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TOPEKA, KANSAS, THURSDAY, SEPTEMBER 18, 1902.

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KANSAS FARMER.

Established in 1863.

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I. D. Graham......Associate Editor
H. A. Hrath......Advertising Manager

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ADVERTISING RATES.

Display advertising, 15 cents per line, agate (fourteen lines to the inch). Continuous orders, run of the paper, \$1.54 per inch per week.

Special reading notices, 35 cents per line.

Business cards or miscellaneous advertisements will be received from reliable advertisers at the rate of \$5.00 per agate line for one year.

Annual cards in the Breeders' Directory, consisting of four lines or less, for \$16.00 per year, including a copy of the Kansas Farmer free. Special rates for displayed live stock advertising.

Special Want Column advertisements, 10 cents per line of seven words per week. Cash with the order. Electros must have metal base.

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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

well known to the publishers, or whom seem ces 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. 116 West Sixth Ave., Topeka, Kans.

In renewing for the Kansas Farmer every old subscriber is authorized to include a new subscription with his own at the same price as if only his own were sent. One dollar pays for a renewal for one year or for a renewal and a new subscriber, each for one

Ever since the middle-aged man of today was a small boy there have been periodical reports of the advent of the successful milking-machine. This time it is stated that the machine is a real success and imitates the calf so much better than can be done by hand as to deceive the very cows themselves if such were possible. The advent of such a machine would revolutionize dairying to a greater extent than the reaper revolutionized wheat-growing.

The situation as to meats is well shown in a current report of the United States Treasury Bureau of Statistics. The report states that for seven months ending with July, 1902, the receipts of live stock at the five markets of Chicago, Kansas City, Omaha, St. Louis, and St. Joseph reached a total of 34. 222,094 head, in contrast with 35,323,972 head for the corresponding period of 1901. There is a difference of 1,101,-878 head to be supplied before the receipts of the current year shall have equalled those of last year. Analysis of stocks of cut meats at the five markets of Chicago, Kansas City, Omaha, St. Joseph, and Milwaukee show that the corresponding date of 1901 the com-bined stock consisted of 279,801,345 pounds.

IMPORTANT EXPERIMENTS WITH ALFALFA.

The Illinois Experiment Station has made some exceptionally important ex-periments with alfalfa and has doubtless determined a practicable method of overcoming the deficiency in Illi-nois conditions. In much of that State as in some others and in sections of some of the best alfalfa-producing States the plants turn yellow after at-taining a height of a few inches. Such plants are apt to perish during the first winter even if not smothered by weeds during the late summer and fall. The yellow appearance indicates deficiency yellow appearance indicates deficiency of nitrogen. A generation ago the direction of the agricultural chemist would have been to apply some kind of nitrogenous fertilizer. While such advice might not have been bad, but might have resulted favorably, the Illinois Experiment Station has shown that under proper treatment the alfalfa may be enabled to, at once, begin the appro-priation to its uses of the nitrogen of the atmosphere, thus supplying its own needs and enriching the soil upon which it grows.

In these experiments, which will not be described in all details here, a plot of alfalfa was sown on land to which no fertilizer had been applied and a corresponding plot was sown on land to which had been applied soil taken from an old alfalfa field in Kansas. This Kansas soil was supposed to be well charged with the alfalfa bacteria, the organism which enables the alfalfa to appropriate nitrogen from the air. The effect on the crop cut in May, 1902, was that the untreated soil produced 1,180 pounds of dry matter or, say, 1,300 pounds of hay, per acre, while the soil inoculated from the Kansas alfalfa field produced 2,300 pounds of dry matter, or, say, 2,550 pounds of hay per acre.

The record of the experiments shows that the application of fertilizers helped in case of both the uninoculated and the inoculated soil but no king of fertilizer on uninoculated soil produced a yield equal to that on the unfertilized but inoculated soil. Inoculation worked well on soil treated to a dressing of lime. Indeed, indications are that the lime favored the development of the alfalfa bacteria.

An important fact was noted in the spread of the bacteria from the inoculated soil to other parts of the field.
This is believed to have resulted from washing of the rains and from the action of the hayrake.

It will be well for farmers anywhere who have difficulty in producing vigorous alfalfa to try the inoculation plan.

OBSERVATIONS ON LAST WEEK'S EXPOSITION.

The magnificent attendance at the live-stock exposition, held at Topeka last week, illustrates the demand of humanity for a play spell occasionally. Who were all these people, and why were they there?

As the writer looked over the throng he tried to classify them. As always the races brought together the densest crowds. Among those most interested were, of course, the owners of the horses. Next came those who were betting heavily. But these two classes constituted but a very small fraction of st. Joseph, and Milwaukee show that on July 31 of the current year there who were wagering a dollar or so on a were on hand 209,094,087 pounds. On favorite horse "just to take an interest" of small transactions. the people. More numerous were those

in the outcome." These were generally accompanied by their lady friends and the wagers were passed over at the conclusion of the race without the intervention of a stake-holder. But the great majority of the onlookers were there simply to see—and be seen. They like good horses and they like to see them They like a contest of excellence, especially a contest in which the outcome is seen without serious effort.

Away from the speed-ring the highly bred animals were more critically surveyed by persons who were themselves interested in breeding. The breeder whose skill and care had produced a herd of superior excellence, was benefited by comparing his results with the results of his peers in breeding. Not the least interested observer of these animals was the less conspicuous breeder, the man who was at the exposition to learn from his elders, perhaps to se-lect a type for his ideal, not unlikely to select an animal to head his herd or to strengthen it in some desirable characteristic. The prize money won is but a minor part of the advantage the exposition offers to the breeder. It is an indicental that helps pay expenses.

"Side attractions" will probably always accompany important expositions. Such of these as are clean are unobjectionable except that they usually de-liver very little compared with the rep-resentations and with the price charged. The questionable shows should be excluded. The gambling outfits and the dispensers of intoxicants should not be tolerated. While a great many people will attend a fair shutting their eyes to degrading influences if they are to degrading influences if they are pre-sent, there is a sort of mystic under-standing among the farmers that, until and unless a fair shall be known to be free from these influences, it can not have their countenance or their money. It is to the credit of the president and other officers of last week's exposition that they made it a matter of personal concern to drive out a lot of malefac-tors who had slipped in under various guises. A still cleaner sweep would have met the hearty approval of a large and influential element.

It is to be hoped that with the encouragement of this year's success the exposition company will be able to arrange for a general agricultural and live-stock exposition, in which will be shown every interest connected with Kansas farming.

PROPOSED POSTAL CURRENCY.

With singular unanimity the plan proposed for the issuance of "post check currency" has been endorsed by the people whose business transactions call for a safe, convenient, and inexpensive means of sending sums of money varying from 25 cents to \$5. This plan con-templates series of Government notes similar to and taking the place of a portion of the greenbacks. These notes are to have all the attributes of greenback money except that they may, if desired by the holder, be made payable to some one person by writing his name in a suitable blank and affixing and canceling a postage stamp. The paper money is in this way converted into a government check in favor of the payee and will be redeemed by any postmaster on presentation by the person to whom payable.

The plan is so simple, so easily put into operation, and fills such a manifest want that it ought to commend itself

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A SUCCESSFUL STATE EXPOSI-TION.

The first annual event of the Kansas peka last week, was an all-around suc-cessful affair financially and other-wise, and the management deserve much credit for the showing made, especially in view of the short time, about six weeks, for preparation.

The old State Fair grounds were utilized, but as most of the old buildings had been burned it was necessary to prepare everything new in order to accommodate the exhibitors this year, which included a new grand stand for the races. Every exhibitor was com-fortably accommodated and all purses and premiums were promptly written as the animals were let from the ring, This was something of an innovation, and was appreciated by the exhibitors.

There were no more interested or better pleased spectators at the fair than Secretary Coburn, of the State Board of Agriculture. He is praiseful of the tireless energy and good work done by the fair officers, and marvels at the results they have accomplished

in so short a time, for which they should nave much credit. The secre-tary thinks the display of live-stock and its high quality in each department are something every Kansan may well be proud of, including as it has herds of the very best, that the general public have not before known were in the State, and containing numerous individuals as good as any seen at some of the great National expositions.

The exposition company did not attempt a general fair owing to the lack of time and suitable accommodations, but the exhibition was confined to a general live-stock display of breeding animals and a complete meeting of speed horses, and everything consid-ered, these leading features were the equal in quality—if not in numbers, of any of the established State fairs held

in the West this season.

The management of the Kansas State
Exposition Company have demonstrated to the State that it is properly equipped to hold and manage a much more complete exposition which will make a representative display of all Kansas industrial resources, and in view of the general interest manifested in this first event, a State exposition should be made a permanent affair, and the next Legislature should provide for the same in a liberal manner similar to that enjoyed by other Western States. What will Kansas do about it?

KANSAS FARMER'S NEW WALL

The KANSAS FARMER has arranged with the leading publisher of maps and atlases to prepare especially for us a new Wall Atlas, showing colored reference maps of Kanasas, Oklahoma, Indian Territory, the United States, and the World with the 1900 census.

The size of our new Wall Atlas is 22 by 28 inches. The outside map shows the flags of the United States as well as the flags of all the nations. In addition thereto is given a list of tables, an exhibit of the products and their values of the United States and the World. One of the maps shows all States, Territories and possessions of the greater United States and facts as to their capitals and the first settlements and in relation to their general government, areas, population, and legislature.

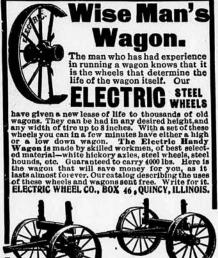
The atlas also gives the growth of our country, showing the population of all towns by States, of 3,000 and over for the census years of 1880, 1890, and

This grand new census edition atlas also shows for every country on earth, the government, chief executive, area in square miles, population, capital and its population. This excellent educational work should be in every home. It sells for one dollar.

Every one of our old subscribers who will send us two new subscribers at 50 cents each for the remainder of the year, will receive a copy of this splendid new Wall Atlas postage pre-

The Hopping Rheumatism.

"Yes," said the old man, "'peared lak he wuz give over inter de han's er satan en satan 'flicted him wid de hoppin' rheumatism. Fust it wuz in one place, en den it wuz another, but he went ter prayin' ter be relieve' of it, en one day, whilst it wuz a hoppin' fum one j'int ter another, it hopped into his wooden leg, an' he pulled off de leg an' th'owed it in de fire, en it en de rheumatism wuz tee-totally consumed."—Atlanta Constitu-



ELECTRIC



Catalogue No. 71 now on the press, the finest catalogue ever published; 80 buyers have worked for months collecting the goods described in this book. Printing and binding are by the Lakeside Press; engravings by Osgood; colored inserts by the American Colortype Co.; cover design by the well-known artist, Ike Morgan—1080 pages; 70,000 quotations; 17,000 illustrations. 15c. and this catalogue is yours.

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Montgomery Ward & Company, Chicago

The Presidency of the Agricultural College.

EDITOR KANSAS FARMER:—In the issue of the Topeka Capital of September 3 is an article headed "Agricultural Work Is Done," etc., which purports to be an "accurate account" of how Nichols was elected president of how Nich-ols was elected president of the Kansas State Agricultural College, and also a defense by "a college man" of Nichols' conduct in relation to agricultural edu-cation in that school. In regard to "how Nichols got in" the correspondent glibly quotes from the records of the proceedings of the Board of Regents showing the undisputed fact that Nichols received enough votes and was de-clared elected, and adds, "this ought to fully settle the question of Nichols' elec-tion," apparently oblivious to the fact that the matter was settled irrespective of the correspondent some months prior by the Board of Regents themselves. The correspondent must have been laboring under some sort of hallucination as there has been no imitation that Nichols was not declared elected, but there are many, however, who consider such a consummation as having been a grievous blunder.

It is not so much now a matter of how he was elected, as why. What did Nichols ever do to warrant his sudden elevation from an obscure place in the faculty to its head, or to demonstrate his fitness for the presidency of an institution which should have at its head the strongest, ablest man available?
Nichols, before his elevation, was placed nineteenth, or nearly the bottom, in the published official list of those constituting the faculty of the college, an unknown professor of physics, but as the result of political changes he see as the result of political changes he secured his present position with nearly a doubled salary. His individual worth to the college is no more than before, if as much, as he was advanced over the heads of his superiors in the faculty—which begets more or less dissat-isfaction among those in that body. No one complains of the amount of the salary if given for good value, and for that matter \$5,000 would not be too much for a \$5,000 man, but it is poor business policy, if nothing worse, to squander \$3,300 on a \$1,000 man, and in this instance, the \$1,000 man, after becoming stance, the \$1,000 man, after becoming president, by his own recommendation had his salary raised \$400 per year and is now drawing more money in that believes for a moment that Nichols by position than any of his predecessors— any possibility fills these requirements. conspicuously among whom were the illustrious John A. Anderson and the learned scholar, Geo. T. Fairchild— striking contrasts to the present incumbent.

According to the correspondent, "a college man," by innuendo at least, would have his readers infer that it is owing to Nichols' efforts that the agricultural department of the college is now receiving a larger proportion of the funds than heretofore. But what has been done was not accomplished through his efforts, but in spite of his opposition, sometimes displayed openly but in the main covertly, where the records would not show.

For the third time—an honor probably never conferred on any other Kansan—Mr. Coburn was appointed a regent of the college in February, 1901, being chosen as the board's vice presi-

regent and reelected president. When he again assumed the duties of regent in 1901, his efforts for a larger recognition of agriculture and animal hus-bandry began. His strenuous endeav-ors to have these branches given a more generous share bore fruit in spite of Nichols' stubborn antagonism, as shown by the Capital correspondent, who apparently wishes to have it ap-pear that Nichols was responsible for the increased appropriations from the college funds for agriculture and should be given the credit for something with which he had nothing to do, expect perhaps to hinder. Upon further investigation it may be found that Nichols had little to do with any of the appropria-tions except possibly that pertaining to the increase of his salary.

As a matter of fact and record, the increased appropriation for the agricultural department is largely due to Mr. Coburn's unremitting efforts, backed by the progressive farmers of the State, but Nichols, seeing the handwriting on the wall and fearing for his job, now diplomatically professes to be the especial champion of agriculture, and, in fact, the whole thing.

It seems that the correspondent en-tirely overlooked the main points in the case, viz., that Nichols, who is a professor of physics, is without the elements of leadership or executive ability, lacking in sympathy for what should be the dominant features of the school, and unable to of the school, and unable to comprehend the purposes for which it was established, besides being devoured with jealousy of his colleagues who show any capacity, and a disposition to minimize the agricultural depart-ment, and humiliate every capable man

connected with it. It is difficult to comprehend why the regents, save one, would unanimously veto a resolution like that introduced by Coburn, wherein a committee was authorized to "search for, find, and recommend a suitable, available man for president of the Kansas State Agricultural College, who must be a Christian gentleman of unquestioned high character, strong executive ability, an edu-cator familiar and heartily in sympathy with agriculture, agricultural education, and the larger purposes for which agricultural colleges were organized and endowed." No one who knows the man Is the best too good for Kansas? If not, why not have the best instead of mediocrity? It is, too, a remarkable circumstance that the suggestion from one of the college regents or from the State's agricultural journal that the agricultural college should be strong in its agricultural work and have a strong, broad man at its head should excite a fire of acrimonious criticism instead of robust support from those who outwardly profess to be its true friends.

Mr. Coburn believes he is right, knows wherein the trouble lies, and does not lack the courage of his convictions, and the overwhelming sentiment of those who support the college is with him. He was familiar with the institu-tion when some of his present-day critics were in their swaddling clothes, and others did not know of its existence. The Kansas Farmer is standing mandent; the first time (in 1882) he was made its president, being reappointed fully by the college and its objects, and

by so doing will add to rather than detract from its popularity. Shawnee County. FARMER.

Official Call for Irrigation Congress.

The Tenth National Irrigation Congress will be held at Colorado Springs, Col., October 6 to 9, 1902. We shall celebrate a great victory, but we must consider the new responsibility placed upon the West by the National Irrigation Act, under the provisions of which the proceeds from public lands will hereafter be devoted to the reclamation of the arid lands in the sixteen States and Territories affected, viz: Arizona, California, Colorado, Idaho, Kansas, Montana, Nebraska, Nevada, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington and Wyoming.

The importance of this great act of constructive legislation—secured by the united action of the friends of Na-tional irrigation regardless of politics is not yet fully appreciated, even in the States most directly concerned. An entire day of the congress will be devoted to the National irrigation act—its op-eration and possibilities, and leading irrigation experts and business men of the country will be in attendance and take part in the discussions.

The American Forestry Association will meet with the National Irrigation Congress, and forestry will be given proper attention.
Colonization, so important to the

Western States, and heretofore practically neglected at Western conventions, will be handled vigorously.

Harmony in the West must be secured if we are to receive the greatest benefits from the National irrigation

A magnificent program for the congress is assured. Local arrangements for the entertainment of delegates will be complete and satisfactory. Favorable railroad rates have been arranged.

Newspapers of the country are urged to give publicity to this call, and to keep before their readers the importance of the congress. Governors of States, mayors of cities and officers of the organizations entitled to appoint delegates, are urged to act promptly, and to select men who are enthusiastic for Western development.

congress will be: The governor of each State and Territory to appoint 20 : The governor of each state and Territory to appoint 26 delegates; the mayor of each city of less than 25,000 population, 2; the mayor of each city of more than 25,000 population, 4; each board of county commissioners, 2; each chamber of commerce, commercial club, or real estate exchange 2; each organized irritate exchange, 2; each organized irrigation, agricultural, and live-stock association, 2; each society of engineers, 2; each irrigation company and agricultural college, 2.

The following are delegates by virture of their respective offices: The duly accredited representative of any foreign nation or colony; the governor of any State or Territory; any member of the United States Senate and House of Representatives; member of any State or Territorial Commission; all members in good standing of the Na-

tional Irrigation Association. BY ORDER EXECUTIVE COMMITTEE,

Agricultural Matters.

More Experience With Emmer.

EDITOR KANSAS FARMER: -I notice in the issue of August 21, Judge Broder-ick's experience with emmer. I was very glad to see it as I had been looking several weeks for a report on raising emmer.

I squandered a \$5 bill myself last spring so as to be satisfied as to what emmer would do in our neighborhood and it was the most complete failure I ever saw.

I gave it a good piece of ground, fall plowed, put in fine shape, and sowed the last days of March with a Hoosier press drill, and it all came up fine, but it never reached one foot in height. The chinch-bugs ate it up as there is no other field to attract the bugs within a quarter of a mile. It was recommended to me to be too rank a grower for the

bugs, but it did not prove to be so.

I write this so that brother farmers may know both sides of the question and have a chance to benefit by my ex-perience. GEO. H. SWITZER. perience. Chanute, Neosho County.

When to Sow Alfalfa.

EDITOR KANSAS FARMER: -- As it is of interest to many of your readers to know how late in the season it is ad-visable to sow alfalfa, will you permit me to give my experience? Here in Meade County we are in the fourth county east from the southwest corner of the State at an altitude of 2,500 feet in the valleys. Here frosts occur earlier in autumn and later in spring than in lower altitudes and as a usual thing we have little rain from August to April, making fall seeding of alfalfa to April, making fall seeding of altaira as a rule uncertain in this portion of the State. Hence, the general practice of spring seeding. On September 10, 1900, there fell a rain here of three inches. Having twenty-five acres in fine condition for seeding I proceeded to sow it to alfalfa as soon after the rain as the condition of the ground would permit, which allowed me to finish seed-ing on the 15th. The alfalfa came up soon, made a fine growth in the fall, remained green until late, none was killed by frosts or winter freezing and it made one cutting of hay and a seed crop in 1901 besides a lot of good fall pasture. From the result of this experiment, if I lived in the eastern end of the State, I would not hesitate to sow as late as October 1 if conditions of moisture were favorable. There is no doubt but that fall seeding is best in the eastern portions of the State. It is also best here when the ground is sufficiently wet. If you are ready to sow alfalfa and your ground is ready if it is springtime sow it, if it is autumn sow it, but in either case don't fail to sow it. Meade, Meade County. G. B. ALLEN.

A Question of Cultivation.

EDITOR KANSAS FARMER:-I am glad you raise the question in your paper regarding the cultivation of corn after it is laid by or after it is too high to be worked by the ordinary two-horse cultivator. A good many of us have had to go after this thing unaided and put on our thinking caps and dig it out as best we could no matter how crude our plans and work. The farmers of Kaisas need instruction along these lines so as to conserve moisture and save their corn crop of a dry year more than they need to know of a new breed of wheat or the number of winnings of a great bull. My own plan, in lieu of a better, is to cultivate corn as many times as possible both ways with twohorse eagle claws cultivator. Then go into the field with a one-horse fiveshovel cultivator that is used by gardeners a good deal. It costs but \$3.50; has a lever for making it rower while working, as the rows may need. I hitch the children's pony to an old mower wheel, put one of them on him, and they follow this cultivator. It makes the ground very mellow between the rows and comes as near the so-much-talked-of dust mulch as I, with my crude machinery, can get. I would like to see a hundred letters from a hundred farmers in the Kansas Farmer regarding after cultivation of corn.

I see an article on wheat-raising in a late issue of the Kansas Farmer where a resident of Nebraska presumes to instruct Kansas and Oklahoma farmers on Generally speaking, certain lines. have no fault to find with the article. But wherein it seeks to advise farmers to sow Kafir-corn on wheat ground immediately after wheat is removed and as a second crop I am constrained to take issue. It may do on some of our Nebraska bottom lands where the soil has a great depth but for Kansas prairie ers of the fields will learn that such

I have tested it to my sorrow. It is a mighty good way to kill ground but a poor way to build it up. I have never sowed Kafir-corn even for one crop that to the following crop. The yield of hay is great but the cost is great too. If the Kansas farmer will sow cow-peas after his wheat and oats he will be getting his two crops from same land with nearly as much forage in bulk and much better to feed in conjunction with corn. Besides he will be using one of the most highly nitrogenous plants in the world. And we are told that half the nitrogen it has extracted from the air stays in the ground after mowing while the other half goes to the barn to increase the butter yield in the dairy, or to increase the growth of the colt or calf or lamb much as have other feeds. Kafir is all right if you have lots of land and don't care but if you have a small farm and are trying to build it up to a point of highest production then you had best leave it alone as a second crop following wheat especially

FRANK HOOVEB. Columbus, Cherokee County.

Richmond Farmers' Picnic Institute, Held September 4, 1902.

It was a lovely day, clear and cool Owing to the long-continued wet spell farmers were so busy in the hay fields and cutting corn that a great many could not come and many did not come until after dinner. The forenoon was spent in social intercourse and in arranging the exhibits of corn, potatoes, fruit, and vegetables. Prizes offered by the merchants and others brought out a magnificent exhibit.

At noon all present gathered at the seats and arranged tables and such a dinner as only the good wives of Richmond know how to prepare was served in picnic style, to which all did ample

After the remains of the feast had been cleared away Chairman Hargrave called the audience to order. The High School quarter sang America, which was followed by an invocation by Rev. A. C. Edgar, pastor of the Presbyterian Church. .

Mr. C. E. Putnam then read a paper on the Tame Grasses, giving some of his experiences with them, which have been quite extensive as he is a large grower of hay, and now has nearly 1,000 tons of clover and timothy in stack and

Mrs. Henrietta Calvin, of Manhattan then gave one of her splendid practical

talks, especially to the ladies.

Mr. W. K. McCall gave us a few ideas about the benefits of farm telephones, after which Prof. Albert Dickens gave us a general talk on the work of the experiment station, which was of the experiment station, which was very much appreciated.

Following these addresses sports in the way of foot races, a kitchen race, and a corn husking race were enjoyed. All went home well pleased with the picnic and determined to make it an annual event. I must not forget to mention that the picnic was held in Mr. J. F. Glasse's grove just at the north side of town, which is in itself an object lesson. Planted eight years ago with soft maples it was the marvel of all that such a beautiful, shady place could be produced in so short a time. REPORTER.

Lessons of the Drouth of 1901. CHAS. A. BABBIT, HIAWATHA, KANS., BE-FORE THE BROWN COUNTY FARMERS' INSTITUTE, OCTOBER 3, 1901.

[This valuable paper is rather late getting into print, but is better late than never. The editor does not know what it was not furnished with the others for the Brown County Institute edition.]

The principal lesson seems to be hope on, hope ever, our soil can stand

enything.

May 15, a two-inch rain and hail leached and hardened the ground. Then we had dry weather till June 19, when one inch of water fell and disappeared on the state of so rapidly that we cultivated in a few The hot winds soon began to blow down our hopes and blow up the thermometers until by August 8 the most of us were thoroughly discouraged, but next day more than one inch of rain arrived, followed by nearly as

much again on Sunday. The prospects changed wonderfully but the drouth continued four weeks and the early corn seemed to have the only ears in sight. About this time a wild rush was made to buy corn-binders to save the modder. Many began cut-ting corn when the substance in the ear was white water and in the stalk green water. If these shocks are not rotten now many of them can be put on the wagon at one forkful. The own-



feed is not valuable enough to justify the extra expense .

Rains since September 9 have kept the corn too green to cut until the frost on the night of September 17. Rains have since damaged the standing fodder. Where the frost did not hurt the corn part of it is still too green to cut. Soft ears hang by the side of solid ones and they should hang there until they are dead.

The Kansas Experiment Station Report for 1888, page 52, shows that corn cut August 20 in hard dough yielded forty-nine bushels; cut August 24, glazed and firm, fifty-three bushels, and cut September 4, hard, stalks drying, sixty bushels. Practically two tons of fodder in all the cuttings. Experiments in the two following years and the report of the Pennsylvania Station for 1890 confirm the first experiment almost to the letter. I never saw an of-ficial report that was not closely along the same line.

Some folks will learn that the drouth has not been so hard on their corn as a certain highly colored corn-killer which carried a man on a spring seat and followed three horses through their fields day and night before the corn was prepared to die.

The man who was so careless as to have a thin stand of corn is the one who has drawn the lucky number, but he had better mend his ways before next corn-planting time. We never have two such dry years in succession. The corn stalk that was ready to

shoot at the August rain has an ear to show as a trophy. The one that aimed at the September rain has its ears frostbitten. But before next spring the pigs will think those same ears are better than a snow bank. Other things being equal the land that has not been allowed to become bare or hard has raised the best corn and always will. Corn listed on old clover sod appears to be best but some top-planted June 10 looked very fine the day before the frost.

The season has educated our esthetic tastes. The old sway-backed crib used be be an eyesore but if it has been kept full of old corn the sag in the hipped roof is now a line of beauty and a joy to a farmer's credit.

Farm Notes.

N. J. SHEPHERD, ELDON, MO.

Mixed grasses make the most reliable pasture. It takes a healthy tree to produce

good, sound fruit.
Until a steer is 2 years old he should be fed with a view to growth rather

than fatness. Good shelter in winter goes a long way in keeping stock in good condition. In profitable feeding the animal must be well fed from birth to maturity.

There must be growth and gain in flesh to compensate for the labor and the food.

In the keeping of swine a degree of cleanliness is always attended with better health and profit. There is no advantage in allowing

the corn fodder to get too ripe before cutting.
When digging potatoes care should be taken not to allow them to be ex-

posed to the sun too long.

To a certain extent the conditons of soil at time of seeding should determine the amount of seed sown.

Other things being equal that farmer makes the most money whose products are most nearly what the market calls for.

So far as possible, all reasonable care should be taken to store the feed under shelter, even to the fodder. If desirous of having good thrifty

stock, it is necessary to select and mate good parents.

Under most circumstances it is better to wean the colts a little young, than to put it off so late in the fall that there is no grass or green feed.

So far as possible make sure of a good supply of feed. It is poor economy to sell feed in the fall and then be obliged to buy before grass comes the next spring.

It will add much to the comfort of the stock and at the same time be a help in increasing the amount of manure mulch if plenty of bedding is se-

cured and stored under shelter.

Early in the fall is a most favorable time to fatten stock and all that are not to be wintered can be marketed. It is not well to attempt to winter too much stock.

While it is advisable to allow stock the run of the pastures as long as the pasture will permit, it is always best to commence feeding before the stock begin to lose in condition.

After the seeding is finished up some time can always be spent to a good advantage in providing good drainage for the low places in the wheat- and grass-

While it is often an advantage to set out fruit trees in the fall on account of having more time-to do the work, under no condition should the work be done before there has been sufficient frost to thoroughly kill the leaves.

Ration of Corn, Kafir-Corn, and Cotton-Seed Meal for Steers.

D. H. OTIS, KANSAS EXPERIMENT STATION.

W. R. M., Harper, Kans., presents the following proposition: "We intend feeding a bunch of seventy head of two-year-old steers. For feed we have corn and Kafir-corn fodder, prairie hay, Indian corn and Kafir-corn, and we intend buying cotton-seed meal. How shall we mix these feeds?"

