfares of the city. Act No. 3 on the program of gold will be delineated by the St. Louis Fair Association through its Thirty-sixth Annual Exhibition. The stage for this event will be set on the morning of Monday, October 5, and will not be disturbed until Saturday, October 10, when the curtain drops on a pleasing feature of St. Louis' Carnival. A blaze of light athwart the darkened eastern skies, strange creatures of inconceivable forms darting to and fro in the heavens and weird sounds on discordant tom-toms wafted on the breezes from the seas announce on the evening of Tuesday, October 6, the approach of a mysterious cavalcade of beings from another sphere. As this mighty army settles on the streets of St. Louis for a triumphant march through its avenues of wealth and beauty, his august highness, the Mightiest of the Mighty, the astute Veiled Prophet, is seen in its van, robed in purple and gold and carrying a wand charged with the powers of magic. In order that the season of carnival be highly successful, his highness, the Veiled Prophet, King Hotu and couriers from the Fair Association and St. Louis Exposition have issued an edict ordering the Missouri Pacific Railway and Iron Mountain Route to sell tickets to St. Louis and return at greatly reduced rates from all points on their lines. Complying in full with the edict of such notables, the management of these lines will place the above mentioned rates in effect. For full particulars and copy of program giving attractions in detail, call on local agent, or address H. C. Townsend, General Passenger and Ticket Agent, St. Louis, Mo.

Did You Ever See an Indian?

Expect not, so send a 2-cent stamp to the General Passenger Agent Colorado Midland Railroad, Denver, and he will send you a fine colored picture of one.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

OCTOBER 23—Gudgell & Simpson and J. A. Funkhouser, Herefords, Independence, Mo.
OCTOBER 27—H. Davidson, Poland-Chinas, Princeton, Kas.
OCTOBER 30—J. R. Killough & Sons, Poland-Chinas, Richmond, Kas.
NOVEMBER 10—J. M. Kirkpatrick, swine, Ottawa, Kas.
NOVEMBER 12—J. H. Taylor, Poland-Chinas, Pearl, Kas.
NOVEMBER 19—B. R. Adams, Fort Scott, Kas., J. M. Turley, Statesbury, Mo., and G. Hornaday & Co., Fort Scott, Kas., combination sale of Poland-Chinas.

STEER-FEEDING EXPERIMENTS.

The following excerpts from Bulletin No. 60, Kansas Experiment Station, in which are described Prof. C. C. George's fifth series of steer-feeding experiments, will interest stockmen:

"Our fifth series of steer-feeding experiments was carried out during the winter of 1895-'96. The purpose of this experiment was to make a further test of the relative merits of the balanced ration—ground corn, ear corn, and the feeding in open, as compared with barn feeding; that is to say, it followed the same general plan adopted in our first steer experiment, that of 1891-92, in which these same questions were tested. It was thought desirable to duplicate that experiment, in order to ascertain how the results would compare with another lot of cattle under the incidental variations due to differences in season. The results are detailed in what follows.

CHARACTER OF STEERS.

"The experiment comprised in all twenty steers, fourteen of which were purchased from a local stock dealer, Mr. C. Parks, Manhattan. They had been reared on the pastures in this locality, and represented the average of native steers in size and quality. In breed they were grade Short-horns. Just what per cent. of Short-horn blood they carried could not be ascertained, but they all had the leading characters of the Short-horn breed, and none of them was probably less than three-fourths pure Short-horn. Nor could the age be ascertained with accuracy; but all had been dropped during the fall of 1892 or early spring of 1893, and were hence two and a half to three years old when put in the feed lot.

"The remaining six steers have a somewhat different history. Four of them were pure-bred Short-horns, brought to the station as calves in the summer of 1893, and obtained from the well-known breeder, T. P. Babst, of Dover, Kas. They were intended for the experiment reported in Bulletin 51, in which pure-bred Short-horns were compared with scrubs. But these four steers were some six months younger than the other pure-bred steers in that experiment, and, further, owing to the fact that they were castrated in the summer of 1893, which operation retarded their growth, they became unsuited for that experiment, and remained on the farm, receiving only the ordinary care of stock cattle. They are numbers 7, 8, 9 and 10, in the tables* which follow, one of them being put in each of the four lots into which the twenty steers were subsequently divided. They showed a decided tendency to early maturity. When turned to pasture, May 22, 1895, they had attained an average weight of 1,197 pounds, being then about two years and four months old, and they were in fine condition. In consequence of this early maturing tendency they were considerably heavier and in better condition than the fourteen steers purchased, when the latter arrived at the station last October.

"The two remaining steers, yet to be accounted for, were scrubs which were purchased as yearlings in the summer of 1893. They had been subject to the same treatment as the steers reported on in bulletin 51 up to the fall of 1894, when, instead of being put in the feed lot, they were simply wintered in the yard and again put on pasture during the summer of 1895. They were at least six months older than any of the other steers in the experiment. These two steers are numbers 18 and 19, noted in the tables* hereafter. One of

them was put in lot III, and the other in lot IV, and these two lots were to be compared as to the merit of the treatment given them.

COST OF STEERS.

"The fourteen purchased steers cost \$3.85 per hundredweight and the six steers reared at the station are assessed at the same value, although the actual cost is somewhat more than this figure, owing to the high first cost of the pure-breds.

PLAN OF THE EXPERIMENT.

"The twenty steers were divided into four lots, numbered respectively I, II, III and IV. Of these, lots I, II and III were tied up in the barn, and lot IV was fed in the open yard with an open shed for shelter. Lot I was fed a mixture of corn meal, linseed oil meal and bran, in the proportion of fifteen parts of corn meal, four parts each of oil meal and bran (a balanced ration), and for coarse fodder had cut corn stover (i. e., corn stalks from which the matured ears were gathered) in the forenoon, and alfalfa hay in the afternoon. Lot II was fed corn meal and cut corn stover. Lots III and IV were fed ear corn and cut stover, the only difference between these lots being that one was tied in the barn and the other kept in the yard. Of these rations each steer was fed all he would eat without cloying his appetite, and an accurate record was kept of the amount fed to each steer at each meal. If it happened that the steer did not eat all his feed the leavings were weighed and deducted from the amount fed. The water drunk by the indoor steers was in like manner weighed and a record kept of the amount consumed by each. The outdoor steers ran together in a bunch and could, therefore, not be fed individually, but a record was kept of the grain and fodder consumed daily. These had free access to water, without record. They were all fed twice a day, the first feed being given at 6:30 in the morning and the second at 5:30 in the afternoon. The indoor steers were let out for exercise about two hours daily in pleasant weather.

"A record was kept of the temperature in the barn and in the yard, the better to note the difference in exposure in lots III and IV.

"It will be noticed that this is a duplicate of our first steer-feeding experiment (see Bulletin No. 34) in almost every particular.

PRELIMINARY WORK.

The steers were turned into the yard of the station for the first time in the evening of October 7. During the following week they were fed collectively a moderate allowance of ear corn at night and turned to pasture in the daytime, in order to accustom them to the premises, and they were also weighed individually for five consecutive days, and divided into lots on the basis of the average of these weights. Great care was taken to have the lots as nearly as possible alike in all particulars, not only as to weight, but also in regard to the individual character of the steers constituting each lot. The four pure-bred Short-horns, which were almost identical in weight and quality, were distributed in the four lots, and the two scrubs were put in lots III and IV. The weight of the lots as made up October 11 was as follows: Lot I, 5,796 pounds; lot II, 5,798 pounds; lot III, 5,804 pounds; and lot IV, 5,792 pounds.

"On October 14 lots I, II and III were tied in the barn for the first time and remained there until the afternoon of October 17. From that date until October 23d they were turned out daily a few hours for exercise, but for the rest of the time they were tied in the barn, the object being to accustom them to the routine they were to follow during the feeding period. Their feed consisted first of ear corn as noted, but after a few days lots I and II were gradually accustomed to the ground feed which was to constitute their diet. All the steers were remarkably docile. They offered but little resistance when tied for the first time, and by October 23 they had become so well used to their quarters that the experiment could begin. Nevertheless, these changes had excited them somewhat, and as a result the indoor lots lost weight during this preliminary feed-

ing, while lot IV, which had been undisturbed in the yard, had in the same time gained in weight. All were weighed again daily on October 21, 22 and 23, and the average of these three weights was the weight taken for the beginning of the experiment.

COST OF FEED.

"The feeds have been charged at actual cost, which is as follows: Ear corn, 26 cents per cwt.; corn meal, 35 cents per cwt.; oil meal, 88 cents per cwt.; bran, 50 cents per cwt.; alfalfa, 20 cents per cwt.; cut corn fodder (stover), 15 cents per cwt.

THE EXPERIMENT BEGAN

October 23, and continued for a period of 147 days, until March 18. The plan as outlined was carried out in every particular. Great pains were taken to give the steers all they would eat and no more. No serious mishap occurred; occasionally a steer would scour, or be somewhat off feed for a day or two, but regained appetite without causing any disturbance to the experiment.

"In connection with the feeding, the manure from each lot was collected for a time, and washed out, with a view to ascertain what per cent. of the grain fed was excreted without being digested.

"All the steers were weighed individually on a stock scale every Wednesday forenoon. They were weighed after they had eaten the morning feed, but before they were watered, and the weights and gains given in the following tables* are those noted at these weekly weighings. In the case of lot IV there is greater individual variation in the weekly weighings than in the case of the indoor steers. This is due mainly to the fact that, having access to water at all times, they would sometimes drink before they were weighed and at other times not.

LOT I.

"The weekly gains vary considerably, but this is always the case with cattle, and is probably due to the varying amount of food in the intestines. It will be noted that a light gain, or a loss, in weight is usually followed by an excessive gain the next week, a feature that is common to all feeding experiments.

"The average daily gain per head for the whole lot was 2.76 pounds. Nos. 2 and 8 fall below this gain, while Nos. 6, 12 and 13 exceed it. No. 12 made the cheapest gain of any in the lot—a total of 427 pounds in 147 days, at a cost of 3.64 cents per pound. He consumed 7.02 pounds of the mixed grain (balanced ration) and 1.96 pounds of roughness for each pound of gain, a total of a trifle less than 9 pounds of food per pound of gain. This is an excellent showing. No. 6 did almost as well, with the total gain a little larger and the daily average gain exceeding 3 pounds, but he consumed somewhat more both of grain and roughness, for each pound of gain, and the gain cost, therefore, a third of a cent more per pound. The pure-bred steer, No. 8, made the least gain of any of them, the total being 349 pounds, and the average daily gain 2.37 pounds, at a cost of 4.24 cents per pound of gain. This, however, should not be put down to his discredit. It was largely due to the fact that he was nearly 150 pounds heavier than the others, and in better flesh, when the feeding began. He could, therefore, not be expected to gain so rapidly for the feed consumed. The tables* show conclusively that as a steer gains in flesh it requires more and more food for each additional pound of gain.

"It will be noticed from the summary that the cheapest gains are made at the start; that there is a gradual increase in the cost as the feeding proceeds, which corresponds to the increased consumption of feed for each pound of gain. The data shown by the table* on these points are somewhat more valuable than those taken from the tables of individual steers, inasmuch as they represent the average of the whole lot. Had the feeding period been prolonged, the average cost per pound of gain would steadily have increased, owing to the diminishing gains for the feed consumed. There is a point in every feeding operation when every additional pound of gain is produced at a loss. Just when this

Merit

Is what gives Hood's Sarsaparilla its great popularity, increasing sales and wonderful cures. The combination, proportion and process in preparing Hood's Sarsaparilla are unknown to other medicines, and make it peculiar to itself. It acts directly and positively upon the blood, and as the blood reaches every nook and corner of the human system, all the nerves, muscles, bones and tissues come under the beneficent influence of

Hood's Sarsaparilla

The One True Blood Purifier. All druggists. \$1.

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

point is reached will depend on several factors, chief among which are the cost of feed and the price the steers will bring in the market. As these factors vary, each feeder must determine for himself when the selling point has been reached. This lot averaged 1,529 pounds when they were sent to market."

*Tables are omitted. Those interested in the details should write to the Kansas Experiment Station, Manhattan, and procure the complete bulletin.

(To be continued.)

This is Your Opportunity.

On receipt of 10 cents, cash or stamps, a generous sample will be mailed of the most popular Catarrh and Hay Fever Cure (Ely's Cream Balm) sufficient to demonstrate the great merits of the remedy.

ELY BROTHERS,

56 Warren St., New York City.

Rev. John Reid, Jr., of Great Falls, Mont., recommended Ely's Cream Balm to me. I can emphasize his statement, "It is a positive cure for catarrh if used as directed."—Rev. Francis W. Poole, Pastor Central Presbyterian church, Helena, Mont.

Ely's Cream Balm is the acknowledged cure for catarrh and contains no mercury nor any injurious drug. Price, 50 cents.

To Chicago, St. Louis and the East via Burlington Route.

The traveling public is sure to find the best fast vestibuled trains to the East via the Burlington Route.

Handsome new compartment sleepers (same rate as standard sleepers), chair cars (seats free), Kansas City and St. Joseph to St. Louis; standard sleepers, chair cars and dining cars—"pay for what you order"—to Chicago. Take the "Vestibuled Eli" to Chicago and the "Vestibuled Limited" to St. Louis.

Ask agent for tickets via the Burlington Route.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

A Look Through South Missouri for Four Cents.

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

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

J. E. LOCKWOOD, Kansas City, Mo.

Ho! for Cripple Creek.

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

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

Two all rail routes from Colorado Springs are offered you. One by the Midland railway up Ute Pass, via Summit, to Cripple Creek. Another over the Denver & Rio Grande, via Pueblo and Florence, to Cripple Creek. Take the great Rock Island Route to this wonderful gold mining camp. Maps, folders and rates on application. Address

JNO. SEBASTIAN, Gen'l. Pass. Ag't., Chicago.

Kalamazoo, Mich., is famous for celery—also as the home of Thos. Slater, whose advertisement appears on page 15.

Irrigation.

THE AMOUNT OF WATER NEEDED FOR EACH IRRIGATION.

By F. C. Barker, of New Mexico, in *Irrigation Age*.

The amount of water needed for irrigation in the arid regions is a very difficult problem to solve. So much depends upon varying circumstances, such as the kind of crops, quality of soil and the amount of evaporation. As a rule, I think, writers upon this subject err in fixing the quantity of water too low. Indeed, there seems to be a kind of rivalry as to who shall lower the record. I will, however, give a practical instance of how much water actually may be needed, as it will be of considerable service to gardeners and others who contemplate erecting windmill pumps.

In June last I erected an eight-foot windmill and pump, lifting water about twenty-one feet into a reservoir holding 55,000 gallons of water. Theoretically the pump would lift 800 gallons per hour, with a fifteen-mile breeze, which would fill the reservoir in seventy hours, or say three days. But fifteen-mile breezes cannot be relied upon to blow continuously every day, and as a matter of fact it usually takes twelve to sixteen days to fill the reservoir. Presuming that it was filled and emptied twenty-four times in the year, there would be enough water to cover two acres of land with twenty-four inches of water in the course of the year. Now, most writers on irrigation maintain that this amount of water is sufficient for anything, and indeed that, with proper cultivation, even twelve inches are sufficient. But an ounce of practice is worth a pound of theory, and this is what I actually found in practice to be the amount of water needed.

I had put in an acre of strawberries, and the windmill and pump were erected so as to give water in case the river, from which we usually irrigate, went dry late in the summer, which it is very apt to do. We got our last irrigation from the river on July 2, and on July 15, as my reservoir was full, I decided to irrigate from that, although the strawberries had not yet begun to suffer from drought, and the soil at the depth of five or six inches was quite moist. The water in the reservoir was about four feet six inches deep, and the outlet (6x4) emptied it in a little over two hours, so that we had a good head of water, indeed as much as the laterals would carry. The actual amount of land irrigated was just four-sevenths of an acre, so that the soil had taken up three and a half inches of water. There had been but very little loss by seepage in the laterals, as these had been previously puddled by muddy water of the river, and as I said before, the land was by no means exceptionally dry. The beds were irrigated by the flooding system, but had I opened up small furrows by means of a hand wheel plow, I dare say I could have easily irrigated three-quarters of an acre, using, say three inches of water.

These results go to show that crops like strawberries, needing an irrigation during the dry season every ten or fifteen days, will require from six to nine inches of water in the month, which is a totally different theory to twenty-four inches in the year. One ought to reckon by the month and not by the year, for there are many months in the year in which little or no water will be required. Compared with many of the results of windmill irrigation, which are given in the papers and printed as testimonials, the above looks very much like a failure. So far as I am concerned, it was a success, far it saved my strawberries, which at a very low estimate are worth \$300, which was just the cost of the windmill, pump and reservoir, so that the investment has paid for itself the first year.

I ought to mention that I have a driven well, with a four-and-a-half-inch Cook's strainer for a point, and as it gets into quicksand or coarse gravel the water flows in very freely. Indeed, I believe it is nearly if not quite equal to an open well, for the pump

FOURTH ANNUAL SESSION KANSAS IRRIGATION CONGRESS.

IN THE GRAND OPERA HOUSE,
GREAT BEND, KANSAS, OCTOBER 15, 16 AND 17, 1896.

PROGRAM.

FIRST DAY—THURSDAY, OCTOBER 15.

MORNING SESSION—10:30 O'CLOCK.

The Congress called to order by Chairman of the State Executive Committee. Prayer, by Rev. L. C. Schnacke, Great Bend. Reading of the call, by H. N. Lester, Secretary State Executive Committee. Annual address, by J. H. Churchill, Chairman State Executive Committee. Address of welcome, by G. N. Moses, Mayor of Great Bend. Response, by Judge L. Houk, Hutchinson. Appointment of Committees, by the Chairman.

AFTERNOON SESSION—2 O'CLOCK.

"Water Supply of Western Kansas"—Hon. D. M. Frost, Garden City; N. H. Stidger, Ness City; J. U. Brown, Tribune.
"Deep Well Irrigation and Irrigation on the Uplands"—Hon. M. B. Tomblin, Member State Board of Irrigation; Eugene Tilleux, Tribune.
"Underground Waters of Western Kansas and the Means of Bringing Them to the Surface"—Willard D. Johnson, of the United States Geological Survey.
"Wanted, an Education"—Fred Dumont Smith, Kinsley.

EVENING SESSION—8 O'CLOCK.

"The Great Plains Country, the Home of Empire"—Hon. J. S. Emery, Lawrence.
"And Some Other Things"—Hon. F. D. Coburn, Secretary State Board of Agriculture.
"The Duty of the Retail Merchant in Western Kansas Toward Irrigation"—R. S. McCreary, Concordia; Ed. Fritzel, Larned.
"The Duty of the General Government to Irrigation on the Great Plains"—Hon. R. W. Blue, Congressman-at-Large.

SECOND DAY—FRIDAY, OCTOBER 16.

MORNING SESSION—9 O'CLOCK.

"Fish Culture"—Hon. J. W. Wampler, Brazilton; Hon. J. H. Churchill, Dodge City; D. C. Luce, Great Bend.
"Raising Potatoes by Irrigation"—W. W. Wick, Topeka.
"Fire-Guard Laws and Preparation of Ground for Alfalfa"—G. W. Watson, Kinsley; Hon. A. P. Heminger, Santa Fe; A. W. Stubbs, Garden City.
"Surface Waters of Western Kansas"—W. G. Russell, of the United States Geological Survey.
"The Pump Problem"—Prof. O. P. Hood, M. S., State Agricultural College.
"What a Man Can Do on a Forty-acre Farm in the Arkansas Valley"—I. L. Diesem, Garden City.
"A Little Farm Well Tilled"—Hon. W. C. Edwards, Secretary of State.
"Irrigation at the Soldiers' Home, Dodge City"—Lieut. S. H. Thomas, Ellsworth.
"Relation of the Wholesale Dealers to Irrigation"—Col. J. G. Stow, Kansas City, Mo.; F. E. Lally, Kansas City, Mo.; J. F. Greenlee, Hutchinson; H. D. Lee, Salina.

AFTERNOON SESSION—2 O'CLOCK.

"Winter Irrigation"—Col. C. D. Perry, Englewood; N. F. Daum, Great Bend; J. W. Gregory, Garden City.
"Progress of Irrigation in the Arkansas Valley"—Hon. John E. Frost, Topeka.
"The Benefits of Successful and Unsuccessful Experiments in Irrigation"—Judge W. E. Hutchinson, Garden City.
"Report of the State Board of Irrigation"—Hon. W. B. Sutton, Russell.
"Irrigation Legislation"—Hon. W. R. Hopkins, Garden City; Hon. W. J. Fitzgerald, Dodge City; Hon. Charles Lobdell, Dighton; Judge Cole, Great Bend.

EVENING SESSION—8 O'CLOCK.

