

# KANSAS FARMER

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## BREEDERS' DIRECTORY.

Cards of four lines or less will be inserted in the Breeder's Directory for \$15 per year or \$5.00 for six months; each additional line, \$2.50 per year. A copy of the paper will be sent to the advertiser during the continuance of the card.

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Write for prices of finest animals in Kansas. H. W. McAfee, Topeka, Kas.

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**R. L. BLODGETT & SONS, BEATRICE, NEB.**---Breeders of Poland-China, Chester White and Berkshire hogs. We have prize-winners. Took 21 premiums at Kansas and Nebraska State fairs in 1895.

**OHIO IMPROVED CHESTER SWINE.**---Pure-bred and registered. One hundred spring pigs at hard times prices. Also a few boars ready for service. H. S. DAY, Dwight, Morris Co., Kas.

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**FOR SALE.**---Houdans, Dark Brahmas, Partridge Cochins, Black Langshans and Banded P. Rocks. We keep only the best. W. H. Rauch, Wichita, Kas.

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Buff and Black Cochins, B. Minorcas, Brown Leghorns, B. Langshans, B. P. Rocks, L. Brahmas, S. L. Wyandottes and Cornish Indian Game, Ducks, Geese and Bronze turkeys. Birds scoring from 89 to 97 points. Eggs in season, from \$1 to \$2 per setting. Twelve years a breeder. Shipping point Warrensburg, Mo. Mrs. James D. Dyer, Hoffman, Mo.

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**S. McCULLOUGH,** Ottawa, Kansas. Breeder of Pure-bred BERKSHIRE SWINE. Stock for sale at all times. Satisfaction guaranteed. Write for what you want.

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**SELECT HERD OF BERKSHIRES** For ten years winners at leading fairs in competition with the best herds in the world. Visitors say: "Your hogs have such fine heads, good backs and hams, strong bone, and are so large and smooth." If you want a boar or pair of pigs, write. They from Topeka. G. W. Berry, Berryton, Shawnee Co., Kas.

**T. A. HUBBARD** Rome, Kansas, Breeder of POLAND-CHINAS and LARGE ENGLISH BERKSHIRES. Two hundred head. All ages. 25 boars and 45 sows ready for buyers.

**THE WOOD DALE BERKSHIRES** Champions of Two World's Fairs. New Orleans, 1885, best herd, largest hog any breed. At Columbian, Chicago, won ten out of eighteen first prizes, the other eight being bred at or by descendant of Wood Dale. New blood by an 1894 importation of 21 head from England. For catalogue Address N. H. GENTRY, SEDALIA, MO.

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Breeds and has for sale Poland-China and Large English Berkshires. Also Single-Comb Brown Leghorns and Mammoth Bronze turkeys. Farm six miles south of Cedar Point, Chase county.

**Quality Herd Poland-Chinas.** For first choice pigs from stock producing winners of seven prizes World's Fair. Darkens Quality 2d and Ideal U. S. by Ideal Black U. S. head the herd. Both first-prize winners Kansas State fair 1894. Come or write your wants. Willis E. Gresham, Burrton, Kas. Secretary Kansas Swine Breeders' Association

**E. E. AXLINE, OAK GROVE, MO.** Jackson Co.

Breeder and shipper of pure-bred POLAND-CHINAS. Best families. A choice lot of summer and fall pigs, sired by Roy U. S. 24165 A. and Western Wilkes 12846 S., for sale at reasonable prices. New catalogues free. Plymouth Rocks, best strains.

**R. SCOTT FISHER, HOLDEN, Johnson Co., MO.**

**POLAND-CHINAS** of the leading strains--Tecumseh, Wilkes, Sunsets. Good ones, strictly first-class. Good bone, broad back, fine head. Prices reasonable. Visit me.

**CLOVER HILL HERD** Registered Poland-China Swine

Eighty head, headed by Royal Perfection 13159 S., a son of King Perfection 1315 S., that won sweepstakes St. Louis fair, 1894. Twenty-one April pigs, thirteen May farrow and twenty-five later, all by Royal Perfection. Write or come.

T. E. Martin & Bro., Fort Scott, Kansas.

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**POLAND-CHINAS** and Plymouth Rocks. Herd headed by Cunningham's Choice 18731, from the herd awarded grand sweepstakes at World's Fair on boar and sow; Royal King 11874. My sows are royal-bred Ward A. Bailey, 1470 15th St., Wichita, Kas.

**PLEASANT VALLEY HERD** REGISTERED POLAND-CHINASWINE Westphalia, Anderson Co., Kas.

Breeder of high-class pedigree Poland-China swine. Herd headed by Tecumseh Grand 9178 S., assisted by Guy Wilkes 3d 12131 O. Tecumseh Grand 9178 S. is now for sale, also fifty choice April pigs. Write. E. A. BRICKER.

**VERNON COUNTY HERD**

**PEDIGREED POLAND-CHINAS.** Forty-five spring pigs sired by Silver Dick 14180 S. and out of high-class dams. Write or visit herd. J. M. TURLEY, Stotesbury, Vernon Co., Mo.

**STANDARD POLAND-CHINA HERD.**

CHAS. A. CANNON, Proprietor, HARRISONVILLE, CASS COUNTY, MISSOURI Breeder and shipper of registered Poland-China swine of the best strains. Herd headed by Chow Chow 9903 S., assisted by a Black U. S. son of Imitation 27185 O., also a son of Tecumseh Jr. 10207 O. 220 head in herd. Young boars and gilts yet on farm. Write or come and visit me.

**R. S. COOK** Wichita, Kas., Breeder of Poland-Chinas.

Won seven prizes at World's Fair--more than any single breeder west of Ohio.

**J. R. KILLOUGH & SONS,** Richmond, Franklin Co., Kansas, POLAND-CHINA SWINE.

Headed by Upright Wilkes 13246 and assisted by J. H. Sanders Jr. 13739. Our brood sows are all richly bred and high-class individuals. A fine lot of fall pigs, both sexes, ready to go at reasonable prices.

**FINE BLOODED** Cattle, Sheep, Hogs, Poultry, Sporting Dogs. Send stamps for catalogs. 150 engravings N. P. BOYER & CO., Coatesville, Pa.

**1,309 POLAND-CHINAS** Shipped by express to eighteen States and Canada. Original Wilkes, Corwin, Tecumseh and World's Fair blood. Write for one to W. S. HANNA, Ottawa, Kansas.

### CATTLE.

**SUNNY SLOPE FARM**

C. S. CROSS, Emporia, Kas. We have one of the largest herds of registered **HEREFORD CATTLE** in the United States. Write for anything you want.

**SHANNON HILL STOCK FARM.**

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

**ROCK QUARRY HERD.**

N. E. MOSHER & SON, SALISBURY, MO.,

Have twenty-two choice pure-bred **HEREFORD BULLS** for sale; twenty choice cows and heifers; all registered. Also ten choice Poland-China male pigs ready for service, sired by Mosher's Black U. S. and Faultless Wilkes. Write for prices. Ment'n FARMER.

**THE SHELTON & WHEELER** **HEREFORD CATTLE COMPANY**

OWNERS OF **THE ROCK CREEK HERD** (Founded by Thos. J. Higgins.)

**200--Pedigreed Herefords--200**

45 Young Bulls, 36 Heifers coming on.

**250 High-Grade Cows,** 15 yearling bulls, 73 heifers, 154 calves.

Stock for sale at all times. Inspection and correspondence solicited. Address all correspondence to C. M. SHELTON, President, BURLINGAME, Osage Co., W. AS.

### SWINE.

**J. T. LAWTON, North Topeka, Kas.** breeder of Improved Chester White swine. Stock for sale. Pairs or trios not skin shipped. Correspondence invited.

**Thoroughbred Duroc-Jersey Hogs**

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

**SUNNY SLOPE FARM** EMPORIA, KANSAS.

We are the largest breeders of pure-bred hogs in the world, and have won more premiums at State fairs this year than any other breeder in the United States. We are breeding this year 200 brood sows and have twelve boars in our herd. At the head of our herd this year we have the great prize-winning boar, Hadley Jr. 13314, who took first prize as boar and four of his get at the Nebraska State fair.

He is the sire of the two prize-winning pigs, King Hadley and Samboline, that have won more prizes than any two six-month-old pigs shown in 1895. Longfellow 29785, who has the best Columbian record of any Poland-China boar west of the Mississippi river. J. H. Sanders Jr. 35089, Sir Chas. Corwin 33095, L.'s Sensation 13316, Clay Dee 25877 (who took first prize and sweepstakes at the Kansas State fair, 1895). These boars are either individual prize-winners or from sweepstakes boars. We breed the great sweepstakes sow, Faultless Queen Corwin 25798. We now have on hand about 140 boars sired by the above. Our prices are as low as small breeders. Why not come to the fountain head and get boars to head herds? We also breed English Berkshires on a separate farm, four miles from Sunny Slope. One of the largest breeders of pure-bred Hereford cattle. H. L. LEBFRIED, Manager.

### SHEEP.

**Shropshire Rams and Ewes for Sale.**

Also Oxford and Delaine Merino, from 1 to 3 years old. Write for prices to DORSEY BROS., Perry, Pike Co., Ill.



## Cultural Matters.

## "THE MAN WHO GETS THERE."

By Reuben Town, read before Mission Township (Shawnee County) Farmers' Institute.

The man who "gets there," at this date, must be brief, or else the other fellow will beat him. Must be ready, like the boy who, when applying for a position in a business house, among other things, was asked what his motto was, replied: "Same as yours on the door—push." He got the job.

In the few thoughts I offer you I shall, from choice and necessity, confine myself to the lives and affairs of common people, not including railroad attorneys, who gain a miserable subsistence by auctioneering off a few millions' worth of rolling-stock and traps and receive the trifling sum of, say, ten thousand for the job, and don't even set up the regulation lunch of coffee, cheese and crackers. They "get there," but not by our road.

There is only one good kind of "get there," and that is based upon the principle of "Do unto others as you would they should do unto you." The other kinds are as numerous as the Kansas corn crop of 1895 before harvest. Some methods of "getting there" are more to be despised than the most hopeless failure. I have known an instance within the last few months where a physician, who had been called to attend a poor but honest and industrious family, at the second visit went into the yard, looked at the only cow and a few pigs and asked that a chattel mortgage be given on these to secure the payment for his medical attendance. We can't reach his case. He "got there," but the people should "get there," also, and dispense with his kind services forevermore. This M. D. does not reside in Shawnee.

The kind of "get there" we like is fair and square, founded on that grand idea that all men are created with equal rights, and a failure to enjoy those endowments is a fault of the individual and not of the Creator.

Man is controlled by habit. You do not put a draft collar and harness on a trotting-bred horse and expect him to move great loads. For generations its blood has not been trained for such work; its shoulders are thin and sloping; its limbs and joints slender and unfit for heavy pulling. So with the large and well-developed animal of any kind. Give it continued poor treatment, exposure and lack of food, and in time it or its progeny will fit itself to its surroundings and become stubbed and hardy, but not fine or large.

I am expected to speak of the man who "gets there" but must start with the boy. "As the twig is bent the tree inclines."

The young man's education should depend upon the kind of occupation he is to follow. If he wishes to become a great statesman, he should have a long-continued mental training, a thorough college education, that he may thoughtfully work out and determine the intricate and far-reaching questions of State and nation. If he is to be a man of business, he should have a good all-around education, including music, if you please; then if he fails to win by figures, he can try singing the world his way. My boy, if you expect and are to be a farmer, what can I say to you? Stick to it. Don't farm one year and live in town two; don't be fooled by those chaps that wear diamonds. You first need, as in all work, good health; added to this all the useful education you can get—the more the better. But you must be level-headed and see a thing before it hits you. The world is changing—moving—and you must aim your efforts to meet these changes and you will avoid many of the mistakes common in business affairs. Have a clear idea of what you want to do. Try to make a success of each day and your life will be a success. If you begin a piece of work, start right and then work up, not down—making the finish better than the start. If you want to "get there" to stay, you must lay the foundation early for after life. I will illustrate: If a farmer wishes to build a good and lasting fence of boards and wire, does he begin

by digging the post-holes? No; he must get a good ready—clear off the, proposed line, put up stakes, select and char the posts, match his boards to save waste, and then proceed with the work, being careful to have the last material and labor as good as the first.

If the individual wishes to begin a successful life, I say, first clear off the line of life; set up your stakes or guides, and then work and live along that line, during storm and sunshine, prosperity and misfortune, knowing that your success in life is not measured by dollars only. Ask yourself these questions: If living on a farm, are you making the best use of your part of the world? Do you try to make farming what it should be—the most desirable calling on earth? Do you try to have a pleasant home? Does the appearance of your premises encourage your brother farmers to slobber up their surroundings? How about that old, rotten, two-wire fence along the front, and the openings where gates might be? The sprouts and extra branches in the orchard? Is the door-yard unfenced and without ornamentation—strewn with as much or more rubbish than any other lot on the farm?

Now, as we stumble over a pretty good cultivator, we inquire about the lister, new mowing machine, rake and hay-gatherer it was so easy to buy and will be so hard to pay for when you sell your corn and baled hay. Where are they? No doubt you hope to meet them again. They may be weather-beaten and some parts missing or broken, but you can tinker them up when you are ready to use them.

My farmer friend, if this is a true picture of your homestead, you are not "getting there," if I am the judge—not if you own the farm! The "get there" man lives next neighbor. His fences are in good condition, gates in their places, orchard pruned and protected, lawn sodded and set with evergreens and other shrubs, his implements are in the dry, tools in the tool-house, wood in the wood-shed, corn in the crib, and about this time of the year you will find the gentleman and his family attending the farmers' institute or visiting his up-to-date neighbors, listening while they open the gates and give him the benefit of their experience.

The "get there" man is unlike the railroad train—he is never behind, but may be a little ahead. If you are an intelligent, prompt, tidy farmer, you are competent to fill any position you can get.

I feel timid about giving advice or judging for others, yet I say that success, though hard to catch, should, when reached, endure to the end of life. You may make a good sale of land or live stock, yet if the proceeds are not well invested and re-invested to the end of your business life, you have not fully "got there."

The individual, as he passes the active period of life, should be able to say: "I have done the world some good; have had my share of the good things; let me enjoy life while I live. I wish the fellow that takes my place at least equal success in 'getting there.'"

THE GENUINE "BROWN'S BRONCHIAL TROCHES" are sold only in boxes. They are wonderfully effective for Coughs, Hoarseness or Irritation of the Throat caused by cold.

## Southdown Sheep Breeders Serene.

From the following letter that has been sent to the members and patrons of the American Southdown Association, sheep breeders have less reason to be dispirited than those engaged in rearing other breeds:

Nearly enough entries have been received for Volume VI. of the Record. If you wish to make further registry in this volume, applications should be sent at once.

Notwithstanding the depression of the sheep industry, the registration of Southdowns during the past year has largely exceeded any previous year.

Wherever the Southdown has been introduced, to be bred as a distinct breed or for muttonizing other breeds, it has given the greatest satisfaction. Its unexcelled mutton, its hardiness and the certainty with which it impresses all of its good qualities wherever used, will increase the demand as its superiority is made known. No other breed of sheep has as bright a prospect for usefulness and as a money-maker for the breeder.

JNO. G. SPRINGER, Secretary.  
Springfield, Ill.

## Quarter-Centennial Program State Board of Agriculture.

The twenty-fifth annual meeting of the Kansas State Board of Agriculture will be held in Representative hall, Topeka, January 8, 1896, at 4 o'clock p. m., and continue in session three days, or until the business requiring attention shall be disposed of.

WEDNESDAY, JANUARY 8, 1896.

AFTERNOON SESSION—OPENING AT 4 O'CLOCK.

Roll call.  
Report of Committee on Credentials.  
Reading minutes of preceding meeting.  
Reports of officers.  
Reports of committees.

The following topics will be taken up and considered, as near as may be, in the order in which they are given, and that ample time may be had for discussion papers will be limited to twenty-five minutes, except as otherwise directed by the meeting. Papers will be subject to pertinent discussion, and delegates are expected to prepare for these discussions. Others present, of whom there will be a large number, will, as heretofore, also have the privilege of participating in the discussions, and are invited to do so.

EVENING SESSION—7:30 O'CLOCK.

Address of welcome, Governor E. N. Morrill.  
Response, the President, Thos. M. Potter.

"Corn and Some of Its Assistants," President Geo. E. Morrow, Oklahoma Agricultural college.

"Importance of a Deep Water Harbor on the Gulf of Mexico," Howell Jones, Topeka.  
"Popular Education in Europe," Chancellor F. H. Snow, State University.

THURSDAY, JANUARY 9.

MORNING SESSION—9:30 O'CLOCK.

"Spraying Orchards," Prof. E. A. Popenoe, State Agricultural college.  
"Some Problems in Tillage" (illustrated), H. R. Hilton, Topeka.

"Ticks and Their Relation to the Spread of Texas Fever," Albert Dean, United States Bureau of Animal Industry, Kansas City.

AFTERNOON SESSION—1:30 O'CLOCK.

"Kaffir Corn, or the Non-Saccharine Sorghums as Grain and Forage Plants," W. E. Hutchinson, Hutchinson.

"Trials and Pleasures of the Swine Breeder," T. A. Hubbard, Rome.  
"Aspects of the Horse Situation, and Its Future Outlook," W. S. Tough, Kansas City.

"Our Wheat," from the standpoint of a miller and shipper, P. G. Noel, Topeka.

EVENING SESSION—7:30 O'CLOCK.

"Bee-Keeping for the Farmer and Fruit-Grower," Emerson T. Abbott, St. Joseph, Mo.

"Kansas—Its Farmers and Prosperity," ex-Lieutenant Governor A. J. Felt, Atchison.

"Sanitation for Farm Homes," Dr. Debora K. Longshore, Topeka.

FRIDAY, JANUARY 10.

MORNING (IRRIGATORS') SESSION—9:30 O'CLOCK.

"How We Irrigate With Water," C. D. Perry, Englewood.

"The Underflow, as Related to Irrigation Development," H. V. Hinckley, Topeka.

"Pumping Equipment for Irrigation," E. B. Cowgill, Topeka.

"The Work of the State Board of Irrigation," Secretary W. B. Sutton, State Board of Irrigation.

AFTERNOON SESSION—1:30 O'CLOCK.

Election of officers and members.  
"Our Cattle Industry and Its Future," L. A. Allen, Kansas City.

"Scrub Cattle vs. Thoroughbreds in the Feed-Lot," Prof. C. C. Georgeson, State Agricultural college.

EVENING SESSION—7:30 O'CLOCK.

"Only the Best Pays Best and Sells Best," W. A. Harris, Linwood.

"Observations of Foreign Agriculture," President Geo. T. Fairchild, State Agricultural college.

"The Farmer's Hope," Miss Ruth Tipton Stokes, State Agricultural college.

An Address—(expected), ex-Secretary of Agriculture, Norman J. Colman, St. Louis, Mo.

## OTHER MEETINGS.

The State Poultry Association, the State Swine Breeders' Association, and the Improved Stock Breeders' Association, will also hold their regular annual meetings during the same week as the meeting of the State Board of Agriculture.

## RAILROAD RATES.

All railroad lines have granted a rate of one fare and one-third for round trip tickets for all these meetings from all points in Kansas, also Kansas City and St. Joseph, Mo., on the certificate plan (provided 100 or more tickets are sold), and tickets will be sold January 6 and 7, good for return, including January 11, 1896. To secure the benefit of these reduced rates the purchasers of tickets will pay full fare coming, and take certificate from the ticket agent that they have done so; this certificate when countersigned by F. D. Coburn, Secretary of the State Board of Agriculture, will entitle the original purchaser to a return ticket at a one-third fare. Do not fail to secure the certificate when purchasing a ticket.

## HOTEL RATES.

The best hotels in Topeka have made low prices for those who attend these meetings. The National, Copeland and Throop have each offered an open rate of \$2 per day; the Chesterfield, \$1.50; the Dutton, \$1.50 and \$1.25; the Fifth Avenue, \$1.25 and \$1, and Commercial, \$1.