As variety is very desirable in a steer's ration our correspondent could feed equal quantities of corn and Kafircorn, both grain and fodder. If prairie hay is as cheap as the fodder it could be used in place of one of the fodders, or it could be given as a third rough-ness to add still greater variety. Give all the roughness that the steers will eat up clean. Prairie hay has a con-stipating effect upon the steers, and if it is found that this effect is too marked it should be withdrawn from the ra-tion. Prairie hay serves an admirable purpose in preparing steers for shipping. Reducing the grain and feeding prairie hay two or three days before shipping tightens up the bowels so as to prevent scouring on the road.

The cotton-seed meal should be introduced into the grain ration very gradually. Commence with about onehalf pound per day per head and in-crease a little each day until the daily allowance amounts to about four pounds per steer. From six weeks to two months should be consumed in getting the steers on full grain feed.

How's This?

We offer One Hundred Dollars Reward for any case of Catarrh that can not be cured by Hall's Catarrh Cure.

F. J. CHENEY & CO., Props., Toledo, O. We, the undersigned, have known F. J. Cheney for the last fifteen years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by their firm.

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Hall's Catarrh Cure is taken internally,
acting directly upon the blood and mucous
surfaces of the system. Price, 75c per bottle. Sold by all Druggists. Testimonials
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free. Hall's Family Pills are the best.

Borticulture.

Cold Storage.

G. L. HOLSINGER, BEFORE THE MISSOURI VALLEY HORTICULTURAL SOCIETY.

Cold storage for the preservation of fruits and vegetables has been employed for many years and when we visit the markets and see the apples, pears, and other fruits and vegetables that are opened up, it seems that we have discovered the secrets of conserving these and knowing the cost of cold storage per package, the original cost of package and contents at time of packing and their value at time of marketing, the investment of capital in the packing and storing of fruits can be made to appear as a "get rich quick" scheme such as seldom comes to most of us.

In a great many instances such is the case. Oftener, by the time the package has been worker over and decayed fruit thrown out, the advance in price will barely pay for the shrinkage, while in as many cases the loss from lack of care or knowledge of conditions in picking, packing, handling, storing, repacking, temperature, and marketing will leave the investor little but the exper-

Possibly next year he will feel that he knows now what to do and will take advantage of the errors of the year before. He may find conditions just right, and if he succeeds, will be con-fident that he now knows how, only to find later that it was only a lucky guess. If on the second attempt he fails, he may again take advantage of previous failures and eventually by close observation of conditions become fairly suc-

cessful in the line of work.

Cold storage for fruits and vegetables may be said to still be a science rather than an art, for while there are appar-ently many who know how and can give all the information that is necessary the number who can do it, who can actually put fruits and vegetables in cold storage with a certainty of success are

not numerous.

I will assume that the apples have been properly packed, that is, picked at the right time, wormy apples or partially decayed thrown out, and that we have only to do with the storing. The question where shall I store?" is one of most importance. My answer to this would be: If there is a cold storage plant where you may be satisfied that the temperature will be kept constant, this is the place to store. I be it is better to store where the temperature is constant even if several degrees higher than you would prefer, and if you can not be reasonably sure that the temperature will be constant I believe it is as safe to store in cellars and caves, and cheaper.

Most of our cold storages are with-out sufficient refrigerating machinery in the rooms filled with fruits, vege-tables, game, poultry, furs, rugs, etc., and when a breakdown comes, as it will, the machines are unabel to furnish sufficient refrigeration and the temperature will rise. One of our largest cold storage houses in Kansts City that guarantees 33° has been observed to have a temperature of 60°

A large proportion of the storage is handled by the packing houses. If a large number of carcasses are accumulated whether by shortage of cars, or fluctuations in the market, and more refrigeration is needed for these departments than usual, the ammonia or brine is shut off of the storage rooms and given to the packing house product. Or if the cold storage house is handling ice as well, the refrigeration will be cut off of the storage rooms to help out the

In any of these cases the temperature may be caught and be brought down in a day or two but the trouble will have been started.

In the packing house fixed temperatures are required for packing house products and if the temperature specified is not reached at the hour, there is "something doing" between the superintendent and refrigeration department in which the latter comes out second best. They watch their temperatures every hour and know from years of experience that constant temperatures are necessary, yet their product is kept days where apples have to be kept months.

Another thing that is of considerable importance in the selection of a storage plant is to ascertain whether or not the system is the closed coil or open pan or sheet system of refrigeration, though this is not of so much importance as

constant temperatures. In the earlier days of refrigeration blocks of ice were placed in the cooling chamber and as hot air will rise the air from around the article to be chilled prices during the winter, and was

would be taken up through the hot air duct while that around the ice having been cooled falls through the cold air duct and so keeps up a circulation. The principle is the same to-day but instead of ice ammonia or chilled brine is used. If the direct expansion of ammonia or brine in closed coils is used the air will be drier and consequently better. The other system used is to have the brine emptied into pans, the edges of which are cut like saw teeth the brine falling from one pan to another and so giving a large surface of brine to chill the air, or by dripping over a large area of cloth answer the same purpose. These open systems, however, do little toward reducing the amount of moisture.

Of late many of the cold storage plants are cooling the air in a separate chamber, afterwards drying it and then by a system of fans blow it through the cooling rooms. This is, I think, best of all the systems if care is taken not to get the air too dry as fruits will shrivel if such is the case.

The variety of apples to be stored must of course receive careful attention as with the best of care some varieties do not do well in cold storage. There is a great difference in the keeping qual-ities of apples. Such as Ben Davis, Gano, Willow Twig, Winesap, Romanite, Rome Beauty do best while apples like York Imperial and Smith Cider gener-ally scald badly.

Few of our summer and fall varieties of apples will keep for a long period. Huntsman do not do well generally if kept beyond Thanksgiving. This is also true of Bellflower. Jonathan, however, can be kept in good condition until March, Maiden Blush until October or November.

There are of course occasions when they will be found later than the times mentioned and at other times they will have to be disposed of earlier.

In storing summer and fall varieties I believe it will always be found advisable to put apples in a cooling room of say 50° and allow them to cool down there, then remove them to another room and keep them 32° or 33°

Apples seem to do better in barrels than in any other package.. If it is proposed to sell in boxes, the apples should be stored in barrels and afterwards repacked in boxes.

Pears will keep in cold storage about the same as apples but as most of the pears grown here are Duchess or Kieffer it is not advisable to store them as the best market comes in the fall.

There are not a great many vege-tables that do well in cold storage. Cabbage and celery do well for a short while but most vegetables can only be held for a very few days, and generally decay very rapidly when brought out.

From the tone of this paper in the beginning, one would be justified in supposing that I am pessimistic with regard to cold storage for fruits. I am not but I believe we will only be successful when we thoroughly know the fruit, when to pick, varieties to store, how to pack, where to store, time to sell, and the markets in which to dispose of them, and I believe there are very few of us who know these things

The Results of Cold Storage.

In discussing the prevailing high prices of food supplies, a writer in the New York Commercial Advertiser New quotes a wholesale dealer of New York

as saying:
"There is no law of supply and demand to-day, and never again will luxuries be within the reach of those in poor or moderate circumstances as they used to be in the season when the market was glutted. Markets do not get glutted to-day. Why? Because the excess is immediately gobbled up for cold storage to supply the early demand of a future season. Thus prices vary very little throughout the year and last season's food becomes a delicacy when it is placed on your plate in advance of its arrival from the farm, or the field, or the sea. The fish you eat to-day with such gusto may be last year's fish the eggs last year's lay, the beef, squab, chicken, all 12 months old. Thus there is no excess as will make prices go down; no such scarcity as would make prices go up. In times of great production the poor man no better can afford to purchase luxuries or delicacies than he could in times of scarcity."

The extension of cold storage facilities has given the farmers a steady market for their products, and has pre vented the gluts upon which householders in former years depended for a lowering of prices.

Supplies that could formerly be had during the summer months only, can now be purchased all the year round. Poultry, which formerly sold at low



I. W. C. T. Stands for Illinois Wire Cotton Tie, the best tie ever devised. In point of economy has no equal, It combines strength and durability, ease and rapidity of application, and is adapted to any press. No breakage and the wire never slips, hence the greatest density is maintained. Endorsed by Ginners, Compressers and Exporters. Write for circular and prices.

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MILLET CANE CLOVERS TIMOTHY GRASS SEEDS.

SEEDS

'scarce and high' during the warm months, is now placed in cold storage

and brought out as wanted.

However, there is one distinct loss through the cold storage business, and that is the quality of the freshness. Cold storage 'goods' do not retain their fla-vor. The products do not spoil, but they lose their flavor when they are thawed out for market. A fish a year old is not as palatable as a fish just from the nets, and it is now almost impossible to get a fresh fish in the markets. The daily supplies are taken from cold storage and shawed out, while the fishermen systematically take their 'catches' straight to the cold storage warehouses. It would not be 'good business' for the holders of the fish to market the freshly caught product while they have ageing fish in cold stor-age. The directions in the household columns of the newspapers as to the selection of fresh fish are therefore some what amusing to dwellers in cities who have to be content with dull-eyed cold storage 'goods.' "

Potato Rot.

The Vermont Experiment Station offers the following timely suggestions as

The late blight or "rust" which has been so prevalent this year, is caused by a fungus, a kind of mildew, which is carried through the winter in the seed potato and so far as known only in this way. Where such infected pota-toes are planted the fungus develops in the potato shoots and finally causes the bight of the leaves, providing weather conditions are at all favorable. The germs or spores are produced in enormous numbers on these blighting leaves and by these the infection is spread to neighboring plants. Many of the spores fall to the ground also, and invading the tubers, cause the rot. Spraying with Bordeaux mixture kills these spores, and so prevents both the blight the leaves and the rot of the tubers. The plants at the Experiment Station farm, which have been sprayed, are as green and healthy now (September 6) as they were a month ago, whereas the rows in the field left unsprayed, are dead. Many farmers throughout the State have had equally good results from spraying. Where the plants were sprayed litle rot is developing, but in the unprotected fields where the tops have blighted, rot is serious. The question is being asked whether it is better to dig at once in these fields. The Experiment Station officers advise prompt digging. They have not decided this by experiments, however, so are now carrying on some to settle the matter.

Deep Tree Planting.

EDITOR KANSAS FARMER:—Deep planting for trees is best. Leave the ground lowest at the tree, so that the water when it rains will run to the tree in-stead of from it. If it is on a hillside, or where the ground is at all slanting, it is well to make a V on the upper side to direct the water to the tree. It will add very much to the growth of the tree. Henry Fellows.

Wichita, Kans.

These directions must be used modified with intelligent reference to the character of the soil, the amount of rain, etc. The writer hired a professional tree-planter to set a few trees in Topeka last spring. He observed the above directions. The soil is a heavy black loam, on an east slope. One of the trees was set so as to leave a de pression around it about four inches deep. This tree started well, but when the wet weather of the latter part of spring came on, it died. Its malady was "wet feet." But on dry, sandy land, or in localities where there is a minimum of danger of too much moisture, fairly deep planting gives good results.

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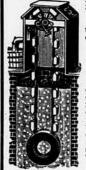
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The Stock Interest.

THOROUGHBRED STOCK SALES.

Dates claimed only for sales which are advertised or are to be advertised in this paper. October 1, 1902—Wm. Plummer, Poland-Chinas, Barclay, Kans. October 7-8, 1902—J. S. McIntosh, Kansas City, Mo.,

October 7-8, 1902—J. S. McInwan, American Shorthorns.
October 13, 1902—Newton Bros., Whiting, Kans., Duroc-Jersey swine.
October 15, 1902—Combination sale of Poland-Chinas at Clay Center, Kans., J. R. Johnson, Manager.
October 18, 1902—J. W. Dawdy, Abingdon, Ill., an D. L. Dawdy, Arrington, Kans., at Galesburg, Ill., Shorthorns.
October 20, 1902—E. E. Axline, Poland-Chinas,

Shorthorns.
October 20, 1902—E. E. Axline, Poland-Chinas, Oak Grove, Mo.
October 21 and 22, 1902—Herefords at Kansas City, Mo., under auspices of American Hereford Cattle Breeders' Association. (Week of American Royal.) October 22-23, 1902—Combination sale of Berkshires, at Kansas City, Mo. (Week of American Royla.) October 23, 1902—J. B. Davis, Duroc-Jersey, Fairview, Kans.

View, Kans. October 20-25, 1902—American Royal Swine sale. Berkshires, and Poland-Chinas, Kansas City Stock Yards.

Berkshires, and Foland-Chinas, Kansas City Stock Yards.
October 31, 1902—J. C. Hall, Hallsville, Boone Co., Mo., at Centralia, Mo., Shorthorns.
November 1, 1902—W. H. Ransom, Wichita, Kans., Shorthorns.
November 1, 1902—H. M. Kirkpatrick, Farm sale of Poland-Chinas, Wolcott, Kans.
November 3, 1902—Peter Blocher, Richland, Shawnee County, Kans., Duroo-Jersey swine.
November 6, 1902—Thos. Andrews & Son, Cambridge, Neb., Shorthorns.
November 7, 1902—Manwaring Bros., Lawrence Kans. Berkshires.
November 10, 1902—Bransteller, Robinson & Wright, Shorthorns, Vandalia, Mo.
November 11, 1902—Thos. Andrews, Cambridge, Neb., Shorthorns and Clydesdales.
November 12, 1902—A. B. & F. A. Heath, and Hon. A. C. Shellenberger, Alma, Neb., 45 Shorthorns.
November 13, 1902—Geo. W. Berry, North Topeka, Mansger. Combination sale of Berkshires. Manhatten, Kans.
November 14, 1902—Purdy Bros, Shorthorns, Harris, Mo.

Mo. November 14, 1902—Harry E. Lunt, Poland-Chinas,

Mo.

November 14, 1902—Harry E. Lunt, Poland-Chinas, Burden, Kans.

November 15, 1902—A. B. Mull, pure-bred Poland-Chinas, Iola, Kans.

November 18-19, 1902—Marshall County Hereford Breeders' Association Sale, Blue Rapids, Kans.

November 19, 1902—Cooper County Shorthorn Breeders, C. P. Tutt, Secretary, Bunceton, Mo.

Cooper County, Mo. Shorthorn Breeders' Association, at Bunceton, Mo., November 19, 1902.

November 20 and 21, 1902—The North Missouri Combination Sale Association, H. J. Hughes, Secretary, Trenton, Mo., Shorthorns and Herefords. University November 22, 1902—Col J. F. True & Son, Newman, Kans., and Preston Wyckoff, Rome, Kans., Shorthorns, at Wellington, Kans.

November 22-29, 1902—W. P. Harned, Vermont, Mo., and F. M. Marshall, Blackwater, Mo., at Kansas City, Mo., Godoy Shorthorns.

December 4 and 5, 1902—Herefords at Chicago, Ill., under auspices of American Hereford Cattle Breeders' Association. (During week of International Cattle Show.)

December 8-9, 1902—J. E. Logan and Benton Gabbert

ers' Association. (Butting R. Logan and Benton Gabbert & Sons, Kansas City, Mo., Herefords. December 16, 1902—Gifford Bros., Manhattan, Kans., Shorthorns.

December 16, 1902—Gifford Bros., Manhattan, Kans., Shorthorns.
December 19, 1902—Hanna & Co., Howard, Kans., Percheron horses, at Kansas City.
January 12-17, 1903—C. W. Armour and Jas. A. Funkhouser. Herefords, at Kansas City, Mo.
January 28-29, 1903—C. A. Jamison, Peoria, Ill., Shorthorns, at Chicago.
February 10, 11 and 12, 1903—J. F. Stodder, George Bothwell and others, Shorthorns; also C. A. Stannard and others, Herfords; Oklahoma City, Oklahoma February 17, 1903—Geo. F. Kellerman, Shorthorns, Kansas City, Mo.
March 3 and 4, 1903—C. H. Garner and M. A. Judy, Aberdeen-Angus cattle, Chicago.

The First Annual State Exposition.

The initial fair under the management of the Kansas State Exposition Company was successful in bringing together a wonderful array of prize-winning stock from other States, as well as our own. Exhibitors were here with prize-winning animals from Ohio, Iowa, Missouri, Nebraska, Colorado, Illinois, and Kansas. While the number was not as large as that shown at some of the long-established State fairs, it was a meeting together of prize-winners in a final contest after their victories at other State fairs.

The only dissatisfaction expressed by the live-stock exhibitors was the classification in the premium list. Some of the beef breeds were given more classes than others. This was occasioned by the great haste in getting out the list this year, and was not intentional to favor one breed more than another. In a general way the premium committee followed the awards given by the Missouri and Nebraska State fairs, which explains the apparent but not intentional favoritism. The management assured the exhibitors that another year all breeds would be placed on an exact par and that no deduction will be made by reason of no competition. This explana-tion is due to those exhibitors who were not fortunate in having the full classification which they deserved.

The Shorthorn cattle were represented by a wonderful array of choice animals from the prize-winning herds of T. K. Tomson & Sons, Dover, Kansas; Ed. Green, Morrison, Colorado; and H. W. McAfee, of Topeka. The Herefords were represented by the Larson Bros., of Brown County, Kans. with two herds of animals that held up the credit of the breed. The Aberdeen-Angus made a wonderful showing with large drafts from the herds of Anderson & Finley, of Lake Forest, Ill., and Allendale, Kans., and of Parish & Miller, of Hudson, who are the owners of the largest homebred herd of cattle of this breed in the United States.

I. B. & A. M. Thompson, Nashua, Mo., were here with a strong showing from their herd of 300 head of Galloways and were met in the ring by representatives from the herd of Geo. M. Kellam, Rich-Kans. E. Moore, Cameron, Mo., and C.

F. Stone, of Peabody, Kans., contested for the honors to be given to the Holsteins.

In the Red Poll ring Wilkie Blair, Girard, Kans., a young breeder, contested for honors with the prize-winning herd of J. H. Crowder & Son, Bethany, Ill.

The lovers of good horses had a rich

treat in store for them in the inspection of the Shires, Percherons, and Coachers exhibited by Snyder Bros., of Winfield, Kans., the Clydes shown by H. W. McAfee, of Topeka, and the Percherons and Coachers from the barns of McLaughlan Bros., of Columbus, Ohio, and Kansas City, Mo. Perhaps the severest contest in the battle of the breeds was found in the various swine-rings which brought together the prize-winning herds from the State fairs of adjacent States. The details of the awards with the names of the exhibitors follow:

JURY OF AWARDS.

The Kansas State Exposition Company, as well as the exhibitors of fine stock, were highly pleased with the work of the expert judges who composed the Jury of Awards. Ex-Gov. G. W. Glick, of Atchison, did the heavy work with the beef breeds, placing the ribbons on the Galloway, Aberdeen-Angus, and Shorthorns, except sweepstakes with the latter breed, which Hon. M. A. Householder, of Columbus, Kans., placed; W. H. Steele, of Steele Bros., Belvoir, Kans., made the awards on Hereford cattle in a very satisfactory manner. Prof. D. H. Otis, of Manhattan, made the awards for Red Polled and Holstein-Friesian cattle. Geo. W. Berry, of Topeka, did all the work in the swine department to the entire satisfaction of all the exhibitors. The awards of premlums for draft and coach horses were properly placed by Dr. George C. Pritchard, of Topeka, while the standard-bred and carriage horses were judged by the famous Missouri auctioneer, Col. R. L. Harriman, of Bunceton. He also started the races with strongest ring of horses in the speed department at any State fair this year. The display of Shropshire sheep was judged by C. F. Stone, Peabody, Kans.

Cattle Department.

SHORTHORNS EXHIBITORS.

H. W. McAfee, Topeka; T. K. Tomson & Sons, Dover, Kans.; Ed. Green, Morrison, Col.

AWARDS.

AWARDS.

Aged bull—First, McAfee on Violet Prince; second, Green on Sittyton Hero 3d. Two-year-old bull—First, Green on Best of All: no second.
Yearling bull—First, Tomson on Daring Knight; second, McAfee on Lord Butterfly. Bull under 1 year—First, Tomson on Belted Knight; second, Green on Young Lad. Aged cow—First, Green on Glenwythan 7th; second, Green on Glenwythan 9th. Two-year-old cow—First, Green on Scottish Belle 5th; second, Green on Louan Cambria 2d.

tish Belle 5th; second, Green on Louan Cambria 2d.
Yearling heifer—First, Tomson on Rose Stearne 6th; second, Tomson on Elderiawn Victoria.
Helfer under 1 year—First, Tomson on 7th Mary of Elderlawn; second, Tomson on Rose Stearne 8th

Rose Stearne 3th. Get of Sire—First, Tomson on get of Gal-lant Knight; second, Green on get of Imp.

lant Knight; second, Green on get of Imp.
Aberdeen.
Produce of cow-First, Green on Imp.
Glenwythan 4th; second, Tomson on Rose
Stearne 2d.
Exhibitors' herd-First, Green on herd
headed by Best of All; second, Green on
herd headed by Sittyton Hero 3d.
Breeders' young herd-First, Tomson on
herd headed by Daring Knight; second,
Green on herd headed by Lancer of Orange.

Sweepstakes—Bull, Tomson on Daring Knight; cow, Tomson on Rose Stearne 6th.

HEREFORDS. EXHIBITORS.

J. A. Larson, Everest, Kans.; L. P. Larson, Powhattan, Kans.
AWARDS. Aged bull-First, J. A. Larson on Hessiod

Two-year-old-bull-First, L. P. Larson on Cavalier 2d. Yearling bull-First, L. P. Larson on De-

Yearing buil-First, L. P Larson on Monarch; second, J. A. Larson on Plain-view Hessiod 13th.

Aged cow-First, J. A. Larson on Louisa; second, L. P. Larson on Augusta.

Two-year-old cow-First, J. A. Larson on Lady

Two-year-old cow-First, J. A. Larson on Miranda 2d; second, L. P. Larson on Lady May.

Yearling heifer-First, J. A. Larson on Esteline; second, L. P. Larson on Estella. Heifer under 1 year-First, J. A. Larson on Catherine; second, L. P. Larson on Corrector's Maid.

Exhibitors' herd-First, J. A. Larson on Exhibitors' herd-First, J. A. Larson on Corrector's Maid.

Corrector's Maid.

Exhibitors' herd—First, J. A. Larson on herd headed by Hesslod 54th; second, L. P. Larson on herd headed by Cavaller.

Sweepstake—Bull, J. A. Larson on Hesslod 54th; cow, J. A. Larson on Estelline. ABERDEEN-ANGUS.

EXHIBITORS Anderson & Finley, Allendale, Kans.; Parish & Miller, Hudson, Kans.

AWARDS.

AWARDS.

Aged bull—First, Anderson & Finley on Conqueror of A; second, Parish & Miller on Pacific.

Yearling bull—First, Parish & Miller on Sunflower Gay Lad; second, Anderson & Finley on Mabmonitor.

Bull under 1 year—First, Parish & Miller on Hale Lad 6th.

Aged cow—First, Anderson & Finley on Coquette 16th; second, Parish & Miller on Lady Tweedmouth.

Lady Tweedmouth. Lady Tweedmouth.

Two-year-old cow—First, Parish & Miller on Chicago Queen; second, Anderson & Finley on Enough 4th.

Yearling heifer—Parish & Miller won

both first and second on Sunflower Sweet
Violet and Sunflower Oneita.
Heifer under 1 year—Parish & Miller on
Sunflower Happy 3d; second, Anderson &
Finley on Banshee.
Exhibitors' herd—First, Anderson & Finley on herd headed by Conqueror of A;
second, Parish & Miller on herd headed by
Hale Lad.
Breeders' young herd—First, Parish &
Miller on herd headed by Sunflower Gay
Lad; second, Anderson & Finley, on herd
headed by Mabmonitor.
Get of sire—First, Parish & Miller on
get of Hale Lad; second, Anderson & Finley on get of Mabmonitor.
Sweepstakes—Bull, Anderson & Finley on
Conqueror of A; cow, Parish & Miller on
Lady Tweedmouth.
GALLOWAYS.

GALLOWAYS. EXHIBITORS.

G. H. Kellam, Richland, Kans.; I. B. and A. M. Thompson, Nashua, Mo. AWARDS.

AWARDS.

Aged bull—First, Thompson on Pride of Goodrich.
Two-year-old bull—First, Thompson on Caleb Miller.
Yearling bull—Thompson first on Dragoon of Wavertree; second on Cress of Nashua.
Bull calf—First, Kellam on Don of Cloverhill; second, Thompson on Confidence of Nashua.
Aged cow—First, Thompson on Highland.

rinil; second, Thompson on Connaence of Nashua.

Aged cow—First, Thompson on Highland Mary and second on Lottie 2d.

Two-year-old cow—First, Kellam on Isabel; second, Thompson on Perfection. Yearling heifer—Thompson first on Coronation, second on Flower.

Heifer calf—First, Thompson on Daisy Dean, second on Lady Queen.

Exhibitors' herd—Thompson first on herd sired by Pride of Goodrich, and second on herd sired by Caleb Miller.

Breeders' young herd—First, Thompson on herd sired by Dragoon of Wavertree.

Produce of cow—First, Thompson on Lottle.

Get of sire—First, Thompson on Pride of Goodrich. oourich.
Sweepstakes—Bull, Thompson's Dragoon
Wavertree; cow, Kellam's Isabel.
RED POLLS.

EXHIBITORS.

J. H. Crowder & Son, Bethany, Ill.; Wilkie Blair, Girard, Kans.

AWARDS.

AWARDS.

Aged bull—First, Crowder on Josephus.
Two-year-old bull—First, Crowder on Falstaff; second, Blair on Legal Tender.
Yearling bull—First, Crowder on Lew
Wallace; second, Blair on Sovereign.
Under 1 year—First and second, Crowder.
Aged cow—First, Crowder on Supremacy;
second, Blair on Bride.
Two-year-old cow—First, Crowder on Gay
4th; second, Blair on Beulah Rose.
Yearling heifer—First and second, Crowder.

der. Heifer calf-First, Crowder; second, Blair.

Aged herd—First, Crowder with Faistaff at head; second, Crowder with Josephus at

head.

Breeders' young herd—First, Crowder with Lew Wallace at head.

Get of sire—First, Crowder on get of Jo-

Get of sire—First, Crowder on get of essephus,
Produce of cow—First, Crowder on produce of Supremacy.
Sweepstakes—Crowder on Josephus; cow.
Crowder on Gay 4th.

HOLSTEINS EXHIBITORS.

M. E. Moore, Cameron, Mo.; C. F. Stone, Peabody, Kans.

AWARDS.

Aged bull-First, Stone on Gerben's Mechtchilde Prince; second, Moore on Mis-sourt's Chief. Yearling bull-Second, Moore on Sir Ger-

ben.
Bull calf—First and second, Moore.
Aged cow—First, Moore on Zarina Mechphilde; second, Stone on Simkey's Beauty.
Two-year-old cow and yearling heifer—First, Moore; second, Stone, in each class.
Heifer—First, Stone; second, Moore.
Exhibitors' herd—First, Moore; second,

Stone.

Breeders' young herd—First, Moore; second, Stone.
Sweepstakes—Bull, Stone on Gerben's Mechtchilde Prince; cow, Moore on Zarina Mechpanue.

Swine Department.

BERKSHIRES. EXHIBITORS.

J. H. Blodgett, Beatrice, Neb.; Charles Blodgett, Beatrice, Neb.; Ed. Green, Morri-son, Col.

son, Col.

AWARDS.

Aged boar—First, Blodgett on Nebraska
Premier; second, Green on Condon's Prize
Winner.

Yearling Boar—First, Green on Elma's
Lee; second, Blodgett, on unnamed boar.
Boar, 6 months old and under 1 year—
First, Blodgett; second, Charles Blodgett.
Boar under 6 months—First, Blodgett;
second, Green. Boar under 6 months—First, Blodges second, Green. Aged sow—First and second, Blodgett.

Yearling sow—First and second, Blodgett. Sow, 6 months and under 1 year—First, Green.

under 6 months-First and second, Get of sire—First, Blodgett; second, Charles Blodgett. Produce of sow—First, Blodgett; second,

Produce of Sc.,
Green.
Aged herd—First, Blodgett.
Breeders' young herd—First, Green.
Sweepstakes—Bcar, Blodgett on Nebraska
Premier; sow, Blodgett on Premier Prin-

EXHIBITORS.

Gilbert Van Patten, Sutton, Neb.; Mc-Farland Bros., Beaman, Mo.; Harry Sneed, Smithton, Mo.; George Briggs & Son, Clay Center, Neb.; Peter Blocher, Richland, Kans.; H. H. Hague & Son, Walton, Kans. AWARDS.

AWARDS.

Aged boar—First, Blocher on Big Joe; second, Briggs on Red Lad.
Yearling boar—First, Van Patten, on Van's Perfection; second, McFarland Bros. on Missouri Prince 2d.
Boar, 6 months and under 1 year—First, Van Patten; second, Hague.
Boar under 6 months—First, Briggs; second, McFarland.

(Concluded on next page.)