"The Destruction of Grasshoppers and Other Insects in Irrigation Districts"—Chancellor Snow, University of Kansas.
"Trend of Irrigation in America"—Hon. E. R. Moses, President of the National Irrigation Congress.
"Wind and Water"—D. H. Anderson, Editor *Wind and Water*.
"The Relation of the Press Toward Irrigation"—D. A. Mulvane, Topeka; A. J. Houghton, Great Bend; Judge Barnard, Ness City.

THIRD DAY—SATURDAY, OCTOBER 17.

MORNING SESSION—9 O'CLOCK.

"Artesian Waters of Kansas"—Erasmus Haworth, Professor Geology, State University.
"A Fundamental Problem in Irrigation"—President Geo. T. Fairchild, State Agricultural College.
"Conservation of the Run-off Waters of Western Kansas"—I. N. Pepper, Stockton; L. Baldwin, Great Bend.
"Relation of Soil Bacteria to Irrigation"—E. B. Cowgill, Editor *KANSAS FARMER*.
"Raising Wheat by Irrigation"—C. B. Hoffman, Enterprise.
"Horticulture as Affected by Irrigation"—Fred Wellhouse, President State Horticultural Society; W. H. Barnes, Acting Secretary State Horticultural Society.
"Methods and Benefits of Subsoiling on the Great Plains"—H. R. Hilton, Topeka; Hon. Martin Mohler, Topeka.

AFTERNOON SESSION—2 O'CLOCK.

"Orcharding by Irrigation"—Geo. M. Munger, Eureka; Henry Booth, Larned; C. H. Longstreth, Lakin.
"Irrigation, Our Commercial and Political Salvation"—A. G. Wolfenbarger, Lincoln, Neb.
Report of Committee on Resolutions.
Report of Committee on Permanent Organization.
Election of officers.

SPEAKERS ON SPECIAL SUBJECTS.

Rev. J. D. Botkin.	Hon. Jerry Simpson.
Hon. Chester I. Long.	Hon. John J. Ingalls.
Governor E. N. Morrill.	Hon. J. W. Leedy.
Hon. J. R. Burton.	President W. Stryker.
President Carl Swensson.	Hon. D. N. Heizer.

J. S. Haskett.

N. B.—All the subjects on the program will be discussed in a short, pithy manner.

General headquarters, parlors of the Hotel Greene.

lifts about the same amount of water that the manufacturers claim it should lift in an open well, which would be too costly here, owing the the quicksands.

So far as I am able to form an opinion, I am inclined to think that where more than small gardens of one or two acres are to be irrigated, a gasoline engine would, on the whole, prove more satisfactory than a windmill. It is true that the running expenses would be greater, but the initial cost would be less. Moreover, after the first forty-eight hours run, one is able to form a pretty accurate estimate of the amount of land that it will be safe to put under crops, whereas, with a windmill, one has a very uncertain element to contend with, necessitating a much larger reservoir so as to provide against calm weather.

Young men or old should not fail to read Thos. Slater's advertisement on page 15.

Weather Report for September, 1896.

Prepared by Chancellor F. H. Snow, of the University of Kansas, from observations taken at Lawrence:

Only four Septembers in the past twenty-nine years have been cooler than the month just closed. The mean cloudiness for the month has been exceeded only three times during that period. Only two Septembers on our record have had so low a run of wind. The barometer was slightly above the September average; the rainfall and relative humidity were normal.

Mean temperature was 68.85°, which is 2.80° below the September average. The highest temperature was 92°, on the 2d; the lowest was 39° on the 28th, giving a range of 53°. Mean temperature at 7 a. m., 58.05°; at 2 p. m., 73.30°; at 9 p. m., 62°. The first hoar frost of the season occurred on the 20th, ten days earlier than the average date.

Rainfall was 3.48 inches, which is 0.17 inch below the September average. The entire rainfall for the nine months of 1896 now completed is 30.34 inches, which is 0.48 inch above the average for the same



Civilized mothers do not throw their babies to crocodiles, but many a prospective mother sacrifices her baby's future welfare by neglecting her own health during the critical time when the little one is expected.

At this period it is a woman's duty to preserve, by every possible means, her strength and good condition.

The best strength-builder for prospective, or for nursing mothers, is Doctor Pierce's Favorite Prescription. It gives vigor and tone to the entire system and imparts special endurance and elasticity to the delicate organs particularly concerned. It makes the mother strong, bright and cheerful; renders confinement short, and delivery easy; entirely free from danger and comparatively free from pain. It provides recuperative force for the mother, and abundant nourishment for the child.

It is the only medicine for women which has been devised by a regularly graduated, experienced physician. Dr. Pierce has been for thirty years chief consulting physician of the famous Invalids' Hotel and Surgical Institute, at Buffalo, N. Y. His reputation as a skilled specialist in women's ailments is world-wide.

Every woman should read Dr. Pierce's splendid free thousand-page book, "The People's Common Sense Medical Adviser." It contains several chapters about women's reproductive physiology and many valuable receipts for home-treatment of simple ailments; with over three hundred illustrations. It is the most instructive and valuable medical library ever published in one volume. Nearly 700,000 copies were sold at \$1.50 each, but a strongly paper-bound copy will be sent absolutely free on receipt of twenty-one cents in one-cent stamps to pay the cost of mailing only. Address, World's Dispensary Medical Association, No. 663 Main Street, Buffalo, N. Y. If a handsome cloth-bound, beautifully stamped binding is desired, send ten cents extra, thirty-one cents in all.

months in the twenty-eight years preceding. Rain in measurable quantities fell on eleven days. There were seven thunder showers.

Mean cloudiness was 50.34 per cent. of the sky, the month being 11.98 per cent. cloudier than usual. Number of clear days (less than one-third cloudy), ten; half clear (from one to two-thirds cloudy), ten; cloudy (more than two-thirds), ten. There were six entirely clear days, and one entirely cloudy. Mean cloudiness at 7 a. m., 58.05 per cent.; at 2 p. m., 50.66 per cent.; at 9 p. m., 42.33 per cent.

Wind was south seven times; southeast, seventeen times; east, thirteen times; northeast, thirteen times; north, sixteen times; northwest, ten times; west, two times; southwest, twelve times. The total run of the wind was 8,580 miles, which is 1,690 miles below the September average. This gives a mean daily velocity of 286 miles, and a mean hourly velocity of 11.91 miles. The highest velocity was forty miles an hour, between 2 and 3 p. m. on the 8th.

Barometer.—Mean for the month, 29.127 inches; at 7 a. m., 29.142 inches; at 2 p. m., 29.114 inches; at 9 p. m., 29.126 inches; maximum, 29.450 inches, on the 22d; minimum, 28.798 inches, on the 8th; monthly range, 0.652 inch.

Relative humidity.—Mean for the month, 70.23 per cent.; at 7 a. m., 78.80; at 2 p. m., 55.20; at 9 p. m., 76.70; greatest, 100, at 7 a. m. on the 13th and 15th, and at 9 p. m. on the 4th; least, 37, at 2 p. m. on the 29th. There were two fogs.

Improper and deficient care of the scalp will cause grayness of the hair and baldness. Escape both by the use of that reliable specific, Hall's Hair Renewer.

"Among the Ozarks."

"The Land of Big Red Apples," is an attractive and interesting book, handsomely illustrated with views of South Missouri scenery, including the famous Olden fruit farm of 8,000 acres in Howell county. It pertains to fruit-raising in that great fruit belt of America, the southern slope of the Ozarks, and will prove of great value, not only to fruit-growers but to every farmer and home-seeker looking for a farm and a home. Mailed free. Address, J. E. Lockwood, Kansas City, Mo.

To St. Paul and Minneapolis via Burlington Route.

Two splendid through trains each day from Missouri river points to the north via the old established Burlington Route and Sioux City line. Day train has handsome observation vestibuled sleepers, free chair cars, and dining cars (north of Council Bluffs). Night train has handsome sleepers to Omaha, Council Bluffs and Sioux City, and parlor cars Sioux City north. Consult ticket agent.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

Gossip About Stock.

The KANSAS FARMER would like the names of any parties in Kansas who expect to feed Western sheep. If our readers will kindly furnish us with such names and addresses we will esteem it a personal favor.

Mr. H. H. Hague took in the festivities at Topeka, last week, and revised his advertising matter regarding his 125 Poland-Chinas and seventy-five sheep. He has now ready for sale twenty-five spring pigs, both sexes, and a few Merino and Shropshire rams, also a few Scotch collie pups.

The Anglo-American Stock Food Co., with headquarters at 118 Adams street, Chicago, have had remarkable success, according to the testimony of many breeders, in not only preventing but providing an absolute cure for hog cholera. We advise any of our readers who know of the prevalence of this dreaded scourge to suggest that all such persons correspond with the above concern to their mutual advantage.

Mr. E. A. Bricker, owner of the Pleasant Valley herd of Poland-China hogs, Westphalia, Kas., and one of our regular advertisers, showed a few head at the Coffey County fair, held at Burlington, recently, and in the hotly-contested rings won first on pen of pigs; first on a pair of hogs showing best gain since date of farrow; second for boar under 6 months; second on sow under 6 months. Mr. Bricker states that he has exchanged his herd boar, Guy Wilkes 8d, to Mr. J. E. Ground, of Union Star, Mo., for his Lambing Ideal, by Governor C., dam Ideal Lady. This represents the exchange of two very fine breeders,

as I cannot afford to put my breeding stock in too high condition for show purposes, but prefer to have everything in good, growing and healthy condition, and then I can please my customers by selling them stock in shape to do them good at once. While at fair made a few good sales. Have a few spring pigs on hand yet that are fit for any herd and which I will sell right."

Pagham Harbor Co., Selsey, Chichester, England, was among the first to see the usefulness of a Southdown Breeders' Association in that country, and largely assisted in the organization that has charge of the registry of sheep and publication of the "English Southdown Flock Book." The company has recently secured membership in the American Southdown Breeders' Association, and has sent a number of pedigrees for entry in its "Record." As another indication of their progressiveness, they have sent to the United States a number of Southdown sheep for exhibition at the leading fairs. That the progressiveness of this firm will be followed by other English breeders seems certain. The advantages of a closer connection between the breeders of the two countries will be mutually great.

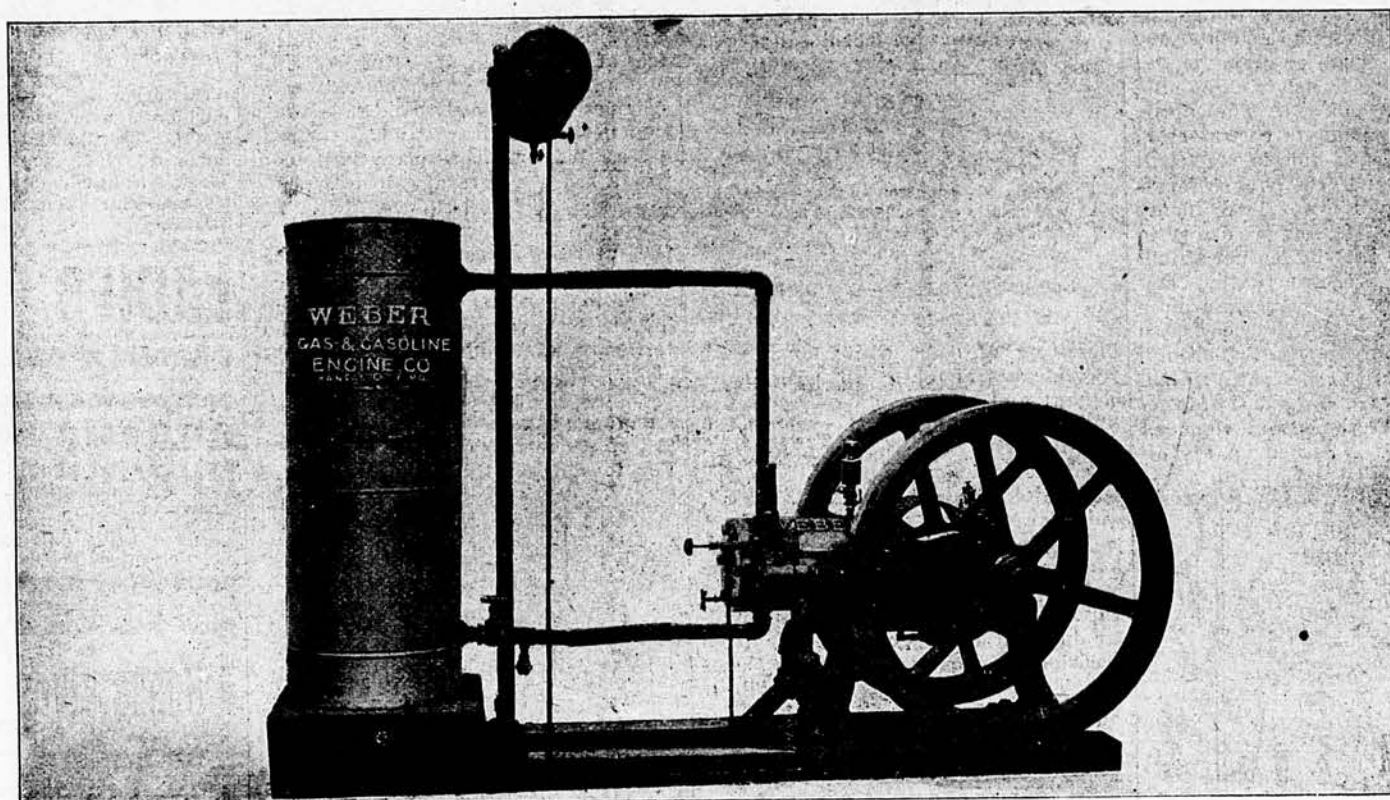
SEVENTY-FIVE HEREFORDS TO BE SOLD.—The only opportunity now announced in the United States where one can secure at public sale the very best of Hereford cattle is the coming sale to be held at Independence, Mo., on Friday, October 23, 1896, when seventy-five head, all except two of them under three years old and of breeding age; twenty-five selected bulls, many of them show yard individuals, and fifty deep-fleshed mellow heifers that stand in the front rank of high-class American typed

boars, Upright Wilkes 18246, J. H. Sanders Jr. 18729 and four yearling boars, the get of the two named, will be offered for sale, besides a large number of their best brood sows, such as Daisy 32290, Bess McKinley 32292, Warner's Medium 36288, Bertha 32291, Sealskin 24450, Bell 31156, May 31155, Little Bess 24453, Maud 36286 and others, all selected for their good individual qualities. Besides the above mentioned animals, fifty spring pigs will be sold, all tops. Col. Sawyer will preside at the sale and all who attend will be sure of hospitable treatment. Messrs. Killough & Sons have been engaged in building up an excellent herd for many years and their stock is of the best in the country.

The public sale of Poland-China hogs of Messrs. Watkins & Broadway and Mr. C. W. Haines, of Centerville, O., at the Illinois State fair grounds, September 23, was, for various reasons, not a financial success for the sellers. An average of \$70 was received for some of the choice animals, the highest price being \$490, for a boar; the great majority were taken at figures even as low as \$6. Among the reasons for this are that the number offered, 100 head, was about twice as large as should have been presented for sale; then, too, the attendance of breeders was not as large as usual, while farmers were not on hand at all. The absence of the latter may be accounted for because at previous sales of this breed of swine extraordinary high prices had ruled, so that farmers willing to pay fair prices were unable to secure what they were able to buy, hence they considered it a useless waste of time in further attendance at these sales. Though it may be hard on the gentlemen who have made this sale, the

breaking prices, the best animals sold readily and the bidding was lively from start to finish, eighty head being sold in less than four hours, including the time occupied by the speeches and the explanation of Mr. Kirkpatrick of the method pursued in handling the herd on alfalfa pasture. It is proverbial that no one wants to bid on the first animal, and yet, even with that sentiment, the young man sent in a pig without a tail. She was sent out without a bid. The next one was a good one and business began and kept up at a lively pace to the end. Col. S. A. Sawyer assisted Col. Sparks throughout the sale. The top sale was a yearling sow, bred to Hadley, at \$172.50, to Wm. Bochnick, of Bonner Springs, Kansas got her share of the plums. C. W. Brown, of Cedar Junction, took one of them at \$105. Jas. S. Machir, of Linwood, another, at \$80, on a sealed bid. He was lucky on his limit, as there were two other bids by mail on this one of \$75 each. Messrs. John Temout & Son, of New Hampton, got in on one of the tops at \$150. Legget Bros., of Stanberry, Mo., stepped in and took another at \$90, and so it went. Ten of the tops averaged \$92.30; twenty head averaged \$62.65; thirty head \$51.70, and the whole eighty head, which included forty small pigs, some of them too small for a public sale, made an average of \$38.10. Nothing was more apparent in this sale than that for all good specimens of the breed with the right kind of breeding there were plenty of ready buyers. Messrs. Kirkpatrick & Son are to be congratulated on the success of the sale, the condition of their stock and the ease and rapidity with which they were handled.

During the State fair, at Wichita, three



WEBER GASOLINE ENGINE.—MANUFACTURED BY WEBER GAS AND GASOLINE ENGINE CO., KANSAS CITY, MO.

which will result in decided improvement in both herds. Mr. Bricker states that he has a number of fine gilts and young males still on hand for present sale.

The new mule and horse market of Sparks Bros., formerly located at the stock yards, has been removed to Twenty-third and Grand avenue, Kansas City, where they may be found in the future ready to buy or sell mules or horses. They have new and commodious stables, with ample facility for handling the trade in every detail. The cars load and unload at their door, and the feed and caring charges will be reduced to the minimum. They will carry in their pens from 500 to 1,000 mules besides always having a good stock of horses on hand.

R. S. Cook, of Wichita, reports the following sales made to Kansas people during the State fair: A choice boar to Hon. T. A. Hubbard, Rome; one Black Joe boar to J. M. Sessler, Ellinwood; one boar to Edwards & Fair, Ellinwood; one Black Joe boar pig to E. Rayel, Hutchinson; one Black Joe gilt to J. M. D. Hickler, Mulvane; one boar to Mr. Barrett, Valley Center; two males sired by Tecumseh Duke to J. A. Jaeyden, Greenwich, and a Black Joe boar that won first in class in herd under one year at State fair to J. E. Hoagland, Whiting.

M. S. Kohl, of Furley, Kas., breeder of Berkshire hogs and Barred Plymouth Rock chickens, has some views on the question of preparing breeding stock for show purposes which are in harmony with those of many who have had experience in the purchase of over-fat breeding stock. He says of his visit to the State fair at Wichita: "I did not carry away the ribbons on hogs,

"white-faces" will be sold. On reference to the sale catalogue one finds that Messrs. Gudgell & Simpson, in company with Mr. Funkhouser, have given the intending buyer an opportunity to get at his own price the cream of their respective herds, aggregating over 600 head. Anxiety 4th 9904 and Heslod 11975 breeding ought to attract every Hereford breeder in the United States. Write for a copy of the sale catalogue.

Elm Beach farm, owned by Irwin & Duncan, of Wichita, were quite successful in the "hot" Poland-China classes, as will be seen by the detailed awards in the State fair report. During this fair this firm made a number of good sales, among which are two sows bred to One Price Medium and two young gilts sired by Johnny Koko to H. M. Hill, La Fontaine, and one Koko boar pig to A. M. Elliott, Sedgwick, and one Clay Dee boar and two Wide Awake gilts bred to Sir Charles Corwin, sold to A. N. Parrish, Lamar, Col., and one gilt to Geo. Matthews, La Veta, Col., and boar and gilt to John Norman, Wichita, Kas. At the Territorial fair of Oklahoma, at Guthrie, last week, he made sales of four gilts and one boar to W. D. Jenkins, Guthrie, Okla.; one sow bred to Sir Charles Corwin to W. T. Dunn, Oklahoma City; one sow, bred, to M. Burke, Perry; one sow, bred, to W. T. Little, Perry, and one boar pig to W. B. Poole, Norman, Okla.

The forthcoming sale of Poland-China swine to be held at Richmond, Kas., by J. R. Killough & Sons, will offer a fine opportunity to obtain choice animals to enrich the blood of the many excellent herds in Kansas and adjoining States. The date of sale is Friday, October 30, 1896. The herd

result will doubtless be of great benefit to Poland-China breeders in general. It shows that abnormally high prices cannot be continued, and this sudden drop from one extreme to another will the sooner bring the prices for this breed of swine to a reasonable mark. Though the gentlemen making this sale have met with financial disappointment, they have added to their already good reputation as breeders and as gentlemen. Their stock was good individually and as to pedigree, and they had reason to expect a different result. Their demeanor throughout indicated their fairness and honesty.