## SPECIFIC FOR SCROFULA.

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



## AYER'S

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

**AYER'S**  
THE ONLY WORLD'S FAIR  
Sarsaparilla

Ayer's Cherry Pectoral cures Coughs and Colds

## Points in Fertilization.

Whether any one now living in Kansas will see the soil in any part of the State reduced to such condition that it may be said of it that its chief value is as a place to put fertilizers, or whether its native fertility will endure working as a mine during the life of the present generation, and still retain sufficient fertility to produce fair crops, may not be subjects on which agreement can be reached. But certain it is that every mine may be worked out. The older portions of this and other countries have long since learned that renewal of some of the elements of fertility is necessary. Some portions of Kansas have shown the need of fertilization. Experience of a Pennsylvania farmer is shown in the following, from Emil Ulrich, of Stroudsburg, Pa.:

"Quite often I have heard the remark made by farmers, who are considered progressive farmers, that 'fertilizers don't pay,' they had tried them and did not see them do any good. There may be some truth in their statements; either they used some complete fertilizer, which, in reality, did not deserve the name of fertilizer, or they used phosphate pure and simple, when, perhaps, the land did not need phosphoric acid, but needed potash or ammonia in some form.

"Thanks to the vigilance of our experiment stations and the bulletins issued by them, showing the actual value and contents of the different brands of fertilizers, spurious mixtures cannot be saddled so easily any more on the unsuspecting buyer, but many instances have come under my observation where so-called phosphates were used, showing no effect whatever on the crop. It was not the fault of the phosphate, but the fault of the man who gave either the land or the plants something that was not needed. Phosphoric acid will show little effect when potash is needed, and vice versa, although it may be safely stated that as a general rule potash is needed everywhere, except sometimes on heavy clay lands, and even there an application of potash in some form will do good.

"One particular case came under my observation this summer. A field was seeded to buckwheat and the party drilled in with the seed 300 pounds phosphate to the acre. The crop was a failure, because phosphate had been tried several times on that same piece without doing any good. It was potash and some nitrogenous fertilizer that the land needed and the plants as well.

"A failure in the application of fertilizers is sure to follow in most cases, unless they are complete fertilizers, containing nitrogen or ammonia, pot-



ash and phosphoric acid, in given quantities.

"There is one way in which the farmer cannot go amiss, and that is by green manuring, i. e., raising a crop of clover, either common red clover or Mammoth clover, and plowing under such crop. Clover, which draws its nitrogen from the air, thus enriching the land, may be called a fertilizer in itself, yet, although we have here the nitrogen necessary for the succeeding crop, the potash and phosphoric acid ought to be supplied in addition.

"There is another point to be considered. Some farmers are under the impression that one bag (200 pounds) of fertilizer ought to accomplish wonders. They do not show any kind of liberality to their land, yet they expect the land to treat them liberally. There has to be an outlay of cash, certainly, for the fertilizer, yet that outlay, much as it may appear in the start, will pay handsomely, if, with a little brain work and study, the farmer purchases and gives to the land what actually is needed. Light soils are, as a general rule—I may say always—deficient in potash. This potash can be supplied in the shape of ashes or potash salts. Ashes may be good enough, but are unreliable as to the quantity of available potash they contain, besides the expense of hauling so many loads, which consumes time and labor. Potash salts in the form of kainit or of muriate of potash are reliable, and the application to the land requires less labor. Now, with potash salts in a given quantity, phosphate, and perhaps some lime, where such is needed, a good stand of clover can be relied upon almost anywhere.

"When this foundation is laid into the soil it is easy to build upon it and the result will be a paying crop, provided all other conditions are normal. However, it must not be inferred that, after a good start has been made in the way mentioned, the good work ought to rest. It must be kept up, and the better we feed our land the better it will repay us. The words, 'farming don't pay,' would then not be heard so often any more."

## The Stock Interest.

### A Steer-Feeding Experiment.

Desiring a definite and practical test as to the value and usefulness of ground linseed cake as a means of fattening cattle, Mr. L. L. Roby, of Topeka, Kas., made a test feed experiment to settle several disputed points about feeding in general, and to more firmly establish several important facts about the great value of ground linseed cake as a sure, quick, safe, cheap and healthful feed for cattle while being fattened for market.

In order to make the test feed as nearly as possible like the general run of Western feeding, the cattle selected were twelve head of common, native, three-year-old steers, which had been roughed through the summer and fall, just previous to being bought for this purpose. They were purchased at the Kansas City stock yards, and when fattened were sold there, Armour & Company being the buyers.

The lot was an open one, except for a small sideless shed in one corner, simply large enough to suitably protect the feed troughs in stormy weather. In the lot were open feed troughs, a small hay rack and a large water trough, in which was kept plenty of fresh water, to which the cattle had access at all times.

At the first the feed was about eighteen pounds of crushed corn and four pounds of ground linseed meal per head. The third day this was not all eaten, and was cut down to fourteen pounds of corn and four pounds of ground linseed cake per head. On the ninth day the desired amount and proper proportions were reached, and in a general way no further changes were made during the test. On the ninth day the feed was mixed, half crushed corn and half ground linseed meal, and averaged twenty-three pounds per head. On stormy days this quantity was increased from a pound to a pound and a half per day. On

warm days they did not get over twenty-one and a half to twenty-two pounds per head per day. In this way the average feed per head was twenty-three pounds per day. The feed was carefully weighed at each feeding. In addition to this they were given plenty of prairie hay for roughness. They seemed to care very little for hay and, excepting stormy days, they seldom ate over three or four pounds of hay per head.

The test lasted seventy-five days, seventy-seven days being the time consumed from buying to selling, the first and last of which no feeding was done. It was the original intention to feed for ninety days, but unfortunately the small lot became so extremely muddy that the test could not be fairly conducted longer in it, and there was no other suitable lot to be found in the neighborhood. When bought the cattle weighed 10,340 pounds, or an average of 862 pounds per head. After seventy-five days feeding they weighed 14,950 pounds, an average of 1,246 per head. The gain was 4,610 pounds, an average of 385 pounds per head for the time, or 5.12 pounds per head each day. Not being properly handled in shipping, the loss by shrinkage was somewhat greater than it should have been. After being in the cars and pen at stock yards for about nineteen hours, without food or water, the shrinkage was 710 pounds. This left a net selling weight of 14,240 pounds. The absolute gain from buying to selling, covering the two shrinkages and all losses from other unfavorable circumstances, was four and one-third pounds per head per day. When sold these cattle brought 40 cents per hundred pounds more than cattle of the same weight, on the same yards, the same day.

Experienced feeders say it is impossible to feed cattle any length of time on full feed without having more or less trouble from sickness and overeating. In this test not a sign of sickness could be discovered from beginning to ending. This is especially remarkable when one considers that the cattle were put on full feed immediately, and that the ration contained at least three times as much ground linseed cake as the most daring feeder had thus far ventured to use.

This experiment was made at a time when cattle and all kinds of feed were at their highest prices for several years. Ground linseed meal costs about one-third more per ton than corn per ton. It made meat on the cattle almost three times as rapidly as corn alone would have done, when fed pound for pound. To have made the same amount of meat from corn, bran, chop or other feeds would have taken 150 to 175 days, and would have cost at least one-half to two-thirds more than this feed cost. In figuring the cost of feeding the feeder must take into account the actual cost of his feed, the interest on the time his money is invested in feed and cattle, the increased danger from sickness on a long feed, and the comparative healthfulness of each feed.

In this test some young pigs were put into the lot and allowed to follow the cattle, without any feed but water. They made remarkable growth, the gain in them being proportionately larger than in the cattle. In using this feed there is less for the hog than in other feeds, and consequently the proportion is about one hog to one steer. This increase in the hog is clear gain.

This feeding test, says Mr. Roby, established several new points in feeding regarding ground linseed meal, which he thus summarizes:

Makes meat quickly.  
Makes meat at less cost than other feed.

Makes more meat than other feeds.  
Makes absolutely healthy meat, which is worth much in the steer or hog, and worth infinitely more to the person who eats it.

Makes a loose hide, a good digestion and the best possible general appearance.

Makes meat that sells for more money than animals fed on other feeds.  
You can feed, without danger, as much of it as the animal will eat. The more you feed the more meat you get.

Do not be afraid to feed it liberally. It is feed, and not a medicine.

It contains three times as much nourishment as corn, and does not cost much more than corn. Therefore it is cheaper than corn.

### Twenty Years' Experience.

EDITOR KANSAS FARMER:—I noticed in KANSAS FARMER an inquiry concerning the value of cane and alfalfa for hogs. As for alfalfa I cannot speak, but cane I have fed, and I think it one of the best of feeds. I have never fed it exclusively, nor do I recommend an excessive ration for hogs. The only time for such is when you can't help yourself. Of course, the object of hog-raising is financial gain, and the cheapness of the feed, considering the growth and gain, is to be the first consideration. I have raised hogs on my own account for twenty years, and under most all circumstances, both in eastern and central Kansas, and will say that plenty of grain and plenty of green stuff is the most successful ration.

Now for my way, after twenty years or more of study: First, the sow; breed, Poland-China; shape, good, lengthy body, broad across the hips, deep through body, not too leggy. Boar, same breed, but more on the round order, but be careful not to get your hogs too much on the chunky order. When your hogs become too chunky, select a more rangy sow and a medium boar. Never go to the extremes on the male's side, nor to the chunky order on female's side. Have good lots and enough good pasture to keep them in a good healthy condition. The cheapest pasture, for the time it lasts, is oats. It will only last from the middle of April until about middle of June, but if you plant a patch of cane that will be ready to feed then, plow up your oats and sow rye. Sow about the 10th of August, then the rye will do to turn on about the 10th of September. One acre will pasture about three sows and their litters, which should be about ten pigs apiece. That is the number my sows generally raise. In breeding sows, let them have but one good service. There is where most men make a mistake. They turn a sow with a boar and leave her there a day or two, or probably until she goes out of heat. Result is weak pigs and few of them. The way I breed is to have my pigs come about the first of March. By so doing, the sows will bring another litter about the first of September. My March pigs will be fat before cold weather. My fall pigs will be old enough to stand the winter; also to fatten for June market.

Make your pasture joining your lots or pens—I say lots because pens mean a small inclosure, which I do not believe in. One hog or two may be kept in a pen, but a number of hogs should have room enough so that it will keep in a healthy condition—and the first thing you do in the morning is to turn them out. Then in an hour or two they will fill themselves. Then call them in and fasten them and give them some grain or swill. Hogs to run in a pasture all day will tramp out and kill more pasture than they eat.

Close attention and regular feeding and watering will go farther towards success than all the feeds and breed in the world administered in a haphazard way. Remember, a hog is an animal, and not merely a hog, as a good many think. Give them good shelter and good clean feeding places.

I am now feeding my hogs Kaffir corn in connection with Indian corn. At first they did not seem to relish it, but before a week they preferred it. I feed the heads unthreshed, and I never had the hogs to do better. My May pigs will average 250 pounds, and they had no grain until middle of August—nothing but grass and water. I will emphasize the water, for that is the essential thing. Never neglect the water. Think, can you, yourself, relish a meal when you are thirsty? Give them clean water and plenty of it. It is cheap.

While I have my feet wet, I will give you my method of watering: Have a barrel to mix your water and milk and such in, so that when you water or swill your hogs they will drink it, for if you take a pail of milk and give it to a dozen or so hogs, they will rush in and the biggest hog will get the milk. Then you go and get a couple of pails of water and pour in, and they will turn up their noses at you, as much as to say, "haven't you even hog sense?"

J. H. RING.

## Nervous

Troubles are caused by impure and impoverished blood because the nerves, being fed by the blood, are not properly nourished. The true way to cure nervousness is to purify the blood by taking Hood's Sarsaparilla. Read this:

"I have taken Hood's Sarsaparilla and it has built me up, increased my appetite and accomplished what I desired. My oldest daughter was nervous and not very rugged, but her health is good since she began using Hood's Sarsaparilla." JOHN L. PINGREE, 172 Hayden Row, Hopkinton, Mass. Get Hood's and only

## Hood's Sarsaparilla

The One True Blood Purifier. \$1; 6 for \$5.  
Hood's Pills are mild and effective. 25c.

### Thirty-four Poland-Chinas Sold for \$4,243.

Owing to a variety of causes, the prevalence of disease being a leading one, the prices of pure-bred swine have this season been, in many instances, somewhat discouraging. The results of the dispersion sale, according to the *Live Stock Indicator* report, of the Midway herd of Poland-Chinas, of which Mr. E. H. Andrews, of Kearney, Neb., is the proprietor, which was held on December 12, by Col. F. M. Woods, come, however, like a gleam of sunshine in a clouded sky. It was attended by a very large number of breeders from all parts of the country, and in addition, while the offering consisted of only forty sows, over sixty bids were filed by letter or telegram with the auctioneer. As the sale is one of the memorable ones in Poland-China circles, we herewith give the details as to the disposition of thirty-four head:

1	Zackery & Tyson, Mound City, Mo.	\$400
2	Fen Lail, Marshall, Mo.	145
3	Watson Ranch, Kearney, Neb.	201
4	Same.	146
5	Same.	97
6	J. Mandelbaum, Blue Hill, Neb.	81
7	N. H. Kline, Aurora, Neb.	128
8	S. F. Antea, Geneva, Neb.	121
9	Watson Ranch, Kearney, Neb.	290
10	G. A. Walker, Fairmont, Neb.	106
11	Watson Ranch, Kearney, Neb.	91
12	C. D. Beasie, Kearney, Neb.	100
13	Dave Warner, Tecumseh, Neb.	80
14	J. L. Barton, Greenwood, Neb.	110
15	Hogues & Beaman, Crete, Neb.	120
16	L. Hafer, Seward, Neb.	106
17	J. Mandelbaum, Blue Hill, Neb.	150
18	E. L. Hoffman, Waynesville, Ill.	175
19	A. J. Brower, Kingsley, Iowa	132
20	E. A. Davis, Galva, Iowa	107
21	John Tyson & Son, Mound City, Mo.	120
22	Frank Zackery, Mound City, Mo.	105
23	Same.	100
24	W. B. Long, Cordova, Neb.	108
25	A. Wickstrom, Holdrege, Neb.	50
26	L. Hafer, Seward, Neb.	57
27	Watson Ranch, Kearney, Neb.	120
28	G. G. Council, Williamsville, Ill.	150
29	J. W. Raymond, Maysville, Mo.	65
30	L. W. Cook, Liberty, Neb.	100
31	H. C. Sydnor, Corder, Mo.	101
32	John Tyson, Mound City, Mo.	100
33	John J. Blattery, Good Intent, Kas.	100
34	Gartin Bros., Darlington, Mo.	97

These figures are very gratifying, being only comparable to those obtained at the dispersion sale of Mr. T. J. Harris, of West Liberty, Iowa, January, 1893, when sixty-five females averaged \$121.79 and two males averaged \$160. The average of the thirty-four head above given is \$125.38.

The Midway sale furnishes a lesson to those who are wise enough to heed it. This lesson is the very old one that there is always room at the top. The sows in the offering were by such noted sires as George Wilkes, Guy Wilkes 2d, Black Chief, Orient, Opposition, Equality, Square Tecumseh, Chief Tecumseh 2d, Victor, etc., and were bred to Chief Tecumseh 2d, except in the case of his own gilts, which were bred to N. B. Tecumseh. The prices secured indicate the confidence which the purchasers feel in pure-bred swine, and those purchasers being leading breeders, who give their best thought to the subject, are, therefore, best entitled to have an opinion. They not only have an opinion, which is very favorable and encouraging to the industry, but they are ready to back this opinion with their means; and, according to the old saying, "It is money that talks." The splendid average made at the Midway sale should afford a fresh stimulus to enterprising breeders, and spur them on to fresh efforts to secure the best and to bring their herds up to the highest possible degree of excellence, in the full confidence that the cream in pure-bred swine is always rich and remunerative.



## cultu Irrigation.

### "THE" IRRIGATION WITH STORM WATERS.

By Hon. Geo. M. Munger, of Eureka, Kas., read before the annual meeting of Kansas State Horticultural Society.

(Continued from last week.)

After all, this question of whether or not it will pay, is the vital one to be considered. It hardly seems prudent to assert that corn at 15 cents per bushel, or wheat at 40 cents, will pay for or warrant the installation of an irrigation system, but in considering irrigation as an aid to horticulture, there seems to be small hazard in recommending it. Should a man obtain by irrigation a yield of 100 bushels of corn per acre, and then get 15 or 20 cents per bushel for it, he could not be said to be making headway rapidly, at least, but if a man has a bearing orchard that is yielding an occasional crop of from fifty to one hundred bushels per acre, and out of that one-half to three-fourths must class as seconds or culls, and by irrigating that orchard he can increase the same fruit so that it will measure three times as much and all grade "fancy," without any culls, it is easy to see that at any prices for fruits that have been known to prevail, this man could easily afford to expend a very considerable amount per acre to install his irrigation. Then should it so be that in place of an occasional crop, the irrigation will produce for him regular annual crops of this same class of fruit, it will require no book-keeper to discover that it is profitable.

If the water running down the Kaw should be applied to the potato crop that is so successfully grown along its fertile bottom lands, and should the result be to double the yield, it would not be necessary, ordinarily, to ask if it paid. Those suppositious advantages are shown by the experience of irrigators to be quite within bounds and conservative rather than extravagant.

This autumn apples were sent from the Grand valley, in Colorado, to show what irrigation can do and actually does there, and the Wagners weighed fourteen ounces and Rome Beauty fifteen ounces. More than this, it is positively stated that in picking there is little need of sorting, as everything grades "fancy," and faulty fruits are practically nil.

The question is asked, "Is the quality of apples and other fruits grown under irrigation equal to that grown under natural conditions?" The answer to that question is, when you select fruit to eat, do you prefer the stunted, gnarly specimen, or the well-grown perfect one? If you had your choice of beeves for slaughter, would you take the stunted specimen that the feeder would reject or the well-fatted animal? It is the invariable rule that the full-grown, well-developed specimens are the best in every way, whether beef, apples or corn. Yet the fact remains that the differences between a large, fine and well-developed apple and the reverse is mainly water. Plants of all kinds can only grow and thrive with an adequate supply of water, as the mouths or valves of their feeding roots are microscopical, and in many, if not all plants, these small roots are themselves invisible to the naked eye. The condition requires that all their food be in absolute solution, no other method of getting sustenance being possible to them. Plants must have water to do their best, not only in plenty but at all times, and is as necessary to best development as it is to the fattening steer, the difference being that the steer can call attention to his wants and enforce attention while the plant will suffer in silence.

Here is a quotation from the *Denver Field and Farm* of late date: "The poorest apple crop in Colorado this year is that from the Stark Brothers' dry orchard, in Arapahoe county. The yield from nearly ninety acres of nine-year-old trees is but 850 barrels of marketable apples. It is time for the Stark Brothers to begin the realization that apples cannot be grown without irrigation in Colorado."

A paper read by Mrs. A. B. Clark, of Independence, Kas., before the Cherryvale Farmers' Institute, February 21, 1895, makes some statements regard-

ing yields of some commercial orchards, from which the following are selected. Of the Wellhouse orchards, she reports, "an average of over \$20 per acre yearly for the whole fourteen years." Of the orchard of J. H. Hillis, of Gentry county, Missouri, she reports, "\$86.66 per acre yearly—for ten straight years."

President W. B. Felton, of the State Horticultural Society of Colorado, reports, "five acres in winter apples (mostly Ben Davis), \$1,155 per acre." Two exceptional yields were reported in the same paper, but the conditions were abnormal.

A Mr. Shropshire, living in Colorado, owning a small orchard, was offered \$800 per acre for it, and answered that he made that much annually from it. Messrs. Tibbets & Sons, having a 100-hundred acre orchard near Grand Junction, in the Grand valley, were offered and refused \$40,000 in money for it, or \$30,000 for a choice forty acres of it. These are all young orchards. Statements like these should call the attention of the Kansas fruit-grower to the thought that there is something he has not yet discovered in fruit-growing. It is not very difficult to show that the lack is almost exclusively water.