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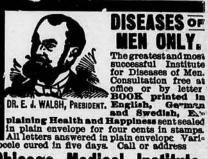
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Addres. SEARS, ROEBUCK & CO., CHIELEO.

Aged sow-First, Van Patten on Trixie; second. Van Patten on Rose Mary. Yearling sow-First, McFarland on Ruby Wonder; second, McFarland on Lucy Wonder.

Wonder; second, McFarland of der.
Sow, 6 months and under 1 year—First and second, Van Patten.
Sow under 6 months—First, Briggs; second, Van Patten.
Aged herd—First, McFarland Bros.; second, Van Patten.
Breeders'young herd—First, Van Patten; second, Briggs.
Produce of sow—First, Briggs; second, Van Patten.
Get of boar—First, McFarland on U. S.

Van Patten.
Get of boar—First, McFarland on U. S.
Duroc; second, Briggs on Red Chief I Am.
Sweepstakes—Boar, Van Patten on Van's
Perfection; sow, McFarland on Ruby Won-

POLAND-CHINAS. EXHIBITORS.

John D. Marshall, Walton, Kans.; Mc-Fadden Bros., West Liberty, Iowa; H. W. Cheney, Topeka; V. B. Howey, Topeka; Wilkie Blair, Girard, Kans.; Dietrich & Spaulding, Richmond, Kans.

AWARDS.

AWARDS.

Aged boar—First, Dietrich & Spaulding, on U. S. Perfection; second, McFadden on T. C.'s U. S. 2d.
Yearling boar—First, Dietrich & Spaulding on Up to Date; second, Marshall on Wilkes I Know.
Boar, 6 months and under 1 year—First and second, McFadden.
Boar under 6 months—First, Marshall; second, McFadden.
Aged sow—First, Marshall on Fingers' Off; second, Marshall on Fingers' Off, Spaulding on Sunflower Lady.
Sow, 6 months and under 1 year—First, Marshall; second, McFadden.
Sow under 6 months—First and second, McFadden.
Aged herd—First, Dietrich & Spaulding; second, Marshall.
Breeders' young herd—First, McFadden; second, Howey.
Produce of sire—First, McFadden; second, Howey.

Breeders' young nord—First, McFadden, second, Marshall.
Get of sire—First, Dietrich & Spaulding; second, Howey.
Produce of sire—First, McFadden; second, Howey.
Sweepstakes—Boar, McFadden on Robert J.; sow, Dietrich & Spaulding on Sunflower Beauty.
CHESTER WHITES. CHESTER WHITES.

EXHIBITORS.

Hardin Bros., Lima, Ohio; Blodgett Bros. Beatrice, Neb. AWARDS.

Aged boar-First, Hardin on Leader's hip; second, Blodgett Bros. on Perfec-

Chip; second, Blodgett Bros. on Perfection.
Yearling boar—First, Hardin on Stemwinder; second, Blodgett Bros. on Northwestern.
Boar, 6 months old and under 1 year—First, Hardin; second, Blodgett Bros.
Boar under 6 months—First, Hardin; second, Blodgett Bros.
Aged sow—First, Blodgett Bros. on Sensation: second, Hardin on Superba.
Yearling sow—First, Hardin on Francisca's Girl; second Hardin on Fancy.
Sow, 6 months and under 1 year—First and second, Hardin.
Sow under 6 months—First and second, Hardin.

Hardin. Get of sire-First, Hardin on Leader's Chip; second, Blodgett Bros. on Perfec-

Chip; second, Blodgett Blods, on Personal Produce of sow—First Blodgett Bros. on June One; second, Blodgett Bros. on Show Lady.

Aged herd—First, Hardin; second, Blodgett Bros.

gett Bros.
Breeders' young herd—First, Hardin; secend, Blodgett Bros.
Sweepstakes—Boar, Hardin on Stemwinder; sow, Blodgett Bros. on Sensation.

Horse Department.

SHIRES AND CLYDES. EXHIBITORS.

Snyder Bros., Winfield, Kans., Shires; H. W. McAfee, Topeka, Kans., Clydes. AWARDS.

Aged stallions—First, Snyder; second, Mc-

Afee.
Three-year-old stallion—First, Snyder.
Two-year-old stallion—First, McAfee;
second, Snyder.
One-year-old stallion—First, McAfee.
Three-year-old mare—First, Snyder; second, McAfee.
Two-year-old mare—First and second,
McAfee.
One-year-old mare—First and second,

One-year-old mare-First and second, Mc-

Afee.
Mare colt—First and second, McAfee. PERCHERONS. EXHIBITORS.

McLaughlin Bros., Columbus, Ohio, and Kansas City, Mo.; Snyder Bros., Winfield, Kans., and R. E. Cowdrey, Topeka.

AWARDS. Aged stallions-First and second, Mc-Laughlin, Bros.
Three-year-old-stallion-First, McLaughlin Bros. Second Spyder Bros. Bros.; second, Snyder Bros. wo-year-old stallion—First, McLaughlin s.; second, Snyder Bros. COACHERS—ALL CLASSES.

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EXHIBITORS. McLaughlin Bros., Columbus, Ohio, and Kansas City, Mo.; Snyder Bros., Winfield, AWARDS.

Aged stallions-First, McLaughlin Bros.; Aged stations—First, McLaughin Bross, second, Snyder Bross.
Three-year-old stallion—First and second, McLaughlin Bros.
Grand sweepstakes, stallion any age or breed—McLaughlin Bros. on Seductor.

JACKS AND JENNETS.

R. E. Cowdrey, of Topeka, was the or exhibitor, and he was awarded first aged jack.

Sheep Department.

SHROPSHIRE EXHIBITORS. Hague & Marshall, Walton, Kans.; Ed. Green, Morrison, Col.; McFadden Bros. West Liberty, Iowa. AWARDS.

ram-First, McFadden Bros.; second, Green.
Yearling ram—First, Green; second, Mc-Fadden Bros.
Ram_lamb—First, McFadden Bros.; second, Hague & Marshall.

Aged ewe—First, McFadden Bros.; second, Green.
Yearling ewe—First, McFadden Bros.; second, Green.
Ewe lamb—First, McFadden Bros.; second, Hague & Marshall.
Sweepstakes—both ram and ewe were won by McFadden Bros.

Poultry Awards.

In the poultry show the following awards

In the poultry show the following awards were made:

Barred P. Rocks—Henry L. Vesper, Topeka, first pen of old birds, first and second pen of chicks, and best display.

White P. Rocks—Thomas Owen, Topeka, first and second pens of chicks, and best display.

Buff P. Rocks—George C. Gurtler & Son, North Topeka, first pen of chicks and best display.

Silver Laced Wyandottes—Mrs. H. J. Barnes, Topeka, first and second pens of chicks and best display.

White Wyandottes—Thos. S. Lyon, Topeka, first pen of chicks; W. A. Forbes, North Topeka, first pen of fowls, second pen of chicks and best display.

Buff Wyandottes—W. A. Forbes, North Topeka, first pen of fowls, and first pen of chicks, and best display.

Buff Wyandottes—W. A. Forbes, North Topeka, first pen of fowls and first pen of chicks, and best display; Allen G. Phfilips, Topeka, second pen of chicks, are pen of fowls, first pen of chicks, and best display; Allen G. Phfilips, first pen of fowls, first pen of chicks, and best display; C. March, Topeka, second pen of fowls.

S. C. White Leghorns—H. C. Short, Leav-

first pen of fowls, first pen of chicks, and best display; C. March, Topeka, second pen of fowls.

S. C. White Leghorns—H. C. Short, Leavenworth, first pen of chicks and best display.

S. C. B. Leghorns—Mr. and Mrs. N. D. Bass, Kansas City, Kans., first pen of fowls, second pen of chicks, and best display; H. C. Short, Leavenworth, first pen of chicks; C. C. Smith. Manhattan, third pen of chicks; Penn & McCoy, Ottawa, Kans., second pen of fowls.

Houdans—J. W. Luce, Wetmore, Kans., first pen of chicks and best display.

Cornish Indian Games—Ed. Greenwood, Topeka, first pen of fowls and best display. Silkies—D. A. Wise, Topeka, best display of fifty birds or over.

Belgian Hares—D. A. Wise, Topeka, best display.

Angora Rabbits—D. A. Wise, Topeka, best display.

Guinea Pigs—Leo and David Wise, Topeka, best display.

Guinea Pigs—Leo and David Wise, Topeka, best display.

Guinea Figs—Leo and David Wise, Topeka, best display.

State Exposition Notes.

W. J. Deitrich, Carbondale, Kans., was the purchaser of a handsome Duroc-Jersey boar pig from the prize-winning herd of McFarland Bros., Beaman, Mo.

John D. Marshall, Walton, Kans., who made an exhibit of Poland-Chinas and Shropshires, has recently purchased the entire Shropshire flock of L. M. Wilson, Wilber, Okla., consisting of eighteen head of registered sheep.

The Breeders' Gazette, of Chicago, which is generally represented at all State fairs by a large delegation of e cient representatives, was represented at the Kansas Exposition by Hon, Martin Mohler, Ex-Secretary of the State Board of Agriculture.

S. F. Coleman, Jr., Elmont, Kans., bought a yearling ram and two ewe lambs from the prize-winning herd of Shropshire sheep exhibited by Ed. Green, Morrison, Col. Mr. Green also sold the yearling Berkshire boar to J. P. Sands, Walton, Kans.

One of the features of the exposition which best pleased the exhibitors was the prompt payment of the prize money, which occurred on the same day that the ribbons were tied. There was no delay, and each exhibitor was given to understand that as soon as the prize was won his money was ready.

The premium list did not make a class this year for saddle horses, but several breeders had some on exhibition, and J. F. True & Son, Newman, and John D. Snyder, of Snyder Bros., Winfield, made an exhibition on Friday in front of the grand stand for a purse of \$10, which was awarded to the saddle horse owned by John D. Snyder.

Wilkie Blair, Girard, Kans., is one of the few breeders who print a list of the names of the members of their show herd on the back of their business card. We hope this plan will be adopted by many others. During the week Mr. Blair sold the 7 months calf Lotus, Vol. 15, to F. M. Washburn, of Topeka, Kans. We understand Mr. Washburn is just making a start in ked Polls, ard are glad to know that he is starting right.

The convenience and comfort of the spectators of the show-rings of cattle and swine was greatly enhanced by the woven wire fence with which they were surrounded by one of our enterprising citizens. Mr. D. H. Forbes, the well-known hardware man on Kansas Avenue, is local agent for the American Fence company, and the surrounding of these prize-rings with this excellent fence earned for him the thanks of all visitors, exhibitors, and the fair association. Enterprise such as this always pays and a little more of it will help to give Kansas one of the greatest fairs in the Mississippi Valley.

At the Wisconsin State Fair, held at Milwaukee last week, notice was served on the officials that not a blooded horse, cow, pen of swine, or cage of poultry will be exhibited at any State fair in the Middle West next year unless the railroads grant a flat rate of one-half ordinary tariff charges on all exhibits. This is the edict of the National Stock Exhibitors' Union, which was organized at the State fair grounds, and every stock exhibitor of note on the grounds, numbering about seventy-five in all, signed the articles, the constitution, and resolutions adopted by the organization.

Gilbert Van Patten, whose advertising card appears on page 935, was an exhibitor at both the Iowa and Nebraska State Fairs before coming to Topeka. The Iowa State Fair had a total of 1711 hogs on exhibition and 403 of these were Durocy-Jerseys. Mr. Van Patten won two firsts, three seconds, three thirds, the sweep-stakes on boars, and the grand sweep-stakes of boar and four sows of any age

or breed. At Nebraska State Fair he won first on aged herd and the sweepstakes on boar. This is the quality of stock which Mr. Van Patten offers to the Duroc-Jersey buyers in Kansas.

The visitor to the cattle barn who entered by way of the east gate came in contact first with such a showing of Aberdeen-Angus cattle as was probably never seen in Kansas before. Nearest the door stood the show animals from the herd of Anderson & Findlay, of Allendale, Kans., and Lake Forest, Ill. This show herd was headed by Imp. Conqueror of Abelour 34794, who won first in class, first in herd and sweepstakes. For quality, size and finish the Anderson & Findlay herd has long been known, and their exhibits here prove to be especially attractive to town people as well as to farmers and breeders who visited the fair.

Snyder Bros., Winfield, Kans., had on exhibition twelve head of horses from their breeding farm. They were an exceptionally fine exhibit, both in Percherons and Shires, while their Coachers and a team of black Standard-bred stallions were the centers of attraction for all who visited their stables. The 3-year-old Percheron stallion, Chester R., was a winner at this fair over the sweepstakes stallion at Columbus, Ohio. Mr. Snyder made an exceptionally attractive showing with his gated saddle stallion, which is a very showy horse of splendid action, and is possessed of about all the different gaits that a horse is capable of. They won twelve ribbons on twelve exhibits.

Although no special effort was made in the direction of a poultry show a very satisfactory and creditable exhibit was made in a large tent just south of the cattle barn. The helpful hen has been a potent element in the success of the nansafarmer, and it is no wonder that he takes pride in the care and breeding of a profitable bird which has stood by him through thick and thin, and which affords a ready means for acquiring a little cash at all seasons of the year. Our report on exhibits will give details as to awards. The poultry display was arranged entirely by Thos. Owen, editor of the Western Poultry Breeder. The exhibits were quite creditable, and a crowd was present every day inspecting this display.

Although the quality of the pure-bred

Although the quality of the pure-bred stock shown was of the highest, there was but one breed of sheep on exhibition. This was the Shropshires, and the pen which attracted most attention, perhaps, was that of McFadden Bros. West Liberty, Iowa, whose advertising card appears on page 936. They are owners of large flocks of imported English and Canadian, as well as home-bred Shropshires, and are now prepared to furnish animals of any age or sex to suit the purchaser. This exhibit has been winning prizes in the State fairs right along where they have been shown this fall, and the sheepman who wants to get the best of breeding as well as of individuals, should write at once to McFadden Bros. for their prices.

McFadden Bros. for their prices.

The show of breeding cattle is a valuable object lesson to farmers. At the Topeka fair last week, says the Drovers' Telegram, a line of four mature cows, all from the same sire, broad of back and even as the proverbial peas in a pod, stood before the judge, awaiting his decision. They were from the herd of a Colorado Shorthorn breeder and were alfalfa raised, yet they stood side by side in competition with corn-fed cattle that were faised farther east. As the judge glanced down the line of cattle in front of him he could not help making an exclamation of pleasure at the fine example of Western breeding stock before him. "If I were a young man again," said he, "and had no other capital but these four red cows, I could be content knowing that the accumulation of a fortune was a question of only a few years." The speaker was ex-Governor Glick, one of the pioneer breeders of Kansas.

The Continental Creamery Company, whom everybody knows well and favorably, did itself proud by the erection of a large tent which was nicely floored and furnished with an abundance of comfortable chairs for the convenience of visitors. This was especially appreciated by the ladies, who could look at the handsome exhibits of cream separators and other dairy appliances while taking a much needed rest. The presiding genius of the tent was Professor Curtice, of the State Agricultural College, who was untiring in his efforts to make his visitors comfortable and at the same time explain the workings of the various pieces of apparatus and machinery on exhibition. A company with the enterprise shown by the Continental Creamery Company is a credit to any State, and is one of the potent factors which serves to make it great.

J. A. Larsen, Everest, Kans., and L. P. Larsen, Powhattan, Kans., are deserving of all praise in their efforts to maintain the reputation of Hereford cattle by an exhibit of such quality as their's at the first State Exposition. They realize the urgent need of Kansas for a State fair, and also that this much desired object can only be accomplished by united effort. In order to help they brought their herds to Topeka without special preparation, though it is evident that they are always well fitted. The sight of Hessiod 54th, who stands at the head of J. A. Larsen's herd, was at once a pleasure and a gratification to lovers of good Herefords, and when it is known that he is a direct descendant of old Hessiod and out of Bright Duchess 15th, who won first in class at the Columbian Exposition, it will not be a matter of surprise that his quality is of the best.

The beautiful weather of the week, the fine quality of the live-stock exhibit, and the exceptionally strong features of the speed-ring resulted in a goodly attendance each day of people from the city and nearby towns. Had the State as a whole realized the importance of the exposition and responded as well as did the citizens of Topeka, the grounds would not have held them. Good work was done, however, in securing the establishment of the fair, and we predict that next year it will be necessary to enlarge the grounds. Kansas needs a State fair, and her need is obvious and serious. So far as the writer's personal knowledge goes this is the only State in the Union which does not have one, and we predict that our legislators

ACTINOMYCOSIS OR LUMP-JAW.

The Early Symptoms, the Progress of the Disease, and Means of Cure.



The Early Symptoms, the Progress of the Disease, and Means of Cure.

DISEASE that most commonly affects cattle, and is shown by hard, fibrous tumors appearing on the lower jaw, face, threat, to five body. These tumors develop rather slowly, and first appear as round, hard, fibrous masses heneath the skin or musous membrane. It can be communicated from containing sores.

Causes.—This disease is produced by a vegetable parasite which gains access to the tissues through the skin or musous membrane. It can be communicated from containing to another by inoculation or by contact, under favorable conditions.

It is attributed to fungus or spores which are found on vegetation, especially that grown on new ground. Until recent years this disease has been considered quite insurable, but later experience shows that many cases will yield to continued and persistent administration of foddide of potassium. The dose which has proven most effective consists in about one-quarter dram of the drug for every one hundred pounds weight of the animal. It should be given once a day well diluted with rain water.

The effects of the drug are shown by discharges from the cyes and nose with occasional slavering. The hair will appear rough and the skin dry. In the cow there is diminished secretion of milk, with constipation and loss of appetite.

Should these symptoms supervene during administration of the drug it should be discontinued for a week or ten days and good food with tonics should be supplied. Supplement this treatment with doses of the most powerful tonic--Dr. Hess' Stock Food. It is well balanced in nutritive and curative properties, the first assisting all other foods to do their best and the latter establishing a high standard of health.

Dr. Hess' Stock Food is the scientific compound for horses, cattle, hogs and sheep, 100-1b. sacks for \$5.00, smaller quantities slight advance; fed in small dose; sold on a writton guarantee. In every package is a little yellow card entitling the purchaser to personal advice and free prescr

will see to it this winter that Kansas no longer remains a back number in this popular and necessary means of education.

As in all great enterprises the burden of the work necessary to success in this great undertaking fell upon a few men, and these few men are deserving of all praise for their untiring efforts in promoting the first annual fair. For weeks past Secretary Updegraff and General Superintendent Heath have been about the busiest men in Topeka, and they have been ably seconded by the other officials, whose success was shown in the wonderful array of fine stock brought here from so many States. This success was rendered possible, in part at least, by the necessity which exists for Kansas having a place in the Western fair circuit. This is evidenced by the fact that our Associate Editor was instrumental in securing a special train load of fourteen cars of fine stock at the Nebraska State Fair, which was loaded there and run through direct to Topeka on the Rock Island railroad.

Topeka on the Rock Island railroad.

The culmination of the Exposition was reached in the magnificent parade of prize-winners before the grand stand and its thousands of spectators on Friday afternoon. The parade was headed by the president of the association, Hon, M. A. Low, and the superintendent of live-stock, H. A. Heath, in the handsomest turnout that is owned in Topeka. The carriage was preceded by Marshall's band and followed by the prize-winning animals in the following order: Saddle, carriage and draft horses; Shorthorns, Hereford, Angus, Galloway, Holstein, and Red Polled cattle. These were followed by one of J. H. Blodgett's prize-winning Berkshire boars and one of Blodgett Bros.' prize-winning Chester White sows. Taken altogether it was a parade that was well worth the price of admission, as it showed in one general view the prize-winners from other State fairs, who had met together here for the first time in the contest for honor.

Standing at the head of as choice a collection of Aberdeen-Angus cattle as has been shown at any fair this fall was Hale Lad 30645 in the barns on the exposition grounds. He is owned by Parish & Miller, Hudson, Kans., who have already refused an offer of \$3,000 in cash for him. Hale Lad is by Gay Lad 19538, by Gay Blackbird 14443. His dam is Heather Blossom 24492. Ly Jim Abbott 22420. He is a brother of Rosegay, the prize-winning bull, which which stands at the head of the famous Gardner herd of Blandinsville, Ill. Parish & Miller own a ranch of 2,800 acres, upon which they have the largest home-bred herd of Aberdeen-Angus cattle in the United States. Hale Lad has a very rich pedigree, and it would be one of the delights of life to see him in the ring beside his royal prize-winning brother, Rosegay. While Rosegay's honors might not be less we are sure they would be more hardly won. We are satisfied that the only reason Hale Lad is not covered with ribbons like his famous brother is because he has not been shown so often.

The exhibitor who created the most surprise because of the quality of his stock, both at Nebraska State Fair and at Topeka, was Ed. Green, of Morrison, Col. Mr. Green is a wonderful breeder, whose Shorthorns can only be viewed with aston-

ishment by those who suppose that this breed has not reached so far West in its purity. In the keen competition at Nebraska State Fair, and without having had time to fit his herd as other herds were fitted, Mr. Green won third on aged bull, second on a 2-year-old bull and aged cow, second and third on 2-year-old heifer, second and third on exhibitors' herd, third on breeders' young herd, and second and third on produce of cow. Our report on awards, published in another column, will show that he is a winner here in both Berkshire swine and Shropshire sheep, each of which he still has for sale. This is particularly fortunate for Kansas people to know because of the fact that well-bred Berkshires appear to be scarce in comparison to the demand for them. See Mr. Green's advertisement on page 396 and write him at once, as he will be at home immediately after his showing at the Colorado State Fair this week.

Gossip About Stock.

The great Kansas opportunity to buy 100 Duroc-Jersey swine at auction, will be the fourth annual public sale held at the farm of Newton Bros., Whiting, Kans., on October 13, 1902. Write for catalogue at once.

inquiries from many places. Have sold as much as \$1,000 worth of cattle and are still receiving more inquiries."

receiving more inquiries."

A good many of our readers will be glad to learn through the advertisement appearing elsewhere of the existence of a well-equipped school for the teaching by correspondence of veterinary science. We refer to the Correspondence School of Veterinary Science at Des Moines, Iowa. There are a number of correspondence schools in various parts of the country, all doing a most excellent work in their respective lines, but this, above everything else, interests the farmer and the farmer's boy. It is in the hands of competent, thorough veterinarians, and puts it in the power of all who will take the course to acquire at home during the leisure months a thorough education in this most valuable branch, either for following as a profesfession or for their own purposes upon the farm. We trust that many of our readers may see the wisdom of availing themselves of what would seem a rare privilege. Look up the advertisement and write for prospectus and further information.

Duroc-Jersey swine af auction, will be the fourth annual public sale held at the farm of Newton Bros., Whiting, Kans., on October 13, 1902. Write for catalogue at once.

There has been a constant demand for Red Polled cattle during the past two or three years and breeders have been utterly unable to fill this demand, either for grades or pure-breds, hence the announcement on page 938 of fifty head at auction by eGo. Groenmiller & Son, of Centropolis, Kans. The first public sale of the kind held in the State-should attract special attention of our readers interested in this desirable class of dual-purpose cattle.

We call attention to the change in the advertisement of W. W. Gray, breeder of Hereford cattle, of Fayette, Mo. In a recent letter, he announces that the ten helfers which have been advertised, are now withdrawn from private sale and have been consigned to the breeders' combination of New York and the private sale and have been consigned to the breeders' combination.

The report of a Kansas Farmer correspondent of the fair held at Iola, was misleading in some particulars. Mr. A. B. Mull, of Iola, complains of the injustice of that report and says, "My winnings on Poland-China hogs included three sweepstakes out of the four offered and nine first out of the four offered and ni

PLUMMER'S TENTH PUBLIC SALE.

...HIGH-CLASS... POLAND-CHINA HOGS

To be held at Maple Grove Farm, Osage City, Kans.,

WEDNESDAY, OCTOBER 1, 1902.

The offering consists of 50 head, including 12 sows with pigs or about due to farrow, bred to Pansy Boy 28292. Also 38 spring pigs, both sexes, the get of the herd-boars, Skylight Perfection 27161, Perfection Chief 2d 20571, and All Wilkes 26468. This is the most select lot I have ever offered for sale. Breeding, inaviduality, and size considered.

Guests from a distance will have free entertainment at Jules' or Malapert's Restaurants, Osage City—and free conveyance to and from farm. Bids by mail to Colonel Harshberger in my care.

Catalogues now ready. Address

There will be thirty-eight spring pigs, both sexes, the get of the well-known herd boars, Skylight Perfection 27161, Perfection Chief 2d 2571, and All Wilkes 2e468. Mr. Plummer believes this is unquestionably the best offering he has ever made, breeding, individuality and size considered. Visitors to this sale from a distance will find free entertainment at Jules' or Malapert's restaurant, Osage City, and will be conveyed to and from the farm free. Parties who wish to send bids after receiving the catalogue can send them to the auctioneer, care of Mr. Plummer.



- 'The Great Shorthorn Bull Now at the Head of the Glenwood Herds, Owned by C. S. Nevius, Chiles, Kans.

ing Farm, and others, to be held at South Omaha on January 22-23, 1903. The calf Farmer."

crop which is extra good will be contracted for future delivery.

We are in receipt of a handsomely bound

We call the special attention of the dairymen of the State to the public sales of dairy stock advertised in this issue of the kansas Farmer. On Tuesday, September 23, Geo. Groenmiller & Son, of Centropolis, Kans., will sell 50 Red Polled cows and heifers, and the net day, September 24, V. B. Howey, of Topeka, will sell 25 thoroughbred Jersey cattle and 15 milch cows and heifers. The best chance to buy dairy stock in Kansas this year.

As per announcement in this issue of the Kansas Farmer there will be held two public sales of Poland-China hogs near Topeka. The first will be on September 24, at the farm of B. V. Howey, five miles southeast of Topeka, at 10 o'clock, at which time he will sell 60 Poland-China hogs, also 25 Jersey cattle and 15 milch cows and heifers. Purchasers from a distance will be allowed a rebate on purchase to cover their expenses in attending the sale.

On Wednesday, October 1, H. W. Cheney will hold his annual public sale of Poland-China swine at his farm, four miles north of Topeka. The sale will open with a free lunch. Buyers are promised that they will find anything they want from 5 months to 2 years old of the finest quality, prize-winning strains. Mr. Cheney was superintenuent of the swine department of the Kansas State Exposition last week and made a brilliant success in that capacity. Buyers will find at this sale bargains worth the money. worth the money.

A good many breeders are skeptical about putting a little money in advertising, looking upon the matter as simply an expense item instead of a revenue measure. This is a great mistake. If you have anything good to sell it always pays to advertise. A case in point is that of Sam Swoyer & Son, of Winchester, Kans., who who sent us \$3.50 to pay for a little special advertising, result of which is shown by the following voluntary statement, which is as follows: "The idvertisement caused

We are in receipt of a handsomely bound and copiously illustrated copy of the proceedings of the fifth annual convention of the National Live-Stock Association, which held its sessions at Chicago during the International Live Stock Exposition in December last. 'Inis report makes a volume of 550 pages of valuable matter and comprises the proceedings of the associavolume of 550 pages of valuable matter and comprises the proceedings of the association; statistical matter, and the important papers read. The frontispiece is a land-scape of President John W. Springer of the association, and is a whole chapter on concentrated energy. Kansas was well represented at this meeting by Mr. H. A. Heath, secretary of the Improved Live-Stock Breeders' Association of Kansas, whose spiritual beauty is shown in a good photo-engraved cut at the head of his whose spiritual beauty is shown in a good photo-engraved cut at the head of his paper on "Conditions in Kansas," which was reprinted in the Kansas Farmer at the time. Mr. H. W. McAfee, the Shorthorn and Clydesdale breeder of Topeka, also helped to hold up the reputation of the State with an excellent paper which was illustrated by his counterfeit presentment. It may be possible to obtain copies of this valuable report from Secretary C. F. Martin, Denver, Col.

Very many of our readers will feel a special interest in the tenth public sale of high-class Poland-China hogs advertised by Wm. Plummer, of Osage City, Kans., on page 921. Mr. Plummer is the oldest breeder of Poland-Chinas now living in Kansas, according to the best obtainable information. He came to Kansas twenty-three years ago with a small herd of sixteen head and has been a careful and reliable breeder during that period. Almost a quarter of a century's experience in Kansas is certainly a proud record for any breeder. His public sale will be held at his Maple Grove Farm, four miles southwest of Osage City, on October 1, 1902, at which time he will sell fifty high-class Poland-China hogs, including twelve sows with pigs or about due to farrow, bred to Pansy Boy 282999, a son of Perfect Boy.

Herefords at the American Royal.