KIRKPATRICK & SON'S SALE.—Indian summer opened for the season with the rising of the sun on the morning of the sale. It was a delightful day and everybody seemed to be in good humor, and had they not been the lunch the Messrs. Kirkpatrick set up at 12 o'clock noon would have put the people in a good humor, anyway. There were about 200 breeders, farmers and onlookers in attendance, about fifty of which were made up of the best breeders in Kansas and Missouri. There were sealed bids from seven States. Col. Sparks opened with one of his best speeches—in fact, the Col. outdid himself in this speech. He was enthusiastic; there was a good audience; the equipments for the sale were perfect in detail, excepting the number of people to be seated had been underestimated; the stock was in prime condition; he had looked through the pens and discovered the individuals were in keeping with their high-class pedigrees, and evidently believed he was entitled to a good sale. Considering the times and the several very poor sales that had been held just previous, the sale was a good one. While there were no record-

Berkshire exhibitors concluded to make an impromptu public sale of a few head, and Gen. H. L. Leibfried, of Sunny Slope farm, was appointed auctioneer of the occasion. Five head from the herd of J. S. Magers' Bourbon County herd, Arcadia, Kas., brought \$263, an average of \$52.60. His purchasers were Geo. W. Berry, of Berryton, Kas., who bought Majestic Lad, the herd boar, for \$225. The other buyers were D. McCormick, Mt. Hope, Kas., who bought three gilts, and H. Magee, Oatville, Kas., bought the boar, Lad 12th. T. A. Hubbard, Rome, Kas., sold five pigs from his herd for \$91, an average of \$18.20, to the following purchasers: E. L. Peckham, Blackwell, Okla.; J. S. Magers, Arcadia, Kas.; H. Loether, Fredonia, Kas., and Sam'l Hardcastle, Marion, Kas. C. A. Stannard, Hope, Kas., sold four pigs for \$63.25, an average of \$15.85, to G. F. Dillon, Dillon, Kas.; E. L. Mitchell, Pond Creek, Okla.; E. L. Peckham, Blackwell, Okla., and D. McCormick, Mt. Hope, Kas.

To Chicago, St. Louis and the East via Burlington Route.

The traveling public is sure to find the best fast vestibuled trains to the East via the Burlington Route.

Handsome new compartment sleepers (same rate as standard sleepers), chair cars (seats free), Kansas City and St. Joseph to St. Louis; standard sleepers, chair cars and dining cars—"pay for what you order"—to Chicago. Take the "Vestibuled Eli" to Chicago and the "Vestibuled Limited" to St. Louis.

Ask agent for tickets via the Burlington Route.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

The Home Circle.

SONG OF ETERNAL HOPE.

BY VINTON PHENIS.

When spring unfolds each tiny flower,
I think of only Jesus and His love.
When summer breathes o'er hill and bower,
And think of only Jesus and His love.
If others whisper of a cruel fate
That blights the flower that has bloomed too
late,
I may not understand, but I can wait,
I think of only Jesus and His love.

When autumn paints with rainbow hue
Valley and hill and vaulted sky above,
When winter settles white and still,
I think of only Jesus and His love.
If others say the sky is overcast,
And soon will come the winter's chilling
blast,
I say the cloud will soon be overpast.
I think of Jesus and His tender love.

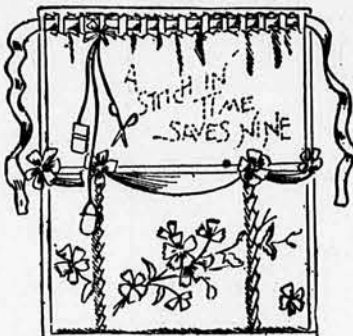
When childhood opens into spring,
I think of Jesus and His tender love.
And when I hear the children sing,
I think of Jesus and His tender love.
If others tell of dangers in the way,
Of blighted hopes and childhood's swift de-
cay,
I only lift my thankful heart and pray;
I pray to Jesus for His tender love.

When years have gathered o'er my head,
And great temptations shall my spirit
prove,
With firm and steadfast purpose bent
I'll think of only Jesus and His love.
If others say the night is coming on,
And all the radiance of life's hope is gone,
I lift my eye and see th' eternal dawn.
I see but Jesus and His tender love.
Topeka, Kas.

NOVEL WORK APRON.

It Can Be Made of a Variety of Very Pretty Materials.

This pretty little work apron can be constructed of a variety of materials, butcher's linen, scrim or organdie, but the most effective to use is china silk, either white or colored. The apron shown here was made of ecru pongee. Thirty-six inches of this is sufficient and the breadth of the pongee forms the width of the apron. Two inches from the top the threads are drawn to the depth of an inch by feather stitching in light blue asiatic twisted embroidery silk, the two-inch plain piece forming the back of the hem, the drawn work showing only in front. Through the drawn work light blue satin ribbon is run, about a yard and a half of it being required. At the lower edge an eight-inch pocket is turned up, and di-



DESIGN FOR WORK APRON.

vided into three compartments by feather stitching. The edge of the pocket and the sides of the apron are bound with narrow blue satin ribbon, and small rosettes of the same are placed here and there. Across the upper part of the apron the well-known motto, "A Stitch in Time," etc., is worked with silk with which you feather stitched. The pocket has a spray of the flower known as "ragged sailors" worked across them in two shades of blue asiatic filo floss; work the stems and leaves in two shades of brown.—Eva M. Niles, in Boston Globe.

Veranda Shelf for Plants.

Plants in pots make an especially attractive dressing for the veranda. And here, too, they can be easily cared for. To show them to the best advantage put up a shelf just inside the rail, and a little below it. In this way the flowers will show to great advantage from the outside and the pots will be in no danger of being overturned, as they surely are when resting upon the broad top of a veranda rail. Another advantage thus gained is that the pots are not fully exposed to the sun, and the roots are not likely to be burned out. A flower box of considerable length, and just high enough to cover the top of the rail, will also prove very attractive when filled with a choice collection of flowers. It does house plants much good, moreover, to get them out of doors in this way for the summer months, while in the position shown they can be much more easily cared for than when in the house.—American Gardening.

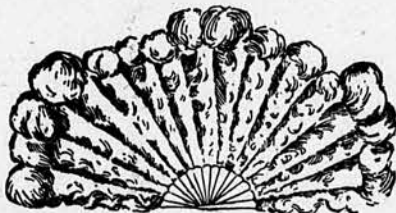
FASHION IN FANS.

The Only Decided Novelty of the Year Is in Feathers.

The empire size and style decidedly continues its sway, and is, in its shortness of build and small semi-circular proportions, convenient to handle and to pack away. There is, therefore, in fact, less necessity for the extra "traveling fan." The very small fan, however, still bestows itself conveniently into the handbag, and if its breezes be small, so, as a rule, is its price. In paper coverings of Japanese manufacture and design one finds it from 5 cents to 25 cents, and in less perishable form, with plain colored cloth, without decoration, at 35 cents; stamped in flower designs at 65 cents, and again hand painted at one dollar.

Of the larger size, claiming no special period of its own, one finds a large assortment of pretty Japanese fans; the wooden sticks are largely stained to match the predominating color of the background or painting of the upper portion of the fan. A lacing of cord on the outer sides of the fan is by no means a novel, but a very pretty addition. The price of a well-made Japanese fan is one dollar, although one can purchase one at half and even quarter that price, of good quality and pretty appearance. Another dainty make of fan is thin gauze covering. Spangles are much used in the ornamentation of fans.

Paintings on gauze of odd-shaped medallion pictures of the empire period, with spangles outlining the picture, are very dainty; price, \$10.50. Tortoise shell sticks are used in the



NEW STYLE OF FEATHER FAN.

mounting of some white fans, with very elegant effect. Among the more elegant and expensive fans one again finds the painting of the empire date mounted with white ivory or highly polished pearl sticks; the price is \$35. One with inlaid border of gold on the pearl, quite large in size and very exquisite as to painting, is \$50. Lace fans are, as a rule, conspicuously absent. A new make of fan numbered among recent importations and likely to prove popular during the winter season for dress occasions is composed of ostrich feathers. The novelty introduced consists in a triple tip peeping over the top at intervals and adding decidedly to the general effect.—Chicago Chronicle.

AN ANCIENT COSMETIC.

The Cool and Healing Cucumber Used as a Beautifier.

The coolness of the cucumber has been ascertained to be a scientific fact. It is always considerably cooler than the surrounding atmosphere. It has also long possessed some reputation as a cosmetic in the old meaning of the word, a "healer" of the complexion, not a "beautifier." The cream of cucumbers is prepared from the pulp of peeled cucumbers, with a mixture of almond oil and other ingredients. Purchase from a trustworthy druggist four ounces of almond oil, add a quarter of an ounce each of white wax and of spermaceti. Put these ingredients in a jar, and set the jar in a saucepan with warm water reaching up to within two inches of the rim. Let the water boil. A marmalade jar is just about the right size to use. When the wax and spermaceti are melted into the oil add five tablespoonfuls of thick juice of a large, nearly ripened cucumber. Obtain the juice by pressing the pulp on a fine hair sieve. Color the cream with a few drops of spinach green. Use enough to give a very delicate tint of green. Pour it to harden into several small jars. It is an excellent cure for sunburn, and is very healing and soothing to the skin.

Wash the skin at night thoroughly with warm water before applying the cream. Dry off all the moisture a soft damask towel will absorb, and rub the cream of cucumbers gently into the skin. In the morning wash it off with warm water, and tone the skin with a bath of cold water to make the tissues firm.—St. Louis Globe-Democrat.

CHILDREN who vibrate all through their growing years between health and sickness, children who are pale and peevish, thin and weak, children who never seem to grow right, whose development is retarded, whom food does not seem to nourish, should take SCOTT'S EMULSION of Cod-liver Oil and Hypophosphites. It contains the very essence of nourishment most needed when vitality is low. Consumptives find new hope in it and thin and emaciated adults always gain flesh and strength after taking it. It is a pleasant and palatable food.

No Child
Looks upon
Scott's
Emulsion
as a
Medicine

WOMAN SIGN PAINTER.

She Is Reputed to Be Far More Daring Than Most Men.

The newest new woman is Miss Edna Waymack, of Cleveland, O. Hers is the distinction of being the only feminine out of door sign painter in the United States.

Miss Waymack hesitates at nothing in her line of business, no matter how arduous the work. She has painted huge advertising signs on the face of perilously steep cliffs, a task few men would undertake. Many large spaces, such as barn sides, the roofs of houses and the like, scattered all over the country, testify to the ability of this young woman as a realistic brush-wielder.

She is perfectly at ease on ladder or scaffold, and she can scale a taut rope in a way to make an old tar blush with envy. Swinging before the precipitous face of a mountain, she often works for hours laying on alphabetical color schemes with a steady hand and a touch that never loses its evenness.

Miss Waymack has many large contracts for big natural canvases which she hopes to fulfill this summer. For the most part, her signs are made in the interests of several large tobacco firms.

The most daring piece of sign painting she has ever undertaken is the lettering on the rough surface of a cliff at Bellefontaine, O. This rock looms up above the surrounding meadow for a distance of some 350 feet with a sheer fall of 300 feet to the base of the cliff. For four days Miss Waymack swung



at the top of this dizzy height, spending about eight hours each day on the big sign she had engaged to paint.

Every day, and all day long, a throng of men, women and children gathered at the foot of the hill watching the woman artist at work in the upper air.

Miss Waymack is accustomed to this sort of thing, however, and is not the least bit disturbed by the curious crowds that usually watch her operations and pass critical comment upon her work.

The working costume of the intrepid artist consists of a short serviceable

skirt of blue serge, a "jumper" of the same material and a Tam o' Shanter cap pulled well down over the face to keep out the rays of the sun. In manipulating her brushes, Miss Waymack wears a pair of coarse mittens, a characteristically feminine fact, just as are the dainty patent leather boots that encase her small feet. Her apparel is always scrupulously neat, scarcely a paint speck being noticeable on her garments.

Miss Waymack has been pursuing her unique career as a sign painter since 1893, and has traveled more and further than is the case with most business women. She is a comely blonde, and has enjoyed a good common school education. Being a bright conversationalist and a clever pianist, she is much sought after in the quiet social circles of Bellefontaine, where she lives with her aged mother.—N. Y. Sunday Journal.

Confusion as to the choice of a blood-purifier is unnecessary. There is but one best Sarsaparilla, and that is Ayer's. This important fact was recognized at the World's Fair, Chicago, 1893, being the only blood-purifier admitted to be placed on exhibition.

LADIES I Make Big Wages—At Home—

and want all to have the same opportunity. The work is very pleasant and will easily pay \$18 weekly. This is no deception. I want no money and will gladly send full particulars FREE to all. Miss M. E. Stebbins, Lawrence, Mich.

ORGANS FREE on trial. High-grade, popular

priced Organs, such as never were offered before. Unequalled for sweetness of tone and beauty of design. We have a large assortment at lowest prices. Send for Our Mammoth Catalogue. H. R. EAGLE & CO., 68 and 70 Wabash Ave., Chicago, Ill.

Housewives

Can easily chop meat for sausage and mince-meat, hamburger steak, suet, corn for fritters, scrap meat for poultry, hash, beef for tea, etc., with the

ENTERPRISE MEAT CHOPPER

22-TINNED-22

The Most Effective Chopper Ever Made.



No. 5, chops one pound in a minute, \$2.00. No. 10, chops two pounds in a minute, \$3.00. Larger sizes described in our Catalogue. Ask your dealer. Send two 2c stamps for the "Enterprising Housekeeper," 200 recipes.

The Enterprise Mfg Co. of Pa., Phila., Pa.

BACKACHE

WHY? Because your Liver and Kidneys are out of order

Dr. J. H. McLEAN'S LIVER AND KIDNEY BALM

is the "PEERLESS REMEDY" for curing ailments of the Liver, Kidneys and Bladder, Diabetes, Rheumatism and Bright's Disease.

FOR SALE EVERYWHERE AT \$1.00 PER BOTTLE

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

The Young Folks.

TO-MORROW.

Where is the thrill of last night's fear?
Where is the stain of last week's tear?
Where is the tooth that ached last year?
Gone where the lost pins go to;
For last night's riddle is all made plain,
The sunshine laughs at the long past rain,
And the tooth that ached has lost its pain—
That's where our troubles go to.

Where are the clothes that we used to wear?
Where are the burdens we used to bear?
Where is the bald-head's curling hair?
Gone where the pins disappear to;
For the style has changed and the clothes
are new.
The skies are wearing a brighter blue,
The hair doesn't snarl as it used to do,
And the parting has grown more clear,
too.

Where are the bills that our peace distressed?
Where is the pin that the baby "blessed"?
Where are the doves in last year's nest?
Where have the pins all gone to?
On the old bills paid are new ones thrown,
And the baby's at school with her pin out-
grown,
And the squabs are running a nest of their
own—
You can't bring 'em back if you want to.

We can stand the smart of yesterday,
To-day's worse ills we can drive away;
What was and is brings no dismay
For past and present sorrow;
But the burdens that make us groan and
sweat,
The troubles that make us fume and fret,
Are the things that haven't happened yet—
The pins that we'll find to-morrow.
—Robert J. Burdette.

AN OLD MAN'S WORK.

Why the Poor of New York Bless Paper
Smith and His Basket.

It stands in a corner of the New York
post office. The clerks drop into it the
papers and magazines they would other-
wise throw away, and the attendants
add every scrap of reading matter that
is left in the long corridors. The spe-
cial policeman watches to see that no
one disturbs it.

At certain hours every day a little old
man appears. He empties the basket
into a bag, and this he carries to a red
box placed at the corner of Broadway
and Vesey street by the "associated hos-
pitals." He is known to few of the peo-
ple who meet him and his name, to
those few, is "Paper" Smith.

Years ago, when he was young, "Pa-
per" Smith met with an accident and
was confined in a hospital for many
months. With no friends to visit him,
nothing to read, hardly anything to
look forward to but the doctor's next
visit, he found it a dull place.

Some of his companions were worse
off than he. They spent the weary
hours in brooding over their miseries.



FOR THE HOSPITAL.

Smith knew what pain was; but it did
no good to think about that. He was
a man who took an interest in other
people, and at the worst of times there
was always something to be interested
about.

Thinking of the unhappy ones, as he
often did, Smith saw a way to lighten
their burdens. The trouble was that,
even after he was cured, he could not
put it in practice. He had to earn his
living. When the day's work was done
he had neither time nor strength to
carry out his plan.

So the toilsome years went on until,
at the age of 50, Smith inherited a small
annuity. It was barely enough to keep
body and soul together; but the chance
to act upon his cherished thought was
the only personal luxury he craved.
Then, in the true sense, he began to
live.

It is 15 years since the post office peo-
ple first heard of "Paper" Smith and
began to save their papers for the eager
old man with the basket. For 15 years
no infirmity of age and no desire for
rest and ease has caused him to neglect
his mission.

He does not know how many of the
suffering and sad have been cheered

and comforted by the contents of his
basket. Very likely he has never wished
to estimate. His duty—and it is his
pleasure also—is to fill the basket.

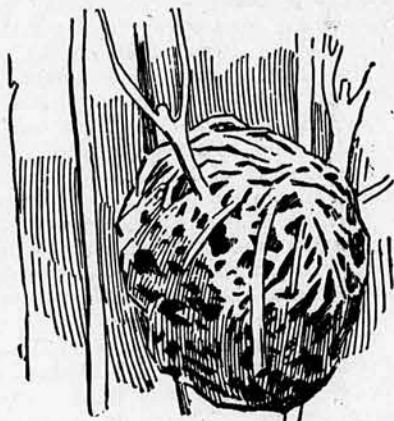
There is no waste in God's universe.
Neither the thoughtful effort of a great
organization nor the impulsive kind-
ness of a little child is ever thrown
away. When we commend, and right-
ly, the deeds of association, perhaps we
fail to do complete justice to the possi-
bilities and power of the individual.

And yet the one thing that helps to
better the world is the steady purpose
that waits for the opportunity, and
then the patient, loving, faithful service
that makes the most of it.—Youth's
Companion.

MARSH-WREN'S HOME.

No Bird Home Could Be More Substan-
tially Put Together.

The nest of the long-billed marsh-
wren is probably the strangest thing
about it, and another surprise is in store
for the student of their ways who has
caught one of the midgets suspiciously
near a great structure of reeds and
grasses, as big as a coconut, and sus-
pended in the frailest way among the
reeds or bushes, several feet from the
ground. It is wholly out of proportion
to the size of the bird, but no nest could
be more substantially put together.
The materials are coarse rushes and
grasses, wound round and round in a
globular form, the ends being carefully
worked in to make a tolerably smooth,
tough thatch, perfectly dry and less
than an inch thick, with a hole some-
where in the side near the top for the
wrens to go in and out. Just where
that hole is, few can tell until after a
brood has been raised and the way has
been made plain by the constant com-
ing and going. If one is not in posses-
sion of the secret, he had better not try
to discover it unless he wishes to de-



WREN'S PECULIAR HOME.

stroy the nest, for he would be likely to
lose patience and perhaps to thrust a
finger through the wall.

In the old nests the orifice may be
plainly seen. It is nearly an inch
across; but in the new nests, instead of
leading directly to the inside like a
simple window, there is a wide shelf or
sill, which projects not outward, but
inward, and slopes steeply upward, so
that the wrens, when entering, must
first go up and then down. The inside,
which is as big as one's two fists, is com-
fortably lined with feathers, and on this
bed of down may be found in June and
July a clutch of beautiful and curious
eggs, dark brown, like chocolate drops,
and in number from five to nine.—Our
Animal Friends.

Met Two Valuable Friends.

Not long ago two Englishmen travel-
ing in Sweden lost their luggage, and,
not speaking the language, were at
their wit's end to explain matters. Two
young men finally came to the rescue,
politely asking in English if they could
be of assistance, and promised to under-
take the recovery of the lost goods.
Next day the missing luggage came to
hand, and the Englishmen met at the
railway station their friends of the day
before. The Englishmen, naturally,
were profuse in their thanks, and asked
the pleasure of an acquaintance. "Cer-
tainly," answered one of the young men.
"I am Prince Oscar of Sweden, and this
is my brother Eugene."

INSIST UPON Hood's Sarsaparilla when
you need a medicine to purify your blood,
strengthen your nerves and give you an ap-
petite. There can be no substitute for
Hood's.

Hood's PILLS are the best after-dinner
pill; assist digestion, prevent constipation.
25c.

OAKLAND'S WILD BOY.

Has Been Kept in Chains for Ten Years
by His Mother.

If you have read any of Rudyard
Kipling's stories about Mowgli, the
wild boy of India, you will see the point
of this true narrative, which is really
news, and is doubly interesting because
it is in our own country.

Mr. Kipling's wolf-boy hero was
brought up by the wild animals of the
jungle, and a very happy boy in his free,
fierce way he was, too. Willie Collins,
about whom this story tells, was
brought up by a wicked mother, who,
in many respects, is worse than any
wild animal, for the latter nearly al-
ways look out for the welfare of its
young, and guards them tenderly.

