

# KANSAS FARMER

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## BREEDERS' DIRECTORY.

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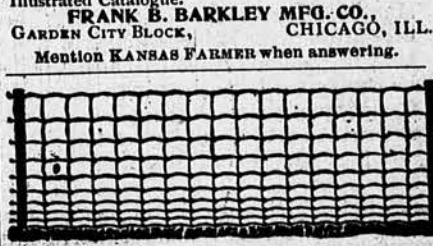
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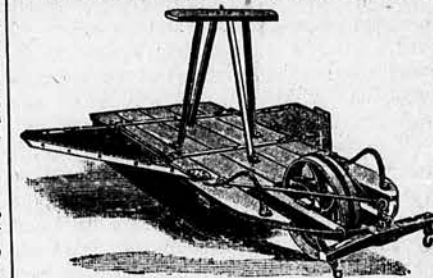
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## The Stock Interest.

### DEHORNING CATTLE SYSTEM.

Bulletin 34 of the Cornell University Agricultural Experiment Station, by I. P. Roberts, of Ithaca, N. Y., has been received. It relates largely to the history of the legality of dehorning, and reviews the prosecutions in the different States, as well as Canada and Great Britain. The summary is given as follows:

In the United States, so far as we have been able to learn, all trials upon charges of cruelty to animals by dehorning have resulted in the acquittal of the accused parties.

In Canada at least two trials resulted in the acquittal of the accused, but in a third trial the conviction of the parties resulted in the appointment of a government commission which made a report strongly recommending the practice and urging the passage of the necessary legislation to give it effect.

In Great Britain there have been decisions on both sides. Those in Ireland and Scotland being in favor of the legality of the practice and those in England, notably that of Lord Chief Justice Coleridge and Mr. Justice Hawkins, against. Of twenty judges of higher courts who have passed upon the subject, sixteen declared the practice to be legal, while four pronounced it illegal.

In regard to preventing the growth of horns, it is well known that ever since the practice of dehorning has come into favor it has seemed to many that if by some means the horns could be prevented from growing it would be for many reasons much preferable to removing the horns from full-grown animals. As several so-called "chemical dehorners" have been on the market for some time, it has seemed well to undertake some experiments with certain caustic reagents to ascertain, if possible, if any could be relied upon to prevent the growth of horns. Accordingly on November 5, 1891, five calves were selected from the University herd for experimentation in preventing the growth of horns by the application of various chemical compounds. These chemicals were compounded and either applied by or under the direction of Prof. James Law, Professor of Veterinary Science.

Of all the different chemicals used, caustic potash proved the most effectual, and in succeeding experiments was used exclusively, but in no case was the application made when the calves were more than one month old.

The results of all the experiments made at this station lead us to believe that the use of caustic potash is by far the easiest, most humane and most certain method of securing hornless cattle. The best time to apply preventive reagents is early in the life of the animal, just as soon as the little horns can be distinguished by the touch. The manner of applying caustic potash (which comes in the form of round sticks about the size of a lead pencil, and may be had at any drug store, and should be kept from exposure to the air as it rapidly absorbs moisture), is as follows:

The hair should be closely clipped from the skin and the little horn moistened with water to which soap or a few drops of ammonia have been added to dissolve the oily secretion of the skin, so that the potash will more readily adhere to the surface of the horn. Care must be taken not to moisten the skin except on the horn where the potash is to be applied. One end of a stick of caustic potash is dipped in water until it is slightly softened. It is then rubbed on the moistened surface of the little horn. This operation is repeated from five to eight times, until the surface of the horn becomes slightly sensitive. The whole operation need take only a few minutes and the calf is apparently insensible to it. A slight scab forms over the surface of the budding horn and drops off in the course of a month or six weeks, leaving a perfectly smooth poll. No inflammation or suppuration has taken place in any of the trials we have made. The results

of these experiments warrant the following recommendations:

1. That for efficiency, cheapness and ease of application stick caustic potash can be safely recommended for preventing the growth of horns.

2. The earlier the application is made in the life of the calf the better. Mr. Roberts, of the station, also took up the matter of patented chemical dehorners, and selected the best known—"John March Company's Chemical Dehorner." After examining the specifications of his letters patent and making a chemical analysis of the "Dehorner," he comes to the conclusion that it is undoubtedly effective for the purpose intended; it is not consistent with letters patent; the price to the consumer is exorbitant, and there need be no apprehension of infringement of a patented article consisting of a single well-known chemical reagent or of a method already so well known and advertised.

### Great Live Stock Show.

The most important show of horses and cattle ever seen in America will be held at the great World's Fair from August 21 to September 9. This exhibit will draw many stock-breeders from foreign lands as well as thousands from all over our own country.

Much depends upon the future breeding of improved stock in this country, and every farmer who can, without making too much of a sacrifice, should attend this show as a matter of business and examine and compare the various breeds on exhibition, and then return home better prepared to improve their stock with the breeds that will bring them the most money.

Of the 1,032 entries of horses the larger part are of the draft and coach breeds, Percheron, Clydesdale, Shire, French Draft, Belgian, Suffolk, French Coach, Oldenburg or German Coach, Cleveland Bay, Hackney, standard trotters, Thoroughbreds, Arabs, Morgans, ponies, jacks and saddle horses.

The 1,227 cattle entered include Short-horn, Hereford, Aberdeen-Angus, Galloway, Devon, Jersey, Holstein-Friesian, Ayrshire, Guernsey, Sussex, Red Polled, Polled Durham, Dutch Belted and Brown Swiss. The six months dairy test herds of thirty head each, of Jerseys, Guernseys and Short-horns, are also on the grounds, which, with the dairy school and the dairy experiment work, will profitably interest those of our readers who are fortunate enough to attend.

The great amphitheater, where these noble specimens will be shown, has a seating capacity for 15,000 people, and the ground is covered with block pavement, with a coating of tan-bark, and the large space is ample to show off the stock to a good advantage. It is the finest exhibition ring we have ever seen.

As it is very appropriate and timely, we will here also state that the various national stock breeders' associations will hold their annual meetings this year at the great Columbian Exposition, during September and October, in the following order:

September 2, Association of Breeders of Jacks and Jennets. September 4, Polled Durham Breeders' Association. September 5, Hereford Breeders' Association. September 6, Ayrshire Breeders' Association. September 7, Morgan Horse Breeders' Association. September 8, Red Polled Cattle Club. September 14, Holstein-Friesian Breeders' Association. September 26, Chester White Swine Breeders' Association. September 27, American Southdown Association. September 28 and 29, National Convention of Wool Growers. September 30, Essex Swine Breeders' Association.

October 3, Leicester Sheep Breeders' Association. October 4, Oxford Down Sheep Breeders' Association. October 5, Dorset Horn Sheep Breeders' Association and National Wool-Growers' Association. October 7, Ohio Poland-China Breeders' Association, Shropshire Sheep Breeders' Association and Shetland Pony Breeders' Association. October 9, National Poland-China Breeders' Association. October 10, Black-Top Merino Sheep Breeders' Association. October 11, Cotswold Sheep Breeders' Association. October 12,

Hampshire Down Sheep Breeders' Association. October 13, National Swine Breeders' Association. October 18, American Poultry Association. October 19, American Buff Cochon Club.

### Pleuro-Pneumonia in England.

The progress of stamping out pleuro-pneumonia in England is referred to editorially by the *Cable* as follows:

"The annual report for 1892 of the Veterinary Department of the Board of Agriculture was published last week. In its earlier pages Prof. Brown gives a concise and interesting summary of the action which was taken in respect to the principal disease affecting live stock. In the case of the outbreak of the foot-and-mouth disease, which occurred in the early part of last year, 5,267 animals were attacked before the disease was suppressed. Slaughter was not universally enforced, strict isolation being the remedy chiefly relied upon, but 516 diseased and 1,490 healthy animals were killed to check the extension of the disease. This outbreak occurred after the country had been free from foot-and-mouth disease for six years. The gratifying progress made under the Pleuro-Pneumonia Act of 1890 in stamping out pleuro-pneumonia is duly recorded, but prominent mention is also made of the re-introduction of the disease by Canadian cattle, which necessitated the slaughter of 1,400 animals. It is noteworthy that twenty-nine more cases of pleuro-pneumonia were detected in American cattle than in the preceding year. This is very remarkable, in face of the contention of the Washington Department of Agriculture that the United States are practically free from this disease."

### Wheat as a Stock Feed.

The low price of wheat has called the attention of feeders to its value as a stock feed. The finest lot of mutton carcasses the writer ever saw were those of a lot of sheep fattened on wheat. In the Northwest the extensive sheep-feeders rely mainly on wheat screenings. At the experiment stations in England wheat is considered the best single stock food available. To sheep it is fed whole, to other stock it is either ground or boiled.

An Indiana feeder, who has fed it to hogs on an extensive scale, says that wheat fed to 4-cent hogs will bring a dollar a bushel in the form of pork. Another man says that instead of buying bran at \$10 a ton, he is grinding and mixing two parts wheat with one of oats for his pigs and calves and colts, and they are doing nicely on it.

Prof. Henry, of the Wisconsin Experiment Station, says that wheat is the best single stock food available. An English experiment station declares wheat the cheapest feed in England for sheep. It should be fed whole to sheep, but, as a rule, for other animals it should be ground coarse or boiled.

Prof. Henry places the feeding value of wheat in excess of corn. He says that with hogs brought in from clover pasture, well grown but lank and "full of snap," a bushel of wheat will easily make from twelve to fourteen pounds of gain if the fattening period is not too long continued. He thinks that for the purpose of adding variety and for nourishing young animals its value may at times double that of corn. Corn and wheat can be fed well together, and the wide-awake farmer will not long hesitate to get out of the old rut of feeding corn no matter what its worth, and selling the wheat though the price is less than cost of production.

### About Mutton Production.

The FARMER desires to impress Kansas feeders with the importance of producing and supplying the market with more muttons. With the abundant crop of corn, oats and other stock feed in Kansas this season, it will pay well to buy Western range sheep, which can be purchased lower now than for several years, and fit them for market. At the same time our farmers should buy a large number of good ewes for breeding purposes. In this latter connection, the following by "J. G. S.,"

in the *Breeder's Gazette*, is quite pertinent:

"Special Bulletin No. 30, lately issued by the West Virginia Experiment Station, contains an interesting and instructive address and notes on sheep-breeding in that State, by Prof. A. D. Hopkins.

"In answer to the questions, 'Do you consider sheep as profitable as any other farm product; if not, what is more profitable?' the Professor received replies from ninety-one correspondents in different parts of the State that sheep paid the largest profit; three answered in favor of the dairy, one in favor of cattle and one in favor of cattle and sheep.

"By replies from 127 correspondents the following information was gained: 'For the favorite ram to cross with common ewes to produce mutton sheep' the votes were: For Southdown, 64; Shropshire, 26; Cotswold, 11; scattering, 12. 'To produce market lambs:' Southdown, 44; Shropshire, 30; Cotswold, 12; scattering, 14. 'Breeds which seem to be favorites:' Southdown, 45; Shropshire, 30; Cotswold, 7; Merino, 22; scattering, 17. 'Predominating blood in improved grades:' Southdown, 39; Shropshire, 11; Cotswold, 12; Merino, 20; scattering, 6.

"From personal experiences and information obtained throughout the State the Professor concludes that it costs the farmer less to produce a pound of mutton than it does to produce a pound of beef or pork; hence sheep will pay as well or better than cattle or hogs, even if the wool only pays for shearing. The conclusion is also reached that in West Virginia, with lands and climate well adapted to this industry and situated so near the large cities of the East, where the consumption of mutton is continually increasing, the growing and feeding of sheep for mutton is one from which the largest profits may be realized by those who give the matter judicious management.

"The investigations and conclusions of Prof. Hopkins as to West Virginia will hold good in other States. Perhaps at a distance from the larger cities, where the demand for mutton is not so great, the profits will be less, yet the consumption of this meat is increasing in towns and villages as well as in cities, and will be more rapidly increased by the production of a better class of meat. The fact that mutton can be produced at less cost than beef or pork should lead the farmers to raise a first-class quality of this healthful meat for their home consumption. While thus providing for their own use a few sheep may well be produced for their home market, and this production increased to suit the demand.

"To secure good results, sheep-breeding requires as careful attention and good management as the breeding or feeding of the larger breeds of live stock. The purchase of a few sheep of even the best quality to be turned out to shift for themselves will not pay. The successful breeder and feeder must consider this one of the leading factors in the farm production. For the general farmer the beginning should usually be with a small number of animals of the mutton breeds, or by the careful use of pure-bred rams of these breeds on common or native ewes. Knowledge gained by experience will enable the breeder to increase his flock as demand for mutton increases, and a certain money-making industry will be almost imperceptibly but firmly established."

Beecham's Pills sell well because they cure.

### To the World's Fair.

Save time and avoid the crowd in the city by buying tickets over the "Great Rock Island Route" and stop off at Englewood near the World's Fair gate. Electric line from the "Rock Island" depot direct to the gate. Time, ten minutes. Fare, 5 cents. You can check your baggage to Englewood and avoid trouble and save expense, as Englewood is in the great suburban hotel district near the fair, and you can have your baggage sent to your quarters at once.

Remember, the Chicago, Rock Island & Pacific is the World's Fair line for reasons given above. JOHN SEBASTIAN, Gen'l Ticket and Passenger Agent.

♣ Oscillator Threshers, Horse Powers, Engines. JOHN S. DAVIS' SONS, Davenport, Iowa.

# Agricultural Matters.

## THE IRRIGATION CONVENTION.

An irrigation convention was held at Great Bend, Kas., on Monday, August 7. It was well attended by representatives of various portions of the State, but more especially the western half. D. M. Frost, of Garden City, was elected Chairman, and E. B. Cowgill, of Topeka, Secretary.

The following report was read and heartily endorsed:

We, your committee, in accordance with a resolution passed at a previous meeting, instructing us to collect such data as could be had and also to report the progress of irrigation, its prospects and outlook for the semi-arid region, submit the following:

The first item we have to report is a constantly increasing interest in the subject. The fruits of the early pioneers are beginning to be seen. Their lessons are enforced by the chronic drought that afflicts us. The irrigation question has come to stay. It is submitting its problems and we must find their solutions. The skeptic is abroad also, and he inquires dubiously, "Where are you going to get water?"

Your committee, after looking up the authorities and reading all the information obtainable on the subject, besides calling upon the assistance of our own reason and observation, has concluded that the water is to be had in great abundance. Kansas has more water in her lower stories than many States of the rainfall region. There is the great valley of the Arkansas river, stretching through 300 miles of southwest Kansas; it is underlaid with water and sand to a depth of from forty to 150 feet and of a width of from ten to fifty miles. It is absurd to say there is not abundant water in this valley. From experiments made it is found that one-eighth of the volume of sand and gravel in this region is free water. How many cubic yards of sand and gravel are there in this great valley? A little schoolboy arithmetic will throw some light upon the problem. Calculate an average width of ten miles (to be safe) and a length of 300 miles and a depth of forty-five feet, and you have a body of water twice the size of Barton county (which is 900 square miles) and nine feet deep; or, to spread it out three deep you will have six counties covered with water. But that is a small estimate.

Prof. Hay tells us that what is called the "plain grit," which underlies the great plain and extends over the most of western Kansas, is from forty to 150 feet deep, and is the reservoir for the entire subterranean waters of western Kansas; that it is full of water. This "grit" is a conglomerate of pebbles, gravel, lime and sand, and holds nearly the same proportion of water as the Arkansas valleysands. So you see the water is practically unlimited.

The question is, "How shall it be brought to the surface?" This is the water we must depend upon largely, although it can be supplemented largely by the surplus rainfall and snow. We neglected to state that the Republican and Smoky Hill rivers were of the same character as the Arkansas, and have immense stores of water percolating through the sands. Then there is the Solomon, the Saline, the Cimarron, the Ninnescah, and hundreds of other minor streams whose physical basins are full to overflowing.

Up at Kearney, Neb., they have excavated the gravel and sand near the Platte river and developed a mighty spring that runs down the slopes of the hills on the north side of the river to a big reservoir, where they have sixty feet of fall and have constructed immense water powers and irrigation works. They are described in full in the *Irrigation Age*, published at Kearney, Neb. This canal and lake are such a great success that the people at Hastings are constructing similar works.

The fact is clearly proven that the great plains, from the foothills of the Dakotas to the Red river in Texas, are underlaid with an immense sheet of water, evidently placed there to make this remarkable region the theater for the perfection of civilization.

Being satisfied of the quantity of water, your committee suggests that the proper way to proceed is to construct a vast system of lakes, reservoirs, dams and ponds all over the plains, and to fill them with the underflow waters, supplemented by the surplus rainfall and snow. These basins will be of two kinds, natural and artificial. The natural basins are also of two kinds; those formed by damming

the rivers, streams and draws, and those that are already formed by nature, such as the Cheyenne basin in Barton county and the basin of the White Woman in Scott county. The artificial basins will be formed by throwing up circular embankments or levees upon level places, similar to some of our fish ponds. There are many square miles in Kansas where large areas could thus be covered with water to the depth of six or eight feet.

Your committee knows of such ponds already being operated in Barton county and filled by pumping, and large crops of vegetables and fish are being raised (the fish being raised within the pond, of course).

Your committee would suggest that the State condemn all the rivers, creeks and draws and natural basins in Kansas for the purpose of converting them into lakes and reservoirs. Some legislation would be necessary, of course. The damming of the streams could be done by levying a tax upon real estate and the tax paid or worked out by the payers of the counties where the dams are located. The lands near the reservoirs, of course, should pay a greater portion of the taxes because of the irrigation facilities.

The State of Kansas could, without any burden to itself, establish a certain number of very large pumping stations where the water is the most abundant and pump water by wind and steam into these artificial basins. The different counties and townships could also supplement this effort by establishing pumping stations of smaller size, and private capital and enterprise would no doubt supplement still further these public efforts by constructing pumping plants to be run by wind power, steam power or horse power.

In time, as prosperity and development comes, the State pumping stations could be transferred to the counties by the payment of what they cost to the State.

Some natural basins, like the Cheyenne in Barton county, could be filled by digging out big springs in the underflow of such rivers as the Arkansas and conveying the waters thence by canal to the natural basin by the most practical route. This kind of an arrangement would be the most successful, as the waters would continue to flow without man's agency after it was once started. A great many artificial basins near the Arkansas and Republican rivers could thus be filled.

Some suggest a system of siphons consisting of pipes laid upon the ground and connected with the underground waters by an elbow, the supply waters, of course, being at an elevation of several feet above the discharge. This form of water supply has the merit of the big spring method in that after it was started it would continue without further outside attention.

The artesian well system is also a promising factor in irrigation for western Kansas. There are about 200 artesian wells in Meade county and some in Hamilton county. There seems to be a belt of artesian well territory entering the State near Coolidge and thence trending southeast through Meade county. Experiment may yet develop more artesian territory. There is a subterranean pressure in a region about central Kansas as is indicated by the flowing salt wells at Great Bend and Larned, but the saline properties of the water precludes the possibility of its being of any use to agriculture.

As a motive power the winds that sweep over these plains are immense; they contain enough power, if hitched to the proper wind-mills, to pump enough water to flood the whole Western plains. They will work the whole year round; with the right kind of pumps they will pump all fall and winter and in the spring and during the night time and on Sundays and holidays, and such industry will not fail to fill the largest reservoirs with the Scriptural measure—pressed down and running over into the ditches. The wind-mills need not be expensive. The most powerful ones, that would throw a barrel of water at each stroke of the pump's piston, should be of a stationary shaft, the wheel large and made of iron and facing the south winds; they would thus catch both the north and south winds, and those are the principal currents in these regions.