The next event of general interest to the Hereford breeding fraternity is the American Royal at kansas City. Secretary Thomas writes us that the outlook is for an unusually large number of exhibitors and for large rings in every class. It is expected that the \$500 appropriation for prizes in the classes for car lots of feeding and fat cattle will bring out a large exhibit in the pens. Three hundred dollars are offered for car lots of feeding cattle and \$200 for car lots of feeding cattle and \$200 for car lots of feeding cattle and \$200 for car lots of feeding cattle and some softened for single animals in the fat stock classes. The prizes for breeding cattle figure up about \$,700 and the plan of the Hereford Association in offering eight prizes in the individual classes assures a wide distribution of this amount. Entries in all classes close October 1, and it behooves Hereford exhibitors to file their entries with Secretary C. R. Thomas, Exchange Ave., Union Stock Yards, Chicago, at once. Premium list and the proper blanks will be sent upon request. The next event of general interest to the quest.

Rise in Butter Prices.

Rise in Butter Prices.

No subject is of such great interest to the farming community as it the disposition of dairy products at a satistactory price. In this connection W. F. Jensen, secretary an treasurer of the Continental Creamery Company, touching on the market of the past six or seven months, and passing on the outlook for the coming fall and winter months, says: "The price of butter is advancing again. This spring and early summer butter was quite high. However, the splendid conditions and unusually heavy make of butter gradually broke the market down until on September 2 the lowest point of 19 cents was reached on the New York market. The markets have since reacted, and now, September 12, is quoted 22 cents. While the make of butter this summer in the entire country has increased thirty per cent the consumption of butter since the oleo bill went into effect, July 1, has also greatly increased and promises to further increase. The outlook for fall and winter is for high prices and very encouraging, thanks to the passage of the oleo bill."

Loss of Life and Property by Lightning.

When the aggregate loss for 1902 shall have been summarized the list will exceed that of any former year in the history of our country. A good reason why these losses should continue from year to year is hard to find when the value of good lightning arresters is so well known. The large companies controlling telegraph, telephone, and electire-light plants took due precaution to protect their most delicate instruments, their plants, poles, and employees by a system of lightning arresters constructed on scientific plans. Why should not individuals protect their homes, their lives and property in like manner?

Pages 42 and 43 of "Iowa Weather and Crop Service" 1901, reads as follows: The total losses reported amount to \$47,294;" and on same page states, "These reports and on same page states, "These reports show that not one of the buildings struck by lightning during the season and reports show that not one of the buildings struck by lightning was provided with a rod or other form of protection."

Again the same writer on page 43 states, "Our investigations during the past three years afford a very strong evidence as to the utility of lightning rods on buildings. It appears to be strong presumptive proof that rods do protect buildings when so few of those that have been provided with even the poorest kind of rods have been damaged by lightning. I fully believe that buildings in city or country may be rendered practically lightning proof by metalic rods scientifically constructed and attached."

A lightning rod should be constructed of

A lightning rod should be constructed of good soft copper—cable form preferable as it combines a large surface, is continuous, has strength, and will not oxydize. To-day there is not a question more earnestly agitated by the insurance hosts than the advisability of properly rodding buanings and ground-wiring fences, thus minimizing their losses from this source. The mutual companies have gone so far in some States as to allow a discount on the regular premium to those who have protected their property by scientific methods of rodding. A properly constructed rod, scientifically put up, connecting all valleys, down-spouting, and other continuous and interrupted metals with good earth connections is no longer an experiment but a demonstrated protection.

King of Them All.

King of Them All.

Elk Grove., Cal., Aug. 1, 1902.

Dr. B. J. Kendall Co., Enosburg Falls, Vt.
Gentlemen:—Please send me one of your
books, "Treatise on the Horse and His
Diseases," for which I enclose a two-cent
stamp. At present I am doctoring two
horses, one has a spavin and the other a
bad case of poll evil. Am using your Kendall's Spavin Cure and must say they are
both improving fast. I have used several
bottles of Kendall's Spavin Cure and can
say there is nothing that does the work so
quick. Of all the horse medicines I ever
used, Kendall's Spavin Cure is king of
them all.

You may use this if it is any benefit to
you as a testimonial. Wishing your Kendall's Spavin Cure success, I am
Respectfully yours,
JAMES A. TRIBBLE.

Strawbberries.

If you want plenty of strawberries next June you must take care of your strawberry patch this fall. If you are in doubt as to how this should be done, write to the Miami County Nurseries at Louisburg, Kansas, and get their book on strawberry culture, which they mail free on application.

When writing advertisers please mention this paper.



Miscellany.

Interstate Commerce in Birds and Game.

JAMES WILSON, SECRETARY OF AGRICUL-TURE.

In order to secure a more general obentitled "An act to enlarge the powers of the Department of Agriculture, prohibit the transportation by interstate commerce of game killed in violation of local large and for other purposes" the local laws, and for other purposes," Department invites attention to the provisions of the Federal and State laws relating to shipment of birds and game. These laws are intended to pre-serve for the common good certain animals and birds that are valuable as food, for sport, or as destroyers of pests. They are generally supported by public sentiment but are frequently violated through ignorance, as com-paratively few persons realize the rapid increase in protective legislation or the numerous restrictions which have the numerous restrictions which have been imposed on the trade in game. Sportsmen, market hunters, game-deal-dealers, commission merchants, railroad and express agents, and all other persons concerned should familiarize themselves so far as possible with the regulations now in force. Copies of State laws may be obtained from fish and farm wardens or secretaries of State, and a summary of the Federal, State, and county laws (published as Farmers' Bulletin No. 160) may be had on application to this Department. The most important provisions of the vamost important provisions of the various laws may be briefly stated as fol-

Shipment.—It is unlawful for any person to deliver to any common carrier for transportation from one State or Territory to another, or for any common carrier or consignee knowingly to receive any wild animals or birds killed in violation of local laws. This prohibition applies not only to game killed out of season but to that captured in an illegal manner (by traps, nets, etc.), or for illegal pur-poses as in some States, for sale or shipment.

(2) Packages Must be Marked.-Every package containing game or birds, or any parts thereof, when shipped by interstate commerce, must bear a statement of the contents and the shipper's name plainly marked on the outside. Inattention to these retails renders the shipper liable not only to loss of his game, but also to heavy penalties for evasions of the law.

Evasions.—Shipping game in trunks, butter boxes, or egg cases; concealing it among other goods; marking it "butter," "dressed poultry," or "household goods;" addressing it with a tag made specially to hide the shipper's name and statement of contents; or resorting to any other device to conceal the nature of the shipment-are all evasions of the law and subject the all evasions of the law and subject the shipper to the same penalties as for its direct violation. False marking of packages is treated as a serious of-fense under some State laws and is punishable by special penalties.

(4) Special Restrictions.—Four-fifths of all the States and Territories prohibit export of deer at any season; all those in which quail occur, except three in the South, prohibit export of these birds at all seasons; and practically every State where prairie chickens are found prohibits their export.

As a result of these restrictions, it is almost impossible in the West to ship quail or prairie chickens to market out side of the State without violating some

law.
(5) Western Game.—All the States and Territories west of the Mississippi River except six prohibit export of all game protected by local laws. Of the six exceptions, Louisiana and Texas prohibit export of all game except a few birds, while Arkansas, Missouri, Montana, and Wyoming either prohibit export of certain species of practically cut off export trade in game by means of other restrictions. Eastern dealers in ordering or receiving such game from these States encourage direct violations of local laws and may render themselves liable to the penal ties provided for violating the Federal law

(6) Alaska Game.—Under the act of June 7, 1902, the shipment from Alaska of any hides or carcasses of deer. moose, mountain sheep, mountain goats, or parts thereof, or any wild birds, or parts thereof, is prohibited at all times. Trophies, specimens for scientific purposes, and live game may, however, be shipped under permit from the Secretary of Agriculture.

quently allow shipment of live birds intended solely for propagation, in some cases under permit from State author-Persons contemplating shipment of live birds should inform themselves fully as to all local regulations. No permits for the shipment of game from one State to another are issued by this Department.

(8) Game for Private Use.especially those which issue nonresident hunting licenses, permit sportsmen to carry a limited amount of game out of the State for private use. In some cases this game must be tagged, carried openly, and accompan-ied by the owner. To insure safe tran-

sit of game, careful attention should be paid to such local regulations.

(9) Insectivorous Birds.—Robins, swallows, cedar birds, meadow-larks, fickers, night hawks or bull bats, and a few other insectivorous species, as well as such birds as longspurs, snow buntings, and shore larks, which are useful in destroying seeds of weeds, are occasionally killed as game. They are, however, generally protected, and un-der no circumstances should they be sent to market or shipped out of the State.

(10) Birds for Millinery Purposes.-Statutes even more stringent than those protecting game birds have re-cently been enacted by many States for the preservation of birds which are not included in the game list. Under these statutes birds which are in demand for millinery purposes are protected throughout the year, and sale and possession, as well as killing, are prohibited. It should be remembered that the principal centers for millinery supplies are nearly all located in States which have such laws, and the purchase of native song birds, as well as of herons, pelicans, gulls, terns, or sea swallows, grebes, or other plume birds, should be avoided. The shipment of these birds or any part of their plumage is prohibited by the provisions of the Federal law. Ostrich feathers are not subject to these restrictions and their use should be encouraged.

Good Work at the Oklahoma Experiment Station.

Press Bulletin No. 88, from the Qklahoma Agricultural Experiment Station, shows commendable activity on the part of the station staff.

EXPERIMENT STATION REPORT.

The eleventh annual report of the Oklahoma Experiment Station, for the fiscal year ending June 30, 1902, has been sent to the addresses on the station mailing list. The report contains a statement of the work of the A. and M. College and of the Experiment Station, and popular articles on the following subjects: Wheat experiments; selec-tion of cottonseed; pasturing wheat; broomcorn; Bermuda grass; rape for early spring feed; alfalfa in Oklahoma; feeding wheat; stock-feding; wheat meal, bran and shorts; rations for fattening steers; feeding cottonseed products to steers; feeding cottonseed meal to hogs; fruit trees; spray apple trees; cultivate trees; fall planting of trees; plant trees and care for them; blackberries in Oklahoma; potato-growing; animal parasites; vaccination to prevent blackleg; loco investigations; wooly aphis; borers in soft maples; and protection against plant diseases and insects.

The report also contains a table snow-ing the annual rainfall at different places in Oklahoma, compiled from the records of the United States Weather Bureau. All of the publications are sent without charge to citizens of Okla-Bureau. homa. The station mailing list contains over 18,000 names. Many have changed their addresses and failed to notify the station. When publications are returned undelivered the name is

All Oklahoma and Indian Territory farmers should see to it that their names are on the list so that they may receive the station publications and de-rive whatever of benefit there is to be had from the experiments which are made.

VINEGAR FROM WINDFALL APPLES.

Apple trees in Oklahoma set very full of fruit this year and now the ground under the trees is almost covered with wind-fall apples. Most of this fruit will lie on the ground and rot and breed a good crop of apple worms for next year. These wind-fall apples will make good vinegar if gathered up and run through a cider mill and then the juice thus obtained allowed to ferment. The rip-er the apples the stronger the vinegar they will make. If the apples are very green a little sugar added to the cider before fermentation sets in will im-(7) Game for Propagation.—States prove the quality of the vinegar very which prohibit export of dead game fremuch. The cider should be placed in

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The BALL BAND trade mark on wool and rubber boots is a guarantee of superior quality. They give more comfort and longer service than any other make. The BALL BAND is the only ALL-KNIT wool boot and the rubbers are made from the highest grade rubber—not the product of a trust. Insist on getting the BALL BAND goods and you are sure of the best. Get them from you dealer.

MISHAWAKA WOOLEN MFG. CO., Mishawaka, Ind.

wooden or earthen vessels and set in the sun until fermentation has run its course. It then can be stored in the cellar or other convenient place for use

Wind-fall apples in the Experiment Station orchard at Stillwater were gathered July 31 and made into cider. These apples made an average of two and one half gallons of cider to the bushel. In thirty days the cider had finished fermentation and was a vinegar of fair quality. Ripe peaches were gathered on the same date and the juice pressed from them and placed in jars for fer-menting. In thirty days this was a vinegar of a better quality than could be found on the local market.

BODY-BLIGHT OF PEAR TREES.

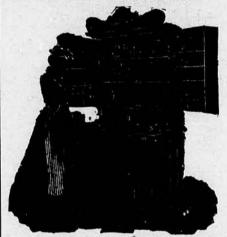
This disease works on the trunk and larger limbs of pear trees. It is easily recognized on the trunks of trees that are not old enough to be covered with rough bark. The first appearance of the disease is in the spring when dark sunken spots are seen scattered over the trunk. These spots are round or oval in outline and gradually increase in size until the latter part of the growing season. A distinct boundary line is then formed by the shrinking of the dead tissue. At this time the dead bark can be easily removed in one piece. The inner bark remains sound and suffers but little, if any, the first year. If this dead bark is not removed it becomes very dry and hard and in two or three years forms such a heavy layer of dead bark that the tree pe-comes bark-bound. If this condition is not removed the tree stops growing and

The dead bark should be removed as soon as found. The trees should be gone over in the spring about the time growth starts and all diseased bark removed. Tree washes and fungicides seem to have no value either in pre-venting the disease or checking its spread. Removing the diseased bark and thoroughly cleaning the trunk and larg-er limbs seems to be a sure and efficient remedy.

ALFALFA IN OKLAHOMA.

The Experiment Station at Stillwater has received numerous reports from farmers who made a success of spring seeding of alfalfa. One farmer in Woods County secured a good stand on newly broken sod and prefers this plan for sandy land for the reason that weeds and moles are less troublesome, and the soil does not blow as it does when the land has been in cultivation for some time. The correspondence of the station indicates that there will be a large acreage of alfalfa seeded this fall. As a hay crop, alfalfa has no equal and small areas of it are now being grown with success on almost every type of soil in Oklahoma. It is coming to be understood that it will not do to pasture alfalfa and that it is a hay and not a pasture crop. An unwarranted prejudice against alfalfa was caused by early attempts to grow it for hog pasture. Many instances have been observed where farmers seeded an acre or two of hog lot to alfalfa and turned the hogs in as soon as the alfalfa was six inches high. Of course, the alfalfa did not last a week and was pronounced a failure. There are some soils with open subsoils and water close to the surface that grow alfalfa that will stand pasturing. But these soils are not com-mon. A field of alfalfa in the spring is tempting when the crop is green and growing while all else is brown and it is at this time that much harm is done by pasturing. The tender growth of the plants is eaten off, thus weakening them and giving a good opportunity for weeds and crabgrass to grow and smother the alfalfa. There are many forage plants that may be grown for hogs. Wheat, rye, oats, rape, sorghum,

THE ELWELL KITCHEN CABINET



Contains three tin-lined Flour Chests; Kneading Board; Bread and Meat Cutting Boards; fine tin Spice Boxes; six Small Drawers; two Large Drawers; one Cupboard and seven shelves; 3 feet 2 inches wide, 25 inches deep, and 6 feet 6 inches high, a little less floor space than a kitchen table. Ask your Furniture Dealer for a descriptive circular or write for one to the

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\$4.60 Empire Stove Manufacturing Co. Minneapolis, Minn., and Box 752, Kansas City, Mo.

cow-peas, and soy-beans, if properly utilized, may be made to furnish succulent forage throughout the year for the hogs without running the risk of ruining a good stand of alfalfa by pasturing them on it.

The Seed-corn Question.

EDITOR KANSAS FARMER:-I think it would be interesting to corn-growers to have the seed-corn question discussed. I planted twenty bushels of Iowa seed corn; it falls short of the native va-rieties from ten to twenty bushels per The seedmen said it would make ten to twenty bushels more than the native corn, giving as a reason that there would be no barren stalks. I think barren stalks are caused by dry weather about shooting time. There are very few barren stalks in any of the corn this year unless it is planted very thick or has suckered a great deal.

Gardner, Johnson County.

A discussion of the seed-corn question, giving the experiences of corn-growers is eminently proper and can not fail to bring out valuable information.

FIRE HORSES WANTED.

Horses to fill following description: Geldings—color, chestnuts, bays, or browns; between 15½ and 16½ hands high; weight, 1,250 to 1,350 pounds; age, six or sevenyears. To be absolutely sound and true in harness years. To be absolutely sound and true in harness Address G. O. WILMARTH, Fire Marshal, Topeka, Kas



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Why pay Middleman's Profit when you can buy at Factory Prices. This Elegant RAILSTON RANGE B Costs you only \$24.90. It is made of the Best Patent LEVELED ODLD BOLLED STEEL LINED THROUGHOUT with genuine FIREPROOF ASBESTOS. Extra Heavy Fire-Box Linings. BURNS WOOD OR COAL. SHIPPED C. O. D. Has a Fincen-Gallon Galvanized Reservoir WAR-RANTED TO WORK AND WEAR AS WELL AS ANY RANGE ON THE MARKET. 25,002 of these Ranges sold the past five years and not one complaint. EL RANGE MANY G. OO. Dent. D. 520 Olive Street, ST. LOUIS, MO. RALSTON STEEL RANGE MANF'G CO., Dept. D. 520 Olive Street, ST. LOUIS, MO.

The Houng Folks.

Conducted by Ruth Cowgill.

THE COWCATCHER.

Cast your eagle eye on me— Leaders there must always be. I have such a massive brain I can stand the tug and strain. See the engine and the train As they meekly follow me, Leaders there must always be.

Leaders there must an arrival leaders there must arrival leaders there must arrival lead.

It is part of nature's plan
That I occupy the van.

Born to rule, and born to lead,
Born to flourish and precede,
The momentum and the speed
Of the engine and the train
Are the products of my brain.

MORAL.

Those the world has pushed ahead
Thought they pulled the world they led.

—Eugene Ware.

How to Make Animals Mind.

Most boys and girls like to try their hands at training some pet, usually a dog. It is fascinating work and the in-telligence displayed by the humble pu-pil is marvelous. In the following story from Saturday Evening Post, by T. S. Hardy, there are several points worth noticing. It is chiefly an inter-view with a professional animal trainer, and therefore ought to be of some real value. At any rate it is very interest-

"Dogs differ greatly in aptitude. Confidence must first be inspired and the conception of plain, every-day obedience firmly enforced. The dog must come when he is called—instantly and willingly—and go where he is told. It does no good to beat him if he is tardy—you can hardly expect him to come to a beating. Tie him with a long leash, and if he loiters when you call, snap the leash. If he proves obstinate still, and crouches, put a tack where it will touch him when the collar tightens. It is surprising how a little practical demonstration will point your precept.
"'Dogs under eighteen months old,"

says the master, 'are unfit for work. An animal must have most of the non-sense out of him before he is worth my time; he must be sensible and ready be-I can begin on more advanced training. I like to start on a dog of under two years who has been taught house life—after that it is a matter of temperament. Georgie I scarcely had to give any time to at all. He loves his work and the patter of applause from the house is better to him than all the fondling in the world. (Outside of business hours he is an unamiable, surly little beast, suspicious of stran-gers.) Georgie is a genius—he learns by intuition and works best alone. I say eight hundred dollars his price, but, put to the test, I doubt if I would part with him for any money.
"'Now Jack, here, is different. Jack

isn't particularly intelligent, but he's a born leader. Come here, Jack, and show the gentleman your act.' A black and fawn-spotted fox terrier, lithe and kindly faced, pranced up to his master's knee and held his head for the mask and harness that slipped over it and buskled around his shoulders. Then a black, crop-haired tail was strapped to his wagging little stump and, presto! the bells were jingling and there was Jack footing it around the ring, as as smart a little polo pony as you would wish to see.

"'Jack has that act with a mate, and that yellow monk over there sits on a little red cart (yes, a dog cart!) and drives the tandem. Jack takes the hurles, too, and keeps all the rest of them up to the scratch. Give me a half-hour alone with Jack first and he and I together will break all the rest of the pack to a new act in ten minutes. No, Jack is not for sale, either. You can't develop leadership in dogs any more than you can in men.

"'Monkeys you have to treat in an absolutely different way. Gaston, you beggar, salute your master! There, see his hand go up? Well, the first step in that trick is to tap him over the head with a stick. He puts his hand up to defend himself—with a little patience the rest comes easy. You must always use patience and never lose your tem-You can't be variable with an animal any more than you can with a child, or it won't pay any attention to When you give a command insist upon it. Don't win obedience by entreaty—some day the animal won't oblige you. And, of course, you must make it evident what you want. If your dog gets puzzled, stop working him immediately and pick it up later.

"'In general, you might say that the best medium for training is experience. If you can make the experience seem to

better. My monkey, Sambo, I taught to eat with a spoon by giving him a dish clamped to the table so that it couldn't be turned over, and so deep and so nar-row in the neck he couldn't get at the bottom with his hands. The use of the spoon came very quickly then, but at first he made the mistake of dumping everything on the table and eating it piecemeal with his fingers afterward. cured him of that by putting another hungry monkey beside him, who ap-propriated for himself everything that Sambo brought up. A few disappointments quickly taught Sambo that the safest place for food was his own face.

'What your dog needs is experience. His life has been one long triumphal procession. He needs to be licked not by you nor me, but by another animal. Just you let me put him in the happy family here, muzzled; let the monkeys tease him, let the coons steal his food, and the baby wolves pull his ears. He'll be a little exasperated at first but there is nothing like expert. first, but there is nothing like experience to take down the conceit. A little while and he will be as soft as a kitten. There's a big gray ape over there I wouldn't be afraid to leave alone with him, unmuzzled he'd take a stick to Of course a dog with spirit ain't afraid of a stick in strange hands—human hands—but when he sees a four-footed beast with hair on his back pick up a club and beat him over the face it just naturally feazes him Yes, sir, he can't stand for it! A little of that would do your dog good."

On Being Shy.

Our humorists, for all their nonsense, make pleasant reading and sometimes in their whimsical hammering, they hit the nail quite squarely on the head. For instance, here is Jerome K. Jerome On Being Shy:

All great literary men are shy. I am myself, though I am told it is hardly

I am glad it is not. It used to be extremely prominent at one time, and was the cause of much misery to myself, and discomfort to every one about me—my lady friends, especially, com-plained most bitterly about it.

A shy man's lot is not a happy one.

The men dislike him, the women despise him, and he dislikes and despises himself. Use brings him no relief, and there is no cure for him except time; though I once came across a delicious receipt for overcoming the misfortune. It appeared among the "answers to correspondents" in a small, weekly jour-nal, and ran as follows—I have never lorgotten it: "Adopt an easy and pleasing manner, especially toward ladies." Poor wretch! I can imagine the grin

with which he must have read that ad-"Adopt an easy and pleasing manner, especially toward ladies," for-sooth! Don't you adopt anything of the kind, my dear young shy friend. Your attempt to put on any other disposi-tion than your own will infallibly result in your becoming ridiculously gushing and offensively familiar. Be your own natural self, and then you will only be thought to be surly and stupid.

The shy man does have some slight evenge upon society for the torture it inflicts upon him. He is able, to a certain extent, to communicate his misery. He frightens other people as much as they frighten him. He acts like a damper upon the whole room, and the most jovial spirits become, in his presence, depressed and nervous.

This is a good deal brought about winderstanding. Many people by misunderstanding. Many people mistake the shy man's timidity for overbearing arrogance, and are awed and insulted by it. His awkwardness is resented as insolent carelessness, and when, terror-stricken at the first word addressed to him, the blood rushes to his head, and the power of speech completely fails him, he is regarded as an awful example of the evil

effects of giving way to passion.

But, indeed, to be misunderstood is the shy man's fate on every occasion; and, whatever impression he endeavors to create, he is sure to convey its op-posite. When he makes a joke, it is looked upon as a pretended relation of fact, and his want of veracity much condemned. His sarcasm is accepted as his literal opinion, and gains for him the reputation of being an ass; while if, on the other hand, wishing to ingratiate himself, he ventures upon a little bit of flattery, it is taken for satire, and he is hated ever afterwards.

These, and the rest of a shy man's troubles, are always very amusing, to other people; and have afforded material for comic writing from time imme-morial. But if we look a little deeper, we shall find there is a pathetic, one come as a direct consequence of the might almost say a tragic, side to the



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ship, all sociability. He moves about the world, but does not mix with it. Between him and his fellow men there runs ever an impassible barrier—a strong, invisible wall, that trying in vain to scale, he but bruises himself against. He sees the pleasant faces and hears the pleasant voices on the and hears the pleasant voices on the other side, but he can not stretch his hand across to grasp another hand. He stands watching the merry groups, and he longs to speak, and to claim kin dred with them. But they pass him by, chatting gaily to one another, and he can not stay them. He tries to reach them, but his prison walls move with them, but his prison walls move with him, and hem him in on-every side. In the busy street, in the crowded room, in the grind of work, in the whirl of pleasure, amidst the many or amidst the few; wherever men congregate together, wherever the music of human speech is heard, and human thought is flashed from human eyes, there, shunned and solitary, the shy man, tike a leper, stands apart. His soul is full of love and longing, but the world knows it not. The iron mask of shyknows it not. The iron mask of shyness is riveted before his face, and the man beneath is never seen. Genial words and hearty greetings are ever rising to his lips, but they die away in unheard whispers behind the steel clamps. His heart aches for the weary brother, but his sympathy is dumb. Contempt and indignation against wrong choke up his throat, and, finding no safety-valve, when in passionate utterance they may burst forth, they only turn in again and harm him. All the hate, and scorn, and love of a deep nature, such as the shy man is ever cursed by, fester and corrupt within, instead of spending themselves abroad, and sour him into a misanthrope and cynic.

Conceit is the quickest cure for it. When it once begins to dawn upon you that you are a good deal cleverer than any one else in this world, bashfulness becomes shocked, and leaves you. When you can look around a roomful of peo-ple, and think that each one is a mere child in intellect compared with your-self, you feel no more shy of them than you would of a select company of magpies or orang-outangs.

Conceit is the finest armor that a man can wear. Upon its smooth, impenetrable surface the puny daggerthrusts of spite and envy glance harmlessly aside. Without that breastplate, the sword of talent can not force its way through the battle of life, for blows have to be borne as well as dealt. I do not, of course, speak of the conceit that displays itself in an elevated nose and a falsetto voice. That is not real.conceit; that is only play-ing at being conceited, like children play at being kings and queens, and go strutting about with feathers and long trains. Genuine conceit does not make a man objectionable. On the contrary, it tends to make him genial, kind-hearted, and simple. He has no need of affectation; he is far too well satisfied with his own character; and his pride is too deep-seated to appear at all on the outside. Careless alike of praise or blame, he can afford to be truthful. Too far, in fancy, above the rest of mankind to trouble about their petty distinctions, he is equally at home with duke or costermonger. And, valuing no one's standard but his own, he is never tempted to practice that miserable pretense that less self-reliant people offer up as an hourly sacrifice to the god of their neighbor's opinion.

His friends and relations make matters still more unpleasant for the poor boy (friends and relations are privileged to be more disagreable than othanimal's own act, and not through any picture. A shy man means a lonely er people). Not content with making intervention of your own, so much the man—a man cut off from all companion fun of him amongst thomselves, they

insist on his seeing the joke. mimic and caricature him for his own edification. One, pretending to imitate him, goes outside, and comes in again in a ludicrously nervous manner, explaining to him afterward that that is the way he—meaning the shy fellow walks into a room; or, turning to him with "This is the way you shake hands," proceeds to go through a comic pantomime with the rest of the room, taking hold of every one's hand as if it were a hot plate, and flabbily dropping it again. And then they ask him why he blushes, and why he stammers, and why he always speaks in an almost in audible tone, as if they thought he did it on purpose. Then one of them, sticking out his chest, and strutting about ing out his chest, and strutting about the room like a pouter-pigeon, suggests quite seriously that this is the style he should adopt. The old man slaps him on the back, and says, "Be bold, my boy. Don't be afraid of any one." The mother says, "Never do anything that you need to be ashamed of, Algernon, and then you never need be ashamed of anything you do," and, beaming mildly at him, seems surprised at the clearness of her own logic. The boys tell him of her own logic. The boys tell him that he's "worse than a girl," and the girls repudiate the implied slur upon their sex by indignantly exclaiming that they are sure no girl would be half as had as bad.

They are quite right; no girl would be. There is no such thing as a shy woman, or, at all events, I have never come across one, and, until I do, I shall not believe in them. I know that the generally accepted belief is quite the reverse. All women are supposed to be like timid, startled fawns, blushing and casting down their gentle eyes when looked at, and running away when spoken to; while we men are supposed to be a bold and rollicky lot, and the poor, dear little women admire us for it, but are terribly afraid of us. It is a pretty theory, but, like most generally accepted theories, mere nonsense. The girl of twelve is self-contained, and as cool as the proverbial cucumber, while her brother of twenty stammers and stutters by her side. A woman will enter a concert-room late, interrupt the performance, and disturb the whole audience without moving a heir while her dience without moving a hair, while her husband follows her, a crushed heap of apologizing misery.

Memory and Dreams.

ROBERT LOUIS STEVENSON.