Willie Collins, as the result of his
mother's cruelty and neglect, is more
like a wild boy than any lad ever



THE AMERICAN MOWGLI.

brought up in a large city. Willie's
home is in Oakland, Cal., and what a
home it is! For the boy it has been a
prison and a cage.

The doctors who have studied Willie's
case say it is the queerest one they have
ever heard or read about. For ten long
years young Collins has been kept in
captivity by his mother, who flogged
him nearly every day, and kept him
naked and in heavy chains all the time.

Is it a wonder that to-day Willie eats,
drinks and barks like a dog, or that he
should be pronounced by the lunacy
commissioners of California as a dan-
gerous, raving maniac! If you were in
one room and this poor, bedraggled lad
in another, you would easily believe
that the strange noise which Willie
makes with his throat was the bark of
a dog or the cry of a wild beast.

Think of spending the first ten years
of your life in a small, dark room,
chained to the floor, with a bundle of
filthy rags for a bed! Is it strange that
this unfortunate boy should become
crazy and dangerous? Gradually Wil-
lie's reason faded away until now he
cannot talk, and does not recognize any
one. All that he seems to understand is
that a piece of meat flung down before
him is something to eat. For ten years
Willie Collins has never left his black
little room, full of foul smells and as
bare as the back of your hand. Those
who remember him when he was a baby
say that he was very bright and good
tempered. Surely it would have been
much better for him if, like Mowgli,
he had been stolen by the wolves and
reared under the free skies, going
wherever he pleased and breathing the
fresh air of the woods. Even now he
walks about on all-fours and snarls
when you toss him a bone.

Neighbors of Mrs. Collins often com-



For the
Kidneys,
Liver
and
Urinary
Organs.

There is only one way by which
any disease can be cured, and that
is by removing the cause, what-
ever it may be. The great medical
authorities of the day declare that near-
ly every disease is caused by
deranged Kidneys or Liver.
To restore these, therefore, is
the only way by which health
can be secured. Here is where

Safe Cure

has achieved its great repu-
tation. It

**ACTS DIRECTLY
UPON THE
KIDNEYS AND LIVER**

and by placing them in a
healthy condition, drives
disease and pain from the
system.

Large bottle or new style
smaller one, at your druggists.
Its reputation—Twenty years
of success—in four continents.
Warner's Safe Cure Co., Lon-
don, Rochester, Frankfurt, Mel-
bourne, Toronto.



plained to the police of Oakland that
she was abusing her son, for they fre-
quently heard his cries in the night.
But in all those years no one has done
anything to bring this unnatural
mother to justice. An investigation of
Willie's case has been made. Mrs. Col-
lins will probably go to jail, but Willie
will probably have to spend the rest of
his life in the insane asylum, where he
has just been placed. The doctors say
that light and good food and sunshine
have come to Willie Collins too late.
His brain, once bright enough, is now
a blank.

Such is the true story of the Ameri-
can Mowgli, who, a wild boy indeed,
had none of the privileges of Mr.
Kipling's young hero, who never knew
a mother's love, and who must end his
life in chains even as he began it.

Six months \$20. O'Connor's Business
College, 524 Minnesota Ave., Kansas City, Kas.

THE BEST Place for young people to go for
a superior Business, Shorthand
or Penmanship course is to the
EMPORIA BUSINESS COLLEGE of
Kansas. No out-of-date, text-
book course in Book-keeping, but Business Prac-
tice from start to finish. Nothing else like it.
Graduates successful. Board \$1.50 per week. Write
for particulars to C. E. D. PARKER, Pres't.,
Emporia, Kansas.

Washburn College,
TOPEKA, KANSAS.

Progressive Management,
Thorough Courses of Study,
Economical for Students.

Academic and Collegiate departments.
Special teachers of Oratory, Music and Art.
THE FALL TERM begins Wednesday, Sep-
tember 16, 1896.

GEO. M. HERRICK, President.

Topeka Business College
TOPEKA, KAN. BEST BUSINESS, SHORTHAND, PENMANSHIP COURSES.

WE MAKE WHEELS, TOO!

We make them easy-running, durable, satisfactory, and the
finish is far beyond any other you have ever seen.

Our Catalogue gives you a full description. If you want one we will send
it, if you will drop us a line.

National Sewing Machine Co., Belvidere, Ill.

KANSAS FARMER.

ESTABLISHED IN 1863.

Published every Thursday by the

KANSAS FARMER COMPANY.

OFFICE:

No. 116 West Sixth Avenue.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

An extra copy free fifty-two weeks for a club of six, at \$1.00 each.

Address KANSAS FARMER CO.,
Topeka, Kansas.

ADVERTISING RATES.

Display advertising, 15 cents per line, agate, (fourteen lines to the inch).

Special reading notices, 25 cents per line. Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per line for one year.

Annual cards in the Breeders' Directory, consisting of four lines or less, for \$15.00 per year, including a copy of KANSAS FARMER free.

Electros must have metal base.

Objectionable advertisements or orders from unreliable advertisers, when such is known to be the case, will not be accepted at any price.

To insure prompt publication of an advertisement, send cash with the order; however, monthly or quarterly payments may be arranged by parties who are well known to the publishers, or when acceptable references are given.

All advertising intended for the current week should reach this office not later than Monday.

Every advertiser will receive a copy of the paper free during the publication of the advertisement.

Address all orders—
KANSAS FARMER CO., Topeka, Kas.

The weekly report of the bank clearings for the United States for last week shows decrease for every city except Dallas, Tex., and Topeka, Kas., both of which are just above the line. The decrease for the entire country is 21.4 per cent.

The New York Journal, which claims to be the only New York daily for the Democratic national ticket, offers a rate which enables us to furnish the KANSAS FARMER one year and the New York Sunday Journal three months, both for \$1.25.

The United States Treasury report for October 1 shows on hands, gold \$162,771,311.21, silver dollars \$380,688,963, subsidiary coin \$15,126,482.53, silver bars \$114,829,398.54. Gold and silver certificates outstanding against this metal amount to \$564,524,323.

Speaking of the advance in wheat, Dun's Review for last Saturday said: "The continued advance in wheat may prove of the utmost importance. It has been 1.12 cents for the week and 10 cents since September 2, and is mainly due to short crops abroad and unusual foreign demand. Atlantic exports for the quarter ending with September, flour included, were 23,195,214 bushels, against 14,320,020 last year, the outgo of wheat separately having nearly doubled in spite of higher prices. Western receipts for the quarter were 57,742,941 bushels, against 43,790,499 last year."

The Kansas Sunflower is a new candidate for public favor. It is a finely put up sixteen-page paper, edited and published at Topeka by Mrs. Lucile B. Baker, better known as "Becky Sharp." It is "devoted to social, musical, literary, dramatic and miscellaneous matter," a list of topics which give ample scope for the facile pencil of Mrs. Baker. Some may have doubted the existence of a field for yet another paper in Topeka, but the demand for the first number was so strong that the publisher with difficulty saved a single copy for the office file, together with the liberal advertising patronage, shows that there is no lack of room for the Sunflower. It is a success.

The horticultural exhibit made by the Kansas State Horticultural Society, in the State house, during the "Autumnal Festivities," was visited by thousands of people, many of whom were greatly surprised and all of whom were highly pleased at the elegant display of Kansas horticultural products. There was upwards of a thousand plates of fruit, forty of which were grapes and forty were pears and peaches. The room was beautifully decorated, and had it not been somewhat aside from regular travel it might have been viewed by as many more. The Secretary is now putting all of the best fruit in cold storage, with a view to making an exhibit in the rooms of the society during the coming winter.

SOME OF THE WAYS OF THE FATHERS.

Whether the recent advances in the price of wheat are the beginning of a considerable and permanent rise, or are only a spurt to be succeeded by declines such as have disheartened growers, is a question on which must depend matters of the greatest importance in the adjustment of the future plans of the farmer. If breadstuffs and other staples are to be produced at a moderate profit the tendency of farming to develop in special lines and to be conducted on business plans may be expected to continue. If, however, prices are to go below cost of production, this fact will not interfere with the nutritive power of wheat nor will low prices of any article of production militate against the utility of that product. Wool is just as warm at 5 cents per pound as at 20. Beef cattle at 4 cents will feed people as efficiently as at 8 cents.

The great-grandparents of the present generation were physically well cared for and yet they bought and sold little. It would be a backward step should the farmers of this generation have to abandon the ways of modern buying and selling and resort to the production on the farm of nearly all there consumed. It is a step not likely to be taken, and yet it is conceivable that, instead of continuing to develop as a specialist and a good patron of other specialists, the farmer may, by reason of scarcity of money, find it to his advantage to resort more than has been his wont to the ways of his fathers.

Men now living remember that the farmer, whether of many acres or few, thought it a necessary part of thrift to produce at least "wheat enough to bread him;" to put up his own pork and beef; to store vegetables and fruits in abundance; to provide for plenty of milk, butter, poultry and eggs; to have sheep enough so that the women folks might do the spinning and weaving for the family; to raise a little flax and to take it through the various processes ready for the more delicate fingers of the spinners and weavers; to provide plenty for all the animals on the place—these were the first requisites. Then there were some things which even the cosmopolitan farmer of three-quarters of a century ago needed and yet did not produce. But he took the skins of some calves to the tanner and the tanner kept a part of the leather produced in compensation for his services; the shoemaker was settled with in the same way; the miller got his share of the grain ground; the blacksmith and other workmen saw little but barter; the store-keeper was little patronized by the farmer and got most of his pay in trade.

Travel, higher education, the refinements of later years, were thought to be out of the reach of the farmer and his family. To go back to such conditions is better than to do worse. Perhaps in a review of these now antique methods may be found the suggestion of ways in which, if necessary, cash expenditures may be reduced. There can be little doubt of the advantage of producing on the farm more of the things required for the family than has been the tendency in more modern times.

INDIA IMPORTING WHEAT.

A few years ago there was considerable alarm in this country at the prospect that wheat from India would rapidly become an important factor in the world's markets, and that, since labor in that country commands but a few cents per day and breadstuffs are necessarily low to enable the people to buy them from their meagre earnings, Indian wheat would go upon the market at prices which would pauperize the American farmer. Prices in all markets have, indeed, been very low, but the part of India in the matter has been less than was anticipated, the contribution of that country to the general supply having been far less than was expected. Now comes the report that some cargoes of wheat have been actually shipped to India. A short crop is doubtless accountable for this reversal of the direction of shipment. But the great population

which India has to feed, a population whose needs crowd the country's productive capacity, ought to, and would, if well fed, consume at home the entire average crop of breadstuffs and rice, and indeed the entire average food production. It is probable, however, that in seasons yet to come India's millions will be so poor as to have to go hungry and ship some of their food to other parts of the world. But it is safe to assume that for the present crop year at least the American wheat-grower has nothing to fear from competition from southern Asia.

THAT POLITICAL ADVERTISEMENT.

A little more than two weeks ago the KANSAS FARMER CO. received from its New York agent a proposition to run a political advertisement in two numbers of this paper. It was nothing except a political argument set up in the form of a display advertisement. It was well known to those who desired to use the circulation of the KANSAS FARMER for the propagation of their political doctrines that this paper bars partisan politics and that the only way to get in would be on the side of the business management. But it happens in this case that the editorial and the business management are very intimate, indeed that the editor of the paper is President of the company. The political advertisement did not appear and our treasury did not get the price offered. The experience of some of our contemporaries is not so fortunate. They took the "ad." They are hearing from their subscribers, as is evidenced by the labored explanations which appear in the editorial columns. The KANSAS FARMER is satisfied to leave political discussion to the able papers devoted to politics on either side of the question, and hopes to be able to assist its readers to make a good living and "something for a rainy day," whether McKinley or Bryan shall occupy the White House and under whatever financial policy shall prevail. But in doing this we have enough to occupy our attention. Further, it is the right of the farmers of Kansas to have the best available consideration of the matters which belong especially to their occupation and that without having thrust before them political theories distasteful to about half of the readers.

The contribution of Galveston, Texas, to the exhibits of the Fall Festival at Topeka, last week, was an imitation ocean steamer. This is an invitation to Kansas to patronize the Gulf port in shipping her produce to foreign countries. A good deal of our produce is going that way and more will follow as freight rates become better adjusted and as Galveston develops her ability to load our return trains with such goods as we must buy.

The Comptroller of the Currency has reports from the banking institutions of the country, from which he finds that they had in their vaults, July 1, 1896, gold aggregating \$134,077,033. The Secretary of the Treasury reported in the Treasury, July 1, 1896, gold coin and bars aggregating \$144,020,363.91. The total of these two items is \$278,097,396.91. It is not known how much more gold was in the country at that date than is accounted for in this total. Undoubtedly some is kept in private hoards. Since that date the Treasury store has increased to \$162,721,311.21.

New York is at length somewhat disturbed over the agitation of rates from the Western country to the Gulf ports. A Wall street writer, after discussing some other elements affecting prices of railway stocks, says: "A yet more serious element has been the cutting of rail rates on the routes extending from the lakes to the Gulf ports. This is a matter of real consequence to the roads serving the corn belt, which are threatened with the diversion of an important amount of traffic from the Atlantic ports. Two extraordinary corn crops, attended with low prices, have largely increased the European demand for that grain, and it is therefore natural enough that an effort should be made to secure this traffic for the routes connecting with the Southern ports."

THE FALL FESTIVAL AND SOLDIERS' REUNION.

Topeka put on her Sunday clothes last week, took a holiday and gave herself over to entertaining the Grand Army of the Republic and other visitors to the Fall Festival. Not infrequently such occasions are somewhat disappointing; often they fall far below expectations; seldom do they surpass the promises made for them. But the great reception held by the capital of Kansas this year was a surprise even to those who had planned it. The city never before displayed so much bunting; never before extended so hearty a welcome; never before offered such entertainments and amusements, and never before had so many guests. The expressions of welcome were especially cordial to "our country's defenders," as was expressed in words in many of the decorations. The old soldiers have had many campfires during the years since the great army was disbanded and have fought over many of the engagements of the war. They have discussed the mistakes of this General or that with greater zest than in 1896. Indeed, as time goes by, and with it the great commanders pass over, their virtues are remembered more than their mistakes, and the tie that binds soldier to soldier excuses faults and exalts the virtues of every one who shared the hardships and dangers and the fellowship of the army. In the grand military parade, led by a detachment of the regular army, followed by several companies of the K. N. G., the veterans formed a less conspicuous part than in former displays of this sort, but the old boys stepped as proudly, though not quite as firmly, as in the days when they went to the nation's rescue.

Of the various displays, the flower parade was conceded to be the finest. It was the work of the ladies of Topeka to prepare the materials for this great display. It consisted chiefly of flower-decorated carriages and horses. To arrange the many equipments into a procession was no small task. On this part of the work one of the prime movers of the festival, who supplied, indeed, much of the spirit and enthusiasm which kept hundreds of delicate fingers at work for many months in order to do unusual honor to the old soldiers, was Major T. J. Anderson. When, at the appointed time, the great floral procession was all in line and fairly started Major Anderson realized that his fondest expectations had been more than realized, and that the ladies of Topeka had indeed done extraordinary honor to the veterans, he stepped around a corner and wept like a child for joy.

The sham battle of Five Forks carried the old soldiers back into the realities of the terrible past and was the only part of the exhibitions which were not free to everybody.

Eminent speakers were present from many parts of the country. The old soldiers have learned to expect to be publicly told in eloquent periods of the service they did to the country, to be reminded of their bravery, their long suffering and their endurance. They cheer these speeches. But their keenest enjoyment comes from the renewal of old associations, the meeting of comrades half forgotten, and in recounting around the campfire the days of 1861 to 1865. The spirit of brotherly kindness which prevails was well illustrated in the case of a comrade who, being unable to pay railroad fare to the reunion, walked 150 miles in order to be here. The "old boys" quickly passed the hat and "chipped in" enough to return him on the cars.

So many people were never before in Topeka. Enjoyment seemed to be universal, and the invitation to "come again" was everywhere so manifest, and the disposition to accept it so universal, that it is not improbable that the Fall Festival and Soldiers' Reunion at Topeka will become an annual production.

Secretary Graham reports that the enrollment at the Kansas State Agricultural college is very close to the 600 notch. It will probably considerably surpass it for the winter term.

KANSAS SWINE BREEDERS' ASSOCIATION.

During the Wichita State fair there was a well-attended meeting of the swine breeders, a portion of the membership expecting the annual election of officers, instead of being held at the meeting of the association, in Topeka. However, it was decided that such action should stand, and the annual meeting and election of officers will be at Topeka, next January.

As there was no regular program to this meeting except miscellaneous business, Mr. Dold, of the Wichita packing-house, was introduced for a few remarks, and he stated that the only hog he knew much about was the packers' hog—that is, the carcass which contains the largest percentage of ham, shoulder and bacon. Lard is a losing element in the carcass and is unprofitable, while the hams and sides are the most profitable. Packers want light feet and head. Sows bred are very undesirable, because, notwithstanding dockage, they are a source of loss to the packers.

Hon. F. D. Coburn, Secretary State Board of Agriculture, was next called upon, and he stated that where two or three breeders were called together, "there are some good fellows, besides they are my friends." He stated his experience in awarding swine premiums at New Orleans, and at the World's Fair at Chicago, and leading State fairs, and he was glad to know that some of the best prizes were captured by Kansas hogs. Here at Wichita this year modern and model hogs to the extent of some hundreds testify to the excellence and skill of Kansas breeders. He also stated that while judging a very strong line of Berkshires, that he was very much complimented by the very noted packers present, Mr. Dold & Son, who commended the final award because of the effect of the lesson that the "upper story," the ham and sides had the predominance of favors.

Dr. F. S. Watkins, of Oklahoma, was next presented, and urged Kansas breeders to co-operate with those of Oklahoma, who are using their best efforts for the promotion of improved stock in that Territory.

Mr. T. A. Hubbard, President of the Improved Stock Breeders' Association, then made a feeling talk, in which he paid tribute to the high character of Kansas breeders, and the hopes of better prospects for their business, believing that there are more prosperous days in sight, and that it is already on with the breeders of cattle.

The matter of holding a combination breeders' sale at the time of the annual meeting of the association at Topeka, was next discussed, and the association was a unit in its favor, and a committee was appointed to have charge of the matter for the association, consisting of the following members: H. A. Heath, Topeka; Geo. W. Berry, Berryton; W. E. Gresham, Hutchinson; C. M. Irwin, Wichita; D. Trott, Abilene, and Col. S. A. Sawyer, Manhattan.

The next matter brought up for consideration was the formation of a new registry association, as was announced by the Secretary through the KANSAS FARMER previous to the meeting. Nearly everybody had given some thought to this matter and was "loaded for bear," and the matter was discussed until a late hour, and finally referred for future action to the next annual meeting of the association, at Topeka, in January.

AMONG THE FAIRS.

THE MIAMI COUNTY FAIR.

Last week the Miami County Fair Association held its regular annual fair at Paola, Kas. The visitor found it up to the usual standard of excellence and the attendance the equal of any year since the fair was first instituted. The Miami county farmers take great pride in making the exhibits of agricultural products and that of live stock the equal of any in the State, and in some branches the superior of any, especially in roadster and draft horses. The exhibit of swine was strongly reinforced by several of the leading breeders of Franklin county. Dietrich & Spaulding, of Richmond, exhibited fourteen head of Po-

land-Chinas and won first on boar under 1 year, third on aged sow, second on sow under 1 year, sweepstakes boar under 1 year and sweepstakes on aged sow. W. B. Higdon, Richmond, was out with six of his Polands and won second on yearling boar. Ed. T. Warner, of Princeton, showed thirteen of his seventy-five Polands and won first on sow and litter and third on sow under 12 months. Davidson & Son, of Princeton, came out with four of their 100 head of Polands and Berkshires and won third on boar under 1 year, first on sow under 12 months, second on yearling boar and first on yearling sow. D. M. Cherry, of Paola, showed both Polands and Berkshires from his combined herds of eighty-five head, and won in the Poland class first on yearling boar, first on yearling sow and second on yearling Berkshire sow, also third money on aged Berkshire sow. J. H. Holman came out with a draft of seven from his herd of seventy-five Berkshires and won first on yearling boar, first on sow under 12 months and first money on pen of six under 6 months. C. C. Young, of Paola, showed eight head that were the equal in breeding of his more pretentious competitors and only lacked a little in show yard preliminary finish. Franklin county doubtless now has the largest number of high-class pedigreed swine of any county in the State, with Brown county a close second. Both of these districts will have to look closely after their laurels if the Miami county breeders come as rapidly to the front rank as has Mr. Cherry in the last twelve months. Sedgwick and Miami matched against Franklin and Brown counties would make an exhibit worthy of a State fair, rightly backed by the State and popularized by good, liberal management.

The Trans-Missouri Country.