Sub-irrigation has been discussed more or less in the public prints, and in some cases with considerable vehemence. It is sufficient to say that according to government reports on the subject the practice has been thoroughly tested in southern California by fruit-growers and condemned. The Utah Experiment Station has also recently issued a report on the subject, and the following is an extract from the summary: "The experiment covers ten trials, and in every trial but one the surface irrigation gave the highest yields. The system is so expensive that it is doubtful whether it could ever be applied to general farming."

The quantity of water required is an important part of the subject, and as bearing on that point, the following extract from an editorial in the *Greeley Tribune* of January 31, 1895, on the duty of water and its results over large areas, is of interest: "Whereas the Larimer county ditch has just half as many acres under cultivation in Weld county as has canal No. 2, it produces a trifle more than one-third as much wheat, about one-tenth the number of bushels of oats, and less than one-sixth the number of sacks of potatoes. It takes water to grow crops, and other things being equal—that is, with the same cultivation and the same character of soil—the greater the water supply, up to the maximum quantity that can be used to advantage, the bigger the yields and the more profit to the farmer."

This difference in yields is so great that it is no wonder the editor reaches the conclusion as read.

There is water enough that falls on eastern Kansas and that runs off to the sea each year to irrigate an enormous proportion of the irrigable land, and it may be doubted if any present live to see the demand for it so great as to require its entire utilization. While it is possible and not uncommon to obtain a paying product under dry farming in the region, irrigation will provide for those seasons and parts of seasons when the natural rainfall is insufficient for the greatest and best results; and more than that, it is an insurance against failures in all seasons.

I am now confronted with an opinion on the profits of irrigation with storm waters by a very high authority, viz., Prof. F. H. Newell, of the United States Geological Survey. In a paper read before the Texas Irrigation Association, recently, Mr. Newell says: "I am still far from confident as to the present practicability in general of this method of development." He also says: "It must not be supposed that irrigation is alone valuable in the arid or semi-arid portions of the State. Perhaps the greatest benefit will come through the construction of irrigation works, not with the intention of using them at all times, but rather as an insurance against the deleterious effects of occasional droughts." In spite of



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IRVIN VAN WIE,

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the doubts of Mr. Newell, we have the testimony before cited in this paper of the long-continued use of the system in India, and with remarkably beneficial and profitable results, and that with a class of products that must meet the competition of the world's markets. Even now, Kansas farmers and Southern cotton planters are engaged in an unequal struggle against this most formidable competition.

India has approximately one-half the area of the United States, exclusive of Alaska, and about four times the population. This indicates a density of population about eight times that of this country, and yet we find that country making rapid strides in its commerce with the world. The topographical and climatic conditions are not widely varying from ours, being located between the 8th and 36th degrees of north latitude. It has, as has this country, great range in its rainfall, varying from almost rainless, as in Arizona, to the greatest rainfall known in the entire world, viz., at Khasaya, where the average annual rainfall is given by Haswell as 610 inches.

The English government has expended in irrigation works of all classes an amount variously estimated but well up in the hundreds of millions of dollars, with the result of not only paying dividends on the money invested that are satisfactory, but with great profit and advantage to the people, besides the vastly more important consideration of having put a period to the frequently recurring famines that were formerly so horribly devastating to the country.

Finer fruits, grains, vegetables and animals never grew than have been always grown in Kansas whenever and wherever the rainfall has been abundant and well distributed. To say that finer fruits, grains, vegetables and animals never grew than are always grown in Kansas, that is to say, to place the products of this State at the very top of the ladder, requires but the application of well-proved and demonstrated practices in the older countries of the world. Irrigation knows no method of placing water on land and crops so utterly unscientific and illy adapted to the needs as the rainfall in its natural way. And there is nothing left but to follow the examples of those people in other parts of the world to wrest from nature the boundless prosperity that a beneficent providence has placed within our reach. But above and beyond all considerations of material prosperity, is to be considered the demands of humanity. Human character is molded by its environments, and a thrifless man cannot be of the greatest use to himself or to his country. A high standard of manhood is more to be desired than material prosperity, but the two must go hand in hand.

### Important to Breeders.

Every one interested in improved stock should have the *Breeder's Gazette*, of Chicago, as well as the *KANSAS FARMER*, which we furnish for the price of one—both papers one year for only (\$2) two dollars; or we will supply the *National Stockman and Farmer*, of Pittsburgh, Pa. (the best general farm and stock journal in this country, price \$1.50), and the *FARMER*, for \$1.50. Send for sample copies to the papers direct, and save money and get a big benefit by sending your subscription to *KANSAS FARMER*, Topeka, Kas. No progressive farmer or breeder can afford at this low price to be without this great trio of farm magazines.

### Salt and Milk.

Recent experimenting to ascertain whether the giving of salt to dairy cows has any direct bearing upon the supply of milk showed conclusively that it is very expensive to neglect that humane duty. Three cows were kept without salt for one month, and during the last half of the period the milk was weighed twice daily. The cows were then given four ounces each daily, and after that their capacity was again allowed to develop, because of the salt, and it was found that the increase for the half month was 100 pounds of milk. A constant supply of fresh water is just as important.

The movement started a few weeks ago at Utica, N. Y., to raise \$50,000 to conduct an aggressive warfare against the sale of oleomargarine and "filled" cheese and to secure needed legislation against these fraud products at the hands of Congress is meeting with good success. A good deal of money has already been subscribed, and a plan of contest arranged along proper and legitimate lines. To such an extent is confidence reposed in the ultimate outcome of the movement that we notice that the *Utica Herald* attributes the rise in the price of cheese to its effect. It says: "There is no doubt whatever that the action of the pure cheese and butter committee of Utica has been one of the main factors in the advance of 1½ cents that has taken place since the committee was appointed. The sale of so many goods at interior points to go West, at prices above those ranging in New York, has fully warranted the advance in that city, and it has been largely the result of the action of the Utica Board's committee. If that action had not been taken, it is not probable that prices would have been within ½ or 1 cent of what they now are."

Dr. Shields, an eminent physician of Tennessee, says: "I regard Ayer's Sarsaparilla as the best blood-medicine on earth, and I know of many wonderful cures effected by its use." Physicians all over the land have made similar statements.

### Union Pacific Route.

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

## DRAIN TILE

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20th and Main Sts., Kansas City, Mo.

## IRRIGATION.

When you write mention Kansas Farmer.

## COUGHS AND COLDS

ELY'S PINEOLA BALSAM is a sure Remedy for coughs, colds, sore throat and for asthma. It soothes, quickens, and renders expectoration easy.

**Consumptives**  
will invariably derive benefit from its use. Many who suppose their cases to be consumption are only suffering from a chronic cold or deep-seated cough, often aggravated by catarrh. For catarrh of the throat, Ely's Cream Balm, 50 cts. per bottle; Pineola Balsam, 25 cts. Sold by Druggists.  
ELY BROTHERS, 56 Warren St., New York.  
When you write mention Kansas Farmer.





## BROWN COUNTY FARMERS' INSTITUTE.

The fourteenth annual meeting of the Brown County Farmers' Institute was held, last week, on Thursday, Friday and Saturday, at Hiawatha, Kas. Notwithstanding the weather was decidedly wintry, the attendance during the session demonstrated that the farmers of old Brown county were alive to the best interests of modern agriculture and the welfare of the northeastern Kansas husbandman.

After the annual address of President Samuel Detwiller, "Subsoiling" was taken up, and the several reports were greatly in favor of subsoiling. Plots of ground side by side showed larger yields in every instance where the subsoil plow had been used.

"Preparing Soil for Wheat," was taken up by Mr. J. D. Hardy, who presented a carefully-prepared paper thereon, which brought out a diversity of opinions on the merits of shallow or ordinarily deep plowing other than by subsoiling. To the listener sitting in judgment it was apparent that the season, character of the soil and the condition of the ground, as well as the kind of seed, had much to do with the outcome, and that deep plowing usually brought larger yields.

The question, "Why Follow Corn With Oats and Then Wheat?" was asked, and after a thorough airing, President Fairchild, of the State Agricultural college, among other things, said, that by following corn with oats a better seed-bed could be made for the wheat, and it gave the farmer an opportunity to get the wheat in early after the oats had been harvested, and avoided a rank growth of weeds.

The subject, "Care of Wheat After it Has Been Grown," was taken up by William Haffner, who advocated cutting before dead ripe, carefully shocking, and then stacking and allowing to remain in stack four to six weeks before threshing. Some favored shocks containing twenty to twenty-four sheaves, while others favored stacking direct from the reaper, and others threshing from the shock. However diversified were the opinions, take it one year with another, as was brought out, over the wheat-growing world shocking and stacking prove the safest and more profitable.

Thursday evening session was taken up by President Fairchild, on "Benefits to the Farmer Resulting From the Agricultural College." He gave a succinct history of the college since its founding, in 1862, and stated that it now had the largest attendance of any agricultural college in the world. Over 600 students are in attendance and receiving the benefits of an equipment, both mechanical and practical, which makes it the most thorough possible and qualifies the student for the duties resulting from the needs of the more modern agriculture.

He was followed by Prof. W. S. Williston, of the State University, of Lawrence, who presented the merits of that institution. Such is its great popularity that about 900 students are now in attendance and receiving an education equal to that afforded at any university of the United States and at about one-fourth the cost of the older and more eastern institutions.

Friday morning session was opened by Mr. John McCoy, on "How Shall We Provide Rough Feed for Our Stock During Both Summer and Winter?" The paper was replete with good things, which, condensed, showed that it were best to have the stock in good growing and thrifty condition all the time, especially in the fall, before the commencement of winter. A little grain with an abundance of rough feed—hay, corn fodder and sorghum—and a shelter to be occupied at will by the animal. Pride and a determination to be as humane with domestic animals as to one's self, with care in the selection of the best for breeding, always results in the largest profits and the greatest degree of satisfaction to the owner and to the buyer.

"The Farmer's Orchard," by Stephen Quail, was an interesting paper. Among other things, he recommended an orchard of 150 to 200 trees, which included cherry, plum and crab trees.

For summer, Red June, Red Astrachan, Early Harvest and Duchess of Oldenburg. The fall and winter varieties were numerous, and of the winter kind the Ben Davis, while not really much of an apple, was a good seller. After the long winter keepers had gone the earliest summer varieties were the most welcomed, hence the writer mentions their names.

The subjects, "Small Fruits," and "How Shall We Select Seed to Improve the Different Kinds of Grain We Use?" brought out a long train of ideas, and demonstrated that the major portion of the Brown county farmers were on the highway of learning to find nature as she is and to take advantage of her whims for the betterment of the individual and the greater happiness of the more modern husbandman.

The session of Friday afternoon was opened by Col. D. R. Anthony, of Leavenworth, on "The Best Way to Utilize the Fodder Products of the Farm to the Best Advantage." He believes in corn fodder. Made a success of using the corn binder. Used a shredder and secured two and a half tons of excellent fodder per acre, which the stock relished and consumed over 90 per cent.

"The Dairy Cow for This County and Her Care," was opened by Mr. E. H. Keller. He advised selecting a typical cow to begin with, no matter what color, and to get the best results must shelter and feed. No feed, no milk, and eventually no cow.

One of the most interesting papers of the entire institute was that by Mrs. Thomas Evans, "How Shall We Handle the Dairy Product?" It was replete with how to make butter and cheese and contained just such practical ideas as the farmers' wives throughout the entire State are seeking to obtain. The paper will appear later on in the KANSAS FARMER.

The question, "How Lessen the Burden of Farmers' Wives?" was most thoroughly gone over, and, in brief, it was suggested that every husband, son and brother begin on January 1, 1896, and take ten minutes each day during the month of January and think out how many ways he can manage to assist the mother, wife or sister, and then resolve to practice what he preaches.

The discussion on "Poultry" brought out the general conclusion that cross-breeds are more healthy than the pure-breds on the farm, and that the introduction of new-blood pure-bred cockerels each year is necessary to attain the greatest success.

Friday evening's session was opened by Prof. Mason, of the Agricultural college, on "Plant Propagation," which he illustrated by charts and diagrams. The ideas brought out during the two hours' time occupied were just such as every farmer his wife, son and daughter should be familiar with, and no Kansan is better qualified to place it before an audience than is Professor Mason. The orchardist, small fruit-grower, gardener or queen of the household should not fail to enjoy the rich treat at any farmers' institute when the Professor lectures.

The morning session, Saturday, was opened by Mr. A. P. Browning, on "Does it Pay to Sow Alfalfa in Brown County?" His paper was one that related actual years of experience, and best of all, successful experience. Ground should be, if possible, clear of weed seeds, thoroughly plowed and pulverized, sowed in the spring early, not pastured the first year, and better if not pastured at all but kept as a hay field or meadow. Stock of all kinds, including poultry, seemed to appreciate it at all times of the year.

"How Can We Keep Our Hogs Healthy?" was entered into with as much seriousness as any subject brought up during the entire institute. Brown county having, in the past few years, taken first rank in the State for pure-bred swine, and having been during the year as thoroughly cleaned out by disease as any equal area in the entire country, no little interest was manifested in this subject. The preventive fellows that a year ago advocated "poke root powders," "Haas' Remedy" and a multitude of other sovereign and sure-cure remedies,

threw up the sponge and declared themselves completely at sea and ready for new light on the subject.

"Cattle Raising for Profit," was led by G. Y. Johnson, who recommended getting the best that had been bred of the best, no matter whether Short-horns, Herefords or the Polled Angus, but be sure to start with the best of the breed selected, and, having once started, endeavor to improve them. He preferred the Short-horns, and from years of actual experience had made more money at a less expenditure of time, labor and feed than did his less ambitious neighbor. Feed well and all the year study how to breed to improve the individual animal.

The afternoon session, Saturday, was taken up in a general all-round talk, and the election of officers for the ensuing year. Col. E. Harrington, of Baker, was chosen President.

Adjourned to meet in a three-days' session in the last week of December, 1896.

## Gossip About Stock.

The Nebraska State Poultry Show will be held at Omaha, January 21-24, 1896. H. C. Young, Secretary, Lincoln, Neb.

H. M. Kirkpatrick, Connors, Kansas, Wyandotte county, has just added two car lots of fine Shropshire ewes to his flock.

Remember that we furnish the *Breeder's Gazette* and the *KANSAS FARMER*, both papers, for the price of one, for a year for only \$2. A splendid business investment.

R. S. Cook, Wichita, writes that his Champion herd of Poland-Chinas never before showed such health and vigor nor such an extra choice lot of tip-top boars for breeders as now, also choice sows bred to the best boars in the West. Bargains plentiful.

D. P. Norton, proprietor of the Neosho Valley herd of Short-horn cattle, says in a recent letter: "I never saw anything like the inquiries there have been for stock, especially bulls and heifers. If half of them buy there will not be enough in Kansas to go around."

The Topeka Linseed Oil Works, of Topeka, extend an invitation to the visiting farmers and stockmen, who will be in Topeka next week, to call and get prices and other information regarding the merits of oil cake and oil meal. The article in this week's paper gives some important facts regarding linseed meal.

W. H. Wren, Marion, Kas., writes: "I am breeding twenty-five early gilts and about fifteen older sows to Wren's Medium 12387, and Hadley Yet by Hadley Jr. 18314, dam Martha Washington 8th by Longfellow, winner in class at the Columbian. The above sows are for sale and will be priced worth the money, either singly or in lots to suit buyers."

R. Scott Fisher, of Holden, Mo., reports a fine lot of Poland-China boars on hand that he is offering lower than he ever sold them before. Owing to a change of location in March, he is compelled to sell them at a sacrifice, as he has no room for them in his new quarters. Any one in need of a boar should write to Scott at once for description and prices. He has from 125 to 250, and his stock is first-class. He contemplates having a brood sow sale in February. Write him for particulars.

The Larimer-Bridgford Live Stock Commission Co. wishes all of its friends a happy, prosperous New Year, and states that this company will make no changes the first of the year, but will have the same competent corps of salesmen which it has had the past year, and will remain in the same offices it has occupied since 1886. Their office is at the head of the stairs on the second floor in the old wing, and is one of the best located offices in the Exchange. The FARMER believes that this company is one of the very best at the yards and recommends the farmers and feeders of Kansas to consign to them. Mr. Larimer, the President of the company, has spent the greater part of his life in Leavenworth and Montgomery counties, and his genial qualities and wide acquaintance has brought the firm a large following in all parts of the State. The company does an exclusive live stock commission business, seeking to control business, not by buying it, but by deserving it.

Mower Bros., Lost Springs, Kas., said: "The Berkshires we got of you last year did so well we want some more." Result, more sales to them. Don't you want some? Will sell cheap and guarantee satisfaction. Write O. P. UPDEGRAFF, Topeka, Kas.

By return mail, full measure. **FREE MOODY'S New Ready-Made** Also latest skirt and blouse patterns and new complete directions for cutting, darning, stitching, trimming, making and finishing entire dress. K. O. LINTON Co., 1508 Main St., Kansas City, Mo.

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**SPRAY PUMPS** 21 STYLES. BEST AND CHEAPEST. Catalogue and full treatise on spraying fruit and vegetable crops mailed free. Address WM. STAHL, QUINCY, ILL.

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"DO IT YOURSELF!" Pat. Oct. 8, 1895. With Root's Home Repairing Outfit for half-soiling and rep'ing Boots, Shoes, Rubbers, Harness, Trowsers, etc. No. 1, 40 items, \$3. No. 2, 22 items, \$2. Send for FREE color describing them and "Root's Simplicity Process" for home rep'ing. Carpenters and Blacksmiths' tools, etc. Agents wanted. The Root's Line Co. Box 7, Plymouth, O.

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CULTURE

## The Home Circle.

THE Y

## To Correspondents.

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

## "AS DAY SUCCEEDETH DAY."

With the New Year's January comes a parting of the ways  
One leading to new glories, one away to fading days,  
One back to dying embers, one to hearthstones fresh ablaze.

Brisk winds from off bleak hillsides play with the fleecy snow,  
While mirth and cheer are plentiful where home fires brightly glow,  
And sweet content and happiness hand in hand together go.

The reign of winter weakens as freshly passing time  
The breath of springtime hastens to melt the frost king's rime,  
While the god of day rides higher on each day's heavenward climb.

Bud and blossom take their places as the seasons come and go  
And the stream of time incessant, keeps up its onward flow,  
And springtime glories vanish when comes the summer's glow.

Anon with waving leafage appear bright tints of emerald green,  
Where floral wealth and beauty catch rare hues of rainbow sheen,  
Then brilliant banners float in turn, waved by an autumn queen.

Full soon the frost king strolls abroad with sharp and chilling breath,  
Beckoning winter's coming onward, where it closely followeth,  
Until field and forest recognize the season's annual death.

A robe of spotless ermine over mother earth is spread  
The streams are bound with icy chains, each hill lays bare its head,  
And December comes to find once more the old year dying—dead.

—Selected.

## NO MORE RICE-THROWING.

An Ancient Custom No Longer Tolerated in the Best Society.

Fashion's freaks are not always so unutterably silly as her stern opponents would have one believe. For instance, when she decreed that rice throwing at weddings was to come to an end, she sensibly signed the death warrant of a barbarous and dangerous custom. The foolish practice obtains now only among those who always will cling to a custom because it is a custom. In really fashionable sets here or abroad it has been agreed that too much serious damage has been done to bride and groom by the hard little grains not to make some substitute necessary.

In addition, however, to marriage bells and festive garments, some outlet seemed needful for the joyful feelings the occasion is supposed to arouse. And in England paper confetti are having quite a vogue. These are disks of paper, about the size of a letter wafer, variously colored and stamped in silver or gold. Armed with cornucopias full of these, the bridesmaids salute the "happy pair" as they leave the parental mansion.

It is easily conceivable what a pretty and effective scene could be made of this custom, especially as our weddings run nowadays to a "color." A pink wedding, with pink cornucopias and pink confetti stamped in gold would infallibly have a delicious memory picture for the guests.