The past is all of one texturewhether feigned or suffered-whether acted out in three dimensions, or only witnessed in that small theater of the brain which we keep brightly lighted all night long, after the jets are down, and darkness and sleep reign undisturbed in the remainder of the body. There is no distinction on the face of cur experiences; one is vivid indeed, and one dull, and one pleasant, and another agonizing to remember; but which of them is what we call true, and which a dream, there is not one hair to prove. The past stand on a precarious footing; another straw split in the field of metaphysics, and behold us robbed of it. There is scarcely a family that can count four generations but lays a claim to some dormant title or some castle and estate; a claim not prosecutable in any court of law, but flattering to the fancy and a great alleviation of idle hours. A man's claim to his own past is yet less valid. A paper might turn up (in proper story-book fashion) in the secret drawer of an old ebony secretary, and restore your family to its ancient honors, and reinstate mine in a certain West Indian islet (not far from St. Kitts, as beloved tradition hummed in my young ears)

which was once ours, and is now unjustly someone else's, and for that matter (in the state of the sugar trade) is not worth anything to anybody. I do not say that these revolutions are likely; only no man can deny that they are possible; and the past, on the other hand, is lost forever; our old days and deeds, our old selves, too, and the very world in which these scenes were seted. world in which these scenes were acted, all brought down to the same faint residuum as a last night's dream, to some incontinuous images, and an echo in the chambers of the brain. Not an hour, not a mood, not a glance of the eye, can we revoke; it is all gone, past conjuring. And yet conceive us robbed of it, conceive that little thread of memory that we trail behind us broken at the pocket's edge; and in what relead at the pocket's edge; and in what naked nullity should we be left! for we only guide ourselves, and only know our-selves, by these air-painted pictures of

the past.
Upon these grounds there are some among us who claim to have lived long-re and more richly than their neigh-bors; when they lay asleep they claim they were still active; and among the treasures of memory that all men review for their amusement, these count in no second place the harvests of their dreams.

FOR THE LITTLE ONES

ONE OF "THE FINEST."

"The nicest man I ever saw,"
Said little Nan to me,
"Is the one who stands outside our school
When we're let out at three.

"He's dressed just as the soldiers are;
He wears gold buttons, too;
And he stands up so proud and straight.
The way the soldiers do.

"He always says, 'Come, little kids,
"I'll take you 'cross street'; and
I guess 'cause I'm the littlest girl
He always holds my hand.

"And all the cars and horses stop— He's so big they don't dare To say 'Get up' and drive 'em on, Because he's standing there.

"He makes believe to chase the boys,
And shakes his fist, and then
He laughs and laughs, and they all come
A-scampering back again.

"Sometimes he pats me on the head And says, 'Ho! little girl, You going to wait till Christmas comes To cut off that curl?"

"And one time when it rained, the street Was muddy, and I cried; He picked me up and carried Right to the other side.

"The nicest man I ever saw,"
Said little Nan to me,
"Is the one who stands outside our school
When we're let out at three."
-Theodosia Pickering Garrison, in April
St. Nicholas.

Old Molly Hare.

"Don't be afraid, little girl—it is only Old Molly Hare. I won't hurt you.

"Oh, Molly, my heart is going pit-a-pat. I was playing that I was in a jungle, and when you popped your head up, I thought you were a lion. Where did you come from?"

"I was sitting behind the fence, and a bad boy threw a stone at me, so I took to my heels through the wheat. My little ones are waiting for me in the hollow tree yonder."

"Tell me about them. Have they got pretty eyes, and long brown ears like you, Molly? I never saw a baby hare." Their eyes are not as pretty as

yours, little girl, but they can see behind and before at once, and their long ears can hear a pin fall."
"How nice! I wish I was a hare,

Molly.'

"Better be a little girl. You have a warm house, but we live under the rocks and fences—and when the snow is on the ground, if we even poke our noses out, the men and dogs are after us.

"Well, I'm going to tell my papa that he mustn't shoot you. But, Molly, don't you get mad sometimes? I heard my grandpapa tell a man that he was as 'mad as a March hare.'"

"That's only an old saying, my dear. Hark! I hear a gun. Good-bye.

Look backward! From thy lofty heights survey
Thy years of toil, of peaceful victories
won. Of dreams made real, largest hopes out-

run!
Look forward! Brighter than earth's morning ray
Streams the pure light of heaven's unsetting sun!

—Lowell.

-Lowell. Save our blessings, Master, save
From the blight of thankless eye,
Teach us for all joys to crave
Benediction pure and high,
Own them given, endure them gone,
Shrink from their hardening touch, yet
prize them won,
Prize them as rich odors meet
For love to lavish at his sacred feet.

—John Keble.

The Bome Circle.

THE COUNTRY WORKER—HER DAY

THE COUNTRY WORKER—HER DAY.

A wealth of hair that's all her own,
 A pair of frank and honest eyes,
 A "Bless me, I have overslept!"
 She doesn't yawn and dread to rise;
 A face quick bathed in water cold,
 A comb and brush to deftly put
 Rebellious tresses into shape,
 An easy shoe on natural foot,
 A tollar white, with bright-hued bow;
 A collar white, with bright-hued bow;
 A cheerful smile, a lively step—
 Down to the kitchen see her go.
 The fire is lit, the ham is cut,
 The coffee pot hums on the range;
 Then griddle cakes done to a turn—
 She "learned to make 'em at the grange."
 Pa and the children gather round
 The breakfast table's hearty cheer;
 Then out to field or off to school
 Go all but mother. Sweet and clear,
 Her home songs rise; her task of love—
 A wife and mother's part to play—
 Seems but to add to happiness
 That duty brings with each new day.
 An hour to read when work is done;
 Her club? The grange—the church her
 "play."
 No paint or whitewash on her face,
 No sorrow o'er a hair turned gray.
 —Frankfort, Ind., American.

A Thesis on Printing.

MAMIE ALEXANDER, BEFORE KANSAS AGRI CULTURAL COLLEGE.

Printing in its broadest sense, means "making an impression." If this be accepted as a definition, we can trace its footprints to a period long before man stood upon the earth. Nature has printed the history of past ages on the very rocks that form the crust of the earth.

Printing, as we take it, is in reality typography, or the art of combining separate letters and taking from them an impression.

WRITING AND BLOCK-PRINTING.

Before taking up the subject of printing proper, it will be well to take a glance at the art of writing and that of block printing. Although both dif-fer widely from printing with movable type, yet this last process seems to have been sucn a gradual transition from block-printing, and it, in its turn, such a natural outcome of the many trials to produce books in some more expeditious manner than could be done with handwriting, that it will be well to study them a little.

Down to the time of the introduction of printing, writing ran in two linesthe set book-hand and the cursive. The writing in set book-hand filled the place now occupied by printed books, the writing being kept regular, the lines even by ruling, and the pages provided with regular margins. The letters employed in the cursive writing were fundamentally the same as in the set hand, and it was necessary for ordinary business. The set book-hand disappeared before the printing-press; the cursive necessarily remains.

MATERIALS.

The materials used in hand writing may be briefly noticed. The parchments were either written with style, reed or pen. Parchment consists of the skin of various animals, cleaned and dried, so as to form sheets of uniform thickness suitable for writing upon. The skins used for parchment were principally those of sheep, lambs and calves. The preliminary cleaning was effected the same as in the manufacture of leather. Skins for fine parchment or vellum were powdered with chalk and rubbed with fine pumice-stone, until a uniform velvety surface was raised.

Vegetable parchment, or parchment paper is a modified form of paper produced by chemical treatment, having considerable similarity to ordinary animal parchment. This is prepared by treating ordinary unsized paper with a dilute solution of sulphuric acid and immediately washing away all traces of the acid.

The art of printing from wooden blocks on cloth, silk, vellum and paper made its appearance in Europe, when writing, transcribing and illuminating had reached their period of highest development. It was practiced on cloth and vellum as early as the twelfth century, and on paper as far back as the last half of the fourteenth century. the early part of the fifteenth century, it was employed in the production of separate leaves, containing either a pic-ture or a piece of text or both.

PRINTING WITH MOVABLE TYPES.

The first printed date, 1454, occurs in two different editions of the same let-ters of indulgence issued in that year by Pope Nicholas Fifth, in behalf of the kingdom of Cyrus. The art of printing on other objects, as also the art of engraving, which is inseparably connected with printing, existed long before the fifteenth century.

The real invention of printing, how ever, was the invention of movable

types, capable of being used again and again in different combinations; and the question as to which city has the honor of being the birthplace of printing, is being debated up to the present day. From modern researches, it appears that the honor lies between John Gutenburg, of Mentz, and Laurence Coster, of Har-

PRINTING IN ITALY.

Printing was taken into Italy in 1465 by two Germans, Syeynheym and Pan-nartz, who went to the Monastry of Lubeaco, near Rome. They printed only a few books there, but two years later they went to Rome. The number of printers increased very rapidly and in a few years after its introduction at Lubeaco, more than twenty towns in the north of Italy were supplied with presses.

John, of Spire, introduced the art of printing into Venice in 1469, where it prospered greatly. Venice was the leading city in this art, but Foligno, Milan, Bologna, and Florence followed the lead. The productions of the Italian press had a great influence in the Renaissance. While the Germans printed books on theology, the Italians, on account of the revived interest in classical studies, issued the most important classics, in graceful modern letter. They translated the Greek into Latin, and printed their classics, at first, in the Latin language; but in 1488, the first edition of Homen appeared in Greek.

PRINTING IN ENGLAND.

William Caxton first introduced the printing-press into England. His career as a printer, began when he was about 55 years old. For several years before this, he had been engaged in literary work, mostly in translating into English. In 1477, Caxton settled near Westminster Abbey. He brought type from Bruges, and printed the first book in England. The book was entitled "Dictes," or "Sayings of the Philosophers." This book was translated from the Philosophers. the French by Earl Rivers. In 1480, a rival printing-press was started in Lon-don by John Letton, who made some improvements over Caxton's press. the improvements were soon copied by Caxton. At this time, the lines were not evenly spaced and consequently gave the appearance of a very ragged page. John Letton was the first to use even spacing and smaller, neater type.

Illustrating was introduced by Caxton

about this time. At first, illustrations were very crude affairs and not very much in demand.

PRINTING IN FRANCE AND SPAIN.

Printing was first introduced into France, at Paris, in 1470. Spain published her first book in 1475.

MANUSCRIPT BOOK.

If we could imagine the printing-press out of existence, we could realize more nearly what its invention has done for education.

Let us take a glance at the educational advantages before the time of the printing-press. During the Middle Ages, the church kept up the manufacture of manuscript books. Before the inven-tion of printing the cells of the monks were the nurseries of learned literature. A monk had a quiet cell, with a desk at the window, a single chair at the deck, and a chest full of manuscripts.

In England during the eighteenth century, there was scarcely a monastery which had not, at least, one literary man who was eager, not only for his spiritual work, but for some special line of literature or art. The writing of history, also, now began in the monasteries. Most of the great monasteries jotted

THERE IS NO DOWNERS

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down short annais of their growth and expansion, or any remarkable story that belonged to their history. Then books began to be collected and libraries established. Any one who wished to make a donation to the monasteries for any cause whatever, gave manuscripts or books if they could secure them in any way. These manuscripts and books were exchanged by the different monasteries and copied by each.

PRINTED BOOKS.

But the needs for more books was imperative, and the printing-press came. The change was by no means sudden.

The first effect of the increased de-

mand for books was to create a great division of labor in the manufacture of manuscripts.

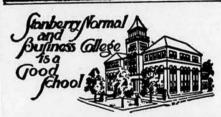
Printing did not spread for many years after its introduction. For some time, the price of books was excessive as ever, and the same precautions taken for their security that had been usual when the only mode of multiplying a volume was by its repeated transcriptions.

The invention of printing was destined to revolutionize the whole world and to extend civilization. It came when it was needed and the world was ready to receive it. A large literature had sprung up, not only of chronicles, pholiosophical and scientific treatises, religious works, and others of an equally solid character, but the novel was also well developed.

On account of the political, religious,

and educational activity, the world was ripe for a great revolution which was

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destined to advance the interests of mankind with gigantic strides.

The progress in printing must be considered as the primary agency in forwarding this advance. It multiplied readers a hundred fold; it stimulated to the primary agency in forwarding the primary agency in forwarding the primary agency. lated authorship; it revolutionized literature, because it made the preservation and dissemination of thought easy; it was a mighty influence in bringing about universal education.

During many years the teachers were the leaders of the church. As yet, the

state paid no attention to education. The church could not furnish universal education, consequently, nearly all their educational efforts were directed toward

the training of the pristhood and pro-viding for the perpetuity of the church. Not only were the monasteries the only places where schools were kept; they were also the repositories of val-uable manuscripts, which were copied with marvelous diligence and preserved for future generations. Both classic and pagan literature were preserved. However, in this way only a few re-ceived the benefits of an education.

What would be the condition of any community without any intercommuni-cation other than oral? When we view the case this way, we are enabled to grasp the significance of the printing-press as an educator We can scarcely realize what it would be like if each individual was limited to what the experiences of life in his own person, or in the comparatively few persons whom he sees daily; or in what he hears from

This was practically the condition be-fore the invention of printing. This would leave one defective and undeveloped in many ways, immersed in his own atmosphere, unable to compare his views with those of others, unable to comprehend or even to know of the life in the remote parts of his own country, to say nothing of other countries. When we add the printed page to experience, we at once increase the par-ticipation of each individual in the life of all to such an extent that society, the State and all it contains, at once wear a new aspect.

The modern school is only possible by means of the printed book. Social life has been benefited, also. Pupils learn to read in school and continue to learn by reading. Books become an essential part of the furniture of the home. Reading keeps up a constant communication between the wisest of the race and the most humble-a perpetual education through life.

THE DAILY NEWSPAPER.

Through our newspapers we get a glimpse of the panorama of the human race. Thus the life of the inhabitant of the city, with his social advantages, effects the country wherever the tele-graph and railroad make the daily paper possible.

The printing of newspapers, with their far-reaching influence, tends to-ward a common, ideal standard of hu-It means the gradual eliminamanity. tion of local peculiarities, and of the limitations of caste and narrow self-interest. This does not mean the reduc-tion of all to one insipid standard on a lower level; but the elevation of the human race to a higher level that is ideal.

Since the newspapers have become the possible possession of every member of society, the humblest individual has access to the wisest and most gifted of his race.

Every morning the newspaper gives us the thoughts of the wise, poems, statements of the recent results of science, articles of biography and hisfruit that is not too acid will make an excellent "Dutch" pie.

APPLE DUMPLINGS.—Make dough as for apple dumplings, a rather rich bistory, and mainly, a complete picture of the movement of the world of humanity, far and near.

spiritual being of man in the image of God, and the most perfect means for emancipation of man from slavery to his own ignorance and passions and from his dependence upon others for guidance and direction. He becomes more rational and more participative in the wisdom and goodness of the human

By contrasting the few who received education before the invention of printing, with the many who now re-ceive it, we have a slight conception of

Genuine stamped C C C. Never sold in bulk. Beware of the dealer who tries to sell

"something just as good."

what its influence has done for educa-

What the future will give can only be a matter of conjecture. But we expect to advance more and more until we approach as nearly as possible to our ideal. However that may be, it is undoubtedly true that past developments along educational lines, the present status, and the probable future—all would have been impossible had it not status, been for the art of printing.

The Apple in Cooking. MARY WAUGH SMITH.

No other fruit can be used to the advantage in cooking as can the apple. We have a dozen delicious desserts for which it forms the principal ingredient; we have apple fritters for breakfast and apple salad for luncheon. From it we make jelly, pickles, butter and common, ordinary sauce, not to mention the making of mince meat, for winter use. There are sweet apples, and sour apples, and dried apples, (at the

boarding-house, of course); and what would we do without apples?

The Chemistry says the average apple is composed as follows: Water, 83.0; albuminoids, 0.4; sugar, 6.8; malic acid, 1.0; pectose and gum, 5.2; cellulose 3.2; mineral matter, 0.4.

lose, 3.2; mineral matter, 0.4.

When served to the sick, cream should not be used, as the fruit-juice itself can take its place with much less danger of upsetting the digestion. The first two recipes are used mainly in preparing food for invalids, although steamed apples are good at any time and, being pleasing to the eye as well as the palate, make a nice dessert for special occasions.

APPLE WATER.—Put one good-sized tart apple through a fruit press or food chopper. Add to one cup of boiling water and set on back of stove where it will remain just below the boiling point for one hour. Sweeten slightly and serve cold to the invalid.

STEAMED APPLES .- Pare apples and remove core as for baking. Place on a shallow pan and fill where core was removed with sugar. Steam till nearly done. Remove from steamer and place on top of each apple a heaping spoonful of meringue made from frothed white of egg and sugar. Place in the oven till the meringue is set. If preparing for an invalid's tray dot the top of the meringue with apple jell. Nothing could be more tempting or delicious for the sick.

APPLE FRITTERS.—Use tart apples in making fritters. If impossible to obtain these let the sliced fruit be sprinkled with lemon-juice a few moments before it is dipped in the batter. Pare apples and remove core. Slice across the apple, varying the thickness with the variety of fruit, making the thicker slice where the fruit is known to cook

quickly. Dip in good batter and fry.

Baked Apple Sauce.—Quarter and core the apples and place in an earthen or granite pan. Add sufficient water and sugar to make a good sauce and cover the baking dish. Cook in a slow oven until thouroughly done. The flavor of sauce made in this way is far superior to that of stewed apples.

APPLE CUSTARD PIE.—Put good, rich apple sauce through the colander. To one pint of pulp add three well-beaten eggs, one tablespoonful butter, spices to taste, and a very little sugar. Bake without top crust.

"DUTCH" APPLE PIE.—Line a pie pan with rich pie dough. Slice into it enough apples, of a variety that will cook quickly, to fill when cooked. Add sugar to sweeten and pour over four tablespoons of thick cream. Any other

myriad forms—newspapers, periodicals, poetry, fiction, etc.—the most potent agency for the realization of the high or cinnamon, as preferred. sweeten. Place upper crust over this and bake thoroughly. Serve hot with sugar and cream. This is easier to make than the regular recipes for apple dumplings, and is quite as palatable.

APPLE SALAD.—Chop apples fine and add to two parts chopped apple one part chopped English walnut meats. Cover with a dressing made from vinegar yolk of egg, butter, salt and pepper,

Visit the Schools.

EDITOR KANSAS FARMER:-This is a duty that parents too often neglect, chiefly because they fail to comprehend its real importance. Too many feel that they would do no good by visiting the school or that such a visit might be out of place. This is a wrong idea. True, there is a teacher to look after the school. But the parents' interest ing States, and the Kansas Farmer.



is just as great and their responsibility can not be shifted upon another's shoulders. The greatest good can be accomplished by cooperation.

How many parents have any positive knowledge of the true condition or in-side working of their district school? Parents who would resent any sugges tion that they are inclined to give cre-dence to rumors, often thoughtlessly ac-cept reports without any question that have no foundation only in school childrens' gossip. Little Johnny returns from school and remarks that "That there teacher ain't no good. All the other kids sez so 'n' I don't think she knows much enyhow. She don't do nothin' like no other teacher never did." The fond parents accept this state ment at least in part. The teacher is a stranger. They don't say much—nev-er make such things their business but they have heard some talk. So Johnny's opinion on school management is weighed against that of a person who has spent time, labor and money to fit herself for a thankless profes-

Many well-meaning persons think that it is poor policy to send a child to school if the teacher has failed to gain his respect; yet they waste a term of school without any act to help the teacher gain that respect. This no one can afford to do. School life is too short at the very best to allow any waste, besides the almost irrepairable injury that may be done in the formation of life habits.

It is a common error among school patrons to suppose that a teacher is a failure because she does not give an indefinable something called "satisfaction." How many men or women in any line of work could withstand the same test? It is a human weakness to find fault with what we do not understand. Then let us visit our schools oftener, keep in closer touch with school work and understand our schools better. The parent has a duty to perform as well as the teacher, the pupil, or the school board. When this is done better work and better satisfaction to all concerned will result. When a farmer hires a hand to take care of his where parents show a live interest.
And pupils will take a deeper interest if
parents do. Then be sure and speak
every word of encouragement you can. It is a stimulant that both teacher and pupils need. If you have suggestions for improvement, offer them privately. Remember always that no teacher is perfect. Don't expect it. The world never

had but one such teacher, and He was crucified centuries ago.

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Economy on the Farm.

EDITOR KANSAS FARMER: - One of the most important things to study and practice on the farm is economy; and yet it is so little understood or prac-But one may ask what is economy? Stinginess is not economy, neither is it economy to rust with laziness, nor yet to wear oneself out with hard work and worry. Work, especially on a farm, is necessary. One who is adapted to farm-work can do a certain amount of it without wearing the body and mind; but beyond a certain amount one can not venture with safe-ty, for he will have to pay for it later on, when he should have health and strength. But these he has not, for too much work, too long hours, too much worry in the start, have used up that vitality too fast. Whereas if a little more economy had been practiced, health and strength would have been prolonged to the end. This economy of strength would have been better for all his friends as well as himself. How much happier one will be when enjoying good health than when in pain. When one has good health and is happy he is optimistic; all things in view are golden; all his connections will catch the infection and be happy with him. To be faithful to oneself and others is true economy.

Then how much time and expense

one save sometimes if things are done in proper time. One-half hour's work at the proper time will often save hours of hard work later. For instance, a board becomes loose; a door may have a loose hinge; a barbed wire may have lost a staple; a horse gets to the corn-crib, cats too much corn, and dies; cattle get into a cornfield and eat to their injury besides destroying dollars' worth of feed. A few minutes' work at the right time would have saved a valuable horse, besides hours of hard work later. It would take many a hard day's work to earn another horse. Wear of body and mind could have been saved. For through this neglect body and mind suffered. So it is economy to do things at once when necessary, for a few minutes' hurry will often save valuable time later as well as the hard-earned

It is economy to plow the land at the proper time and cultivate before weeds get the start, using good teams and implements in the work. Often a few days' early plowing when the land is in good condition will save weeks of hard work later after the land has become dry and hard, and weeds almost too high for the teams to walk through. It is economy to take time to read the daily and farm papers. It helps one to keep up with the times. One will often get valuable suggestions from reading them. It will give strength to both body and mind.

It is not economy to make an animal live on as little food as possible, especially one being grown for market. One may feed a whole corn-crib of corn to animals without any gain, which would be a total loss; but the same corn fed to the same animals economically would have produced a good profit, which is

It is not economy to starve one's family, nor make them go in rags. Good and proper food of the right quantity and proper clothing may be the means of developing them into strong men and women; whereas insufficiency of either may cause sickness and doctor's

It is not economy to work one's wife to death unless one is anxious to get rid of her to get another. But no good husband would want to get rid of a good wife. Still many a good wife on a farm is obliged to do work beyond her strength. And she as well as her husband will have to pay for it very dearly over and over again later on. It is not always best to be too stingy with the cents Ior when necessary may save many a dol-lar by-and-by. So in studying economy on a farm, one must look a little ahead and try to learn what outcome may be expected and spend when necessary. Do the work at the proper time; make every minute count. Do not rust with laziness, nor hurry faster than good judgment would dictate, or than one's strength will stand. Give the body and mind proper food and rest to keep both young, and have both young when old in years.

D. TROTT. Abilene, Dickinson County.

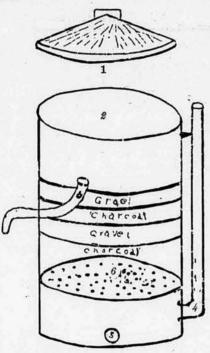
The Philippines Will Exhibit at the World's Fair.

Dr. Gustive Niederlein has sailed for the Philippine Islands to begin the great work of collecting the Philippine exhibit for the World's Fair at St. Louis in 1904. Governor Taft, of the Philippines, has appointed him as special commissioner of the Philippine govern-

ment for the preparation of an elaborate exhibit. An appropriation of \$600.000 is available for the Philippine exhibit, the money coming out of the insular treasury. Dr. Niederlein has for some time been associated with the Philadelphia Commercial Museum. He visited St. Louis a few days ago to consult with World's Fair officials in preparation for his Oriental trip. Since the close of the exposition at Paris, Dr. Niederlein has been busy there classifying and describing the products of the French Colonies exhibited in thirtyone different buildings at that exposition and dividing them between the Colonial Museum to be established at Paris and the Philadelphia Commercial Museum. The French Colonial Office has offered to send him on an extensive tour through all the French colonies to make a great collection for next year's exposition at Hanoi, with view to the transfer of this collection to St. Louis, and its final division between the Philadelphia Commercial Museum and the Colonial Museum at Paris. Dr. W. P. Wilson, director of the Philadelphia Commercial Museum, says: "Dr. Niederlein is one of the most able men in diplomacy and special work with for-eign governments I have ever had connected with the museum, or been associated with. He is a thoroughly trained scientific and business man. He is a man of broad cultivation, speaking readily five different languages. A native of Germany, he spent ten years in the employ of the Argentine govern-ment as one of its officials. He had charge of their explorations and the study of their raw products, and was one of the most important investigators and witnesses of the boundary question between Brazil and the Argentine Republic. He is a very high-class official. He is laboring with me towards eventually producing a history of the raw products of the world in ten or twelve

Pure Cistern Water.

EDITOR KANSAS FARMER:-I noticed in the FARMER of July 24, an article on purifying cistern water. In order to purify cistern water you should first have a pure cistern; second a good filter; and third a water elevator pump, and there will be no trouble with bad



This is a filter for a cistern, made of galvanized iron, about 24 or 26 guage; 24 to 28 inches in diameter; 28 to 36 inches high, which is the most popular size.

(1) is the cover; (2) is the filter can; (3) is the outlet from filter to cistern and is made of two 4-inch ductor elbows; (4) is inlet to filter from building and is four-inch conductor elbow and pipe; (5) is three-inch can screw faced with rubber gasket and is used to drain the filter; (6) is a screen made of galvanized iron and punched full of five-sixteenth to threeeighth holes. This is for the charcoal and gravel to rest on and should be placed six inches up from the bottom of the filter. It should be covered with four to six inches of charcoal lumps in size from a quail's to a hen's egg, and then cover charcoal with two to three inches of gravel, and so on until you get within one or two inches of the of the outlet (3). Be sure to finish with a layer of gravel on top so as to

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the bottom of the filter and rises up

gently to the outlet, which is not the case with any other filter. By removing can screw (5) after a rain and pouring in the top of filter three or four pails of water you will wash all the dirt out of charcoal and gravel, and by leaving the cover loose on top and can screw (5) open, the charcoal and gravel will dry out and not become stagnant. Use this filter and a water elevator and you will have pure cistern water. * J. M. S. Lyons, Kans.

Intelligent Care of Timber Resources.

The lumbering operations of the Kirby Company of Texas, are probably the largest in the world. They extend over a tract of a million and a quarter acres of pine lands, which contain about 80 per cent of all the longleaf pines of Texas—a vast single body of virgin forest reaching out over seven counties, and uninterrupted except for the clearings around the villages and farms which it incloses.

This great forest is estimated to have contained, uncut—and the estimate is low-six and a quarter billion merchantable feet of lumber, board measure. The cuttings already made amount to only a small percentage of wheat the great forest originally contained.

The company operates seventeen mills, which now make an annual cut of 250,000,000 feet, board measure, and supports a population of 15,000 people. Since the forest is mature and is helped rather than harmed by the culling of the larger trees, the annual cut is to be increased to 400,000,000 feet. In addition to the trees used for lumber, which are cut down to as low a diameter as twelve inches, 7,000,000 are being cut out of the forest trees between nine and twelve inches in diameter to fill a contract with the Santa Fe railroad.

It is just because its operations are on such a huge scale that the Kirby Company has decided it must protect it-

estry. Large as its holdings are, unless they are properly managed and protected they must sooner or later be exhausted.

Even if the obligations to the 15,000 people dependent for a living on the lumbering operations should be ignored, the investment made in mills and

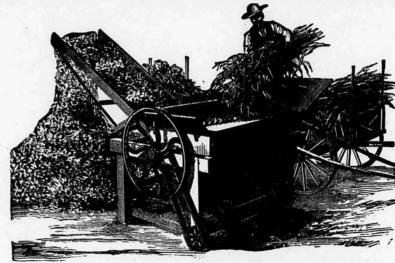
equipment is too great to imperil by exhausting the timber supply.

Forestry receives little encouragement when the profits of lumbering are small, the markets poor, and the operations conducted with difficulty; but on the Kirby tract these conditons are reversed. The company is making a high profit on its timber, the demand for lumber is excellent and lumbering operations are made exceedingly easy by the lay of the land and the condition of the forest. The lands are in Jasper, Sabine, Hardin, Newton, St. Augustine, Angeline, and Tyler counties and were bought with an eye to simplifying and cheapening lumber operations. The la-bor supply is steady, and a railroad runs through the forest from north to

Last winter Overton W. Price, assistant chief, and Thomas H. Sherrard, field assistant, of the Bureau of Forestry, made a preliminary examination of the lands at the company's request and returned a report stating the lines along which forestry might be practiced with profit in the Kirby Company's forest. The company accepted the report and asked that a complete working plan be made.