Between the Missouri river and the foothills of the Rocky mountains lies a country which has always been full of sunshine and for over a quarter of a century full of hope and promise. Its broad and magnificent sweeps of gently rolling prairie, its fertile soil and nutritious grasses, its delightful, invigorating climate and buoyant atmosphere, and when the rainfall is sufficient its luxurious growth of vegetation, have always invested it with peculiar charms, and it was generally believed to be a country of great possibilities awaiting only the discovery of means necessary for developing its resources.

There was but one thing lacking to make this country a seeming paradise. That was more water. But we were told twenty-five years ago that the rainfall would increase with the settlement and improvement of the country. With full faith in this theory, which was untrue, the frontier lines were extended far into the interior in a brief period of time. Times were propitious for home-seeking and home-building. The "cruel war" was over and the armies disbanded and the men accustomed to army life found the East too tame for them and a great movement was inaugurated for the settlement of homestead and railroad lands in the West. Then we had been singing all over our country and in foreign lands—

"Come from every nation,
Come from every clime,
Don't feel alarm,
For Uncle Sam is rich enough
To give us all a farm."

And they came. In a few years, in the early seventies, Kansas and Nebraska first, and later the Dakotas, were settled. Then came the new era of railroad building all over the West, the most wonderful in mileage constructed the world has ever known, competing lines hastening to occupy new territory in advance of others and in some cases building parallel roads not needed, showing that the shrewdest business men were not proof against the seductive influences of this country. From 1875 to 1879, five years of unbroken prosperity, the soil responding so cheerfully and so bountifully to the touch of the husbandman, filled the average homesteader with lofty notions of wealth, and beautiful homes with all the refinements and even luxuries of modern civilized life

floated in visions before the minds of these noble-hearted men and women. But they needed money, or thought so, and a family council being called it was concluded to mortgage the homestead. So it commenced. Eastern investors became interested in our country. They came, they saw, and they were conquered. After breathing for a while the exhilarating atmosphere of this country they concluded to carry a liberal portion of it "bottled up" to their Eastern homes, and for the benefit of their friends they unbottled it there. The result was, this atmosphere so highly charged with Western ozone intoxicated the whole crowd of investors and the money came. Like a great river it came, spreading all over these plains, and with but few exceptions thoroughly saturated every quarter section of land. In 1880 and 1881 the tidal wave experienced a temporary check by reason of crop failures; but from 1882 to 1886, being for the most part good crop years, the wave attained its highest point and we all reveled in the luxury of a first-class boom. In 1887, with crop failure and being no longer able to sustain the high tension, the boom broke and the trouble began. Soon the day of reckoning came. While the tide was up the burden which was so cheerfully assumed and so easily borne, now with a falling tide became a crushing weight—in many cases too great to be borne. This ends Chapter No. 1.

Since 1887 this country has had a varied and unhappy experience. Crop failures were much more frequent than before and when the soil brought forth bountifully prices were low. Many were driven to the wall. Others struggling with a heavy burden managed to keep their heads above water until a safe landing was effected, while others (there were some) were fortunate enough to adopt a line of agriculture which was suited to the county in which they were operating. These fared better. However, experience teaches there is no loss without a compensating gain. There is no trial, disappointment, or even misfortune without a compensating good, hidden away it may be for a time, but still there. Our country adopted the wheat basis in its early days and continued to do business on that basis until recent years. I mean by that that wheat-growing to the exclusion largely of stock was the line of agriculture adopted by farmers generally as the most profitable, especially in the central and western portions of this district of country. Some years the four States of Kansas, Nebraska and the two Dakotas grew more than half the wheat needed to meet the requirements for consumption in the United States. While the soil was new and prices good wheat farming was fairly profitable. But the wheat situation throughout the world has greatly changed in recent years and the change no doubt has come to stay. Other countries in other parts of the world have also been opening out large wheat areas, and we are reliably informed that the India and Argentine farmer can deliver wheat at a profit in Liverpool at 50 cents per bushel. Our farmers generally were unwilling to accept the situation, but persisted in growing wheat until it seemed necessary that an order be sent direct from heaven commanding them to stop, or at least to readjust their farming operations and make stock-growing (cattle and hogs) their chief source of profit. If the blighting of three wheat crops in three successive years was necessary (1893, 1894 and 1895) to effect this readjustment, it was, as I see it, the most fortunate calamity that could have befallen our people. Wheat farming to the exclusion of stock has financially ruined those who have persisted in it, while the men in this country who had the foresight and business sense to turn their attention to growing stock ten or fifteen years ago without a single exception to my personal knowledge are now in easy circumstances and some of them growing rich, having liberal bank deposits. These are facts and our farmers are now generally willing to accept the situation and will govern themselves accordingly.

Since this healthful change of base

from wheat to stock-growing has been effected the advantages of this country for growing and maturing cattle and hogs and other stock are being more generally recognized. Besides, dairying is a growing industry in this country and creameries have been multiplying in recent years at a healthy rate. Private dairying and poultry-breeding, which in the bonanza days of wheat-growing were ignored, are now meeting current expenses of the average family. This in not a few instances 200 to 300 acres of wheat failed to do years ago. In other respects good has come to us from the evil of crop failure.

1. The shortage of rainfall over a large portion of the trans-Missouri country has led us to the study of moisture economy. How to conserve moisture and to secure from a given rainfall the largest possible amount of service in plant growth—a matter of general interest to the people of all portions of our country.

2. The necessity for more moisture to insure crops has brought us to the study and investigation of the water supply beneath the earth's surface and its availability for irrigation purposes. These investigations and the experiments thus far conducted have demonstrated the fact that there are large bodies of water stored away at varying depths which may be lifted to the surface and utilized in growing crops at, it is believed, no greater cost than is usually incurred when water is taken from the irrigation ditch.

In the study of these vital questions and in the experimental work done to determine the possibilities of irrigation in this country Kansas seems to be leading. The results of these investigations and of the experiments now being conducted are of general interest, and if we are successful, as we no doubt will be, every man in our country who has a good well and good sense will arrange to irrigate at least so much as a fruit and vegetable garden.—M. Mohler, in *Breeder's Gazette*.

The recent importations of gold into this country seem to have ceased.

The Oklahoma Territorial Fair was held, last week, at Guthrie, Okla., and was visited by a Kansas contingent consisting of O. P. Updegraff, of Topeka, the successful starter of the races in the speed department; Geo. W. Berry, of Berryton, Kas., the expert judge on swine, and the following exhibitors and breeders of Poland-China swine: Irwin & Duncan, Elm Beach farm, and R. S. Cook, Champion herd, Wichita, and W. E. Gresham, Quality herd, Hutchinson, and not least, the FARMER representative. The detailed report is crowded out of this issue.

Publishers' Paragraphs.

For the past half-dozen years Warner's Safe Cure has not been advertised in the agricultural press, the city papers having been exclusively used. The company manufacturing the old and reliable kidney and liver medicine have, however, come to the conclusion that the agricultural paper is read more thoroughly than the city daily and better results can be obtained by returning to it. In this they are correct, and we hope our readers will prove it to them by reading the new advertisement of the Warner's Safe Cure Co., which will be found in another column of to-day's paper, and acting on the advice there given.

Fifty years ago, in 1846, the American Missionary Association was founded, and in October of the present year the semi-centennial is to be celebrated by a great series of jubilee meetings in Boston. The work of these fifty years has certainly been remarkable. The negroes and poor whites of the South, the Indians and the Chinese, have all profited by it, and the work was never so broad and vigorous as now. It is most opportune that there should appear in the October number of the *New England Magazine*, just as the friends of the association are about to gather to their jubilee, a thorough illustrated article upon its history and present activities. The article is by Rev. Charles J. Ryder, well known through his official connection with the association, and his article, greatly enriched by the pictures illustrating every phase of the work, will be read and valued by every friend of the association and every American who has at heart the great educational interests to which it is devoted. Warren F. Kellogg, 8 Park Square, Boston, Mass.

Horticulture.

OBSERVATIONS ON THE CARE OF FRUIT TREES.

By Prof. L. H. Bailey, in Bulletin 102, Cornell University Experiment Station.

In considering the subject of the proper care to be given fruit trees, one is struck with the fact that all kinds of fruits are sufficiently productive in western New York, save only the apple; and a moment's reflection brings to mind the fact that the apple alone is the fruit which is commonly raised in sod and which everywhere receives the least attention. The presumption is at once raised, therefore, that this sod and neglect are in some vital way associated with the declining productiveness of apple trees. In order to put ourselves right upon the question we must first of all ascertain, if we can, why the apple is of all fruits the most neglected.

My older readers will recall the fact that until recent years the effort of the farmer has been directed to the growing of hay, grain and stock. Previous to this generation the growing of fruit has been a matter of secondary or even incidental importance. A bit of rocky or waste land, or an odd corner about the buildings, was generally given over to the apple orchard, and if the trees received any attention whatever it was after all other demands of the farm had been satisfied. All this was particularly true of the farming previous to the second third of this century, and the apple and standard pear orchards of the country still record the old method. It has required at least a generation of men in which to thoroughly establish any new agricultural system, and the time is not yet fully arrived for the passing out of the old orchards and the coming in of the new. In other fruits than apples and standard pears the generations of trees are comparatively short-lived, and those fruits sooner feel the effect of new agricultural teachings. Orchards of plums, dwarf pears, apricots, cherries and quinces have mostly come into existence along with the transition movement from the old to the new farming, and they have been planted seriously, with the expectation of profit, the same as the grain crops have. Peaches had passed out in most parts of the East, and they are now coming in again with the new agriculture. At the present time men buy farms for the sole purpose of raising fruit, a venture which would have been a novelty fifty years ago; but the habit of imitation is so strong that the apple planter patterns after the old orchards which were grown under another and now a declining system of agriculture, and many of which are still standing on the old farms of New York State.

But there is still another reason for the neglect of the apple orchard. Until fifty or sixty years ago the chief end of the apple was the cider barrel. All the old writings enforce this idea. John Taylor's famous "Arator," printed in Virginia early in this century, declares that "the apple will furnish some food for hogs, a luxury for his family in winter, and a healthy liquor for himself and his laborers all the year." He says that "good cider would be a national saving of wealth, by expelling foreign liquor, and of life, by expelling the use of ardent spirits." Cox's "Cultivation of Fruit Trees," in 1817, devotes nine chapters to cider and its products. The whole temper of the country was to make cider of the apple. There is a record that one settlement near Boston, of about forty families, made nearly 3,000 barrels of cider in 1721; and another New England town of 200 families made "near 10,000 barrels." Now, any apple will make cider; and the presence of worms and apple scab and all the other accessories, may be supposed to add to the merits of the product. It was not necessary to care for orchards which were to grow cider, and the habit of neglecting them has become so indelibly impressed upon the public mind that all the teachings of the last generation have not been able to erase it. The sod orchard is a survival.

Now, I am not urging that the

farmer shall put his apple orchard under clean tillage. I am simply trying to press home the fact that apple trees must receive thought and care if the owner is to expect much return from them. If tillage and timely effort are good for corn, and peach trees, and blackberries, they ought also to be good for apple trees. I asked a farmer not long ago what his apple orchard is worth. "It is worth a good deal. A crop of apples is a clean gift." He said more than he knew, and his thought is uppermost in many farmers' minds in this State. If a thing is "a clean gift," no effort has been expended to secure it. It is no merit of the average farmer if now and then he goes into his orchard and finds a crop of apples there; and he should not complain if half the apples are scabby and all of them are wormy. It is a generous soil which gives a crop of hay or grain year after year under a most neglectful treatment, and then occasionally throws in a crop of apples to boot.

My reader may agree with these general remarks, but he insists that we tell him just how to make his apple orchard bear. He wants methods. And this is just what no one can give him. Every farmer should know his own farm better than any one else knows it. He knows the soils, the exposures, his own limitations of help and capital, and all the many interacting factors which make a piece of land a farm. Some one may be able to instruct him in principles, but he must apply them for himself. A principle may need a different application on every farm. Every farmer knows this fact, when he comes to think of it; for there are no two good farmers who perform the same operation in the same way. If a person once knows the underlying reasons for plowing in the fall or in the spring, or deep or shallow, he can soon think it all out for himself just how he ought to plow on his own place.

What will make my orchard bear? Nobody knows. Ask the trees. Study the conditions. Think about the orchard. Try one method here and another there. Try to find out why it does not bear. Perhaps the varieties are not productive ones. Perhaps the flowers do not fertilize. Perhaps the soil is too low or too poor. The orchard may need spraying, or, possibly, even manuring or plowing up, or pruning. Or, oftener, perhaps it needs cutting down and a new one started all over again, with the matter done right from the beginning. It is hard work to break a colt when he is ten years old, and then he never makes a good horse.

It is certain that there is no one cause for the failure of all apple orchards to bear. There are many, perhaps very many causes. The experimenter should be able to discover these causes and to explain them; but just which one is at the bottom of the failure in any particular orchard the owner himself must find out, if he can. And he cannot expect to find out in one day or perhaps in one year. He must revolve the matter in his mind, as he goes and comes, day by day, in rain and shine, and he will finally come to an opinion, unless, unfortunately, he has an opinion before he begins to revolve the matter.

(To be continued.)

Blackberries, Grapes, Potatoes.

EDITOR KANSAS FARMER:—I would like to have some one tell, through your columns, which are the best kinds of blackberries for market to raise in central Kansas. Some say the Early Harvest are the best, and others that they are too small. I should think coming early would be an advantage on account of the July dry spell that we usually have. What is the proper time to mulch them? Also, when is the best time to mulch grapes, and is it best to prune them closely or not? Some of my neighbors say that it hurts them to prune much. Years when they pruned closely they had but few grapes next year, and when they did not cut them much they had good crops. I would like to know what others' experience is.

Is there no other potato for this

region that is as good and will yield better than the Early Ohio? The Early Ohio is good, but we never get more than six or eight good potatoes in a hill.

I would be greatly obliged by any information on the above.

A. J. HOUGHTON.

Cottonwood Falls, Kas.

Most men break down when afflicted with rheumatism. If they would try Salvation Oil they would find relief at once.

Meals on the "Order" Plan

are now served in the dining cars run by the Great Rock Island Route between Kansas City and Chicago. This change has been made to suit the convenience of the traveling public, and with the belief that such an arrangement will better please our patrons.

All meals will be served a la carte, and at reasonable prices.

While the system of serving meals has been changed, the traveler may still rely upon the excellence of cuisine and perfection of service that have earned for the Rock Island the reputation of maintaining the best dining car service in the world.

JOHN SEBASTIAN, G. P. & T. A., Chicago, Ill.

FARMERS

DO YOU WANT TO BETTER YOUR CONDITION? If you do, call on or address: The Pacific Northwest Immigration Board, Portland, Oregon.

SALESMEN to sell Cigars to dealers: \$25 weekly and expenses; experience unnecessary. Reply with 2c stamp. National Consolidated Co. Chicago.

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

Wanted, an Idea.

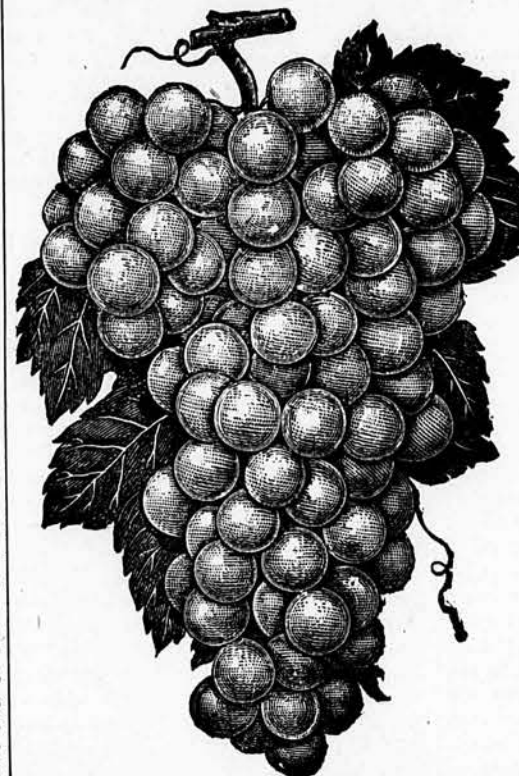
Who can think of some simple thing to patent? Protect your ideas; they may bring you wealth. Write John Wedderburn & Co. Patent Attorneys, Washington, D. C., for their \$1,800 prize offer and list of 200 inventions wanted.

KANSAS HOME NURSERY now offers choice berries and orchard fruits of all kinds in their season. Fresh shipments daily by express. Prices to applicants. A. H. Griesa, Box J, Lawrence, Kas.

Carnahan's Tree Wash and Insect Destroyer

Destroys the bore worm and apple root louse, protects the plum from the sting of the curculio and the fruit trees from rabbits. It fertilizes all fruit trees and vines, greatly increasing the quality and quantity of the fruit. Agents wanted everywhere to sell the manufactured article. Address all orders to John Wiswell, Sole Mfr., Columbus, Kas., and Cleveland, Ohio.

Plant Trees and Orchards in 1896.



Early Ohio Grape; Six Weeks Earlier Than Concord.

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

Illustrated Planter's Catalogue and Price List.

We solicit your correspondence and invite inspection of our stock.

Reliable Salesmen Wanted.

ADDRESS

HART PIONEER NURSERIES,

FORT SCOTT, KANSAS.

In the Dairy.

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

Explanation of the Hot Iron Test.

The hot-iron test, which is used by all cheese-makers to determine the condition of curds, is made by touching a lump of curd, from which the whey has been removed as much as possible by pressing in the hand, to a piece of iron heated to nearly redness. Under certain conditions curd will adhere to this iron and when pulled away will be drawn out in fine threads. The length of these threads is supposed to be proportional to the acidity of the curd, and is taken as a measure of this; hence curds are said to have one-fourth or one inch of acid, according as the threads are one-fourth or one inch long. A large number of tests of acidity in connection with hot-iron tests have shown that no definite relation exists between them, although it may be said that long strings are usually associated with high acid. It may be clearly shown that the length of the string is not alone dependent upon the amount of acid present by adding a little borax, phosphate of soda, or even bicarbonate of soda, all of which have an alkaline reaction, to sweeten curds, which do not adhere to the hot iron, when they will be found to string as perfectly as if acid was developed. Moreover, curds precipitated by the natural development of lactic acid in milk do not always string. It appears from this that the hot-iron test indicates, not the degree of acidity, but a condition of the curd, which may be brought about in a variety of ways. Our observations show that any reagent, whether acid or alkaline, which has a slight solvent action upon casein, will cause the curd to string upon a hot iron. The effect of such a reagent is to convert the curd into a more or less plastic condition in which the particles adhere readily to each other. Such curds when piled will flatten and assume the meaty texture desired in the cheddar process, before they are put to press. The cheese will also close up well and show few mechanical holes. There are present in most milks a variety of organisms capable of converting curd into this condition; usually the lactic forms predominate, but often others which have a peptonizing or digestive action on the casein have considerable influence. It is evident from this that the determination of acid can never replace the hot-iron test in practical cheese-making, as it often fails to show that condition of curd essential to a fine texture cheese.—*Dr. S. M. Babcock.*

California Butter Law.

A San Francisco correspondent of the Chicago Record writes to that journal as follows:

"We were traveling in Siskiyou county, that northern part of the State which geographically is a part of California, but commercially is a part of Oregon. It is a wild and sparsely settled region, with only here and there a half-cultivated ranch and an occasional mining camp.

"It was one of the latter we reached about nightfall. We were directed to the principal hotel in the place, a roughly-boarded, two-story building, of which the most prominent feature of its internal arrangement was the bar-room, which was also the office, and contained in one corner a wooden sink provided with a paper bucket filled with water, two or three tin wash basins and a couple of community towels hung on rollers.

"Supper was ready when we arrived and we were directed at once to a long room with a low ceiling—the dining-room—in which about twenty roughly dressed men, most of them in their shirt sleeves and apparently miners, lumbermen and teamsters, were seated at three or four long tables. The tables were covered with oil cloth. The tableware was very thick and heavy ironstone china, much cracked and chipped. The knives and forks were steel, with handles discolored and cracked from rough usage and hot dishwater. Near each end of the table

was a set of casters, originally, doubtless, quite showy with silver plating, but at this period much the worse for the wear of the plating.