Your committee is of the opinion that this irrigation congress should be made permanent and organized upon some intelligent basis of action, and we further believe that an Irrigation Commission should be created and composed of the County Commissioners of the several counties, their powers and duties outlined by law, and that a board of civil and hydraulic engineers be employed by the State, one of whom is chief, which board shall proceed to

survey and make estimates of the work to be done, how it shall be done and cost of the same. We further believe that a perfect system of irrigation for Kansas implies a harmonious connection among all the forces of water production and its distribution. We cannot afford to have any hap-hazard work done in this matter. It must be scientific and in accord with both science and experience. When completed it will be a grand harmonious agency lifting up the sleeping waters from their depths and distributing them evenly and justly, giving to saint and sinner their portion in the season and "making the rain to fall upon the just and the unjust."

L. BALDWIN,  
JOHN ARMSTRONG,  
H. J. ROETZEL,  
A. H. BAKER,  
F. T. BELT,  
Committee.

The Committee on Resolutions made the following report:

WHEREAS, The experience of the peoples of all ages has abundantly demonstrated the value of irrigation in all parts of the world; and,

WHEREAS, Millions of dollars have been paid into the treasury of the United States by actual settlers along the eastern slope of the Rocky mountains from British America to the Gulf of Mexico in the purchase of lands classed by the government as agricultural lands; and,

WHEREAS, Said settlers have expended other millions in fruitless attempts to successfully farm portions of said lands; and,

WHEREAS, A larger proportion of said lands can, as shown by actual survey, be placed under systems of irrigation; and,

WHEREAS, The streams flowing eastward from the Rocky mountains and the underflow afford an abundant supply of water for irrigation purposes; therefore be it

Resolved, That it is the duty of the national government, in conjunction with the several State governments, embraced in said territory, to render substantial aid in the construction of proper systems of irrigation; first, by causing the necessary topographic, hydrographic and geological surveys to be made to determine the most available water supply; second, by the construction of reservoirs to gather and store the surplus water that annually becomes the agent for the destruction of millions of dollars worth of property along the banks of the lower Arkansas, Missouri and Mississippi rivers.

Resolved, That our Senators and Representatives in Congress be, and are hereby urged to use every effort within their power to secure such legislation as will result in the speedy accomplishment of the purposes outlined in the foregoing preamble and resolutions.

Resolved, That to carry out the object of this irrigation movement it is necessary that the office of State Engineer be created, and we urge upon the Legislature at its next session to make provision for the appointment of such an officer, and for a thorough hydrographic and geological survey of the State.

Resolved That this convention provide for the holding of an Inter-State convention from all the States on the eastern slope of the Rocky mountains, comprising North and South Dakota, Nebraska, Wyoming, Colorado, Kansas, Oklahoma, Texas and New Mexico, and that an Executive committee be appointed to arrange for that convention.

Resolved, That we recommend that at this Inter-State convention permanent State organizations be effected by the representatives from the various States.

J. S. EMERY,  
A. W. STUBBS,  
J. L. BRISTOW,  
L. BALDWIN,  
H. S. GREGORY,  
Committee.

The Chairman appointed the following Executive committee to arrange for a time and place to hold an Inter-State convention, viz.: E. R. Moses, Great Bend, Chairman; J. S. Emery, Lawrence; J. L. Bristow, Salina; A. W. Stubbs, Garden City; A. H. Whiting, Lincoln. This committee reported at the evening session, selecting Salina as the place and September 28 as the time to hold said convention. Each county in each of the States named will be asked to send three delegates each to this Inter-State convention. Invitations will also be given to Senators and Representatives in Congress in the States interested to be present and participate in the proceedings.

The newspapers within the territory mentioned are solicited to take an interest in this important question and work up all the enthusiasm possible for the important question. United action by the people of these States will result in much good by bringing the question of irrigation before the people of the United States. We are far behind other nations on this subject; its importance must soon be felt, and a new era of prosperity will be ushered in when this arid region is watered, as it can be with proper attention.

It is encouraging to note the active

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is brought up on Vacuum  
Leather Oil; 25c, and your  
money back if you want it.

Patent lambskin-with-wool-on  
swob and book—How to Take Care  
of Leather—both free at the store.

Vacuum Oil Company, Rochester, N. Y.

interest taken by the railroads in behalf of this enterprise, and they can be relied upon in giving it their hearty co-operation.

This is but the beginning of what must, before many years, become a great issue in the West, and by persistent effort the dreams of many earnest advocates will be fully realized.

From the many interesting letters read the two following are selected because of the eminence of the writers and of the fact that they are representative of large interests in the sub-humid region:

TOPEKA, KAS., August 4, 1893.  
Kas—Genlemen: I regret that a press of business keeps me from attending the convention. I beg leave to submit:

1. That though water goes from the Rocky mountains, THROUGH Kansas every year to do all the necessary irrigating if it were only held in subjection in the west end of the State.

2. That it is entirely practicable to capture and hold the water—the only question being that of expense, which can be settled by a competent survey.

3. That a great amount of land that is now dry can be successfully irrigated by tapping the underflow, but surveys and experiments are necessary to determine the extent to which the underflow can be used within reasonable limits of cost in different drainage districts.

4. That to insure the best results to the State the necessary surveys should be made by government engineers and a State engineer co-operating in harmony for the mutual interest of government and state.

5. That Congress should be urgently requested to arrange for the necessary surveys to be made in conjunction with State engineer.

6. That the next Legislature should be requested to provide for a State engineer, and a committee should now be appointed by the convention to place the matter forcibly before the Legislature.

7. That politics should not be a factor in this irrigation matter in any "shape or form."

8. That I, as a civil engineer and student of irrigation problems, have "an axe to grind," but that does not lessen the strength of my opinion that in irrigating western Kansas there is money for the irrigator, the capitalist, the railroads, the State and the government. Very truly,

H. V. HINCKLEY,  
Chief Engineer A. T. & S. F.

OMAHA, NEB., August 5, 1893.  
Members of Committee of Irrigation Convention, Great Bend, Kas. Gentlemen: From the columns of the Barton county Tribune I learn that a convention is to be held at Great Bend on the 7th inst. for the purpose of organizing a combined movement towards securing a system of artificial moisture from the underflow waters and also from the surplus rainfalls in western Kansas.

The subject to be treated in this convention is one of great interest to all residents of western Kansas, and is of equal interest to all who are in any way concerned with the progress and development of that locality.

Outside of the actual residents of the territory named, I can conceive of no one more vitally interested in the development of the country than are the rail road companies who traverse it and who are dependent upon its products for their traffic and consequently for their existence; therefore, in behalf of this company, I beg to express my intense interest in your proposed convention and my desire to co-operate with you so far as it may be possible for me to do so. I regret very much that the proposed holding of this convention did not come to my knowledge at an earlier date in order that I might have arranged to have either served as a representative or to have been present myself. I trust, however, that should any more meetings be held of this kind that I may be able to either be present in person or send a representative.

Some few years since the Department of Agriculture at Washington organized under authority of Congress a Bureau of Irrigation Inquiry and delegated to that bureau the matter of making such surveys, tests and experiments as would be necessary to determine the feasibility and the best method of irrigating that portion of the United States known as the "sub-arid region." Quite extensive surveys were made under the supervision of this bureau, and a number of practical tests were also made to determine the amount and character of the subterranean waters or underflow known to exist throughout the plains of the Rocky mountains.

During 1890 and 1891 Howard Miller, of Lewisburg, Union county, Pa. was appointed special agent of the Bureau of Irrigation, with direct supervision of all the tests and investigations for determining the facts regarding this underflow. He spent a great deal of time in western Kansas and eastern Colorado looking after this matter, and became thoroughly familiar with the needs of that country, its topography and the possibilities of successful irrigation. Assuming that other conventions are to be held in the near future for the active prosecution of this matter, I would suggest that Mr. Miller be asked to address the next meeting upon the subject of the underflow and the possibilities of its utilization for irrigation. In this connection I would also suggest that Mr. Miller, while being thoroughly posted on all matters pertaining to western Kansas and its interests, is also equally well posted upon the past and present attitude of the Department of Agriculture as to this matter of irrigation, and he will be glad to render all service possible in case an endeavor to interest the Department of Agriculture in your work.

If convenient, I would be pleased to have as full a report as possible of your deliberations and actions for the purpose of giving it publication in the columns of our monthly paper, the *Western Home*. Would also be pleased to be advised of the time and place of your next meeting in order that I may make arrangements to have a representative there. Again expressing my regret at being unable to be present, I remain

Yours truly,  
B. A. McALLISTER,  
Land Commissioner U. P.

The Farmer's Forum.

This department is devoted to the discussion of economic questions and to the interests of the Alliance, Grange and kindred organizations.

IS THE INTEREST A BURDEN?

The following circular was recently sent from this office to representative farmers in various parts of Kansas, care being taken to include in the selection members from each of the several political parties. Several answers have been received and are given in full in the alphabetic order of the writers' names:

OFFICE OF KANSAS FARMER,  
TOPEKA, KAS., July 16, 1893.

DEAR SIR:—You are one of 100 farmers in different parts of the State to whom this slip is sent with the request that you read carefully the following letter from the Superintendent of the Census to the Secretary of the Kansas State Board of Agriculture, and that at your earliest convenience you write to this office full answers to the inquiries of the Superintendent of the Census.

It will be understood that we are at liberty to publish your answer:  
Yours very truly,  
KANSAS FARMER CO.

DEPARTMENT OF THE INTERIOR,  
CENSUS OFFICE,  
WASHINGTON, D. C., June 16, 1893.

DEAR SIR:—As you are doubtless aware, the Census office has been investigating the subject of mortgage indebtedness in Kansas. The tabulation of the returns from farm owners in ten Kansas counties shows that in these counties it costs the farmer \$114 on the average every year to pay the interest upon his mortgage without reducing the amount of the principal. Whether the payment of the interest is or is not a real or perceptible burden upon the debtor may depend upon the use to which he puts his borrowed capital and upon the profit he derives from it.

Are you in possession of any facts in regard to farmers' net incomes above payment of interest and in regard to the cost of producing crops and rearing farm stock that will indicate whether this annual interest charge of \$114 is or needs to be a perceptible burden upon the farmer in a year of good crops; and if not, what proportion of bad crop years must occur in order to make it a perceptible burden? By "burden" I mean a loss of property or of customary comforts or other enjoyments in consequence of the payment of this interest by the farmer as a debtor in comparison with his circumstances as they would be if he cultivated a farm having the same net value above incumbrance that the farm he now cultivates has.

Very respectfully,  
ROBERT PORTER,  
Superintendent of Census.

MARTIN MOHLER, Esq.,  
Secretary of the State Board of Agriculture, Topeka, Kas.

CHASE, KAS., August 7, 1893.

EDITOR KANSAS FARMER:—In reply to these statements and inquiries will say, that in central Kansas I can not call to mind one case, where the interest amounted to as much as \$114 per annum, that the mortgage was ever paid by money raised out of the sale of the products of the farm mortgaged—that is a 160-acre farm. In some cases where the farmer owned a half section or more, I have known a mortgage of \$1,200, and something above this amount, to be paid with money raised from the sale of produce raised on the mortgaged farm.

Years ago, when cattle were profitable, investing money in this sort of stock paid a fair profit. But aside from this industry, it has not paid to mortgage the farm to get money to invest in the different productions of the farm.

As to bad crop years, will state that short crops have contributed but little, if any, more to short profits or actual losses than low prices, which in several cases during the past twenty years have forced the farmer to sell his crops at less than cost of production.

The cattle industry was reasonably profitable from about 1873 to 1883. Since then the price of beef has been such as to cut off about all the profit, and in case the cattle owner is operating on borrowed money, the interest not only becomes a burden, but leads to the loss of the farm if mortgaged, or to a forced sale of the same, in order that something may be saved out of the wreck.

What I have stated in regard to the cattle industry will apply with equal force to all other farm products. Such is and has been the state of affairs in central Kansas, as far as I have observed. True, an occasional farmer has proved himself an expert as a financier, while a dozen who have been

quite as industrious as himself, around him, have met, with no sort of profitable success. Others, again, have not only failed to realize a profit, but have steadily lost ground, and finally the home. This description refers to the two extremes, and also to that class who about hold their own. An average, I suppose, is what is sought after in making these investigations.

G. BOHRER.

JEWELL CITY, KAS., July 24, 1893.

EDITOR KANSAS FARMER:—Your circular received, and in reply will say, that I am not in possession of any facts regarding any other man's business, and do not know the amount of a single man's mortgage in this county. I have never heard but very little complaint about paying the interest on mortgages. I do not think the interest very much of a burden in good crop years, although I never had a mortgage on my property to try it. Some men pay lots of interest, yet seem to be making money all the time. We are glad to say many of the mortgages in this county have been paid in the past few years.

L. A. BREED.

NORTH TOPEKA, KAS., July 25, 1893.

EDITOR KANSAS FARMER:—In reply to the enclosed circular, would say, that the majority of the real farmers of my locality and acquaintance are not mortgaged. The majority that are mortgaged are in that condition as a result of some speculation during our boom period. A few are now mortgaged as a result of bad management, expensive families, etc. As to whether a payment of \$114 annual interest would prove a burden, would say, that it depends on size of farm. A man with 160 acres can pay it every year and support a family well—if he will work, and had better do it than pay rent; and, if he is enterprising, can pay the principal also in ten years.

It is my opinion that there are more farmers in northern Shawnee county that have a little money to loan than there are that are oppressed by the payment of interest. The worst curse we have in our locality is so much land owned by non-residents, which is leased for one year only (in hopes of selling at or before end of year) to a class of tenants that were grown in the shade and hence wilt when exposed to the sun.

Our farmers have made long strides in way of improved stock. In 1878, when I first saw the country, Texas ponies, Cherokee cattle and elm-peeler swine were the ruling breeds. Now you can see splendid draft and driving horses, splendid specimens of the different breeds of dairy and beef cattle, and as good hogs as any section of the world.

H. W. CHENEY.

BELOIT, KAS., July 28, 1893.

EDITOR KANSAS FARMER:—Yours of 16th inst. at hand. Will reply by saying that I have lived in the State and on my present farm for twenty years, and have farmed it all the time, so you see that I speak from personal knowledge. Will answer your question by an illustration, taking a 160-acre farm for an example, with conditions really above an average, estimating wheat at fifteen bushels to the acre, at a cost of 40 cents per bushel; corn at forty bushels to the acre, at a cost of 12 cents per bushel. Have made no allowance for cost of keeping up insurance or repairs, but depend on surplus stock sold from the farm to do that.

CAPITAL INVESTED.

160 acres land, at \$15 per acre.....	\$2,400
Farm implements and teams.....	800
Total.....	\$3,200

RECEIPTS.

60 acres wheat, 15 bu. per acre, 50c per bu. . .	\$ 50
40 acres corn, 40 bu. per acre, 20c per bu. . .	320
40 acres pasture, \$2 per acre.....	80
20 acres oats and forage crops, \$5 per acre..	100
Total.....	\$ 550

EXPENSES.

Interest on \$3,200 at 8 per cent.....	\$256
60 acres wheat, 15 bu. per acre, 40c bu. . .	360
40 acres corn, 40 bu. per acre, 12c bu. . .	192
20 acres oats, forage, \$2.50 per acre.....	50
Taxes.....	25
Total.....	\$883

Net income..... \$ 67  
with which to clothe, educate, supply luxuries, pay doctor bills, etc., for an average family of five persons. Comments are not necessary.

Conditions as they exist to-day—this year:

160-ACRE FARM.

60 acres wheat, 8 bu. per acre, 30c per bu. . .	\$144
40 acres corn, 20 bu. per acre, 30c per bu., (estimated).....	240

40 acres pasture, \$2 per acre.....	\$ 80
20 acres oats and forage, \$3 per acre.....	60
Total receipts.....	\$524
Total expenses.....	883
Net loss.....	\$359

This last example is a fair average of the condition of the farmer in the west half of Kansas to-day, and is not overdrawn. And we hold the financial legislation of the last twenty-five years largely responsible for the low prices, consequently favor the free and unlimited coinage of silver and increase of the circulating medium as a remedy.

ANSON S. COOKE.

HIAWATHA, KAS., July 27, 1893.

EDITOR KANSAS FARMER:—In reply to your circular, will say, that while I do not fully understand the scope and meaning, in the aggregate in our county it would amount to about \$25,000, which I presume is principally sent out of the county to Eastern capitalists. If this were the only item, it probably would not be a burden, but the insurance money, the taxes (local), the implements purchased, the coal and fuel purchased, all combined, leave but a small item of profit at the end of the year to the man who holds the plow. Therefore, I conclude that it is a burden to the average farmer to pay this \$114 per annum on his mortgaged indebtedness, which does not by any means include all the interest he pays; but, possibly, an equally large amount is paid in which he has given personal security. In considering this matter, we must take into account the average price which he is compelled to take for his produce, and the average yield per acre. Taking the average, the raising of horses and cattle the past few years has not been profitable in a general way. Hogs are profitable at present prices. Wheat is almost a complete failure the present year. The same can be said of all small grains and fruits. Corn promises a fine yield, but the price is as yet a matter for the future to develop.

Judging the future by the past and present, I cannot see any great degree of prosperity for the farmer who is encumbered by the average amount of mortgaged indebtedness, but believe with a diversified system of farming and proper rotation of crops, economy and industry, he can pull through the present financial difficulty.

SAMUEL DETWILER.

OSBORNE, KAS., August 8, 1893.

EDITOR KANSAS FARMER:—In answer to question sent from Census office: In first place, I do not believe the farmers of this county pay as much as \$114 interest upon their debts. Where they do pay it, there is no question whatever but that it is a real burden. Many farmers who incurred this indebtedness put same in stock. Prices of stock, as well as grain, depreciated to such an extent that the whole capital was expended in payment of interest and taxes. Since then many farms have been sold under mortgage foreclosure. Those who still retain their farms and have paid the interest have done so by depriving their families of all the luxuries of life and many of the comforts. There are families in this county living on farms who have not raised apples and have not had a bushel of apples in their homes in a year, and but little other fruit. If we could have good crops every year and prices like the fall of 1891, the country would soon be relieved of its burden, but a failure once in three years—about what we have averaged—makes this payment of interest a perpetual burden, of which they are relieved only when they sell out or lose their farms by foreclosure.

I draw my conclusions by comparing farmers now in debt with those who are not in debt. Farmers not in debt are not complaining and are contented, but \$114 in cash will buy a great many luxuries and comforts in a farmer's family.

S. B. FARWELL.

VENANGO, KAS., July 25, 1893.

EDITOR KANSAS FARMER:—In reply to inquiries, I state, to the first, that, to an industrious farmer, it is not. He always puts borrowed money to honest purposes. Second, in years of average crops, with fair industry and usual health, interest on borrowed money is as easily paid for as the clothes he wears and as cheerfully. To him and

the stock-raiser, interest is no burden unless a series of years of bad crops ruins him financially. Interest, for money to carry on the farm or to pay for it is no burden to honesty and industry.

W. S. GILE.

TOPEKA, KAS., July 29, 1893.

EDITOR KANSAS FARMER:—In answer to questions regarding loss and profit on loans in Kansas, will say, I have had some experience and have been glad there was such relief in our State as loan agencies. I think the statement—\$114—absurd to start with. I have been able to better myself through the favor of this agency. I do not think the payment of interest a perceptible burden. Taking one season with another, I think there is a profit in favor of the borrower of money if judiciously used.

V. B. HOWEY.

WICHITA, KAS., July 27, 1893.

