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and Barred Plymouth Rock chickens. Tecumseh Short Stop 14750 at head of herd, assisted by Hadley Jr.'s Equal 15119 and King Tecumseh 15307. One hundred choice pigs for sale. Farm located three miles southwest of city. Call or correspondence invited. R. H. WHEELER, Lawrence, Kas.

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Peabody, Marion Co., Kas.

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Fifty boars and gilts for this season's trade. My herd boars consist of Darkness Quality 14361, Princeton Chief 14543, Col. Hildreth 37247 and Standard Wilkes. My sows are splendid individuals and of the right breeding. Personal inspection and correspondence invited. LAWRENCE NATION, Hutchinson, Kas.

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Herd boars are E's World's Fair No. 2 11930, grandson of Seldom Found 7815, Klever's Model 3d 19789, King Hadley 15057 (C). This hog is not only a show hog, out a prize-winner, breeding Hadley Blood, One Price Imitation, Guy Wilkes 2d, Black U. S., L's Tecumseh and Chief Tecumseh 2d.

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Brood sows by Wren's Medium, Hadley M. Washington, Protection Boy and Darkness 1st 38753 in this herd. Tanner 19212, a son of Gen. Hildreth 37247 by the famous Hildreth 37247, now heads my herd, and a finer breeder and individual is not in Kansas to-day. I need not comment on Tanner's breeding, nor on that of my brood sows. Pigs by One Price Medium 2d 18305. Prompt attention given to all inquiries. Prices reasonable. J. R. WILLSON, Marion, Kas.

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stock; choice breeding, good length, bone and ham. Pairs and trios not akin from five grand boars and twenty-five sows. Special offering now of best breeding. Also B. P. Rocks and Buff Cochins for sale from best strains. Prices right. J. C. CANADAY, Bogard, Carroll Co., Mo.

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Agricultural Matters.

BY-PRODUCTS OF THE COTTON FIELD.

Editor Kansas Farmer:—In the Country Gentleman of January 6 appears a remarkable article over the signature of Mr. H. Stewart—remarkable alike for its statements and omissions relating to a subject of profound importance to every swine and corn-grower in the United States, that is, the volume and use of the by-products of the cotton field.

Mr. Stewart's statements are, in substance, "that the cotton seed formerly wasted, except so far as used as a fertilizer, constitutes 77 per cent. of the weight of the crop; that the seed now returns the growers \$50,000,000 per annum, and more than equals the outlay for fertilizers; that American crops average 8,000,000 bales per annum, and equal the product of all the rest of the world; that a full crop in India is 4,000,000 bales, that of China 2,000,000, as is that of Egypt; that our bales are much larger than those of Egypt where the product is nearly all Sea Island cotton which will not stand compression, so that Egyptian bales do not weigh over 200 pounds; that oleomargarine is a mixture of cottonseed oil and refined tallow; that last year some 1,500,000 tons of cottonseed were crushed, yielding forty gallons of oil to the ton; that the oil was worth 40 cents a gallon; that this oil is nearly all used surreptitiously and chiefly as olive oil; that in consequence (impliedly at least) the culture of the olive for oil has been almost wholly abandoned in Europe; that deducting the weight of the oil from the seed crushed (he says nothing about the hulls which constitute nearly half the weight of the seed) there remains about half a million tons of cottonseed meal; and that the average yield of lint cotton in the United States is not over 150 pounds per acre."

Reviewing this article and examining the basis for these wonderful statements, permit me to say that a full crop of cotton in India is but 2,500,000 bales of 400 pounds each, instead of Mr. Stewart's 4,000,000 bales; that in Egypt the cotton grown is not of the "Sea Island" kind, but a special variety peculiarly adapted to the soil and climate of the Nile valley, and having a staple ranging from an inch to an inch and a half in length, while our "Sea Island" cotton has a staple a full half longer, and brings a half higher price than the Egyptian cotton, although the latter (Egyptian) gives yields averaging 340 pounds of lint per acre, while "Sea Island" yields average but 125 pounds; that during the twenty years ending with 1895 some 354,000,000 acres, producing an aggregate of 64,350,000,000 pounds of cotton, were grown in the United States, the yield an acre averaging 182 pounds, or 21 per cent. more than stated by Mr. Stewart.

Instead of production elsewhere equaling that of the United States, we grow 70 per cent. of all the cotton entering commercial channels in any part of the civilized world, and probably 66 per cent. of all the cotton grown, including that produced in central Africa.

Instead of the Egyptian product being put up in loose bales of 200 pounds, as stated, it is, says A. B. Shepperson—who was the special agent of the United States in charge of the cotton exhibit of the Columbian exposition, and who is, beyond question, the best authority in the United States—put up in compressed bales averaging some 750 pounds gross, and instead of an average outturn from Egyptian fields of 2,000,000 two-hundred pound bales, or 400,000,000 pounds, as Mr. Stewart states, an Egyptian crop has, in recent years, ranged from 650,000 to some 850,000 bales of about 700 pounds net, or an aggregate of some 500,000,000 pounds.

It may be true that oleomargarine is a mixture of refined tallow and cottonseed oil, as that oil is even used in many creamery sorts of butter, but the most of that manufactured in the United States carries more or less swine's fat as well as much more questionable constituents in some cases.

Instead of cottonseed oil being sold chiefly as olive oil, as Mr. Stewart states, it is chiefly used as either an adulterant of lard or as a substitute therefor under such names as "cottolene" and "cotto-suet;" probably more than 450,000,000 pounds of this cheap vegetable fat being thus, surreptitiously in some cases and openly in others, substituted for the fat of swine, thus destroying the Northern farmer's market for both swine and corn, and bringing about much of that agricultural depression which has so worried both farmer and statesman—and yet this remarkable

article, pretending to enlighten the readers of your contemporary, has not a word to say about this deeply interesting phase of a most interesting subject.

One of the most astonishing statements which ever appeared in a reputable agricultural journal, and one without the least support in actual conditions, is that "the culture of the olive for its oil is almost wholly abandoned in Europe," the evident intention being that the reader should infer that such abandonment resulted from the alleged substitution of the oil of cottonseed for that of the olive, the writer evidently presuming upon the ignorance of the readers, as well as of that of the editor of the journal in which the article was to appear, as it would require nearly every pound of cottonseed oil which could be expressed from all the available seed produced by American cotton fields to displace the 120,000,000 gallons, more or less, of olive oil produced in Europe annually.

Italy, Spain, Austria, France, Portugal, Greece and Turkey are the olive-growing countries of Europe, the production being much greater in Italy and Spain than elsewhere, the combined product of the two probably exceeding an average of 100,000,000 gallons per annum, while the other countries ordinarily turn out something less than 20,000,000 gallons together.

About the olive yards of Greece, Turkey and Portugal we know so little that it is difficult to say whether they have expanded in recent years, but those of Italy increased by 18 per cent. between 1884 and 1894, and those of Austria about 9 per cent., while those of Spain have expanded by a third in twenty-five years. Obviously the consumption of olives other than in the form of oil must have increased many hundred-fold since we began to express oil from cottonseed, about twenty years ago, if, as Mr. Stewart states, the culture of the olive for its oil product has been almost wholly abandoned in Europe. The course of production in the two European countries, however, which annually report the outturn of olive oil assure us that there has thus far been no material displacement of olive oil by that from the cotton fields, or at least no such displacement as to lessen the production of olive oil in such countries. During the eleven years ending with 1895 Italy and Austria have, year by year, produced olive oil in quantities as follows:

	Italy. Gallons.	Austria. Gallons.
1885.....	41,800,000	2,300,000
1886.....	57,400,000	2,400,000
1887.....	34,800,000	2,300,000
1888.....	57,100,000	4,400,000
1889.....	33,900,000	1,800,000
1890.....	67,900,000	2,700,000
1891.....	60,300,000	3,400,000
1892.....	37,100,000	3,800,000
1893.....	64,700,000	2,800,000
1894.....	46,600,000	2,400,000
1895.....	58,800,000	2,900,000

The Italian outturn has averaged 51,000,000 gallons per annum for the eleven years, and 53,500,000 gallons during the last named five years, as against an average of less than 49,000,000 gallons during the preceding six years, while in Austria the increase has been proportionately less, although in about the ratio of the addition to the area employed. Evidently, neither Italy nor Austria has "almost wholly abandoned the culture of the olive for its oil product," as indicated by Mr. Stewart.

European authorities credit Spain with an olive oil production averaging more than 50,000,000 gallons annually, and while from Spanish olive yards we have no annual reports, yet from time to time data is available showing a rapid increase of the area devoted to this product.

Unfortunately for the American engaged in growing corn and swine, cottonseed has not displaced any considerable portion of Europe's annual outturn of some 120,000,000 gallons of olive oil, otherwise our markets would still quote the lard hog, and we should not face a reduction of millions in the numbers of American swine since 1882, despite the fact that in the meantime we have added nearly 20,000,000 to the number of consumers of swine products. Had cottonseed oil been used to displace 120,000,000 gallons of European olive oil it could not also have been used, as it has, to displace nearly or quite 400,000,000 if not 450,000,000 pounds of American lard, although cottonseed meal could still have been used to displace many million bushels of corn for feeding purposes.

Mr. Stewart gravely informs the readers of the Country Gentleman that the farmers realized \$50,000,000 from the sale of 1,500,000 tons of cottonseed, or some \$33.33 per ton, when the census report of 1880 shows that cottonseed was in 1879 worth but \$7 per ton to the grower, as the census of 1890 shows it was worth only one-fourth of Mr. Stewart's imaginary \$33.33 in 1889. The fact is that at the present time cottonseed returns the grower an average of not more than \$5 per ton at his nearest railway station, and instead of the oil made last year being, as Mr. Stewart states, worth 40 cents per gallon, it was selling in November for 13 cents at the mills in Texas, is now worth (crude oil) but 18 cents in New York city, where refined oil is worth but 21 cents. As a matter of fact, cottonseed oil has in but one year since 1890 brought an average of over 25 cents, the average for the six years having been less than 21 cents at the mill, or about half Mr. Stewart's hypothetical 40 cents.

Then, again, he states the seed crushed last year at about 1,500,000 tons, when as long ago as 1889 the "crush" exceeded, as shown by the census, 1,790,000 tons, and crushers have informed me that the "crush" of 1897 will reach and may exceed 3,000,000 tons, and that the growers are realizing about \$5 per ton. If the "crush" equals 3,000,000 tons, and the price to the grower is \$5 per ton, he will be short just \$35,000,000 of the \$50,000,000 with which our informationist credits him; and if we credit the crusher with forty gallons of crude oil per ton, 750 pounds of meal and eight pounds of poor lint, and assume that these products bring maximum prices for all mills, the crushers will realize as follows from the by-products of the cotton field:

120,000,000 gallons oil at 17c.....\$20,400,000
 1,125,000 tons cottonseed meal at \$12.....13,500,000
 24,000,000 pounds short lint at 5c.....1,200,000

Total value of secondary product.....\$34,100,000
 Of this sum we may assume that the grower received some \$5,000,000, the remainder being divided between middleman, railway and crusher.

This, however, is but the obverse of the medal, the reverse showing herds of swine steadily declining in numbers, the price of every bushel of corn shrinking, and the average value of recent crops of that greatest of American products less by about \$100,000,000 per annum than equal quantities would have brought in the decade preceding the use of cottonseed oil as a lard adulterant. In other words, a gain of \$34,000,000 per annum by the cotton-grower, middleman, railway and seed-crusher is offset by a loss of nearly or quite three times that amount by the nation's corn- and swine-growers. And yet, when pretending to deal with the results flowing from the utilization of the by-products of the cotton field, the correspondent of the Country Gentleman has not thought it worth while to even mention the stupendous changes wrought in the condition of the American farmer by a continuous variation in the ratio of animal and vegetable fats entering into human dietaries, and the concurrent variation in the ratios of corn and cottonseed meal entering into animal dietaries!

Ought we not to congratulate your esteemed contemporary upon its success in securing the services of such a statistician and economist?
 Peotone, Kas. C. WOOD DAVIS.

Kansas Experiments With Wheat.

Bulletin 71, Kansas Experiment Station, reports on the experiments with wheat, conducted by Prof. C. C. Georgeon during the season of 1896-7. The following is a summary:

1. Wheat grown continuously without manure on a measured acre, for seventeen years in succession, has produced an average yearly yield of 19.57 bushels. The crop was completely winter-killed during three of these years, so that only fourteen crops were harvested, and two of them were partly winter-killed. The average yield of the fourteen crops harvested is 23.67 bushels.

2. Subsoiling for wheat has not benefited the yield. It has, on the contrary, apparently reduced the yield over that on surface-plowed ground in nearly every instance it has been tried.

3. As to the time of seeding wheat, the results of the past season's experiments confirm those of former years. The best yields were obtained from seedings made about the third week in September.

4. The rotation experiments are just beginning to give results, though they have not run long enough as yet to warrant definite conclusions. They do show, however, that a yearly application of twenty tons of barn-yard manure to the acre is decidedly detrimental, in that it causes an excessive growth of straw and a failure to develop kernel.

5. The rotation experiments in which wheat is followed by some leguminous catch crop, sown as soon as the wheat is harvested and removed or plowed under in time to again sow the ground to wheat that same fall, have only just begun, the past year being the only sea-

HALL'S Vegetable Sicilian
HAIR RENEWER

Gray hair warns us of old age. Renew your hair and laugh at the warning.
 Challenge baldness—it won't come.

son in which wheat has been grown on this plan. The wheat seeded on soy bean stubble gave the best yields.

6. The test of varieties is of special interest the present year, in that it shows the comparative hardiness of some fifty leading varieties grown at the station for several years. Out of the whole number, only the Turkey, Tasmanian Red and Crimean withstood the severe freeze in November so as to yield at the rate of ten bushels or more per acre.

Navy Beans.

Editor Kansas Farmer:—Will some of the readers of the Kansas Farmer who have had experience in raising navy beans inform me and others, through the Farmer, of the best methods and varieties and amount of average crop?
 Kansas City, Kas. J. L. HEISEY.

Blue Grass.

Editor Kansas Farmer:—Thinking of sowing blue grass seed here on our heavy limestone soil. What is the best mode of putting it in, time to sow, and will grow in this dry latitude?
 WM. HEATH.

Delight, Ellsworth Co., Kas.

Artichokes for Swine.

Editor Kansas Farmer:—I take this opportunity of addressing you in regard to the matter of feeding artichokes to swine. What is the relative value of the Jerusalem artichoke in growing swine, compared to a full corn diet? How far will a bushel of seed tubers go toward planting an acre, and when should swine be allowed to run into planted plot? Any information regarding this matter will be thankfully received.
 E. H. NEWELL.
 E. H. HEWELL.

Parma Center, N. Y.

Educate Your Bowels With Cascarets.
 Candy Cathartic, cure constipation forever.
 10c. 25c. If C. C. C. fail, druggists refund money.

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Every day in the year via Santa Fe Route. Choice of luxurious Pullman palace sleepers or comfortable and modern Pullman tourist sleepers. Apply to agent A., T. & S. F. Ry. for literature and particulars of service. Remember this is a daily service.

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The St. Louis & San Francisco Railroad Company offer for sale 100,000 acres of rich farm, grazing, fruit, timber and mineral lands upon cheap and easy terms, in tracts to suit purchaser. These lands are located in southwest Missouri, within 150 miles of St. Louis.
 For full particulars, address E. M. Kenna, Land and Tax Agent, Century building, St. Louis, Mo.

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Tickets will be sold on the first and third Tuesdays of January, February and March via the Union Pacific to points in Missouri, Arkansas, Indian Territory, Oklahoma, Texas, Louisiana, Arizona and New Mexico, where the minimum round trip rate is \$7 or over, at one fare for the round trip, plus \$2.
 For exact territory and full information or tickets call on or address F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent, Topeka.