The real confetti of Italian carnival fame are little balls made of starch and water. They were so constructed as to break when thrown, and in breaking scatter the starch powder over the person whom they struck. It was often painful to get these stinging blows on cheek or neck, and, like the rice, they are passing out of use.

But the paper confetti is as little likely to become really popular as the rice for the reason of the mess it makes when scattered over house and grounds. Crumpled paper lying about is as ugly as the aggravating rice grains crunching under the passer-by's foot. And the general run of housekeepers, whether of high or low degree, detest a "muss."

—N. Y. Herald.  
Pass It Along.  
We must be kind to others if we'd hope for others' love;  
Who kicks the man beneath him must be kicked by the man above.  
—L. A. W. Bulletin.

## Beginning of a New Life.

He—It makes me a better man every time I kiss you.

She—I've been hoping, dear, that you would reform.—Life.

## BRIGHT AMERICAN GIRL.

She Makes a Study of How Europeans Eat Their Meals.

Americans Always Call for Ice Water, Frenchmen Are Sticklers for Style, Germans and Englishmen Want Solid Food.

The climate, the place, the people and the language may change, but the table d'hôte is ever the same. You have no choice; you are literally "at the table of the host," and you must take what he gives you and be thankful that hunger has given you the necessary appetite. There are two things almost indispensable to the American tourist which are rarely furnished unless a special order is given—the first, butter; the second, ice water. The butter, when it is secured, is always unsalted, and the water uniced, which necessitates a second order and another wait; anything out of the unusual taking time illimitable. It is said that the American is distinguished by his prompt demand for ice water, and, if this is true, of which I have no doubt, there is no adequate reason, considering the great number of American tourists, why it should not be served more promptly. I have tried everything to quench the thirst of travel but nothing but water will satisfy.

The table d'hôte dinner greatly simplifies the arrangements for service. Having the same dinner to serve to each guest, there is a system and order maintained which is different from the hurry and skurry of a dinner a la carte. At Neuhausen, where the Rhine falls attract so many visitors, I was particularly struck by the silence and system of the attendance. The waitresses were attired in Swiss costume, the short bordered skirt, the black bodice, with silver chains, and filigree medallions on shoulder and neck, and the spotless white chemisette. At the beginning of each course the waitresses formed a line at the door, and then, at a signal, took their respective places, either at the head, foot or center of the long tables. They stood a few seconds, with huge trays poised in air; then a bell



THE PRETTY WAITER.

sounded, the trays were lowered and the guests served.

I have been much surprised at the small amount of beer drunk by the better class of Germans. A German without his beer had always seemed to me rather a Hamletless Hamlet, but, I am told, and observation bears out the assertion, that the better class of Germans do not drink beer. On the Rhine boats beer is not served in the first-class saloons, and in the great garden at Baden, where the open-air concerts take place and which is the great place of resort, very little beer is served, the general order being for the popular Rhine wines, while the Frenchman takes his inevitable cognac and coffee, a sip of the cognac, then one of the coffee, then both poured together and drunk being the approved method.

Somebody has called Scotland the "country of two jams," orange marmalade and some other preserve making their appearance at every meal with startling regularity. Switzerland might be termed the country of honey. On every breakfast and lunch table the little pot of honey is laid out and, if the sweetening process begun

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

# Royal Baking Powder

## ABSOLUTELY PURE

in Scotland is continued in Italy and France, my bad temper will no longer be a source of anxiety to my friends and prayerful meditation to myself.

One can always tell the nationality of one's neighbor at these tables d'hôte by what he takes to drink. The American always has his ice water, the German his Rhine wine, the Englishman his dark, heavy wine, when he can get it, which tastes like half-fermented vinegar, and the Frenchman his champagne or his cognac.

And the customs are so different in the manner of eating and drinking. There is a profound satisfaction in the meal itself to the Germans and Swiss, who eat, oblivious of the rise and fall of empires, duels and death. The Americans always act as if they were in a hurry to catch a train, and they usually are; the Frenchman eats more slowly, with more attention to details, attentive service, etiquette, etc., while the Englishman resembles the German, in the solidity of his food and the way he swallows it.—N. Y. Recorder.

## FOR YOUNG WIVES.

Advice Which, if Heeded, Will Lessen the Friction of Married Life.

Some excellent advice to a young wife consists of an earnest exhortation to preserve discreet silence with respect to family matters, says Princess.

Always remember that what you learn about your husband's family is to be kept to yourself; that when you married him and took his name you became one of the family, and the little trouble, the little skeleton, is not to be discussed with the members of the family in which you were born. To your sister it may mean nothing that some trouble has come to your husband's brother. You may tell it to her in secrecy, and it may seem of so little importance that she will repeat it to her sister-in-law, and gradually what was meant to be kept quiet is told all round the neighborhood. The art of keeping to yourself what you hear on each side of the house is one that you must cultivate, for it means the keeping of peace. Surely, you would not wish to hurt your husband, and yet you will do it if you cannot keep quiet. When you enter his mother's house, anything that is told to you in confidence must be forgotten when you leave it, unless, indeed, it is discussed with your husband, and the same rule will apply to your own family. Don't imagine that every little frown, every little disagreeable word is meant for you, and do not retail to your husband anything unpleasant that may have happened when you were visiting at his mother's house. Think that she is your mother, too, and give her the privilege of speaking to you as your mother does. I know it isn't always easy to have fault found with one when one is trying to do one's best, but think over what is said, if there is anything helpful in it. It is in the woman's power to make or mar the sanctity of marriage by the manner in which she accepts its responsibilities. It is as due to the earnest endeavors of a good wife that many a husband has been reclaimed or prevented from leading the downward path, as, unfortunately, it is that carelessness or indifference or neglect from the "weaker half" in physical strength has weakened her power and made her influence useless.

## New Style of Corset.

The latest ideas in the way of stays are those which lace up in front instead of the back. They are said to be much better for a weak back, and also have the advantage of making the waist look much smaller than the old style.

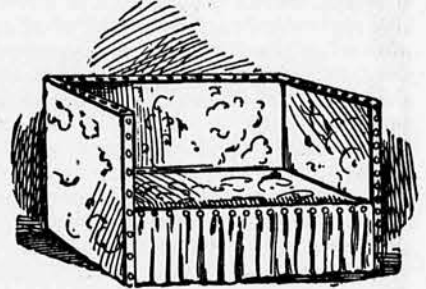
In cases where dandruff, scalp diseases, falling and grayness of the hair appear, do not neglect them, but apply a proper remedy and tonic like Hall's Hair Renewer.

## BABY'S OWN SEAT.

How an Ingenious Mother Utilized an Empty Wooden Box.

Babies a year old enjoy a little seat of their own fully as well as the older babies, for whom one can buy a suitably-sized rocking-chair.

I made a seat for my baby, and it was the envy of all the youngsters in the neighborhood. I took a wooden



box, such as salmon cans are packed in, about sixteen inches long, ten inches wide and a foot deep; took off one side, nailed cleats on the inside four inches from the floor, and fastened in the cover board, sawed off to fit, as a seat. I padded the seat, back and sides with cotton, and covered the whole with cretonne, tacking it on with brass-headed tacks, and also tacked on a little valence to the front edge of the seat to hang to the floor. The bottom was left on the box, and it proved to be a particularly substantial and serviceable affair.—Babyhood.

## MEDICAL TREATMENT.

If you want the best expert and scientific treatment by the leading physicians and specialists of the country, consult only DR. HATHAWAY & CO., 70 Dearborn St., Chicago, Ill. All Chronic Diseases of men and women, Private, Skin, Blood and Nervous Diseases. Cases treated by mail all over the world by sending for Symptom Blank No. 1 for men, No. 2 for women, No. 3, Skin Diseases, No. 4 for Catarrh. Best of references.

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**PILES,** All forms, hemorrhoids, dyspepsia, etc., immediate relief. Price 50 cents. To those never having used our celebrated remedies, will send a prescription of either for 25c. as a trial. Dr. W. T. Kirkpatrick, Lincoln, Ill.

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at 25 cents a dozen will pay one year's subscription to Farm-Poultry. If you have 50 hens and each lays one egg more because of the better methods of care and feeding that you have learned from Farm-Poultry, the paper will have paid for itself.

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is a practical guide and instructor for everyone who wants to make money on poultry and eggs for market. It is edited by practical poultry raisers, who teach facts—not theories. It tells how to make pullets lay early, how to make hens lay more; how to prevent and cure diseases of poultry, and hundreds of things that the successful poultry raiser needs to know. Price \$1.00 a year; 50c. for six months. Sample copy mailed for two cents.  
I. S. JOHNSON & CO., 33 Custom House St., BOSTON, MASS.



## The Young Folks.

### OLD MAN JONES AND LITTLE JOE.

'Pears as ef I can see 'em yit—  
Ole man Jones an' little Joe.  
Joe 'us his boy, an' fer as I know,  
The ole man allers stood by him.  
For whenever he quarreled or fit  
With any uv the neighbor boys,  
Er cheated, tradin' sight unseen,  
In Barlow knives, or other toys,  
An' they'd complain an' say he 'us mean,  
All the ole man said to it  
Wus, lookin' grieved at Joe he'd 'low:  
"He's better now."

Many a day I see 'em pass—  
Ole man Jones an' little Joe—  
Goin' backards to an' fro  
Huntin' work fer Joe an' him,  
Fer the folks is skeres who has  
Jobs to let; an' sometimes they  
'Ud only shake their heads an' say:  
"That air pesky boy uv your'n,  
When I hired him last year,  
Broke up more'n he could earn."  
'N'en the ole man's head 'ud turn—  
Mebby jest to hide a tear—  
Lookin' 'round at Joe he'd 'low:  
"He's better now."

Onct they went down to the creek—  
Ole man Jones an' little Joe,  
Fishin' wh-r 't the cat-tails grow—  
The ole man not watchin' him—  
Joe went wh-r the bank wus slick  
'N fell in, an' come home sick,  
The ole man he fixed a cot,  
By the winder wh-r the light  
'Ud make the boy's face look bright  
An' never left him day or night,  
An' wh-n the neighbors stopp'd an' got  
To inquirin' "How wus Joe?"  
The ole man 'ud answer low—  
Chokin' down a sob somehow:  
"He's better now."

Ther' they wus fer days an' days—  
Ole man Jones an' little Joe,  
Fever seemed to come an' go—  
Ole man thinkin' more uv him,  
Till one day the doctor says:  
"Haf to give him up," says he—  
Ole man never said a word,  
But his white lips trembled some—  
You'd a thought that they wuz dumb—  
Fer all the neighbors ever heard,  
When they laid the boy away—  
Thought they heard the ole man say,  
When he kissed the little brow:  
"He's better now."

Never seen 'em pass ag'in—  
Ole man Jones an' little Joe!  
Fer his ole limbs tottered so  
That the neighbors watchin' him—  
An' his cheeks so pale an' thin,  
'Ud turn away their heads an' say:  
"Ole man hain't got long to stay."  
'Bout a month the preacher come,  
An' the pe'ple gathered in,  
Ever'body's lips wuz dumb,  
But the preacher's ther' that day—  
Don't remember what he said;  
'Bout forgot the text he read;  
Recollect he mentioned Joe,  
An' the ole man grievin' so  
Jist to be agin with him!  
Ever'body's eyes got dim  
Thinkin' mebbey, anyhow:  
"He's better now."  
—Chicago Record.

### ANIMAL FRIENDSHIPS.

#### Horses, Dogs, Hens and a Lioness Form Queer Companionships.

Why it is that animals have such a great dislike for solitude and have fits of loneliness when shut up by themselves away from any other living being is something no one has been able to explain. Yet it is the fact that all animals yearn for companionship, even animals that are wild and fierce.

Remarkably strange and curious are the friendships animals form. Horses chum with cats, dogs with geese, and there are two capital stories, one of how a horse and a hen, the other of how a dog and a hen became fast companions.

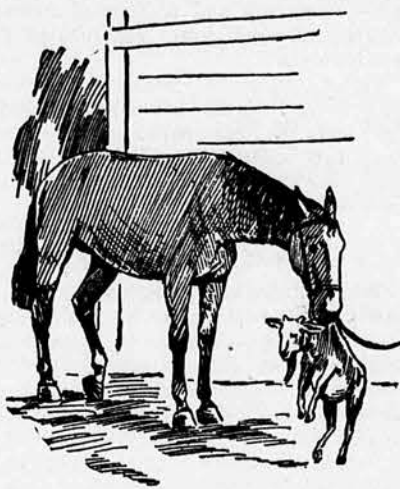
The horse and the hen happened to be the only occupants of a large orchard, and got to know each other and seldom were to be found apart. The hen's favorite method of showing her friendship was to approach the horse with a cackle of joy and rub gently against his legs, the sagacious equine looking down upon her kindly and standing perfectly still in a well-satisfied manner as the feathered wings fluttered about his legs.

In one of the farms just over the border line of the annexed district a hen became so chummy with a valuable retriever that she actually laid her eggs and hatched her chickens in the dog's kennel, and the four-footed beast enjoyed it immensely. He would guard by the hour the eggs, and later the little chickens, and when he had occasion to go in and out of the house he would move with the greatest of care so as not to disturb his feathered friend.

Geese and dogs are apt to be very fond of each other. There is a story of a goose that was rescued by a mastiff from the attack of a fox and was so grateful that it could not show the dog enough attention. It left all the other geese of the farmyard and stayed by the dog day and night, accompanying him daily as he wandered over the farm. When the dog fell ill the goose never once left the kennel, and in its de-

votion it would have starved to death if a handful of corn had not been brought to it every day.

The friendship between the horse and the stable cat has been many times re-



GALEOPSIS AND THE KID.

marked, and it is well known that if for any reason the stable cat is killed or taken away the horse will get impatient and nervous over it.

A remarkable case is on record of one of the Derby favorites a few years ago, Galeopsis, who some months before the race got into a state of positive melancholia, which was rapidly pulling him down. Veterinarians examined him and found that his trouble was purely a nervous one, brought about through excessive loneliness. Nothing could be done for him until a shrewd stable hand happened to suggest animal companionship. A goat and a kid were introduced into the stable with great success, and the race horse picked up so that on the day of the event he was able to make a fine showing.

An eye-witness of this describes Galeopsis' satisfaction as follows: Galeopsis seemed to take much interest in them until the goat died; but the kid remained, and the horse now vastly diverted himself by lifting the little creature up by the back of its neck with his teeth, putting it down in the manger, carefully placing it on the ground again after awhile and then repeating the operation.

There was once a lioness in the Dublin zoological gardens who had arrived at an advanced age and was so feeble that she was unable to drive away the rats that used to annoy her by biting her feet. The trainer at last evolved the scheme of putting a good rat terrier into her cage. She received the dog at first with an angry growl and decided symptoms of aversion, but as soon as the little brute grabbed the first rat and shook the life out of it she began to understand what he was there for, and at once took a great fancy to him. She coaxed him to her side, put her paws around him and night after night the little terrier used to sleep close up to her, both in a state of mutual great content.—N. Y. World.

### THE WISE LITTLE SCHOLAR.

The wisest of my scholars is a gentle little maiden,  
Who looks at life and learning with a pair of soft blue eyes:  
She has an answer ready, with a deal of logic laden,  
And solves all knotty questions and problems as they rise.

We were learning in geography of surface elevations—  
"Can you tell me what relief maps are?" I asked the little class.  
I expected only hanging heads and verbal hesitations;  
But my wisest little scholar couldn't let a question pass.

"If you please, sir," said she, joyously—with pride her cheeks were burning,  
To think that she could answer when the others couldn't do it—  
"A relief map is a map you've been a awful time a-learning,  
And you're awful tired of it, and you're so glad to get th'oo it."  
—Louisa H. Bruce, in N. Y. Independent.

Do you know a good farm and fruit paper when you see it? Let us send you the *Rural New-Yorker* this week. Send your address; no money.

The Rural New-Yorker,  
409 Pearl street, New York.

### QUITE A DIFFERENCE.

#### After Thompson Had Bought the Dog His Bark Was Musical.

The fabulist of the Chicago World has invented a little tale of two men and a dog. Its lesson is too obvious for comment, perhaps, but cannot be learned too often. It is commended to all readers, both to those who keep dogs and to those who do not.

Johnson and Thompson were next-door neighbors. Johnson had a dog that barked a considerable part of every night. Finally Thompson said to Johnson:

"Look here, Johnson, we have always been friends, and I hope you won't take offense if I tell you that the barking of your dog is driving me and my family mad for want of sleep."

"Dear me!" said Johnson. "That's queer. I haven't noticed that Leo ever barked any to speak of."

Two or three evenings afterward Thompson came home leading a dog—the dog—by a string.

"Now, then," said he to Mrs. Thompson, "we will soon have a chance to sleep. I didn't like to shoot the beast while belonging to Johnson, so I have bought him. Nobody can blame us for killing our own dog. I'll get some chloroform to-morrow."

A month passed, and Johnson and Thompson met.

"Well, Thompson, you haven't chloroformed the dog yet."

"No," said Thompson. "The truth is we have become rather fond of the fellow. He is so lively and playful."

"But doesn't his barking at night annoy you?"

"I haven't noticed it."

"H'm!" said Johnson. "The brute keeps us awake half the night. I don't see how you can put up with it."

### Girl Bables in Sicily.

In some parts of Sicily the birth of a girl is looked upon as such a misfortune that a black flag is hung out the window to proclaim the sad event. Having to be supported by the family as long as they are unmarried, and being obliged to dower the bridegroom, they are looked upon as expensive luxuries. Boys, on the other hand, are very soon self-supporting, and when the time comes for marrying, increase the family wealth by bringing home a bride and her dot. The girls live in seclusion, are most kindly treated, and at the age of 14 or 16 they are disposed of in marriage on a purely financial basis.

### How Sleigh Bells Are Made.

It is a mystery to many how the iron ball inside of sleigh bells gets there. In making sleigh bells the iron ball is put inside a sand core, just the shape of the inside of the bell. Then a mold is made exactly the shape of the outside of the bell. The sand core, with the jinglet inside, is placed in the mold of the outside, and the melted metal is poured in, which fills the space between the core and the mold.

The verdict of the people is that Dr. Bull's Cough Syrup is the best remedy for coughs, colds, sore throat, asthma, etc.

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



## Perfect Health

Can only be secured by keeping the Liver and Kidneys in order. Satisfactory results are always secured by using

**Dr. J. H. McLean's  
Liver and Kidney Balm.**

Mothers, fathers, sisters, brothers, all pronounce it the "PEERLESS REMEDY" for curing ailments of the Liver, Kidneys and Bladder, Female troubles, Rheumatism and Bright's Disease. For sale everywhere at \$1.00 per bottle.

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

## Heart Disease Requires

Suddenly; but never without warning symptoms, such as Faint, Weak or Hungry Spells, Irregular or Intermittent Pulse, Fluttering or Palpitation of the Heart, Choking Sensations, Shortness of Breath, Swelling of Feet and Ankles, etc.

### Dr. Miles' Heart Cure, Cures Heart Disease.



Mr. Geo. L. Smith, of the Geo. L. Smith Mantel Co., Louisville, Ky., writes Feb. 26, 1894: "For about a year I was a terrible sufferer from heart trouble, which got so bad I was obliged to sit up in bed to get my breath. I had to abandon business and could hardly crawl around. My friend, Mr. Julius C. Voght, one of our leading pharmacists, asked me to try Dr. Miles' Heart Cure. I had used little more than a bottle when the pain ceased and palpitations entirely disappeared. I have not had the slightest trouble since, and today I am attending to business as regularly as ever."

Sold by druggists everywhere. Book on Heart and Nerves sent free. Address Dr. Miles Medical Co., Elkhart, Ind.

**Dr. Miles' Remedies Restore Health.**

**\$90 Agents Wanted everywhere to take orders for MARION HARLAND'S NEW BOOK, "Home of the Bible." Over 200 New Photos. Pleases Sells Fast. Pays Big. No experience needed. One sold 51 in 30 hours. Illus. Circulars Free. Address Historical Pub. Co., Phila.**

## How to Make Money.

Agents make money fast selling PERFECTION DISH-WASHERS. Washes and dries in two minutes. Sells at sight! For particulars write Perfection Manufacturing Co., Drawer a-3, Englewood P. O., Chicago, Ill.