EDITOR KANSAS FARMER:—Yours received, and I assure you it is no easy matter to give you an answer that is entirely satisfactory to yourself or to the writer. But as you are to get answers from ninety-nine others, you will be able to form a very just conclusion as to the points under consideration.

First, is the payment of \$114 annually as interest on mortgage a real burden to the borrower? Now, I want to classify my brother farmers in Kansas before I proceed to answer, for I shall aim to do both classes justice in my answer. If an active, intelligent farmer, with any care and management, you need have no fear of his being burdened by this little item of \$114. You will get your money when due in seven cases out of ten. We have occasional failures. But if the borrower is a crank and politician, who pays his own, and the national debt, only with his jaw, then you will never get your \$114, because he don't know whether it is a burden or not—he never tried it.

Is this \$114 a real burden to the Kansas farmer? Let us see. After twenty-one years' experience and observation in this (Sedgwick) county, I have no hesitation in giving you this statement as to what the active and industrious average man, with one team and ordinary machinery, can do annually: First, he can plow, plant, cultivate and harvest forty acres of corn, worth \$300; second, forty acres wheat, worth \$250; third, twenty acres oats, worth \$240; fourth, five acres truck patch, \$50; fifth, pasture, capable of raising annually forty animals—ten cattle, worth \$180; ten calves, worth at 2 years old, \$15, \$150; hog pasture, twenty-five hogs annually, \$100; total land given him by United States, 160 acres; annual yield, \$1,270. Deduct your interest, \$114; annual tax, \$24; repairs and machinery, \$162; threshing grain, \$50; total, \$350, which leaves a profit of \$920. This balance is a pleasant burden for the active, industrious man, but something the other fellow knows nothing about. This is no exaggeration. I know many farmers in Kansas who make annually double this amount.

The United States gives us the 160 acres of land. We cultivate, fence and build for our comfort and convenience. We raise our own crop by our own labor, we raise our own stock, we feed and mature that stock by grain of our own raising, consequently all that we get out of either grain or stock raised in this way is so much wealth created by us and is our pay for labor performed.

We have no regular or fixed time or plan in Kansas farming. Our seasons are irregular. The condition of our soil varies greatly. You must be governed by circumstances in Kansas farming. What proves a success this year under certain treatment may prove a failure next year under the same. You must observe the conditions before you each year, but the main thing is, push, push, and take care of what you make.

JNO. KELLY.

AMERICUS, KAS., July 24, 1893.

EDITOR KANSAS FARMER:—Yours of 16th received. I was not aware that so great a number of our farmers were paying so much interest. I believe in Lyon county our people are making enough money out of their farming to each year pay off a portion of their indebtedness. I believe further (from experience and observation), that any practical farmer, under fair circum-

stances, can make fair profits out of money on which he pays 10 per cent. interest, provided his money is properly invested and handled. I do know that most of our farmers, where I reside, are out of debt, and others fast paying out. Let us remember that many so-called farmers, when they mortgage their farms for money, amongst the first purchases they make, you will find many of the comforts, such as pianos, fine furniture, buggies, fast horses, etc., from which there is no income. But interest must be paid. Money invested in cattle, hogs and labor in raising corn to feed the same will and does pay fair profits.

Now, I have written something, and perhaps I have not answered your questions, for I find they are rather difficult questions.  
J. W. LAY.

BENTON, KAS., August 7, 1893.

EDITOR KANSAS FARMER:—Replying to your slip of July 16: I have lived and worked on my present farm home for over twenty-two years, having had the same opportunities for obtaining "facts" as others similarly situated.

So far as the average farmer is concerned the interest burden bears heavily enough, often to discouragement. This remark is intended to apply to those whose sole reliance is on their farms, and not to men who add to their incomes from mechanical or other outside employments, or draw pensions, or obtain profits by shrewd trading or otherwise.  
WM. H. LITSON.

VINLAND, KAS., July 31, 1893.

EDITOR KANSAS FARMER:—I am in receipt of your slip, dated July 16, containing Secretary Porter's letter. I don't know positively what many farmers' net incomes are from farming, but I do know what it costs to raise crops and stock and how it pays, as much depends on the price we get as quantity or quality of the crops. Almost all we raise, with the exception of wheat, is fed to some kind of stock. For several years past cattle and hogs have gone lower each year, so that if not an actual loss there was but very little profit. Wheat for several seasons has been and is now too low for any profit. Horses, until the past two years paid for raising. Present prices leave but little if any profit. Hogs, for the past nine months, have been bringing good prices, but many farmers had but few or none to sell under these conditions. Many farmers have less property now than they had a few years ago, and paying interest would mean depriving them of a decent living or eating into their capital.  
WM. ROE.

### THE SCHOOL BOOK BUSINESS.

There is so much nonsense afloat these days regarding alleged trusts, that it is often difficult for the average citizen to distinguish the real from the alleged. One result of all this has been the styling of the American Book Company as a school book trust. So much of this idea of alleged book trusts has been scattered throughout the length and breadth of the land—largely by envious rivals of the American Book Company—that it was brought to the attention of the Illinois Legislature, during its recent session, and the Senate appointed a committee of seven "to investigate the methods of business in the State of Illinois of the American Book Company." We give the report of that committee as adopted June 8, 1893, because the company has been doing a large business in Kansas, and we believe every one connected with education in this State will read it with interest. The report is as follows:

REPORT OF SENATE COMMITTEE TO INVESTIGATE THE AMERICAN BOOK COMPANY.

To the Honorable, the Senate of the State of Illinois:

The special committee appointed by your honorable body, on the 7th day of February, 1893, respectfully submits the following report:

As the result of its investigation into the organization and methods of doing business of the American Book Company, having its principal offices in the cities of New York, Chicago and Cincinnati, the said company being the school book corporation mentioned in a resolution adopted by the Senate on the date aforesaid, your committee

finds from the evidence that the said American Book Company was incorporated under the laws of New Jersey regulating the organization of corporations organized for manufacturing purposes, with privilege of doing a mercantile business in connection therewith.

For the purpose of purchasing copyrights and publishing rights, owned by Messrs. D. Appleton & Co., of New York, A. S. Barnes & Co., of New York, Ivison Blakeman & Co., of New York, and Van Antwerp, Bragg & Co., of Cincinnati, the company was formed May 15, 1890, as appears from a copy of the certificate of organization that was submitted to your committee in evidence. For the purpose of purchasing the aforesaid copyrights and publishing rights of the houses named and also purchasing some additional copyrights and publishing rights from Messrs. Harper & Brothers, of New York, and D. D. Merrill, of St. Paul, Minnesota, an aggregate capital of five million dollars (\$5,000,000) was subscribed, and certificates for the same were issued for the full payment of the properties so purchased.

A copy of the by-laws of the company was submitted to your committee, and, upon examining the same, were found to be, in all respects, regular, and such as would be expected to be used as the guidance for the operations of any corporation organized under a general corporation law.

It was shown in evidence to the committee that, upon the organization of said American Book Company, as aforesaid, the firms of Ivison, Blakeman & Co., A. S. Barnes & Co., and Van Antwerp, Bragg & Co., dissolved and went out of business entirely.

The committee further finds that the said American Book Company sells school books in every State and Territory in the United States and several foreign countries; that the total school book sales for the United States by all publishers of school books is about \$7,000,000; that the total sales of the American Book Company for the year 1892 were \$3,307,000; that the total sales by the American Book Company in the State of Illinois were \$209,527.13 for the year 1892; that of the school books published in the United States, the American Book Company publish about 50 per cent.; that of the school books sold in Illinois, the American Book Company publish about 70 per cent. Also that there are eleven other firms or corporations, competitors of the American Book Company, having offices in Chicago; that there appeared before your committee the resident managers of four of the largest competitors with the American Book Company, and from the evidence of the managers of said competitors, your committee find that the American Book Company is compelled to meet a fairly strong competition from other book companies doing business in the State of Illinois.

Your committee finds, from the evidence submitted, that the American Book Company does not control the supply of text-books; that it does not control competition, which is shown to be of considerable strength and extent, nor is there any evidence of collusion between the American Book Company and any of its competitors in the manufacture and publishing of school text-books, for the regulation of prices, the division of territory, or controlling the number and quality of text-books manufactured.

Your committee finds from the evidence that there has not been any advance in the price of school text-books since the organization of said American Book Company, but on the contrary, by reason of increased discounts being made to retail dealers, the latter have been enabled to reduce their retail prices all the way from 20 to 40 per cent. It was furthermore shown in evidence that the American Book Company has reduced its mailing prices fully 16½ per cent. lower than the mailing prices which prevailed prior to the organization of the said company, and that catalogues and price lists showing this reduction had been freely sent to school teachers throughout the entire country, in order that where unreasonable retail prices were charged by local dealers

## THE PRODUCT OF THE FARM!

WE WILL SELL YOUR Grain, Hay, Dressed Hogs, Lambs, Veal, Wool, Butter, Eggs, Poultry, Fruit, Vegetables, Hides, Pelts, Furs and all kinds of Produce on the Chicago market for you on commission, to best advantage.

Organize a league in your neighborhood—members participate in commission profit of sales of their own products. Send for tags with instructions for shipping, to our General Office, 706 Garden City Block.

**FARMERS & MANFRS. COMMERCIAL LEAGUE,**  
Ship Produce to 174 S. Water Street, Chicago, Illinois.

the teachers and patrons of schools would be able to send direct to the publishers for supplies which could be procured at the published list prices, postage prepaid.

Your committee finds that a contract rate of 20 per cent. discount from published list prices has been established by the American Book Company and offered to boards of education, school districts and teachers throughout the United States. From this it that appears the smallest school district in any State is favored as much as any of the large cities or States, since it was shown that school districts in Nebraska, Iowa and other States, where school districts are empowered to contract with publishers, supplies of books were being furnished at as low rates as are made to the States of Missouri, Louisiana and West Virginia, where State uniformity laws exist.

Your committee, after having listened to the sworn statements of the officers of the American Book Company, and of the managers of the largest competitors of the American Book Company, finds that the said American Book Company is not a trust or combine within the meaning of the law of this State, entitled "An act to provide for the punishment of persons, co-partnerships or corporations forming pools, trusts or combines, and mode of procedure and rules of evidence in such cases," approved June 11, 1891, and in force July 1, 1891.

With regard to legislation in the interest of a reduction in the cost of school text-books, your committee would recommend that the present school law of the State of Illinois be so amended as to authorize school district boards to take advantage of the contract rates now offered by publishers of school text-books, and to make purchases direct and supply to pupils as needed at cost. It was stated in evidence that laws of this character are already in satisfactory operation in other States, and it is believed that a similar law enacted for the State of Illinois would obviate the difficulties that have heretofore attended the supply of school text-books to children through local retail dealers.

[Signed] JOHN W. ARNOLD,  
Chairman.  
JOHN F. O'MALLEY.  
JOHN HUMPHREY.  
V. S. FERGUSON.  
EDWARD T. NOONAN.

### Gossip About Stock.

Don't overlook the new announcements of stock advertisers. The best breeders and the best bargains are advertised in the FARMER.

Competent stockmen estimate that 2,000 cars of stock will be shipped out of Greenwood county this year.

The daily stock and market papers are advising stock shippers to hold their stock away from the markets as much as possible.

When you speak or even think of spring medicine, how quickly Hood's Sarsaparilla comes into your mind. Take it now.

### Publishers' Paragraphs.

The model pump for household purposes is made by the St. Joseph Pump Co. Notice their advertisement elsewhere in this paper.

Our 2-cent column for wants, for sale and exchange, has done many thousands of dollars of business for our readers. One dollar pays for twenty words for five weeks.

The Badger corn harvester, made by I. Z. Merriam, White Water, Wis., will interest every one of our readers because of the novelty and cheapness. The evidence of users is very flattering.

The Mook Star Bale-tie is meeting a great demand from readers. It has unusual merit, is low-priced, and should be investigated by any needing bale-tie machines. The Mook Co., Kansas City, Mo., will give full information.

### Do You Study Politics?

Whoever studies political questions should read all sides. The official State paper, the Topeka Advocate, is still at the head of the reform movement, and is giving its readers a more reliable report of the situation in Congress than any other Western paper. It receives its information in the shape of editorial correspondence.

One dollar a year or 25 cents for a trial subscription. Address,  
ADVOCATE PUBLISHING CO.,  
Topeka, Kas.

### Initiative and Referendum Lectures.

On direct legislation through the Initiative and the Referendum. State being organized. Write for plan, date, etc.  
W. P. BRUSH, Topeka, Kas.

### Kansas Fairs.

Following is a list of district and county agricultural societies and fair associations in Kansas, with names and postoffice address of Secretaries and dates of fairs for 1893, as far as reported:

Kansas State Fair Association, L. H. Pounds, Topeka, September 29 and 30, October 1, 2, 3, 4, 5, 6 and 7.  
Allen County Agricultural Society, O. L. Whitaker, Iola, September 21, 22 and 23.  
Anderson County Fair Association, M. L. White, Garnett, August 29, 30, 31 and September 1.  
Clay County Fair Association, P. P. Kehoe, Clay Centre, September 12, 13, 14 and 15.  
Coffey County Fair Association, George Throckmorton, Burlington, September 11, 12, 13, 14 and 15.  
Cowley County Fair and Driving Park Association, J. P. Short, Winfield, September 5, 6, 7 and 8.  
Herington Fair Association, Dickinson county, W. N. Hawley, Herington, September 19, 20, 21 and 22.  
Finney County Agricultural Society, D. A. Mims, Garden City, September 21, 22 and 23.  
Franklin County Agricultural Society, C. H. Ridgeway, Ottawa, September 27, 28 and 29.  
The District Fair Association, Franklin county, D. H. Gore, Lane, September 19, 20, 21 and 22.  
Greeley County Agricultural Association, Thomas H. Orr, Horace, September 26, 27 and 28.  
The Anthony Fair Association, Harper county, H. Parke Jones, Anthony, September 26, 27, 28 and 29.  
Jackson County Agricultural and Fair Association, S. B. McGrew, Holton, September 26, 27, 28 and 29.  
Jefferson County Agricultural and Mechanical Association, George A. Patterson, Oskaloosa, October 10, 11, 12 and 13.  
Johnson County Co-operative Fair Association, C. M. T. Hulett, Edgerton, September 19, 20, 21 and 22.  
Johnson County Fair Association, W. T. Pugh, Olathe, August 22, 23, 24 and 25.  
Linn County Fair Association, Ed. R. Smith, Mound City, September 5, 6, 7 and 8.  
LaCygne District Fair Association, Linn county, J. S. Magers, LaCygne, September 26, 27, 28 and 29.  
The Frankfort Fair Association, Marshall county, James B. Van Vliet, Frankfort, September 26, 27, 28 and 29.  
Miami County Agricultural and Mechanical Association, D. M. Ferguson, Paola, October 3, 4, 5 and 6.  
Morris County Exposition Company, E. J. Dill, Council Grove, September 26, 27, 28 and 29.  
Sabetha District Fair Association, Nemaha county, Ira F. Collins, Sabetha, September 5, 6, 7 and 8.  
Osage County Fair Association, C. E. Filley, Burlingame, September 26, 27, 28 and 29.  
Osborne County Fair Association, M. E. Smith, Osborne, September 26, 27, 28 and 29.  
Riley County Agricultural Society, Charles A. Southwick, Riley, September 27, 28 and 29.  
Wichita Agricultural and Mechanical Fair Association, J. E. Howard, Wichita, September 11, 12, 13 and 14.  
Wilson County Agricultural Society, C. R. Cantrall, Fredonia, August 29, 30, 31 and September 1.  
Neosho County Agricultural Association, H. Lodge, Erie, August 29, 30, 31 and September 1.

## Piles! Piles! Piles!

Not piles of worthless stuff, but Steketee's Ointment and Pile Remedy combined will cure the worst case of Piles in any form, and have plenty left to cure burns or any sores on man or beast. Was never known to fail to cure sore breast and scratches on horses. All for 35 cents. Do not pay \$1.00 when you can have this for 35 cents. For sale by druggists, or on receipt of 35 cents in U. S. postage G. G. Steketee, Grand Rapids, Mich., will send it. Cut this out and take it to a druggist first; 3 boxes for \$1.00.

## Make Your Own Bitters

On receipt of 30 cents, U. S. stamps, I will send to any address one package Steketee's Dry Bitters. One package makes one gallon best tonic known. Cures stomach and kidney diseases. Now is the time to use bitters for the blood and stomach.

WHEATON, Ill., December 7, 1890.  
MR. STEKETEE:—Your Dry Bitters has no equal for kidney or liver complaint. Have been troubled for the past ten years. Find your bitters excellent.  
FRANK SCHUBLER.

Send G. G. Steketee, of Grand Rapids, Michigan, 30 cents, U. S. stamps, and we guarantee that he will send at once.

## The Home Circle.

To Correspondents.

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

### The Cynic.

The cynic's shafts, like arrows sped,  
Will fly all thickly round the head  
Of him who tries to help his brother.  
Like steady rain his spleen and gall  
Will dull the sky and drip and fall  
Upon the man who helps another.

Just as mosquitoes, fleas and gnats,  
Or gad flies and the garish bats,  
Might tease and vex a Paul or Nero,  
The cynic, with his little brains,  
Will nag and give some passing pains  
To pope or priest, to saint or hero.

Wide as the world there may be found  
Some insects cumbering the ground,  
Which no one ever would discover  
Unless upon one's clothes they cling,  
And with their little javelins sting  
Humanity's best friend and lover.

All human action to his mind  
Is based on selfishness refined,  
And has no love or virtue in it.  
To him hypocrisy and greed  
Stand foremost in each human creed,  
And in all ears he'll drum and din it.  
HENRY W. ROBY.

### METEMPSYCHOSIS.

The word itself is not very attractive, but as a story must have a name and that name should indicate at least some point sought to be demonstrated or disproved, the word will do, as no other one word would.

In the year 1830, during the month of June, I started from Philadelphia with my husband for a visit with relatives residing in Pittsburg, Pa. At that time, as all will remember, of course, there was no Pennsylvania railway nor any other railroad carrying passengers through charming valleys and delightful mountain scenery between the two cities named. Our only means of conveyance was the slow-going stage coach, which required seven days to accomplish the trip. After starting from Philadelphia, we found ourselves in a coach full of travelers, the most of whom did not go further than Harrisburg; from the last named place only two remained with myself and husband, and these were a very pleasant lady, with whom I had already made a sociable acquaintance, and a dark, foreign-appearing gentleman, who had been somewhat conversational before, but now became quite inclined to keep us all from being lonely. During our ride through the Juniata valley, he related to us many incidents of his life and troubles in the "old world"—which, by the way, is not a day older than the spot where now stands the little village of Port Royal, in Juniata county, Pa. To relate his whole conversation would require too many columns set "solid," which the printer doesn't like, so I'll only give an extract sufficient for the purpose of this story.

He was a native of India, though of English and Scotch ancestry. He was quite particular to specify when and where they came from. His great-grandmother had been the wife of Colon Campbell, the oldest son of the Duke of Argyle, in the year 1750. Her marriage with her husband, who was the Marquis of Lorne, had been a private one and never known, or rather, never acknowledged, by her husband's family. Colon Campbell was Colonel of one of the regiments ordered to the American colonies to make up the army of General Braddock, who was then about to commence his march against Fort Du Quesne, which ended on the tragic battle field in the Pennsylvania mountains. By appointment, Colon Campbell was to have met his wife in London, and there acknowledge their marriage, and bring her certain articles of family jewelry which had adorned the persons of several generations of Campbells. By some miscalculation he did not meet his wife, and his time of departure being hastened, he sailed for America and was killed at Braddock's defeat. The wife, who at that time was also the mother of a daughter three years old, lacking the means of self-support, was obliged to go to her brother in India, who was a Lieutenant in a British regiment, stationed at Calcutta. The little daughter grew up to be a very beautiful young lady and was admired by the Nawab of Rampur, who made her one of his seven hundred and thirteen wives. After a few years, owing to a coldness which sprang up in the social circle of the private domestic establishment of the Nawab, the English wife was forced to escape from the harem to save her life and her little daughter. Now, this last mentioned little daughter grew to be also a very handsome lady and married a Scotchman in India by the name of Ferguson. This Mr. Ferguson and his wife were the parents of our loquacious traveling companion.