The task of preparing this working plan will begin November 15, and will be in charge of Mr. Sherrard, who is an expert on Southern pines. Thirty men, established in three camps, will make the measurements and gather the figures on which the plan will be based.

Several problems must be worked out, whose solution will be of value wherever lumbering is practiced in the longleaf pine belt. The most important of these is the fire problem. The first self by adopting some system of for necessity in planning for further crops



Whitman's Improved Porter's Cattle Feeding Machinery, Manufactured by Whitman Agricultural Co., St. Louis.

on lumbered lands is to protect those lands from fires, which kill the repro-duction. Light fires repeatedly burn over the forest floor in the longleaf forest, and while they do no damage to the large trees, all the young growth is killed. The fire problem, briefly stated, is whether it is best to attempt to protect all the forest or to limit the protection to cut-over areas. Since the longleaf pine in five years attains a size large enough to protect itself from any but the severest fires, it is probable that the system of fire protection will apply only to lands cut over within the last

The cutting of trees for railroad ties brings up for settlement a matter of interest not only to the Kirby Com-pany, but to every tie company in the country. On the Kirby lands trees be-tween nine and twelve inches in diameter are used for ties, and trees above twelve inches are cut into saw timber. The question has been raised by the bureau whether it would be better to allow all the trees twelve inches and under to grow into the more valuable saw timber, and get the ties out of the tops of the larger trees. A great deal of measuring and calculating will have to be done to settle this point.

Hereford Prizes at the American Royal

At a meeting of the board of directors of the American Hereford Association, Sept. 12, \$500 was appropriated for prizes in the classes for feeding and fat cattle in carload lots at the American Royal. This is in addition to the \$500 offered in these classes by the Kansas City Stock Yards Co., and makes a grand total of \$1,000 distributed as follows:

Section 9. Carload of fat steers, spayed or martin heifers any age, fifteen hed to constitute a carload—first, \$250; second,\$150.

Section 10. Carload of feeding steers spayed or martin heifers 2 years old and under 3, twenty head to constitute a carload—First, \$100; second, \$70; third. \$30.

Section 11. Carload of feeding steers spayed or martin heifers 1 year old and under 2, twenty head to constitute a carload—First, \$100; second, \$70; third,

Section 12. Carload of feeding steers spayed or martin heifers under 1 year old, twenty head to constitute a carload—First, \$100; second, \$70; third,

The only requirement as to breeding of the cattle eligible to compete in the above classes is that they must show a preponderance of Hereford blood. Entries can be made with C. R. Thomas, secretary, Chicago, by letter or on blanks that will be furnished upon request.

Water-proofing Cloth. WOOLEN CLOTH.

Four ounces of powdered alum, four and one-half ounces sugar of lead, dis-solved in three gallons of water, stirred twice a day for two days. When perfect subsidence has taken place, pour off the clear liquid only, and add to it two drachms of isinglass, previously dissolved in warm water, then mix thorough oughly. Steep the cloth in this mix-ture for six hours, after which hang up to drain and dry; do not wring.

LINEN OR CALICO.

Stretch the article upon the table. Make very thick paste of whatever color is desired. Take a large lump of common brown soap, pretty freshly cut from a bar, hold it in the left hand, and every time you replenish the brush with paint rub well on the soap, taking up as much as possible, and rub well on the surface of the linen or calico. It will take long to do and should be hung in the windiest place you can find. Summer is the best time. A month will see it in very usable order. It will be supple and perfectly waterproof. After wearing a few times a second coat would be advisable, done in the same way. This will dry in half the time.

SACKCLOTH OR CANVAS.

This can be made as impervious to moisture as leather by steeping it in a decoction of one pound of oak bark with fourteen pounds of boiling water. This quantity is sufficient for eight yards of stuff. The cloth has to soak for twentyfour hours, when it is taken out, passed through running water, and hung up to The flax and hemp fibers, in absorbing the tannin, are at the same time better fitted to resist wear.

Another recommendation is to take fish-skin glue, two pounds; alum, five pounds; water enough to cover the cloth, dissolve the glue in one-nalf the water and the alum in the other. When the glue is all melted, mix the whole

and put in the cloth and keep stirring until all is covered. Take out and let drip, but don't wring; spread out to dry. American Gardening.

WEEKLY WEATHER CROP BULLE TIN.

Weekly weather crop bulletin for the Kansas Weather Service, for the week ending September 13, 1902, prepared by T. B. Jennings, Section Director:

GENERAL CONDITIONS.

A cool week, with frosts in the western and northern counties on the 12th, and general over the State on the 13th. except in the extreme southern counties, the temperature falling to 28 degrees in the northwestern counties and to 35 degrees in the extreme sountheastern. No rain fell in the western half of the State and but little in the eastern.

RESULTS. EASTERN DIVISION.

EASTERN DIVISION.

Corn cutting is progressing in the northern counties and is nearly finished in the southern, and new corn is being marketed; in Montgomery it is husking out better than expected; in Anderson the wet weather has molded some corn in the shock. The frost damaged some tender plants and some fodder in the extreme northern counties; little or no damage in the central. Wheat sowing is progressing, and in Crawford the wheat is coming up. Early sown rye is up in Shawnee. Plowing is progressing rapidly where the ground is dry enough. Prairie haying has been retarded by wet or damp weather in some counties, but is being pushed in others and in Leavenworth is about finished. Alfalfa is being sown in Jefferson and Shawnee, but seeding is delayed in Marshall by scarcity of seed. Apples are a good crop in many counties, but Cherokee and Leavenworth report the crop poor; in Shawnee they are in good condition and coloring finely. Flax is poor in Cherokee,

Montgomery.—Wheat seeding will com-nence soon; corn husking out better than xpected, and will make fine yield of good uality.

Morris.—Two light frosts, but no damage

expected, and will make fine yield of good quality.

Morris.—Two light frosts, but no damage done; rapidly preparing ground for wheat; pastures continue fine.

Nemaha.—Frosts 12th and 13th damaged tender plants in low places; corn is, ripening well and will soon be beyond reach of frost; fall plowing in progress and hay being made; many potatoes have rotted.

Pottawatomie.—Fine week for hay making; frost 12th and 13th did little harm. Riley.—Frost Thursday and Friday nights, but no damage done; corn well matured and of extra fine quality; farm work badly behind.

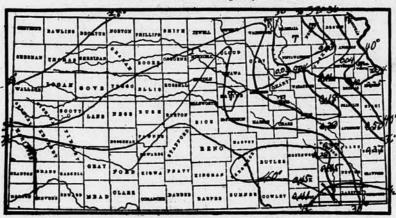
Shawnee.—Early corn a fine and heavy crop; late corn will be out of danger from frost by the 20th, while very late planted was injured by frost of the 13th, generally growing and filling nicely; wheat sowing well under way; rye up and is fine; haying pushed with vigor, crop unusually heavy; apples splendid; pastures fresh and green, and cattle doing very well.

Wilson.—Little having done vet: too wet

well.
Wilson.—Little haying done yet; too wet to plow; most of corn cut; threshing not all finished yet; flax making very poor yield; heavy frost night of 12th, but crops generally beyond damage.
Woodson.—Light frost 13th; corn past danger line; haying not yet finished and progressing slowly; ground too wet for wheat sowing.

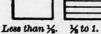
MUDDLE DIVISION.

Rainfall for Week Ending September 13.



Minimum temperature shown by lines.

SCALE IN INCHES.









Over 8.

T. trace.

and potatoes have rotted in Nemaha. Pastures are fine.

Anderson County.—Frost, with ice on low places, on 13th, not much damage; ground still too wet to plow; corn cutting about completed, some badly molded in about in shock.

in shock.

Atchison.—Reduced acreage of wheat being sown; frost 12th and 13th did little, if any, damage; prairie hay not all up yet; corn cuttling in progress.

Bourbon.—More wheat being sown than last year, but plowing retarded by wet ground; considerable frost 13th, causing little damage.

Chase.—Much plowing being done, and wheat sowing commenced; great deal of hay to be made yet; new corn in general use; corn cutting finished and Kafir and cane cutting commenced; alfalfa seed croppoor, but fourth crop of hay good; pastures excellent and water sufficient for all winter.

winter.
Cherokee.—Heavy frost 13th, but all crops practically safe from frost; wheat sowing in progress, with ground in fine condition; good quality new corn on market, but low land corn of poor quality; wheat yield is large, especially where fertilized.
Coffey Pain Thursday storage have

tilized.

Coffey.—Rain Thursday stopped haying;
fall work behind.

Crawford.—Ground in excellent condition
for seeding; some wheat up; frost 13th, but
no damage done.

Donlphan.—Ground in good condition;
heavy frost 13th injured late corn.

Douglas.—First frost 13th, not injurious
to crons.

Douglas.—First frost 13th, not injurious to crops.

Elk.—Frost Saturday morning, but no damage done; corn coming to market.

Geary.—Corn cut and Kafir and sorghum being cut: alfalfa making fair growth for last cutting: some wheat being sown, ground in excellent condition.

Jackson.—Heavy frost with ice Saturday morning damaged late corn on bottom lands quite badly, but percentage of late corn is small; good haying week.

Jefferson.—Making hay, cutting corn, sowing wheat and rye; heavy frost morning of 13th injured tender vegetation; much corn ready to cut; considerable prairie hay yet to be made; some alfalfa sowed; apples improving and coloring finely.

Johnson.—First killing frost Friday night, but everything out of its way.

Leavenwortn.—Fall plowing progressing; haying finished; corn cutting begun, crop extra fine; apple crop poor, marketing begun.

Linn.—Heavy frost on low lands morning

gun.
Linn.—Heavy frost on low lands morning
of 18th; plowing progressed part of week,
and some threshing of wheat was done;
stacked wheat considerably damaged; not

stacked wheat considerably damaged; not much corn being cut on account of wet weather.

Marshall.—Alfalfa seeding delayed by soarcity of seed; drilling of wheat will dommence soon; frost 12th and 13th dam-aged forage somewhat; fall apples a good crop of fine quality.

put up. Plowing is progressing in many counties and is about finished in the southern. Frost damaged tender plants in the northern counties.

Barton.—Third crop of alfalfa being cut; wheat plowing general soon; light frost 12th and 13th, no damage; corn nearly all cut; pastures fine.

Clay.—Frosts nights of 11th and 12th not sufficient to do much, if any, damage; corn being cut and some marketed; haying nearly completed; wheat seeding well under way.

Cloud.—Week verv favorable for farm work; frosts 12th and 13th damaged Kafircorn.

Cloud.—Week very favorable for farm work; frosts 12th and 13th damaged Kafircorn.

McPherson.—Plowing nearly completed; seeding begun; threshing continues.

Jewell.—Heavy frost the 13th did considerable damage to late gardens and sorghum not yet cut; corn mostly out of way of frost, only small per cent being late enough to be damaged and that not injured.

Kingman.—Excellent crop Kafir and cane being cut; large crop of hay being harvested; plowing about finished; ground getting dry.

Ottawa.—Corn cutting and plowing progressing at rapid rate; wheat sowing begun; light frosts 12th and 13th, no damage. Pratt.—Grain in good condition again, for threshing; no seeding done yet, too dry for germination.

Republic.—Frost 12th and 13th killed tomatoes and sweet potatoes and the blades on low land corn, and injured Kafir-corn; threshing from shock progressing slowly, grain so badly damaged it hardly pays to thresh; plowing not well advanced, and sowing not begun; ground getting dry again.

Russell.—Much hay put up; late corn and

sowing not begun; ground getting dry again.

Russell.—Much hay put up; late corn and forage crops badly damaged by frost on morning of the 13th.

Saline.—Preparation of ground for wheat being pushed; haying progressing rapidly; light frost 12th and 13th damaged gardens in places.

ly; light frost 12th and 12th damaged gardens in places.
Sedgwick.—Fourth cutting of alfalfa being made; ground would plow better with a little rain.
Smith.—Melons and gardens killed by frosts 12th and 13th, and Kafir on low ground badly damaged; late corn injured some, but early safe.
Stafford.—Threshing about done; seeding general; corn husking commenced.
Sumner.—Plowing about done; gathering corn for feed; wheat drilling will begin soon.

soon.
Washington.—Cool weather retards ripening of corn. fodder good; heavy frost morning of 13th did very little damage to corn; sowing commenced; potatoes good. WESTERN DIVISION.

Corn is generally out of danger, and in Ness is nearly all cut. The fourth crop of alfalfa is cut in Wallace and is ready to cut in Hodgeman; the seed crop was cut in Decatur before the frost; an in-creased acreage is being sowed in Ness.

I put my name on my lampchimneys. I'm not ashamed of them.

MACBETH.

If you'll send your address, I'll send you the Index to Lamps and their Chimneys, to tell you what number to get for your lamp.

MACBETH, Pittsburgh.

Forage crops were damaged some by the frost in the northern counties; in Hodgeman all feed crops have been harvested, except Kafir-corn; in the other counties much feed is being put up. Haying has been pushed, and much hay has been put up. Pasture is fine, and cattle are in very good condition. The ground is too dry in Decatur and Lane for plowing.

Clark.—Preparing to put in winter wheat.

Decatur.—Forage crops injured by heavy frosts of 12th and 13th; seed alfalfa practically all cut before the frost; getting dry for plowing.

Ford.—Light frost on the 12th, no damage; prairie pastures good and cattle in fine condition.

Hamilton.—Frost on mornings of 11th and 12th; a cold week.

Hodgeman.—Kafir-corn not ripe enough to cut; all other feed put up, and haying in progress; alfalfa about ready to cut.

Lane.—Much feed being put up; frost on 12th hurt growing crops somewhat; corn mostly past injury; too dry to plow.

Morton.—Fodder cutting in progress; crop much injured by drought.

Ness.—Good week for haying; killing frost Thursday night; threshing practically finished; experimental crop of flax large; wheat and barley yielded poorly; increasing acreage of alfalfa; corn nearly all cut; pastures fine, and cattle fat.

Thomas.—Heavy frost morning of 12th, hurting cane and Kafir considerably; farmers cutting forage crops.

Trego.—Heavy frost on morning of 12th killed vines, sorghum, and some other crops, but did not inure hay; much feed uncut.

Wallace.—Fourth crop alfalfa cut, seed crop good; range grass good; frost and a little ice on the 12th did little damage; corn about out of danger.

Crowds Going to the Circus.

An unusual degree of interest has been aroused by the announcement that Ringling Bros.' famous big circus is to exhibit in Topeka, Tuesday, Sept. 23. Several big excursions are announced, and out-of-town people will be well represented at the big show. Those who come should make every effort to arrive in time to see the magnificent new free street parade, which takes place in the morning preceding the opening performance. The procession is divided into thirty enormous sections, each of which is a complete parade, and presents in its entirety a bewilderingly magnificent two-mile carnival of pageantry, such as the world has never seen. In this gorgeous display are shown over 100 beautiful dens and cages of wild animals, 500 horses, 30 elephants, and nearly a thousand people, and the costumes throughout are of the finest silks, satins, and cloth of gold. The performance that follows is the most magnificent arenic display ever presented by any circus in America. It is entirely new this year, and its novelty and magnitude have created a sensation wherever the show has exhibited. An unusual degree of interest has been

One Fare for the Round Trip

to Boston and return, via Nickel Plate Road, October 7th to 11th, account meeting of Brotherhood of St. Andrews. By depositing tickets at Boston and paying fee of 50c., extended return limit of November 12th may be obtained. Though vestibuled sleeping-cars and first-class service in every respect. Cheap rates to all New England points. Write John Y. Calahan, 113 Adams St., Chicago, for particulars. (No. 49)

Proposition—I can give a few honest parties having five hundred dollars (\$500) to invest, or who could give a bankable note, a paying business on GROUND FLOOR TERMS, they remaining home most of the time. I have complete a machine valuable to every farmer, and trying a single county, sold \$12,-360 worth in it. This raised my sales to \$1,000 a day for forty days. Similar work was never known. Best bank reference. Come in person. One-half your car fare is paid, if in good faith, even if the business does not suit.

WM. R. WHITE, 70 Times Patentee.

Eddy Bldg., Bloomington, Ill.

GALVANIZED WIRE



There are two kinds of Cream Separators Sharples Tubular Separators Tubular Separators and the others. The Sharples has a plain, simple, effective, easily washed bowl that can't get out of order, because it has no complicated parts. The others, without exception, have combicated cones, discs, partitions and graters, lifficult to wash and frequently out of order. The difference is vast. It's the difference between success and failure. "Talk" won't explain the difference. But thought and judgment and experience will. We have a handsomely illustrated paper that will help you, or we'll send you a Sharples Tubular and let you try it for P. M. Sharples, West Chester, Pa arples Co. Chicago, lils.

In the Dairy.

Conducted by D. H. Otis, Professor of Dairy Hus andry, Kansas Experiment Station, Manhattan, Kans. b whom all correspondence with this department to whom all correspondance should be addressed.

Sixth Report on Cow Text Experiment

This report completes the record for one-half of the year. For detailed account of March, April, May, June, and July records see Kansas Farmer for April 10, May 15, June 26, July 17, and August 14. The record for August is as follows:

winter, from want of water in prope conditions than from want of feed. Another man who uses the heater says, 'No one needs tell me how the fire in

"No one needs tell me now the fire in my heater is; the milk pail tells that. As the fire goes down, the milk goes down in the pail."

The dairy cow is a very sensitive animal, with a thin coat of hair, thin hide, and but little fat beneath the surface to protect her from the cold. It requires feed to keep up her normal temperature feed to keep up her normal temperature and when she is forced to quench her thirst with ice water this normal temperature is reduced to abnormal, and it requires an extra amount of feed to bring her temperature up again to the normal, therefore reducing the amount of material that should go toward the production of milk. Now, fellow dairy-man, can you from the financial stand-point afford to allow your cows to drink ice water and warm it with high-priced feed and thus increase your milk flow, when by the use of a tank-heater you can warm the water for the whole herd with much cheaper fuel, and at the same time maintain a good milk flow?

On our farm we do not burn very much coal in our heater, but burn old

chunks of rotten fence posts which are practically worthless for any other pur-pose. We find this a good way to keep the farm clear of rubbish as well as supplying a good fuel for our heater. Corn cobs are excellent for starting fires

and for warming the water quickly.

The time required to attend a heater is about the same as that required to break the ice out of the tank, and it is far more pleasant to work with fire when the mercury is down about zero, than with ice. The water should be warmed at least to 60° F. The cows like it good and warm and I have noticed them drink from as near the heater as

A WONDERFUL RECORD

We are glad to announce to everybody interested in dairying within a radius of 500 miles of our place, that in consequence of the economical system upon which we do business we were able to pay during the past year the magnificent average price of

22 I-2 Cents Per Pound For Butter Fat

There is practically no limit to the quantity of cream we can handle and we ask your cooperation in developing this business along these lines. In addition to the excessive price received by our patrons for butter-fat, they have added to the value of their skim-milk by using a farm separator, what would amount to at least 5 cents a pound additional for butter-fat. Write us for particulars and we promise prompt reply to any inquiries.

BLUE VALLEY GREAMERY COMPANY

"Pioneers of the Farm Separator System."

	SIXTH REPO	RT OF COW TEST EXPE	RIMEN'	r. Yield		Grain	consu	med.	Judges rank
	Selected by-	Fresh—	Milk, lbs.	Test, per ct.	Butter fat, lbs.	Bran	Corn chop.		for
Cowslip	. J. W. Bigger			4.25 4.3	24.87 25.06 32.87	95.7 108.5 108.5	95.7 108.5 108.5	191.4 217. 217.	3 1 2
Rose of Cunningham Clover Leaf	M. L. Dickson	Jan. 12, 1902	478.	3.5 3.65	16.76 22.29	62. 77.5	62. 77.5	124. 155.	7 5
Rose of Industry	C. Eissaser	May 3 1902	844.7	4.15 3.45 5.85	21.97 29.14 18.4	77.5 108.5 €1.7	77.5 108.5 61.7	155. 217. 123.4	9
Dalsy Belle	C. C. Lewis	Dec. 25, 1901	547.1	5.45	29.82	108.5	108.5	217.	4

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BUTTER

MAKERS

Note: Roughness per head, 470 pounds alfalfa, of which 110 pounds was fed green and 360 pounds as hay. RECORD FROM MARCH TO AUGUST, INCLUSIVE.

			RECO	KD FIC	Mr mir		7	1018				II Das 1	at III)	27011 10		Rough-
		farch	A	pril	м	ау	- J	une	J	uly	Aug	ust.		Total .	Grain con-	ness con-
No. Name of cow. 243. Cowslip	Milk, lbs. . 761.6 . 849.5 . 1200.1 . 733.1 . 824. . 802.	Butter- fat, lbs. 33.89 32.28 36.00 21.62 25.27 25.68 30.88	Milk, 1bs. 762.1 743.7 1090.1 642.9 726.8 791.5 477.0 582.8	Butter- fat, lbs. 32.00 29.00 35.97 20.25 24.34 26.91 25.04 29.43	Milk, 1be. 797.5 878.4 1241.2 745.7 830.3 838.1 876.4 6687.3	Butter- fat, lbs. 35.88 36.01 41.53 23.86 29.47 33.10 29.79 30.49 35.39	Milk, lbs. 658.9 793.0 1055.5 593.9 742.6 664. 999.3 438.6	21.97 5 26.73 6 25.92 6 34.48 3 23.89	Milk, 1bs. 559.2 657.5 826.6 401.9 633.2 511.4 842.2 628.0 532.0	Butter- fat, lbs. 25.16 £7.29 30.58 13.65 24.06 20.97 29.90 19.35 26.58	Milk, 1bs. 585.1 682.7 913. 478. 610.7 529.4 844.7 314.6 547.1	Butter- fat, lbs. 24.87 25.06 32.87 16.76 22.29 21.97 29.14 16.4 29.82	M11k, 1bs. 3565.2 3846.8 5499.9 3194. 3734.3 3625.6 2720.4 2298.1 3060.5	B: tter, fat, lbs. 182.44 183.74 213.41 118.11 152.84 154.14 123.31 142.85 184.9	sumed, lbs. 1249.5 1300.6 1388. 816. 957.9 957.9 746.6 913.3 1249.1	sumed, 1bs. 29.44 29.44 29.44 29.44 29.44 29.44 29.44 29.44 29.44

On the first of August the cows were they could get. An Illinois dairyman turned on sorghum pasture for fifteen minutes and the time extended fifteen minutes and the time extended into minutes per day for a week, at which time they were allowed on as long as they would eat. In order to save the sorghum the cows were taken off as soon as they were full. In addition to save the cows still had access the pasture the cows still had access to the tame grass pasture on which they had been all summer. This was rather short the first half of the month but on account of the rains improved a great deal the last half. From August 18 to 31 it was too wet to turn on the sorghum. This caused somewhat of a decrease in the milk flow the last half of the month. The cows had access to alfalfa hay morning and evening. In addition to the alfalfa hay each cow con-

sumed 110 pounds of green alfalfa.

Daisy Bell was bred August 16 to the Guernsey bull, Shylock of Darling-

Floss went dry the last of the month. Four of the cows, Rose of Cunning ham, Clover Leaf, Rose of Industry, and May Queen produced a higher yield of butter fat in August than in July.

Tank-heaters for Cows.

L. V. SANFORD.

Experiments have shown that the average dairy cow consumes 4.68 pounds of water for each pound of milk that she produces, and since 87 per cent of the milk is water, we see how important it is that our cows drink large quantities of water. In order that they may do this the water should be pure, clean, and at a temperature of about 60° F. By the use of any of the various makes of heaters that are on the market the water may be held at this temperature during the coldest of winter weather at a small cost. A prominent Illinois feed-er says after two years' experience with a tank-heater, that he is confident that farmers lose more on their milk in the

says that he has found that cows even in summer much prefer water 60° F. to that below 60° and that they drink more of it and they will consequently give a larger flow of milk. He also states that when his cows were forced to drink water in the summer directly after it is pumped from the well the milk flow was perceptibly decreased. If this be true in summer we again see how important that the water should be warmed in winter when the cow is already chilled by the atmosphere. It is a fact in medical science that warm drinks promote the lacteal secretion hence another reason why we should warm the water for our dairy cows.

The water provided for the dairy cows at any season of the year, but in winter especially, is a factor upon which largely depends, not only the profit and income from the dairy business, but the health and thrift of the cows besides. Then why not out of sympathy for your cows, to prevent the necessity of pairing, if not replacing a bursted water tank, to prevent your getting cold fingers, sick animals, becoming financially embarrassed, and many other things that lead to "internal, if not external" profanity, spend a few dollars for a tank heater, warm the water for your stock and ever after lead a Christian life.

A Few Points of Note Gathered From Study and Experience.

W. A. HAMILTON.

There are a few facts that are prominent to the dairy man and these he must observe whether conscious or un-conscious of their true value. If his knowledge has mainly come from books he is liable to generalize and classify results, study causes and consequences. If his knowledge is gleaned from experience he is apt to lose sight of general causes, results and attribute effects to a

Success is in the System.

If the system is right, success will follow. We are running on the New York price system basis. That is the reason for our success. We are paying two and one-half cents less than the New York market for butter-fat, less the actual cost for fuel, labor and supplies for running the station. We are paying three and one-half cents less than the highest quotation on that market for butter-fat in cream from hand separators brought to the stations. If you are near no station, and have cream in quantities to warrant shipment, we are paying two and one-half cents less than that market for butter-fat in the can and at the railroad station, we to furnish everything necessary for shipment.

This is Right, Fair and Just.

It is a system based upon equity to all concerned—the patron and to ourselves. The price is entirely out of our hands, for it is at all times regulated by the most stable butter market of the world. And so long as this policy is continued we expect and will have the confidence of our patrons and our business will build. Let us hear from you, either through our station operators or by letter.

The Continental Creamery Co.,

Topeka, Kansas.

minor factor. Yet it matters little if he knows the true facts and works so to avoid errors.

I shall endeavor to give a few of the points that I deem most necessary for profitable labor in the dairy occupation. The factor most successful in a dairy

is the man and equal, not second, is his

The reasoning power of an establishment is the motor or life-giving power, for "The man that thinks governs the man that toils." As we know the requirements of a leader and have heard them enumerated time and again. The professional dairyman will have the best machinery on the market—the cow—the best of the crude article—the feed—that the machinery is to transform into the best article on the market —the milk. The finished articles, but-ter and cheese, are results of his handi-work, and his financial success, to a great degree, a degree greater than most of us are aware, depends upon his skill in putting on the market a stylish. in-expensive and attractive article.

The quality of this manufactured article depends to a great extent, almost solely, on the cleanliness of the milk, machinery, the quality of the crude ma-terial, the workmen, utensils and the building, as "Cleanliness is next to God-liness," it deserves more attention than we generally give it. When the cow is contaminated with disease bacteria in the organs hindering them from per-forming good service, the air saturated with living bodies constantly breathed by the cow into the lungs and falling into the milk, the hay giving the air millions of hay bacilli, and the gutter swarming with increasing number of bacteria, it is positively impossible to make an article for the market that will command the highest price.

I have concluded that the areator and cooler should have a wider practice among dairymen. If I was called upon to give the most important thing upon the dairy farm I would say cooler and areator, if asked how to improve the milk on the farm I would suggest cooling and areating.

What Shall We Raise to Feed With Alfalfa?

C. H. WILSON.

Under Kansas conditions corn, Kafircorn, soy beans are without doubt the grain to grow and feed with alfalfa.

It has been proved at the Knsaas Ex-

periment Station that a good ration for dairy cows consists of twenty-five pounds of alfalfa and three and one-half pounds of corn daily. However, it is better to feed more of a variety, such as soy beans and bran, so as to keep up the cows appetite.

In Kansas the Kafir-corn stands the dry hot summer better than corn and ary not summer better than corn and it is nearly equal to it in feeding value. It has strong feeding powers and heavy root development and is especially adapted to poor soils. At the Kansas Experiment Station they raise more Kafir-corn to the acre than corn, thus making the feeding value of the Kafircorn worth more to the acre than the

For calves ground Kafir-corn is a good feed. It counteracts the loosening tendency of the milk. When calves are six weeks old alfalfa hay can be fed with the Kafir-corn; however, the alfalfa hay tends to scour young calves.