## Washburn College.

TOPEKA, KANSAS.

Collegiate, Academic, Musical departments. Classical, Scientific and Literary courses. Seven beautiful buildings. 160-acre campus. Large endowment. Faculty unexcelled. Highest standard of admission in the State. Expenses very low. Splendid facilities for science and classics. Fall term opened September 11, 1896. Catalogue on application.



## KANSAS FARMER.

ESTABLISHED IN 1863.

Published every Thursday by the

KANSAS FARMER COMPANY.

OFFICE:

No. 116 West Sixth Avenue.

SUBSCRIPTION PRICE: ONE DOLLAR A YEAR.

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

Address KANSAS FARMER CO., Topeka, Kansas.

## ADVERTISING RATES.

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

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

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

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

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

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

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

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

Justice Brewer, of the United States Supreme court, formerly a Justice of the Kansas Supreme court, has been selected by President Cleveland as one of the Commissioners to ascertain the correct boundary between Venezuela and British Guiana, and he has accepted.

The new KANSAS FARMER binder is made expressly for the convenience of those subscribers who desire to keep their KANSAS FARMERS for reference. It takes but a few seconds to put the paper in it when received. The binder holds fifty-two numbers, and keeps the papers in as nice shape as if they were a book. The price is 25 cents, postpaid, or \$1.10 for the binder and the FARMER one year. Send your own renewal for one year and a new yearly subscriber, with \$2 for both, and we will send two binders, one for yourself and one for the new subscriber.

A valuable book of 300 pages, bound in cloth-covered boards, under the title, "The Horticulturist's Blue Book," by Prof. L. H. Bailey, of Cornell University Experiment Station, has just appeared from the press of Macmillan & Co., New York. It gives in concise form thousands of points of information such as are useful every day to the gardener and orchardist and cannot all be remembered. It is a convenient reference book by one of the best authorities. Price 75 cents, for which it will be sent postpaid. Address KANSAS FARMER CO., Topeka.

The probabilities are that Col. John T. Crisp, Fish Commissioner for Missouri, will come to Topeka and deliver an address upon fish culture for a prairie country, before the quarter-centennial meeting of the State Board of Agriculture, January 8, 9 and 10. Repeated efforts have been made to secure an answer from Mr. Crisp as to his acceptance of the invitation, but not until the official program of the meeting was published, did he respond. A few days ago a letter was received in which Secretary Coburn was notified that the chances are "nine out of ten" that Mr. Crisp will be on hand. He is an ex-Confederate, is one of the ablest Democratic orators in Missouri and an enthusiast on the subject of fish culture.

## A NEW DEPARTURE.

The paid subscriptions of very many of our old-time subscribers expire this month, as each will observe by noticing the printed label on his copy of the FARMER. It has been our custom to promptly drop all such from our mailing list at this season of the year without notice, but in response to a general request, "Please don't cut us off now and we will remit later," we have concluded to keep all names on our list until we receive the money for renewal or have positive orders to discontinue. We prefer, however, to have our subscribers notify us at once that they want the paper for another year and state when they desire to pay.

## THE NEW YEAR.

As civilized peoples reckon time, yesterday was the beginning of a new year. There probably is no reason why the beginning of the year should be fixed at eleven days after the earth, in its journey around the sun, begins again to assume such position, as to that center, as to increase the duration of sunshine upon the northern and decrease it upon the southern half of the globe. In the old days, when men studied astrology, in the days before histories were written, it was discovered that periodically the sun moved away southward, and that as he withdrew the season of warmth and of productiveness of the earth became a season of cold, with its sufferings and of hunger for those who had not provided stores from the summer's generosity. With astonishing exactness did those ancient astrologers fix the time of the solstices. Their realization of the fact that the return of the king of day would be accompanied by the revival of vegetation, the renewal of warmth and comfort and the replenishment of food supplies, might well make sun worshipers of unenlightened peoples, and lead to celebrations of the beginning of the great luminary's return journey. Rejoicing and feasting have always gone together, so that, from the most ancient times, the season of the winter solstice, the beginning of the year, has been celebrated by festivities. After men began to write histories, they tried to fix upon some means of reckoning the year by phases of the moon, and later by days. But since the year corresponds neither to an exact number of lunations nor an exact number of days, the lapse of years found the new year's day, as reckoned in these obvious natural periods, considerably removed from the time of the winter solstice. Attempts were made to reform the calendar and to bring the new year's day as kept by men to correspond with the actual beginning of the sun's northward movement, with the result that, while we now know how many days, hours, minutes and seconds there are in a year, we have succeeded in placing the beginning of the civil year only within about eleven days of the beginning of the year as marked by the astronomical phenomenon.

But Christian nations hold their chief festivities a week earlier than the beginning of the civil year, and are thus seven days nearer to the time of the great annual festivities whose date was fixed by the ancient astrologers.

The year 1895, now a part of the vanishing past, will be remembered in general as one whose return, or the return of whose conditions, is not desirable. The parting kick with which caricaturists sometimes represent the dismissal of the old year, is this year administered with unusual gusto. May the new year bring more general prosperity, more comfort and more enjoyment, and in the hope that such will be his mission, the KANSAS FARMER welcomes the youth, 1896, and wishes every one of its readers and patrons a happy and prosperous New Year.

## NO STATE SALOONS FOR KANSAS.

Governor Morrill opened a veritable Pandora's box when, in an interview with a correspondent of a Kansas City paper, last week, he expressed his preference for the Gothenberg system of dealing with the liquor question. By this system the State owns and conducts the saloons, and its chief advantage over the common every-day saloon system of neighboring States consists in the elimination of the element of profit from the business. Very soon after the interview appeared in print, leading politicians of all parties expressed themselves so strongly in opposition that they were said, in the language of the street, to have "jumped on it with both feet."

Ex-Governor St. John came next, in a big hall and a big Topeka audience, and turned against it the withering denunciation born of his eternal enmity towards the saloon in any form and the argument and irony of the most accomplished stump speaker in Kansas. Prohibitionists don't like it because it means the saloon, and liquor people

don't like it because there is no money in it for them. The Topeka Ministerial Union took the matter up, and, without regard to party, expressed the severest censure of the positions taken by the Governor and appointed a committee to present their resolutions to the Governor.

With this kind of a start at Topeka, the returns from the other parts of the State may be anticipated as likely to show the chief executive standing alone over the remains of a proposition wrecked by universal disapproval.

## A BIG WEEK FOR FARMERS.

The patriotic and progressive farmers of Kansas realize the manifold benefits of getting together once a year to compare notes and discuss current matters of practical interest. Those who come once always find that it pays. The big week this year for Kansas farmers is from January 6 to 11, inclusive, at Topeka. The particular attractions, in the order named, are as follows: Monday, Kansas Swine Breeders' Association. Tuesday and Wednesday, Kansas Improved Stock Breeders' Association, and, beginning Wednesday evening, the quarter-centennial meeting of the Kansas State Board of Agriculture, which will continue the remainder of the week. The annual Kansas Poultry Show lasts the entire week.

Reduced rates have been secured on all Kansas roads on the certificate plan, rates good going January 6 and 7 and returning any time up to January 11. It will be necessary for all who wish to avail themselves of these rates to pay full fare to their local agent and take his receipt for the same, and this must be presented on arrival at Topeka to Secretary Coburn, of the State Board of Agriculture, who will secure return fare at one-third rates.

We urge all farmers and breeders who can spare the week, to attend all of these important meetings, as it will be time well invested. There is every indication of a large attendance, and the KANSAS FARMER office will be glad to meet the visitors and extend a hearty welcome to the capital city.

## AGRICULTURAL LECTURES.

The demand for intelligent discussions of the problems of soil and moisture, of cultivation and production, is rapidly increasing. It is realized that the man who keeps up with the progress of the times makes a better application of his labor and gets better returns from his fields than the plodder who mixes little thought with his efforts. The call for lectures on special subjects is met in several States by the employment of lecturers under State auspices and at State expense. Such provision is to an extent made in Kansas by the Agricultural college, which furnishes lecturers for a considerable number of farmers' institutes each year. This does not seem to entirely meet the demand and in various parts of the State the farmers are arranging with that tireless investigator, H. R. Hilton, for lectures illustrated by experiments, showing the action of water in soils of various kinds and under varying conditions. Mr. Hilton's studies of these subjects and of root growths as they actually occur, together with his interesting manner of presenting them, make him a speaker for whom there is an increasing demand. He has now engagements for Edgerton, Johnson county, January 24; Stockton, Rooks county, February 7; Mankato, Jewell county, February 11, and for Haven, Reno county, February 13 and 14.

It is to be hoped that the next Legislature will make some provision for this class of lectures, so as to make them available more generally than is possible under private auspices.

"Wisconsin Farmers' Institutes, a hand-book of agriculture, is a substantial book of 263 pages, giving a stenographic report of the last three days' institutes for the season of 1894-5. No State covers a wider range of subjects in its institutes or covers them better than does Wisconsin. To residents of other States, Wisconsin sells these reports at 25 cents for paper covers and 40 cents for bound volumes.

## CANAIAGRE IN KANSAS.

The fate of the sugar industry in Kansas seems to be sealed. But one factory—that at Fort Scott—was operated in 1895. The finest factory in the State, that at Medicine Lodge, closed its operations with the season of 1894, and was sold under foreclosure last week. This factory cost about \$110,000, and was bid in for the mortgagee at \$9,480, this being the amount of the balance of the indebtedness and costs of foreclosure and sale.

It is not our purpose at this time to even enumerate the causes which have contributed to the failure of the sugar industry, or to discuss the conditions under which, should they prevail, success would be possible. More important, just now, is the fact that there is likely to be introduced a new industry, in pursuit of which the Medicine Lodge sugar mill is to play an important part.

It is well known that the sources of the supplies of oak bark, used in tanning leather, are being rapidly depleted, while the demand for the tanning reagent, tannic acid, is continually increasing. For some time past the oak bark supply has been partially supplemented by a preparation made from the leaves of a tree in India. This is produced by primitive methods of the natives, for, while the English purchasers of the product would gladly introduce improved machinery and scientific methods, the religious views of the natives will not permit it. The product is, therefore, limited in quantity and variable in quality.

A few years ago it was discovered that the root of the canaigre plant, which grows wild in New Mexico and Arizona, contains immense quantities of tannic acid, this constituting about 25 per cent. of its weight. A factory has been operated at Phoenix, Ariz., which produces about six tons of tannic acid per day from canaigre. This product is controlled by a syndicate in London, England.

The canaigre plant has been tried in southwestern Kansas. It grows well at Garden City, and experimental settings at Medicine Lodge are growing finely. A peculiarity of the plant is that it grows in winter and the top entirely disappears in spring and summer, and the only question about its success in Kansas appears to be that of its ability to endure our winters. Experience thus far indicates that it will be hardy, at least in southern Kansas. It grows well in arid regions.

The Medicine Lodge sugar factory contains all of the machinery appertaining to a canaigre tannic acid plant except some inexpensive appliances for washing the roots, and it has been proposed to convert it into such a factory, having a capacity to produce fifty tons of tannic acid per day. Learning of this and desiring to maintain its control of the entire canaigre output, the London company which controls the Arizona plant has proposed to buy the Medicine Lodge sugar factory. It authorized its American representative to pay the price for which it was supposed the property would sell. Negotiations are now pending between the purchaser and the English company, and there is a strong probability that they will terminate in a sale.

Tannic acid is worth about \$110 per ton. Placing it at \$100, the fifty tons daily output will be worth \$5,000. The roots may be dug at any time when the ground is not frozen, and they may be kept for months without loss, so that a canaigre factory operates during the entire year. The value of a day's output multiplied by the number of working days in a year, gives a very desirable sum for the income of any community. The amount of land necessary to grow canaigre for such a factory is about 30,000 acres. The London company assert that their market will take care of such an output without lessening the price.

There is much political commotion and strong intimations of war in the South African gold country. It is said that Germany, Portugal, and possibly France, are displeased with the attitude of England in that country. The leading mines are said to be closing on account of the belligerent aspect.



## U. S. AND U. K. NAVIES.

A correspondent inquires as to the number of ships in the British and in the United States navies, and the size of the largest gun in each. The published statements as to these points make comparisons difficult, on account of the differences in methods of describing—especially the guns. The *Scientific American* gives summaries, omitting ships which cannot make at least seven and one-half knots per hour and those armed with smooth-bore guns. From this comparison we condense the following:

FIRST-CLASS BATTLE SHIPS OF THE LINE.				
	Total number ships.	Average speed. Knots.	Belt armor inches.	Total dis- placement. Tons.
United States. 4	16.42	18	18	42,274
Great Britain. 29	17.47	18	18	376,900
SECOND-CLASS BATTLE SHIPS.				
United States. 3	16.7	12	12	17,110
Great Britain. 12	13.63	14 to 24	14 to 24	114,080
THIRD-CLASS BATTLE SHIPS.				
United States. 5	11.9	7 to 12	7 to 12	22,020
Great Britain. 11	13.43	8 to 12	8 to 12	77,820
COAST DEFENSE BATTLE SHIPS.				
United States—The six-knot boats armed with smooth-bore guns are reckoned as obsolete. [There are thirteen of these.—Ed.]				
Great Britain. 13	11	8 to 12	8 to 12	52,530
TOTAL BATTLE SHIPS OF ALL CLASSES.				
United States, 12 ships with a total displacement of 81,404 tons.				
Great Britain, 65 ships with a total displacement of 621,290 tons.				
FIRST-CLASS ARMORED AND PROTECTED CRUISERS.				
(Of 20 knots speed and upward.)				
	Total number ships.	Average speed. Knots.	Total dis- placement. Tons.	
United States.... 5	5	21.9	88,500	
Great Britain.... 9	9	21.0	83,100	
FIRST-CLASS ARMORED AND PROTECTED CRUISERS.				
(Of 19½ knots and under.)				
United States.....	21	17.0	159,200	
Great Britain.....21	21	17.0	159,200	
SECOND AND THIRD-CLASS PROTECTED CRUISERS.				
ERS.				
United States....14	14	18.23	46,028	
Great Britain....60	60	19.20	229,605	
LOOKOUT CRUISERS.				
United States.... 5	5	16.73	7,598	
Great Britain....19	19	17.00	36,240	
GUNBOATS.				
United States.... 7	7	18.00	7,300	
Great Britain....34	34	19.00	28,550	
TOTAL CRUISERS OF ALL CLASSES.				
United States, 31 ships with a total displacement of 99,421 tons.				
Great Britain, 143 ships with a total displacement of 536,725 tons.				
TORPEDO BOAT DESTROYERS BUILT AND BUILDING.				
	Number.	Displacement.	Speed.	
United States.....	62	250 tons.	28 knots	
Great Britain.....62	62	250 tons.	28 knots	
TORPEDO BOATS.				
United States.....	10		10	
Great Britain.....	166		166	

Summing up the totals for battle ships and cruisers combined, we get:

United States, 43 ships with a total displacement of 180,825 tons.  
Great Britain, 208 ships with a total displacement of 1,153,005 tons.

These summaries leave out many vessels and armaments which were considered effective in their day, and might yet be made useful for some purposes in case of war.

The question as to size of guns is a difficult one, from the fact that in the published tables British guns are exhibited in tons and United States guns in inches of bore. The "World Almanac" summarizes the British as follows:

80 tons or over..... 10 guns.  
40 to 80 tons..... 84 "  
20 to 40 tons..... 96 "  
4 to 20 tons..... 1,478 "  
Under 4 tons..... 5,122 "

It is currently stated that Great Britain has several 110 ton guns.

According to the "World Almanac," the United States navy has twenty-six fifteen-inch smooth-bore guns which are ruled out by the *Scientific American*. It is a remarkable fact, however, that the later-built vessels of the United States, including the Iowa not yet completed, all carry large smooth-bore guns. The weights of United States guns are not given. It is currently reported, however, that she has some weighing 112 tons each.

The showing made by the *Scientific American* should be read with allowances, for the opposition of that paper to the stand the President and Congress have taken on the Monroe doctrine. There appears to be an effort on the part of all such journals to belittle the fighting strength of their country. It must be admitted, however, that our navy is unequal to that of Great Britain.

The KANSAS FARMER regards a war as both unlikely and undesirable, and to be avoided if possible with honor. It does not, however, look upon the conditions as such as to insure for this country a "licking" if war comes. Indeed, the probabilities are that we

should inflict injury much more rapidly and effectively than we should receive it, and our adversary would suffer grievous losses and complications not of our making. The American people should, and doubtless will, stand firm. From this time forward it will be known that the Monroe doctrine is to be respected by all the powers of the world, that we are not a cringing set of cowardly money sharks, and that while we will not become entangled in the affairs of the old world, we propose to have a hand in the affairs of this continent whenever our interests are affected or our peace and safety menaced.

It is proper here to state that application to the State military department failed to discover more exact information than here given as to the points of inquiry which called out this article. Should the interest continue we may be able to give better comparisons in the near future.

## Statistics of Railways.

The report of the Inter-State Railway Commission includes statistics of railways in the United States for the year ending June 30, 1894. On that date there were 178,708.55 miles of line, an increase during the year of 2,247.48 miles. There were 1,924 separate corporations, an increase of 34 over the previous year. Of these, 945 maintained operating accounts, 805 were subsidiary companies, 98 were private roads, and 76 were not operated during the year. The movement toward consolidation on the base of mileage involved was greater than in the preceding year; 15 roads, representing 1,734.64 miles, were merged; 22 roads, representing 2,351.99 miles, were reorganized, and 14 roads, representing 1,590.34 miles were consolidated. The number of roads having an operated mileage of 1,000 miles or over was 44, and these roads operated 56.30 per cent. of the total railways. The capitalization of roads filing reports was \$10,796,473,813, or \$62,951 per mile. Number of passengers carried was 540,688,199, and the number of tons of freight moved was 638,186,553; both these items show a decrease as compared with the previous year. Gross earnings were \$1,073,361,797, a decrease of 12.07 per cent. Operating expenses were \$731,414,322, a decrease of 11.66 per cent. Net earnings were \$341,947,475, a decrease of \$50,883,100 from the previous year. Income from other sources was \$142,816,805, which added to the net earnings made the amount available for fixed charges and dividends, \$484,764,280. Fixed charges were \$429,008,310, dividends, \$95,515,226, and other payments \$6,092,038; leaving a deficit from the operations of the year of \$45,851,294 as compared with a surplus of \$3,117,745 in the previous year. The number of employees was 779,608, a decrease of 93,994. The number of employees killed was 1,823, and the number injured was 23,422, a marked decrease in casualty as compared with previous years. The number of passengers killed was 324, an increase of twenty-five, and the number injured was 3,034, a decrease of 195.

A preliminary income account for the year ending June 30, 1895, including the returns from 650 roads, and covering the operations of 164,529.38 miles of line, is also included in the report. The gross earnings of these roads for this period were \$1,003,022,853, or \$6,096 per mile, a decrease of \$13 per mile; operating expenses were \$677,667,635, or \$4,119 per mile, a decrease of \$44 per mile, and net earnings were \$325,355,218 as compared with net earnings of \$320,137,670 for the same roads in the previous year, an increase of \$31 per mile. Passenger receipts fell off \$177 per mile, while freight receipts show a gain of \$149 per mile. Total net earnings and income, including income from other sources, were \$358,412,461. Fixed charges and other deductions were \$336,351,946 and dividends were \$53,135,545, leaving a deficit from the operations of the year of \$31,075,030. The amount of dividends paid by the same roads in the previous year was \$61,504,785. Remission on the part of the railways in filing their reports continues to cause serious delay in the compilation of these statistics.

## Balanced Rations for Steers.

In Bulletin No. 36 of the Maryland Experiment Station, Profs. Robert H. Miller and E. H. Brinkley give an account of carefully-conducted experiments to determine the relative advantages of well and poorly-balanced rations for fattening steers. The following is their summary of results of three tests:

"The results obtained during the first and third tests were nearly identical in every respect, and the gains in flesh and fat and the consequent increase in value gave a decided profit from a financial point of view for the well-balanced ration over the poorly-balanced one.