Mr. Ferguson, the elder, had become quite wealthy in India, and our Mr. F. had been educated in Europe and had spent many years in travel. He admitted he was

not a Christian in belief, but was a firm believer in the Brahmin religion and had queer notions about "former existence" and the holy brethren in the Hindoostan mountains, who were the keepers of all spiritual knowledge and who had the unpleasant habit of never dying and of not doing other things deemed proper by sociable human beings. He talked a great deal about his "Mahatma," who had ever guided him in every action in life. What a "Mahatma" was, of course, I did not know.

Our Mr. Ferguson had never been in America before, but in all his travels he had been uneasy and seemed to be impelled to cross the Atlantic ocean. Six months before he had been unable to resist the impulse, though he had no definite idea where he wanted to go. He reached New York and had remained a month. Something mental forced him to continue further. He went to Philadelphia, where he felt easier, but still his mental prompter told him he had not accomplished what he had come to do. He had, without thought of where his journey would lead to, taken passage on this coach, and did not know how far he should go, but did know that he felt happier than ever before, and was now feeling freer from the mental load he had carried for years. He believed he had lived in this world before, but where and when he did not know. He was sure his present trip would reveal that fact to him. We were now in western Pennsylvania and were in the road that had first been opened by General Braddock in 1755. "Do you know," said Mr. Ferguson, "there is something strangely familiar to me about this locality? I never was here before, that is sure, yet I seem to recognize the general features of the country."

Our driver now informed us that we were within five miles of the former battle field where General Braddock met his disastrous defeat, and from which the immortal Washington led his first successful retreat.

At this point we were startled by Mr. Ferguson fairly screaming: "Driver, stop; oh! stop the coach." We came to a standstill, while the driver came down from his seat to see what was the matter. Mr. Ferguson sat with his hand over his eyes for a few minutes and seemed greatly agitated. Soon he started up and begged my husband to get out with him to go just beyond the little hill near us. He did not know why, "but would not the kind gentleman humor his notion?" They were gone about ten minutes, when they came back with an old rusty iron box, whose hinges and lock were rusted off, but they had not removed the cover. My husband related to us how Mr. Ferguson, with his hand before his eyes, as though to keep him from seeing with his mortal sight, had gone to a little ravine and underneath a huge shelf of rock, completely hidden by a thick growth of underbrush, had dug away some gravel and flat stones, and, hidden where it would seem to be almost impossible to be accidentally discovered, was found this iron box. He now opened it and found within another similar box, also much rusted. This latter box contained an old gold watch, a diamond bracelet and a diamond ring, also a small roll of parchment stuck through the ring.

Mr. Ferguson opened the parchment, read the writing, and apparently fainted, and the parchment fell from his hands. When he had recovered from his faint, he whispered: "Read, read the paper."

I picked it up and read as follows:

PENNSYLVANIA COLONY, July 9, 1755.  
We are about to march on Fort Du Quesne. From reports brought in by scouts I am satisfied we are liable to be surrounded by Indians at any time. General Braddock will not believe it and takes no precaution against surprise. I have a presentment that I shall be killed in the coming battle. I desire this jewelry be sent to my wife, who is now in London waiting for my return. She is my lawful wife and I have neglected publicly acknowledging her. I hoped to meet her in London before my departure for America, but we were ordered to start a week sooner than we expected. I will conceal this box and tell Col. Washington and Capt. Orville Deville where to find it and where to deliver it. So, if I am killed, it will be sure to be found and sent to England.  
COLON CAMPBELL,  
Marquis of Lorne.

P. S.—I have tried to speak to Col. Washington and Mr. Deville, but have not been able to find them. I shall put the box away and see them in the course of the day, though I already hear the shots of the Indians at the front.  
C. C.

We examined the watch and the jewelry and found each of the three pieces marked with a coat of arms, and the watch engraved with the name of Colon Campbell.

We were all very much surprised, of course, and considered the occasion very romantic. Mr. Ferguson, who had sat with his face covered and was apparently weeping, now wiped his eyes, and said in a very shaky tone of voice: "I now know why I could not resist the impulse to come to America, and why I felt so happy after we were fairly started on this stage trip. I have long believed, and I now know most surely, that I formerly lived on this earth, and that I was the Colon Campbell who wrote that letter. Since sitting here it has all come to me so plainly. I did not see Col. Washington on that day nor Capt.



Every farmer who makes a specialty of fancy stock takes pride in exhibiting the finest product of his farm, whether it be a Shropshire sheep, a Shorthorn cow, a Chester White hog or a Percheron horse. To show to best advantage, the natural colors of the wool or hair must be brought out; the white in particular must be snowy white and not tinged with dirty brown or yellow. A breeder says of the Ivory Soap:

"I have used it for many years and find it for all practical purposes superior to anything I have ever used. . . . It leaves the skin soft and clear, furnishes life to the coat, produces a beautiful growth. . . . and leaves it smooth, glossy and free from harshness. I use it with lukewarm rain water, which I find is the best. This forms a rich, oily lather, and helps loosen all stubborn scales and blotches of the skin."

R. I.

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Deville. I was killed within a half hour after I hid the box. Right where we now sit is the spot where I fell. I was one of the first ones killed. The army pushed on a few miles further where the main battle was fought. Would you oblige me by copying this letter as a memorandum for yourself. It may be of service to me and a curiosity to you.

At Pittsburg we lost sight of the European Indian, and we were left much mystified by the discovery so recently made.

How can I account for the strange occurrence? Why, he simply lied, and had made three able-bodied geese of his fellow travelers.

He had taken our addresses and shortly after sent for our deposition concerning the incident. We could not refuse, and made our affidavits in accordance with the facts above stated. Six months afterward we were subpoenaed as witnesses in a criminal trial at Philadelphia, wherein our Mr. Ferguson was defendant, charged with receiving a large amount of money under false pretenses from the Duke of Argyle for the jewelry he that day found in western Pennsylvania. He had opened correspondence with his ducal relatives in Scotland, and by the aid of our depositions had succeeded in making old man Campbell believe

he was recovering rare heirlooms of the family. He sent his agent to Philadelphia and paid our Mr. Ferguson 10,000 pounds sterling for the trinkets, which proved to be other than genuine. It was shown that the box had been secured a few years previous by Mr. Ferguson from an old farmer who dug it up on Braddock's battle field—that he hid it and waited his opportunity to get proper witnesses to the miraculous finding. He had never been in Europe, but was a native of the State of Louisiana. He served patiently a term of ten years in the Pennsylvania penitentiary.

Moral? Why, yes. Don't believe all the wonderful stories you read and hear of mysterious findings, or suddenly mysteriously acquired ideas, and remember your own eyes and ears may sometimes lead you into quite wrong ideas and beliefs and notions.  
N.

### Give Her a Hoe.

Give her a hoe? Yes, give her a hoe, and let it be one of the best quality—handle long, light, straight-grained and strong, blade of the sharpest and truest of steel, that will ring out like a bell when it strikes a stone or a brick-like clod. Let the style of the implement be such as her fancy may dictate—round, square, three-cornered or a

ONE PURE BAKING POWDER, AND THAT IS

## Dr. Price's Cream Baking Powder

Surpassing all others in its quick and perfect work.

Where good, pure, wholesome  
food is required, . . . . .

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Should be used. No other does such perfect work.

DR. PRICE'S is The Only Pure  
Cream of Tartar Baking Powder.

Others contain Ammonia, Alum, Lime or other hurtful ingredients.

combination of many things. But give it to her. Why? Because it will improve her health and increase her practical knowledge. It will be a benefit to the family and to the farm. It will be one more argument in the long list to prove that whatever work comes to hand may be truly ennobling.

Housework is undoubtedly healthful. Sewing is almost womanly accomplishment, and music is a divine art. But pity the young woman who must be confined to these during vacation after nine months of earnest, absorbing study, and who, beside the regular class routine, has been faithful in all society work. Doesn't she want anything better? It is time that she had it, whether she desires it or not. Why should she be deprived of fresh air, because she is a woman? Why should the bright sunshine be doled out to her through the kitchen window? Let the programme be varied somewhat, and, as has been suggested, give her a hoe. By vacation time the flower beds will be calling for order among their members; the vegetable garden will hold out a pressing invitation for her to use her implement of warfare against the weeds; the orchards and fields will have a charm not to be withstood. The little done, each day as she is able, will increase, and day by day the work will become more absorbing. But do not think that all else will be neglected because of the hoe. The dishes will be washed as quickly, the floor as neatly swept, the cake as light, the bread as sweet as though she never set foot out of doors. While, as if by magic, the dainty garments will be fashioned without snarling thread or temper, without wearing away of strength or patience. And when she gets up in the morning before the sun appears and hoes for an hour while the sweet-voiced birds are singing all around, she will more nearly comprehend that wonderful anthem of praise with which earth greets each new spring day. The balmy freshness of the morning air will fill her with inexpressible happiness and contentment. Each new-blown flower and rustling leaf will show her the power and love of the Great Creator. The gentle wind will whisper to her of a higher world and better things to come, and life will have a nobler, truer meaning than ever before. What though the visible effects of her communion with nature are but bright eyes, a glowing countenance and a hearty appetite. Is she not better for it? Is not the whole family benefited thereby? The ripe fruits picked by her own careful hands have a peculiarly delightful flavor, nor is their beauty marred by unsightly leaves or bits of broken twigs.

Flood and drought, oppressive heat or untimely cold may discourage; insect hordes array themselves against the harvests; all these and other evils she may have to contend with, but her work will be done, and not in vain. And should the handling of the simple tool beget in her a desire to use the more complicated machinery necessary to a well-regulated farm, who so ready and willing to teach the use and place of wheel and lever as the strong and able brother? Who so willing to credit her with her full share of the work done? Vacation will end all too soon for her work to be completed. She must leave much of the gathering of the fruits of her labors to other hands. But she will go back to her school work with a new strength, more quick to comprehend, more able to endure, and thankful indeed will she be for her acquaintance with the hoe.

MARY E. COTTRELL.  
Wabaunsee, Kas., August 10, 1893.

**A Long Sermon.**

The Rev. George N. Howard, D. D., of Lowell, whom I met in this city the other evening, had a unique experience two years ago, when he was a delegate from this State to the national convention of the Sons of Veterans. New England sent a large delegation to Minneapolis. The delegates traveled in two special cars and made a very jolly party. Sunday found the party on the road, and it was suggested by some one that it would be a proper thing to hold some kind of religious service. The matter was brought to Mr. Howard's notice and he immediately approved of it. An extemporaneous choir was organized, and one of the musicians of the party took his station at the piano in one of the cars. The occupants of the other cars were notified of what was about to take place, and by the time that everything was in readiness the car that had been chosen as the chapel was filled to the doors. The train hands and even the porters took their places among the rest. The service was an interesting one and Mr. Howard preached an eloquent sermon.

From the time he began to speak till he had finished the train had made a run of over eighty miles. From that day to the present Mr. Howard has claimed to be the only living clergyman who has preached a sermon that was heard for eighty miles, and his friends are fond of referring to him as the "champion long-distance preacher of America."—*Boston Globe.*

**The Young Folks.**

**The Atheist and the Acorn.**

Metinks the world is oddly made,  
And every thing's amiss,  
A dull, presuming atheist said,  
As stretch'd he lay beneath a shade:  
And instanced it in this:

Behold, quoth he, that mighty thing,  
A pumpkin large and round,  
Is held but by a little string,  
Which upwards cannot make it spring,  
Or bear it from the ground.

Whilst on this oak a fruit so small,  
So disproportion'd, grows;  
That who with sense surveys this all,  
This universal casual ball,  
Its ill contrivance knows.

My better judgment would have hung  
That weight upon a tree,  
And left this mast, thus slightly strung,  
'Mongst things which on the surface sprung,  
And small and feeble be.

No more the caviler could say,  
Nor farther faults decry;  
For as he upwards gazing lay,  
An acorn, loosen'd from the stay,  
Fell down upon his eye.

The offended part with tears ran o'er,  
As punish'd for the sin;  
Fool! had that tough a pumpkin bore,  
Thy whimsies must have work'd no more,  
Nor skull had kept them in.—*Annie Finch.*

**JOE AND THE BEAR.**

Years and years ago, when the State of Maine was not much settled, little Joe lived on a farm. Then he was only 6 years old.

One day his mother said to him, "Now Joe, the men will be too busy to go for the cows this afternoon, and you will have to go. When you find them keep close to old Brindle, and she will show you the way home."

"Yes," said Joe, and started out. He had to go through the barnyard to reach the pasture. He could not let down the bars between, so he climbed over the fence and walked toward the woods where the cows went every day.

He went up to old Brindle and said, "Brindle, it is 'time to go home," and she said, "Moo-oo," and at once turned toward home, and the other cows followed her, and Joe kept close to her, as his mother had told him.

While they were all walking along together a bear came out of the woods and saw the cows and the little boy. It was a young bear, and he had never seen a little boy before, and he may have thought Joe a calf walking on its hind legs. At any rate he seemed to want to see the creature closer, for he began to move after the cows. He probably had seen the cows many times.

A bear does not make a noise in walking, so he came pretty near before Joe knew he was there.

Joe did not know what to do. He was sure he could not run as fast as the bear could and the bear could climb trees as well as he.

Suddenly he thought, "Mother told me to keep close to old Brindle, and if I get on her back I shall be close to her. I wonder if she will let me."

He jumped on a stump, and from the stump on Brindle's back. She looked round and said, "Moo-oo," which was the same as, "that is right, little boy," and walked on with Joe on her back.

But the other cows turned round and shook their horns at the bear. The bear probably thought those sharp things might hurt him if they stuck into him, and he stopped.

The cows then ran after old Brindle, who walked on steadily so as not to shake Joe off.

When the bear saw the cows going away he began to be inquisitive again, and tried once more to get near enough to examine Joe.

But softly as he walked the cows found out he was coming, and turned round and shook their horns at him again. He stopped, and again they ran after old Brindle.

And so they kept on till suddenly old Brindle herself stopped. "What are we stopping for, Brindle?" said Joe. "Moo-oo," said Brindle, which was the same as "we are at home."

Joe looked round then, for he had had his head turned, watching the bear all the time, and sure enough there they were at the barnyard fence, and the bars were down and the men waiting to milk. Old Brindle stepped over very carefully and one of the men lifted Joe off her back.

He ran into the house and told his mother of his adventure. "Yes," said she, "if you had not minded mother and kept close to old Brindle the bear might have found out you were a little boy and good to eat."

When the bear saw that the cows had reached a barnyard and saw men there he was afraid to go further and turned and went back to the woods and Joe never saw him again.

Eleven years after Joe met the bear he entered the United States navy, in which he remained for the rest of his life. In youth and manhood he proved himself as brave and quick-witted in danger and as obedient to those above him as when he met the bear.—*Detroit Free Press.*

**First Use Of Sugar.**

The word sugar was first used by Pliny, who says that the Romans first became acquainted with it in Arabia. He states that Indian sugar is preferable, and calls it "honey found in canes." Lucanus, in his description of India, speaks of sugar, and says that it was much appreciated.

Statius, in his book on "The Festivals of the December Saturnalia," says that among the eatables which the Emperor Domitian made the people scramble for was a substance obtained from the Eleosian cane. Eleosia was a province of Arabia, and the "food" mentioned was sugar. Other classical writers make mention of it. Dioscorides writes very innocently about it; he says the name sugar is given to a kind of honey which is found in canes, and is not produced by bees. Strabo writes to the same effect, and adds that when solidified it resembles salt.

The sugar cane was introduced into Sicily in 1148, and soon afterwards into Spain. About sixty years later the Spaniards introduced it into Antilles. During the seventeenth century it was cultivated on a large scale by immigrants; at the end of the eighteenth century Jamaica alone was producing about 15,000 tons annually.

**An American Fable.**

One day as the fox was passing through the forest he espied a hare, which at once and with great speed disappeared into her burrow. Assuming a smiling expression to hide the chagrin he felt, Reynard approached and said:

"And that's exactly why I was in such a hurry to get out of your way," replied the hare.

"My dear madam, perhaps you have not heard the latest news? I have made a public declaration of my intention to reform and lead a different life.

"Please explain. This lack of confidence on your part hurts my feelings."

"Why, sir, in your character of a fox I could always outrun you and find safety, but as a reformer you have got a dozen new tricks which I am not onto and won't feel safe till I learn."

"But, my dear madam," persisted the fox, "if you will but come out here and talk the matter over I am sure we shall arrive at a satisfactory understanding. I used to be very fond of hare, but my reformation is complete."

By the use of cajolery and argument the hare was induced to leave her burrow, and she was scarcely out when the fox seized her.

"How now!" she shrieked. "You solemnly assured me that you had lost your taste for hare!"

"Just so, my innocent-minded and long-legged friend," replied the fox, as he made ready for dinner. "While it is true that I have lost my taste for hare, I continue to be ravenously fond of rabbit!"

MORAL!

The reformed burglar simply enters the house by some other door.—*M. Quad.*

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Wheat is about 25 cents per bushel lower in Chicago than at this time last year.

It is gratifying to know that a great deal of early plowing is being done in Kansas. This assures a good condition of the land at seeding time.

The time for poultry entries at the World's Fair closed at midnight August 15. The time for pigeon entries has been extended to September 1.

The government report shows that the condition and prospects for spring wheat have materially declined during the last month in consequence of drought.

The management of the FARMER desire a few first-class and responsible men who desire the exclusive subscription agency of this paper for any county in the State. Write for particulars.

Those who are not regular subscribers and yet receive a copy of this number are requested to examine it carefully. There are several features of this journal which make it of such value to the intelligent farmer that none can afford to do without it. Subscribe now.

The perfection to which the blooming properties of the gladiolus have been brought is well illustrated by a selection of magnificent specimens in various shades recently exhibited at this office by J. F. Cecil, President of the Shawnee County Horticultural Society.

The premium list of the eleventh annual Kansas State fair, to be held September 29, 30 and October 1-7, inclusive, is now out and should be in the hands of every one who contemplates making an exhibit. It can be secured promptly by addressing L. H. Pounds, Secretary, Topeka.

The "old reliable" KANSAS FARMER this week prints 10,000 extra copies which go to as many persons who are not on the regular subscription list. We shall, between now and the first of January, thus issue 100,000 extras. Each of these papers is an invitation to the recipient to become a regular subscriber.

The unanimity with which the press of the country and all who attempt to account for the unsatisfactory financial condition, attribute it to legislation and look for and demand relief at the hands of Congress, is a wonderful commentary on the declaration often repeated on the stump to the effect that the government has nothing to do with the prosperity of the individual; that this depends solely upon his own industry, etc.

**CASH AND CONFIDENCE.**

A good many people have wondered what becomes of all the money in the United States in times of panic. The KANSAS FARMER showed, a few weeks ago, that the liabilities of the banks to their depositors amounted to several times as much as all the gold, silver and paper money both in the treasury and in circulation. In times of panic these depositors are apt to draw their money, even if they do not care to use it immediately. Their demands may easily exceed the entire stock. Some hide their cash away in old stockings, etc., while others rent space in safe deposit vaults where they may securely lock their treasures beyond the reach of all but themselves. This money is, for the time, in effect out of existence. One effect of this is to immediately put a premium on money; to make money scarce and dear, as compared with everything else; in other words, to depress prices. When this has gone to the limit, property changes hands for small consideration and soon after begins to advance. On the advance of property, money comes forth from its hiding place and is readily invested as long as the advance continues. Fortunate is the man who has ready money to invest at bottom prices and when everybody is crazy to sell. His purchases are easily made and his profits are sure, for, on the return of money to circulation, property is in demand at prices which yield a round profit over the depressed prices of the panic.