"The dining-room girl who came to wait on us rattled off the bill of fare in exactly the same way that dining-room girls do in ten thousand other hotels all over this broad land. As she received our orders she slid the big butter dish from its place near the middle of the table over toward us, saying, 'Here's your substitute butter,' at the same time taking from one of the casters, where they were kept, like the bills of fare in cheap restaurants, pieces of cardboard about the size and shape of the ordinary restaurant bill of fare. She laid one of these down on the table beside each of us and started for the kitchen. Wondering slightly at this, we each picked up the cardboard laid before us, and this is what we read:

The butter served here is butterine.	
Percentage of ingredients is as follows:	
Creamery butter.....	25
Neutral.....	20
Butter oil.....	10
Oleo oil.....	35
Cream, milk and salt.....	10
Total.....	100

"By the time we had finished reading this the girl returned with our supper. When she had arranged the various dishes in front of us we asked her what she had given us this chemical analysis of our butter product for. Without a word, but with a gesture of impatience, she turned the cardboards over and, we read:

"This notice is given in conformity with sections 3 and 7 of an act of the Legislature of California, approved March 9, 1895, entitled an 'Act to prevent deception in the manufacture and sale of butter and of cheese, to secure its enforcement, and to appropriate money therefor.'

"Sec. 3. Each person who, by himself or another, lawfully manufactures any substance designed to be used as a substitute for butter or cheese, shall prepare a statement, printed in plain Roman type of a size not smaller than pica, stating in the English language its name and the name and address of the manufacturer, the name of the place where manufactured or put up, and also the names and actual percentages of the various ingredients used in the manufacture of such imitation butter or imitation cheese.

"Sec. 7. No keeper or proprietor of any bakery, hotel, boarding house, restaurant, saloon, lunch counter or other place of public entertainment, or any person having charge thereof or employed thereat, or any person furnishing board for other persons than members of his own family, or for any employees where such board is furnished as the compensation or as a part of the compensation of any such employee, shall place before such patron or employee, for use as food, any substance designed to be used as a substitute for butter or cheese, unless the same be accompanied by a copy of the statement described in section 3 of this act and by a verbal notification to said patron that such substance is a substitute for butter or cheese."

"The proprietor, having now complied with all the requirements of the law, has only this wish to express:

"May good digestion wait on appetite
And health on both."

Dr. D. E. Salmon, Chief of the Bureau of Animal Industry, says in his No. 16 circular that "Club House," "Meadow Sweet," and other fancy cheeses, come under the recently enacted filled-cheese law. While the best New York and Wisconsin cheeses are the basis and form the bulk of this cheese, which is put up in small, fancy packages, there is added olive oil, cottonseed oil, butter fat, and even wine or brandy, to "taste it up." Honest cheese seems to be only that which is made from milk or cream, without the addition of butter or any animal or vegetable or other oils or fats foreign to such milk or cream.

To remove the constipated habit, the only safe treatment is a course of Ayer's Pills, followed by a laxative diet. Most other cathartics do more harm than good, the reforming physicians recommend Ayer's Pills, especially as a family physic.

WOMEN WHO INFLUENCE THE NATION.

How many women realize the great share they have in making this nation what it is? These patient, practical, earnest women in all parts of our land go about their every day affairs intent only upon the simple thought of being faithful sisters, wives and mothers. Yet all the while they actually accomplish more for the prosperity of the nation than is possible to the shrewdest politician or the wisest statesman.

The wives and mothers of this country are its real patriots. Without hope of political reward they bear and rear and educate its future citizens and set before them a constant example of unselfish devotion.



A mother who has the care of children added to her regular household duties carries indeed a heavy burden and one which the strongest man might stagger under. When a woman's physical strength enables her to support this burden easily and cheerfully she is an inspiring example. There is no more pleasing picture than a strong, capable housewife surrounded by hearty, healthy children.

But it too often happens that the mother's strength is unequal to the demands made upon it. Her health becomes undermined by overwork or anxiety or some special weakness of the delicate feminine organism.

Women suffering from any disease or weakness of this nature ought to know how many thousands of their sex have been completely cured of these delicate complaints through the use of Dr. R. V. Pierce's Favorite Prescription. It is a perfect specific for all forms of female weakness.

It directly heals and strengthens the internal organs and ligaments; it gives vital power to the nerve-centers and reinforces the entire system with healthy energy.

Prospective mothers, by taking the "Favorite Prescription" early during the expectant period are enabled to pass through their time of trial with perfect safety and very little pain, and without subsequent relapse or mental disturbance.

Nursing mothers are provided with an abundant secretion of healthy nourishment for the child by the use of this remarkable "Prescription." It preserves the vigor and nerve force of hard-working housekeepers and protects them against the dangers and complications incident to the change of life.

It is the only medicine of its kind devised by an educated physician and experienced specialist in the treatment of women's diseases.

For nearly thirty years Dr. Pierce has been chief consulting physician to the Invalids' Hotel and Surgical Institute, of Buffalo, N. Y. He is the head of a large staff of eminent physicians and surgeons, graduated members of the most distinguished European and American medical colleges. His medical formulas are recognized everywhere as standard remedies and he has world-wide reputation as a medical author.

His great thousand-page illustrated book, "The People's Common Sense Medical Adviser," is possessed by over a million American and English families. It is the most comprehensive family medical work ever printed in

one volume. It was formerly sold for \$1.50 per copy, but a paper-bound copy will be sent absolutely free to any one sending twenty-one 1-cent stamps, to pay the cost of mailing only. Address World's Dispensary Medical Association, Buffalo, N. Y. For a handsome cloth-bound copy send 10 cents extra, (31 cents in all).

Union Pacific Route.

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

Homes for the Homeless.

The opening of two Indian reservations in northeastern Utah to settlers opens up over three and one-half million acres of fine agricultural and stock-raising land for homeseekers.

The Uintah and Uncompahgre reservations are reached by the only direct route, the Union Pacific system, via Echo and Park City. E. L. LOMAX, G. P. & T. A., U. P. system, Omaha, Neb.

Unequaled Service

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

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

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

41

Tours in the Rocky Mountains.

The "Scenic Line of the World," the Denver & Rio Grande railroad, offers to tourists in Colorado, Utah and New Mexico the choicest resorts, and to the trans-continental traveler the grandest scenery. The direct line to Cripple Creek, the greatest gold camp on earth. Double daily train service with through Pullman sleepers and tourists' cars between Denver and San Francisco and Los Angeles.

Write S. K. Hooper, G. P. & T. A., Denver, Col., for illustrated descriptive pamphlets.

No Room for Doubt.

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

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

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

Ask your nearest agent for tickets via this route.
E. L. LOMAX,
Gen. Pass. and Ticket Agent.

42

Popular Low-Price California Excursions.

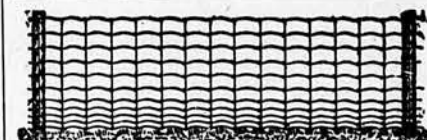
The Santa Fe Route personally conducted weekly excursions to California are deservedly popular. About one-third saved in price of railroad and sleeper tickets as compared with first-class passage.

The improved Pullmans occupied by these parties are of 1896 pattern and afford every necessary convenience. A porter goes with each car and an experienced agent of the company is in charge.

The Santa Fe's California line is remarkably picturesque, and its middle course across the continent avoids the discomforts of extreme heat or cold.

Daily service, same as above, except as regards agent in charge.

For descriptive literature and other information address G. T. Nicholson, G. P. A., A. T. & S. F. Ry., Chicago.



FENCES AND FERTILIZERS

It is customary to spread the plant food evenly over the field, then mix with the soil. Why not bury it all in one corner of the field? That's the way some people build elastic fences. When a shock strikes the Page, it don't have to wait while a boy "goes to the spring," but finds it all along the line.

PAGE WOVEN WIRE FENCE CO., Adrian, Mich.

Chichester's English Diamond Brand.
PENNYROYAL PILLS
Original and Only Genuine.
Safe, always reliable. Ladies ask
Druggist for Chichester's English Diamond Brand in Red and Gold metallic boxes, sealed with blue ribbon. Take no other. Refuse dangerous substitutions and imitations. At Druggists, or send 4c. in stamps for particulars, testimonials and "Relief for Ladies," in letter, by return mail. 10,000 Testimonials. Name Paper, Chichester Chemical Co., Madison Square, Philadelphia, Pa.
Sold by all Local Druggists.

When to Cut Alfalfa.

The Utah Experiment Station has been investigating the feeding value of alfalfa, with special reference to the stage of development at which the most valuable hay is made. The following summary is given in Prof. A. A. Mills' Bulletin No. 44, just published:

"From the results of the three seasons' trials with alfalfa, early cut (just before bloom), medium cut (one week after first bloom), and late cut (one week after full bloom), the following conclusions seem warranted:

"1. Steers, fed either the alfalfa with or without grain, made the most rapid gains on the early cut, and the lowest on the late cut, or they stand as follows: Early cut 100, medium cut 77, late cut 68.

"2. For both first and second crops, the early cut was first in rate of gain, while for the first crop, the late cut was better than the medium cut, and for the second crop, the medium cut is far the better of the two.

"3. The food eaten per day was slightly the highest for the early cut and lowest for the late cut, standing as 100 for the early cut, 99 for the medium cut and 85 for the late cut.

"4. Pound for pound, the early cut was the best, the late cut second best, and the medium cut poorest. They stand as 100 for the early cut, 78 for the medium cut, and 81 for the late cut.

"5. The early cut yielded the most hay when weighed into the barn, the medium cut coming second and the late cut last.

"6. The early cut contained the most moisture, and when all are reduced to the same moisture content, 12 per cent., which the hay contained when fed, the yield stands: Early cut 100, medium cut 93, and late cut 90.

"7. In amount of beef produced per acre the standing is: Early cut 100, medium cut 71, and late cut 71.

"8. In yield of protein, a very valuable nutrient, the standing is: Early cut 100, medium cut 78, and late cut 82.

"9. During the two weeks of budding and flowering there appears to be no additional growth; in fact, our results show a loss of 82 pounds per acre of dry matter during this period.

"The results of two years' feeding with the different crops of alfalfa, red clover, mixed hay, timothy, and alfalfa and straw, appear to warrant the following conclusions:

"1. In rate of gain per day the different feeds stand as follows: First crop alfalfa, 100; second crop alfalfa, 75; third crop alfalfa, 110. All crops alfalfa, 91; red clover, 75; timothy, 97.

"2. The food eaten per day varies about in the same order as the gains, standing as follows: First crop 100, second crop 97, third crop 105, all crops 100, red clover 80 and timothy 95.

"3. Pound per pound, the good alfalfa proved about equal to timothy, while in rate of gain it proved better.

"4. A ration of alfalfa and straw, with grain, proved superior to one of alfalfa and grain.

"5. Mixed hay and grain proved superior to alfalfa and grain, but not quite so good as alfalfa, straw and grain.

"6. A ration with a wide nutritive ratio, 1 to 8.6, proved much better than one with a narrow nutritive ratio, 1 to 4.56, while a ration having a nutritive ratio of 1 to 4.81 proved better than either of the others.

"7. The use of mixed fodder in the rations, in one case mixed hay and in the other alfalfa and straw, appeared to have much more to do with the feeding value than did the nutritive ratio of the rations. However, the ration that was nearest the Wolff's standard gave the best results.

"8. Better results were obtained by making the ration wider than the standard by 2.6 than by making it narrower by 1.44.

"9. By feeding what straw the animals will eat up clean our foods rich in protein—alfalfa, bran and wheat—may be fed to good advantage, though the nutritive ratio be too narrow.

"10. Where the rations contained but one class of fodders, legumes, the feeding value very closely followed the amount of protein in the ration; but when the rations contained any other

fodders, mixed hay, timothy or straw, the varying amounts of protein in the ration appeared to have little to do with the variation in feeding value of the ration."

A Berkshire Record-Breaker.

The record-breaking price paid for a Berkshire at public sale this year was \$225, paid for Majestic Lad 32201 at the public sale during the State fair at Wichita, by Geo. W. Berry, of Berryton, Kas. Majestic Lad was farrowed September 25, 1893, at Chicago, during the World's Fair. The dam, Imp. Majestic, was owned at the time by Metcalf Bros., East Elmo, N. Y., and won second prize in the two-year-old class. The sire of Majestic Lad was Imp. Royal Hater, that won first in class at Ohio and New York State fairs and was highly commended at the World's Fair. As a sire this boar is remarkable and his get are uniform and are great sellers always. The number of Royal Hater pigs are scarce in the West, hence Mr. Berry is fortunate in his selection and states that he has consented to let a fellow breeder buy the breeding service for a few sows at \$25 per service.

"The Weber."

The Weber Gas and Gasoline Engine Co., of Kansas City, Mo., one of whose engines is illustrated on page 5, has brought out a four horse-power simple agricultural engine which the manufacturers say is designed to meet a long-felt want for a simple, safe and economical power to be placed in the hands of parties inexperienced in the uses of machinery. By turning these engines out of their factory in large quantities they are enabled to make an exceedingly low price on this special engine, putting it within the reach of all.

To farmers, cattle feeders, irrigators, ranchers, etc., this engine has proven a big money-saver for pumping water from deep wells and shallow wells, for stock and home supply, for grinding grain, cutting ensilage, grinding bone, operating fan mills and feed mills, grindstones, small threshers, cream separators for dairy use, irrigation pumps, in fact, every possible use where power is required around a farm or ranch.

Its advantages over windmills, steam engines, horse-powers, tread-powers are at once apparent, owing to the fact that the engine costs nothing except when in actual operation, and then only in proportion to the exact amount of work it is accomplishing. It is always ready for use, started instantly, stopped instantly. There is no danger from fire or explosion or burn-outs, as with steam; no getting tired, as with horse-powers, and keeps on running whether the wind blows or not. Unlike a windmill, you are not dependent upon the caprice of the wind.

"Unlike a steam engine manufacturer," says the Weber Co., "we are not compelled to tell you all about our super-heater, variable exhaust, fusible plugs, surface cocks, corrosion around stay-bolts, heaters, steam gauges, improved safety valves, glass water gauges, blow-off cocks; or tell you how to fill your boiler with water before starting a fire, or instruct you how to fire wood, coal, straw, or how to clean your fire, ash pan, flues or boiler; and how to preserve the boiler and smoke-stack. We don't have to tell you what to do in case of low water, or foaming, or caution you about the safety-valve sticking, or how to prevent blisters and repair leaks, because all these things are dispensed with."

This engine is mounted on skids and furnished complete with water tank, gasoline tank, etc., ready to run and can be skidded about the farm at the will of the operator, or can be loaded on a heavy farm wagon and used as a portable plant.

Corn at 10 cents per bushel costs \$3.57 per ton of shelled corn or \$2.86 per ton of ear corn. At such price it is the cheapest feed that can be given to animals.

To Colorado, Montana, Hot Springs, Puget Sound and Pacific Coast via Burlington Route.

Take the shortest and most desirable line to the far West; complete trains from the Missouri river. Daily train leaves Kansas City at 10:40 a. m., arrives Billings, Montana, 1,050 miles distant, 6:45 next evening; free chair cars Kansas City to Billings; sleepers Kansas City to Lincoln; through sleepers Lincoln to Billings. Connects with fast train beyond to Montana and Puget Sound. Ten to twenty-five hours shorter than other lines from Kansas City.

Through sleepers and chair cars Missouri river to Denver; Rio Grande scenic line beyond for Colorado, Utah and California. Ask agent for tickets over the established through lines of the Burlington Route.

L. W. WAKELEY, Gen. Pass. Agt., St. Louis, Mo.

2,000,000 Strawberry Plants and plenty of all other kinds of small fruits. The William Belt, Brandywine, Parle King, Tennessee, Isabel, B'well, Splendid, all new strawberries. Egyptian, Bishop, Brandywine, Miller and Columbian, all new raspberries. B. F. SMITH, Box 6, Lawrence, Kas.

The Kansas City Stock Yards

are the most complete and commodious in the West,

and second largest in the world! The entire railroad system of the West and Southwest centering at Kansas City has direct rail connection with these yards, with ample facilities for receiving and reshipping stock.

	Cattle and calves.	Hogs.	Sheep.	Horses and mules.	Cars.
Official Receipts for 1895.....	1,689,652	2,457,697	864,713	52,607	103,368
Slaughtered in Kansas City.....	922,167	2,170,827	567,015	111,445	
Sold to feeders.....	392,263	1,876	111,445		
Sold to shippers.....	218,905	273,999	69,784		
Total Sold in Kansas City, 1895.....	1,533,334	2,446,203	748,244	41,588	

CHARGES: YARDAGE, Cattle, 25 cents per head; Hogs, 8 cents per head; Sheep, 5 cents per head. HAY, \$1 per 100 lbs.; BRAN, \$1 per 100 lbs.; CORN, \$1 per bushel.

NO YARDAGE CHARGED UNLESS THE STOCK IS SOLD OR WEIGHED.

C. F. MORSE, E. E. RICHARDSON, H. P. CHILD, EUGENE RUST,
V. Pres. and Gen. Manager. Secretary and Treasurer. Assistant Gen. Manager. Gen. Superintendent.
W. S. TOUGH & SON, Managers HORSE AND MULE DEPARTMENT.

WITHOUT A PEER

STANDS

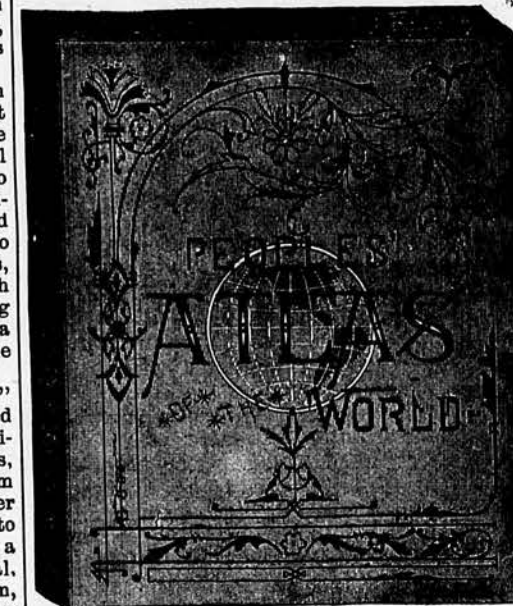
The People's Atlas OF THE World

MORE THAN

100,000 Copies Of the 1894 Edition having been sold; and during the past summer the Atlas has been revised and greatly improved, making it

An Up-to-date,
Absolutely Accurate,
Beautifully Illustrated

Atlas



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The handsomely engraved maps of all the states and territories in the Union are large, full page, with a number of double-page maps to represent the most important states. All countries on the face of the earth are shown. Rivers and lakes are accurately located. All the large cities of the world, the important towns and most of the villages of the United States are given on these maps. Over 200 Magnificent Illustrations and Maps embellish nearly every page of the Atlas and faithfully depict scenes in almost every part of the world.

THIS ATLAS contains a vast amount of historical, physical, political, educational and statistical matter, so comprehensively arranged and indexed that information on any subject can be found in a moment's time.

GENERAL DESCRIPTION OF THE WORLD,

Giving its physical features, form, density, temperature, motion, winds and currents; distribution of land and water; races of people, their religions and numbers; also the most complete list of nations ever published, giving their geographical location, area, population, forms of government, etc.

ITS SPECIAL FEATURES RELATING TO THE UNITED STATES ARE:

The Popular and Electoral Votes for President in 1884, 1888 and 1892, by States. List of All the Presidents. Agricultural Productions. Mineral Products. Homestead Laws and Civil Service Rules. Statistics of Immigration, 1820 to 1891. Public Debt for the Past 100 Years. Gold and Silver Statistics. Number and Value of Farm Animals. Cultivable Area as Compared with Increase of Population. Postal Information, with Domestic and Foreign Rates, and Other Information that should be in every Home, Store, Office and School-room.

A \$1.00 BOOK FREE.

To every one who will send to this office \$2 to pay for two years' subscription to KANSAS FARMER. The two dollars can be applied for subscriptions one year each for two different addresses if desired. Or, send \$1.20 for one year's subscription to KANSAS FARMER and the Atlas. Address KANSAS FARMER CO., Topeka, Kas.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, Dr. N. S. MAYO, Professor of Veterinary Science, Kansas State Agricultural College, Manhattan, Kas.

MASTITIS.—We have a cow that gives bloody milk out of one teat. The milk is thick and stringy. There is a lump about the middle of the teat.
Dillon, Kas. T. J. C.

Answer.—There is inflammation of that quarter of the bag, caused, probably, by germs getting into the gland. Milk as clean as possible three times daily and bathe that quarter of the bag with water as hot as can be applied without causing pain. Apply water for fifteen minutes twice daily. After milking inject into that quarter through the milk duct of the teat a weak solution of carbolic acid, one part carbolic acid to forty parts rain water. Inject medicine twice daily only. Do not use milk from this quarter.

WIRE CUT.—I have a mare which cut her foot on barbed wire about August 1. It is nearly healed up, but the leg is swollen below the knee. What can I do to reduce the swelling? What is the proper treatment of a barb wire cut from start to finish?
Spring Hill, Kas. L. C. W.

Answer.—The swelling cannot be reduced, except temporarily, until the part has healed and the blood vessels resume their normal state. For the treatment of a wound from start to finish see next week's KANSAS FARMER.

GLANDERS.—What are the prominent symptoms of glanders?
Independence, Kas. W. A. T.