Official Statutes.

The General Statutes of Kansas, 1897, in two volumes, compiled and annotated by Judge W. C. Webb, by authority of the Legislature, are now ready for delivery. Contains all the laws of a general nature in force, together with annotations of the Kansas Supreme Court Reports and Court of Appeals.

We have purchased the entire edition, and will sell said Statutes to citizens of Kansas for \$5, net. On receipt of draft or money order we will express one set to your address. This offer is limited.
 KANSAS STATUTE COMPANY,
 Topeka, Kas.

The Stock Interest.

THOROUGHbred STOCK SALES.

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

FEBRUARY 8—Clifton George, Poland-Chinas, Lathrop, Mo.
 FEBRUARY 17—C. P. Shelton, Poland-Chinas, Paola, Kas.
 FEBRUARY 25—Jos. R. Young, J. D. White, S. M. Smook and J. M. Turley, Poland-Chinas, Nevada, Mo.
 FEBRUARY 26—Jno. Brazelton & Sons, Poland-China brood sows, Wathena, Kas.
 MARCH 2—C. S. Cross, Herefords, Emporia, Kas.
 MARCH 8—T. J. McCreary, Aberdeen-Angus cattle, South Omaha, Neb.
 MARCH 16—Jas. A. Funkhouser, Gudgeon & Simpson, Herefords, Kansas City, Mo.
 MARCH 17—W. T. Clay-H. C. Duncan, Short-horns, Kansas City, Mo.
 APRIL 13—T. F. B. Sotham, Herefords, Chillicothe, Mo.
 APRIL 16—Scott & March, Herefords, Belton, Cass Co., Mo.

LEGISLATION NEEDED FOR THE STOCK INTERESTS.

Report of the Special Committee of the Improved Stock Breeders' Association, by Geo. W. Glick, of Atchison.

Your committee, to whom was referred the matter of needed legislation for the benefit of the stock breeders of Kansas, have given the matter some consideration and respectfully submit the following suggestions for your consideration:

The Secretary of our State Board of Agriculture gives the value of the live stock of Kansas at \$94,074,885. He also states that the animals sold for slaughter, for the past year, was \$37,781,678. The cheese, butter and milk sold was \$5,259,997, which added to the value of the animals sold for slaughter, makes \$42,334,882 as the productive value of but two classes of our farm animals for one year. Horses, mules and sheep are not included in this estimate.

This vast amount of property contributes its full share of taxation to the support of our State, county, school and other utilities. This property cannot be hid away like the money of the banker, or the paper of the bondholder, but is always in sight and cannot dodge the assessor. It does not attempt to avoid its liability but meets its obligations fairly and manfully without protest.

This vast amount of live stock receives no protection different from other property. The criminal laws of the State are the only power the owner can invoke for his protection, except in a few cases where an unscientific sanitary board may attempt to shut out splenic fever or quarantine animals after epidemic or contagious diseases have invaded the State. This protection does not meet disease at or beyond the borders of the State and disarm it of its terrors, nor warn the owners of herds and flocks of impending danger, but waits till it locates in our State, fixes centers of contagion, and commences its mission of destruction on the farms and ranches. Should this policy be continued? Should this vast amount of productive wealth be left to take its chance of safety or perhaps its chances of existence, without the State making an honest effort, by law, for its safety and its protection?

All European countries have found it prudent, and an absolute necessity, to protect their live stock from the ravages of contagious diseases. Great Britain in the past has spent over \$200,000,000 to protect her cattle alone from contagious pleuro-pneumonia and the foot-and-mouth disease, and to-day will not allow even inspected cattle with a clean bill of health to be sold except for immediate slaughter on the island of Great Britain. New York, Massachusetts, Connecticut, New Jersey and Pennsylvania spent millions of dollars and lost an immense number of cattle, years of time, and exercised incessant vigilance to keep contagious pleuro-pneumonia under control, and this terrible and devastating disease was only stamped out when the national government took charge of the work, freed this country from the disease, and thus secured the opening of the markets of the world to our meat products—a benefit now enjoyed by the stock breeders of Kansas.

The stock interests of the State are capable of being extended and increased to vast proportions; only millions can name the future values, and they are now and always will be the foundation of so much wealth and prosperity, that it is important that they should receive whatever legislative protection and encouragement that can be given to them, so that they may rest safely and securely against contagious, epizootic or communicable diseases, that come silently and unexpectedly and without warning, and that may lay waste the flocks and herds of the State and destroy millions of dollars worth of property, rendering scores of farmers bank-

rupt, with no power to stay their ravages while a victim can be found.

Crops may fail, drought and storms may lay waste the farmer's fields, but in the day of trouble he knows that within a year this trouble can be remedied, by replanting of crops, and the live stock is his rock of safety, as he knows it will furnish his reward in cash to repair all losses by the elements and his work in aiding to furnish meat for the markets of the world.

Can these dangers be avoided or minimized by legislation? Your committee thinks they can. We think that the law which was repealed three years ago, providing for a State Veterinarian, should be restored to the statute books, and the law providing for the Board of Sanitary Commissioners should be amended, so the State Veterinarian should be one of the three members of the board. It was not the purpose nor the intention of the repealed law that the State Veterinarian should attend to the treatment of ordinary non-contagious diseases (but many people got that idea), but should be on guard duty to see that contagious, infectious and all communicable diseases do not invade or get a foothold in this State; to warn stockmen of impending danger, advise as to the proper methods to adopt for protection; to see that proper quarantine was established and rigidly enforced, and aid in expelling or stamping out any infectious disease that might get a foothold or a location in our State, and to do such other acts as might be deemed necessary to protect the health of our domestic animals.

It is easier to prevent disease from invading our State than to eradicate it after it gets an abiding place in some flock or herd and establishes a center of infection.

An educated and competent veterinarian would be worth millions of dollars to the stock breeders of Kansas, in certain emergencies or contingencies that are liable to occur any day. Such cases have already occurred and had it not been for the prompt action of the Secretary of Agriculture and of a few cool-headed men the entire stock industry of the United States would have been injured to the extent of hundreds of millions of dollars and the export cattle business of this country destroyed.

If the State Veterinarian were made an official member of the State Board of Sanitary Commissioners, the expenses of the board could and would be greatly reduced—enough to pay a fair salary to the Veterinarian. If a State Veterinarian were provided for at a salary of \$2,000 per year, with necessary traveling expenses, it would make a tax of five one-hundredths of one mill to each quarter section of land in the State, or a tax of one forty-seventh of one mill on the value of the live stock of this State. When this insignificant outlay is considered it seems to your committee that any one capable of representing a Kansas trust agency intelligently would not hesitate to vote for the creation of the office of State Veterinarian, and your committee most earnestly recommend the restoration of the law establishing that office.

HOG CHOLERA.

The Kansas City stock yards are the center of hog cholera infection for this part of the country. In making this statement your committee wish to say that it applies equally to all stock yards. It is a condition that cannot be prevented or mitigated. Disinfection is impossible. If it were possible to disinfect the yards one day, the disease might be transplanted there the next. This being the case, we should take the conditions as we find them and provide protection as far as legislation can do it.

Hog cholera, like contagious pleuro-pneumonia and tuberculosis, is incurable. No scientist or veterinarian has ever yet been able to effect a cure. Your committee is aware that so-called hog cholera "sure cures" are offered for sale, backed by many recommendations, but in practice they are worthless and can deceive only the credulous.

Hog cholera, as proved and demonstrated by scores of scientists, is a germ disease, and any medicine or remedy administered into the stomach strong enough to kill the germs will kill the hog. Some of the advertised nostrums may be good from a sanitary standpoint.

Your committee therefore would recommend the passage of a law providing that all hogs shipped into the stock yards should not be shipped out or taken out of same, except for immediate slaughter, or to be shipped to other stock yards or packing-houses beyond the limits of the State. Hog cholera is disseminated by litter, bedding, etc., being thrown out of or dropping out of cars in which hogs are being or have

KIDNEY AND BLADDER TROUBLES QUICKLY CURED.

You May Have a Sample Bottle of the Great Discovery,
 Dr. Kilmer's Swamp-Root Sent Free by Mail.

Men and women doctor their troubles so often without benefit, that they get discouraged and skeptical. In most such cases serious mistakes are made in doctoring and in not knowing what our trouble is or what makes us sick. The unmistakable evidences of kidney trouble are pain or dull ache in the back, too frequent desire to pass water, scanty supply, smarting irritation. As kidney disease advances the face looks sallow or pale, puffs or dark circles under the eyes, the feet swell and sometimes the heart acts badly. Should further evidence be needed to find out the cause of sickness, then set urine aside for twenty-four hours; if there is a sediment or settling it is also convincing proof that our kidneys and bladder need doctoring. A fact often overlooked is that women suffer as much from kidney and bladder trouble as men do.

Dr. Kilmer's Swamp-Root is the discovery of the eminent physician and scientist and is not recommended for everything, but will be found just what

is needed in cases of kidney and bladder disorders or troubles due to weak kidneys, such as catarrh of the bladder, gravel, rheumatism and Bright's disease, which is the worst form of kidney trouble. It corrects inability to hold urine and smarting in passing it, and promptly overcomes that unpleasant necessity of being compelled to get up many times during the night.

The mild and extraordinary effect of this great remedy is soon realized. It stands the highest for its wonderful cures. Sold by druggists, price 50 cents and \$1. So universally successful is Swamp-Root in quickly curing even the most distressing cases, that to prove its wonderful merit you may have a sample bottle and a book of valuable information, both sent absolutely free by mail, upon receipt of three 2-cent stamps to cover cost of postage on the bottle. Mention Kansas Farmer and send your address to Dr. Kilmer & Co., Binghamton, N. Y. This generous offer appearing in this paper is a guarantee of genuineness.

been shipped. To remedy this, all cars in which hogs have been shipped to the sale yards should be cleaned out and disinfected before used again. This policy would in a great measure prevent the spread of the disease to the hogs on the farms of the State, and thus aid in saving to the swine-raisers thousands of dollars annually. The law should prohibit, by a severe penalty, the throwing of diseased hogs into running streams, and requiring that all hogs dying of cholera should be cremated or buried in pits with a sufficient quantity of quicklime. These conditions only will prevent dogs, crows or hawks from carrying the disease about the neighborhood and continuing the spread of the contagion.

TUBERCULOSIS.

Tuberculosis is not a very prevalent disease in our State, but it does exist, and legislation should provide for its eradication as far as possible, by prohibiting the sale of tuberculous animals except for shipment to and sale at the stock yards, where they may be inspected and destroyed.

All dairies that sell milk to the public ought to be inspected periodically by a competent veterinarian, and all cows affected with tuberculosis removed from the dairy and the sale of milk from cows so diseased prohibited under severe penalties.

Consumption is on the increase in our towns and cities, and scientific men now inform us that the majority of such is contracted by the use of milk of tuberculous cows fed to children. The helpless children as well as the public should be protected against the sale and use of tuberculous milk.

Public opinion and the protection of the public health is most important. Cities and towns have forced municipal authorities to prohibit the sale of milk from any dairy where the cows are not periodically inspected, marked and provided with a clean bill of health. A dairy with any tuberculous cows in it is a standing menace to public health and human life.

There are some other matters that might be profitably discussed, like glanders in horses and scab in sheep, that ought to claim the attention of the stock breeders of Kansas, but if your committee has been able to say anything that has set the owners of live stock to thinking or that may induce them to make an effort to secure from the Legislature the consideration of even a part of the legislation suggested, your committee will be greatly gratified, and the stock interests of our State materially benefited.

Revival of the Horse Business.

In a speech before the National Association of Stock Breeders and Feeders, J. F. Berry, of the Chicago horse and mule market, said:

"The great depression that we have just passed through has discouraged horsemen and driven many of them out of the business. Horses have been sold at ruinous prices. For the last three years there has been but a small per cent. of the usual number of colts raised. At the same time the consumption of horses has been going on, until our supply of American horses is reduced two or three millions. While horses have been low in price, farmers, in order to sell at all, have been obliged to

sell their best, thus reducing the quality as well as the quantity.

"Go into any section of our best horse-raising country, and you will not find 10 per cent. of the horses on hand large or good enough to meet the demands of the market. While the depression of prices has been going on through natural causes, the use of horses has been revolutionized and the grade has been raised both in size and quality. The former system of breeding horses for the market would prove a failure at this time, as then a small and smooth horse was salable, and ordinary horses brought all they were worth. At present ordinary horses are of little value. They are a thing of the past.

"While we do not believe the bicycle and electricity will ever take the place of the horse or materially reduce his value in general, they have supplanted small horses and increased the demand for larger animals. Our American markets, as well as the foreign markets, demand a higher class of horses, and while the wheel and electricity have decreased the demand, the export demand since 1893 has increased in about the same proportions, the difference being a larger and a higher class of horses.

"The depression in all business has passed away, and we are on the upward turn of prosperity. Horses are increasing in price, and the future is bright. It will not be long before prices will be as high as they ever were, and it is believed by our best judges that a great famine in the salable class of horses will be upon us in a few years at the most.

"The great improvement in the streets and roads brought about in the interest of the wheel has created an increasing demand for the light harness horse, and as this enterprise proceeds to improve streets and roads there will be an increase in the same proportion for that most noble animal, 'the light harness horse.'

"The export demand is becoming the leading feature and life of our Chicago market, it being headquarters for export buyers. From twenty to forty exporters can be found in this market any day in the year, and some of them are extensive dealers. About all the foreign markets are represented. The export demand commenced in 1893, and had a rapid growth until 1896, when 35,000 horses were sold for export, and during the last year fully 50,000 horses and mules were sold for export. The demand is increasing in England, Ireland, Belgium, Scotland, Germany, France and Mexico, and our present correspondence would indicate fully one-third increase for the coming year. If Americans will have an eye to their own interests they will commence breeding the best grades, and as extensively as possible, and every horse should be bred to a purpose, and the breeder should pay the strictest attention to the class he wishes to produce."

Few consumptives believe they are in danger till medicine is of little avail. Ayer's Cherry Pectoral taken in the early stages, has prevented further progress of the disease, and saved many a life. At any stage of phthisis, Ayer's Cherry Pectoral affords great relief.

To Cure Constipation Forever.
 Take Cascarets Candy Cathartic. 10c or 25c.
 If C. C. C. fail to cure, druggists refund money.

Irrigation.

THE ETHICS OF IRRIGATION.

Paper read before the Kansas State Irrigation Association, by Prof. Templin, of the State University, at the annual meeting at Lawrence, December 19, 1897.

It does not appear perfectly clear that the placing of this title upon the program was altogether serious. Certainly since its publication friends have not failed to remind me that it was capable of being regarded as a joke. If such is the theme, little more can be said of the speaker. He has to confess that he has never spoken or written a word on the subject of irrigation—has read very little—but (for better or worse) has actually worked at irrigation, having engaged in it for a time for a livelihood. Nevertheless, he still hopes that none of these things conclusively debar him from a place on this program.