With the scarcity of money and the inability of persons to pay, "confidence" is destroyed and the instrument of over 90 per cent. of transactions vanishes more rapidly than does the money. Stagnation of industry, discharge of laborers, hard times and physical suffering result even in a land so full of products that they cannot be sold.

With the limited amount of money on which most civilized countries attempt to do their business, supplemented by credit, panics brought about either by accident or design are inevitable. In only one country—France—is it attempted to do the business largely with cash rather than with credit. This renders it necessary for France to maintain a large amount of money per capita in circulation, but it gives the people comparative immunity from panics. True, the opportunities for the sudden acquisition of large wealth are less in a country which does business on a cash basis than in one in which private credit is largely the medium of exchange. But it is surely desirable that our institutions shall promote the general welfare rather than that we place in the hands of the unscrupulous the means of periodically raiding the products of industry.

**IS \$114 INTEREST A BURDEN?**

On the fourth page of this week's FARMER will be found an inquiry from Superintendent Porter, of the Census, addressed to Secretary Mohler, of Kansas State Board of Agriculture, together with answers from a large number of farmers in this State, who were selected from all parties and with a view to their ability to deal with the question. Further answers will be presented next week.

It is unfortunate that Mr. Porter did not make his inquiry more explicit. It is scarcely necessary to ask whether the payment of \$114 per year is a perceptible or real burden to the average farmer. It is a burden to any one in far above the average financial position, and its payment must, in a majority of cases, in Kansas or anywhere else, be made at the sacrifice of comforts or enjoyments. But in further explanation Mr. Porter modifies his inquiry so greatly as to make it entirely a different question, namely, whether the farmer who is paying this interest is worse off than if he cultivated a farm having the same value that the farm he now cultivates has above the incumbrance.

Some of our correspondents have construed this to be the question and have answered accordingly. This brings up the entire question of doing business on borrowed money. The profits of invested capital average less rather than above 4 per cent. Data as

to the actual profits of capital invested in farming can scarcely be said to be available. It is doubtful, however, if the man of average ability can afford to enlarge his operations on the farm by the use of long time money at a rate above 6 per cent.

Not infrequently the prospect of rise in the value of property is cited as a profit to be made from the use of borrowed money. This should be treated as entirely distinct from Mr. Porter's inquiry, and belongs rather to the realm of real estate speculation than the industry of farming. The present time illustrates forcibly the advantages of being out of debt.

**SEED WHEAT FOR WESTERN KANSAS.**

The matter of assisting farmers in western Kansas to secure seed wheat for the fall sowing has been undertaken in a thorough and business-like manner and will doubtless prove a success. Last week a delegation representing twenty western counties in which this season's crop was a failure, waited on the Governor and made a fair and candid statement of the situation.

At the time of the adjournment of the Legislature these counties still presented a reasonable prospect for a crop. No appropriation was therefore asked, and of course none was made. The generosity of private subscriptions must, therefore, be relied upon in the present case. It was, however, decided to place the collection and distribution in the hands of the Railroad Commissioners, who have assigned the details of the work of collecting the grain to Walter N. Allen, of Jefferson county. No better selection could have been made.

Secretary Henderson, of the Railroad Commissioners, will select in each county a competent agent to attend to the distribution, and the reports and records of the work will be kept in the office of the Secretary. Those who receive the seed will be placed under no obligations to return the grain, but will be allowed to do so after the next harvest if they desire.

The railroads will carry the grain free of charge.

**SEED WHEAT FREIGHT FREE.**

Much of the success of a large business depends upon that kind of generosity which may very properly be called enlightened selfishness. With plenty of seed wheat the farmers of western Kansas will in all probability produce a crop in 1894 which will tax the capacity of the railroads to haul it to market. Without seed of course no crop can be raised. The mutual interest of the farmers and the railroads in this respect is fully recognized by the General Manager of the Santa Fe, who in an interview last Saturday said:

"Transportation companies in the Southwest are so closely identified with the agricultural classes that I might not inappropriately be termed somewhat of a farmer myself. Just now I am dealing with the seed wheat question."

"The farmers who till the soil 3,000 to 4,000 feet above sea level depend more upon wheat than upon corn. Three years out of four it is almost a sure crop. In 1892 the yield was enormous, and land costing \$5 or \$6 per acre paid for itself several times over. But it was necessary to dispose of the greater part of the crop to square up old debts. That is a peculiarity of the Kansas farmer—he likes to pay up. This left little wheat, comparatively, on hand after last fall's seeding. Everything was staked on a big crop this year. Dry weather and heavy winds in the western part of the State during the fall and winter, combined with tardiness of spring rains, failed to properly sprout and mature the berry. The planter who went forth rejoicing returned with nary a sheaf."

"Such a situation required immediate action by somebody. The people in southwest and western Kansas are not paupers, and should not be so considered. They are simply temporarily out of luck. Their grit and pluck deserve the helpful sympathy of every one. A little aid now, to tide over the misfortune that threatens, will make

them hold on all the harder. That section of our State is all right, when its climatic whims are better understood."

"The Santa Fe, which has a large mileage in the district affected, proposes to haul seed wheat absolutely free of charge from the more bountifully supplied eastern sections of the State, to be distributed among needy settlers who desire to sow another crop this fall. Our land and freight departments have made careful inquiries, through local agents of the road and otherwise, as to the probable necessities of each locality, and enough seed will be shipped in to supply actual wants."

"All that John Jones, farmer, has to do, if his own bins are empty, is to make arrangements, either directly with some wheat seller or others, or through the local relief board, or with the County Commissioners of his home county, for such seed wheat as he must have, and the Santa Fe, on being notified, will ship the wheat in care of the County Commissioners, making no charge whatever for cost of carriage. Of course the usual precautions will be taken to see that the privilege is not abused and that all deserving cases are taken care of. What we wish to do is to extend this aid to those who really ought to have it."

The broad-gauged policy outlined above has been pursued on former occasions, and it is this ready recognition of the situation which has made the mighty business of the Santa Fe system. Manager Fréy evidently takes the right view of the circumstances, and while affording needed assistance to farmers is making a wise stroke of business policy for his company.

**THOROUGHNESS OF THE WORLD'S FAIR DAIRY TEST.**

Laying aside all prejudice and personal like or dislike for favorite dairy herds, the test now going on at Chicago, if carefully studied and stored up, will prove of immense benefit to dairymen throughout the world. The aim is to make these lessons the most exhaustive and far-reaching of any that have ever been undertaken; and every point in feed, general details and actual work has been elaborated in the most practical and pains-taking manner. For fairness and impartiality by which these conclusions have been reached, no person, whether farmer, dairyman or other citizen, can but render the verdict that justice has been done to all concerned.

To inspire such an enterprise and carry it to success has required the most incessant labor and good judgment that has ever been called into action in any similar undertaking in the history of dairying.

In connection with the great Columbian Exposition it is befitting that the United States, the youngest among civilized nations, should feel called upon to illustrate to the world the thoroughness with which such enterprises are handled, and the approval that is accorded by all who have witnessed its operations is indeed flattering to those who are foremost in this great school of instruction. As a text for future work the history of the Columbian dairy test will take rank as the highest authority in this most important branch of American husbandry, whose practical results must prove of untold value to dairying in every land.

The *Mark Lane Express* of August 8, in its weekly review of the British grain trade, says: "The British wheat crop is now estimated at 7,000,000 quarters. This leaves 21,000,000 quarters to be imported. Deducting the stock left over from 1892, there will be needed 19,000,000 quarters. It is not easy to see where this supply is to come from. It will absorb all the good crops of Russia, India and south-eastern Europe to fill the British requirements. In the meantime foreign wheats are neglected. Manitoba is quoted at 28s. 9d., and California at 39s. 3d. per quarter. English wheat is in quiet request and at unchanged values. Corn is cheap. Old American sells at 21s., and New American 6d. less. Oats are dull and weak. Flour, barley, peas and beans are unchanged."



### SHADED PASTURES.

The broiling sun of the summer months poured upon unprotected live stock presents a case of discomfort which rarely fails to appeal to the sympathies of the farmer. When to this is added the fact that positive detriment to the prosperity of the animal is also incurred, the case calls for intelligent consideration.

Some years ago, in a discussion of the conditions necessary to the production of the best butter, an experienced writer stated that not all the cream and milk cooling arrangements that money could buy; not all the improved processes of the age of inventions could produce May butter in July and August without the use also of a "cow-cooler."

But the thrifty farmer who has observed how the soil is generally sapped in the vicinity of trees, hesitates to sacrifice so much of the strength of his pasture as is necessary to the production of sufficient shade to make the stock comfortable. Especially is this true of the cottonwood, which is otherwise a very desirable tree for pasture shade, that it preys mightily upon the fertility of the soil near it.

The inquiry has been recently made whether all trees are thus detrimental to crops in their vicinity. Common observation shows that they are not all equally severe in their demands.

Allusion has heretofore been made in these columns to the fact that a certain family of plants—that to which the clovers belong—enrich the soil on which they grow. These plants are known in botany as the *leguminosae* or the pulse family. The most easily recognized characteristic of these plants pertains to the seed pod, which opens on both edges, as the pea and bean. These plants vary in other characteristics and in size and general appearance, from the very small to the very large, including the clovers, peanuts, beans, peas, etc., on the one hand and on the other, hand the locust and rosewood among trees. The most nutritious of all food plants belong to this family and it also includes some which are rank poisons. But aside from the few external characteristics, on account of which they have been grouped into one family, it has been found that these plants all have the newly-discovered ability to convert the free nitrogen of the air to their own use to the promoting their growth and also to the enrichment of the soil on which they are produced. In the many carefully conducted experiments which have been made in this direction, the locust tree has been carefully tried and found to be an efficient nitrogenizer of the soil. The attention of those who have locust trees growing in grass lands has been called to this fact, and so far as heard from, the testimony is uniformly to the effect that grass grows well under locust trees which are not too thick to prevent a fair amount of sunshine from reaching the surface.

Speaking of the locust tree, an old writer, who knew nothing of the more recent discoveries of the reasons of the fertilizing power of the legumes, said: "It has been recommended to be planted on the borders of pastures, as its droppings enrich the soil; cattle are fond of the sweet leaves. The tree never attains great size in the Eastern States, but reaches its perfection in Kentucky and Tennessee, where it sometimes exceeds four feet in diameter and grows to a height of eighty feet. Where land on which it grows is cleared it produces abundant crops of Indian corn for several years in succession without manuring. It has been suggested that exhausted soils may be restored to fertility by a growth of the locust, its leaves soon becoming converted into mould."

Blue grass, which is one of the best pasture grasses, grows perhaps more luxuriantly under a moderately open growth of locust than in the broad sunlight.

Here, then, the way is pointed out to secure the advantage of shaded pastures without the disadvantage of a sacrifice of productive capacity. True, if only a few trees be provided, the animals will stamp out the grass beneath their shade whatever the fertility of the soil. But why not provide ample

shade? Why not set aside a certain area for comparatively permanent mid-summer pasture, and so cover it with locust trees that the animals need never be without shade? Such a pasture planted with locust, say 100 feet apart each way, would be a thing of beauty, and in case rotation were necessary, might, without serious inconvenience, be plowed and planted to cultivated crops occasionally.

Objection to the locust may be made on account of the fact that one species is prone to send up suckers from the roots, and is also very subject to the attacks of borers. These objections are scarcely applicable to the honey locust, or black locust, as it is sometimes called.

### Irrigation Information.

Farming land in the United States, in sections having an average rainfall, are worth from \$20 to \$60 an acre. Arid or so-called "desert" lands without irrigation are dear at 25 cents an acre. With irrigation unimproved desert lands in southern California are worth from \$50 to \$400 an acre. Water can be placed on desert lands at a cost of from \$10 to \$75 an acre. If 25-cent land and \$10 water can be added together and be made to foot up a total of \$50 an acre value, what is irrigation worth to the arid States?

Unirrigated farming lands have no certainty of producing a crop of anything depending on rainfall. Irrigated lands can always be depended on to produce any crop planted in the fertile earth. The difference in the value of these two classes of lands is the difference between certainty and chance.

The Inter-State Irrigation Convention, to be held at Salina, Kas., September —, will be attended by delegates from the entire region lying between the foot hills of the Rocky mountains on the west and the areas of reliable rainfall on the east. Able speakers will be present and the subject of changing from uncertain to unerring production a region 400 miles wide and more than 1,000 miles long, will be discussed as never before.

Information as to this convention can be obtained by addressing J. L. Bristow, Secretary Executive committee, Salina, Kas.

The International Irrigation Congress (Los Angeles, October 10-15, 1893,) will discuss the question of irrigation in all its phases, and the subject will be handled by men of wide experience and national reputation. The government will be represented in this congress by a special officer of the Interior Department, who will impart such information as is in possession of the government on this important subject.

A handsome little book on irrigation has been issued by the Publication committee of the congress, which will be sent free of charge to all applicants who will send 2 cents to cover postage. The book is finely printed and freely illustrated, contains much valuable information, and is an epitome of irrigation knowledge. For copies of this book or any details concerning the congress address, C. D. Willard, Secretary, 137 South Main street, Los Angeles.

### Suggestions to Experimenters With Chinch Bug Infection.

EDITOR KANSAS FARMER:—The very large number of requests for "chinch bug infection" made to me this spring and summer, was, especially at the first of the season, almost too great for the facilities of my laboratory. The station has sent out infected material to 5,000 Kansas farmers this season, and the number of boxes of diseased bugs is much larger than the number of experimenters. In many cases several boxes would be sent to one address. Not less than 7,500 boxes of infected bugs have been sent out. Now, looking forward to a similarly large demand next season, I find it desirable to relieve the station in some degree from this overwhelming work; indeed, in order that there may be no fatal delay in scattering infected bugs in the early part of the season, the plan I have to propose is almost a necessity. The plan is simply this: That all experimenters this season having successful results should gather a large number of the fungus-killed bugs from their fields, and preserve them over the winter in a dry can or box.

It is almost certain that the disease caused by *Sporotrichum* can be started among healthy bugs in the spring by associ-

ating them with the fungus-killed bugs kept over from the preceding season. Wherever possible, then, let these "white bugs" be gathered and kept over until next spring, and an attempt be made to start the disease from these bugs.

The "white bugs" should be carefully searched for; often, when not at first glance apparent, the fungus-covered bugs will be found under clods, fallen corn stalks, etc. If several thousand dead bugs are collected and kept over winter most of them may be put directly into the field in the spring, although enough should be reserved to start an infection box. While a given lot of the dead bugs cannot be certainly relied on to start the disease in the spring, yet the presumption in their favor is sufficiently strong to warrant a direct application to the field of the most of them, without waiting to begin an infection box. An infection box should be started, however, at the same time, both as a check experiment to determine the worth of the kept-over bugs, and also as something of a means (if the infection is working) of having control of a certain amount of infected material. In gathering bugs from the field this season, the bugs kept should distinctly show a growth of white fungus on their bodies. Do not mistake moulted skins for dead bugs.

F. H. SNOW,  
Director State University Experiment Station.

### Weekly Weather-Crop Bulletin.

Issued by the United States Department of Agriculture, in co-operation with the Kansas State Board of Agriculture, for the week ending August 14, 1893; T. B. Jennings, observer:

Good rains have fallen throughout the northern half of the State, except in Republic, Cloud, and western half of Washington, with fair rains in the extreme western counties.

Throughout the southern half of the State the rainfall has generally been light, except in a belt extending through Clark, southeastern Ford, Kiowa and into Stafford, where it has been good.

The first four days of the week were warm while the last three were decidedly cooler with very cool nights.

The sunshine has been rather excessive throughout the State.

Corn in the northern half of the eastern division and in Anderson county is in good condition, and late corn in fair condition in the northern counties of the western and middle divisions, while in the southern half of the eastern the dry weather has slightly injured it. In the middle division corn has been much injured by the drought, and cutting has commenced in many fields to save the fodder.

Wheat is yielding well in Osage county. Broomcorn, millet and sorghum are generally improving in the northern central counties, the extreme western and the northwestern counties and in Meade and Clark.

Pastures are short in the south central and southeastern counties, but good in the northern and extreme western.

The hay crop in the southern and southwestern counties has been injured by dry weather.

Plowing is in progress throughout the State, the ground being in good condition except in the dry portions of the State.

### Avoid Unnecessary Charges.

EDITOR KANSAS FARMER:—As the terminal charges for handling stock at the Columbian Exposition are excessively high, would it not be advisable for you to call attention to this fact and aid intending Kansas exhibitors to protect themselves as far as possible against those rates? This can be done by the swine-breeders by fixing a date when they can all send their stock to one place, and thus make up and ship in carload lots, thus saving high terminal rates on small or broken car lots. This can be easily arranged among the exhibitors by correspondence through your office. Horsemen and sheep exhibitors may avail themselves of this advantage, too, by a little correspondence and discreet management. Though the horsemen can unload and lead their stock to the grounds.

The assignment of cattle stalls will be made only as cattle arrive, the assignment to be made numerically from stall No. 1 to the end. So there will be no choosing of places, but the rule of "first come, first served," will apply. As the men who intend to exhibit cattle will each send a carload, I can't aid them in avoiding these terminal rates.

G. W. GLICK,  
Chicago, August 11, 1893.

The KANSAS FARMER the past year has been worth \$100,000 to its subscribers. All we want in return is 100,000 new subscribers, who will agree at the expiration of the year that it was the wisest and most profitable dollar investment they ever made. Note the great offers made in our supplement. Everything we offer is first-class and guaranteed.

### A PEN PICTURE.

#### An Exact Description of a Typical Case of Chronic Malaria.

A yellow skin, a sallow complexion, dark circles about the eyes, a furred tongue with bad breath, a bitter taste and bad digestion, are sure signs of Malaria. Not exactly sick, but wretched; not quite delirious, but got the blues badly; not confined to the bed, but not fit for business; losing flesh, losing business, losing all interest in everything; dizzy after stooping, short of breath on slight exertion, weak and trembly, easily fatigued, restless, nervous, sleepless. Nothing but malaria can so completely undo a person without putting him to bed, nothing else can so irresistibly demoralize mind and body.

There is only one cure. Everybody who has had experience with malaria knows what the cure is. Pe-ru-na exactly hits the case. It not only cleanses the blood of all malarial poison, but it promptly mitigates the bad symptoms and leaves the brain clear and nerves steady. It cures without delay, without exception, and without any ill effect whatever.

A complete treatise on malarial and other summer diseases, entitled "Aurora," sent free to any address by the Pe-ru-na Drug Manufacturing Company, Columbus, O.

The next meeting of the Shawnee County Horticultural Society will be held at the residence of Ezekiel Marple, five miles north of Topeka. All who attend are requested to bring samples of fruit. The following is the programme: "The Grape and Its Uses," C. A. Sexton; "Handling and Marketing Grapes," W. H. Coultis; "The Pear," A. H. Buckman; "Fungoids and Spraying of the Grape," J. L. Smith.

The course of the wheat market has at last taken a turn for the better. Predictions as to the continuance of the upward course would be mere guesswork. The last few days have witnessed the lowest prices on record in this country, but it cannot, with safety, be assumed that the causes which depressed the market have yet done their worst.