Answer.—A sticky discharge from the nose, at first thin and watery, later thick, often containing matter (pus) and streaked with blood. Ulcers in the nostrils and swelling of the glands under the jaw. The glands rarely break. In farcy, which is a form of glanders, there are lumps (farcy buds) on various parts of the body, especially the hind legs. These lumps often break and discharge, but do not heal readily.

The Axline Swine Sale.

Last Thursday, Mr. E. E. Axline, of Oak Grove, Jackson county, Missouri, held his annual swine sale, on the farm, near Oak Grove. The sale was in every way very satisfactory, considering the dull times and the age of the offerings. Ninety-six head, mainly spring pigs, brought \$1,350, making an average of over \$14. Liggett Bros., Stanberry, Mo., topped the sale on a February gilt by Western Wilkes 12846 and out of Lady Risk 38184 S., at \$42.50. The fall gilts brought prices ranging from \$16 to \$30, making an average of \$22.50. After the sale closed twelve weanlings were sold at private sale for \$10 each. The buyers were principally from Jackson and Lafayette counties, many of whom were old customers of Mr. Axline's that had bought of him their recruits for a number of years. The visitor at the farm finds a breeding herd the equal in merit of herds either East or West and headed by such boars as Roy U. S. 13843 S., Western Wilkes 12846 S., O. K. King 15101 S. and Dandy Boy 16070 S. The blood of Moore's Black U. S. 38905 A., Imitation 2d 38279 C., King Perfection 7013 S., Gibson's Tecumseh 16481 S. and Double Black U. S. 2d 38907 C. is found among the brood sows that belong to the big-boned, long and roomy kind that insures a successful pig crop. Their merits ought to be better known by the Western breeders, especially Kansans, who send East for something good. Mr. Axline endeavors to have, and succeeds, too, in breeding pigs of strong constitution, not fat but in good, thrifty, growing condition, thereby always pleasing his customers with the right kind.

Thos. Slater has a message for every man on page 15.

We can furnish you KANSAS FARMER and Peterson's Magazine, each one year, for \$1.75. Or KANSAS FARMER and Arthur's Home Magazine for \$1.65. Send to this office amounts above named.

"Dairying for Profit, or the Poor Man's Cow," is practical, was written by a woman who knows what she is talking about, and is cheap—only 10 cents for a 25-cent book, to subscribers for the KANSAS FARMER. Send to this office.

Horse Owners! Use



Caustic Balsam

A Safe Speedy and Positive Cure
The Safest, Best BLISTER ever used. Takes the place of all liniments for mild or severe action. Removes Bunches or Blemishes from Horses and Cattle. SUPERSEDES ALL CAUTERY OR FIRING. Impossible to produce scar or blemish. Every bottle sold is warranted to give satisfaction. Price, \$1.50 per bottle. Sold by druggists, or sent by express, charges paid, with full directions for its use. Send for descriptive circulars.
THE LAWRENCE-WILLIAMS CO., Cleveland O.

MARKET REPORTS.

Kansas City Live Stock.
KANSAS CITY, Oct. 5.—Cattle—Receipts, 10,645, calves, 883; shipped Saturday, 2,114 cattle. The market was steady to strong. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.
No. Ave. Price. No. Ave. Price.
79.....1,488 \$4.40 15.....1,240 \$4.15
3.....1,313 3.85 18.....1,132 3.80
40.....1,119 3.60 1.....1,310 3.25

WESTERN STEERS.
38.....1,381 \$4.00 110.....1,228 \$3.60
44.....1,048 3.15 53.....1,099 3.12½
20.....846 2.60

NATIVE HEIFERS.
11.....769 \$2.75

NATIVE COWS.
1.....1,060 \$3.00 9.....1,153 \$2.60
3.....1,096 2.55 1.....1,080 2.50
2.....1,050 2.15 1.....1,093 2.10
3.....820 2.00 1.....940 1.60

NATIVE FEEDERS.
1.....940 \$3.40 80.....1,124 \$3.40
3.....931 3.25 2.....1,065 3.00
1.....940 2.50

NATIVE STOCKERS.
52.....658 \$3.50 6.....733 \$3.40
12.....750 2.55 6.....733 4.40
1.....580 3.25 14.....585 3.20
1.....440 2.50 1.....460 2.00

Hogs—Receipts since Saturday, 5,018; shipped Saturday, 10. The market was steady to 50 lower. The following are representative sales:
32.....135 \$3.25 86.....196 \$3.25 100.....153 \$3.20
74.....182 3.22½ 71.....209 3.20 73.....202 3.20
89.....206 3.17½ 75.....218 3.15 55.....339 3.15
38.....122 3.15 82.....202 3.15 43.....207 3.15
16.....190 3.15 49.....218 3.15 80.....209 3.15
93.....168 3.15 132.....168 3.15 81.....201 3.15
21.....109 3.15 23.....127 3.15 77.....193 3.12½
81.....243 3.12½ 79.....237 3.10 28.....201 3.10
74.....259 3.10 91.....205 3.10 66.....237 3.10
64.....281 3.10 60.....171 3.10 64.....239 3.10
76.....252 3.10 71.....248 3.10 138.....270 3.10
5.....383 3.10 75.....255 3.07½ 73.....181 3.05
72.....281 3.05 57.....202 3.05 3.....236 3.05
43.....242 3.03 73.....154 3.05 42.....350 3.00
63.....305 3.00 83.....194 2.95 30.....353 2.95
5.....346 2.85 7.....351 2.89 6.....243 2.60

Sheep—Receipts since Saturday, 950; shipped Saturday, none. The market was steady. The following are representative sales:
2 sw.....60 \$2.50 3 native.....110 \$2.40
175 sw.....91 2.10 153 sw. nat.....94 2.20

Horses—Receipts, 167; shipped Saturday, 23. The horse and mule receipts to-day were moderate, and as the week's regular auction sales do not open until to-morrow there was little business. There was a large crowd of visitors looking around.

Chicago Live Stock.
CHICAGO, Oct. 5.—Cattle—Receipts, 19,000; market for best cattle stronger, common to fair weaker; fair to best beefs, \$3.40 to \$5.12½; stockers and feeders, \$2.50 to 2.85; mixed cows and bulls, \$1.50 to \$3.65; Texas, \$2.50 to \$2.25.
Hogs—Receipts, 44,000. Light 50 lower; others steady; light, \$2.90 to \$3.42½; rough packing, \$2.60 to \$2.75; mixed and butchers, \$2.90 to \$3.40; heavy packing and shipping, \$2.30 to \$3.30. Pigs, \$2.00 to 2.40.
Sheep—Receipts, 26,000; market steady; native, \$2.00 to \$3.10; western, \$2.00 to \$3.00; lambs, \$3.00 to \$5.00.

St. Louis Live Stock.
ST. LOUIS, Oct. 5.—Cattle—Receipts, 3,000; market active and higher; native steers, \$3.50 to 4.8; Texas steers, \$2.50 to \$3.60.
Hogs—Receipts, 3,500; market steady; light, \$3.10 to \$3.40; mixed, \$2.60 to \$3.25; heavy, \$3.00 to \$3.25.
Sheep—Receipts, 2,000; market weak.

Chicago Grain and Produce.

Oct. 5. Opened High'st Low'st Closing
Wh't—Oct..... 66½ 68½ 67½ 68½
Dec..... 66½ 68½ 67½ 68½
May..... 70½ 71½ 71½ 71½
Corn—Oct..... 22½ 22½ 22½ 22½
Dec..... 22½ 22½ 22½ 22½
May..... 25½ 25½ 25½ 25½
Oats—Oct..... 17½ 17½ 17½ 17½
Dec..... 17½ 17½ 17½ 17½
May..... 19½ 19½ 19½ 19½
Pork—Oct..... 6 50 6 50 6 40 6 40
Dec..... 6 37½ 6 50 6 37½ 6 40
Jan..... 7 07½ 7 30 7 07½ 7 22½
Lard—Oct..... 3 95 4 02½ 3 95 3 97½
Dec..... 4 12½ 4 25 4 10 4 17½
Jan..... 3 27½ 3 20 3 20
Ribs—Oct..... 3 47½ 3 60 3 47½ 3 55
Dec.....
Jan.....

Kansas City Grain.
KANSAS CITY, Oct. 5.—Wheat here sold readily at steady prices for hard. Soft wheat was irregularly higher. A few sales of hard wheat samples showed some advance.
Receipts of wheat here to-day, 190 cars; a year ago, 216 cars.
Sales were as follows on track: Hard, No. 2, 3 cars 6½c, 3 cars poor 60c; No. 3, 6 cars choice 60c, 35 cars 59c, 6 cars 58½c, 9 cars 58c; No. 4, 2 cars 58c, 10 cars 57c, 13 cars 56½c, 25 cars 56c, 2 cars 55c; rejected, 2 cars 54c, 2 cars 53c, 2 cars 52c, 2 cars 51c, 1 car 50c; no grade, nominally 4c. Soft, No. 2 red, choice 70c, 2 cars 68c; No. 3 red, 1 car 69c, 1 car 68c, 1 car 65c; No. 4 red, 2 cars choice 65c, 1 car 63c, 1 car 62½c, 2 cars 62c, 1 car 60c; rejected, nominally 53c to 57c. Spring, No. 2, 2 cars 61c, 1 car 60c; No. 3, 3 cars 58c.
Corn sold steady at Saturday's prices. There was some shipping demand.

St. Louis Grain.
ST. LOUIS, Oct. 5.—Receipts, wheat, 82,400 bu.; last year, 62,500 bu.; corn, 161,000 bu.; last year, 22,200 bu.; oats, 100,000 bu.; last year, 169,400 bu.; shipments, wheat, 68,500 bu.; corn, 181,691 bu.; oats, 19,770 bu. Closing prices: Wheat—Cash, 70c; December, 70½c; May, 74½c. Corn—Cash, 21c; December, 21½c; May, 24½c. Oats—Cash, 16c; December, 16½c.

Kansas City Produce.
KANSAS CITY, Oct. 5.—Butter—Creamery, extra fancy separator, 14c; firsts, 13c; dairy, fancy, 11½c; fair, 9½c; store packed, fancy, 8c; packing stock, 6c.
Eggs—Strictly candled stock, 13c per doz.
Poultry—Hens, 5½c; roosters, 10½c each; young roosters, 5½c per lb.; spring, 5½c; broilers, from 1½ to 2 lbs., 6½c; turkeys, over 7 lbs., 7½c; spring ducks, 7c; old, 6c; spring geese, 6c; pigeons, 75c to 85c per doz.
Apples—Choice eating stock sells from 40 to 60c a bu.; inferior, 30 to 35c a bu.; cooking stock, 10 to 35c; Ben Davis seems to form bulk of supply and prices range from 20 to 30c in a small way, according to quality; shippers are paying for Northern Spy \$1.00 a bbl. in car lots; for fancy fall and winter varieties, \$1.00 to \$1.25 a bbl.; Jonathans, \$1.50 a bbl. for fancy and 75c to \$1.00 for No. 2 stock. Grapes, Ohio Concord, 9-lb. baskets, choice, 11½c; inferior, 9c; small way, 13c; New York Concord, fancy, small way, 13c; jobbing, 11½c; inferior, 8½c.
Potatoes—In a small way prices ruled 17½ to 20c; in round lots, 16½ to 18c; in car lots, 17½c. Sweet potatoes, new stock, 25c per bu.

Remember that you can get the KANSAS FARMER and the Kansas City Daily Star, both for one year, for \$4, or the KANSAS FARMER and the Kansas City Weekly Star, both for one year, for \$1.20.

BROOMCORN ESTABLISH'D 1873

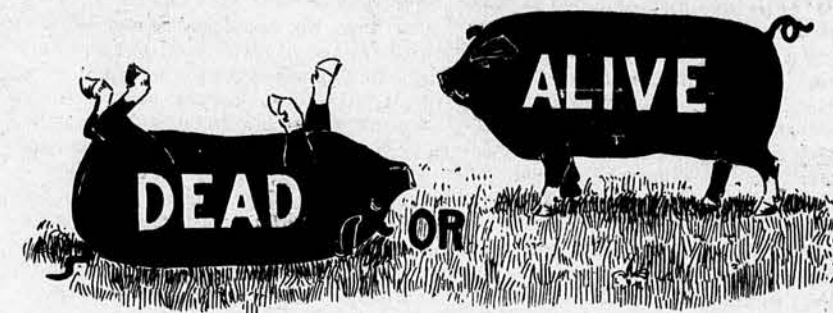
ON CONSIGNMENT OR SOLD DIRECT.
We carry the largest stock of Broom Manufacturers' Supplies in the United States. Correspondence solicited.
J. P. GROSS & CO., 289-241 Kinzie St., Chicago, Ill.

Ship Your Produce Direct TO MARKET.

It is the only way to get the true value of what you have to sell. It is no longer an experiment. Our shippers testify to it every day. We receive and sell: Butter, Eggs, Poultry, Veal, Game, Hay, Grain, Beans, Seeds, Potatoes, Broom Corn, Hides, Wool, Green and Dried Fruit, Vegetables, or anything you may have to ship. We make prompt sales at the Highest Market Price and send quick returns. Write us for Prices, Shipping Tags, or any information you may want.

SUMMERS, MORRISON & CO., Commission Merchants,
174 South Water Street, CHICAGO, ILL.
References: Metropolitan National Bank, Chicago, and this paper.

HOW DO YOU WANT THEM?



A hog half dead is worth more than the carcass of a dead one. Bannerman's Phenyle will cure hog cholera in all stages. Don't wait until your hogs are on their last legs before you attempt to cure them. Your hogs may be taken sick with cholera next week. Fifty thousand hogs saved last year.

J. WALLACE. WALLACE BROTHERS, O. A. WALLACE.
BREEDERS OF DUROC-JERSEY SWINE.
LA PORTE CITY, IOWA, September 14, 1896.

BANNERMAN & CO., CHICAGO, ILL.—Dear Sirs: Enclosed find draft for \$6.50, for which send me 100 pounds Bannerman's Phenyle.

You will perhaps receive an order from A. W. Montgomery, of Belle Plaine, as I sent him your address yesterday. There is quite a good deal of Hog Cholera in this vicinity, but our herd has been all right so far, and I attribute it to Phenyle keeping them so.

When we ordered the barrel of you last year, our Chickens and Turkeys were dying like flies, and it checked the disease at once, and we have not lost any since.

Respectfully, WALLACE BROS.
P. S.—Please ship at once.
Breeders' price, 200-pound barrels, \$12; 100-pound barrels, \$6.50; 50 pounds, \$4. For information and directions, address

THE ANGLO-AMERICAN STOCK FOOD CO.,
(Mention KANSAS FARMER.) 113 Adams Street, Chicago, Ill.

Receipts of corn to-day, 56 cars; a year ago, 41 cars.

Sales by sample on track: No. 2 mixed, 12 cars 20½c; No. 3 mixed, 2 cars 18c; No. 4, nominally 18½c; No. 2 white, 9 cars 21c, 2 cars 20½c; No. 3 white, 1 car 20c; No. 4, nominally 19c.
Oats met with fair demand. There was no change in prices.

Receipts of oats to-day, 23 cars; a year ago, 45 cars.

Sales by sample on track, Kansas City: No. 2 mixed, nominally 16c; No. 3, 1 car 15c, 1 car 14½c, 1 car 14c; No. 4, nominally 11½c to 13c; No. 3 white, new, nominally 18c; old, 3 cars 20½c; No. 3 white, 1 car 17c, 2 cars 16½c, 8 cars 16c, 1 car 15½c, 2 cars old 19c; No. 4, 1 car 14½c.

Hay—Receipts, 97 cars; the market is steady. Choice timothy, \$7.00 to \$7.50; No. 1, \$6.00 to \$7.00; No. 2, \$5.00 to \$6.00; No. 3, \$4.00 to \$4.50; prairie, choice, \$4.50 to \$5.00; No. 1, \$1.00 to \$1.50; No. 2, \$3.00 to \$3.50; No. 3, \$2.00 to \$2.50.

St. Louis Grain.
ST. LOUIS, Oct. 5.—Receipts, wheat, 82,400 bu.; last year, 62,500 bu.; corn, 161,000 bu.; last year, 22,200 bu.; oats, 100,000 bu.; last year, 169,400 bu.; shipments, wheat, 68,500 bu.; corn, 181,691 bu.; oats, 19,770 bu. Closing prices: Wheat—Cash, 70c; December, 70½c; May, 74½c. Corn—Cash, 21c; December, 21½c; May, 24½c. Oats—Cash, 16c; December, 16½c.

Kansas City Produce.
KANSAS CITY, Oct. 5.—Butter—Creamery, extra fancy separator, 14c; firsts, 13c; dairy, fancy, 11½c; fair, 9½c; store packed, fancy, 8c; packing stock, 6c.
Eggs—Strictly candled stock, 13c per doz.
Poultry—Hens, 5½c; roosters, 10½c each; young roosters, 5½c per lb.; spring, 5½c; broilers, from 1½ to 2 lbs., 6½c; turkeys, over 7 lbs., 7½c; spring ducks, 7c; old, 6c; spring geese, 6c; pigeons, 75c to 85c per doz.

Apples—Choice eating stock sells from 40 to 60c a bu.; inferior, 30 to 35c a bu.; cooking stock, 10 to 35c; Ben Davis seems to form bulk of supply and prices range from 20 to 30c in a small way, according to quality; shippers are paying for Northern Spy \$1.00 a bbl. in car lots; for fancy fall and winter varieties, \$1.00 to \$1.25 a bbl.; Jonathans, \$1.50 a bbl. for fancy and 75c to \$1.00 for No. 2 stock. Grapes, Ohio Concord, 9-lb. baskets, choice, 11½c; inferior, 9c; small way, 13c; New York Concord, fancy, small way, 13c; jobbing, 11½c; inferior, 8½c.

Potatoes—In a small way prices ruled 17½ to 20c; in round lots, 16½ to 18c; in car lots, 17½c. Sweet potatoes, new stock, 25c per bu.

Remember that you can get the KANSAS FARMER and the Kansas City Daily Star, both for one year, for \$4, or the KANSAS FARMER and the Kansas City Weekly Star, both for one year, for \$1.20.

Any boy or girl under sixteen years old who wants to make \$5 in cash before Thanksgiving should write to the KANSAS FARMER CO., Topeka, Kas., for particulars.

HORSES SOLD AT AUCTION

on Tuesday, Wednesday and Thursday of each week. Private sales every day at the Kansas City Stock Yards Horse and Mule Department. The largest and finest institution in the United States. Write for free market reports.

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Direct all mail to Station A. Market reports furnished free to all sheep feeders or breeders on application. Correspondence solicited and prompt reply guaranteed.

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STOCK YARDS, KANSAS CITY, MO.
And EAST ST. LOUIS, ILL.

Stockers and feeders bought on order. Liberal advances to the trade. Write for market reports and special information.

The Apiary.

Conducted by A. H. Duff, Larned, Kas., to whom inquiries relating to this department should be addressed.

Bees and Cider.

Bees should not be allowed liberty to cider. All stores from this and decayed fruit are very unhealthy for them during winter for food. Bees will store their combs full of sweet cider if allowed access to it, and in such cases heavy losses are liable to occur the following winter. It well pays each one interested, both the apiarist and the manufacturer of cider, to inclose the mills in a building where the bees cannot molest them, as it is almost impossible to manufacture cider where mills are located close to large apiaries in the open air. Combs containing a large quantity of cider should be removed and others of good honey inserted instead. If combs of honey are not at hand it will pay to feed such colonies the full amount of winter provisions, and the combs of cider honey can be used in the spring with no bad effect for spring feeding; and even if the honey is soured to some extent it will do no harm to give it to the bees in warm weather when they are flying daily. But to confine bees without loss during cold weather it is essential to have a healthy diet on which to confine them.

Feeding in the Comb.

Filling frames of comb with sirup and placing the same in the hives, is perhaps the best and speediest manner of feeding bees. If you lay an empty comb flat upon the table, and pour liquid upon it, instead of the liquid immediately running into the cells it will lie contentedly upon the surface. If the liquid falls from a distance, or a considerable height, so as to strike hard upon the surface, the most of it will force itself into the cells. If you pour sirup upon a comb out of a pitcher, holding the pitcher three or four feet above the comb, you will succeed better than if the pitcher be held only a few inches above the same. If a portion of the sirup falls in a compact mass upon the cells, it can enter the cell only by displacing the air contained therein; and if the sirup presses with equal force over all parts of the mouth of the cell, there is no chance for the air to get out, and the cell remains empty. In other words, if a drop larger in diameter than the cell falls directly on the cell the chances are that it will simply act as a cork to cork up the air that is in the cell, but if the drop is so small that it strikes nowhere upon the sides of the cell there is nothing to hinder it going to the bottom of the cell, and if it strikes upon one side of the cell it will still reach the bottom. So the smaller drops we can have as they fall the better success, and to this end, instead of a pitcher we will take a watering-can from which to pour the sirup. But thick sirup will not readily pass through the nose of a watering-can; so we must have thin sirup, and as we desire at least in the fall no thinner than can be made by using five pounds of sugar to one quart of water, it is necessary to handle it while warm, but not so hot as to make the combs soft or melting the same. The sirup may be heated to about 125 degrees.