"The results of the second test, owing to the class of steers used and the market value being relatively high in the fall and low in the spring, caused the feeding to be conducted at a financial loss; yet the loss was less with the steers fed the well-balanced ration and as to a certain degree corresponded with the results of tests one and three.

"Taking the average of the results for the three tests (ten steers), we find that the well-balanced ration gave a profit of \$3.73 per steer, while the average for the ten steers fed the poorly-balanced ration resulted in a financial loss of \$1.98 per steer. These results are collected together with the weights of the steers and the amount and value of the food consumed by them."

The experimenters offer the following conclusions, drawn from the results of three experiments in feeding steers for beef:

"1. That a well-balanced ration produced more gain and more profit than a poorly-balanced ration.

"2. Steers fed the well-balanced ration had a higher value per pound than those fed the poorly-balanced ration.

"3. That the ordinary corn and cob meal used by farmers was unprofitable and needed the addition of some highly nitrogenous food, such as wheat bran and cottonseed meal to make it profitable."

## Reads It First.

EDITOR KANSAS FARMER:—I herewith inclose \$1.20 to pay one year for your valuable paper and the "People's Atlas of the World." I am very well pleased with your paper, in fact, I read it before I read the others. I used one of Perine's subsoil plows last season in planting trees and potatoes, and will say that in my opinion it is the plow. Lost hardly any trees and raised a fine crop of potatoes.

A. M. REICHENBERGER.

Andale, Sedgwick Co., Kas.

## Second-Growth Sorghum Hay.

EDITOR KANSAS FARMER:—Will you please answer through your most valuable paper, if sorghum sowed early in spring and mowed the last of June, and stacked as hay, then the second crop mowed in fall, whether the last, or second crop, would kill cattle or not?

O. R.

The conditions under which second-growth sorghum is harmful, as distinguished from those under which it is not harmful, have not been well ascertained. Some think it is harmless until frosted. We have no information of experience with second-growth sorghum treated as O. R. suggests. If any reader has had any experience in this matter we shall be glad to hear from him.

## The Secret of Good Crops.

The modern farmer is not content to use the antiquated tools and methods of his fathers. In this age of keen competition the farmer who wishes to prosper needs and gets the most improved farming implements; and by reading the best agricultural literature he keeps in touch with the spirit of progress that pervades our farming communities. He is particular, also, in regard to the kind of seed he plants and the manner of planting it. The seeds must be of the highest fertility and grown from the highest cultivated and most profitable varieties of stock. The great seed firm of D. M. Ferry & Co., Detroit, Mich., fully appreciate this fact, as is attested by their progressive business methods and the quality of the seed which they supply farmers and gardeners through the dealers all over the country. The reliability and fertility of their seeds are proverbial, and the largest seed business in the world has been created by their sale. In evidence of this

firm's knowledge of the wants and requirements of planters, large and small, is Ferry's Seed Annual for 1896. This book is of the greatest value to farmers and gardeners—a veritable encyclopedia of planting and farming knowledge. It contains more useful and practical information than many text-books that are sold for a dollar or more, yet it will be mailed free to any one sending his name and address on a postal card to the firm.

## Publishers' Paragraphs.

Poultry-raisers will find it profitable to use the "Two-cent column" of KANSAS FARMER to reach customers.

Send \$1 to this office for a subscription to KANSAS FARMER one year, and upon your request we will send you a copy of "Ropp's Commercial Calculator," in paper covers. For 15 cents extra will send it in leatherette covers.

We have received several requests for sample copies of the *New England Magazine*. These have all been referred to the publishers of that journal. We do not know whether free sample copies of this magazine are sent on application, but presume they are, and that applicants will receive them in due course of mail.

Pleased Subscriber: "I want to be one of the KANSAS FARMER family as long as I live and am able to pay for the paper. Enclosed please find \$1 for another year.—J. N. Monroe, Wilsey, Kas." The above is a sample of many letters received daily and encourages the management to constantly maintain and improve the excellence of this journal.

One of the oldest and best known evergreen nurseries of the great West, is located at Evergreen, Door Co., Wisconsin. Readers of the KANSAS FARMER, many years ago, became acquainted with the name of Evergreen Nursery Co., of which S. E. Pinney is superintendent. The advertisement of this company will be found elsewhere in this paper, and any one ordering evergreens of this firm may rest assured they will be treated fairly by them. Write for free catalogue.

Hart Pioneer Nurseries, of Fort Scott, are a bigger institution than most people imagine. Mr. W. F. Schell, the manager, in a recent talk with a FARMER representative, stated that the magnitude of their business was on the increase. The fall shipment alone amounted to seventy-eight cars. They employ 100 men. The outlook for spring trade promises to surpass anything in the previous history of this famous Kansas nursery, and they are well prepared for any demand and will make prices and stock satisfactory to intending purchasers.

A great many men throughout the country, including plenty of really swell fellows, have got it into their heads, rightly or wrongly—and we are by no means sure that it isn't rightly—that there is no reason why any man should pay more than \$3 to \$5 for a pair of shoes, and, to say the least, the idea has this foundation in reason, that excellent shoes are now made for \$3. To pay \$8 to \$12 for a pair of shoes is simply throwing away money, and in many cases this is done to gratify a mistaken notion that none but your favorite shoemaker is worthy to adorn your feet. The recent improvements in shoe machinery make it possible, as shown by the well-known W. L. Douglas \$3 shoe, to produce a shoe to-day that will compare favorably in style, wearing qualities and comfort with those offered at \$6, \$8 and \$10 a pair.

## Farmers' Institutes.

Farmers' institutes have been appointed for the following places and dates, and will be attended by the representatives of the Agricultural college named:

Overbrook—(no date).  
Peabody—January 30-31, Profs. Mayo and Lantz.  
Edgerton—January 23-24, Profs. Graham and Georgeson.  
Washington—January 16-17, Profs. Mayo and White.  
Randolph—January 30-31, Profs. Georgeson, Winchup and Will.  
Hutchinson—February 6-7, Profs. Pope and Mason.  
Hiawatha—December 26-27, President Fairchild and Prof. Mason.

Every breeder in Kansas should have the *Breeder's Gazette* (price \$2 a year) and the *KANSAS FARMER* (\$1 a year). Both journals are furnished by us for the price of one paper, viz., \$2.

The Most Popular Highway of Travel, penetrating the principal cities of the East—the shortest line between Chicago and Boston, with solid through trains to New York city via Fort Wayne, Cleveland and Buffalo, and the only line via these cities having colored porters on its first and second-class day coaches at the disposal of its patrons, is the NICKEL PLATE ROAD, whose unexcelled train service and most liberal rates have long been recognized by east-bound travelers. J. Y. Calahan, General Agent, 111 Adams St., Chicago, Ill.



## Horticulture.

### BEAUTIFY YOUR HOMES.

The following essay was prepared by Mrs. M. J. Coventry, of Fort Scott, and read before the twenty-eighth annual meeting of the Kansas State Horticultural Society, December 12, 1894, at Fort Scott.

A noted minister once said: "Flowers are the most beautiful things God ever created and forgot to put a soul into them." They make of this world a garden of Eden, so many kinds and varieties and so pleasing to the human eye. They grow everywhere, on hill or in the dell, in the woods or on the plains; even on the edge of perpetual snow, on mountain peak, we find them forcing their tiny and beautiful petals through the snow in obedience to nature's laws, and also under the direct rays of the sun.

The All-wise and Almighty Architect of the Universe, our Heavenly Father, might have made this world less beautiful than he has, and it would, no doubt, have been endurable as a place of probation, without so much of beauty as we behold scattered everywhere with a lavish hand; without the rainbow tints and exquisite shading of colors; without the delightfully sweet perfumes and exhalations of the violet, the heliotrope, the rose, the hyacinth, and many others of the bright sisterhood of flowers. Yes, all this might have been done by the All-wise, but he knew that the exhibitions of his love would have been fewer and the incentive to look from nature up to nature's God much less, and then he could not have said: "Consider the lilies of the field, how they grow. They toil not, neither do they spin, and yet I say unto you that Solomon in all his glory was not arrayed like one of these."

Longfellow writes:

"Spoke full well in language quaint and olden,  
One who dwelleth by the castled Rhine,  
When he called the flowers, so blue and golden,  
Stars that in earth's firmament do shine.

"In all places then and in all seasons,  
Flowers expand their light and soul-like wings,  
Teaching us by most persuasive reasons  
How akin they are to human things;  
And with child-like, credulous affection,  
We behold their tender buds expand,  
Emblems of our own great resurrection,  
Emblems of the bright and better land."

There are but few people who do not love the flower garden. There is no work so refining and ennobling as cultivating flowers and fruit. In reading of all the lives of the great men who have ever lived, we find they spent much time indulging those æsthetic tastes which elevate the mind, refine and purify the life and ennoble the soul, and it was in the garden surrounded by those gorgeous yet sweet refiners of nature that the thoughts were penned that immortalized them.

Every family in Kansas, whether residing on a farm or in a village or city, should reserve a spot near the dwelling for a flower garden.

To be loved as it should, the home must be made beautiful and worthy of being cherished.

The neatest and happiest homes are those adorned with well-cultivated flowers—the handiwork of the mother, wife or daughter—and the price of suburban residences of the cities lies in the floral beauties of their gardens. The culture of these beauties of nature tends to virtue, refinement and intelligence, while the lack of it often leads to vice and immorality and an estrangement of the family.

Every child should have a flower-bed of its own, to tend, cultivate and care for as it wishes; allowed to choose the varieties, and to pluck the blossoms at its own pleasure. With a share of these cheering and beautifying emblems of innocence and purity their souls will be taught God's love to man.

Flowers are refiners. Common dross becomes as pure gold under the genial influence of their charm, evil vanishes, good predominates, wherever their cultivation is made manifest. They add a charm to domestic life which nothing else can impart. They bring happiness and content to those possessing them and are always boundaries of civilization.

Desolation is marked by rank grasses and tangled weeds, whereas a well-kept yard, with its carefully-arranged flower-beds, is a harbinger of civilized content.

It does not require the wealth of a

Croesus nor the fortune of an Astor to possess these household blessings. It is the one pleasure that is as free to the common laborer as to the merchant prince. Make home cheerful with books and flowers and the boys and girls will want to stay there. When they have grown to maturity and are left to battle with life's vicissitudes alone, they will often look back to their childhood homes, and as memory travels apace, the sweetest picture it will recall, the one upon which it will linger longest, will be the little flower garden in their dear old home, the brightest vision inscribed on the tablets of memory.

Every sane mind loves the beautiful and receives pleasure from the same. We see beauty in tranquil evening closing the gates of day with tints and hues as gorgeous as if an angel had flown through its portals and left his shining robes as a heritage to a gazing and admiring world. We see it further in the twinkling star, in the moonbeam, in the dewdrop, also in the leaf, the tree, the lawn, and flower. But abundant and varied as is this beauty, furnished by nature, it is not sufficient. Mornings do not last through the day, and sunsets do not come at noon, and so we seek to supplement nature, to add feebly where she has omitted, and so we have painting, statuary, architecture, landscaping, and to these we would add the humbler element (though none the less sweet and pure) of tree, lawn, plant and flower. For these we plead on this occasion. Therefore, friends, we are here to plead with you and all whom we can influence, to plant trees and flowers and otherwise cultivate the beautiful about the home, the school house, the church, in the village, in the city and on the farm. In pleading for this it hardly need be said that beauty is at once product and proof of civilization. Through the history of the race the highest civilizations have produced the highest types of the beautiful. The Greeks, the most enlightened of their age, bowed at the shrine of the beautiful, and so, whether they built an altar or carved a statue, the spirit of beauty pervaded it. Today, the older and more cultivated nations, as a rule, are the leaders in the beautiful, while, on the other hand, the uncivilized and the savage show the lowest types of it. Thus beauty marks culture, whether in the nation or in the individual.

But it is objected that beauty is not bread. Granted. Not all of life's work is for bread. The highest authority has said: "Man shall not live by bread alone." There is a faculty in our nature that asks for the beautiful as certainly and unerringly as the appetite asks for bread. Animals are happy and contented when well fed and sheltered. They do not look at a picture or admire the stars. Man does both, and so has a new source of happiness in the beautiful. Hence he who is surrounded by the beauties of nature and art, has sources of enjoyment unknown to him who is shut in with the uncouth, the gross or repulsive. What is the practical conclusion of this? Simply and obviously that it is our duty to increase the beautiful whenever and wherever we can.

One great plea is made of not having time. When the farmer used the wooden mold-board plow, sowed his grain by hand and reaped it with a sickle, there seemed to be some justification for that excuse, but now machinery and horse-power relieve the greater burdens of the farm, there is no excuse. When an entire family interest themselves in making a home—a home indeed—they find both time and means to accomplish the work.

Again, some will ask, "Will all this pay in dollars and cents?" Yes, indeed. A residence surrounded by a lovely, well-kept lawn, on which are tall, graceful trees, will sell for hundreds of dollars more than a place which stands out alone in the glaring sun, where no relief comes from the heat all the long hot summer day.

An orchard on a farm increases \$1 every year for each apple tree. If 500 trees are planted, \$500 each year is added to the value of the farm. Then what would a farm be worth for com-

fort or pleasure without an orchard? The injunction cannot be urged too strongly upon the farmers of Kansas to plant large orchards, which will yield a hundred-fold in health, pleasure and profit. And although this command has gone forth from this society, and has been heeded by many, the work is but cleverly commenced.

Also large groves of forest trees should be planted on every farm. Every one owning 160 acres can well spare ten or twenty acres for woodland. It would not only enhance the value of his own land but that of all the country. Suppose there were ten acres of every quarter section in the State planted and made a fine woodland. In a few years we would hear nothing more of the rain-line in Kansas. Every Kansan knows that the climate of the entire State has been characterized by no inconsiderable irregularity since its earliest settlement, and that the greatest embarrassment of the horticulturist has always arisen from the extremes of temperature and moisture. If we may believe the testimony of the wood growth, we find that this same irregularity has marked the climate of this region for the last 150 years, and that there have been periods of drought and disaster, and also periods of remarkable fertility, before the advent of the white man, periods which have rivaled even the most productive years of late, almost reaching tropical luxuriance, and periods, too, when either drought or locust spread desolation not unlike what we remember of 1874. Such is the testimony of the forests. And as the geologist reads the history of the earth in the rocks, it is the privilege of the horticulturist to read the history of the vegetable growth and consequence of climate in the records of the forests.

Now, as horticulturists, it will be only an act of wisdom to accept the lesson that may be gathered from our own department of nature. In regard to Kansas, and probably the entire Missouri valley, this lesson will be of vast moment. While we know that our climate for the past twenty-five years has been to a marked degree irregular, we are taught that this is not exceptional, but has characterized this region for more than a century, at least, and to counteract the effects of climate is now and ever will be the most important and difficult work of the horticulturist. We need, then, to seek for the means to counteract the effects of these marked irregularities of temperature, moisture and wind. I am a firm believer in the possibility of converting most of the Western plains, to the foothills of the Rocky mountains, into practical farming condition by the planting of large orchards and forests, which will help to retain the moisture and check the hot winds which carry desolation in their path.

Years ago, Spain wished to raise money for a public expenditure, and so cut away vast regions of forest timber. After that the country was visited by cyclones, droughts and torrents. If, then, the cutting away of forests decreases the rainfall, the planting of forests will increase it. The passion of gain is too strongly in contrast with our civilization and is at the bottom of those disasters which will result to the instigator as unfortunately as the killing of the goose that laid the golden egg.

To you who have done so much for the State of Kansas, we need to give a vote of thanks for the work that has been done in reclaiming and beautifying the treeless plains, which once were marked in the geographies as the "Great American Desert." Still go on in the vast undertaking until trees are planted all along the streets and avenues of every city, around every school house and dwelling.

Trees as well as flowers are objects of beauty within themselves. They refresh us by their shade, sustain us by their fruit, delight us by the beauty and the fragrance of their flowers, and protect us from the fury and inclemency of the elements. Forests mitigate the heat of summer and the cold of winter, restrain the fury of the winds and regulate and equalize the distribution of the rainfall. Without the present forests of the world and the

## A THOUGHT THAT KILLED A MAN

He thought that he could trifle with disease. He was run down in health, felt tired and worn-out, complained of dizziness, biliousness, backaches and headaches. His liver and kidneys were out of order. He thought to get well by dosing himself with cheap pills. And then came the ending. He fell a victim to Bright's disease! The money he ought to have invested in a safe, reliable remedy went for a tombstone. The thought that killed this man

### HAS KILLED OTHERS.

Statistics show that 90 per cent. of the deaths from pneumonia, Bright's disease and similar complaints are caused from derangements of the liver and kidneys. These great organs keep the blood pure and in healthful motion. When they get out of order the blood becomes poisoned, the circulation impeded and the whole system speedily breaks down. It is

### A DANGEROUS IDEA

to imagine that pills can strike at the root of these diseases. It has been thoroughly proved that such remedies are worse than useless. There is only one remedy which can always be depended upon. This remedy alone can act on the liver and kidneys when they are out of order, clear out the system and build up the health. The name of this remedy is Warner's Safe Cure. It is the only standard remedy in the world for kidney and liver complaints. It is the only remedy which physicians universally prescribe. It is the only remedy that is backed by the testimony of thousands whom it has relieved and cured.

There is nothing else that can take its place.

fossilized remains of those of past ages, the busy wheel of the thousand industries of civilization would soon stop, and the earth become a dreary waste. The cultivation of trees is to-day the paramount interest of Kansas, and if this young but already great and grand State is to continue that career of growth and prosperity, that has rendered her name a household word, and her territory a land of promise to the immigrant the world over, it must receive the fostering care and aid of all her people.

I will say to you, gentlemen, go home and do your part in this direction, not only for your own home, but plead with your neighbor in behalf of this great work, and may the influence of this society be as traceable in coming years as the hand-writing on the wall.

CATARH is a constitutional disease and cannot be cured by local applications. Hood's Sarsaparilla is a constitutional remedy; it cures catarrh because it purifies the blood.

HOOD'S PILLS are purely vegetable and do not purge, pain or gripe. Sold by all druggists.

### A Look Through South Missouri for Four Cents.

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

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

Rheumatism positively cured by Kidney-kura. We guarantee it. See advertisement.



## Entomology.

### The Harlequin Cabbage Bug.

BY PROF. E. A. POPENOE, STATE AGRICULTURAL COLLEGE.

EDITOR KANSAS FARMER:—A hard-backed bug, oval shaped, almost black, with dark red spots, ruined my cabbage this year. It is not as large as the bug which works on pumpkins, being about one-fourth to three-eighths inch long. They destroyed the cabbage as the chinch bug destroys corn, by sapping the life out of them. The cabbage turns brown like cured tobacco, and dries up. What is the name of the bug and how can it be destroyed?

Independence, Kas. W. C. JONES.

The description above given leaves no doubt that the insect referred to by Mr. Jones is the harlequin cabbage bug (*Murgantia histrionica*), a species of Southern origin, but now of wide distribution, feeding throughout its range upon plants of the mustard family in general. Among cultivated plants, the cabbage, the horseradish, the turnip and the radish all suffer from its attacks, though from the nature of the case the insect is best known as a cabbage pest.

It is a true bug, taking only liquid food, which it obtains by piercing the plant tissues with its sucking, beak-like mouth parts. The result of its attacks, then, is not the bodily destruction of the plant, but the extraction of the sap to such a degree that the plant withers and dies. The bugs of the last brood in summer mature in the fall and pass the winter as adults, hiding under rubbish or in cloddy soil, in the vicinity of the plants last attacked. Those that survive make their way in spring to the plants that serve them as food, feeding upon wild cresses and the like if their garden favorites are not at hand. The eggs are laid upon the leaves, and the young on hatching begin to suck the sap, and by reason of their numbers are even more formidable than the adults. They grow rapidly and several broods mature before the end of the season.