An agricultural writer in southwestern Ohio makes this statement: "There can be little doubt that the acreage of wheat sown this fall will be greatly reduced, for at present prices it does not pay for cost of production. It is to be hoped that enough reduction of acreage will be made to bring the price up to \$1 a bushel, for neither producer nor consumer is benefited by so low a price as wheat is now selling for."

The discussion of the silver question is progressing rather slowly in Congress. The forces are feeling their strength, and those who would summarily destroy the monetary functions of silver are less confident of immediate results than they were one or two weeks ago. In the meantime the course of exchanges has, during the last ten days, brought several millions of gold from other countries to this, and that without any change in our laws affecting money.

Much as the stock and bond market is depressed, it is less affected by the scarcity of currency than almost any other. New York borrowers of money for ordinary commercial transactions have had to pay 10 to 12 per cent., while members of the Stock Exchange have found no difficulty in borrowing at 5 or 6 per cent. One reason for this is that stock and bond transactions require no currency, but are made entirely with checks and drafts. The banks are perfectly willing to loan if only the money is not drawn. The plan is this: A. B. borrows money at the bank with which he does business and is given credit for a deposit to the amount of the proceeds of his note. On the Stock Exchange he transacts business by giving his check. The recipient of his check does not care for currency, and if he presents his check it is only certified by the bank officials and may be deposited in any of the Stock Exchange banks as cash. In this way Wall street can continue doing business even though money practically disappears, and while the banks may not be in position to loan currency, or may find themselves in position to ask and receive high rates of interest for actual money, they may still find it desirable and profitable to vend private credits at ordinary rates.

**Horticulture.**

**KANSAS AS A FRUIT-GROWING STATE.**

By G. C. Brackett, Secretary Kansas State Horticultural Society, in World's Fair Report of Kansas Board of Agriculture.

The fruit-growing industry in Kansas is an assured success. There is no portion of the State that is not adapted to the successful culture of some of the classes of fruits, and their commercial value has been fully established in the markets of her sister States, both eastward and westward, in a competition with the product of the oldest and most favored regions. The rapidity of advancement to a leading position in the industry and to extended areas of orcharding has no precedent in the history of older and noted fruit States, and she now holds the distinction of having the largest apple orchards in the world. Among these are the orchards of Messrs. Wellhouse & Son, near Leavenworth, with branches in Johnson, Miami and Osage counties, covering an area of 1,237 acres and of this area only 437 acres are of bearing age. The product of this portion is given below:

Year.	Bushels.	Year.	Bushels.
1880.....	1,594	1887.....	33,095
1881.....	3,887	1888.....	20,054
1882.....	12,087	1889.....	11,952
1883.....	12,338	1890.....	79,170
1884.....	11,726	1891.....	63,179
1885.....	15,373		
1886.....	31,909	Total.....	299,355

This total sold for \$140,475.08. The cost of picking and putting upon the market was \$52,075.30, leaving a net profit of \$88,399.78.

The first orchard planted was near Lawrence, in 1856, and contained 150 apple trees. But the beginning of the present orchards dates with the years 1873 and 1874, and rapidly increased with the following years, until, at this time, the aggregate of fruit trees under culture runs up into the millions, as the following statistics for 1892 show:

	Bearing.	Not Bearing.
Apple.....	6,110,609	5,478,284
Pear.....	158,472	229,152
Peach.....	4,715,040	1,255,087
Plum.....	741,443	400,806
Cherry.....	1,344,177	562,317
Total.....	13,078,721	7,925,046

There is a variability in the climate and soils of the State. The humidity of the eastern two-thirds, and its loamy soil, fits it for the culture of the apple, pear, plum and cherry, and all classes of small fruits, and in the southern third, may be added safely the peach. In the western third, where the climate and soil are more arid, the pear, plum, grape, blackberry, and gooseberry generally succeed, and in some favored localities the apple and peach and all classes of small fruits may be added to the list.

The climate is of the most congenial character for the development of a fine wood growth and the maturity of fruits, and especially for the ripening of orchard products, giving a highly delicate coloring and delicious quality, and a condition of maturity which, under proper handling, fits it for transportation to distant markets safely.

There are some locations specially valuable for special classes, viz.: In the northwest, the plum of the *Chicana* family, and some few of the *Domestica*, as the Lombard type, yield specially and remarkably fine products, while in the central southern the grape and pear are very successfully grown; and especially in the sandy loam skirting the Arkansas river, the home of the grape, and evidently the commercial vineyards of the West will, in time, be largely planted in this and similar valleys lying to the west and south.

Hindrances to success are in no respect materially different from those occurring in the States eastward, and which seem to follow the settlement of all of the Western States. These are mainly insects injurious to the fruit and fungi which attack the fruit and plants. But all of these, equally prevalent in most all fruit States, are now being easily brought under control, and are not regarded as very serious matters by the intelligent, energetic and thrifty culturist.

New ideas and new methods have come up in every branch of farm industry within the last few years. A prejudice in favor of ancient ways should not

be permitted to keep one from being progressive. We must read, study, learn by the experience of others, and keep up with the times.

**Tests of Varieties of Strawberries.**

By James Troop, Horticulturist, Purdue University.

For the benefit of those farmers who contemplate setting out a strawberry bed this fall for family use, the following information concerning varieties is sent out at this time. These ten varieties are taken from a list of over 100 which have been tested for two or more seasons on the experiment grounds at this station and have been selected with special reference to their desirability for the table. They are also divided equally between those varieties having pistillate and those having perfect or bisexual flowers, which is indicated by the letters P. and B.

**Brunette. (B.)**—This was originated by Mr. G. Cowing, of Muncie, Ind. The plant is a good grower and productive, berry dark red and of the very best quality. Especially desirable for home use.

**Bubach's No. 5. (P.)**—Under good treatment this is one of the largest and most profitable varieties that we have grown. The quality is a little inferior, however.

**Katie. (B.)**—This has not become generally known, but it is really a first-class berry for the table. Quite early, productive, of good size and quality.

**Edgar Queen. (P.)**—A comparatively new variety which has not been advertised very extensively, but it has given us better satisfaction than many others which have been so highly praised.

**Lovett's Early. (B.)**—Is a good grower, productive, and the fruit of excellent quality, but not so early as the name would indicate. This would do well to set with Greenville (P.), which is an Ohio berry and has given good satisfaction wherever tried. Desirable for either the table or market.

**Parker Earle. (B.)**—Is a medium late berry and would do well to plant with Shuster's Gem. (P.) Both these varieties are quite productive, of good size and quality. The first, however, does not produce many plants.

**Cumberland. (B.)**—In many localities this old variety continues to be a favorite. With us, however, it has come to be a very shy bearer and for that reason alone I do not recommend it for general cultivation.

**Warfield No. 2. (P.)**—For an all-round berry this stands at the head of the list. The plant is small, but a wonderful grower and very productive when given good care, as all varieties should have. The berry is a dark, glossy red, not overly large, rather tart, which quality it retains after being canned. It is the best canning berry we have tried.

This station publishes its experimental results for the benefit of farmers from time to time. Your name and postoffice address will secure you these documents free. Whatever special branch of farming you are following, please indicate it in your application. Address C. S. Plumb, Director, LaFayette, Ind.

If making the raising of fowls for market a specialty, select a breed that will make the best growth in the shortest time.

**Growing Old Pleasantly.**

The cheerfulest old folks you can find are those wise enough to mitigate the infirmities of age with Hostetter's Stomach Bitters, the finest tonic in declining years, infirmity, delicate health and convalescence. It stimulates digestion, renews appetite and sleep, and insures regular action of the liver and bowels. Against malaria, rheumatism and kidney complaints it is a reliable safeguard.

**Among the Ozarks.**

"The Land of Big Red Apples" is the title of an attractive and highly interesting book recently issued. It is handsomely illustrated with views of south Missouri scenery, including the famous Olden fruit farm of 3,000 acres in Howell county. It pertains entirely to fruit-raising in that great fruit belt of America, the southern slope of the Ozarks, and will prove of great value, not only to fruit-growers, but to every farmer and home-seeker in other States looking for a farm and a home. Mailed free. Address J. E. Lockwood, Kansas City, Mo.

**Entomology.**

Conducted by Prof. E. A. Popenoe, State Agricultural college, Manhattan, Kas., to whom queries about insects and specimens for determination may be sent, with request for reply in this paper. Answers will be published as soon as possible, and unless of immediate importance no other reply will be made. Always send several specimens, where possible, with statement of habits observed and, with the plant-feeders, parts of the plant attacked, where its name is not certainly known. Specimens may be packed, if small, in a quill; if larger, in a tight tin; or other box, strong enough to prevent crushing in transit, and never loose in a letter. The package, addressed and marked with the name of the sender, without other writing, is mailable at the rate of 1 cent per ounce, prepaid.

**A Wheat Smut Beetle.**

I send you by to-day's mail some little bugs found in wheat heads, and some of the heads they have worked upon. As they are new to me I should like to know something about them. Are they likely to become so numerous as to become a pest? All the damage they have done this season does not amount to much, but what of the future?

W. G. M.  
Plevna, Kas.

**Answer.**—The insects forwarded with the above prove on examination to be beetles of the family *Phalacridae*, and to pertain to the species known to entomologists as *Phalacrus penicillatus*. This beetle has not attracted sufficient attention to have received a common name, but it may be not inappropriately called the wheat smut beetle. That the insect may be recognized when found it may be described as a small, convex, regularly oval, polished black beetle, measuring about one-tenth of an inch in length. Its upper surface is quite smooth and shining, showing no trace of lines or punctures except under a good lens. The under side is flat, the legs relatively short, the feet four jointed, the antennae black, slender, light brown at base, with the terminal four joints forming a narrow club. Doubtless the species here described is not alone in attacking smut, as two other species of the same family are common and are likely to be found along with it in the net of the collector.

The species was first described by the pioneer Western naturalist, Thos. Say, in the Journal of the Academy of Natural Sciences of Philadelphia, in 1824, from specimens found at Engineer Cantonment, a station on the Missouri river in what is now Nebraska. It is stated in the remarks following this description that "In many parts of the United States this species is found in the seed vessels of such plants of wheat as are destroyed by the parasitic vegetable called smut." Our correspondent will see, then, that the habits of the beetle in question have not changed in the past seventy years, and may have a reasonable assurance that his wheat is in no present or future danger. Rather are the beetles to be regarded as allies, since where they are abundant a correspondingly large amount of smut will be devoured by the beetles and their larvæ, and the consequent injury by this parasite to future crops be lessened.

**Seventeen-Year Locusts.**

C. V. Riley, Entomologist of the United States Department of Agriculture, has issued the following circular:

During the present year two broods of the periodical cicada or so-called "seventeen-year locust" (*Cicada septendecim* L.), one of the seventeen-year (*septendecim*) race and one of the thirteen-year (*tredecim*) race, will make their appearance in different parts of the country.

I would beg of you to glance over the following list of localities, which has been prepared from previous records, and to send me during the season any confirmatory experience as to the appearance or non-appearance this year of the insects in those localities, or in any localities not indicated. Any evidence giving the extent of territory over which they appear in your county or State, or any well-attested dates of their appearance in previous years, will be thankfully received and appreciated.

**BROOD XVI.—TREDECIM—(1880, 1893).**  
Alabama.—Lowndes county.  
Georgia.—Cobb and Cherokee counties.  
Tennessee.—Lincoln county.  
North Carolina.—Lincoln and Moore counties.  
This brood is but little known, and

all localities require further confirmation this year.

**BROOD XI.—SEPTENDECIM—(1876, 1893).**  
North Carolina.—From Raleigh, Wake county, to the northern line of the State; also in the counties of Rowan, Davie, Cabarrus and Iredell.

Virginia.—From Petersburg, Dinwiddie county, to the northern line of the State; Bedford and Rockbridge counties; Valley of Virginia from the Potomac river to the Tennessee and North Carolina lines.

District of Columbia.—Woods north of Washington.

Maryland.—Southern half of St. Mary's county.

Kentucky.—Trimble county.

Indiana.—Knox, Sullivan and Posey counties.

Illinois.—Madison county.

Kansas.—Dickinson and Leavenworth counties.

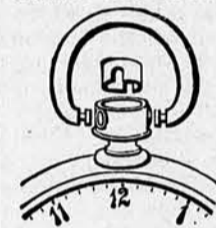
Colorado.—Cheyenne canyon.

This is a well-established brood, most of the localities in the Eastern States, as well as those in Indiana and Illinois having been verified in past years; but the localities in Kentucky and Kansas require confirmation, and that in Colorado is extremely doubtful.

**Here's the Idea**

**Of the Non-pull-out Bow**

The great watch saver. Saves the watch from thieves and falls—cannot be pulled off the case—costs nothing extra.



The bow has a groove on each end. A collar runs down inside the pendant (stem) and fits into the grooves, firmly locking the bow to the pendant, so that it cannot be pulled or twisted off.

Can only be had with cases stamped with this trade mark.

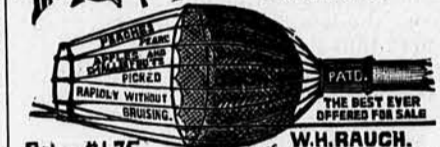
**Jas. Boss Filled Watch Cases** are now fitted with this great bow (ring). They look and wear like solid gold cases. Cost only about half as much, and are guaranteed for twenty years. Sold only through watch dealers. Remember the name



**Keystone Watch Case Co., PHILADELPHIA.**

**Strawberries -- Wanted.** To let berry-growers know that our new Robinson strawberry is the ideal for market purposes. Is large, strong, staminate, firm as Captain Jack. 700,777 plants of other well-known varieties for sale. Send for price list. B. F. SMITH, Box 6, Lawrence, Kas.

**The Royal Fruit Picker**



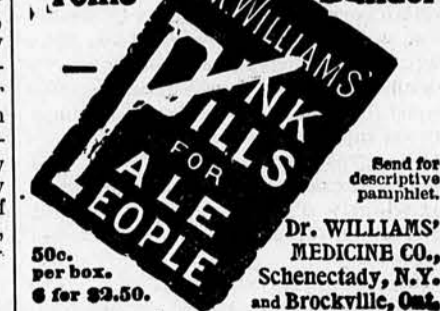
Price \$1.75 Address W.H. RAUCH, WICHITA, KAN.

**CUT IN TWO**



Prices of the following Articles: Bicycles, Watches, Carriages, Buggies, Carts, Haycutters, Harnesses, Saws, Wire Fence, Organs, Pianos, Sit Stoves, Kettles, Road Flows, Trucks, Anvils, Fire Arms, Mills, Brills, Bone Mills, Lathes, Sanders, Cider Mills, Forges, Serapers, Feed Mills, Sewing Machines, Lawn Mowers, Engines, Saws, Steel Sinks, Letter Presses, Corn Shellers, Rollers, Tools, Dump Carts, Hay, Stock, Elevator, Railroad, Platform and Counter SCALES. Send for free Catalogue and see how to save Money. CHICAGO SCALE CO., 151 So. Jefferson St., Chicago, Ill.

**Nerve Tonic Blood Builder**



50c. per box. 6 for \$2.50. Send for descriptive pamphlet. Dr. WILLIAMS' MEDICINE CO., Schenectady, N.Y., and Brockville, Ont.

**CLUB FOOT** Dr. Hartman's treatment for Club Foot. Book free to all afflicted. Address SURGICAL HOTEL, Columbus, O.

**CANCER** Can be cured by Drok Method. No knife, no pain. Book free. Address PINGREE & TREADLE, 241 Wabash Ave., Chicago.

## In the Dairy.

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

### Old Butter.

It is asserted that if butter made in June is put up fresh from the churn and packed solidly and hermetically sealed, say in tin packages with the heads soldered, butter will keep any reasonable length of time, and June butter can be sold in December at fresh prices. This would be a very fortunate thing in some respects, but unfortunately the proofs in its support are not at all conclusive. Over in Canada they are doing all in their power to supply the English trade in butter and cheese, and this tin package business is on trial. At the late dairy convention in Canada some of this June butter, sealed in tin cans, was put on exhibition and sampled, and so good an expert as Governor Hoard pronounced it "sweet," with an old flavor. This is not cheering, and will indicate that there can be no great departure from the present best ways of sending the butter fresh made to the consumer. One other thing is patent, that a steady demand for goods can only come from the supply of the very best, and in this the dairy export trade of this country must be maintained. There is already too great a selling of our finest cheese to Montreal buyers to be sent to England from there as best Canadian. We need our own supremacy of dairy trade and can only have it by making the best and selling it as our best "U. S." make.

### The Farmer's Cow.

From many sources the statement is made, that the thing that operates against the dairyman is that the cow he milks is, taking an average, a poor one, and high yields are impossible. But then the other question comes up, how comes this dairyman milking such a poor cow? As has been pointed out time and again in this paper, the dairyman has it in his power to elect the kind of a dairy he wants. The cow, her breeding, her yield and cost of feeding, the farmer has all in his own power of betterment, and the farmer's dairy, breeding, feeding and yield are reflections of his dairy intelligence. That a man's dairy only makes 125 pounds of indifferent butter, and a neighbor over the fence has a dairy, and a farm of no better producing soil, that makes 250 and often better of butter, is the proof that the man must first be improved before great results can be looked for from his herd. There is no danger of over-production in dairy produce until there is a general upheaval of the dairy world in general. The Gospel is being accepted in greater proportion than new dairy truth, and it has been centuries even since Luther's reforms were promulgated. The average dairyman must in some way be roused from the state that quietly accepts a cow that only gives an annual yield of 3,000 pounds. By the time the dairy would be fully awake, the demand for fine dairy goods will be a long way in advance of the supply. Preach, teach and hope all the time for dairy reform.—*Practical Farmer.*

### Something to Consider.

It is easy enough to see that it would not be advisable for every farmer to go into dairying, either in the way of making butter on the farm and selling it or in selling the milk to a creamery. Yet there are plenty of farmers raising wheat and corn, feeding cattle and hogs, running in debt from the time that one lot is marketed until another can be made, so they fail to realize the benefits that could be secured by making dairying a part of the farm work for no other reason than that it would afford a means of bringing something in regularly with which to pay running expenses. And this is only one of the possible advantages.

Like many other things on the farm, dairying is overdone in one respect while there is plenty of room in others. With horses, cattle, fruits and a number of other products of the farm as well as of butter there is an over-production of the lower grades. If no effort is made to produce a product

above the average there is no inducement to go into the business, and in reality there is very little choice. One might as well raise one as the other, as in either case one must be content to work at low wages if they are produced and sold.

When there is an over-production of any product there is of necessity a lowering of prices, especially with farmers, as they have not the opportunity of combining and controlling production and prices. It is the lower grades that suffer worse and first, although all grades suffer more or less from over-production. There is no encouragement in dairying if a low quality of product is made, and with the better grades of butter a man must understand how to take advantage of opportunities for lessening the cost as much as possible if the best profit is realized.

Dairying offers a means of diversifying farm production, of obtaining a regular income that with a large class of farmers will be found an advantage and also a measure of helping to keep up the fertility. But in all of these good management is necessary or the results will be as unsatisfactory as with the majority of other products.

### How to Make Dairying Pay.

Keep posted.  
Don't be stingy with feed.  
Keep none but the best cows.  
Handle the milk and cream with losses reduced to the minimum.  
Make an article that will sell at top price.  
Expend some money in getting fixed for hot weather.  
Use a thermometer.  
Get a good churn.  
Stop churning when the butter is in the grain. Work the butter on a board. Salt one ounce to the pound.  
Have a cool place to set the milk.  
Cream will not rise where milk is set in open pans in ordinary cellars when the temperature gets much above 62°. Unless these rules are carried out, losses must be the result.