At first glance, the connection between irrigation and ethics does not appear to be a very close one, but I am confident that a relation can be shown to exist. What might appear to be the most plausible argument I do not care to use. It has been said that he is a benefactor who causes two blades of grass to grow where one grew before, but there may be doubt about it in some cases. It depends upon the grass and what is done with it. We have all seen situations in which there was altogether too much grass. A quarter or a section of tough blue-stem is

the ideal to be realized. Whether we like it or believe it or not, life as it is lived is a complete expression of the real character of the one who lives it. By character we mean the principle in a man which does things—which issues into concrete conduct. It is that complex of innate propensities and tendencies after they have been transformed and developed and more or less permanently fixed or set. This process of developing and fixing such native possibilities is largely determined by one's environment, the conditions which force him to live habitually as he does. Such circumstances resulting in the formation of habits of mind and body are more potent among the formative influences of one's character than all the precepts he will ever hear. So a man's character and ideals become to a large degree professional. Ethically, the merchant, the lawyer, the preacher, the mechanic, the farmer belong to different varieties, if not to different species. Theoretically they may all subscribe to many broad abstract principles, but practically they differ greatly, each having his own peculiar virtues and vices. So, to determine or influence in any degree the life of a man or of a people it will be necessary to determine the formative influences of character. Now one of the most powerful agencies in successful moral training is constancy. Without it a person becomes fickle, unstable, vacillating, incapable of persistent resolution but subject to momentary caprice. His character may be said to be

ple to assert itself. Irrigation will thus favor the development of a certain general type of character. It will not produce a community of soldiers but it will foster true patriotism. It will develop conservatism. Men with comfortable homes and fair prospects, like those in western Kansas, about whom we were told last evening, will not take part in the thoughtless destruction of prevailing institutions, nor rush into hasty social reconstruction. An irrigating people will ultimately resemble the inhabitants of Holland and Belgium more than those of Hungary and Ireland. If western Kansas were to successfully practice irrigation and eastern Kansas continue to rely upon the current forces of nature, it would not be many generations, other conditions remaining constant, before the present situation would be reversed and the west would be the more conservative and the east the more radical.

All of these things, however, on the condition that a reasonable amount of intelligent labor be required—a condition, the presence of which will be readily granted by all who have tried irrigation (or the Campbell method of soil culture).

Well-directed labor, labor for worthy ends, which is rewarded to a reasonable degree, is the first essential in the development of a good character. That there is "no excellence without labor" is as true subjectively as objectively.

Shakespeare makes Hecate exclaim: "And, you all know, security is mortal's chiefest enemy."



Happy, healthy childhood! Every childless woman feels a tugging at her heart-strings when she sees another woman's happy, healthy rollicking baby. Motherhood is woman's supremest duty and her supremest happiness. Even in childhood she shows how deeply this sentiment is implanted in her breast when she plays with her dolls. There are thousands of otherwise happy wives in this world who only lack the thrilling touch of a first-born's fingers to complete their happiness.

Every wife may be the mother of happy, robust children who will. Thousands of women who had lived years of cheerless, childless wedded life, or whose babies have been born to them weak and sickly, soon to die, are now happy mothers of healthy children, and bless Dr. Pierce's Favorite Prescription for the wonders it has accomplished for them. This great medicine acts directly and only on the delicate and important organs that bear the burden of maternity. It makes them strong, healthy, vigorous and elastic. It allays inflammation, heals ulceration, and tones and strengthens the nerves. It banishes the discomforts of the expectant months and makes baby's advent easy and almost painless. It insures a healthy child and an ample supply of nourishment. Honest dealers will not offer worthless substitutes for the sake of a little added profit.

"I cannot say enough in praise of Dr. Pierce's Favorite Prescription, as it has undoubtedly saved my life," writes Mrs. Florence Hunter, of Corley, Logan Co., Ark. "I miscarried four times; could get no medicine to do me any good. After taking several bottles of Dr. Pierce's Favorite Prescription I made my husband a present of a fine girl."

Free! Dr. Pierce's Common Sense Medical Adviser. For paper-covered copy send 21 one-cent stamps, to cover mailing only. Cloth-bound 31 stamps. Address Dr. R. V. Pierce, Buffalo, N. Y. A whole medical library in one 1000-page volume.

It is worth a thousand pounds a year to have the habit of looking on the bright side of things.—Johnson.

No-To-Bac for Fifty Cents.

Guaranteed tobacco habit cure, makes weak men strong, blood pure. 50c, \$1. All druggists.

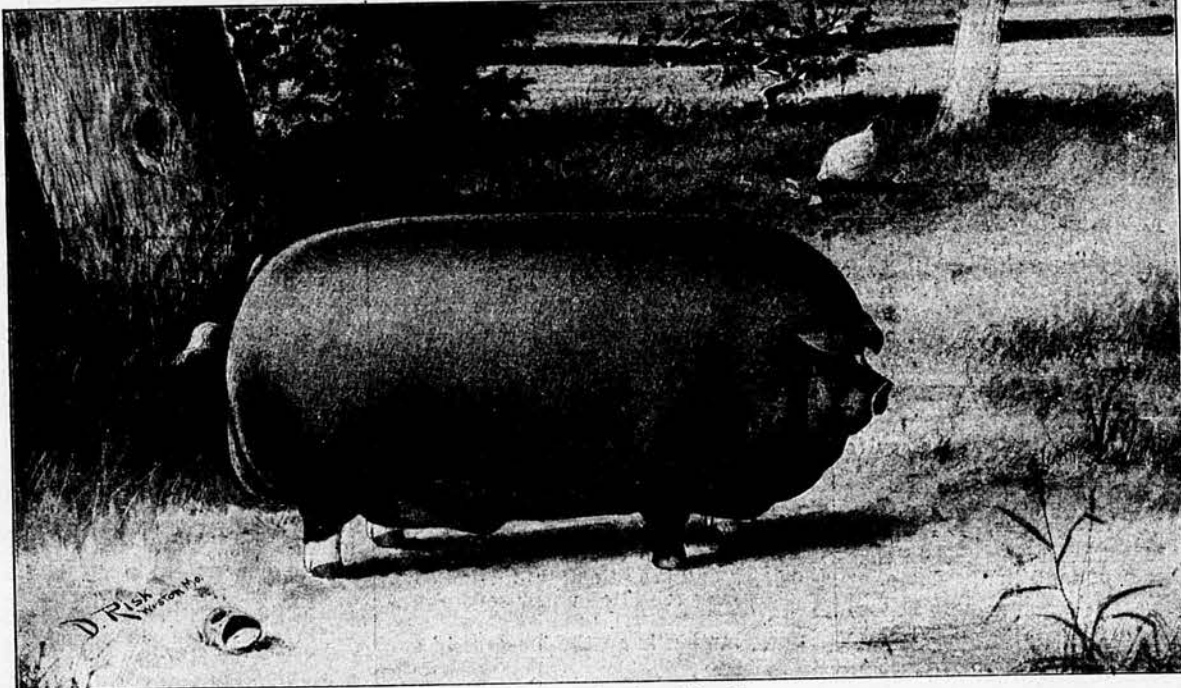
WANTED:—John Jackson, formerly a butcher in Great Hampton Row, Birmingham, England, who many years ago went to America under the name of James Johnson and traded for some years as cattle dealer in Kansas City. Jackson (if alive) is now entitled to property in England. Information to William Jackson (brother), Shakespeare Villa, Sparkhill, Birmingham, or to Thurston & Messier, Solicitors, Wednesbury, England.

SIMPLE WHEN YOU KNOW HOW.

Prof. Whitsel's methods are the only in the world that teaches you **HOW TO GAIT YOUR HORSE**. Fox trot, running walk, trot, singlefoot and canter—either gait—in less than one hour, regardless of breeding. Besides, this book teaches the high school gaits, march, high trot, Spanish walk, etc. Gives a full course to ladies and gentlemen in riding the saddle-horse; in fact, everything pertaining to the saddle-horse—every position and gait illustrated true to life by both sexes in actual practice. Price, post-paid, \$1. W. M. Whitsel, Kansas City, Mo. Reference—F. Weber Sons, Wholesale and Retail Harness and Saddlery, 1004-6 Walnut St., K. C., Mo.

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These four Provinces form that portion of the Dominion of Canada known as Western Canada. The resources are Agricultural, Timber and Mineral. A Homestead of 160 acres can be had FREE. \$15 to \$25 per acre per year are yields that have been had off these lands, and no taxes but school taxes. Write for pamphlets, maps, etc., to J. S. CRAWFORD, 408 Board of Trade Bldg., Kans. City, Mo.



U. S. CHIEF 2d 19662 S.

The new boar selected by CLIFTON GEORGE, Lathrop, Clinton Co., Mo., to assist Chief I Know in his herd. Sired by U. S. Chief 24609 and out of Lady U. S. 80276. Many of the best sows in his coming sale—February 8, 1898, at Lathrop, Mo.—are bred to him, others bred to the great Chief I Know. Write for catalogue.

not an inspiring spectacle for the man who is striking into it with a twelve-inch breaking-plow. Nor can we be certain that it is always desirable to have two stalks of corn or wheat grow in the place of one. Geography may have something to do with it. For example, it has been suggested that it would be preferable not to have the rule apply to India or Argentina.

Even a much broader view of the problem suggests its doubts. The multiplication of amount of food, even if it be uniformly distributed, might not be an unmixed good. Man does not live by bread alone, and it is conceivable that more bread would not make a better man. Grant that such an enlargement of the world's food supply would result in a corresponding increase in the number of its inhabitants, it would still be to show that they would be any happier or nobler. Carlyle's England of twenty million people, mostly fools, would have been as great and good with some ten million fewer fools. Sociology may be interested in quantity of life but ethics cares only for quality.

The prime purpose, if, indeed, it is not the sole purpose, of irrigation is to increase the food supply. Admit that this end is obtained. Aside from its bearing upon the population problem, has irrigation any practical relation to the lives, morals, the character of the people? Let us see. We may begin by accepting for our purpose the generally current standards of conduct. We will mean by the good life just what is ordinarily meant by it. The industrious, prudent, honest, just, benevolent, patriotic, temperate, gentlemanly man is

anarchistic or, better yet, he has no character. So it happens that the man whose business and income are very irregular, who plays the part of Dives one day and of Lazarus the next, is almost sure to grow into a man who cannot be trusted. It would be most astonishing if he remains a steady, upright, courageous citizen. He may be brilliant but he will not be solid. A speculative career will make a speculative character; and it is as true of communities as of individuals. Oscillation between beggary and affluence grows fanaticism and nomadism; and a state which one year shrinks from the horrors of bankruptcy and the next forces its creditor's at the revolver's mouth to accept payment of debts not yet due, has something to fear.

Now, those who are familiar with irrigation will admit two things about it, namely: it decreases chance and uncertainty in agriculture and horticulture, and hence in all legitimate industry dependent upon them, and it involves much hard labor and good management. It is not necessary to defend these two propositions. They are implied in or demonstrated by all the papers on this program. My sole contention therefrom is that since irrigation places these industries, conducted by such a large proportion of some communities, upon a more steady and reliable basis, thereby eliminating wild extremes of fortune, it contributes to the ethical advancement of the people. Tending strongly to the preservation of the economic equilibrium it will tend to secure the moral equilibrium; or rather, it will allow the moral equilibrium of the peo-

And he was right, where security weakens will, paralyzes resolution and diminishes the capacity for doing things that ought to be done. However, security in the legitimate products of one's best endeavors stimulates the active faculties and is one of mortal's chiefest friends.

The quiet, steady, fairly profitable practice of irrigation may ultimately prove to be a more potent moralizing and civilizing force than the fiery oratory of the professional reformer. At any rate, let it go on as long as there is more water than is needed for drinking and bathing.

\$2.70 BOX OF KING'S SEEDS FREE

To any reliable persons who will sell for us a \$3 lot of our best Northern Grown Seeds to their neighbors. **NO MONEY REQUIRED.** Simply write that you accept this offer and saw it in the Kansas Farmer and we will forward the \$3 lot of seeds prepaid, and when sold will send the \$2.70 box.

BOYS AND GIRLS Can secure Watches, Guns, etc., free by selling seeds for us, and we start them with a stock without requiring a cent of their money.

T. J. KING CO., Seedsmen, Richmond, Va.

Fairbury Nurseries

Plant Our Cherry for a Sure Crop. Growers of Fruit, Forest, Shade and Ornamental Trees, Evergreens, Small Fruits and Vines. In fact, everything usually grown and sold by WESTERN NURSERYMEN.

WE PAY THE FREIGHT. Send us a list of your wants for special prices.

PRICE LIST SENT FREE. ADDRESS C. M. Hurlburt, Mgr., Fairbury, Neb.

The Apiary.

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

Winter Bee Notes.

If the bees get a good fly in January you can very nearly call them safe for this winter.

It is not preferable to have bees fly out of the hives when there is much snow on the ground. Shading the hives will prevent it.

When the bees are flying out lively, we can open the hives and examine them to see if they have plenty of food, and also help them to clean out the hives.

Queens will begin laying a few eggs now very soon, and thus make a beginning for next summer. They usually have considerable brood during March, and April will find them well stocked.

The editor of the Busy Bee says: "I am asked by correspondents what I think of Carniolan bees, and in reply will say that I consider them a most excellent bee. But I would not recommend them to the farmer or beginner, as it is very hard to get those which are pure, and then there are so few of them in the country that they cannot be kept

while, when it will turn back to a fine quality of pure liquid honey, just as it first came from the hives, and if it is sealed up air-tight while it is warm it will remain in this form for a long time. If it is not thus sealed up it will soon go back to granulation.

Farm bee-keeping will progress much better if those who have bees would make preparations during leisure time in winter by preparing hives and fixtures of all kinds that the bees will likely need the following season. Not being ready with good hives when the bees swarm, and honey boxes when they are needed, is the principal reason the bee business is made a bungling affair.

Stock of all kinds should be excluded from about bee-hives in winter, and indeed all other times, but more especially in winter. Bees in cold weather must be kept from any annoyance of whatever nature. They are always in a state of activity, and when aroused they proceed to consume food which they would be better without, and would not do otherwise. It is not only damaging to them, but a loss of honey.

Bees cannot be fed liquid feed in winter, but may be fed candy. To make this candy, take granulated sugar and add a little water to it so that when set on the fire it can be reduced to sirup. Let it boil ten or fifteen minutes, and

OHIO POLAND-CHINAS AT PUBLIC AUCTION.

PAOLA, KANSAS, THURSDAY, FEBRUARY 17, 1898.

Sows and Gilts bred, direct from the home of this famous breed. Black U. S., One Price, Black Bess, Victor M. strains.

Thirty-five Ohio Poland-Chinas, twelve of which are from the great Black U. S. and One Price herd of W. C. Welch, of Harveysburg, Ohio. In this offering goes the blood of Pricess 30169, the reigning king of the house of One Price, and of W. H. Black U. S. 89199, Edith Black U. S., Sixteen to One 41827 (dam Nina One Price), all by Welch's Black U. S. 83521, Victor C. 36415 by Victor E., and I. X. L. Tecumseh, of the Greenwood I. X. L. family, and herd boar of W. A. Starback, Wilmington, Ohio. No richer bred individuals of these great families ever went under the hammer, East or West. Come to this sale. Get an Ohio Poland-China from where the Illinois boomers get theirs—just as good.

Sale in comfortable room in town. Commences at 1 p. m. Write for catalogue; it tells all about them. J. N. Harshberger, Lawrence, Kas. Auctioneers. Buckeye Bill, Paola, Kas.