Like their relative, the common squash bug, they are somewhat difficult to destroy by the application of the insecticides used in the case of other sucking insects. Owing to the structure of the mouth of this insect, and its mode of feeding, it is, of course, futile to apply Paris green and similar poisons, even if other circumstances did not forbid. In fact, no insecticide, applied to the plant under attack, has been found of great avail. The bugs live under, as well as between the leaves, and many individuals may thus escape even the most careful application.

Where the insect is especially destructive it will be found best to rely upon general methods. One of these is suggested by the habits of the insect in hibernation. To destroy the adults of the last brood, dead leaves and trash in general may earlier be disposed so as to attract the insects into these winter shelters; later they may be burned with the torpid bugs in hiding. In early spring it is highly important to take care of the relatively few adults. These should be captured and destroyed by all possible means. Effective traps are made by placing over the ground fresh leaves of the cabbage or turnip, these being examined daily and the attracted insects destroyed. During the night the bugs like to shelter under boards or shingles placed between the plants on which they feed. Such traps should be examined early in the morning before the lodgers take their way to the plants. Persistent use of these means will result in a greatly reduced number of the first brood of young and will have a very appreciable effect in the diminution of the destructive army in summer. When the plants are suffering from a serious attack of this insect, advantage may be taken of its habit of dropping to the ground when disturbed, and large numbers may be destroyed by shaking the plant over a shallow pan in which a little coal oil, say a quarter of an inch in depth, is contained. The bugs dropping into this liquid do not recover.

I have noted an apparent preference of the insect for the leaves of the horseradish, and offer the suggestion that a

row of this plant may prove a lure, and furnish a better opportunity for the use of the coal oil pan, as described.

A January thaw is always more productive of colds and coughs than a January freeze. Then is the time Ayer's Cherry Pectoral is needed and proves so extremely efficacious. Ask your druggist for it, and also for Ayer's almanac, which is free to all.

## In the Dairy.

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

### Exile of St. Lambert.

Word has been received that this great sire of great performing cows is dead. The immediate cause of death is not stated, but the post-mortem showed a quantity of wire nails in his stomach, and as he was as vigorous and apparently in as perfect health as ever until about a week before he died, the conclusion is irresistible that there was no constitutional defect.

Exile was born May 15, 1883, and was, therefore, an old bull by comparison, although a few others have lived to a greater age. He was royally descended, tracing twice (once each through sire and dam) to Stoke Pogis 3d, four times (twice each through sire and dam) to Victor Hugo, and three times to imported Pauline. Outside of these great Jersey fountains there are only three names in his tabulated pedigree, and these are the imported cows Ophelia (12½ per cent.), Topsy of St. Lambert (6½ per cent.) and Lydie (6½ per cent.) This gave him a great preponderance of highly prepotent dairy blood and serves to explain why he has to his credit forty-nine daughters that have tested from fourteen pounds two ounces to thirty-two pounds seven ounces of butter in seven days.

Individually Exile of St. Lambert is described as having been a grand specimen of the highest type of a Jersey bull. He was large, weighing over 1,600 pounds, had enormous strength and vigor, yet finely finished, beautifully proportioned and possessed of all the fancy points, such as stylish head, dished face, very broad between the eyes, masculine, but not coarse, large prominent eyes, golden skin, soft, yet thick and pliable, covered with a good coat of fine, silky hair, high crest, proudly arched, remarkably deep chest and great breadth, strong loins, and a perfectly magnificent tail.

Although he has left behind him a numerous progeny, as in addition to his tested daughters, his sons are also to be considered, for these have proven their ability by adding a large number of tested granddaughters to the family roll of honor, the death of this bull cannot be considered otherwise than as an irreparable loss to the dairy interests of the country in general, to Jersey interests in particular, and especially to his late owner, Mr. P. J. Cogswell, of Rochester, N. Y.

### The Woman Dairy Commissioner.

Mrs. Anna D. Clemmer, the Dairy Commissioner of the State of Colorado, is an energetic woman, who has done much for the West and the cause of a broader womanhood. She was born in Danbury, Conn., but her husband's health failing she accompanied him to Colorado. Reared in a home of plenty, an only daughter, Mrs. Clemmer had never known a hardship until called upon to face pioneer life in Colorado. To-day she is a handsome, self-reliant, progressive woman, whose gray eyes look out frankly upon the world and at the duties of life unflinchingly. She is in the prime of life and a busy woman. Her home is at Boulder, where, besides a pleasant home, she has a Jersey herd, and with her own hands makes 200 pounds of butter a month. Two miles from Boulder she has a hay ranch of 160 acres and 1,000 chickens, to all of which she gives her personal attention, as well as looking after her office in Denver.

A butter factory in Australia advertises for a creamery manager at £2 a week, who is required to "manage the creamery, drive the engine, cart the

cream every day to the factory (five miles away), find his own cart and horse, and keep the horse in feed, work on Sundays when required, and when not busy supply the creamery with firewood."

### Dairy Notes.

Milk is now successfully sterilized by subjecting it to an alternate electric current.

It will not require much study to show many farmers that they could improve their system of feeding cows.

Cows do not milk any easier with wet hands than with dry hands. If the udder is covered with dust and mud, it should be washed off and dried with a clean rag.

Hoard says that it sounds passing strange in these days of cheap oats, cheap corn and cheap barley, and butter at a good price, to hear farmers talking about selling their grain. There are three pounds of butter in a bushel of oats or corn or barley when fed to a good butter-producing cow. Can a man sell his grain at any better price, in these times, than to turn it into butter?

How many farmers outside of regular dairymen ever take time to test their cows and calculate whether or not they are profitable and paying for their keep? One good cow should furnish milk and butter bountifully for any ordinary sized family, but how often do we see three or four head kept for this purpose, and then the wants of the family are not at all times supplied. This is a leak that should be stopped the coming year if you want to increase your prosperity.

The general opinion is that feed was the cause of the bad flavor so generally reported in November. Now that the season is further advanced and cattle are in the barn, the flavor has improved. This is a probable view, but not the only one. When cold weather comes on the dull butter-maker is always caught. He does not take time by the forelock and see that he is prepared to secure the proper ripening of his cream. He finds it cold and lacking ripeness, but he warms it up and goes through the old motions and falls in flavor. Frosty feed is one bad thing, the cows pinched with cold is another bad thing, and a sleepy butter-maker is another bad thing, and all three make a bad mess of it.

I find Salvation Oil the best cure for rheumatism I have ever known. Joshua Zimmerman, Wethersville, Md.

At the Minnesota dairy meeting, out of the twenty-four papers on the program, six are by ladies. This is a move in the right direction, and should be encouraged by other States at their yearly conventions.

### A Young Lady With Rheumatism.

Her name is Miss E. M. Stockwell, and she lives at Allston, Mass. She wrote a letter in which she states: "I was troubled with a severe attack of rheumatism and was unable to walk. After applying Tuttle's Family Elixir a few times I became entirely well. I can recommend it as the best liniment I have ever seen." Why not read the advertisement of Tuttle's Elixir in another column?

## Long Life

to leather: Vacuum Leather Oil. Get a can at a harness- or shoe-store, 25c a half-pint to \$1.25 a gallon; book "How to Take Care of Leather," and swob, both free; use enough to find out; if you don't like it, take the can back and get the whole of your money.

Sold only in cans, to make sure of fair dealing everywhere—handy cans. Best oil for farm machinery also. If you can't find it, write to VACUUM OIL COMPANY, Rochester, N. Y.

KENDALL'S SPRAIN CURE. Certain in effects and never blisters. Sold everywhere.

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### Carnahan's Tree Wash and Insect Destroyer

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

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Fruit trees, Berry plants, Evergreens and Ornamental shrubbery at wholesale to the planter. Write for free price list. W. H. LITSON, JR., Nevada, Mo.

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An enormous yielder, a great keeper and a splendid table potato. Supply limited.

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This Justly Celebrated Feed Cooker will save any Farmer, Feeder or Dairyman Hundreds of Dollars each Year. Will pay for itself the first year it is used.

COOK your corn before feeding to cattle or hogs, increasing its fattening qualities 50 per cent. and make each bushel go about ¼ further. It will enable you to realize 75¢ per bushel for your present crop—it will steam moldy hay or corn perfectly sweet and make dry cornstalks or straw soft and palatable. Made of steel boiler plates, with boiler tubes passing directly through the water—will do your work quicker, cheaper, and is guaranteed to be better and give better satisfaction than any other.

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12½ PER CENT. MORE BUTTER.

We were getting 12 lbs. of butter at a churning, and with the Improved No. 5 U. S. Separator we get 13½ lbs. When I was away our boy, 11 years old, run the milk of six cows, and said it did not tire him. Our girl, 13 years old, cleans the machine. We run 45 lbs. of milk in 7½ minutes (360 lbs. per hour). ELKDALE, PENNA., Sept. 28, 1895. W. B. CHURCHILL.

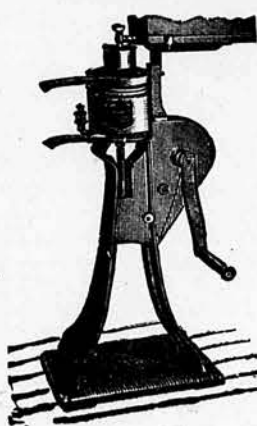
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## TO DESTROY GOPHERS.

A reader inquires how to prepare the phosphorized grain for the destruction of gophers, to which allusion was made in this paper in a quotation from a recent publication of the United States Department of Agriculture. Bulletin No. 5 of the Division of Ornithology and Mammalogy United States Department of Agriculture has the following on this point:

"Phosphorus has been used extensively in California, Washington and Oregon in destroying ground squirrels, and to a less extent for pocket gophers. Mr. Allen Chattin, of Charter Oak, Iowa, states that he has entirely exterminated the gophers from his own and several neighboring farms by the use of phosphorus. His recipe is as follows: Put a stick of phosphorus in a five-gallon can with a little cold water; next pour in hot water, not quite boiling, until the can is half full, and stir with a stick. When the phosphorus is melted add, while the water is stirred constantly, two pounds of sugar, and immediately after the sugar is dissolved thicken to a stiff batter with corn meal and flour, half and half. Now add wheat and stir until stiff. While adding the wheat add also fifteen to twenty drops of oil of rhodium. The wheat will soak up all the water in the mass and it will become quite hard. Keep in a cool place. Small pieces may be chipped off as needed. Gophers may get too little strychnine to kill them, but no matter how small a piece of phosphorus they get it will finally prove fatal. Dig down to an open hole, drop in a small piece, put a clod to keep the hole from filling, and cover over with loose dirt to exclude the light. It should be borne in mind that phosphorus is one of the most deadly poisons. I do not wish to be held responsible for recommending the use of this or any other poison on the farm."

It should be remembered that it may ignite spontaneously when exposed to the air and can be kept safely only under water. It should be handled with tongs. If taken in the hands it is liable to take fire and melt while it burns, making it impossible to avoid terrible burns.

In a letter so the editor of the KANSAS FARMER, C. Hart Merriam, Chief of the Division of Ornithology and Mammalogy, strongly recommends the use of bisulphide of carbon rather than phosphorus. Following are directions for using this agent of destruction:

"Open the gopher hole where one of the freshest hills has been thrown out. Pour two tablepoonsful of bisulphide on a bunch of cotton, rags, tow, waste, or any such material and push it well down into the hole; then close the opening. The bisulphide quickly forms a heavy suffocating gas that flows down the hole and along the galleries. Wherever it overtakes the gopher he is quickly killed. The whole operation is perfectly simple and easy. The only difficulty arises from the length of the tunnels, which is so great that the animals may be beyond reach of the gas. Hence it is sometimes necessary to open the tunnel and introduce the bisulphide at two or more places. The gas has a vile odor. It should be carefully kept from fire, as it is highly inflammable and explosive; otherwise no danger attends its use."

Fifty-two creameries are reported in Washington, and the daily output of the different creameries and factories throughout the State is 7,000 pounds of butter and about 2,400 pounds of cheese and an annual production of butter of 2,190,000 pounds, of cheese 547,000 pounds, and an annual consumption of butter of 2,920,000 pounds, and of cheese 730,000 pounds. In commenting on this showing, the *Pacific Farmer* says: "The State of Washington has made a striking advance in the production of butter since 1891, when the annual production was only 5 per cent. of the amount consumed, while the figures given above indicate that this percentage has been raised until it stands in 1895 at over 70 per cent."

At the Iowa dairy convention, Dairy Commissioner W. K. Boardman reported progress, and evidently he has

not labored in vain. The sale of oleo has been reduced 80 per cent. and that of butter increased 25 per cent. He drew attention to the local markets, where about twenty million pounds of butter were consumed in the cities of 10,000 inhabitants or more. He urged changes in the laws which would compel creameries to use correct pipettes as well as Babcock bottles, and provide for the control of milk delivered to creameries and their sanitary conditions. It seems the present law only refers to the milk sold for consumption. He also wanted to see the filled cheese controlled and the cheese stamped. He urged an increase in cheese factories in Iowa.

## Criticises Crummer.

EDITOR KANSAS FARMER:—We are in receipt of your journal of December 11, and note a long screed, covering nearly two pages of your paper, in reference to hog cholera. In the whole article the writer neither uses good sense or scientific principles; his description of the disease, and his reference to feeding hogs, when first put up, are about the only things he comes near telling the truth about, and we give the average farmer credit for knowing just as much about it as he apparently does.

It has long been a demonstrated fact that hog cholera is created by a germ, and the recent investigations by our government have proven this fact beyond all doubt; but no one apparently has gone any further than to state it is a germ.

The writer of the article admits of the germ, but does not offer any practical remedy. Germs are fostered and created by decomposition, and where everything is pure there can be no germs. Farmers lose their hogs from lack of sanitary conditions around their premises. Until the farmer realizes that these are the causes of germs and germ life, there will never be any let-up in hog cholera. For instance, take a house infected with smallpox, a germ. You may let the house stay for six months after the patient dies or is removed, and any person moving in there will take the smallpox, unless the house is relieved of the germs.

Hog cholera is a germ. How can farmers expect to get rid of hog cholera without disinfecting and ridding their farms of the germ, as any board of health would do in the case of smallpox? There is no use of putting hogs where there are germs: it is only a matter of time until these germs grow up, enter the system of the other herd of hogs, and play the same havoc with them as they did with the others. That has been going on for years, and will go on until the farmers know how to destroy the germs.

Farmers, to keep their hogs in good condition, must use a food to keep them in good health, so they can ward off disease.

As for the idea of inoculating hogs with cholera, while they are well, to prevent them from taking it later, when the disease is prevalent, is the veriest rot. If typhoid fever was prevalent in an adjacent town, you might as well inoculate your family with the germ, and state it would prevent them from taking it, should it become epidemic at your place of abode, and claim they would be a healthier family (if they did not die in the meantime) when through than before. This man belongs to the back century.

Your short editorial on page 8 of your valued paper contains more solid sense on treating the disease, and is more to the point, than the whole article written by E. N. Crummer. The account of how the disease proceeds is interesting, but the proper means of stopping the disease is more important to the farmer than all the other combined.

How in the name of goodness can you cure hog cholera by feeding, alone, when the germ is under his feet, when, every hour of the day, he is either inhaling it or feeding it in his mouth? The only absolute way to prevent hog cholera is to kill the germ under his feet by proper disinfection, and to feed the hog certain foods along with his regular feed to keep him in condition, until you have exterminated the germs. Chicago, Ill. A. ALLARDYCE.

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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. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been reported to. All replies through this column are free. Sometimes parties write us requesting a reply by mail, and then it ceases to be a public benefit. Such requests must be accompanied by a fee of one dollar. In order to receive a prompt reply, all letters for this department should be addressed direct to our Veterinary Editor, Dr. S. C. ORR, Manhattan, Kas.

**HOGS DYING.**—One of my neighbors has hogs getting weak in the back. One has died. I have one that has got down and acts in the same way. I think mine has kidney worm. What do you think is the trouble? M. H. Eskridge, Kas.

**Answer.**—Hogs get weak in the back from various causes. Cholera sometimes acts in that way. Tell your neighbor to call the State authorities and have the disease investigated.

**PIGS DYING.**—My pigs have a bad cough at intervals, and some of them have worms. I put twenty head up and fed them condition powder for two weeks and they have been dying at the rate of one a week. I opened one and found the lungs adhering to the walls of the chest, and also filled with small pus cavities. R. H. H. Marysville, Kas.

**Answer.**—Continue the powder as before and also put a tablespoonful of concentrated lye in swill for each ten hogs once a day. If they continue to die have the disease investigated. The condition of the lungs indicates tuberculosis.

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## MARKET REPORTS.

### Kansas City Live Stock.

KANSAS CITY, Dec. 30.—Cattle—Receipts, since Saturday, 5,782; calves, 87; shipped Saturday, 1,854 cattle, no calves. The market was generally steady with a preference for handy weight steers. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.			
No.	Ave. Price.	No.	Ave. Price.
175.....	1,402 \$4.00	18.....	1,551 \$4.00
60.....	1,484 3.90	46.....	1,530 3.85
25.....	1,163 3.65	15.....	1,288 3.80
18.....	1,259 3.50	42.....	1,330 3.70
25.....	1,152 3.45	20.....	1,111 3.40
5.....	1,016 3.45	20.....	1,141 3.35
24.....	1,060 3.30	20.....	1,141 3.25
1.....	1,080 3.10	1.....	970 3.00

### TEXAS AND INDIAN STEERS.

23.....	1,020 \$3.25	99 Ind.....	1,022 \$3.05
13.....	846 2.90	57.....	800 2.85
30.....	1,346 2.05		

### ARIZONA STEERS.

44.....	1,344 \$3.25		
20.....	831 \$2.90		

### SOUTHWESTERN STEERS.

10.....	904 \$2.40	43 Ind.....	651 \$2.30
5.....	630 2.10	5.....	492 2.10

### TEXAS AND INDIAN COWS.

65.....	666 \$2.10	3.....	633 \$2.10
5.....	630 2.10	5.....	492 2.10

### NEW MEXICO COWS.

1.....	120 \$3.40	22.....	1,072 3.15
8.....	1,087 3.20	20.....	923 2.50
2.....	1,005 2.50	1.....	461 2.35
8.....	1,120 2.35	1.....	461 2.35
1.....	1,080 2.30	14.....	832 2.30
1.....	1,005 2.25	2.....	796 2.25
5.....	980 2.20	2.....	1,010 2.15
2.....	850 2.00	1.....	840 2.00
8.....	727 1.85	1.....	710 1.75
1.....	880 1.50	1.....	810 1.50

### COWS AND HEIFERS.

5.....	842 \$3.45	8.....	943 \$3.35
13.....	1,210 3.30	2.....	730 3.30
1.....	980 3.25	2.....	613 3.15
5.....	1,068 3.03	2.....	821 2.00

### STOCKERS AND FEEDERS.

5.....	842 \$3.45	8.....	943 \$3.35
13.....	1,210 3.30	2.....	730 3.30
1.....	980 3.25	2.....	613 3.15
5.....	1,068 3.03	2.....	821 2.00

Hogs—Receipts, since Saturday 4,476; shipped Saturday, 151. The market was 5 to 10c higher. The following are representative sales:

58.....	315 \$3.60	72.....	278 \$3.55
66.....	270 3.55	71.....	270 3.55
59.....	337 3.55	65.....	281 3.55
64.....	246 3.52½	68.....	245 3.50
6.....	321 3.50	23.....	286 3.50
80.....	245 3.50	67.....	203 3.50
145.....	230 3.50	77.....	231 3.50
91.....	211 3.50	5.....	356 3.47½
25.....	216 3.47½	64.....	267 3.47½
34.....	276 3.47½	103.....	194 3.47½
78.....	194 3.47½	66.....	237 3.47½
30.....	270 3.45	66.....	183 3.45
25.....	218 3.45	56.....	238 3.45
80.....	134 3.45	27.....	251 3.45
88.....	202 3.45	15.....	214 3.40
6.....	203 3.35	14.....	137 3.35
2.....	425 3.30	28.....	117 3.25

Sheep—Receipts, since Saturday, 1,292; shipped Saturday, none. The market was slow, but generally steady. The following are representative sales:

29.....	75 \$3.85	124.....	78 \$3.40
49.....	115 2.80	7.....	118 2.75

Horses—Receipts, since Saturday, 151; shipped Saturday, 49. The week's auction sale of horses and mules began to-day and there was a fair attendance of buyers. The supply of horses is quite large and buyers were rather slow in their selections. Prices ranged about steady.