For hogs Kafir-corn, soybeans, alfalfa hay are the ideal feeds. The Kansas Experiment Station finds that hogs make better gains on Kafir-corn meal and alfalfa hay than on the meal alone. The hay should be fed in long flat troughs, giving the hogs all they will

The gain per bushel of feed was: Kafir-corn meal and eight pounds al-falfa hay, 10.88 pounds; Kafir-corn meal

alone, 7.48 pounds. For sows with young pigs raise alfalfa and let them run on the field or cut green alfalfa and feed to them Raise wheat so as to have available shorts to feed with the green feed. Kafir-corn combined with alfalfa hay will produce more pounds of pork per acre from upland, than are usually produced from adjoining bottom lands of

For horses oats and corn with alfalfa hay makes a good ration; the hay must be bright and free from dust. From my own experience I know that alfalfa hay and oats kept my work horses in much better condition during the hardest working season than did the prairie hay and oats. The best way is to mix the alfalfa and prairie hay about half and half; then there is no danger of the horses eating too much alfalfa. There are a great many different opinions concerning the feeding of alfalfa to horses. Some say feed it, others say don't feed it, that it injures the kidneys of the horse. Notwithstanding

these differences Mr. Dewey, of Manhattan, one of the prominent horse breeders of this section of the country feeds alfalfa hay to all his horses, even the stallions and jacks, with good re-

In Oregon, Washington and Idaho clover and alfalfa seed are mixed and grown together very extensively for the production of sheep. The clover starts to grow quicker than the alfalfa and helps to furnish a variety which is desirable.

In conclusion, I will say that under Kansas conditions wheat, corn, Kafir-corn, oats and soybeans are the grain to grow and feed with alfalfa. All these feeds can be grown on the Kan-sas farm, and all the different kinds of stock that make the farm profitable can be grown on these feeds.

Leading Exhibitions for 1902.

Kentucky State Fair-Louisville, Sept. 22-27.
Michigan State Fair—Pontiac, Sept. 22-26.
Illinois State Fair—Springfield, Sept. 29-

Oct. 4.
Texas State Fair—Dallas, Sept. 27-Oct. 12.
St. Louis Fair, Oct. 4-II.
American Royal Hereford Shorthorn,
Galloway, Aberdeen-Angus, Berkshire, and
Poland-China—Kansas City, Oct. 20-25.
International Live Stock Exposition, Dec.
1-6.

Sedgwick County—The Wichita and South-western Exposition and Fair Association— H. L. Resing, Secretary, Wichita; Septem-ber 22-27.

Kansas Fairs in 1902.

Following is a list of fairs to be held in Kansas in 1902, their dates, locations and secretaries, as reported to the State Board of Agriculture and compiled by Secretary F. D. Coburn:
Butler County Fair Association—H. M. Balch, Secretary, Eldorado; September 29-October 3.

Harvey County Agricultural Society—

October 3.

Harvey County Agricultural Society—
John C. Nicholson, Secretary, Newton;
September 23-26.

Jackson County Agricultural and Fair
Association—S. B. McGrew, Secretary, Holton; September 23-26.

Marshall County—Frankfort Fair Association—J. D. Gregg, Secretary, Frankfort;
September 23-26.

Morris County Exposition Company—M.
F. Amrine, Secretary, Council Grove; September 24-26.

Ness County Agricultural Association—
H. C. Taylor, Secretary, Ness City; September 24-28.

Sentiment inspired by patriotism has—and it is to be hoped always will afford, a one-cent-a-mile rate to enable the "Boys in Blue" to assemble in reunion at least once a year, from all points of the compass. Such a rate is authorized from all points east of Chicago to Washington for this purpose in October, 1902. Such a rate has been afforded once a year since the first reunion of the veterans of the War of '61. This especially low rate has become popular, not only for the purpose for which it was established, but for other purposes, chief among which we recognize the opportunity thus afforded to visit friends, at or convenient to, the place of reunion, because of the low rate, and because of the favorable opportunity by reason of the fliberal extension of time limit for return. On dates authorizing sale of Grand Army Excursion tickets to Washington, for the Reunion of 1902, are also authorized similar reduction in rates, from all points west of Chicago, with time limits the same as on such tickets to Washington, excursion tickets to any point in the territory of the Central Passenger Association, on or reached by the Nickel Plate Road. For full information call on you most convenient interline ticket agent by mail, wire, phone—or in person, or on John Y. Calahan, General Agent Nickel Plate Road, No. 113 Adams St., Chicago, Ill. (No. 47) Home Visitors' Low Rate Excursion

She Was Healed of Cancer.

She Was Healed of Cancer.

This is to certify that I had a cancer on the side of my neck the size of a silver dollar for twelve years. I was advised by my family physician to try Dr. Rinehart's new cancer cure, which I did, and after being under his treatment for four weeks I found that I was permanently cured, there being no pain or loss of sleep. I can most heartily recommend his treatment to any one.

Most Resp. Yours,

Mrs. THOMAS JONES,

Russiaville, Ind.

Persons afflicted can have a book on Cancer and a Trial Treatment sent them with full directions free of cost, postage prepaid, by sending a full description of their case to DR. RINEHART, Box 20, Kokomo, Ind.

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Owing to its many money-saving and money-earning qualities, there is no better investment that a Dairyman can make than a U. S. Cream Separator. Eight or nine cows and a U. S. Separator are equal to ten or eleven cows without one, to say nothing about the cost of feeding and labor saved. Dairymen who are getting along without a separator, thereby hoping to save the expense of buying one, are making a grave mistake, as they are sure to find out sooner or later. Many have wished they had bought sooner, so will many others when they know the superior qualities of the U. S.

If any dairyman was sure he would save arough the first year to pay for his separator, wouldn't he

If any dairyman was sure he would save enough the first year to pay for his separator, wouldn't he buy? Well, that is just what hundreds and thousands of purchasers of the U. S. Separator have done, and some have made enough in six months.

If you keep cows, write the VT. FARM MACHINE CO., Bellows Falls, Vt., for their booklet "How to Make Money," which tells of a few of the many profitable experiences of users of

U. S. SEPARATOR

The Poultry Hard.

Diseases Common to Poultry.

A. H. DUFF.

It is very proper for us to know and to make a study of the different diseases of poultry, and know just what to proscribe in the way of medicines to get the best results in curing them, but it is of much more importance to study the causes of the different diseases, and to apply prevention in time to prevent its ravages. It is a successful poultryman that makes the latter study a specialty, but it is by far odds the exa specialty, but it is by far odds the exception, and the common run of poultrymen take up the former, and give it much time and study, scarcely thinking of the latter. It is not what we do not know in the line of poultry management so much, as it is what we do know and do not put into practice that causes so many failures in our flocks. Let us here consider a few of them. Let us here consider a few of them.

FEEDING POULTRY.

If we master the feeding problem we have gone over a piece of very diffi-cult ground. The rule of measuring or weighing out a certain amount of food for each fowl, and thus following up this kind of feeding to all kinds of flocks and different varieties of the same, different ages, etc., will lead us into difficulty, and the poultryman that knows no more about managing poultry than this, should never engage in the business. Fowls running at large, largely regulate their own food supply, but when we confine them it is altogether different, and the system of confinement is largely becoming popular, for it is an undisputable fact that the sys-tem of confining them has given the best results, and it has opened up a way that the city lot poultrymen have been able to furnish his own luxury in the way of fresh poultry and eggs for his own household. While this is true, it does not leave the farmer on the oppo-site, for all the free range he can give his fowls will not give him the profits that it will to largely confine his birds. Improper feeding for the best results is just as apt to fail with free range poultry as those confined, so that the free range poultrymen have no "walk over" the other fellow when it comes to get-ting the best possible results. You should know enough about poultry to feed as your judgment dictates, never over-feeding, and but little under-feed-ing. Never forget that to balance your grain feeding, nothing will come so near doing it, and at the same time give the least trouble, as clover hay. Alfalfa is the best but red clover well handled will answer. We might sum up the principal points in feeding in grit, grain, clover, and pure water; nicknacks sparingsly.

QUARTERS FOR FOWLS.

Dry, clean yards, with plenty of shade in summer, and good tight houses in winter. Free range is nowhere to be considered in winter, for free range in winter wherever winter is found, means exposure to sudden changes, and reduces the supply of eggs, and endangers the health of any flock. Laying hens should never set feet upon the snow except it is rapidly melting away, and a carpet of dry hay or straw in the yards is always preferable. Fifthy brooders or houses infested with lice is the most rapid road to destructive diseases both with young and old fowls. Ordinarily body lice is not the worst kind of lice and so not cause disaster in the flock so readily as the commot mite that infests the houses and roosts. But treat all alike and make sure of their destruction. Remember that newly constructed houses are more easily infested than old houses, and begin early to spray them. It is better to spray immediately after the house is completed. Use any of the liquid lice-killers advertised or make it from carbolic acid There is scarcely a and kerosene oil. poultry plant, be it farm or anywhere else, that poultry do not need sharp grit and egg-shell material. Crushed oyster shells are excellent, and I consider an absolute necessity to feed the fowls at all seasons of the year.

COLD AND HEAT.

Excessive cold or heat are two very important factors for us to study and arrange, for they are both very productive of disease. Overheating is usually produced by over crowding. It is also produced by small, poorly ventilated houses, either in young or old birds by improperly constructed houses. Better to let the fowls hunt out a roosting place as they choose, than to compel them to occupy limited quarters such as tight boxes and small roosting quarters that the filling filthy.

When the various crops are being that boxes and small roosting quarters harvested in the fall, is the time to save improperly ventilated. Just how to regular to prevent to becomplace as they choose, than to compel the filling filthy.

tion. In the first place do not overcrowd or keep more fowls confined in a house either in the day time or at night. Regulate your house so that abundance of ventilation is given in summer, and enough in winter to keep the air pure and healthy inside We say to make all houses tight, for it is thus we must have them during much of the time in winter, but tight houses are destructible when the temperature is such as not to require it. Roup, which is so common now in almost every section of the country, is large caused by overcrowding not only in winter but summer as well. Roup is by no means a production of cold weather, but more frequently comes in its mildest form in summer. It attacks the growing flock, and may be produced by exposure to storms and heavy rains, or by overcrowding of the chicks in their night quarters. Roup is much more fatal in lower latitudes and in wet climates, than in high latitudes and dry atmospheres, but it is every-where now in the extreme temperatures all over the country. Many causes have been given for its appearance in flocks and some lay blame to very high feed ing, but while this may help the situation as to the temperature of the body of the fowl in overcrowding, the latter is to blame. Dampness is always dan-gerous, and this is one thing we should particularly avoid about poultry quar-ters. As winter approaches it reaches its most fatal form, and if it does not kill outright, it reduces the flock ma-

EXERCISE AND HOW MUCH.

Just how to give fowls the proper amount of exercise for their well being, and to obtain the best results in flesh and output of eggs, is a question of very great importance. If fowls have to work for their living in scratching material to such an extent that they can not obtain food enough for their needs, or if they are compelled to range to excess for the same, they will never do their best in flesh or egg yield. If on the other hand they have no exercise and have nothing to do but stand or sit around and partake of food constantly before them, they become sluggish, lose their appetite to such an extent that but little profits follow. Nothing is more productive of disease than to crowd their crops with food without sufficient exercise to balance it. You will not be liable to make a very great mistake if you paste the following in your hat as a guide: Keep your fowls hungry enough to scratch through a foot of straw to find a little grain there, but do not depend upon this as a food sup ply, but give them their regular meals in addition.

If you have been inbreeding your flock to any extent you will have nothing worth starting with, and all the care and management you can bestow will not lead you to success. You must start out right if you expect to win, and you will fail every time by in-and-in breeding. Some fanciers may under take to bring me to task on this point, but to them I will say, that they may produce a few hirds coming nearer to Standard requirements in the way of "bars, spots and stripes" to knock the other fellow out in the show room, but those fellows do not help to feed the multitudes with market poultry and eggs. It is very essential to breed up to Standard requirements, and breed them just as close as it is possible, but be careful to keep the constitution of your birds in view first, last and all the time.

Poultry Notes.

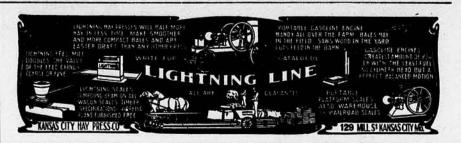
N. J. SHEPHERD, ELDON, MO.

As a stimulant for egg-production the following powder will be found benefi-cil: Fenugreck, 1 pound; ground bone, 1 pound; ground charcoal, 1 pound; sulphur, 1 ounce; red pepper, 1 ounce; salt, 1 ounce. A tablesponful in the soft food once a day is suincient for

In feeding grain to the fowls it is quite an item to give a variety as in this way a good appetite may be more readily maintained. On the average farm there is usually a sufficient quantity of grain so that if a little care in feeding is exercised a good variety can be maintained.

Ducks require a dry floor in winter. Because they are classed as water fowls many people get the idea that they will live in damp quarters, but this is a mis-take. One of the best ways of making them comfortable in winter is to have a light roofed shed and keep the floor well littered with dry straw changing sufficiently often to prevent it becom-

improperly ventilated. Just how to regup and store away the supply of feed ulate the cold and the heat is the quest needed for the poultry during the win-



ter. The small potatoes, beets, and apples, and the cabbage that did not head should all be saved to feed the poultry during the winter. Not only can a good variety be secured in this way but the cost of wintering be greatly decreased as all of these are cheap foods.

Bones are valuable for poultry largey for the prosphate of lime they contain. They contain also a small quantity of animal matter which is useful for food. They are in their best condition when fresh and unburned. Burn-ing consumes the animal matter and makes them just so much less valuable. While the charcoal which burned bones contain aids digestion and is purify-ing, it can be obtained more cheaply in the form of common wood charcoal.

A good way to tell a fresh egg is by the air bubble on the large end, the smaller the air bubble the fresher the egg. A fresh egg has a somewhat rough shell while the shell of the stale egg is very smooth. When cooked the contents of a fresh egg stick to the shell and must be removed with a spoon; but a stale egg when boiled permits the shell to be peeled off like the skin of an orange. It takes a longer time to boil a fresh egg hard than it does for a stale egg, and fresh eggs are more easily digested than stale ones.

Silage in Barrels.

Replying to your request for informa-tion about keeping silage in barrels, I give my way.

I take a barrel as airtight as I can get it, put about six inches of green clover grass in the bottom of the barrel. I pound this down in the barrel, then put in more and pound again, and so on until the barrel is full. I find that the tighter it is pounded the better it will keep. It does not hurt it. The barrel should be headed up tight. I think Mr. G. will find that this is as good as any green food he can get in the winter.—Correspondence in Farm Poultry.

About Eli Hay Balers.

About Eli Hay Balers.

The excellent showing for an abundant hay crop this year is going to make lively work for the hay-balers. The mention of hay-baling naturally suggests the "Eli" Baling Press which is being advertised in our columns by the Collins Plow Company, of Quincy, Ill. Among hay-balers it is rated as embodying about all that is known to be good. We do not know what, if any, significance there was originally in the name, but it is safe to say that the name it has made for itself far eclipses any



meaning the word may have had at the time of the Ell's coming into the hay-baling field. There are numerous considerations which have given it a wide use. First of all there is that indispensable requisite of turning out the shapely solid bales which enable the shipper to get the greatest amount of hay in the car. Then there is its extraordinarily large feed opening, easy and safe feeding and great capacity. Heing a full circle press, a very important item is the fact that the bridge over which the horses have to step is made very low, and the plan of the power is such that nearly all the resistance is removed while the horses are crossing it, making their duties light and safe. Every part has the necessary strength to enable it to continue long in heavy work.

As the baling season is fast approaching, parties contemplating purchasing should not fail, before placing their order, to send to the above company for their illustrated catalogue, which fully describes the thirtyeight sizes and patterns they make. Kindly mention this paper when writing.

\$23.30 Chicago to New York and Return

via Nickel Plate Road, on October 3, 4, 5, and 6, with return limit leaving New York October 14, 1902. Three trains dally, at convenient hours. Vestibuled sleeping cars. American Club Mcals, ranging in price from 35 cents to \$1.00, served in dining-cars on Nickel Plate Road, also meals a la carte. Chicago depot, Harrison St. and 5th Ave. City Ticket Office 111 Adams St. 'Phone Central 2057. Write John Y. Calahan, General Agent, 113 Adams St., Chicago, for particulars. (No. 51)

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ROSE COMB WHITE LEGHORNS—Fine cocker-els for sale. Emboden geese for sale—\$5 per trio. Mrs. Winnle Chambers, Onaga, Kans.

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All our Fine Breeders of this season, also Spring Chicks for sale after the firstof June. Barred Rocks, White Rocks, Buff Cochins, Partridge Cochins, Light Brahmas, Black Langshans, Silver Wyandottes, White Wyandottes, Silver Spangled Hamburgs, S. C. Brown Leghorns, and Belgian Hares. Buy the best now at the lowest prices. Write your wants. Circulars free. Choice Breeders and Show Birds.

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NO MONEY TILL CURED, 25 YEARS ESTABLISHED. We send FREE and postpaid a 200 page treatise on Piles, Fistula and Diseases of the Rectum; also 100 page Illus. treatise on Diseases of Women. Of the thousands cured by our mild method, none paid a cent till cured—we furnish their names on application. DRS. THORNTON & MINOR, 1007 Oak St., Kansas City, Mo.

The Apiary.

Conducted by A. H. Duff, Larned, Kans., to whom all inquiries concerning this department should be addressed.

New Queens.

Early in autumn is the best time to procure queens and introduce them into full colonies. The best of queens can now be had at less than half the prices they can be procured for in spring..

Before introducing a new queen, remove the old one from the hive, and secure her so that she can not get away, for she will find her way back to the colony, and the new queen will be lost. Queens are sent out in introducing

cages, and the process of introduction will take place without assistance of any one. To make it more sure in the any one. To make it more sure in the hands of the amateur, the cage should not be opened for twelve hours after placing it in the hive.

The queen cage used for shipping and introducing, is composed of two departments; one for the queen and few bees that accompany her, and the other is filled with food composed of sugar and honey worked into a stiff dough, which the bees of the hive must eat through before the queen is reached, which will will take them about twenty-four hours, and thus they liberate the queen themselves. .

Of all the different varieties of bees that of late years have been imported into this country, none exceeds the pure Italians, and but few breeders now breed anything else, for there is no demand for them. The Italian bee has been greatly improved from select breeding in this country. Home-bred stock is in better demand now than those imported directly from Italy.

The best feed for bees if for winter stores, is granulated sugar, indeed it is the best and cheapest for feeding at all times that bees require feed. The best feeder to use is a block of two inches thick filled with holes on one side nearly through the wood. . The size of feeder may be gauged by the amount of feeding whether light or heavy. Feeding in an upper story is the best and safest plan. Add water enough to thoroughly cover the sugar and heat to the boiling point. This is for syrup and warm weather feeding.

Autumn Management of Bees.

Considerable work is necessary to do with bees in autumn if we have them in the proper shape to go into the win-ter in fine condition. The most of this work is better done early in autumn for it can not be done to near as good advantage later. September is the best time to do it, and all feeding, and arranging the hives, and getting the brood chamber in fine condition, can only be done at this time.

Feeding of colonies that do not have enough honey to winter on should be done now, from the fact that the bees will seal up the honey, which they will not do later, and a colony that is fed now will breed a lot of young bees that is the life of the same during winter. Fall bred bees are worth much more than those bred in summer, and a colony that is thus fed early, will produce enough young bees to insure its wintering well and coming out strong in spring feeding is best done regularly every day during the month of September, as by this prolonged method, the queen will continue to lay eggs, and a fine lot of brood will be the result. While it may take a little more feed to

do this, yet it pays well to do it.

It is so seldom that we get any surplus honey in autumn, that it is best to take off all supers, and allow the bees to store all they get in autumn, in the brood chamber for their own use. A flow of honey in autumn will enable ia colonies ways winter better thereafter, but it is so seldom that we get such in most localities, that we usually go into winter quarters with old bees bred in summer. Bees will not breed if fed late in autumn, unless the weather is unusually warm, but even then it is not good for a colony to go right into cold weather with too much brood in the combs, for such colonies require frequent flights.

Moving Bees in Autumn.

It is not good policy to move hives of bees in autumn short distances, and many frequently do this, thinking that some other place would be better and more convenient to have them during winter. Bees may safely be moved a mile or more without loss, but a less distance will be followed by loss of bees. Even if taken a few rods, and indeed a few feet, especially if many colonies are near, the bees will return

hives, or if no other colonies are near, they will not find the way to the hive, except it be moved but a foot or so at a time each day they are flying, when they may thus be made to follow the hive.

We can very easily reduce the strength or numbers of bees in a colony by thus moving them, when no worse time can be found than just before winter for doing it, on account of crippling the colony by weakening it down. Twice in the year we should be very careful about losing any bees by careless handling, and that is in late autumn and early spring. It will do no hurt to move bees long distances, for they will not then return, but in many cases even in the distance of one mile, some of the bees will return.. Bees do not seem to know much about their own hive, but only the surroundings and location of the same which they have marked, and the field bees that go some distances in search for honey, will return on their former lines.

Some think that to set hives against the south side of a building in winter is a good plan, thus giving them the benefits of the warm sun during the day, but this is not beneficial to them and I would rather prefer the north side of a building, if moved at all. The sun in winter is no benefit to bees, except on a day warm enough for them to fly out, and the hives are better shaded from the sun than otherwise. Chaff hives with thick walls prevent the sun from warming up the bees in the hive during days not warm enough for them to be out, which is proper.

Paving the Way for the New Irrigation Law.

The reclamation of arid lands in the West, under the recent legislation, one of the most important measures passed by the last Congress, involves an amount of preparation, before actual reclamation can be undertaken, which is not generally understood. The success of irrigation depends on the constant supply of water, and it is therefore of the greatest importance that the available water resources which are to be drawn upon should be carefully studied. For example, one of the essential facts to be first ascertained is the amount of flow which may be expected at various stages of the streams. This factor is of the greatest importance, for it obvious-ly sets a positive limit to the acreage which can be placed under cultivation. It is easy also to understand how closely the low-water stages must be scrutinized, for the reason that they usually occur in the midst of the crop-growing season, when an abundant and constant supply of water is most needed.

Another important fact to be carefully ascertained is the possibility of increasing the amount at low stages by impounding the spring and freshet waters, or portions of them, in great storage reservoirs, and the location and cost of such reservoirs, some of which may be among the largest structures of

their kind in the country. If it were necessary to gather this information afresh for the uses of the new reclamation law, it would be some time before it would be possible to commence the construction of actual irrigation works, for it is not a simple matter to secure the necessary data regarding the discharge and regime of the streams which must furnish the supply. It requires a series of observations and measurements, made by experienced engineers, extending over months and years; and examinations of watersheds, to determine the location of storage reservoirs and the estimation of their cost, must be carefully and deliberately made. Fortunately much of this work has been already accomplished by the division of hydrography of the United States Geological Survey. For ten years or more this organization has been engaged in a comprehensive study of the country's water resources, with special reference in the Western States to the use of the water supply for irrigation purposes, and as the result of these years of investigation the United States Geological Survey, into whose hands has been placed the engineering and construction work of the reclamation law, has been able to immediately commence plans for construction, say ing years of time and hastening the day when the reclamation of now useless lands will be accomplished.

Vaccinating Bugs.

The science of medicine has reached wonderful perfection. The microbe theory in certain diseases has been proven true beyond doubt. The inoculation of chinch bugs with the microbes of contagious diseases, in order that epidemics may spread among the little pests, is a practical method now in use to the old location, and enter the wrong Dr. D. M. Bye, the eminent specialist

NEW DISCOVERY

MADE BY A MAN IN ALLEGHENY, PENNSYLVANIA.

George C. Eldridge Finds Something Which Many Consider to be Better Than Gold—His Statement.

There is much talk in the town of Allegheny, Pa., over the discovery made by Mr. George C. Eldridge of that place. After a long search he has found something better than gold. In a recent interview he says:

"Yes, I have made what I consider to be an important discovery. To tell you about it I must start at the beginning.

"That was a number of years ago," he continued. "The nature of my work forced me to be very irregular with my meals and that, together with a general misuse of my stomach, brought on nervous dyspepsia. My trouble commenced with bloating constipation and this was accompanied with pain in the back and stomach. I suffered with shortness of breath and palpitation of the heart, sleeplessness and an absolutely miserable feeling at all times. About three years ago I had an attack which confined me to my bed for three weeks and times without number after that I was obliged to give up. My kidneys also became affected and caused me considerable trouble.

"Four different doctors attempted to

cure me but they gave me only temporary relief. I became utterly discouraged. Then I tried Dr. Williams' Pink Pills for Pale People. Relief came in about a week and at the end of four

months I was entirely well.
"I can only say that I believe I owe
my life to Dr. Williams' Pink Pills and can find no words to express my thanks for what they have done for me. Better than gold is but mild praise for them. Everybody who knows me remarks the wonderful change. I can eat anything now, sleep like a child and do my work with ease. I do not need medicine any more although I always keep Dr. Williams' Pink Pills for Pale People on hand."

Mr. Eldridge lives at No. 235 Carroll street, and is but one of thousands who always speak of Dr. Williams' Pink Pills in the highest terms of praise. They know what this remedy will do, for they have used it. It acts directly on the blood and nerves.

At all druggists, or direct from Dr. Williams Medicine Company, Schenectady, N. Y., 50 cents per box; six boxes for \$2.50.

for cancer, of Indianapolis, Ind., says that dosing with medicines, cutting with knives or burning with plasters to cure cancer is no longer to be recognized, but that he has discovered a com-bination of soothing balmy oils which kill the cancer microbes and cure the most malignant cases. Those wno read this will confer a great favor by cutting it out and sending it to a friend who is afflicted. Book sent free, giving particulars and prices of oils. Address Dr. D. M. Bye, Drawer 505, Indianapolis,

\$19.00 Boston and Return. \$19.00

via Nickel Plate Road, October 7th to 11th, inclusive, good returning until November 12th by depositing tickets at Boston and paying fee of 50c. Three trains daily, carrying through vestibuled sleeping-cars. Individual Club Meals, ranging in price from 35c. to \$1.00, served in dining-cars on Nickel Plate Road; also meals a la carte. City Ticket office 111 Adams St., Chicago. Full information can be secured from John Y. Calahan, General Agent, 113 Adams St., Chicago. (No. 48)





@ The @ Superior Cream Extractor.

"It Gets the Cream "-20 per cent more than by setting in pans.

WATER IS NOT MIXED WITH MILK Therefore, impure water does not taint the Cream and the skim-mik is left pure and sweet. .. We PAY THE FREIGHT.

Descriptive circulars, reliable testimonials, and prices mailed on request. Write to-day. Can't get in touch with such a money-maker too quick. : : : : : SUPERIOR FENCE MACHINE CO., 172 Grand River Avenue, Detroit, U. S. A. Red River Division.

FRISCO



Adjustable to wash from handkerchiefs to heavy blankets. (No more use for the wash board.) Washes



Uncle Sam's Mail Service

requires physical and mental ability of a high degree to withstand its hard labors. The high tension to which the nervous system is constantly subjected, has a depressing effect, and soon headache, backache, neuralgia, rheumatism, sciatica, etc., develop in severe form. Such was the case of Mail Carrier S. F. Sweinhart, of Huntsville, Ala., he says:

"An attack of pneumonia left me with muscular rheumatism, headache, and pains that seemed to be all own me. I was scarcely able to move for about a month when I decided to give

Dr. Pain Pills

and Nerve Plasters a trial. In three days I was again on my route and in two weeks I was free from pain and gaining in fiesh and strength."

Sold by all Druggists. Dr. Miles Medical Co., Elkhart, Lad'



NEW FAST TRAIN Between St. Louis and Kansas City and

OKLAHOMA CITY, WICHITA, DENISON, SHERMAN, DALLAS,

And principal points in Texas and the South-west. This train is new throughout and is made up of the finest equipment, provided with electric lights and all other modern traveling conveniences. It runs via our now completed

FORT WORTH

Every appliance known to modern car building and railroading has been employed in the make-up of this service, including

under the management of Fred. Harvey. Full information as to rates and all details of a trip via this new route will be cheerfully furnished, upon application, by any representative of the



Brain Markets.

Conducted by James Butler, Secretary of the Farmers' Co-operative Grain and Live Stock Association.

"The human race is divided into two classes,—those who go ahead and do something, and those who it still and say, why wasn't it done the other way."

Diver W. Holmes.

Secretary Smiley and Grain Trust Members.

That there is a grain trust in this State no wellexistence in informed, intelligent grain-grower will deny. It is too plain to admit of denial. Secretary Smliey has al-ready been convicted and every officer and individual member of the grain dealers' association can be convicted under the same law if farmers will unite in prosecuting them. We feel confident that we can furnish sufficient evidence to convict all of the officers and many of the members of the abovenamed association, and prevent them the export companies who are working in conjunction with them from doing business in this State.

The writer is just as positive that we can make a case against the associa-tion, its officers and individual members, as he was that we could convict Secretary Smiley. We have been col-lecting evidence against the entire combination for more than a year and now we are ready and anxious for action.
This is not a personal contest, it is a
fight for our rights as against a band of outlaws who are organized and who are plundering and injuring the grain-growers of this State by operating con-trary to and in defiance of the antitrust laws of Kansas.

That we can convict and prevent this illegal element from operating and doing business in this State there is not a question of doubt in my mind. Their illegal actions and operations have been carefully followed and there is no doubt but that many of their own members will be too glad to tell what they know when put on the witness stand. They will be as anxious to turn States

evidence as are the aldermen who robbed the city of St. Louis.