C. P. SHELTON, Paola, Kas.

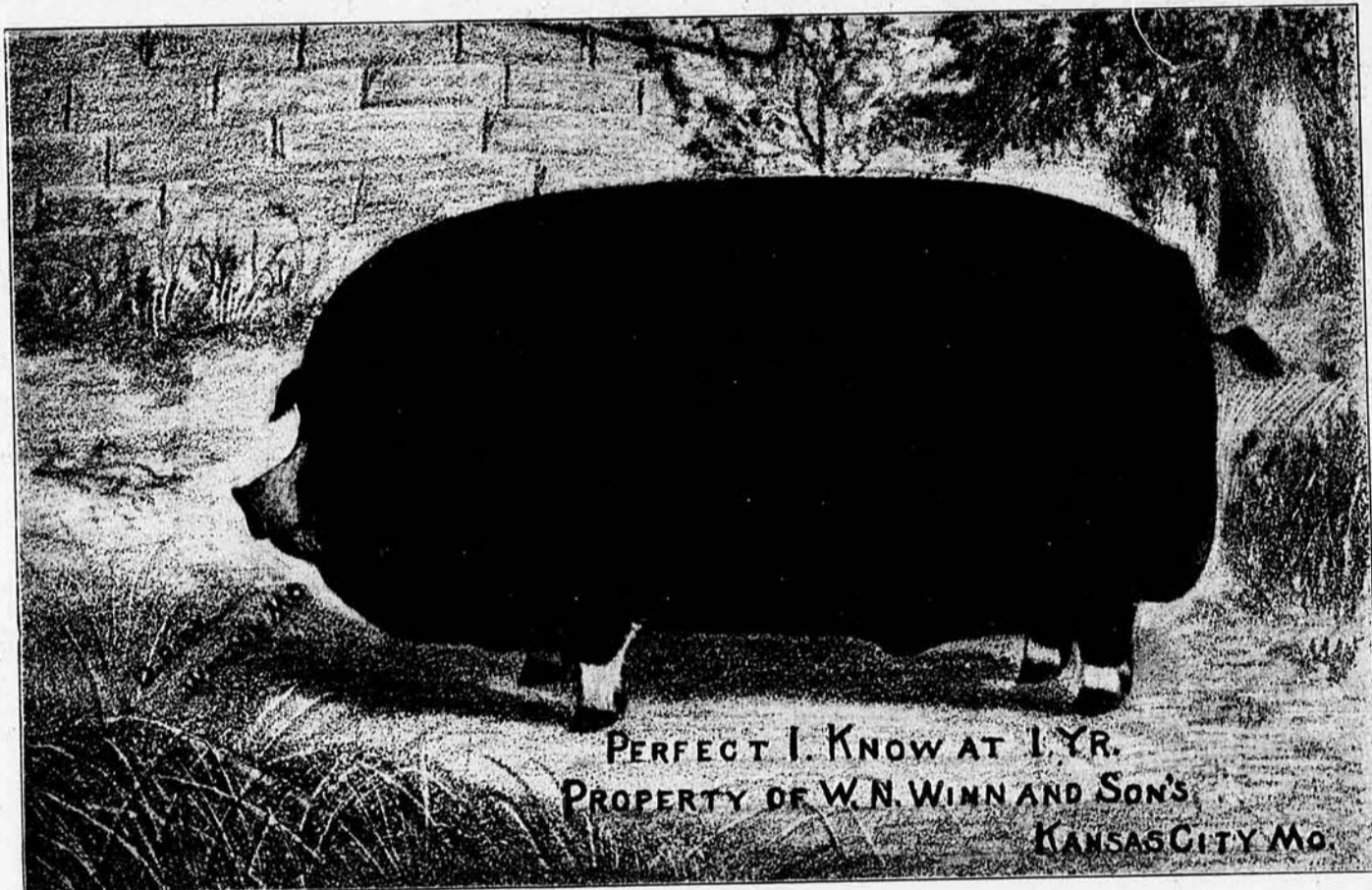
was held at the Clifton House, Chicago, January 13, 1898. The reports of the officers showed a prosperous condition of the association and an increase of about \$500 over last year in the amount of cash on hand. Robt. J. Evans, El Paso, Ill., is Secretary.

Frank Colby, of Sheridan, Ind., purchased a fine pig of Clifton George, of Lathrop, Mo., in December, and writes as follows: "The pig is doing grandly, and is just about as nearly perfect as a

Beauty Is Blood Deep.

Clean blood means a clean skin. No beauty without it. Cascarets, Candy Cathartic clean your blood and keep it clean, by stirring up the lazy liver and driving all impurities from the body. Begin to-day to banish pimples, boils, blotches, blackheads, and that sickly bilious complexion by taking Cascarets,—beauty for ten cents. All druggists, satisfaction guaranteed, 10c, 25c, 50c.

Blocks of three—one old with two new subscribers—all for \$2. Send them



PERFECT I. KNOW AT 1 YR.
PROPERTY OF W. N. WINN AND SON'S
KANSAS CITY MO.

The above represents one of the finest boars in America. Write to W. N. Winn & Son, Thornton, Mo., or Kirkpatrick & Son, Connor, Kas., for catalogue of brood sow sale, and then attend the sale at Kansas City next Monday.

pure long. A cross between them and the Italians produces a very desirable bee."

Do not neglect looking for queens or brood when opening the hives. It requires good eyes and some experience to find a queen readily, but if brood is present in the combs, you may be sure the queen is all right.

Have the entrances to hives and the vicinity around them clean and convenient for the bees to get out and in the hives. This saves many bees in winter, as they are often caught out when the air is a little chilly, and are scarcely able to crawl into the hive.

There is little or no expense in keeping a few colonies of bees, except the hives they are in. They frequently pay an immense profit on the investment. It is very singular that more people do not keep them, and it is undoubtedly a mistake and a misunderstanding of their importance.

Considerable extracted honey is now on the market put up in different kinds of packages, tin cans, glass jars, etc. Almost all pure liquid honey at this time of the winter is candied down solid, resembling sugar. Quite a good many people prefer to use it in this manner, and extensive users of it nearly all prefer it thus. Some do not, and would rather have it in liquid form. It is very easily returned to liquid by setting the cans or jars in warm water for a little

stir continuously all the while to keep it from burning. Pour out on plates covered with paper, to prevent the candy sticking. This will harden almost instantly into solid cakes, when it is ready to feed the bees. Lay one of these cakes on the frames directly over the cluster of bees.

Gossip About Stock.

The twenty-first annual meeting of the stockholders of the American Poland-China Record Co. will be held in Cedar Rapids, Iowa, Wednesday, February 9, 1898.

The sixth annual meeting of the National Duroc-Jersey Record Association

Pigs Growing Bony

- by eating swill out of the old-fashioned trough.
- Our cast-iron pig trough keeps clean, pure and sweet. Price, \$1.50.
- TOPEKA FOUNDRY, Topeka, Kas.,
- Manufacturers of castings in grey iron, brass or aluminum. Patterns, models and machine work.

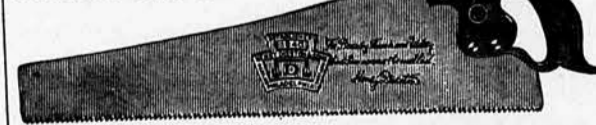
hog could well be. I am confident that when the pig is full grown I will have the best hog in Indiana. I would not sell him for double the price I paid for him." No. 47 of Clifton George's sale catalogue is a litter brother of the above mentioned pig, and Mr. George considers it a finer one even than the Mr. Colby pig. The sale will be held on Tuesday, February 8, at Lathrop, Mo.

promptly to the Kansas Farmer Co., Topeka, Kas.

Too late we learn—a man must hold his friend, Unjudged, accepted, trusted to the end. —John Boyle O'Reilly.

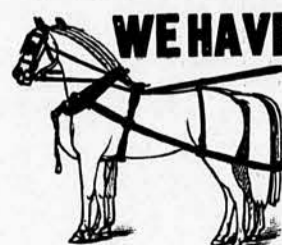
Remember, you can get Kansas Farmer and Breeder's Gazette both for one year for \$2, saving \$1 by the combination.

DISSTON'S



crucible cast steel, and are FULLY WARRANTED. For sale by all dealers. Send for PAMPHLET OR SAW BOOK, mailed free. HENRY DISSTON & SONS, Philadelphia, Pa.

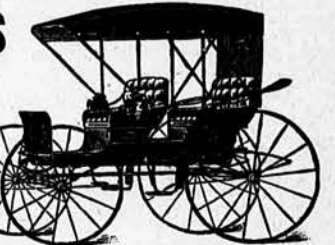
It will pay you to buy a new saw with "DISSTON" on it. It will hold the set longer, and do more work without filing than other saws, thereby saving in labor and cost of files. They are made of the best quality



No. 207. Farm Harness. Price, \$23.70. As good as sells for \$30.00.

WE HAVE NO AGENTS

but have sold direct to the consumer for 25 years at wholesale prices, saving him the dealer's profit. Ship anywhere for examination. Everything warranted. 118 styles of Vehicles, 55 styles of Harness. Top Buggies, \$36 to \$70. Surreys, \$50 to \$125. Carriages, Phaetons, Traps, Wagons, Spring-Road and Milk Wagons. Send for large, free Catalogue of all our styles.



No. 214. Price, with curtains, lamps, storm apron, fenders and pole, \$65. As good as sells for \$90.

ELKHART CARRIAGE AND HARNESS MFG. CO. W. S. PRATT, Sec'y ELKHART, IND.

The Home Circle.

PASSING UNDER THE ROD.

I saw the young bride in her beauty and pride
Bedecked in her snowy array;
The bright flush of joy mantled high on her cheek,
And the future looked blooming and gay.
With woman's devotion she laid her fond heart
On the shrine of idolatrous love;
She anchored her hopes to this perishing earth,
By the chain which her tenderness wove.
But I saw when those heart-strings were bleeding and torn,
And the chain had been severed in two,
She had changed her white robes for the sables of grief,
And her bloom for the paleness of woe.
But the Healer was there pouring balm on her heart,
And wiping the tears from her eyes;
And He strengthened the chain He had broken in twain,
And fastened it firm to the skies!
There had whispered a voice—
'Twas the voice of her God:
'I love thee—I love thee,
Pass under the rod.'

I saw the young mother in tenderness bend
O'er the couch of her slumbering boy,
And she kissed the soft lips as they murmured her name,
While the dreamer lay smiling in joy.
Oh, sweet as a rosebud encircled with dew,
When its fragrance is flung on the air;
So fresh and so bright to that mother he seemed,
As he lay in his innocence there.
But I saw when she gazed on the same lovely form,
Pale as marble, and silent, and cold;
But paler and colder her beautiful boy—
And the tale of her sorrow was told.
But the Healer was there who had stricken her heart,
And taken her treasure away;
To allure her to heaven, He had placed it on high,
And the mourner will sweetly obey.
There had whispered a voice—
'Twas the voice of her God:
'I love thee—I love thee,
Pass under the rod.'

I saw, too, a young father and mother who leaned
On the arm of a dear cherished son;
And the star in the future grew bright to their gaze
As they saw the proud place he had won.
And the fast-coming evening of life promised fair,
And the pathway grew smooth to their feet,
And the starlight of love glimmered bright at the end,
And the whispers of fancy were sweet.
And I saw them again, bending low o'er the grave,
Where their hearts' dearest hope had been laid,
And the star had gone down in the darkness of night,
And joy from their bosoms had fled.
But the Healer was there, and His arms were around,
And he led them with tenderest care;
And He showed them a star in the bright upper world—
'Twas their star shining brilliantly there.
They had each heard a voice—
'Twas the voice of her God:
'I love thee—I love thee,
Pass under the rod.'

—Mary S. B. Dana.

THE NEW WOMAN ON THE FARM.

Paper read by Mrs. Dr. H. W. Roby, before the annual meeting of Kansas State Horticultural Society.

(Continued from last week.)

John scanned the drawing with a critical eye.
"And what is this—enclosure?" pointing to the south end of the porch.
"That," said Mary, beaming, "is an enclosure. Only when I get the rough paper on that, I shall cover it over with clean, white oilcloth. You see, the closet opens from this room also. On this side there are two bunks just as they are on a steamboat. This is the spare room, with this little corner shelf for a wash-bowl."
"This is not a back porch," cried John, triumphantly waving the architectural design back and forth before Mary's smiling countenance. "It is a Pullman car at one end, and a trans-Atlantic ocean steamer at the other, with a non-descript middle; and now, Mary, dear Mary, tell me where we are to live."
Mary had joined in the laugh which accompanied his graphic description of the back porch.
"In the living room," she said modestly. "But let us enter it from the front porch. See how this sheltering roof covers and protects it. At this northeast corner there is a tiny vestibule, where we may hang our rubber coats and take off our overshoes and drain our umbrellas, and on this wooden locker we may sit to put them on, and in it can keep the hammocks and cushions. Up these steps, and we are in our living room."
"Home at last!" cried John, and, rising, he seized Mary by the waist and proceeded to march victoriously up and

down the room. That is he would have marched if the room where they had been sitting had not been a little 12x12 modern parlor, encumbered with a stove, a center table, a lounge, a book-case, an organ, four cane-seat chairs and three easy chairs with phenomenally long rockers. As it was, after an attempted circuit of the room, he drew Mary down beside him on the lounge and whispered in pretended anxiety, "Is it like this one, Mary?"
"You forget," said Mary, soothingly, "it is sixteen feet wide and twenty-four feet long. Almost at the northern end is a fire-place rising through the floor and just leaving room for a cozy niche behind it, where there are two high casement windows, beneath which are two wide divans."

"Fitted into the walls at either end are shelves for holding our books. The divans are so wide and so fitted that they may serve as lounges by day and couches by night. Underneath is store room for extra bedding and many things for which there is no place with our limited closet room."

"The floor is hard pine, stained, and on it I can put that pretty carpet I have made, with its tapestry border. It is a most beautiful rug. The plastering is the rough coat and the woodwork is the simplest of pine, which we can stain and varnish ourselves."

"There are two cheerful east windows and a generous south one. Pray, John, that I may be delivered from the temptation of filling it full of plants. Not more than five plants John, one for each window."

"The large square table, on which we can eat by day and at which we can sit and read by night, will not interfere much if you want to try a cake walk."

"I shall be duly careful that there are not more than two long-heeled rockers," Mary looked mischievously at John, for there had been something like a frown on his face and a whispered objurgation as he had come into contact with an uncomfortably sharp projection when he had attempted triumphantly to promenade the room a few moments before. "There can be plenty of easy chairs, made out of barrels," looking inquiringly at John. There was no response. "We shall have to buy the easy chairs, then, and each shall buy his own, so we may be sure of a perfect fit."

"Five plants," repeated John, musingly, going back a little in his thoughts. "You, who are so fond of flowers, how will you bring yourself down to that?"

"Ah, but you will build me a cold-frame right under this south window and I shall have violets."

I might remark in passing that John did build the cold-frame and Mary sold \$65 worth of violets one winter, but that is another story.

"Then, when you are planting trees in the front yard, you may set me out some flowering shrubs."

"And make flower beds?"
Mary shook her head. "No, not flower beds. Things must grow from year to year without the care that annuals will need. I will be very busy, John, and we must find for our front yard the shrubs and vines that grow easily and naturally in Kansas. Pick them out of our scanty woods and put them along with the walnuts and butternuts, the hickories and pecans transplanted from our own forests to our own dooryards."

"Are we to have no oaks nor elms nor cottonwoods?" was John's aggrieved inquiry, for John belonged to the class of large-hearted men who love a noble tree.
"Along the highway and about the outer edges of the farm," was Mary's answer. "Dou you know, John, I never pass under the leafy branches of those trees on Kansas avenue, in South Topeka, on a hot summer day without breathing a prayer for the soul of the farmer and benefactor who planted them there. So shall people remember us after we are dead."

"And on the elm at the gate post we can put a sign."

John broke into a hearty laugh. "One mile to the Jenkins Dry Goods Store?" he inquired. "We might have 'Dude's Sarsaparilla' painted on the roof of the front porch, too, like the enterprising farmers in the Western Reserve in Ohio. Ugh! those black and yellow nightmares make me shudder yet."

"Well, no," said Mary, hesitatingly, for she saw she was treading on dangerous ground. "But just—'beware of the dog,' or perhaps 'beware of the dogs,' for I want two—a little, noisy one to give alarm and a big one that means business when he shows his teeth. I know dogs are rather a foolish and expensive luxury, but so long as you men persist in laying out your farms so that a farmer's wife shall be dangerously alone and isolated the greater part of

CANDY
CATHARTIC

Cascarets

CURE CONSTIPATION

10c
25c 50c

REGULATE THE LIVER

ALL
DRUGGISTS

the day, so long must we women provide ourselves with the best means of protection that we can."

"But when the new man comes?" interrupted John.