### Chicago Live Stock.

CHICAGO, Dec. 30.—Cattle—Receipts, 12,000; market active and 10c higher; fair to best beefs, \$3.40@4.75; stockers and feeders, \$2.40@3.65; mixed cows and bulls, \$1.45@2.60; Texas steers, \$2.70@3.75.

Hogs—Receipts, 24,000; market averaged 5c higher; closed weak; light, \$3.45@3.70; rough packing, \$3.40@3.45; mixed and butchers, \$3.45@3.72½; heavy packing and shipping, \$3.50@3.75; pigs, \$2.60@3.60.

Sheep—Receipts, 14,000; market steady; native, \$2.00@3.50; western, \$2.00@2.25; Texas, \$2.00@2.90; lambs, \$3.25@4.65.

### St. Louis Live Stock.

ST. LOUIS, Dec. 30.—Cattle—Receipts, 3,500; market 10c higher; native steers, \$3.50@4.75; Texas steers, \$2.00@3.75.

Hogs—Receipts, 4,010; market 5c higher; heavy, \$3.35@3.65; mixed, \$3.20@3.60; light, \$3.30@3.60.

Sheep—Receipts, 1,003; market 10c higher.

### Chicago Grain and Provisions.

	Dec. 30.	Opened	High'st	Low'st	Closing
Wht—Dec.....	56¼	56¾	56	56¾	56¾
Jan.....	56¼	56¾	56¼	56¾	56¾
May.....	56¼	56¾	56¼	56¾	56¾
Corn—Dec.....	25¾	25¾	25¾	25¾	25¾
Jan.....	26	26	26	26	26
May.....	26	26	26	26	26
Oats—Dec.....	17¼	17¼	17¼	17¼	17¼
Feb.....	17¼	17¼	17¼	17¼	17¼
May.....	19	19	19	19	19
Pork—Dec.....	7 81	7 85	7 75	7 85	7 85
Jan.....	8 65	8 85	8 75	8 85	8 85
May.....	8 95	9 15	8 95	9 10	9 10
Lard—Dec.....	5 27½	5 27½	5 27½	5 27½	5 27½
Jan.....	5 35	5 37½	5 32½	5 37½	5 37½
May.....	5 52½	5 60	5 52½	5 67½	5 67½
Ribs—Dec.....	4 32½	4 32½	4 32½	4 32½	4 32½
Jan.....	4 32½	4 31	4 30	4 32½	4 32½
May.....	4 57½	4 60	4 55	4 57½	4 57½

### Kansas City Grain.

KANSAS CITY, Dec. 30.—Elevator men made little effort to buy wheat to-day, and the demand was limited to mill orders, which were not sufficient to absorb all the offerings. Prices were quotably changed.

Receipts of wheat, to-day, 35 cars; a year ago, 9 cars.

Sales were as follows, track, Kansas City: Hard, No. 2, nominally 54c; No. 3, 5 cars 50c; 2 cars 49c; 1 car 48c; 3 cars 46c; 1 car 45c; No. 4 hard, 2 cars 40c 1 car 38½c; rejected, nominally 35c. Soft, No. 2 red, 1 car good 68c; No. 3 red, 2 cars 62½c; 1 car 61c; No. 4 red, 1 car good 58½c; rejected, nominally 31½c. Spring No. 2, 2 cars 53½c; 5 cars 53c; No. 3, 2 cars 52c; 2 cars 51½c; 1 car 51c; 1 car 50c; 1 car 48c; rejected, 1 car 44c; 1 car 46c; white spring, No. 2, 1 car 53c.

Corn was firmly held, but sold rather slowly. The offerings were not large. There was some bidding for January, and the price was advanced ¼c.

Receipts of corn here for to-day, 62 cars; a year ago, 29 cars.

Sales by sample on track, Kansas City: No.

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2 mixed, 8 cars 22½c; 7 cars 22½c; January, 10,000 bu 21½c, 20,000 bu 22c; December, 22½c bid; No. 3 mixed, 2 cars 21c; No. 4 mixed, nominally 20½c; white, 6 cars 22½c. Oats were scarce and held higher, but buyers were not disposed to advance bids. Receipts of oats for to-day, 5 cars; a year ago, 7 cars.

Sales by sample on track, Kansas City: No. 2 mixed, 2 cars choice 16½c, 1 car 16c; No. 3, nominally 14½c; No. 4, nominally 13½c; no grade, nominally 13c; No. 2 white, 1 car 17½c; No. 3 white, nominally 16c. Hay—Receipts, 37 cars; market steady. Timothy—Choice, \$11.50@12.50; No. 1, \$10.00@11.00; No. 2, \$7.50@9.00; No. 3, \$5.00@6.50; fancy prairie, \$7.00; choice, \$8.00@8.50. No. 1, \$5.00@6.00; No. 2, \$4.50@5.00; packing hay, \$3.00@4.00.

### St. Louis Grain.

ST. LOUIS, Dec. 30.—Receipts, wheat, 28,000 bu.; last year, 3,756; corn, 64,690 bu.; last year, 62,245; oats, 38,000 bu.; last year, 26,400 bu.; shipments, wheat, 11,850 bu.; corn, 15,540 bu.; oats, 19,435 bu. Closing prices: Wheat—Cash, 65c; December, 55½c; May, 59½c. Corn—Cash, 23½c; December, 23½c; January, 23½c@23½c; May, 25½c. Oats—December, 16c; May, 19½c.

### Kansas City Produce.

KANSAS CITY, Dec. 30.—Butter—Creamery, separator, 22½c; firsts, 18½c@19½c; dairy, fancy, 14½c@15c; store packed, fresh, 10½c@12c; off grades, 8c; country roll, fancy, 13½c@15c; choice, 10½c@12c. Eggs—Strictly fresh candled stock, 17c per doz.; cold storage, 13c. Poultry—Hens, 6c; springs, 6½c@6c; roosters, 15c; young, 17c; turkeys, hens, 7c; gobblers, 6c; ducks, 7½c@8c; geese, fat, 6c; pigeons, 60c per doz. Fruits—Apples, fancy, \$2.25@2.50 per bbl.; choice, \$1.75@2.00; common to good, \$1.00@1.50 per bbl. Cranberries, \$3.25@3.50 per bbl.

### Kansas City Sheep Market.

(Special report, furnished by KNOLLIN & BOOTH, Kansas City stock yards.) Receipts, 1,292 head. The sharp advance last week made buyers rather backward. Paying steady values. Some sales were steady, one instance 5 cents higher, and few sales made late were lower. General market irregular.

58 lambs.....	83	\$4 15
30 ".....	82	4 00
29 ".....	75	3 85
94 ".....	65	3 25
9 ".....	50	3 25
248 fed New Mexico yearlings.....	77	3 40
83 native sheep.....	123	3 05
49 fed Southwestern.....	115	2 80
10 cull lambs.....	63	2 50
17 " sheep.....	92	2 25
18 ".....	82	2 25
2 lamby ewes, each.....	1	1 75
7 ".....	1	1 75

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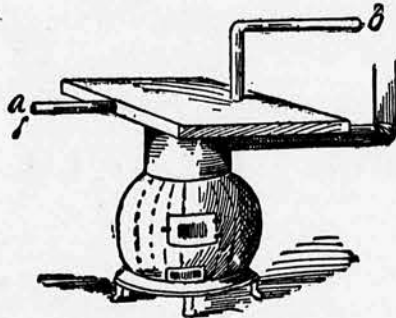


## The Poultry Yard

### FOWLS IN WINTER.

An Excellent Heater and Ventilator for Poultry Houses.

Among the many plans now in use for warming the poultry house, the heater, illustrated below, supplies heat and ventilation, or a supply of fresh, warm air. Any kind of a flat top stove, or even a kerosene stove will give sufficient heat. The size of the stove should depend on the size of the house, but 40 degrees is sufficient heat. The illustration shows a closed box a yard square and an inch deep, made of ordinary sheet iron. The box or heater is placed on a small stove, or if legs are attached to each corner of the heater, a lamp may be placed under it. The cold air comes in at A, passes through the box, becoming heated, and emerges at the pipe B. The cold air pipe is one-half inch in diameter, and the warm air pipe one inch. The pipe A should be long enough to extend through the walls to the outside, so as to bring in the pure air. No



HEATER AND VENTILATOR.

ventilators on the top of the building will be required, and the air will keep the house dry. Always bring the air in and discharge it near the roof, as the birds will not then crowd or become lame as they will when the warmth is below them.—Farm and Home.

### SOME TIMELY HINTS.

Observe Them, If You Want Eggs During the Winter Months.

1. Get the hens into healthy growing condition, shrinking, if necessary, to remove surplus fat, or adding to, if poor. In the first instance, feed only on cooked vegetables and oats or bran; in the latter give more corn.

2. Make the ration one rich in egg materials. Let a certain per cent. of animal food, meat scraps, meat, meal, or food of this nature be given daily. One pint to a pailful of cooked food is enough.

3. Feed to promote health rather than destroy, and temper the quantity. A wooden pail full of cooked vegetables, or cooked clover, with two quarts of mixed ground grain worked well into the mass, is breakfast enough for 30 hens. Reduce rather than exceed this, the sole object being to satisfy the claims of hunger and promote activity. Let the night ration be not more than one quart of mixed grain (whole) to 17 hens, be so scattered about the chaff, leaves, straw or earth, that only a kernel will be found at a time. This means that the hens will scratch busily until dark, and this it is which promotes egg building. In the coldest weather, fill the crops just at night with corn, for the same reason that you fill the stove with coal—to keep warm.

4. Three or four times a week feed cooked or chopped clover with ground grain in the morning mash.

Clover, animal meat, meal or scraps, wheat, vegetables and oats, if fed as indicated to hens having comfortable pens, will insure steady egg production.—Rural World.

### How to Fatten Turkeys.

Turkeys will not fatten if confined in close coops, as they pine if deprived of liberty, but if several turkeys are confined together in a small yard for ten days they can be made quite fat in that length of time. Feed three times a day as much as they will eat, giving corn meal, ground oats, middlings and ground meal, equal parts by weight, scalded, morning and noon, and wheat and corn at night. Keep a head of cabbage in the yard, also sharp gravel, ground charcoal and fresh water. A few turkeys can be fed with chickens, if preferred. It is not necessary to force them to eat.

### POULTRY FOR MARKET.

Some Valuable Hints for Dealers as Well as Farmers.

There is a class interested in poultry that buys from farmers, and after dressing the poultry the carcasses are shipped to market. It is a very profitable business, and such dealers are useful in a community, being always ready to accept any of the surplus stock offered and save time and labor for the farmers, as they dress and ship hundreds of carcasses at once, while some farmers, in order to secure a few cents more per pound, do not take into consideration the labor they bestow in preparing but a few fowls for shipment. A greater profit can be made in buying poultry, however, if those engaged in such business will fatten the fowls before killing. Instead of buying to-day and selling to-morrow, there should be clean quarters, with small yards attached, having feed and water troughs, and the birds fed on fattening foods, so as to increase the weight and secure a larger price per pound. In ten days or two weeks the birds will be ready for market if they are given all the food they will eat during that time. By allowing time for increasing weight it becomes an advantage to buy poor birds if they are in good condition, as the first cost is less and a greater proportionate weight can be added. Only the frame and bony structure are sufficient. The food will then increase the weight and the quality will be superior, as birds that are fattened in a short period of time are tender and juicy. Such a plan would rid the market of much of the inferior poultry that is usually forwarded, and as the cost of producing one pound of poultry should not exceed five cents the adoption of the method would furnish the markets with better stock and largely add to the profits of the business.—Prairie Farmer.

### Wintering a Colony of Bees.

Where bees are to be wintered in a cellar, they should be taken in only when permanent freezing weather has set in. The first thing to look after is that the cellar have plenty of good fresh air. Many a cellar is nothing but a breeding place for disease and the foul air finds its way into the living rooms of the family, so keep the cellar air pure and sweet. If the cellar is filled with rotting vegetables, do not expect the bees to winter well. As to the hives themselves, but little importance arises as to their arrangement in the cellar provided they are fairly warm and fresh air can get in and out of them. Set tiers as high as convenient. A good plan of ventilation is to construct a long, hollow, square box or insert a stovepipe through the cellar wall. In either a damper may be made to turn or to be withdrawn, according to the outside temperature. — C. R. Morts, in Farm and Home.

In breeding and raising poultry, especially for market, size should always be considered. Fowls are usually sold by weight.

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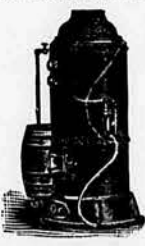
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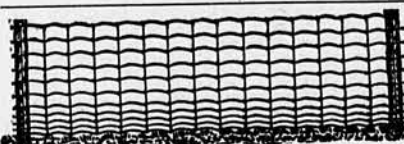
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**FOR SALE**—B. P. Rocks, Black and White Langshans, Buff and Partridge Cochins, Light Brahmas and S. C. Brown Leghorns, scoring from 91 to 94 points by Wale. Adam Rankin, Box 442, Olathe, Kas.

**FOR SALE**—Or exchange for small place near good town—(if not sold by February 1, 1896, for rent)—234 acres, well improved, good land; plenty of living water. Four miles from Linwood, twenty-five miles from Kansas City. A. P. Ashbrook, Linwood, Kas.

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**STRAYED**—From the farm of Forest Savage, four miles southwest of Lawrence, Kas., a dark bay mare, heavy set, bushy tail, legs dark from knees down, in good flesh, good looking mare. A suitable reward will be given to any person for her recovery. Address J. A. Downs, Lawrence, Kas.

**SEND TO ARLINGTON NURSERY**—Arlington, Reno Co., Kas., for surplus price list. On account of old age and failing health, I will sell the whole nursery, either with or without the land, at a great bargain. Write or call on B. P. Hanan, Proprietor.

**CHEAPEST FARM IN KANSAS**—One hundred and sixty acres for \$1,000—less than improvements cost. Write for particulars. A. Deeds, Glen Elder, Kas.

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**FOR SALE**—Or trade for good Kansas farm, one good hotel with good business, in Iowa town. Address Lock Box 39, Mediapolis, Iowa.

**FOR SALE**—Thoroughbred Holstein and Jersey bulls, ready for service. Prices low. Wm. Brown, Lawrence, Kas.

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**FOR RENT**—Eighty acres of second bottom land, well improved, six miles northeast of Topeka. For particulars, call on or address John Rollheuser, 122 East Fourth St., Topeka, Kas.

**FOR EXCHANGE**—An improved 120 acre farm in Ohio to exchange for improved farm in eastern Kansas. Will assume small incumbrance. Address "World," Wakeeney, Kas.

**HIGH-CLASS REGISTERED BERKSHIRES**—For sale. Five gilts sired by Majestic Lad 32201, Imported Western Prince 32202, Onward II. 31136 and Berry's Champion (Vol. XIV). Berry's Champion for sale also. All selected and choice individuals. W. B. Vanhorn, Lawrence, Kas.

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## THE STRAY LIST.

FOR WEEK ENDING DEC. 18, 1895.

Wilson county—V. L. Polson, clerk.

**MULE**—Taken up by John Miller, five miles southwest of Fredonia, November 25, 1895, one black horse mule, 1 year old, no marks or brands.

Labette county—J. F. Thompson, clerk.

**MARE**—Taken up by D. M. Nafus (P. O. Oswego), November 28, 1895, one iron-gray Norman mare, 4 years old, fifteen hands high; valued at \$20.

**HORSE**—Taken up by John Bosson, in Howard tp., (P. O. Valeda), November 21, 1895, one black horse, 4 years old, white spot in forehead, white spot on nose, right hind leg white half way up.

**COLT**—By same, one black horse colt, 3 years old, white spot in forehead.

Lyon county—C. W. Wilhite, clerk.

**STEER**—Taken up by Henry Drier, in Center tp., November 30, 1895, one one-year-old steer, red with some white spots, some white in face, medium size, branded on left hip with indistinct brand; valued at \$15.

Coffey county—T. N. Bell, clerk.

**HEIFER**—Taken up by Milford Hill, in Neosho tp. (Crotty P. O.), one black heifer, 1 year old, white belly, crop off left ear, no brands; valued at \$10.

Chase county—M. K. Harman, clerk.

**TWO STEERS**—Taken up by Geo. C. Ellis, in Toledo tp. (P. O. Cottonwood Falls), December 9, 1895, two red steers—one has white face, branded L B on left side and 1 on each hip; the other is a muley, branded H H L B on left side and 1 on each hip; valued at \$32.50 each.

Wabunsee county—J. R. Henderson, clerk.

**HEIFER**—Taken up by Wm. Thirby, in Mission Center tp. (P. O. Eskridge), November 30, 1895, one red heifer, 2 years old, no marks or brands.

Bourbon county—G. H. Requa, clerk.

**SWINE**—Taken up by John Smith, in Timber Hill tp., four black sows, three sows and one barrow.

Allen county—Jas. Wakefield, clerk.

**HORSE**—Taken up by D. D. Spioer (P. O. Geneva), November 25, 1895, one brown horse, left front foot white and right hind foot white, star in forehead, spot on the nose, branded S on right side, shoes on front feet.

**PONY**—By same, one small bay horse pony, small star in forehead, spot on nose, white line across left arm, Mexican brand on left side, shoes on front feet.

Pottawatomie county—Frank Davis, clerk.

**STEER**—Taken up by R. F. Glenn, in Grant tp., December 9, 1895, one red line-back steer, crop off left ear; valued at \$20.

FOR WEEK ENDING DEC. 25, 1895.

Osage county—E. C. Murphy, clerk.

**TWO SOWS AND PIGS**—Taken up by J. DeWitt, in Burlington tp. (P. O. Burlington), December 3, 1895, two black sows and seven spotted pigs—one sow all in both ears; valued at \$16.50.

Labette county—J. F. Thompson, clerk.

**HORSE**—Taken up by J. S. Nier, in Canada tp., December 5, 1895, one bay horse, 3 years old last spring, right hind foot white; valued at \$10.

**COLT**—By same, one black horse colt, 1 year old, white spot in forehead, four white feet; valued at \$15.

Wilson county—V. L. Polson, clerk.

**MARE**—Taken up by S. W. Knoles, of Buffalo, December 14, 1895, one bay mare, 3 years old, star in forehead.

FOR WEEK ENDING JANUARY 2, 1896.

Wilson county—V. L. Polson, clerk.

**MULE**—Taken up by Chas. H. Watkins, in Fall River tp., about four miles northeast of Buxton, December 13, 1895, one dark iron-gray mare mule, about 3 years old; valued at \$20.

Greenwood county—J. F. Hoffman, clerk.

**STEER**—Taken up by C. E. Austin, in Shell Rock tp., November 4, 1895, one dun steer, Western brand covers nearly whole of left side, crop off left ear; valued at \$15.

Cherokee county—P. M. Humphrey, clerk.

**HORSE**—Taken up by G. B. Carlisle, one bay horse, black mane and tail, shod in front; valued at \$10.

Lyon county—C. W. Wilhite, clerk.

**HEIFER**—Taken up by J. K. Peterman, in Agnes City tp., November 2, 1895, one two-year-old heifer, red with some white spots, stubbed horns, branded L on right hip and O on right side; valued at \$15.

Pottawatomie county—Frank Davis, clerk.

**HEIFER**—Taken up by A. F. Kolterman, in Mill Creek tp. (P. O. Onaga), December 26, 1895, one red and white two or three-year-old heifer, no marks or brands; valued at \$14.

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**Official Receipts, 1894**

Slaughtered in Kansas City..... 1,772,545  
Sold to feeders..... 369,846  
Sold to shippers..... 308,181  
Total sold in Kansas City, 1894..... 2,450,572

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

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