Too Much Pollen for Wintering.

It has been claimed by apiarists that have tested the matter to some extent, that bees will winter better if not allowed to partake of pollen, but confined on combs of honey alone. I think some attention should be given to this matter in arranging hives for winter. I am satisfied that in some cases where a large amount of pollen filled the combs where the cluster of bees occupied during the winter, did not winter well. Dysentery showed itself to some extent in almost every case in such instances; but we might attribute this to the fact that they were confined to the combs containing pollen, and were obliged to partake of it or starve. I believe they should not be confined to such combs, but I do not believe it necessary to entirely remove them from

the hive. The frames of comb that generally contain pure honey are found on the outside of the brood nest, and those that contain pollen are always found next to the brood, and as this is the case the bees are likely to occupy the combs containing pollen for their winter quarters. This can be controlled to quite an extent, and all I think really necessary is to remove the center combs, or those combs containing pollen, and place them at the outside, and the combs that contain honey next to the bees. If this is done and the bees confined on combs of pure honey, we think no damage will be done by them partaking of the pollen at their pleasure. It is very necessary that bees have a good supply of pollen in early spring, and if possible we prefer to have it in the hive where they have access to it when needed. It is true that we can furnish a substitute in the shape of meal, etc., but can only do so on days that they can fly and work on it. It often occurs that a large amount of pollen is stored in the combs, and as it is exclusively used for food for the young bees, it naturally is stored near the brood nest. The amount of pollen stored depends upon the supply. Bees seem to be as eager to gather pollen as to gather honey, and often a large reserve is on hand.

Protection in Winter.

If bees are left in thin, unprotected hives during winter, the moisture arising from them will condense and freeze to the hive, thereby encircling the bees with ice. On a warm day this will melt and run down over them, and dilute the honey, producing disease. Protect with chaff hives, thoroughly made with double walls and packed well with good dry chaff. A good dry cellar is equally good, but if bees are put in a cellar they must have a department by themselves where they are not subjected to disturbances of any kind.

Queenless Colonies.

At the ending up of the summer's work colonies are often found without queens, and without brood also, and will become dead loss if allowed to remain so. Giving them brood is all right so far as it goes, but it will scarcely insure them of a queen thus late in the season, as most all drones have been dispensed with, and as a result the queens will remain infertile. Ordinarily queens are successful in becoming fertile during the month of September, more especially so if there has been a late honey flow. Bees seldom retain their drones on any other condition, except in case of queenless colonies, which will in most cases retain them. All colonies thus found queenless should be supplied with queens, or they should be united with other colonies.

Catarrh Cannot Be Cured

with LOCAL APPLICATIONS, as they cannot reach the seat of the disease. Catarrh is a blood or constitutional disease, and in order to cure it you must take internal remedies. Hall's Catarrh Cure is taken internally, and acts directly on the blood and mucous surfaces. Hall's Catarrh Cure is not a quack medicine. It was prescribed by one of the best physicians in this country for years, and is a regular prescription. It is composed of the best tonics known, combined with the best blood purifiers, acting directly on the mucous surfaces. The perfect combination of the two ingredients is what produces such wonderful results in curing catarrh. Send for testimonials, free.

F. J. CHENEY & CO., Props., Toledo, O.
Sold by druggists, price 75 cents.

"The Maple Leaf."

Comparatively few travelers realize that within the past ten years a new and formidable competitor for railway patronage has entered the field. The Chicago Great Western (Maple Leaf Route) is decidedly out for business; the equipment, service and roadbed have been steadily improved, until now they are among the best in America. On no other railway can you get any such meal (a la carte) for the money; the service and surroundings are in perfect taste; the menu card is replete with the choicest of everything at reasonable prices. The Pullman compartment sleeping cars and the new free reclining chair cars in service between Kansas City and Des Moines and St. Paul and Minneapolis and Chicago are the embodiment of all that is luxurious in railway travel.

Every man should read the advertisement of Thos. Slater on page 15 of this paper.

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IF YOU DON'T KNOW, ask the practical, responsible painter—ask anyone whose business it is to know—and he will tell you to use Pure White Lead and Pure Linseed Oil. They make the best and most durable paint. To be sure of getting

Pure White Lead

examine the brand (see list genuine brands). For colors use the NATIONAL LEAD CO.'s Pure White Lead Tinting Colors. No trouble to make or match a shade.

Pamphlet giving valuable information and card showing samples of colors free; also cards showing pictures of twelve houses of different designs painted in various styles or combinations of shades forwarded upon application to those intending to paint.

NATIONAL LEAD CO.,
1 Broadway, New York.

HORSE OWNERS RECOMMEND

This remedy very highly. We have thousands of testimonials. It is the only standard remedy on the market. If your horse is lame you need this remedy, for it will cure more speedily than any other remedy in the world.

TUTTLE'S ELIXIR

Is a positive, safe and speedy cure for Colic, Cuts, Splints, Contracted and Knotted Cords, Callous of all kinds, etc. Brings speedy relief in case of Spavins, Ring-Bone and Cockle Joints.

Tuttle's Family Elixir is the best for all pains, bruises, ches, Rheumatism, etc., etc.

Samples of either Elixir are sent for three 2-cent stamps to pay postage. 50 cents buys full-sized bottle of either Elixir at any druggist's or it will be sent direct on receipt of price.

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The Great Disinfectant Insecticide
KILLS HEN LICE

By simply painting roosts and dropping-boards. Kills Mites and Lice, cures Colds and Cholera, also kills Hog Cholera germs. If your grocer or druggist does not keep it, have them send for it.

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in all the many shows in which it has participated, there must be something in the superiority of claims of the **RELIABLE INCUBATOR**. Self regulating, entirely automatic, you put in the eggs, the Reliable does the rest. All about this and many things of value to the poultry man in our new book. Send 10 cts. for it. **RELIABLE INCUBATOR & BROODER CO., QUINCY, ILL.**

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Specially designed to break up the hardest subsoil. It can be run 2 feet deep, which lets in all the rain, storing it up for all crops, which insures against drought and standing water on the surface. For further particulars address **PERINE'S PLOW WORKS, Topeka, Kas.**

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AND WIRE SPLICER

A combination tool used in repairing and removing wire fences. Price \$1.25. Drives and pulls staples, cuts and splices wire. Its special use is in building and repairing wire fences, but may be used for many different purposes about a farm. Saves its cost in one day's work. You can't afford to be without it. Ask your hardware merchant for it, or address **Russell Hardware & Implement Manuf'g Co., Kansas City, Mo.**

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These cribs are made of selected and seasoned oak and 5 double strands of wire and will last a lifetime. After the crib is empty it can be used for garden or yard fence. It is the most economical, serviceable and durable size—500, 800 and 1,200 bushels. Write for prices. Secure agency.

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DETECTIVE Men wanted in every county to act as private Detectives under instructions. Experience unnecessary. Universal Detective Agency, Indianapolis, Ind.

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If you want a mill that will grind corn and cob and all small grains. The largest mill made, hence the greatest capacity. **FULLY WARRANTED!** Made in sweep and power styles and five different sizes. Write for illustrated circulars.

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The Santa Fe Route is the most direct and only through broad-gauge line from Chicago and Kansas City to the celebrated Cripple Creek gold mining district. Luxurious Pullmans, free chair cars, fastest time, and low rates.

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Made of steel and iron. Earlier and larger crops.

Bull, roots and plants taken up together, preventing stunting or injury. Vegetables, flowers, strawberries, tobacco, small nursery trees, etc., can be moved at all seasons. Invaluable for filling vacancies. Transplanter with blade 2 inches in diameter, \$1.25; same with 3-inch blade, \$1.50. **SPECIAL PRICE** with KANSAS FARMER: By a special arrangement with the manufacturers we are able to offer the Transplanter and KANSAS FARMER one year for price of Transplanter alone. Send \$1.25 and we will mail KANSAS FARMER to you and send you the Transplanter by express. Or call at FARMER office and get the Transplanter and save 25c. express charges.

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GRIND CORN

Ear or Shell

Oats, Wheat, Rye and Barley Fine Enough for any Purpose.

Made only by Stevens Manufacturing Co., Joliet, Ill.

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CORN HARVESTER!

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The best on Earth. Horse high, Bull strong, Pig and Chicken tight. You can make from 40 to 60 rods per day for from 14 to 22c. a Rod.

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Falling Sexual Strength in old or young men can be quickly and permanently cured by me to a healthy vigorous state. Sufferers from.....

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"Wanted," "For Sale," "For Exchange," and small or special advertisements for short time, will be inserted in this column, without display, for 10 cents per line, of seven words or less, per week. Initials or a number counted as one word. Cash with the order. It will pay. Try it!

SPECIAL.—Until further notice, orders from our subscribers will be received at 1 cent a word or 7 cents a line, cash with the order. Stamps taken.

SHROPSHIRE RAMS WANTED.—By S. A. Marteeny, St. John, Kas.

FOR SALE.—One hundred high-grade Shropshire ewes, choice ones. Also some choice high-grade Jersey cows. E. W. Melville, Eudora, Kas.

FOR RENT.—A well improved bottom farm near Topeka. Address 212 West Eighth Ave., Topeka.

FOR SALE.—Twenty-nine head of full-blood and high-grade Hereford cows and heifers. Also some bull calves, to close out. F. W. Baker, Council Grove, Kas.

I WILL SELL.—A few of my White Leghorn cocks and cockerels cheap, if taken this fall. Belle Dille, Edgerton, Kas.

SOMETHING EXTRA.—An Irish potato digger that gets the potatoes all in sight, no matter how much crab grass, weeds or trash on the ground. It does not clog. Address Perline's Plow Works, 123 East Eighth St., at price of \$20 f. o. b., Topeka, Kas.

STRAWBERRY PLANTS.—Best varieties, \$2 per 1,000. J. C. Banta, Lawrence, Kas.

FOR SALE.—A few choice Large English Berkshire spring pigs, either sex. W. H. S. Phillips, Carbondale, Kas.

NEW CROPS OF ALFALFA, BLUE GRASS, TIMOTHY, clovers, rye and other grains and seeds bought and sold. Correspondence solicited. Kansas Seed House—F. Barteldes & Co., Lawrence, Kas.

FOR SALE AT SPECIAL PRICES.—Hay outfits, carriers, forks, etc. Inquire at the store of F. W. Griggs & Co., 208 W. Sixth St., Topeka, Kas.

SHROPSHIRE RAM, ALLEN'S 1704 (A.S.C. 68370). I wish to sell this ram, as I cannot use him any longer. He is a fine one and fit to head any flock. Is a son of noted Proud Salaphian. Also some registered and unregistered lambs for sale to suit the times. The above are all fine stock. Write quick. Elwood Rush, Shaw, Kas.

FOR SALE.—The herd boar. Pride of Kansas 23231, sired by Graceful Index, dam Princess Girl. He is a half brother to Darkness Quality, that brought \$170 for a half interest at the Gresham-Nation sale, September 10. I will sell reasonable, on account of need of changing herd boars. Write for particulars to J. F. Knappenberger, Reno County Herd, Penn-lona, Kas.

BREEDERS AND FARMERS.—Send to the Kaw Valley herd for a Poland-China male to use the coming season. Not so many, but I never raised a better lot. Prices way down low. M. F. Tatman, Rossville, Kas.

TWELVE POLAND-CHINA BOARS AT \$12 EACH. They are 5 months old and Wilkes bred and choice boars, out of the Standard herd. I wish to close out at once my surplus males, hence the low price. A big bargain to the buyer. Address L. Nation, Hutchinson, Kas.

TREES AND PLANTS.—The Vinland Nursery will make low prices for fall and spring trade. Address W. E. Barnes, Vinland, Douglas Co., Kas.

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

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

FOR SALE OR TRADE.—One hundred and sixty acre farm in Graham county, Kansas. Nice, smooth land. No incumbrance. Also 160 acre farm in Scott county, Kansas. Smooth land. No incumbrance. I will sell cheap. Address Thomas Brown, Box 55, Palmer, Kas.

MOESER ICE AND COLD STORAGE CO.—Topeka, have just completed their new cold storage building, on the latest modern plan, and now have the best facilities for storing all kinds of fruits, butter, eggs, etc. Railroad switch to storage building. Car-load lots unloaded free of charge. Write for prices.

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

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

WANTED.—Buyers for Large English Berkshire gilts, bred or ready to breed to son of imported boar. Bargains! O. P. Updegraff, North Topeka, Kas.

FOR SALE.—Farms in Morris, Osage, Lyon, Bourbon, Cherokee, Labette, Neosho, Anderson, Montgomery, Coffey, Woodson and many other counties for sale on eight years' time. No interest asked or added in. Write for new circulars with descriptions and prices. Hal W. Nelswanger & Co., Topeka, Kas.

SPECIAL WANT COLUMN--CONTINUED.

ALFALFA SEED.—Crop of 1896. Pure and fresh. Write for prices. McBeth & Kinulson, Garden City, Kas.

TEN YOUNG SHORT-HORN BULLS FOR SALE. by Wm. H. Ranson, Walnut Hill Stock Farm, North Wichita, Kas. Twenty-five years experience in breeding and handling Short-horns. Write.

SHAWNEE COUNTY CIDER MILL.—Bring your apples to my cider mill, three miles west of Kansas Ave., on Sixth street road. My mill will be in operation every Tuesday, Thursday and Saturday till November. Henry McAfee Topeka.

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

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

FARM FOR SALE.—A good Arkansas valley farm, close to Larned. Well improved, large frame house and barn, granary, fencing, etc.; close to school; two railroads in sight. Price \$10 per acre, payments to suit. A. H. Duff, Larned, Kas.

THE STRAY LIST.

FOR WEEK ENDING SEPT. 24, 1896.

Osage county—E. C. Murphy, clerk.

FILLY.—Taken up by A. F. Kitchen, in Fairfax tp. (P. O. Scranton), August 10, 1896, one brown filly, 3 years old, no marks or brands; valued at \$15.

Nemaha county—F. M. Hartman, clerk.

MARE.—Taken up by Michael Malone, near Goffs, August 29, 1896, one brown mare, about 7 years old, wire cut on left shoulder; valued at \$10.

Cherokee county—T. W. Thomason, clerk.

HORSE.—Taken up by F. Middleton, in Shawnee tp., one bay horse, about 10 years old, fourteen hands high, weight about 900 pounds.

MARE.—Taken up by C. T. Obyrne, in Shawnee tp., one roan mare, fourteen hands high, rupture on belly.

Labette county—J. F. Thompson, clerk.

MULE.—Taken up by E. J. Kinzer, in Mt. Pleasant tp., near Altamont, September 1, 1896, one dark bay horse mule, fourteen hands high, about 7 years old.

MULE.—By same, one bay mare mule, fourteen hands high, about 7 years old.

Shawnee county—Chas. T. McCabe, clerk.

STEER.—Taken up by W. E. Tallafarro, in Mission tp., (P. O. Wanamaker), one two-year-old red and white steer.

LIVE STOCK AUCTIONEERS.

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

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

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

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The Prize-winning Herd of the Great West. Seven prizes at the World's Fair; eleven firsts at the Kansas District fair, 1893; twelve firsts at Kansas State fair, 1894; ten first and seven second at Kansas State fair, 1895. The home of the greatest breeding and prize-winning boars in the West, such as Banner Boy 2841, Black Joe 28608, World Beater and King Hadley. For sale an extra choice lot of richly-bred, well-marked pigs by these noted sires and out of thirty-five extra large, richly bred sows. Inspection or correspondence invited.

ELM BEACH FARM POLAND-CHINA SWINE

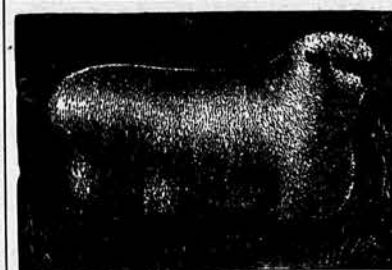
The home of the great breeding boar, SIR CHARLES CORWIN 33095. Our 1896 crop of pigs are by six different boars and out of fashionably bred sows, including such grand individuals as the prize-winning \$500 Lady Longfellow 34099 (S.), that has eight pigs by the prize boar, King Hadley. STOCK FOR SALE at all times and at very reasonable prices. We also breed Short-horn cattle. Write or come and see us.

IRWIN & DUNCAN, Wichita, Sedgwick Co., Kas.

Rose Registered Jersey Cattle and Poland-China Swine

are unrivalled. JERSEYS are rich in the blood of Coomassie and Stoke Pogis. Service bull, Calvin S. Brice 37820—grandson of Pedro and Marjoram 2d—won first premium New Jersey State fair, 1894, when a calf. Herd boars fashionably bred and high-class individuals. Head herd boar Rosewood Medium by Woodburn Medium, he by Happy Medium; dam Fantasy by One Price. Assisted by Tecumseh the Great by Chief Tecumseh 2d; dam Moss Wilkes by Geo. Wilkes. Second assistant Domino by What's Wanted Jr.; dam Bonnie Z. by Gold Coin, he by Short Stop. Domino won first, pig under 6 months, Nebraska State fair, 1895. Our SILVER WYANDOTTES are high scorers. We have the best equipped dairy farm and most complete breeding establishment in northern Kansas. Farm in Republic county, near Nebraska State line. Take U. P. or Rock Island railroad to Belleville, or write.

JOHN R. TOLFORD, Manager, Chester, Neb.



SHROPSHIRE RAMS!

A choice lot of yearling and two-year-old rams, sired by Rect-r 94 and Grand Delight 2d and other noted rams, and a grand lot of imported and American-bred ewes. Prices in keeping with the hard times and the quality.

KIRKPATRICK & SON,
Connors, Wyandotte Co., Kas.

PUBLIC SALE!

HEREFORDS!

INDEPENDENCE, MO., OCTOBER 23, 1896.

25 BULLS AND 50 HEIFERS.

Choice selections from our herds that number over 600 head of pure-bred Herefords. For catalogues and other information respecting this sale, address

GUDGELL & SIMPSON, Independence, Mo.
JAS. A. FUNKHOUSER, Plattsburg, Mo.

SEVENTY-FIVE HEAD.

SEVENTY-FIVE HEAD.

SECOND ANNUAL

Public Sale of Poland-China Hogs!

—TO BE HELD AT—

RICHMOND, FRANKLIN CO., KAS., FRIDAY, OCTOBER 30, 1896.

The offering is by far the best I have ever made, and will comprise the herd boars. Upright Wilkes 13246, J. H. Sanders Jr. 13729 and Medium Pride, twenty sows bred to my herd boars, also about fifty spring pigs of both sexes, splendid individuals and of the choicest breeding.

TERMS:—A credit of six months at 8 per cent. will be given. Sale at 1 p. m. Free entertainment and transportation furnished at Richmond. Come and bring your friends. Spread the news.

Col. J. W. SPARKS, Auctioneer.

J. R. KILLOUGH & SONS, Richmond, Kansas.

There Is No Doubt About the MERIT of DEHORNING. It cuts both ways, does not crush. One clip and the horns are off close. Write for circular. A. C. BROSIUS, Cochranville, Pa.



WILD TOM 51592.

Sweepstakes bull Wild Tom 51592. Weight when thirty-four months old 2,205 pounds in show condition. He is the best living son of Beau Real 11055. Dam Wild Mary 21238. Winnings:—Iowa State Fair, 1895, first in class, first in special, first in sweepstakes, and Silver Medal; Kansas State Fair, first in class, first and special at head of herd, first bull and four of his get.

FARM—Two and a half miles northwest of city. We furnish transportation to and from the farm if notified.

SUNNY SLOPE FARM

♦♦♦♦♦ EMPORIA, KANSAS, ♦♦♦♦♦

Hereford Cattle Headquarters

Sunny Slope Farm is one of the largest breeding establishments in the United States. Three sweepstakes bulls in service—Wild Tom 51592, Climax 60942, Archibald VI. 60921, also the great breeding bull, Archibald V. 54433, who was the sire of two sweepstakes animals (Archibald VI., sweepstakes under one year of age, and Miss Wellington 5th, sweepstakes heifer over all beef breeds when twelve months and twenty days old. We have thirteen serviceable bulls for sale, ranging from eight to twenty months old. We also have forty bulls for sale, ranging from five to eight months old. Also a choice lot of heifers and cows. We combine the blood of Anxiety, Lord Wilton and Grove 3d. Breeders are invited to inspect our herd.

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