"When he comes," said Mary, "we shall have farm villages, and the farmers' wives can indulge in companionship, in co-operative house-keeping, in co-operative dairying. Oh, it's nearer than you think," joyfully said Mary, who, by virtue of being a new woman, was that most cheerful and hopeful optimist, a reformer, while John slowly shook his head.

"If we only could co-operate," said Mary, "there are many needless cares in the life of a farmer's wife, even though she does eliminate the milking, the hewing of wood and the drawing of water. There are the butter, the chickens and the bees."

"Will you make butter?" queried John. "I shall not dare to let you make it, John, after reading this"

Turning to the book-case she drew out a little red-covered volume labeled "Profit in Dairying."

"What a suspiciously mercenary-looking shelf that is," exclaimed John, as he read, "Profit in Dairying," "Profit in Poultry-keeping," "Gardening for Profit," "The Helpful Hen," "Liberty and a Living," etc.

"You don't see any book entitled 'School Teaching for Profit,' do you," merrily inquired Mary, and proceeded to read aloud:

"But if it is a man that is making butter, better not go into the dairy, for you can see enough of the circus without. From the dairy door issues the steam of the boiling teakettle and sounds of profanity, together with calls upon every female on the place to wait upon and bring him lots more hot water and not to stand there gaping like fools, and he tells them that 'churning is woman's work anyhow.' And when at last the bitter and unprofitable end is reached, he slams the churn, and kicks a pail over and leaving the dairy in a hopeless mess goes out and kicks the cow and then goes round that place like a comet for the rest of the day."

"With that dreadful picture in my mind," said Mary, looking up, I couldn't let you churn the milk from my two pretty Jersey heifers, Lily and Rose, that I have brought up with my own hands."

Then Mary puckered her pretty brows into a deep, financial wrinkle, as she continued: "They are good for a hundred dollars a year, net, and my two dozen hens shall bring us fifty more."

"Dearest girl," smiled John, how many tears I shall have to wipe away when these lovely castles in Spain tumble about your ears."

"You shall see," was Mary's confident answer. "I'm not going to sell my butter as Mrs. Borle does her's, for 6 cents a pound and take it out in trade."

I ought not to anticipate, but I must tell you that Mary did ship her butter all the way from Valencia to Salt Lake City one summer and got 35 cents a pound for it. That was before the people at home found out how good it was. And as for the chickens, I have seen Mary's books, which showed for two years at least a clear profit of \$2 per year for every hen.

Indeed, now, when I come to think about it, it would be quite impossible to recite here in twenty minutes all the long and interesting conversations held between Mary and John before that eventful Thanksgiving day, 1895, when the happy young folks went to live in the home they had planned.

Quite impossible to tell how the money from the cows was supplemented by the returns from the chickens, and that in turn eked out by the receipts from the bees, the garden, the celery plants, the parsley frame, the violets and the berry patch.

So that when, with a proud smile, Mary laid her account book down on the table before John, the 30th day of December, 1897, the husband looked up

from its pages with love and pride in his eyes and said:

"Well, sweetheart mine, you've kept your promise nobly. You did kirmish around and find the bread." And, after a pause, he pursued, reflectively, "Isn't it strange that farmers' wives are the only women, as a class, who go into married life with the intention of supporting a husband? I fancy," he said, with a twinkle in his eye, as he drew Mary down beside him, "that showing the best way to do it, is the true mission of 'The New Woman on the Farm.'"

Unlike most proprietary medicines, the formula of Dr. J. C. Ayer's Sarsaparilla and other preparations are cheerfully sent to any physician who applies for them. Hence the special favor accorded these well-known standard remedies by the World's Fair commissioners.

No deception practiced.
No \$100 Reward.

ASK YOUR DRUGGIST
for a generous
10 CENT TRIAL SIZE.



ELY'S CREAM BALM
contains no cocaine, mercury nor any other injurious drug. It opens and cleanses the Nasal Passages. Alleviates Pain and Inflammation. Heals and Protects the Membrane. Restores the Senses of Taste and Smell. Is quickly absorbed. Gives Relief at once. 50 cts. at Druggists or by mail; Trial Size 10 cts. at Druggists or by mail.
ELY BROTHERS, 56 Warren Street, New York

The DELICIOUS FLAVOR

of the best packing house products can be secured at home if you know how. It's all in the curing and smoking. Our free pamphlet gives all the latest recipes and instructions for salting, curing and smoking—**LEE'S HICKORY EXTRACT** made from the best hickory wood. You can smoke a ham or side of bacon in two minutes, with no danger of fire or spoiling the meat. Cheaper and better than old process even if you have the smokehouse and hickory wood. Sample hot. Geo. H. Lee Co. Bx 11 Exeter, Neb.

HOUSE PAINTS

Victory Implement and Wagon Paints, Nonpareil Carriage Paints. Home-made and the best made for all purposes. Window and Picture Glass, Hot-bed and Greenhouse Glass. If your dealer does not carry these goods send direct to
CUTLER & NEILSON PAINT AND COLOR CO.,
Manufacturers and Jobbers,
N.W. Cor. 11th and Mulberry Sts., Kansas City, Mo.

Do You Love Music?

If so, secure one of the latest and prettiest Two-Steps of the day, by mailing **TEN CENTS** (silver or stamps) to cover mailing and postage, to the undersigned for a copy of the

"BIG FOUR TWO-STEP."
(Mark envelope "Two-Step.")

We are giving this music, which is regular 50-cent sheet music, at this exceedingly low rate, for the purpose of advertising and testing the value of the different papers as advertising mediums.

E. O. McCORMICK,
Passenger Traffic Manager "Big Four Route,"
CINCINNATI, O.
Mention this paper when you write.

The Young Folks.

HOW DID THEY KNOW?

Dear pussy, I love you, an' I's your true friend,
'Cause I saved you a whippin' to-day
When cook missed her custard and every one said
It was puss that had stole it away.
You know you are naughty sometimes,
pussy dear,
So in course you got blamed, an'—all that!
An' cook took a stick, an' she 'clared she would beat
The life out, that mizzable cat.
But I—didn't feel comf'orb'le down in my heart,
So I saved you the whippin', you see,
'Cause I went to mamma an' telled her I 'spect
She'd better tell cook to whip me,
'Cause the custard was stole by a bad little girl
Who felt dreffully sorry with shame,
An' it wouldn't be fair to whip pussy, in course,
When that bad little girl was to blame!
'Was it my dear little girlie?' my dear mamma said,
I felt dreffully scared, but I nodded my head,
And then mamma laughed.
'Go find nurse, for I guess,
There's some custard to wash off a little girl's dress.'
Well, then, course they knew
It was I, an' not you,
Who stole all the custard an' then ran away.
But it's best to be true
In the things that we do,
An'—that's how I saved you a spankin' to-day.

Written for Kansas Farmer.

YOUNG FOLKS IN THE OLD COUNTRY.

BY ANNA MARIE NELLIS.

NUMBER 17.

"SYLVESTER ABEND."

In German cities New Year's eve is celebrated somewhat like Hallowe'en and "carnival night" are in Topeka. That is to say, all the noise and mischief performed in Topeka on both the nights mentioned, multiplied by about twenty-five, would represent the happiness enjoyed on the streets of Berlin on the last night of the year.

On the night of December 31, in the year 335 (in fact, it is so long ago that I had nearly forgotten the circumstance), one Sylvester, known as Sylvester 1st, a Pope by occupation—Pope of Rome—died. He was also known as Saint Sylvester, but whether he was a saint before or after the occurrence just mentioned, I do not now know. Maybe he was, like some folks nowadays (a very few), just a little so before he died. Anyway, he died. Since then it has been the custom in European countries to celebrate the anniversary of the occasion on the night of December 31, and they call the evening "Sylvester Abend." For one night in the year the folks, both old and young, in Germany, seem to feel that they are "tied loose," and they make the most of the opportunity. Not that the crowds do any damage, for that they would not dare in a country so strictly governed as Germany is, but they are allowed to play as many pranks as their inclinations dictate.

Leipsiger and Fredrich strasse are the localities where the fun is "thickest," and I do believe there were a hundred thousand people on those streets to celebrate Sylvester Abend. I am sure there were so many as two thousand, but I didn't count the rest.

In former years, I was told, the enjoyment was much mixed with absolute mischief by mobs who took advantage of the occasion to do damage which they would not dare undertake at any other time of the year.

On this last New Year's eve an immense force of police were detailed for guard duty in the principal streets, and they kept the noisy crowd within due bounds.

Any unlucky individual with a silk hat, or a high hat of any kind, was an "special mark for the merry ones. The hat would be quickly mashed down on the wearer's head and he would thus learn the lesson not to be too stylish on Sylvester Abend.

The fun began at 10 o'clock and was "kept up" till a late hour, as it was the especial object to "see the old year out and the new year in."

The principal luxuries indulged by the Germans on New Year's eve, or Sylvester Abend, are pffannekucken and punch. The pffannekucken are large round balls of cake, which have been fried like doughnuts and sugar-coated. The punch, drank by nearly everybody, I cannot describe; as a dutiful Kansas prohibitionist I had no desire to investigate it.

At the stroke of 12 all the bells in the city were rung and every window on the streets was opened and those within shouted: "Prosit Nieu Jahr," and the crowds without took up the answer: "Prosit Nieu Jahr," and the shouting was continued for more than fifteen minutes, until every throat indulging in this queer exercise was too hoarse

for further exertion and had to be lubricated with Berlin punch.

Among the intellectual exercises indulged in by those remaining within doors on New Year's eve is melting lead and dropping it in water at 12 o'clock to learn the fortune for the new year. If the lead separated into many pieces, then the operator will have much money during the following twelve months.

NEW YEAR'S MORNING.

For "auslanders" (foreigners) an interesting, though not really pleasant, entertainment is provided early New Year morning. The milk "madchen," who brings the cream each morning for the coffee; the "brodchen knabe," who brings the hot rolls for breakfast; the postman, the portier, the meat man, the grocery "madchen," all come and hand us a card of congratulations for the coming year. Now, that is very pretty and thoughtful, but it is only a portion of the entertainment. We are expected to do the rest, and they will stand patiently until we remember our part and reward them with a fee. From one mark to ten, according to the importance of the individual, is the right figure. We simply said to ourselves: "That's the Dutch of it," and sent them away happy.

At 9 o'clock the mail brings New Year card greetings from "everybody" one has met at any time in the city. We have the same custom in a very limited way in America, but here in Berlin it is observed in a very copious and wholesale manner.

NEW YEAR'S CALLS.

People here, as a rule, do not "receive" on New Year's day. The all-important event is to be down on the "Linden" and see the Ambassadors go make their New Year's calls on His Imperial Highness, the Kaiser of Germany. This occurs from 11 o'clock till 1 p. m.

We were determined to see all that was possible to be seen, and a party of Americans, numbering nearly thirty, obtained a very desirable observation point at the foot of the equestrian statue of the great Freidrich, which is directly in front of the imperial palace and in the center of "Unter den Linden." Here we could see the crowd and also the carriages as they came to and returned from the palace.

Rows of mounted and unmounted police lined each side of the wide street, so as to keep the people back from the portion reserved for the state carriages, which came at intervals, driving up to the palace and in a half hour returning.

There were eight Ambassadors, consequently we saw eight carriages carrying the representatives of the great countries, America, England, Russia, France, Austria, Turkey, Spain and Italy.

I will undertake to describe only a few of them. Our Ambassador's carriage had four outriders—coachman and three footmen. These wore dark blue livery, and the American coat of arms marked the box and carriage doors. Mr. White is the only Ambassador who wears civilian dress when calling on the Emperor. The representatives of the other countries named were resplendant in shining military uniform, with gold medals and diamonds.

The "turn-out" of the Turk was most elaborate. The carriage was maroon-colored and the coachman and footmen were in white and yellow, and one of the footmen on the back seat, behind the carriage, had a gorgeous white satin coat trimmed with yellow satin, gold braid carelessly but artistically thrown over his left shoulder.

The carriage of the Frenchman was dark blue and the coachman and footmen wore white satin knee breeches, white satin coats trimmed in pink, Napoleon hats, powdered and curled wigs and pink silk stockings.

The Italian had a light blue carriage, with outriders in livery very similar to the Frenchman's outfit. Each carriage bore the coat of arms of the country it represented on the street.

Passing quickly, as they did, but little opportunity was given to obtain more than a simple glimpse of the Ambassadors within, the uniforms and badges principally "catching the eye."

An interval occurs in the calling at exactly 12 o'clock, when the Kaiser, according to custom, comes from the palace and on foot goes over to the arsenal and delivers the key thereof to one of the Generals, who is then the custodian, and gives to him the password for the year. We stretched our necks to the utmost limit, but the crowd was so great; we could not see the Kaiser, so I cannot give the pass-word at this time.

The vast assemblage of people was comparatively quiet. No shouting nor unnecessary noise was allowed.

After the last one of the state carriages had passed, on its return from the palace, there was a small military

\$500.00 Given Away for the largest lists of Misspelled Words found in this advertisement.

See this Month's Issue of DEMOREST'S

for rules governing the Contest.

DEMOREST'S celebrates the beginning of its 38th year of continuous prosperous publication by a reduction in price. There is scarcely any other magazine now published that has had as long and as prosperous a career.

The reduction in price made possible by the recent improvements in engraving, printing and paper-making should gratly enlarge its constituency. No other magazine gives more for the money.

DEMOREST'S FAMILY MAGAZINE

10 Cents

Per Copy
or... \$ 1.00
ONE YERE for



It is the only magazine that gives patterns of its fashion designs for the mere cost of postage.

This is not a lottery; it is an educational contest in which every reader of this month's (February) DEMOREST and next month's DEMOREST is entitled to compete without one cent of expense.

DEMOREST PUBLISHING CO., 110 FIFTH AVENUE, NEW YORK CITY.

parade in front of the arsenal. Two companies of "the finest" of the Emperor's troops, which are stationed there, were reviewed by some high military official whose name I did not learn.

From 2 p. m. to 3 o'clock the Emperor goes out in the royal carriage to return the Ambassadors' calls. He does not, of course, get out of the carriage, but simply sends up his card, like a well-bred Kansas lady would do when she doesn't want to be too familiar with the people called upon.

The royal carriage was drawn by six black horses. The trimmings were all of the black eagle variety and silver. The Kaiser went without a military escort but was accompanied by one of his officers.

This ended all excitement and display "down town." During the interval from 12:30 p. m. till 2 o'clock, our party was entertained at lunch by friends who live on the Linden, and from their balconies afterward we had a much finer view of the crowd and proceedings.

The day was pleasant and not much like winter time, probably about the same temperature as that enjoyed in Kansas on New Year day.

Dr. and Mrs. Dickie received all Americans from 4 p. m. till 6 o'clock, and here we had our American calls after the excitement of the Royal German New Year's entertainment.

The Kaiser, we learned, left immediately after his calls for Potsdam, where the royal family were still residing.

On January 10 they will be in Berlin for the winter and then the court festivities and balls will be given. I don't suppose I will get an "invite."

If the tissues about the roots of the hair become unhealthy the hair will soon turn gray or fall off. Correct this trouble with Hall's Hair Renewer.

WHY BE A SLAVE when you can save time, material, money and avoid all worry by using Farnham's Celebrated Gauge Shears. Best shear and only gauge in existence. Stays sharp and don't get loose. Sold on novel plan. Agents have veritable Klondike. On salary, commission, or best bicycle for three dozen orders. F. H. FARNHAM, 91 Dearborn St., Chicago, Ill.



LADY AGENTS

make big money selling Ideal Hat Fastener. No hat pins needed. Just the thing for cyclists, in fact every lady. Satisfaction guaranteed. Price 25 cents

postpaid with terms to agents. Address Ideal Hat Fastener Co., 280 Dearborn St., Chicago, Ill.