### World's Fair Dairy Notes.

For the week ending July 27, the highest record in the Jersey herd was scored by Brown Bessie, as follows: July 25, 42.6 pounds of milk, 6.2 per cent. butter fat, and 3.15 pounds of butter credited.

For the same week the highest mark in the Guernsey herd was reached by Materna, on July 21. Milk 38.5 pounds, and 2.27 pounds of butter credited.

The highest per cent. of fat (5.6) was reached by Jane Ash, in the Guernsey herd, on July 23.

The Short-horn record for same week was as follows: On July 24, Waterloo Daisy gave 40.4 pounds milk. The largest per cent. of fat in this herd was from Fancy 11th, on July 27, (5.3) per cent., and the most butter is credited to Imp. Bashful on July 26—1.81 pounds.

The Short-horn cow, Mignonette, owned by the Pennsylvania Reform school, Morgantown, Pa., died July 21.

In the cheese test, May 11 to 25, inclusive, the records of the herds were credited by the amount and value of products and charged with the amount and value of food consumed. The record may be summarized as follows: Jersey herd, 13,296.4 pounds of milk; 1,451.76 pounds cheese, valued at \$193.98; 11,578.7 pounds whey, valued at \$9.26; 327 pounds gain in live weight, valued at \$14.72. Total value of product \$217.96. Cost of food \$98.14. Net profit \$119.82. Guernsey herd, 10,938.6 pounds milk; 1,180.62 pounds cheese, valued at \$135.22; 9,666.7 pounds whey, valued at \$7.73; 480 pounds gain in live weight, valued at \$21.60. Total value of product \$164.55. Cost of food \$76.25. Net profit \$88.30. Short-horn herd, 12,186.7 pounds of milk; 1,077.6 pounds cheese, valued at \$140.14; 1,077.6 pounds whey, valued at \$8.67; 709 pounds gain in live weight. Total value of product \$180.72. Cost of food \$99.36. Net profit \$81.36.

Prices at which feeding stuffs were charged to the cows at Jackson park per ton: Corn meal, \$22; corn hearts, \$13.50; oats, \$23; cottonseed meal, \$26; bran, \$12.50; middlings, \$13; grano-gluten, \$14.75; oil meal, \$22; hay, \$11.50; silage, \$4. Such of these feeds as are farm-grown rarely if ever cost in actual dairy work the prices charged in this test.

### Farm Loans.

Lowest rates and every accommodation to borrowers on good farm loans in eastern Kansas. Special rates on large loans. Write or see us before making your renewal.  
T. E. BOWMAN & Co.,  
Jones Building, 116 W. Sixth St., Topeka.

Highest of all in Leavening Power.—Latest U. S. Gov't Report.

# Royal Baking Powder

## ABSOLUTELY PURE

## The Poultry Yard.

### Breeding Chicks.

A friend complains that his chicks are dying with cholera. He says he feeds them on wheat and corn meal boiled together. We think the whole trouble is in the corn and lack of grit. We cannot say too many times that chicks need some sort of grit from the first time they are fed. Nature has provided that their food shall be ground to a paste in the gizzard before it is digested, and this requires some grinding material, and if it is not furnished they get dysentery (not cholera) and die rapidly.

Where fowls have been kept about any place that is not gravelly, the supply of pebbles and coarse sand is all consumed in the course of years and the chicks cannot pick up enough, and this lack must be supplied. Our place has a pretty good supply of gravel, but we feed our chicks coarse sand regularly, and it is surprising how much of it they dispose of. Our grown fowls, too, will greedily pick up grit that is thrown to them, and a short time since we pounded up some glass dishes that had got broken and every fragment was picked up. This makes an excellent grit for fowls. We never feed our chicks any cooked feed except the first week, when we give them stale wheat bread dampened in sweet milk, and after that we give them any rice or oat meal that may be left from the table. We buy both rice and oat meal for our chicks, and though it looks as if this were pretty costly food for them, we find it pays to feed it in considerable quantities, for we have not lost a single chick this past spring from disease. We keep Leghorns and Light Brahmas both, and our chicks are growing finely. Our Pekin ducklings are fed all sorts of food and do well on it, as they like almost anything and will eat a sloppy mess of bran and shorts as greedily as anything else, and seem to grow as fast on it.

We give our chicks as their principal food whole wheat, with a feed of cracked corn occasionally. We hatch all our chicks in an incubator and raise them in a brooder. This spring we let one Light Brahma hen sit, and out of thirteen eggs she hatched five chicks. We have let them run with her, and while they have done well, we have chicks that are four weeks younger from the same hen that were hatched in an incubator and have been kept in a brooder that are nearly as large as those hatched by the hen. Where one can succeed with an incubator there is no better way of hatching chicks, and as any one can operate a brooder successfully, it is much better to set several hens at a time and put the chicks in a brooder to raise, letting the hens get ready to begin laying again.—*Miller Purvis, in American Farmer.*

### Chicken Cholera.

We are informed by reliable parties—who are great successful chicken raisers, judging from the great number of chickens I saw on their premises—that ground or pulverized black pepper and common table salt are an ef-

fectual remedy for the disease called chicken cholera. The two articles are to be mixed together in about equal quantities, and given to the diseased chickens in teaspoonful doses, mixed with a little water, putting it into their mouths and forcing them to swallow it; the dose to be repeated as occasion may require, until they are relieved. By noticing them well it is easy to see when they have it.

The same persons told me that a good preventive was to keep asafetida in their water-troughs; crumble it up so as to tincture the water well and prevent them from eating it, as they will eat all they can get. It is very probable that the cloves or bulbs of garlic, well bruised and put in their water, would have the same effect, from its resemblance in smell, flavor and effects to asafetida. The same remedy is no doubt as good for turkeys and other fowls as for chickens.

### Poultry Items.

Over-fed fowls will not lay well.  
Oats is good feed for over-fat hens.  
Alternating oats with bran makes a good feed.  
Plan to enjoy some chicken meat yourselves.  
Keep the poultry house well white-washed.  
Turkey hens will mature earlier than gobblers.  
Geese are easily and cheaply raised on the farm.  
A good duck will lay an average of 140 eggs in a year.  
Pullets mated with two-year-old cocks are best for breeders.  
A fowl that is inclined to fatten readily is rarely a good layer.  
The eggs of hens grow smaller as the moulting season advances.  
Condition is an important thing where the production of eggs is considered.  
Soft soap is a good remedy for scaly legs. Leave on but a short time and wash off.  
In fattening, close quarters, cleanliness, a small amount of light and plenty of fattening food will tell the story.

## Making Cheese at Home.

Send \$1.00 to C. E. KITTINGER, POWELL, SOUTH DAKOTA, for ten rennets, with complete instruction, by mail, for making cheese at home without any costly apparatus or previous experience. Any woman can make cheese while attending household duties. Milk that will make one dollar's worth of butter will make two dollars' worth of cheese. Simplest process of all. Endorsed by the Manhattan Experiment Station and hundreds of farmers in all parts.

## FARMERS,

WE WANT YOUR BUTTER. Will furnish vessels to ship it in, take it regularly, and pay the best Kansas City prices. We have hundreds of regular customers, and will convince you that we can handle your butter satisfactorily. Refer to Grand Avenue Bank and Bradstreet's Mercantile Agency.  
Chandler & Son, 515 Walnut, Kansas City, Mo.

## EPILEPSY OR FITS

Can this case be cured? Most physicians say No.—I have cured; all forms and the worst cases. After years study and experiment I have found the remedy.—Epilepsy is cured by it; cured, not subdued by opiates—the old, treacherous, quack treatment. Do not despair. Forget past impositions on your purse, past outrages on your confidence, past failures. Look forward, not backward. My remedy is of to-day. Valuable work on the subject, and large bottle of the remedy—sent free for trial. Mention Post-Office and Express address.  
Prof. W. H. PEEKE, F. D., 4 Cedar St., New York.

## PILES, FISTULA,

And all other Diseases of the Rectum cured by Drs. Thornton & Minor, Kansas City, Mo., without knife, ligature or caustics—no money to be paid until patient is cured. We also make a specialty of Diseases of Women and Diseases of the Skin. Beware of all doctors who want any part of their fee in advance, even a note. In the end you will find them expensive luxuries. Send for circular giving names of hundreds who have been cured by us, and how to avoid sharpers and quacks. Office, No. 100 West Ninth Street. Rooms 30-31-32 Barker Building.

## The Apiary.

Edited by REV. E. T. ABBOTT, St. Joseph, Mo., to whom all communications relating to this department should be addressed. Enclose a stamp if you desire a reply by letter. We invite questions and communications from any of the readers of KANSAS FARMER who may be interested in bee culture.

### The Honey Bee.

I begin, this week, a series of articles in which I propose to cover pretty thoroughly the subject of bee-culture. If those who are interested in the subject will preserve the numbers of the KANSAS FARMER which contain these articles they will, no doubt, find them of utility for future reference, as I purpose to try to answer just such questions as I think a beginner in the business would ask. The readers of this column can aid me greatly if they will write me at once and propound such questions as they would be glad to have answered; also explain the difficulties they have encountered in trying to keep bees.

### HISTORY.

The story of bees and honey is, no doubt, older than the human family, and reaches back beyond the pages of written history. It can only be fully known by studying it in the rocks of geological ages. This would not be of any practical utility, therefore I will not attempt it.

What may be called the literature of bee-culture is of much later date, and possibly began with the writings of Aristotle. This literature has multiplied during the ages, until now, instead of the writings of one man, we may number the books on the subject by the score. Most of these books have thrown new light upon what has become a large and important industry. But as many of the readers of this column do not have access to any book upon the subject, I have thought it necessary to go over most of the ground once more.

Bee-keeping, if not *bee-culture*, is very old. Bees are kept in some way in almost every part of the habitable globe. The method of caring for them and the tools used are very crude in many places, but, notwithstanding this, they are at least a small source of profit to those who care for them. The industry has probably reached a higher degree of perfection in the United States than in any other part of the world. Many of the important discoveries, it is true, have been made in the old countries, notably Germany, but they have waited for American push and energy to enlarge upon them and make them practical.

For the advanced condition of this industry in the United States we owe a greater debt of gratitude to Rev. L. L. Langstroth, now of Dayton, O., than to any other living man. It was he who gave us the hive that bears his name, and with it a book embodying the majority of the ideas and practices that are to-day of any special value in the apiary.

Many hives have been invented, or rather made, and many patent fixtures introduced since he first wrote his book, but most of them are of little value. It may be well to remark in passing that there is probably as much humbug connected with so-called "patent" bee-hives as with any other one thing. Farmers will save themselves a great deal of annoyance and money if they will make it a rule never to buy any hive on which a man claims to have a patent.

Many of these hives contain good features, but the patents have long since expired on all those of any value to a farmer or small bee-keeper.

### A COLONY OF BEES

during the summer season is composed of three kinds. These vary, not only in their general appearance and the offices which they fulfill, but they have a different history as we trace their development from the egg to the perfect bee. The queen or mother bee is one of the most important members of the colony. She begins life in a cell three or four times as large as that of an ordinary worker cell.

Her cell is perpendicular instead of horizontal, as are the cells of the workers and drones. From the time the egg hatches, which is on the third day, the young queen larva receives an

extra amount of food, which is also richer than that given to the larva of an ordinary worker bee. This extra food and care hastens and in some way changes her development and causes her to mature in a shorter time than would the larva hatched from the same egg in an ordinary cell and treated as are the larva of other bees. About the sixteenth day after the egg is laid the young queen cuts a circular hole in the bottom of her cell, crawls out on the comb and begins to help herself to the honey she finds in the cells about her. In a week or ten days she comes out of the hive, flies around it a few times to mark the location and then darts away, high up in the air out of sight. Here she meets a drone or male bee, is fertilized, and in a short time returns to the hive, beginning in a few days her life work of laying eggs. The queen may be readily distinguished from other bees, as she is longer and slimmer. Her wings are shorter than her body and her general appearance is such that no one can make a mistake as to which is the queen after once he has seen her.

Eggs that produce workers are laid in the ordinary horizontal cells and the bees developed therefrom do not make their appearance until about the twenty-first day after the eggs are laid. The worker bee is too well known to need any description. It may be well, however, to remark that the workers are undeveloped females.

The queen lays the eggs that produce drones in cells a little larger than those intended for worker bees, and it is about twenty-four days after the egg is laid before his dronishness makes his appearance. How it is that the queen is able to lay the eggs that produce three kinds of bees so different in their development, appearance and offices, is one of the wonders of the beehive. Various explanations have been offered by writers on the subject, but most of them are unsatisfactory. I am of the opinion that it is a matter of volition with the queen, and that she can lay eggs that will produce either drones or workers at will.

Fertilized eggs produce workers. Those which are not fertilized produce drones, and the mysterious mechanism of the queen's body enables her to fertilize the eggs at will.

In our next we will take up the subject of the different races of bees.

## The Family Doctor.

Conducted by HENRY W. ROBY, M. D., consulting and operating surgeon, Topeka, Kas., to whom all correspondence relating to this department should be addressed. This department is intended to help its readers acquire a better knowledge of how to live long and well. Correspondents wishing answers and prescriptions by mail will please enclose one dollar when they write.

### Answers to Correspondents.

**FAMILY DOCTOR:**—I write to you to ask if there can be anything done for my wife. She had what was called a milk-leg at her confinement, in 1873, and was afflicted with that with swelling, and had to keep it bandaged, and about four years ago it broke. First it discharged watery fluid, and as it went along discharged a watery pus, and about this last year it don't discharge very much. But it is a large sore with a covering over it almost like a white skin. The sore is about four inches over, with red, inflamed appearance around edges. Will you kindly prescribe for her? Kirwin, Phillips Co., Kas. W. K.

What probably was milk-leg at the time of confinement and for a time thereafter, has ultimately become a case of varicose ulcer. The circulation in the limb is so sluggish that the capillaries or minute veins in the skin do not empty themselves often enough, and thus the blood stagnates and inflames the skin, which finally breaks down into ulcers, because it is not sufficiently nourished. In nearly all such cases the real fault lies in the rectum, in a condition of internal piles, which choke off a portion of the normal circulation and make the process of repair in the extremities tardy and defective. Medicine sometimes affords some temporary relief, but the case is almost sure to relapse very soon and grow gradually worse. The only sure cure I know of is a simple and safe surgical operation for the permanent cure of the piles and the contracted condition of the rectal muscles, which are kept in a nearly constant state of contraction, thus choking off nutrition.

**FAMILY DOCTOR:**—There is a young man living here who has very peculiar sensations while asleep, which I will try to describe. He is about 22 years old (smokes). They always occur while lying on his back.

First, there seems to be a swaying motion from side to side, and the swaying grows swifter and then shorter and finally stops, and a noise begins in his ears similar to the noise made by a locust. It grows louder and louder. He is unable to move without great difficulty. If he moves it stops. Sometimes he thinks he will see how long he can endure it, but it gets louder and louder, and finally he can not stand it, and moves and it stops. Can you tell the cause? Answer in KANSAS FARMER, and oblige, Carneiro, Kas. A. F. PERCY.

You say at the outset of your report that this trouble occurs while he is asleep, and then you seem to be telling what he thinks and does when awake, so that your letter is not consistent. If it all occurs in his sleep, it is what is called "night mare." But if it all occurs while he is awake, it is some form of nervous disorder which is quite rare. If you will sit down now and write explicitly all the symptoms just as they occur and state just when they occur, and how often, and how long they last, and whether it all occurs in his sleep or all while he is awake, or partly in sleep and partly awake, I may be able to throw some light on the subject. Give age, complexion, occupation and as much of his history and habits as you can.

### Revival of Hypnotism.

In the last few years, a great impetus has been given the study of hypnotism and its subdivisions—animal magnetism, mesmerism, Spiritism, mind-cure, faith-cure, and a variety of other terms, all more or less related to the primary science. Societies are being organized all over the world for the critical study of this new and yet old science—new as a science with scientific attributes, and old as a phenomenon little or not at all understood. The subject has been given a good deal of newspaper prominence recently, on account of some specious charges lately made against it in connection with criminal conduct.

Public mesmerists and hypnotists have made a great outcry against the general study of the subject, alleging it to be very dangerous in anybody's hands but their own. But we surmise that that outcry comes purely from an interested motive. These gentlemen do not want it well understood, for then their occupation would be off, with Mr. Othello's.

Since hypnotism has been reduced to a scientific basis and formula, by Prof. Hudson, of Washington, D. C., it is very easy to refute that baseless and senseless assertion of the itinerant hypnotists. Careful experiments often repeated demonstrate that the non-criminal element in society cannot possibly be made to commit crime under hypnotic influence, and that real criminals cannot have their criminal proclivities increased by it. That discovery removes the last serious objection to hypnotism. Its power for good is very great, as is that of all the great natural forces in the world. As all good may be basely perverted, so may this power be used unwisely and vilely. That is, it may be the strange name, made use of to deceive and defraud the unlearned and simple. It is a term that for a time yet may still be juggled with, as charms and amulets and sorceries were in olden times, and the name of witchcraft at a more recent date, and emotional insanity and heart failure still more recently.

A few years ago, about all the diseases and deaths that a host of doctors and people did not understand were *secundum artum* assigned to "liver trouble." That fad was run until it was finally laughed out of existence by more intelligent people who knew that the Creator had never made such a gigantic blunder as to create livers for people that would do nothing but gall them to the grave. Now, in its place we have the new and equally silly fad, "heart failure," to lay at every man's door who goes off on a very long journey without our consent. One of the State Boards of Health has recently issued orders that no case of death shall hereafter be reported to it by the name of "heart failure." It must have the real cause or a statement that the cause is unknown.

We all remember how, for years, since Wm. H. Seward first entered the plea of "emotional insanity" as a defense against murder, in the courts, that indefensible defense has been interposed time and again until it has become threadbare. And now, to take its place, the cry of "hoodoo" and "hypnotism" are being dragged into court to answer as a defense for the criminal who really has no defense, but, like the drowning man, is prone to catch at a straw. Here is one of the recent Associated Press dispatches, indicating which way this new breeze is blowing:

ST. PAUL, MINN., August 1.—It is stated that the defense in the case of Baumberger, who murdered six members of the Kreider family near Cando, N. D., will be that the young man was hypnotized by one of his victims, the oldest girl, and that he committed the crime while under an influence exerted by this girl which he was powerless to resist.

To one who knows even a little of hypnotism, that is the most silly and crazy defense in the world. No more monstrous pretense could be conjured up than that a young girl

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## HILL'S DOUBLE CHLORIDE OF GOLD TABLETS

will completely destroy the desire for Tobacco in from 3 to 5 days. Perfectly harmless, cause no sickness, and may be given in tea or coffee without the knowledge of the patient, and will cause him to voluntarily quit smoking or chewing in a few days. DRUNKENNESS and MORPHINE HABIT may be easily cured at home by the use of Hill's Special Formula Gold Tablets.

### IMPORTANT.

A remedy that requires the patient while taking it, to give up the use of Tobacco or Stimulants, has no curative powers. Beware of nostrums. When taking HILL'S TABLETS the patient need make no effort in his own behalf, and we permit the use of Tobacco, Liquor or Morphine until such time as it is voluntarily given up.

HILL'S CHLORIDE OF GOLD TABLETS are for sale by all first-class druggists at \$1 per package.

### BEWARE OF FRAUD.

The wonderful success of Hill's Tablets has caused many worthless imitations to be placed upon the market. If your druggist does not keep Hill's Tablets, but offers you something "just as good," shun it—he is deceiving you in order to sell something in which there is a greater profit.

REMEMBER, we guarantee a complete and permanent cure, or failing, will refund the money paid us.