We are not going into this case blindly. We are not going into it at all unless we have the backing of the law-abiding business men of Kansas, the merchants who went to aid their the merchants who want to aid their patrons in securing fair play and the farmers and grain-growers who are be-ing plundered by this element of out-laws, operating against the interest of the wealth-producers of our State. We are going to be plain in presenting this

We have had the council all along of some of the best lawyers in Kansas and advised with them constantly regarding evidence that we have secured. We feel confident that we can win this fight and that law will triumph against these organized illegal plunderers and that we can collect damages against all responsible parties who are members of this illegal pool and combine. To do this will require money; such a case can not be fought without expense. The grain trust members are not going to cease their plunder if they can in any way avoid it.

Great legal battles cost money; there is no way to avoid this. If we make this fight the expense must be met. It must be secured before we start. Last year when we began action against Secretary Emiley and other members of the grain dealers' association, they made an assessment of \$25 each on their members and from them and other period and applications and secretary priced a find of \$10. er contributors, raised a fund of \$10,000. Our people did not expend more than \$1,000 in winning these cases and this amount was paid by a comparative

The case we propose now will be a fight to the finish. The other case was to test the law at the least possible expense. The action we now propose is to enforce the law, break up the illegal combination, prevent its operation in the State, and bring its members to justice and give them the full extent of

the law. "Section 1. "Section 1. A trust is a combina-nation of capital, skill, or acts, by two or more persons, firms, corporations or associations of persons, or either two or more of them, for either or for all of the following purposes: First-To create or carry out restrictions in trade or commerce, or aids to commerce, or to carry out restrictions in the full and free pursuit of any business authorized or permitted by the laws of this State. Second—To increase or reduce the price of merchandise, produce or prevent competition in the manufacture ciation.

making, transportation, sale, or purchase of merchandise, produce, or commodities, or to prevent competition in aids to commerce. Fourth—To fix any standard or figure, whereby its price to the public shall be, in any manner, controlled or established, any article or commodity of merchandise, produce or commerce intended for sale, use, or consumption in this State. Fifth—To make or enter into, or execute, or carry out, any contract, obligation, or agreement of any kind or description by which they shall bind or have to bind themselves not to sell, manufacture, dispose of or transport any article or commodity, or article of trade, use, merchandise, commerce, or consumption below a common standard figure or by which they shall agree in any man-ner to keep the price of such article, commodity, or transportation at a fixed or graded figure, or by which they shall in any manner establish or settle the price of any article or commodity or transportation between them or themselves and others, to preclude a free and unrestricted competition among themselves or others in transportation, sale or manufacture of any such article or commodity, or by which they shall agree to pool, combine or unite any interest they may have in connection with the manufacture, sale, or transportation of any such article or commodity, that its price may in any man-ner be affected. And any such combi-nations are hereby declared to be against public policy, unlawful and void.

"Sec. 2. All persons, companies, or corporations, within this State are hereby denied the right to form or to be in any manner interested, either directly or indirectly, as principal, agent, representative, consignee, or otherwise in any trust as defined in section one of this act.

Sec. 5. Every person, company, or corporation within or without this State, their officers, agents, representatives or consignees, violating any of the provisions of this act, within this State, are hereby denied the right, and are hereby prohibited from doing any business within this State, and all persons, companies, and corporations, their officers, agents, representatives, and consignees within this State are hereby denied the right to handle the goods of, or in any manner deal with, directly or indirectly, any such person, company, or corporation, their officers, agents, representatives, or consignees, and it shall be the duty of the attorney general, and the county attorney of any county in the State where any violation of this act be committed, or either of them, to enforce the provisions of this section by injunction or other proceeding; and all persons, companies, and corporations, their officers, agents, representatives or consignees, violating any of the provisions of this section, either directly or indirectly or abetting or aiding directly or indirectly in any or aiding directly or indirectly in any violation of any provisions of this section, shall be deemed guilty of a misdemeanor and shall be fined, not less than one hundred dollars nor more than one thousand dollars, and confined in jail not less than thirty days, nor more than say months, and shall forfeit not less six months, and shall forfeit not less than one hundred dollars for each and every day such violation may continue, which may be recovered in the name of the State of Kansas in any court of competent jurisdiction.

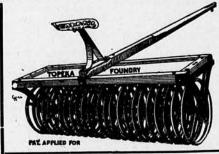
"Sec. 8. That any person, firm, company, or corporation that may be damaged by any such agreement, trusts or combinations described in sections one and two of this act, may sue for and recover in any court of competent jurisdiction in this State, of any person company, or corporation, operating such trust or combination, such damages as they have sustained, together with a reasonable attorney ree

We are ready to begin this suit just as soon as we get the necessary backing. But we want it understood that we are not going to jeopardize our central association. We are not going to obligate it for this expense. While our association will help and take the lead in this fight, we must have the liberal backing and support of the local associations as well as farmers all over tne State.

We must have sufficient funds before starting this suit. While the coopera-tors in the State are willing to lead the fight they must not be expected to bear all the expense. The farmers all over the State are directly interested because of the extortion practiced against them by the grain trust. The trust is intimidating exporters into boycotting farmers and were it not for the trusts commodities, or to control the cost interferring, exporters would be glad or rates of insurance. Third—To to deal with the farmers' central asso-

Providence has sent you bountiful rains. Take advantage of it by packing your ground this fall and also in the spring, and conserve the moisture.

North Topeka, Kans.
February 20, 1902.
As to the value of your Pulverizer and Packer, words will not give to it the merits that it deserves as a farm implement. The only reason use one, is because they do not know their value; especially in this dry soil of Kansas, where we have so much wind and sunshine; the land is apt to blow away from home I bought one of your tools two years ago and it is in good shape yet, and is ni use every time a roller is needed. I am a firm believer in good plowing and surface cultivation and lap listing, and there is no implement equal to the Packer on the farm. Wishing you success
Yours truly.



Topeka, Kans., April 18, 1802.

I note the advertising of your Packer and Roller. I have no doubt whatever of its excellence, and have no doubt that if a thousand of them were in use for each one that is now used, Kansas would be the gainer thereby. Yours with good wishes,

Secretary State Board of Agriculture.

Mr. H. C. Colburn, of Hoyt, writes us: "Will say that we are well pleased with the Packer pleased with the Packer we bought from you last March. We would not at-tempt to farm without it I put in 60 acres of alfalfa this spring and rolled it three times, now it is as thick as the hair on a dog's back."

dog's back."

By June 1st the alfalfa was 10 inches high and he expected to cuta crop shortly. He put in 125 acres of corn rolled before planting and rolled again after planting. The corn was from 4 to 6 inches high before one drop of rain fell. He planted 150 acres of Kafir-corn which he rolled after the plow and planting. This makes the amount of acres rolled with our packer 600.

Don't Wait until you need it to order it or you will get left.

Address, TOPEKA FOUNDRY, Topeka. Kansas.

KENTUCKY BLUE GRASS SEED.

For a Beautiful as well as a Most Profitable Pasture sow BLUE GRASS. The genuine Kentucky seed is what you want, and from September until June is the proper time to sow. For pure seed of our own raising, and full particulars, write MT. AIRY SEED FARM, Paris, Kentucky.

THE L. A. ALLEN Cattle Commission Co. LAMES R. HAWPE Salesmen. 25 YEARS IN THE CATTLE TRADE

SELL CATTLE ON COMMISSION

And Fill Orders for Stockers and Feeders. Market Price Guaranteed. Office, 267-268-269 Second Floor Exchange Bldg OVER INERSTATE NATIONAL BANK. STOCK YARDS. KANSAS C TY, U S. A. References-Inter-State National Bank and Cattlemen Generally.

Some of them admit that they are intimidated by the trust czar (Secretary Smiley) who would injure them if they dealt with us. Positive evidence on this line has been received very re-cently. We believe Secretary Smiley and the combination of cloth gentlemen he represents have extorted more money from the farmers of this State and injured them more than all the horse thieves that have ever been hanged or sent to the penitentiary within the bor-ders of the State of Kansas from its earliest history up to the present time. We ask grain-growers and law-abid-

ing citizens of Kansas, What are you going to do about it? Are you going to submit to being plundered or are you going to prosecute this band of out-laws? It is up to you. We are ready to proceed with the case and can win it if you will furnish the means to prose-cute it. We believe the farmers, mil-lers, and other business men of Kansas are ready for this contest and that will soon raise the necessary s. We have more than 7,000 cofunds. operators in this State but they are no more interested than other grain-growers, therefore we make this appeal to the farmers and law-abiding citizens of Kansas.

We want your help. We want to help you. As secretary of the Farmers' Cooperative Grain and Live Stock Association the writer will receive contributions to prosecute this case as above outlined and account for the same. Should we not receive enough funds to conduct this prosecution the money will be refunded to the donors. Many of our associations are perfectly able and should give a hundred dollars to prosecute this case and there are none who can not afford to give \$25. It is a business matter to them as to whether they will suffer to have their hands tied in a business way by an illegal process, or whether they will fight for their rights.

There are hundreds of farmes who can well afford to give \$10, others \$5, and there are none but what should give a dollar. It is now up to you, friends. In this case money talks. you want to proceed against this band of anarchists and outlaws send in your liberal subscriptions. Address,

JAMES BUTLER, Secretary. Topeka, Kansas.

When writing advertisers please mention shis paper.

THE MARKETS.

Kansas City Live Stock Markets.

Kansas City Live Stock Markets.

Kansas City, Mo., September 15, 1902.

Last week was marked by a pronounced falling off in the demand for corn-fed beeves. All summer the packers have apparently not allowed the runs of grassers to interfere with their killing demand for corn beeves, but continued big receipts of grass steers have finally had the effect of making an end to fancy priced cattle. Top corn-fed steers sold here last week at \$7.40. Although this appears low in comparison with \$8.50 steers, it is considerably above figures this time a year ago, when best beeves were bringing \$6 and plenty of corn-fed stock was selling at \$5.50.

In spite of large runs of Western cows, there were not enough received to meet the demands of the trade, and prices advanced 10@15c curing the week. Fair to good Westerns will bring \$2.75@3 right off of grass. More milkers and springers than are received could be handled at a profit to the shipper. Best grades are bringing around \$50.

In the neighborhood of 30,000 feeders changed bands here last week.

to the shipper. Best grades are bringing around \$50.

In the neighborhood of 30,000 feeders changed hands here last week. The enormous supply broke values on medium and lighter grades, but best heavy feeders held about steady. Never before in the history of the cattle trade has there been such a mammoth movement of Western feeders through Kansas City to feed-lots of the East. On Monday, September 15, cattle receipts here were 25,000 head, exclusive of 3,100 calves. About 15,000 head of cattle consisted of feeders. Good heavy feeders are now selling at \$4.756.25.

Hog receipts showed a slight decrease last week, the total supply amounting to only 22,000 head. Other markets showed a heavy falling off from a year ago. The bulls had the swine market in their grasp owing to strength in pork and bullish receipts. It is now a foregone conclusion that the hog supply over the entire country is light and will continue light during the early part of the winter. Hogs advanced 10@15c during the week, edging constantly towards the \$8 mark. On Monday of this week tops brought \$7.92½, the high-

wi car from M Coo wr Sin glame cur for dul

the early part of the winter. Hogs advanced 10@15c during the week, edging constantly towards the \$8 mark. On Monday of this week tops brought \$7.92½, the highest point in over a month.

Horses and mules showed a decrease in receipts and trade in the former was dull. There is some demand for good 1,300- to 1,400-pound feeding chunks. Farmers having such stock on hand will do well to dispose of it at the present time unless they prefer to feed the horses themselves. All classes of mules are in request at steady prices. Good cotton mules 14 hands high are worth \$60@80; 15 hands \$90@115. The United States Government is out for cavalry horses 15.3 to 16.1 hands in height, and any color except dun or gray.

Continued heavy receipts constituted the feature of the sheep trade at this and other Western markets during the week. Local receipts were light at 36,800 head. In spite of the bearish influences cast against prices, the market rallied towards the close, and the week showed muttons selling 15@20c higher than in our last report. Lambs closed steady with a week ago. Feeders have eased off a bit, and it seems that now is a good time for countrymen to secure thin Western lambs at prices that look about right. Good feeding lambs can be bought for \$3.80@4, that ten days ago sold from \$4.25@4.40. Present prices of feeding lambs range from \$1.75@2 per head. Feeding wethers are bringing \$3.35@3.40. Thin

lambs look like a better investment than sheep, judging from prices asked by sellers for the latter.

A quiet, steady poultry market was had all week. Supplies are moving more freely, and the general fall lassitude seems to be settling in on trade. Springers are worth 10c; broilers, 11½c; hens, 9c; roosters, 20c each; ducks, 6@9c; turkey hens, 11c; and gobblers, 10c.

South St. Joseph Live Stock Markets.

South St. Joseph Mo., September 15, 1902, All cattle records were broken at South St. Joseph to-day, when 281 cars, 8,350 head, arrived, as compared with the previous largest run, 152 cars, 4,529 head, on August 25, 1902, Receipts last week

St. Joseph to-day, when 281 cars, 8,350 head, arrived, as compared with the previous largest run, 152 cars, 4,529 head, on August 25, 1902.

Receipts last week were 15,330, as compared with 15,269 the previous week, and 11,099 the like week a year ago. The demand was good and beef steers sold with much freedom all week. Good to choice corn cattle and Westerns advanced 10@15c in value, but common and medium natives showed no material change, with country buyers good competitors for the good qualities underfed steers. Good fat natives sold up to \$7.50. Cows and helfers were in heavy supply with Texans and Westerns in the majority. The demand proved good and prices ruled 10@15c nigner. While the country demand for stockers and feeders was strong and shipments for the week were the second heaviest on record here, yet supplies were too heavy and prices sagged 10@15c. Colorado and western Nebraska continue to send in the bulk of the cattle with Kansas and the Panhandle country in Texas good contributors.

Quarantine receipts totaled 3,893 last week, 5,562 the former week, and 2,823 the like week a year ago. Steers of desirable quality were in the majority, and under a good demand; prices ruled 5@10c higher. Cows and heifers sold readily at an advance of 20c. Bulls and calves were in demand with a stronger undertone to the market.

Supplies of hogs last week, 18,886; preceding week, 24,193, and same week a year ago, 28,652. For the first half of the week prices ruled sharply lower, but the loss was fully repaired during the balance of the week, with the demand good at the improved range of prices. Pigs ruled in light supply and under a good demand values advanced 15@25c. Prices to-day ranged from \$7.70@7.87½, with the bulk of sales at \$7.75@7.80. Prices were quotable from \$4@7.25 for common to choice grades.

Arrivals in the sheep department last week numbered 20,975, as against 9,463 the previous week, and 16,743 the corresponding week a year ago. Natives were in exceedingly small quota, with Western range sheep and

Frasius' Market Review.

Frasius' Market Review.

Topeka, September 15.

Grain markets throughout the week just passed have been strong, especially is good milling wheat in demand and is wanted at good prices. The same may be said of corn. Kansas City had four cars of new corn in today, which sold at about the price of old corn, from 56 to 57% per bushel; while the option for new corn is selling at 34c for December delivery, or 23c less than present values. The writer does not believe that corn will be 23c lower in December than it is now. There are too many people who are looking for cheap corn, and the movement will not be as early as under normal conditions in former years. Of course corn will be considerably lower than present prices, but I don't think it will be placed on bargain counters. The primary recipts of wheat are still large, but so are the exports. Last week's 5,000,000 bushels was cleared from our coast, and Atlantic port clearances alone to-day were about 600,000 bushels. The late government report makes the wheat crop less than last year, and if later predictions prove that this condition is varified, we will have much higher prices for good wheat in the future.

Markets closed as follows:

Chicago—No. 2 red wheat, 73c; No. 3 red wheat, 68@68c; No. 2 corn, 59c; No. 2 oats, 28%c. Kansas City—No. 2 red wheat, 68%c6rc; No. 3 hard wheat, 68@63c; No. 2 hard wheat, 68%c6rc; No. 3 hard wheat, 68@63c; No. 2 hard wheat, 68%c6rc; No. 3 hard wheat, 68%c6rc; No. 2 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 4 hard wheat, 50%c6fc; No. 5 corn, 59c; No. 6 white corn, 59c; No. 2 whit

Wáurika, Okla.

A new town on main line of Rock Island Ry., 63 miles south of Chickasha. The only one lying in Oklahoma. Lot sale Oct, 13. A demand for all kinds of business. Beautifully situated 'mid large shade trees and running water. Home seekers of Oct. 7th should purchase their tickets through, making their stops at other points on going trip.

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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.

CATTLE.

FOR SALE—A. J. C. C. male calf, dropped March 4, 1902; also helfer, dropped August 13, 1902, for \$20 each; or the two for \$35. Address Edward Hunzicker Colony, Kans.

FOR SALE—A car-load of high-grade Red Polled cows and helfers, bred from registered sires for 20 years; also a young registered bull to mate them. Walter J. Burtis, Fredonia, Kans.

FOR SALE—Having sold my farm I will offer at private sale for the next twenty days, eight head of Shorthorn cattle as follows: Two bulls, five cows and one heiter caif. All registered or eligible to registry They are good individuals and comprise the blood of the best Cruickshank, Rose of Sharon, and Rates families. Will sell all or any part of them. If not sold by September 25, will then sell at public sale, which I will hold on that date. For further particulars call on or address M. Sanders, Twin Mound, Kans.

FOR SALE—2 double standard Polled Durham bulls and 3 Shorthorn bulls. A. L. West, Garnett, Kans.

FOR SALE—Guernsey bulls from best registered stock. J. W. Perkins, 423 Altman Building, Kansas City, Mo.

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FOR SALE—Two registered Shropshire rams, cheap. P. I. McEchron, Richmond, Kans.

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PROSPECT FARM—CLYDESDALE STALLIONS, SHORTHORN CATTLE and POLAND CHINA HOGS. Write for prices of finest animals in Kansas H W. McAfee, Topeka, Kansas.

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FREE 200 printed farm and ranch descriptions in 5 counties, 55 m. from K. C. Prices, maps statistical book. Write G. Winders, Ottawa, Kans.

FOR EXCHANGE—A nine-room house, two blocks from State House, on paved street, for a farm near Topeks. Address L. M., Kansas Farmer Office, Topeka, Kans.

FOR SALE—Eighty acres well-improved, good soil, plenty of water, three and one-half miles southwest of Blue Rapids, Kans. Write for description. H. J. Gerken, Irving, Kans.

FOR SALE—A 30-acre chicken farm, all sandy soil; also a 45-acre truck farm, sandy loam, three miles from Topeka, on the Kansas Valley bottoms; both farms adjoining. Address O. K., Box 13, Oakland, Kas

FARM FOR SALE—A. M. Coleman's farm, situated six miles northwest of Topeka, contains 320 acres; a fine farm. For terms, address W. M. Coleman, R. F. D. No. 3, North Topeka, Kans.

FOR SALE—160-acre farm, extra good corn, wheat and grass land, good improvements. A. E. Cornet Rural Route 4, Lawrence, Kans.

FOR SALE—Good alfalfa, corn, and wheat land in the banner stock county of Kansas. Write the Verdi-gris Valley Land Company, Quincy, Greenwood Co., Kans.

FOR SALE—FOR SALE—A choice 320 acre farm located in Chase County Kansas. 140 acres under plow, 125 acres now in crop, 20 acres native meadow, 160 acres in pasture, fair buildings, good orchard, good pure water. Will sell with farm all the crop. 30 head of cattle, 13 head of them are registered Shorthorns, 5 horses, harness, wagons, farming implements. Send for full printed description. John G. Howard, Homestead, Chase Co., Kans.

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The Stray List.

Week Ending September 4.

Miami County-L. Flanagan, Clerk. BULL—Taken up by J. D. Stevens, in Osage Tp., August 21, 1902, one red bull, weight about 1,200 to 1,300 pounds, marked in each ear with a swallowfork, branded H 8 H on left side and with letter S on left thigh, about 8 years old; valued at \$25°

Week Ending September 11.

Cherokee County—S. W. Swinney, Clerk.
MULE—Taken up by R. P. Darnell, in Lowell tp.
(P. O. Galena), August 8, 1902, one bay mule (male)
14½ hands high, old cut on right front foot, branded or
18th hip, a small lump on left knee, shod in front
valued at \$60.

Kingman County-W. R. Long, Clerk. MARE—Taken up by Geo. Pro, in Ninnescah tp., August 6, 1902, one grey mare, 16 hands high, weight 1,200 pounds, 12 years old; valued at \$45.

Week Ending September 18.

Miami County-L. Flanagan, Clerk. HOGS—Taken up by P. J. Harrington, in Paola tp., at the waterworks, one mile north of Paola, August 28, 1902, four head of hogs—two black sows, one weighing a bout 125 pounds, the other about 75 pounds; also two pigs, about three months old.

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Do you wish to know how to live a life "hid in Christ with God"? If so, send us a carefully selected list of ten or more names and addresses of earnest Christians and we will mail you, free, your choice of one of the following Colportage Holiness Booklets which will give you light on these subjects:

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Address, God's Revivalist Office, Mount of Blessings, Cincinnati, Ohio.

\$100.00 Cash Prize for a Name.

For the new Daily Limited train to California to be placed in service November 1, 1902, by the Rock Island System and Southern Pacific Campany, via the El Paso Short Line. The competition is open to the public and conditions involve no fees of any kind. For circular of instructions, address at once John Sebastian, Passenger Traffic Manager, Rock Island System, Chicago.

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via Nickel Plate Road. Tickets on sale October 3 to 6 inclusive, good leaving New York not later than October 14. Address John Y. Calahan, General Agent, 113 Adams St., Chicago, for reservation or sleeping-car space and other information. (No. 50)

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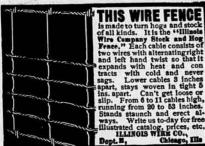
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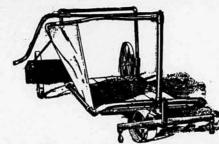
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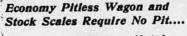
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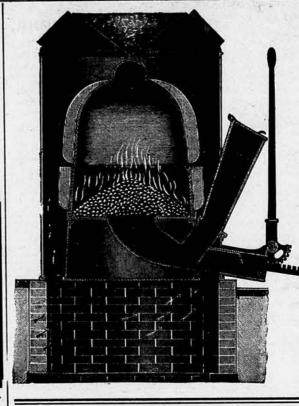
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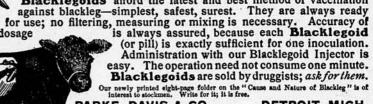
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On August 28 fire destroyed my barn with all feed and machinery. I must have money to rebuild at once. For the next 60 days my entire crop of spring pigs goes at one half price. Write me for prices and breeding. I can sell you a bargain.

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FOR SALE Poland-China Hogs, Holsex. Best strains represented. H. N. Holderman, Rural Route 2, Girard, Kans.

Kansas Herd of Poland-Chinas Has some extra fine glits bred; also some fall boars.
Will sell Sen. I Knew, he by Perfect I Knew.
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Special price for next 20 days on 10 bred gilts, to far-row in April and May; they weigh from 200 to 275 pounds, and most of them are bred to Black Perfection 27132, the best breeder I ever owned. Also 20 fail pigs, and 4 boars large enough for service. 100 head in herd. Write for anything you want in Poland-China hogs. JOHN BOLLIN, R. F. D. No. 5, Leavenworth, Kans.

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2 extra heavy boned Sensation Sows, bred to that big-boned "901 Fine" 26580; also, 30 extra Spring Pigs of above breeding.

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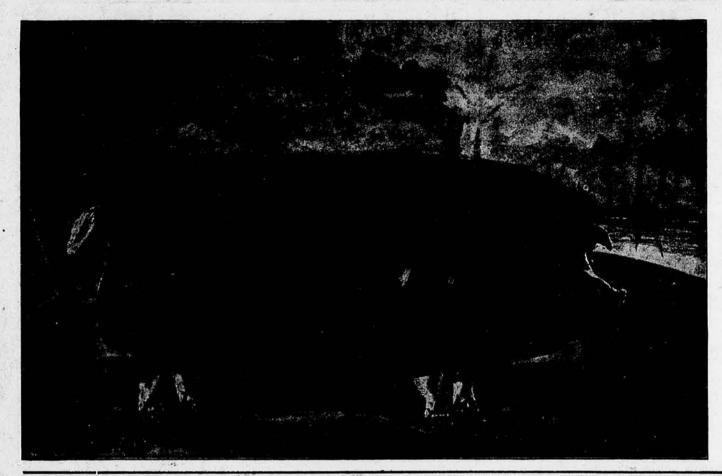
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FOURTH ANNUAL PUBLIC SALE

DUROC-JERSEY SWINE

WHITING, KANS., OCT. 13, 1902.

A DRAFT OF 100 HEAD

Consisting of 20 open Sows of fall and winter 1901 farrow, and 80 head of Tops of our spring 1902 crop of both sex, sired by the following five grand old herd males, and from dams of equal blood lines and individual merit: Woodburn 3841, Fleet R. 6225, Kid Wolford 8299, Jimmeson L. 10405, and Fleet R. 2d 9945. Every animal a good one, first-class, and useful. Write at once for free Catalogue, and remember we value your presence on Oct. 13.

COL. JAS. W. SPARKS, COL. BERT FISHER, Aucts. ALEX. DUNN, JR., Clerk.

Whiting, Kansas Newton Brothers,

800000

Red Polled Cows and Heifers SO HEAD AT PUBLIC AUCTION At Farm, 3 Miles West of Centropolis, 15 Miles Northwest of Ottawa, 10 Miles Northeast of Pomona, 11 Miles Southeast of Overbrook, Kans., on TUESDAY, SEPTEMBER 23, 1902. About one-third will be fresh between now and holidays; all the others bred to registered bull. TERMS—One year's time, without interest; 8 per cent off for cash. Parties from a distance must furnish bank reference. SALE WILL COMMENCE AT 10 A. M. FREE LUNCH AT NOON. GEO. GROENMILLER & SON CENTROPOLIS, KANSAS.

SWWWWWWWWWWWWWWWWWWWWWWWWWWWWWW

Sale of Sedgwick County Shorthorns

AT THE RIVERSIDE BARN IN WICHITA, KANS., SATURDAY AFTERNOON, NOV. 1, 1902, H. RANSON will sell to the highest bidder, 24 head of high-class Sedgwick County bred and raised SHORTHORNS. The offering will consist of 9 young bulls and 15 head of bred cows and helfers. For further particulars, address

Wm. H. RANSON, North Wichita, Kansas.

ARE YOU LOOKING FOR A HOME?

Kingman County offers the greatest inducements of any locality in the state to homeseekers looking for a successful combination farming community, especially grain and stock farms at big bargains. For full particulars write for book entitled "OUT THERE IN KANSAS." Address

Frank Weinschenk, Mgr., Kingman Jounty Colonization Company, Kingman

ONE MILLION STRAWBERRY PLANTS

STRICTLY FIRST-CLASS.

Per 100, 30c; per 1,000, \$1.75 to \$3.50. Asparagus per 100, 50c; per 1,000, \$8. Rhubarb, \$3.50 per 100. Raspberries and Blackberries per 100, 70c; per 1,000, \$6; Winter Onion Sets, 75c per bushel; Winter Apples, \$2 per barrel; choice Missouri Pippin and Ben Davis. Fall Bulbs.

H. H. KERN, BONNER SPRINGS, KANS.

SOUTHWESTERN

EXPOSITION AND LIVE STOCK SALES.

This great event will take place in Wichita, Kansas, September 22 to 27 inclusive, and will be halled with satisfaction by all stockmen. Our great Live Stock Show and Sales last February surpassed everything of the kind held up to that time, making the second best record in the United States in twelve years. Breeders of live stock realized more than invoice prices and disposed of all stock brought here for sale.

As headquarters for stockmen, Wichita leads. Terms and accommodations unsurpassed. Liberal premiums on all exhibits. \$5,000 purses offered for speed ring. Leading stockmen from all over Kansas, Oklahoma, Indian Territory, and Texas will be present.

If you have fine stock to show or sell, bring it to Wichita.

H. L. RESING, Secretary.

AT MY FARM, 5 MILES SOUTHEAST OF TOPEKA, 10 A. M.

SEPTEMBER 24, 1902

60 Pure-bred Poland-Ohina Hogs, 25 Thoroughbred Jersey Cattle, 15 Milk Cows and Helfers.

The hogs are of the Tecumseh, Wilkes, Chief of Models, Missouri Black Chief, etc. Most of the cows and heifers are bred for spring calves to Diploma's Mercury 39891, the finest bred Jersey bull in the State with a butter record behind him of 92 cows, 12 to 19 pounds of butter per week.

TERMS OF SALE-Cash; but purchasers from a distance will be allowed a rebate to cover expenses. Address,

COL. J. N. HARSHBERGER, V. B. HOWEY. Topeka, Kansas. Auctioneer.

WHEN WRITING OUR ADVERTISERS MENTION KANSAS FARMER.