RARE FLOWERS

One-Half Usual Prices.

Send a nickel and address of two who plant flower seeds, and I will send packet of 50 varieties and my Unique Brownie Seed Catalogue.

MISS EMMA V. WHITE, SEEDSWOMAN, 824 Nicollet Avenue, MINNEAPOLIS, MINN.

Wright's Condensed Smoke for Smoking all Meats. Imparts a delicious flavor. Keeps Meat Sweet and free from Insects. A 75 cent bottle will smoke 250 pounds. Sold by all Druggists. Made by E. H. WRIGHT & Co., Ulysses, Neb.

1000 GIVEN AWAY

At the Slaughter Price of \$3.05 each. These magnificent watches are fine engraved, Gold Alloy, hunting case, fitted with high grade fully jeweled genuine Standard Make American movement, absolutely guaranteed for 5 years. A watch which will last a life-time and not to be confounded with the ordinary cheap Swiss watch advertised so extensively. AGENTS AND WATCH DEALERS CAN MAKE FROM 25 TO 50 DOLLARS DAILY handling these watches, as they can be sold easy from 15 to 25 dollars each. If you want a real Bargain, cut this out and send us your name and address, stating if you want Ladies' or Gent's size, and we will send you watch by express to examine, and if you find everything satisfactory, pay to Express Agent our "SPECIAL SALE PRICE" \$9.95 and it is yours, otherwise order returned at our expense. If money is sent with order, a beautiful 5 year rolled gold chain will be sent Free with watch. Address

T. FRETER CO., 296 E. 29th Street, CHICAGO.

Knocked out by Lumbago?

It's because you don't cure it with ST. JACOBS OIL, which penetrates to the seat of the pain and subdues, soothes, cures.

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.**

Forestry for Farmers.

Farmers' Bulletin No. 67 (pp. 48, figs. 15), entitled "Forestry for Farmers," is a reprint of the papers on Forestry for Farmers (Yearbook 1894, pp. 461-500) and the Relation of Forests to Farms (Yearbook 1895, pp. 333-340), by B. E. Fernow, Chief of the Division of Forestry, United States Department of Agriculture.

Contents: How trees grow—How to plant a forest—How to treat the wood lot—How to cultivate the wood crop—The relation of forests to farms.

This bulletin can be secured free of cost from the Secretary of Agriculture, Washington, D. C., or from a member of either house of Congress.

Dorset Horn Sheep.

Editor Kansas Farmer:—The seventh annual meeting of the Dorset Horn Sheep Breeders' Association of America was held at the Waddell House, Cleveland, O., Tuesday evening, January 18, at 8 p. m. The Treasurer's report showed an increase of \$708.99 over last year. The committee selected Pittsburg, Pa., and named the second Tuesday of January as the place and time of next meeting. The association now has 166 members and is in every way a prosperous organization. A large number of Dorsets will be imported in 1898 by members and the trade was never more promising.
M. A. COOPER,
Secretary.
Washington, Pa.

Experiment Station Work--II.

This is the title of the second number of a sub-series of brief, popular bulletins compiled at the United States Department of Agriculture from the published reports of the agricultural experiment stations and kindred institutions of this and other countries. The chief object of these publications is to disseminate throughout the country information regarding the work at the stations, and thus to acquaint our farmers in a general way with the progress of agricultural investigation on its practical side.

The present number (Farmers' Bulletin No. 65, pp. 32, figs. 7) reviews briefly recent work on—

The value of common crops for forage—Stock melons—The starch content of potatoes—A possible danger in the use of crimson clover—Raising geese for profit—Cross-pollination in relation to fruitfulness—Nitrogen, a germ fertilizer for leguminous plants—Recent investigations on lime as a fertilizer—Are ashes at present prices an economical fertilizer?—Can farmers mix their own fertilizers economically?

These are not intended to be "rules for farming," but are regarded as tentative and suggestive, the conclusions being subject to modification by further experiments—trials on the farm alone being able to show how far they will be useful in actual practice.

That there may be no difficulty in understanding the technical terms which are of necessity sometimes used, a list of them with definitions and explanations is given on pages 30-32.

This bulletin can be secured free of cost from the Secretary of Agriculture, Washington, D. C., or from a member of either house of Congress.

Do not fail to include the Chicago Times-Herald in your reading matter for 1898. No household is complete without it. All newsdealers sell it.

WHY THIS CHANGE?

Five years ago all of the people of the East and nearly half of the people of Kansas were searching the vocabularies of the lexicons to discover still worse epithets with which to characterize the people of this State. They were wrong, mean, dishonest, contemptible, individually and collectively, socially and politically, morally and financially, in the estimation of our Eastern friends. The charge was admitted and enlarged upon by a portion of the press and people of Kansas.

At this juncture the Kansas Farmer, standing almost alone as the defender of the name of Kansas, showed that her people are typical Americans, being composed of native-born citizens to a greater extent than almost any other commonwealth; that in intelligence they stand at the head, having a smaller per cent. of illiteracy than any other State save Nebraska, which sister State was sharing with Kansas the animadversions of the traducer; that in newspapers Kansas stood at the head of the column, having a larger number in proportion to population than any other State; that in books and magazines read Kansans were an example to all the world; that in schools and teachers, in high schools and colleges—in the standard means of education, we were well provided and making extraordinarily good use of our opportunities; that in churches and religious work we excel; that industrially Kansas had produced until the world's markets were glutted with our products; in short, that Kansas was (and she is still) an example of the highest form of enlightened modern civilization.

But the denunciation went on. The fact that in politics she had changed, and instead of giving an 82,000 plurality for the Republican candidates, as formerly, she had elected officers on a new and strange platform and under a new party name, it was written down as a crime of the majority of the people of Kansas. It was charged at home and abroad that the new party was one of repudiation and dishonor, and the bottled-up wrath of fools who had foolishly parted with their money was poured in multiplied measure upon our people.

When the next election brought a change of party ascendancy and replaced the Republicans in power, there was no abatement of the vituperation against Kansas. Another election again brought a change and replaced the Populists in control of every branch of the State government, and the denunciation continued, as shown by a letter reproduced in Harper's Weekly of January 29 as a shocking example of the misinformation of Eastern people concerning Kansas:

—, Connecticut, July 7, 1898.

"Dear Sir:—I have your letter of June 23 ultimo, and am not at all surprised at the appearance of the new page turned in the history of your bank. It is like all the rest that has gone before—a shameless history, carried on by shameless men. It is like the inception of the bank, like the acts of its promoters, like the acts of those who foisted the stock upon the East, like Kansas and Kansas people. It is a unique history, too, in that it shows a keen foresight in the selection of those who pay and those who have gone free. In Kansas, I suppose, it is called 'financiering.' Here we give a thing that is founded upon deceit in the beginning and repudiation in the end another name. However, I suppose you cannot help it. There must be something in the air that you breathe in your God-forsaken State that fosters and nurtures the freebooter spirit.

"If it is not asking too much, I would like to know who secured the passage of this act of your Legislature by which you have the power given to you to further pluck your stockholders? Did the 'statesmen' of Kansas, the members of the Legislature themselves, create and carry to completion this act, or did the banks themselves see one more way in which they could get at the pockets already depleted but perhaps not entirely empty? What part did the bank take in this feat of Western engineering?

"I cannot attend your meeting, and would not if I could. I have no desire to see a poor farce poorly played, and as for sending a proxy, I would see you and all the other members of the management of the bank in the lowest depths of hell before I would put my name to any paper that would aid you in your nefarious schemes, and I would certainly prevent a member of my family from signing such a paper.

"I was through your State recently, and was disappointed in seeing it looking so well. I had hoped to see nothing but desolation. However, it is early yet,

and there is still time for the hot winds to blast and destroy. I wish for your whole State and people nothing but distress, but failure, but utter bankruptcy. When that blessed time and condition comes to you I shall feel that we are getting even with you, and when you are blotted out altogether, so that nothing remains but the unsavory name of your foul State, I shall feel that the mill that has ground slowly has at last ground not only fine but well.

"Very truly yours,
"_____"

It is a notable fact, however, that about a year ago Kansas papers and people who had before joined in the denunciation of everything Kansas, discontinued the practice except for obviously political purposes.

Some six months ago it began to dawn upon the more enlightened in the East also that Kansas is not all bad. They concluded that it must have been crop failures that caused the loss of money sent to Kansas and that the resumption of the habit of profuse production would restore the State to favor. It was found that repudiating laws were not passed and that Kansas people were paying their obligations fully as well as the average; that in some cases they were insisting that the lender accept his money and return the papers even before due. When that Butler county farmer planked down the \$1,500 then earned by his mortgage, not due for six months, and at the point of his revolver compelled the mortgagee to unwillingly deliver the papers, the face of mankind towards Kansas was changed and we at once became the wisest, most honest, industrious, frugal, debt-paying, intelligent and praiseworthy people on the earth. Great is the persuasive power of a six-shooter, even at long range.

Then our people at home and our exceedingly warm friends abroad began to explain their changed opinion of us. Our Bank Commissioner showed to a Harper's Weekly writer as follows:

"Total foreclosures in twenty years, \$50,000,000; estimated absolute loss in twenty years, \$25,000,000; total interest paid in twenty years, \$175,000,000; net interest paid, deducting the total loss of \$25,000,000, \$150,000,000. The net sum paid, despite losses, therefore, is 6 per cent. of the entire investment."

Our Secretary of State Board of Agriculture showed that the farm products of 1897 amounted to over \$136,000,000. This was seized upon as the reason for all the fine talk now prevalent. Kansas could pay because she had produced such crops and was getting such prices for them. Then came Secretary Coburn with a tabular showing of the value of productions for the last ten years, showing that 1897 was only an average season here, and the explanation of the marvelous change in the estimate placed upon our honesty and intelligence was rudely demolished.

The facts are, that during the middle 80's Eastern money was loaned recklessly in Kansas and was invested in all sorts of schemes, many of which could under no circumstances succeed. The investments were made by agents, most of whom cared only for the commissions. When the panic of 1890 and 1893 came, Eastern people wanted their money to protect other investments or to hide away. They demanded it more rapidly than it could be paid. Some undertook to force collections, with the result that all property suffered unnecessary and unnatural depreciation. But payment went on as rapidly as possible, until now most of the debts have been paid. The insufficient securities have gone into the hands of those who furnished the money on them. Now when they can get it, Eastern people don't want their money out of Kansas. Indeed, they want to loan us more. The change has been largely psychological. It is likely to go again to the extreme of a dozen years ago, when Kansas people were urged to take money on almost any terms and with little regard to the value of the security offered. Present conditions are favorable for the production of great crops in Kansas in 1898 and the anxiety to invest in something whereby a share of the proceeds of our fields may be secured is likely to increase the plethora of investment capital in the State. The experience of the recent past will, however, insure a degree of conservatism which is a safeguard against placing the State again in position to be called upon for the fulfillment of obligations faster than our resources will provide the means.

It is pleasant to be again spoken well of, even though we have in no essential changed. The results of our heroic and successful efforts to discharge our obligations are recognized, and no doubt some doughty Kansan will in the future, as in the past, be found to awaken

people to the realization of our respectability at the muzzle of a revolver if necessary.

The service now being rendered by Harper's Weekly in placing authentic information of the situation, both past and present, before the public in a series of illustrated articles in that superb periodical, will be appreciated in Kansas and should be borne with meekness by some Eastern people who are clearly shown that their wisdom in the past has been of a shallow kind, bordering dangerously near to foolishness, when they have dealt with and talked about Kansas.

SUBSTITUTIONS—ADULTERATIONS.

Statistics are not usually considered exciting reading. But an item of statistics from the Oil, Paint and Drug Reporter, of New York, is so important to Western corn- and hog-producers as to be startling. In its review of a week's business, that paper said of crude cottonseed oil: "The Western packers and refiners have been free buyers and it is estimated that from fifty to sixty tanks have been taken outside of those for the Atlantic refiners." The refiners referred to are lard refiners. To sell to Western lard refiners some 800 or 900 tons of substitute for one of the products of the hog is to substitute this vegetable fat for the lard that would be produced by say 60,000 average hogs. Whether or not mankind at large is benefited by the substitution of cotton oil for hog fat in this wholesale way, the lessening of the demand for real lard affects seriously the returns from the hog crop and, in regular order, the corn crop. But so far as appears, this is an ill to be endured, since there is no remedy.

Another number of the journal above quoted speaks of seventy-five to 100 tanks having been taken by Western packers. Speaking of this, Mr. C. Wood Davis says: "From seventy-five to 100 tanks—of fifteen tons each—of cottonseed oil per week makes such a brisk demand for hogs and swine! A hundred tanks of cottonseed oil—as was bought by the Western packers in the last week of December—is, when mixed with the proportion of beef stearine required to give it the consistency of lard, equivalent to about 10,000,000 pounds of lard, or the lard product of more than 300,000 average porkers. If the substitution continued at this rate for fifty-two weeks per year, it would represent more than 15,000,000 swine, and the consumption of 200,000,000 bushels of corn."

In the same issue of the Oil, Paint and Drug Reporter it is stated that "butter oil"—a specially prepared grade of refined yellow oil for the use of butter-makers, is in request and that bids of 25 cents per gallon for 5,000 barrels, or 2,000,000 gallons, for an extra choice quality had been refused.

Of this Mr. Davis says: "With 'butter oil' selling for 3½ cents per pound, is it any wonder that even 'creamery' grades absorb the stuff, and that the fat of the cream of the cow is in such disrepute that honest and energetic dairymen are unable to compete with their neighbors and competitors who have been fully blessed with the 'commercial instinct'—the instinct to get money by all means—and that it is a rare thing to find an unadulterated sample of butter in the cities? Mixers abound now as much in the butter business as in that of the lard refiner, and we can imagine what the major part of the butter will be like when the great packers get their 'butter factories' in full operation. It is, even in Kansas, not an easy matter to get a sample of unadulterated flour, and from Winfield a miller by the name of Baden is mixing his flour with such exceedingly poor corn meal that the veriest novice could and does detect the adulteration. I have bought a sack of it and know whereof I affirm."

BLOCKS OF THREE.

Every present subscriber for Kansas Farmer who will send in two new subscribers and \$2, may have his own subscription extended one year without additional cost. We mean it; blocks of three—one old and two new subscribers for \$2. This offer is made for the purpose of greatly enlarging the Kansas Farmer's subscription list, and is confined strictly to the proposition as stated. It will be an easy matter for any old subscriber to get two new ones, and it is almost certain that after reading the "Old Reliable" for a whole year they, too, will become permanent members of the Kansas Farmer family. This is to the publishers the business end of this extraordinary proposition. Blocks of three—one old with two new subscribers—all for \$2.

KANSAS TO BE AT THE TRANS-MISSISSIPPI EXPOSITION.

The Omaha Bee of January 22 is enthusiastic over the progress reported in the preliminaries for a Kansas exhibit at the coming great exposition. In the course of its article on the subject it recounts that the Legislature of the State of Kansas failed to make an appropriation for a State exhibit, but that it is to be represented in a manner commensurate with the dignity and importance of the situation through a movement set in motion by the Governor, at whose suggestion the great railroads of the State have subscribed \$5,000 apiece, making a nucleus of \$20,000. It is expected that other subscriptions will be added until a sufficient sum is secured to provide a creditable exhibit. Speaking of this matter to the Bee, Mr. O. P. Updegraff, of Topeka, Secretary of Kansas Improved Stock Breeders' Association, said:

"Kansas is thoroughly in sympathy with the exposition. It is one of the closest neighbors of Nebraska and therefore feels that it ought to do all in its power to advance the interests of the exposition to be held in Omaha. At the same time it also considers that it can secure no greater benefit than from such an advertisement as it would secure by being fittingly represented at the exposition.