FREE. A pamphlet of particulars together with testimonials from persons who have been cured by the use of our TABLETS, will be sent free on application.

If your druggist does not keep Hill's Tablets, send us \$1.00 and we will forward you package by mail.

Address THE OHIO CHEMICAL CO.,  
51, 53 & 55 Opera Block, LIMA, OHIO.

had hypnotized a brute of a man and made him kill her; that her influence over him to have herself killed was so powerful that he could not resist it. Recently it was charged against Dr. J. S. Wintermute, of Tacoma, that during the trial of a case in court where he was suing a Mr. Stinson for \$41,000 damages on a cattle deal, he hypnotized one of the defendant's witnesses and made him lie like a Trojan. The writer was in early life a short-hand reporter and reported about 5,000 trials in court. During those years he saw many lying witnesses in court, some of whom ultimately landed in State's prison for perjury, but we never saw any witness hypnotized into lying. Lying is a very natural and active impulse with some people and gets on vigorously without the aid of hypnotism. Until this crazy and groundless defense becomes a very stale chestnut, it will be set up as a defenseless criminal's defense in all the courts. It may run until some scientific and sensible judge sets the example and orders it stricken from the files of his court as a baseless fabrication and fraud. Not that odious force is itself a fraud, but that it is not and cannot be prostituted to such base and unholy uses as are now being charged to it. It is simply the old cry of witchcraft, revived under a new name, to help out a very hard-pushed criminal. Here is another phase of the matter:

St. Louis, Mo., August 6.—Prof. Alexander J. Tyndall, the English mind-reader, visited "murderer's row" in the city jail today and operated on Jacob Henze, convicted of the murder of Edwin E. Brown, the Chicago live stock merchant. Henze was more than willing, claiming he was innocent. After he had succumbed to the Professor's power, needles were thrust through his ears and cheeks without causing a tremor. He was then awakened and put through a course of questions, but he told the same story he told before and at his trial, and could not be led into an incriminating admission. The Professor then declared the man innocent, as otherwise he could not have gone through such an ordeal successfully.

This was done on the theory that a person hypnotized into what is known as the somnambulistic state can be made to give their entire life history in great detail and very minutely, telling many things which they had entirely forgotten for years, and then when waked out of that state they will not know or remember what took place while so somnambulized. And to a large extent that is true.

Cholera has actually appeared again in New York harbor, but our very watchful quarantine officers, it seems, have not permitted it to land. They had seventeen cases under lock and key on one of the pest islands in the bay, and the ship they came in anchored off by itself in a very lonesome part of the bay and guarded against egress or ingress. So that good quarantine is likely to prevent all infection of the shore both against cholera in New York and yellow fever at Pensacola, where two cases were recently found.

## B THE ST. JOE HIVE

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The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the KANSAS FARMER.

FLIES ON JACK.—Is there anything that I can rub on a jack's legs to keep the flies off? They are nearly making him crazy.

ANSWER.—Rub the jack's legs with fish oil every day and the flies will not trouble him.

SORES ON STALLION.—I have an imported Percheron stallion that I have had a great deal of trouble with on account of sores.

ANSWER.—Although your case is somewhat similar to "summer sores," we think the following treatment will give better satisfaction under the circumstances.

Review of Kansas City Stock Markets. Our correspondent at Kansas City stock yards writes: Our receipts this week are 33,294 cattle, 23,167 hogs and 7,650 sheep.

Cheap Excursions for Home-Seekers.

August 22, September 12 and October 10, the Santa Fe route will sell round-trip excursion tickets at one standard, first-class fare, plus \$2.

A rare chance to see the great Southwest at small expense. Cherokee Strip invaders should remember this.

Our money matters constitute a drawback on trade, some buyers paying New York exchange for stock, and this can only be cashed at heavy charges for exchange.

WE GUARANTEE

That one tablespoonful of GOMBAULT'S CAUSTIC BALSAM will produce more actual results than a whole bottle of any liniment or spavin cure mixture ever made.

THE LAWRENCE WILLIAMS CO., CLEVELAND, OHIO.

MARKET REPORTS.

LIVE STOCK MARKETS.

Kansas City, August 14, 1893. CATTLE—Receipts, 5,663 cattle; 656 calves. Not so good export demand for heavy native cattle, and best grades lower.

Table with columns: No., Wt., Pr., No., Wt., Pr. DRESSED BEEF AND SHIPPING STEERS.

Table with columns: No., Wt., Pr., No., Wt., Pr. TEXAS STEERS.

Table with columns: No., Wt., Pr., No., Wt., Pr. TEXAS COWS.

TEXAS HEIFERS.

244 spayed. 758 2 35

TEXAS CALVES.

37 @ 6.75 10 @ 6.75 96 @ 6.75 2 @ 3.50 95 @ 7.25

INDIAN STEERS.

13 748 2 60 21 850 2 60 110 881 2 70 202 849 2 30 37 826 2 30 13 1,007 2 75

INDIAN COWS.

34 860 2 25 22 803 1 75 10 847 2 10

INDIAN HEIFERS.

31 598 2 20

INDIAN CALVES.

102 @ 7.00 8 @ 8.00

COWS.

4 915 1 45 3 816 1 45 1 960 1 50 8 541 1 50 11 840 1 60 20 892 1 70 10 800 1 85 24 850 1 80 1 1,000 1 90 6 843 2 00 12 1,019 2 55

BULLS.

2 1,315 2 00 1 1,020 1 65 1 1,220 2 00 2 1,310 2 00 1 1,220 2 20 1 1,300 2 00 2 1,290 2 15 1 1,500 2 25 1 900 1 55

HEIFERS.

2 450 1 40 3 570 1 50 8 770 2 00 1 1,110 3 00 1 970 2 75

CALVES.

9 @ 6.50 5 @ 7.00 73 @ 6.75 15 @ 6.50 19 @ 7.50

STOCKERS AND FEEDERS.

20 871 2 50 49 863 2 35 23 1,025 3 10 23 970 3 10 7 764 1 65 23 861 2 55

HOGS—Receipts, 1,416.

PIGS AND LIGHTS.

No. Dock. Av. Pr. No. Dock. Av. Pr. 6 161 4 30 2 140 4 75 5 118 5 00 4 120 5 25 44 40 170 5 40 30 173 5 40

REPRESENTATIVE SALES.

10 40 277 4 30 18 278 4 35 49 328 4 55 7 330 4 55 32 200 190 4 60 14 120 207 4 65 59 80 253 4 70 69 207 4 70 37 40 275 4 70 52 120 224 4 75 62 239 4 75 53 230 4 75 71 239 4 80 64 80 237 4 80 17 234 4 80 67 80 240 4 80 61 40 259 4 80 44 228 4 85 66 40 205 4 90 69 160 210 5 00 86 240 200 5 15 75 160 218 5 15 3 243 5 25 60 101 5 35 97 182 5 40 9 181 5 40

SHEEP—Receipts, 1,330.

248 85 3 10 253 western 84 3 10 209 86 3 90 23 lambs 73 4 75 8 bucks 120 3 25 64 93 4 10 48 82 2 85

Chicago, August 14, 1893.

CATTLE—Receipts, 16,000. Steady. 4,000 Texans steady; 6,000 Westerns, 10c lower. Beef steers, \$3 30@5 10; stockers and feeders, \$2 25@3 25; bulls, \$1 50@2 50; cows, \$1 25@2 70; Texas cows, \$1 50@2 20; Texas steers, \$2 35@3 15.

HOGS—Receipts, 29,000. Heavy, 10c lower;

Light, strong, Mixed, \$5 00@5 45; heavy, \$4 60@5 20; light weights, \$5 20@5 90. SHEEP—Receipts, 14,000. Weak. Natives, \$2 00@4 50; lambs, per cwt., \$3 00@5 50.

Omaha. SOUTH OMAHA, August 14, 1893.

The Daily Stockman furnishes the following quotations:

CATTLE—The receipts were 1,800 head. Active and firmer. Beeves, \$3 25@4 45; stockers and feeders, \$2 25@3 00; cows, \$1 90@2 35.

HOGS—The receipts were 1,300 head. 10@15c higher; closed flat. Range of sales, \$4 70@4 90; bulk, \$4 75@4 80.

SHEEP—Receipts, 600. Market dull.

St. Louis, August 14, 1893.

CATTLE—Receipts, 2,200. Few natives and inferior. Texans 10@15c lower. Native steers, common to best, \$3 00@4 10. Texans, \$2 25@3 15.

HOGS—Receipts, 3,600. Market lower. Top, \$5 65. Bulk, \$5 25@5 35.

GRAIN AND PRODUCE MARKETS.

Kansas City, August 14, 1893.

In store: Wheat, 362,430 bushels; corn, 83,319 bushels; oats, 4,239 bushels, and rye, 2,501 bushels.

WHEAT—Receipts for forty-eight hours, 86,400 bushels. A good market was had yesterday for all sample lots, and the first half of the session Saturday's figures were obtained, but later the market grew weaker in sympathy with a decline in futures and buyers bid 1/4c lower, but salesmen were slow to accept this reduction.

CORN—Receipts for forty-eight hours, 80,000 bushels. Demand good for mixed and values a little firmer, but white slow sale.

OATS—Receipts for forty-eight hours, 22,000 bushels. More coming in than for some time and market in consequence dull and lower.

RYE—Receipts for forty-eight hours, 1,000 bushels. None coming in. If here would sell fairly at old prices.

FLAXSEED—Firm and in good demand. We quote at 90c per bushel upon the basis of pure.

HAY—Receipts for forty-eight hours, 930 tons, and shipments, 50 tons. Demand fair and values steady.

BROOMCORN—Hurdled, green, 4 1/2c per pound; green, self-working, 3 3/4c; red-tipped, do., 3c; 3 1/2c; common, do., 2 1/2c; crooked, half price.

HIDES AND PELTS—Market dull at old prices. We quote: Green, salted, cured, butchers' free of brands: No. 1, 30; No. 2, 2c; bull and stag, 2 1/2c; kip skins, 3c per pound.

WOOL—Unchanged, but very little moving. Missouri, unwashed, per pound, heavy fine, 8c; 10c; light fine, 10@13c; combing, 18@15c; low and carpet, 12@14c. Tub-washed, per pound, choice, 25@27c; medium, 23@25c; dingy and low, 19@22c.

St. Louis, August 14, 1893.

WHEAT—Receipts, 121,000 bushels; shipments, 20,000 bushels. No. 2 red, cash, 59 1/2c; August, 59 1/2c; September, 60 1/2c@60 3/4c; October, 63 1/4c; December, 69c.

CORN—Receipts, 157,000 bushels; shipments, 20,000 bushels. Cash, No. 2 mixed, 34 1/2c; August, 34 1/2c; September, 35 1/2c; December, 34 1/2c; year, 33 1/2c.

OATS—Receipts, 43,000 bushels; shipments, 4,000 bushels. No. 2 cash, 24c; August, 24c; September, 23 1/2c; May, 29 1/2c.

WOOL—Receipts, 26,000 pounds; shipments, 4,000 pounds. Market nominal. Medium—Missouri and Illinois, 15@16c; Kansas and Nebraska, 14@14 1/2c; Texas, Arkansas and Indian Territory, 8 to 12 months, 15c; Montana, Wyoming

and Dakota, 13 1/2@15c. Coarse—Missouri and Illinois, 14@14 1/2c; Kansas and Nebraska, 13@14c. Chicago, August 14, 1893.

Cash quotations were as follows: WHEAT—Receipts, 96,000 bushels; shipments, 405,000 bushels. No. 2 spring, 62 1/2@63 1/4c; No. 3 spring, f. o. b., 61c; No. 2 red, 62 1/2@63 1/4c.

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Kansas City Stock Yards Horse and Mule Depot, W. S. TOUGH & SON, Managers.

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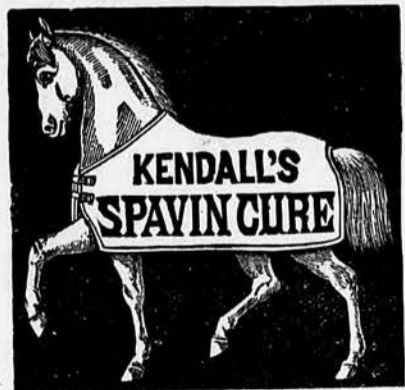
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Official Receipts, 1892.....	1,571,155	2,397,477	438,268	32,505	97,462
Slaughtered in Kansas City.....	727,381	1,805,114	218,969		
Sold to feeders.....	218,923	4,290	29,078		
Sold to shippers.....	446,501	586,563	48,259		
Total sold in Kansas City.....	1,388,405	2,395,937	296,246	15,974	

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"For Sale," "Wanted," "For Exchange," and small advertisements for short time, will be charged two cents per word for each insertion. Initials or a number counted as one word. Cash with the order.  
Special:—All orders received for this column from subscribers, for a limited time, will be accepted at one-half the above rates, cash with order. It will pay. Try it!

**FOR EXCHANGE**—Lands, live stock and other property. What have you to trade for them? J. E. Ansel, 910 Kansas Ave., North Topeka, Kas.

**STRAYED**—From 1018 West Sixth street, Topeka, Kas. August 9, one very nice black pony, leather halter on. Reward for return of same. J. B. Kilne.

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**WANTED**—A few good farms in eastern Kansas, to sell. D. A. Mulvane, Topeka, Kas.

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**THE STRAY LIST.**

FOR WEEK ENDING AUGUST 2, 1893.

Coffey county—O. P. Mauck, clerk.  
FILLEE—Taken up by A. H. Edwards, in Lincoln tp., one black filly, 3 or 4 years old, star in forehead; no marks or brands; valued at \$40.

Morton county—W. L. Harris, clerk.  
MARE—Taken up by L. G. Morgan, in Cimarron tp., June 27, 1893, one chestnut sorrel mare, about thirteen hands high, 5 or 6 years old, branded F on left shoulder, small white spot in forehead; appraised value, \$25.

Wyandotte county—C. E. Bruce, clerk.  
HORSE—Taken up by Thomas Webb, in Shawnee tp., July 26, 1893, one bay gelding, 5 years old, fourteen hands high, black mane and tail, smooth shod all round, rag on left fore foot, scar on right fore leg; appraised value, \$50.

Franklin county—O. M. Wilber, clerk.  
COLT—Taken up by J. B. Thorp, in Williamsburg tp., P. O. Williamsburg, June 29, 1893, one gray-dun mare colt, 8 years old, five feet eight inches high; no marks or brands.

Cherokee county—P. M. Humphrey, clerk.  
MARE—Taken up by L. B. Storms, in Pleasant View tp., P. O. Pleasant View, one bay mare, 13 years old, fifteen hands high, branded D on left shoulder.

HORSE—By same, one very light cream-colored horse, 8 years old, fourteen and one-half hands high, light blue hips, heavy mane and tail.

FOR WEEK ENDING AUGUST 9, 1893.

Ford county—R. S. Crane, clerk.  
HORSE—Taken up by Chas. L. Thomas, in Richland tp., P. O. Dodge City, June 18, 1893, one bay gelding, 10 years old, branded on left shoulder and left hip; valued at \$20.

Brown county—J. V. McNamar, clerk.  
PONY—Taken up by R. W. Brown, in Powhatan tp., one black mare pony colt, 2 years old, a little white on left hind foot; valued at \$15.

FOR WEEK ENDING AUGUST 16, 1893.

Shawnee county—J. M. Brown, clerk.  
PONY—Taken up by O. F. Cunningham, in Soldier tp., P. O. Hiram, one sorrel mare pony, 8 years old, blaze face, hind feet white, right front foot white half way to knee; valued at \$20.

Cowley county—J. B. Fishback, clerk.  
MULE—Taken up by George Bryan, in Dexter tp., P. O. Dexter, August 4, 1893, one light bay horse mule, 5 or 6 years old, mane and tail roached, bushy legs, black stripes on shoulders and legs, harness marks; valued at \$20.

Chautauqua county—G. W. Arnold, clerk.  
MARE—Taken up by P. V. Hollister, in Summit tp., P. O. Waukena, one sorrel mare, 7 years old, 14 1/2 hands high, branded on left hip with wagon wrench; valued at \$40.

HORSE—Taken up by J. D. Robinson, in Sedan tp., July 25, 1893, one flea-bitten gray horse, scar on right hip five inches long and scar on right arm; valued at \$25.

HORSE—By same, one bay horse, saddle and harness marks; valued at \$25.

Sherman county—Ernest J. Scott, clerk.  
HORSE—Taken up by T. J. Jackson, in Lincoln tp., P. O. LaBlanche, August 11, 1893, one light bay horse, white left fore foot, weight 850 pounds.

HORSE—By same, one dark bay horse, white right hind foot, weight 800 pounds.

Labette county—D. H. Martin, clerk.  
HORSE—Taken up by A. Millikin, in Howard tp., P. O. Valeda, July 20, 1893, one bay stallion, 4 years old, split in right ear and nick in left ear; valued at \$20.

Trego county—C. A. Hoar, clerk.  
HORSE—Taken up by A. V. Hixson, near Ogallah, July 5, 1893, one dun horse, four and a half feet high, branded N. C. on left ham, O or Q on back part of ham, two white spots on side of neck, halter; valued at \$20.

HORSE—By same, one bay horse, five feet high, branded J or U on left shoulder, had shoes in front, slightly stove up in front; valued at \$20.

Harper county—Wm. Duffy, clerk.  
PONY—Taken up by W. H. Hager, in Spring tp., May 16, 1893, one bay horse pony, 14 hands high, branded X-T on left hip; valued at \$30.

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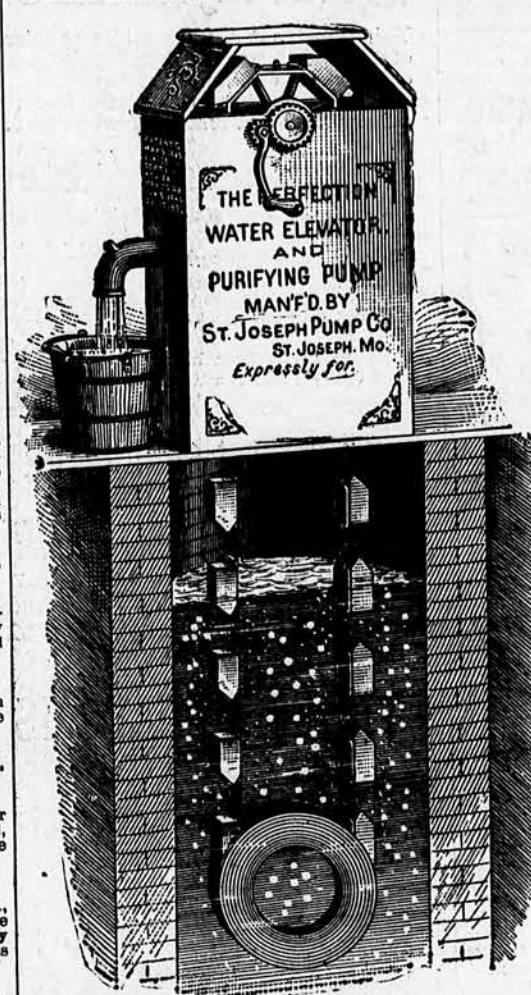
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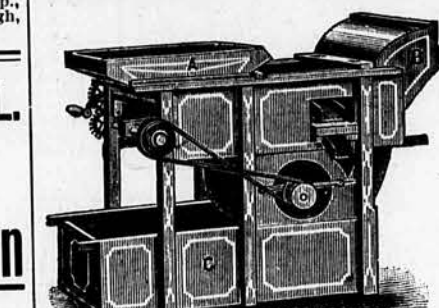
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