"Our Legislature was pledged to economy. It even failed to provide for the different State institutions. Consequently it did not pass any appropriation for an exhibit at the exposition. But Governor Leedy is a broad-minded man and thoroughly appreciates the good results that would come from an appropriate exhibit. He therefore took up the matter and you can rest assured that through his efforts Kansas will have proper representation. Kansas is distinctively a farming and a breeding State and Governor Leedy is a farmer and a breeder. He therefore understands the necessity of having a proper showing and he will have the support of every farmer and breeder in the State."

Cane vs. Kaffir Corn.

Editor Kansas Farmer:—In your issue of the 12th ult. Mr. H. C. Stanley says he shall sow 160 acres cane or Kaffir, and wishes to know which is the best. Anything in regard to the sorghums is interesting to me, and I have been growing both cane and Kaffir for seed and fodder for about six years and have settled a few things satisfactorily to my own mind by experience.

As a sown crop I prefer cane, for the following reasons: Cane is far more hardy than Kaffir and will die down by drought and revive a number of times during the summer and yet make a nice crop in the fall. When the weather is very hot and dry and cane fires badly the juice will sugar and may be cut, and makes fine hay, but is much better left till fully ripe. A good crop of sown cane should lie in the swath at least a week in drying weather before raking, and may then not be ready to put up in very large shocks, and should it be rained on it will blacken but does not injure materially for feed. Just rest easy till it fully dries, then put it up. A great many people here sow Kaffir, but I have never yet seen a good crop procured and none ever ripens. It does not make half the tonnage per acre, cures in three or four days and must be stacked if you wish to keep it in good condition, while cane will stand in stooks till spring with scarcely any waste. It can be hauled as fed, thus saving a vast amount of work and expense to the single-handed farmer. I tried mixing the seed one year, and found the Kaffir dried till it was almost worthless before the cane would do to rake. In short, I have no use for sown Kaffir when cane seed can be procured, but place it ahead of millet. I sow with wheat drill, a bushel per acre, and would sow one and a half bushels if rain was reasonably sure, but never risk more than one bushel this far west. One more item in favor of cane: It will almost completely rid a fowl piece of ground of weeds in one season, and I will vouch for the statement that the ground the next spring will turn off the mold-board sleek and wet after all other ground is too dry to work. I have procured my best crops of listed corn and Kaffir off of cane stubble. So much for sown; now for listed (for we list everything here). Now the tables are turned, and I think the farmer who sticks to red Kaffir corn, listed, through a term of years is on the sure road to success.

I raise some listed cane each year to have my own seed and some to sell, but it will not do to rely on for a seed crop. The fodder is best in the early part of the season, but Kaffir is good always. I can raise hogs, cattle and have fat

horses on Kaffir corn. If any one wishes to know our method of raising and handling, I can answer at some other time, but now I wish to speak of the one great drawback to us here, and will give a cue to some inventive mind. It cannot be headed cheaply and still save all the fodder, which is worth nearly as much as the grain, and what we need is a fodder shredder and separator that is strong and durable, run by horse-power, that can thresh it for 3 cents per bushel. They asked us 5 cents this year, and we were to furnish the coal and hands. That is a straight case of prohibition. Another machine I think would suit me just as well, and that is one which would grind head and seed together when topped short. S. B. REED.

Farmers' Institutes.

The Agricultural College has already assisted in a number of farmers' institutes in different parts of the State, this winter, and has promised assistance to several other institute organizations. The following are the places, dates and delegations from the faculty for which definite arrangements have been made at this writing:

February 7-8.—Scott, Profs. Faville, Nichols.

February 8.—Meriden, Profs. Cottrell, Walters.

February 8-9.—Lakin, Profs. Graham, Harper.

February 9.—Valley Falls, Profs. Cottrell, Walters.

February 10.—McLouth, Profs. Cottrell, Walters.

February 10-11.—Delphos, Profs. Otis, Weida.

February 10-11.—Gardner, Profs. Faville, Fischer.

February 10-11.—Haven, Prof. Campbell.

February 10-11.—Seneca, Profs. Burdett, Clothier.

March 3-4.—Arlington, Prof. Cottrell.

Publishers' Paragraphs.

One of our subscribers who ordered a sewing machine writes us from Humboldt, Kas., as follows: "We have tried the machine and wife says it as good as any \$55 machine in the neighborhood."—A. M. Beeman."

Doubles the Pleasure of a Drive.—A fine carriage doubles the pleasure of driving. Intending buyers of carriages can save dollars by sending for the large, free catalogue of the Elkhart Carriage and Harness Mfg. Co., of Elkhart, Ind.

Miss Emma V. White, the enterprising seedswoman of Minneapolis, has sent to our table her Brownie flower seed catalogue for 1898, which is certainly most unique and artistic, and we call the attention of our readers to her advertisement elsewhere, feeling sure that all will be interested, as we have been, in seeing her neat little book.

A most beautiful nursery catalogue is that of E. W. Reid's nurseries, Bridgeport, O. It is one of the most complete, tastily arranged and artistically illustrated catalogues yet published. It is sound business from cover to cover. There are no catch-penny schemes in it. It is an instructive catalogue and is well worth sending for on account of the information it contains.

The amount of fine pictures and fruit talk that can be had for the asking on a postal card directed to Stark Bros., Louisiana, Mo., is surprising. We wish no ill to Stark Bros., but we wish every reader of Kansas Farmer would obtain the pictures. They are made from the real fruit and present the most perfect examples of the color printer's art. Drop a postal to Stark Bros. and you will be pleased with what they will send.

CLEAN AND HEALTHY NURSERY STOCK.—Buyers of nursery stock will be interested in the result of an examination made by Prof. W. G. Johnson, on January 13, of the stock of the Harrison's nurseries, at Berlin, Md. All the stock was found in first-rate condition and free from injurious insects. A certificate stating these facts has been issued to the Harrison's covering all their stock on hand to be sold for spring.

To be able to harvest the hay crop quickly, neatly and safely it is necessary to have the best of appliances that can be obtained. One of the reliable implement manufacturing establishments, which has been advertised in Kansas Farmer during past four years, is the Loudon Machinery Co., of Fairfield, Iowa. The implements they make are reliable and the best that can be obtained, from a common two-tined fork to the largest size of "horse fork" that is manufactured anywhere. Every item required in arranging your barn for quickly unloading hay, they can furnish. Notice their advertisement ap-

You make a mistake

if you have a Dairy or Creamery

When you do not use

The Best Separator on the Market The Improved United States Separator

Send for catalogues filled with testimonials.

It excels all others in

THOROUGHNESS OF SEPARATION.

BELMONT, MD., June 12, 1897.

The Improved U. S. skims closer than any machine I know of.

E. P. THOMAS.

LYNDONVILLE, VT., Nov. 26, 1897.

The Improved U. S. is by far the smoothest-running separator I have ever seen in operation. As a skimmer it beats anything I have ever tested.

W. I. POWERS, Mgr. Speedwell Farms.

GROTON CITY, N. Y., Dec. 20, 1897.

I placed your Improved U. S. beside an "American," gave them an equal test, and decided the U. S. cheaper at \$125 than the "American" at \$100. The "American" left twice as much fat in the skim-milk.

F. A. COATZ.

BARDWELL'S FERRY, MASS., Feb. 11, 1897.

The skim-milk from Improved U. S. shows only .015 of 1% of butter fat. It is operated by my two boys, aged 8 and 13 years.

F. L. TOTMAN.

LUDLOW, VT., Nov. 13, 1897.

The Improved U. S. Midget runs full capacity and gets the last drop of fat.

W. H. H. CHAPMAN.

Catalogues free on application.

VERMONT FARM MACHINE CO., Bellows Falls, Vt.

pearing in this issue and write them for catalogue.

We have received an illustrated essay on the subject of artichokes, from Mr. J. P. Vissering, box 55, Alton, Ill. It compiles the experience of many farmers, it treats of the different kinds, their culture, their value as food for all farm stock; the enormous yield, even in dry seasons, of the White French variety, and as a sure preventive of hog cholera. The essay may be had free by addressing as above. See advertisement elsewhere. Artichokes may be planted in the South any time now.

The new book, "First Principles of Agriculture," indicates by its title something valuable as an introduction to that study of agriculture which is rapidly becoming necessary to successful competition in the present contest for supremacy in the production of the world's food and clothing. The author of the book is an authority on the subjects treated. The price of the book is 90 cents, at which price it will be furnished postpaid by the Kansas Farmer Co. Read the advertisement in another column.

We wish to direct the attention of our readers to the announcement of the Fairview Seed Farm, Rose Hill, New York, which makes its first appearance for the season of 1898 with this issue. It will be observed that the "ad." contains some extraordinary offers in the way of special collections of seeds and tubers. Their new Mortgage-Lifter potato is well spoken of and should prove of special value to our readers. Every farmer or gardener should have an experimental plot where new varieties may be tested each season. Many of the best standard sorts of fruits, berries and vegetables have been given to the public in this way. Try this new collection; it does not cost much and may result in much profit to you.

BIG CROPS.—This country of ours is certainly a favored one when providence extends a helping hand and gives us immense crops and high prices. This touches the button and the energies will do the rest to bring on flush times. There is likely to be a plentiful crop of something else, if, as predicted, we have a wet fall and cold winter. The weather conditions would be just such as will give a crop of pains and aches, rheumatism, neuralgia, sciatica and lame back. With it all, many fine days will keep up outings and field sports, and with them happenings of sprains and bruises, soreness and stiffness. We may be thankful that St. Jacobs Oil will always come to the rescue with a prompt and perfect cure for them all.

With this issue we start the season's advertising of the Cyclone Fence Co., of Holly, Mich., whose "ad." appears on another page. These people manufacture the Cyclone fence and the machine for making the same. The fence differs from most others, from the fact that all the long horizontal strands are composed of cables of two large wires securely twisted together, instead of a single wire or cable made of small wire. The advantages of this plan are that

OAKLAWN FARM.



350

PERCHERONS and FRENCH COACHERS,

Stallions and Mares, of the highest type on hand at present time.

90 Stallions Old Enough for Service.

Good colors, large sizes and best of breeders. 18 of them imported in 1896. No man wishing to buy can afford to miss seeing this collection. Bus meets all trains. For catalogue and information address

M. W. DUNHAM,
WAYNE, DU PAGE CO., ILL.

it is much stronger and that the twisting of the wires together enables them to contract and expand at will, according to conditions of heat and cold, always resuming their former condition. The cross wires or pickets of this fence are made from No. 9 steel wire and the manufacturers tell us constitute the heaviest cross wires used on any fence. These are thoroughly interwoven with the horizontal cables, making a complete, strong, handsome and durable fence. The machines are said to be of equal merit with the fence and weave fence rapidly of any height on any kind of ground. Write them for circulars, prices, etc.

The evidence in the case proves Hood's Sarsaparilla cures rheumatism, dyspepsia, catarrh, that tired feeling, scrofula, salt rheum, boils, humors and all blood diseases.

Hood's Pills are prompt, efficient, always reliable, easy to take, easy to operate. 25c.

Fairview Stock Farm.

D. C. Palmeter, Chicago, owner above farm, Wilber, Neb., writes: "I have given Quinn's Ointment a thorough trial; has proven great success; does more than is claimed." For curbs, splints, spavins, windpuffs, bunches, has no equal. Trial box 50 cents, silver or stamps. Regular size, \$1.50 delivered. Address W. B. Eddy & Co., Whitehall, N. Y.

Don't Tobacco Spit and Smoke Your Life Away.

To quit tobacco easily and forever, be magnetic, full of life, nerve and vigor, take No-To-Bac, the wonder-worker, that makes weak men strong. All druggists, 50c or \$1. Cure guaranteed. Booklet and sample free. Address Sterling Remedy Co., Chicago or New York.

Horticulture.

REMEDIES FOR POTATO SCAB.

Editor Kansas Farmer:—Many inquiries are now coming in about "scab" in seed potatoes, and asking how best to fight it. I have answered this question many times in the Farmer, but the thousands of new subscribers did not have a chance to profit by it, and some have assured me that they subscribed on purpose to find out the best way. It is very gratifying to see that the farmers are awake to their interests, and that they realize they must have a smooth, sound crop of potatoes if they expect to compete with their neighbors. Their good judgment is also shown when they subscribe for the Kansas Farmer, and ask questions through its columns. Although it is repetition, yet I am always glad to answer any questions that I can, but I advise the keeping of the Farmer on file, and then, at the end of each year, the annual index will tell you just what page to find any subject on. Take two laths, about two feet long, and drive three round wire nails through them; then pull off one lath, push the Farmer over the three nails; then put the other lath over the nails, and this simple file will hold three months of the paper, when they can be tied together with cord put in the nail holes, and laid away, and the same laths can be used for another three months of the paper.

Scab is caused by the effort of the living tissue of the potato to heal up or overcome an incision made by a minute germ that feeds on the surface of the potato. It is just the same principle as the effort put forth by nature to heal a wound on the human person. If we receive a cut, nature goes to work and heals it up, first covering the cut with a scab. If the cut should kill us, there is no more life left in our body, and of course nature does not make any effort to heal up the cut, hence there is no scab formed after death. Therefore, just as soon as the potato ceases to grow, or is dead, so to speak, all effort to overcome the attack of the minute germ on the skin of the tuber ceases, hence it is impossible for the scab to increase if the potatoes are left in the ground. If the scab could increase in this way, it could and would increase in the same ratio if the potatoes are dug and put in the cellar. Hence the growers who dig and store their crop as soon as it is ready to dig, do not prevent further ravages of the scab, as many of them suppose, for the simple reason that it is already checked, and could not increase any if the tubers were left in the soil. The natural shrink of the tubers will cause it to appear that the scab has increased, but it has not. It is stated that horse manure will cause scab, or conditions favorable to it, but my own experience goes to prove the contrary. I have experimented a great deal with manures and potatoes, especially with heavy dressings of horse manures, and every time I used horse manure the growth of the crop was hastened, and the germ that causes scab did not have so much time to get in its work, consequently the tubers were larger and smoother than common. I have never heard of any remedy that will kill the scab in the soil except a four-years' rotation, as the scab is known to exist in the soil for three years.

But the scab on the seed potatoes can be easily killed, and if the seed is not again exposed to the germs of the disease, and is planted in soil free from the disease, the growing crop will be free from it also. The oldest remedy is the corrosive sublimate treatment.

Take paper buckets or stone jars, and dissolve two (2) ounces of corrosive sublimate with two gallons boiling water, stir thoroughly, then allow to stand twenty-four hours. Put this liquid in fifteen gallons of water and soak the seed before it is cut, for one and one-half hours. As long a time as twelve hours will not destroy the seed. The same water can be used again until it is all absorbed. The treated seed is poison and must be kept away from all stock, and the liquid must be kept out of your mouth. It will not hurt your hand, as it is the very same treatment used by the doctors to heal up a sore quickly and to prevent an unsightly scar caused by a scab. Treated seed will again become affected if put in anything that has had scabby potatoes in before, and even the planter should be treated. New bags, baskets, boxes, wagons and so forth must be used or old ones treated.

To cut the seed and sprinkle on flowers of sulphur till no more will adhere, is another way. I have tried both the above, and both will kill the scab on the seed; but the sulphur will do more. It will preserve the crop from rot, and I

presume the blight. The sulphured seed will also produce a much larger crop. Last year I made several experiments, with all conditions alike, and the sulphured seed produced a sound crop, while the next row, not sulphured, and of the same variety, had a large percentage of rotten tubers.

In a small way sulphur can be applied to the seed by hand, and in a large way by the aid of the scoop-shovel. All sulphur which does not adhere can be used on other seed.

I wish every grower in Kansas would try the sulphur treatment, and report. When planting north and south, the wind blows the sulphur in one's eyes and bothers some, but if the planter has a fertilizer attachment, I think the sulphur could be applied on the seed by the aid of this attachment.

Another plan is to put fourteen ounces sulphate of copper in two gallons of boiling water, stir well, then add to it thirty-seven gallons of water, and dip the seed for five minutes, then dry and cut. In using these solutions metal and wooden buckets should not be used. Paper buckets or earthen vessels should be used.

A new fungicide called "formalin" has been discovered, and is said to be non-poisonous. It is a watery solution of a gas, and is not very expensive. It is sold by the fluid ounce and can be bought at most drug stores. Add eight ounces of the "formalin" to fifteen gallons of water and soak the seed two hours. Formalin is not corrosive, and so can be used in any kind of a vessel, and being non-poisonous, there are no particular precautions to be observed. It does make the hands smart if there are any raw spots, and the fumes irritate the throat and eyes, but these are only slight annoyances. A bulletin on this subject has been issued by the Purdue University Experiment Station, at Lafayette, Ind., which can be secured for a stamp.

By treating the seed potatoes every year by one of these methods, and practicing a four-years' rotation, with clover as one of the crops, to be followed by potatoes, the grower can keep up the fertility in his soil, and raise smooth, sound potatoes. Clover adds to the land, and as potatoes are nearly 80 per cent. water, it will be seen that they do not take away much fertility. By planting the potatoes forty-four inches between the rows, the digger track can be filled up with the lister and corn planted with a very small expense. The corn should be cut up and followed by some cereal crop with clover sown in it. CLARENCE J. NORTON.

The Black Rot of the Cabbage.

A Farmers' Bulletin, No. 68, has just been published by the Department of Agriculture giving to cabbage-growers the benefit of some recent discoveries by the Division of Vegetable Physiology and Pathology of the United States Department of Agriculture on the black rot of the cabbage. The author of this bulletin is Mr. Erwin F. Smith, under whose immediate supervision the investigations were made which resulted in these discoveries.

Although this disease has come into prominence only within the last few years, it is now a serious hindrance to cabbage-growing in several States, causing losses to the growers aggregating many thousands of dollars yearly.

The disease is known to growers in various parts of the country under different names, perhaps the commonest of which are "stem rot" and "black rot," and has heretofore resisted all attempts to eradicate it.

As there is no known way of curing the disease or of entirely ridding a locality of it when once established, prevention is the only alternative, and the bulletin points out to the grower where the danger lies, how the introduction of the disease may often be prevented, and how, when already introduced, great losses may sometimes be avoided.

Being one of the Farmers' Bulletin series, the publication may be obtained free of charge from the Secretary of Agriculture, Washington, D. C., or a member of either house of Congress.

Cabbage Bugs.

Editor Kansas Farmer:—In reply to a letter from A. M. Hate, Alden, Kas., as to specimens of insects which destroyed his late cabbage, I would say that the specimens are of the so-called Harlequin cabbage bug (Murgantia histrionica), and is one of the worst pests that cabbage-growers have to contend with. I would recommend the following treatment: All rubbish should be cleaned up and burned at the end of the season, rotating the crop where possible. The full-grown insects hibernate during the winter in rubbish heaps and protected places, and are ready to begin work the



OFFER No. 1 Australian Salt Bush.

A New Forage Plant, said to produce immense crops of excellent forage. Especially adapted to drouthy localities and alkali lands. Don't fail to try it.

OFFER No. 2 Mexican June Corn.

This corn has proven a sure crop when planted in June or later. Quality for table or stock food unexcelled. Sure to make big crop regardless of season.

A 50c. Package postpaid, by mail, of either of the above will be sent For one new yearly subscriber at \$1.00 to Texas Farm and Ranch the great Family, Agricultural and Live Stock Journal. Clean, reliable, interesting and instructive; weekly 50 pages, illustrated. Present subscribers can receive benefit of either offer No. 1 or No. 2 by sending one dollar to have time paid to, advanced twelve months.

Texas Farm and Ranch... has contracted with Texas Seed & Floral Co. for 5000 packages each of Offers No. 1 and No. 2, and when they are exhausted offer will be withdrawn. Sample copy of Texas Farm and Ranch FREE! The proprietors of the paper in which this ad. appears will tell you that Texas Farm and Ranch Pub. Co. is responsible, reliable and prompt. When remitting say which offer you select. Address, TEXAS FARM AND RANCH, Dallas, Texas.



coming season. As they prefer mustard plants to cabbage, it is a good idea to plant mustard between the rows to attract them. They are then sprayed with kerosene, which destroys both the mustard plant and the insect as well. They may be trapped in the early spring by placing cabbage and turnip leaves saved over during winter and placing on the ground, gathering them in the morning and destroying the insects.

Among the up-to-date books on truck gardening is "Vegetable Gardening," by Samuel B. Green, copies of which may be obtained from the Kansas Farmer Co. E. E. FAVILLE, Kansas Experiment Station.

Protector Against Canker Worms.

Editor Kansas Farmer:—A device has just been received by the Department of Entomology at the Agricultural College for the protection of orchards from the attack of canker worms. It is the invention of Geo. L. Pratt, of Ridgeway, N. Y., consisting of a certain grade of wire mosquito netting fastened around the trunk of the trees so as to form a flange at base. The device seems practical and is being tested by the station. An early report will be given to the readers of the Farmer as to its efficacy. Manhattan, Kas. E. E. FAVILLE.

Captain of Police Phillip J. Barber, of Baltimore, Md., says: "Salvation Oil has been used at our station the past winter for rheumatism, neuralgia, pain in the back, etc., and I have yet to meet with its equal. It is the best."

1000 Box Elder & Ash \$1.25. Rus. Mulberry and Osage Hedge at about same price. 100 APPLE, 3 to 4 ft. \$6 Cherry, 3 to 4 ft., \$10 Concord Grape, \$1.60 We pay the freight Complete price list free Jansen Nursery, Jansen, Nebr.

WE CAN SAVE YOU MONEY On small fruit plants—100 varieties of Strawberry plants; 75,000 Kansas Raspberry, best raspberry ever introduced. Write for our new 1898 catalogue, now ready. Address, F. W. DIXON, Holton, Kas.

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We PAY FREIGHT is only one of Stark 12 Challenge Points—the full 12 plainly show WHY Stark Bro's grow and sell the most trees. Then, we will not cut quality no matter how LOW our price. If interested in trees or fruits drop postal for STARK FRUIT BOOK new edition; finest, most complete yet issued sent free. STARK BROS., Louisiana, Mo. Stark, Mo. Rockport, Ill. Dansville, N.Y.

DON'T FAIL to submit to us a list of your wants and get our prices before buying Fruit Trees, Grape Vines, Small Fruits, Currants, Gooseberries. Introducers of LOUDON RED RASPBERRY, and RED CROSS CURRANT. Ornamentals of best quality. Surprisingly low prices given on application. Send for free Chromo Catalogue, also free copy of Plum Culture, Pear, Currant, Raspberry or Cherry Culture. GREEN'S NURSERY CO., Rochester, N. Y.

\$300. for Six Potatoes! We shall introduce this year for the first time the wonderful new MORTGAGE LIFTER POTATO and shall pay the above sum in prizes for the best six potatoes grown from one seed potato. THE EARLIEST POTATO IN THE WORLD. Tested 4 years. Be the first in your neighborhood to try it; next year you can sell it to others. Price this year, 50 cents for Single potato. First in the Market Cabbage is the earliest to head; beat your neighbors by weeks. Sure Head Cabbage, all head and sure to weigh up to 60 lbs. Climbing Cucumber, entirely new—a perfect wonder. Climbs any trellis or support 6 to 8 feet high; prolific early fruiter. Six Week's Turnip; earliest grower, easy grown, good size and white as snow. EARLIEST TOMATO IN THE WORLD—greatest success for earliness, tenderness and quality. Was fruited in 60 days. Big Prizes Awarded for the tomatoes grown in least number of days. Instructions with seed. One whole potato by mail (packed from frost) instructions for prizes and a packet each of the five early vegetables and catalog of "SEEDS THAT GROW" for free. Fairview Seed Farm, Box 89 Ross Hill, N.Y.

ARTICHOKE No. 1 for all Stock, Before you buy send for ESSAY on kinds planting harvest and FREE. Sin. Bu. \$1. J. P. VISSERING, Box 55, ALTON, Ill.

The Comet SPRAYERS \$2 to \$4 Double Acting are the best. Sprays from bucket or barrel 50 feet. New scientific and mechanical principle. My free catalogue will make plain to you that I have the sprayer you want. Write to day. H. B. RUSLER, Johnstown, Ohio.

POTATOES \$1.50 a Bbl. Largest Seed POTATO growers in America. The "Koyal New Yorker" gives Salzer's Early Wisconsin a yield of 750 bushels per acre. Prices dirt cheap. Our great Seed Book, 11 Farm Seed Samples, worth \$10 to get a start for 10c postage. JOHN A. SALZER SEED CO., LaCrosse, Wis.

2,000,000 Strawberry Plants at \$1.50 per 1,000 and up; 12,000 Peach trees 1 1/2 and up; Osage Orange Hedge \$1 per 1,000; Ash Seedlings 75c per 1,000. A large supply of all kinds of exceedingly well-rooted, true to name and strictly first-class nursery stock. Write for price list to BOHEMIAN NURSERIES, Reynolds, Neb.

TESTED • SEED • CORN. Send five 1-cent stamps for three sample packages of the best varieties of corn grown, and book "Hints on Corn Growing, and How the Up-to-date Farmer Grows the Big Crops." The Iowa Agricultural College grew 94 bushels per acre of this corn, which gave 62 pounds of shelled corn from 70 pounds of ears. PLEASANT VALLEY SEED CORN FARM, J. B. ARMSTRONG, Proprietor, SHENANDOAH, IOWA.

Grass is King AND THE COW QUEEN. This is a well established fact and the main question with Progressive Farmers of to-day are HOW MUCH MORE GRASS and better and permanent Pastures and Meadows can be obtained? We have made the grass question our specialty for years and issued our Catalogue or BOOK ON PERMANENT PASTURES AND MEADOWS. Every Farmer or Dairyman interested in more Grass or better and permanent Pastures and Meadows should read a copy. All Natural Grasses and Clovers accurately described and illustrated. It contains valuable information as to how permanent Pastures and Meadows can be obtained, an' gives experience of our old customers with our Grass Seed. A copy free to every Farmer and Dairyman. Write for it to-day. Farmers and Seed Growers, FARBULT, Minn.

STARK NURSERY We PAY FREIGHT is only one of Stark 12 Challenge Points—the full 12 plainly show WHY Stark Bro's grow and sell the most trees. Then, we will not cut quality no matter how LOW our price. If interested in trees or fruits drop postal for STARK FRUIT BOOK new edition; finest, most complete yet issued sent free. STARK BROS., Louisiana, Mo. Stark, Mo. Rockport, Ill. Dansville, N.Y.

In the Dairy.

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

OVER 1,000 BUTTER-MAKERS COMING TO TOPEKA.

It is none too soon to begin laying plans for the great butter-makers' convention that is billed to assemble in Topeka on the 21st of February. No such opportunity as this is likely to be presented to the dairymen of Kansas in the next dozen years, and no up-to-date butter-maker, whether novice or expert, can afford to miss this meeting. Only three weeks remain for those interested in progressive dairy methods to make such arrangements in their affairs as will enable them to take advantage of the educational features that have been promised for this session. It will not only afford an opportunity for exchanging personal ideas in relation to the most improved methods of feeding cows, caring for milk, ripening cream, churning, working and packing butter, but of meeting the representatives of supply houses, transportation lines, commission firms and all those directly interested in shipping and marketing this valuable product; for to their promptness and keen foresight Western creameries and butter-makers are under many obligations. The salt men will be here with their salt, the separator concerns with their separators, the supply houses with their churns and butter-workers, the butter color men with their June color, proprietors of refrigerating machinery to take the place of ice, the skim-milk weicher to prevent patrons from robbing each other, experts to manipulate cream testers, all claiming that their particular make is the best on earth. There will be a working creamery and two sets of rival butter-makers, exhibits of butter from near and far-off States, and prominent among these will be reporters for the dailies and leading dairy papers, who will gather news for all the world to read. Prof. Haecker, of the Minnesota Experiment Station, is coming, and will tell us how to select a good cow by external signs, illustrated by living specimens of various types as found in every herd. Gov. Hoard has promised to be present and speak in his inimitable style; one or more women of note will talk on dairy lore; representative men from every dairy State in the Union are coming and will take a hand in the discussion of questions pertinent to such an occasion and the judges will tell who makes the best butter and cheese.

Maj. Henry E. Alvord, Washington, D. C., will talk on "State Aid for Dairying."

Prof. Clinton D. Smith, Michigan, is billed to lecture on "Feeding and Development of the Dairy Cow" (illustrated by stereopticon views).

Prof. Chas. F. Curtis, Ames, Iowa, gives "The Value of Skim-milk for Calf-Raising."

J. Dixon Avery, Chicago, is interested in Kansas, and will tell of our "Possibilities as a Dairy State."

Prof. H. M. Cottrell, Manhattan, Kas., will give his views on "The Production of Milk."

W. K. Boardman, ex-State Dairy Commissioner, Nevada, is down for an address on a pertinent subject.

H. E. Schuknecht, Albert Lea, Minn., will present the subject of "Pasteurizing Cream for Butter-making."

H. M. Brandt, Canton, Kas., is assigned the topic of "Rural Institutes."

J. G. Lumbard, Omaha, Neb., is on for a song, and addresses will be given by Governor Leedy, Mayor Fellows, C. H. Pattison, F. D. Coburn, and President Irwin Paul, of Iowa.

There is going to be a procession of all the visitors to this meeting headed by Marshall's band, and one evening will be given up to a musical entertainment in honor of our guests. One car-load of gentlemen from Boston, one from Philadelphia, two from New York, two from Chicago and three or four hundred butter-makers and their friends from Minnesota and Iowa have signified their intention of testing our hospitality during this convention. Now, let our Kansas people all turn out and give them a royal reception.

Pink Law Upheld.

Those oleomargarine manufacturers who have hopes of defeating the anti-color laws of the different States will have their confidence somewhat shaken by the decision of Judge Lochren, of the United States court, upon the Minnesota "pink" law, which was held to be constitutional by this court Tuesday of this week in the case of the Armour Packing Company vs. Berndt Anderson, Dairy Commissioner of Minnesota, in which the former began replevin suit

against the latter in the United States court at St. Paul a few weeks ago, seeking to recover a car of oleomargarine which was colored yellow.

Judge Lochren decided that the "pink" law does not abridge any rights guaranteed citizens of the United States by the constitution of the United States.

It is admitted that this "pink" law is the most drastic measure possible to conceive. If such a measure is constitutional there is little hope that the plain anti-color laws will ever be defeated, or decisions reversed by the higher courts. As a matter of fact, the courts are recognizing more and more the justice of such laws, and the position of the dairymen grows stronger with each contest with the oleomargarine interests.

The Care of Milk.

Milk must be removed from the stable as soon as possible after it is drawn to avoid germs and characteristic stable odors which it readily absorbs, says Farmers' Bulletin No. 63. It is not uncommon to see a large can placed in the passage-way between the cows, where it is slowly filled and allowed to remain until the cows are turned out and the chores finished. It may be more than an hour from the time the first milk was drawn until it is cooled. Such delay must not be allowed if it is expected to keep the milk in good condition. Each pail, as soon as it is filled or when the milking of any cow is finished, should be carried to the dairy room. If a dairy house is located at a distance from the stable, the cans should be taken to it as soon as they are filled; and they should not be so large as to require a long time for filling. When there are many milkers and large cans are used, the cans may be carried to the dairy house by suspending them on a skeleton frame between two wheels, or they may be sent across on a cable stretched from the barn to the dairy house.

If milk could be drawn in such a manner that no dust or dirt fell into it, straining would be needless. But this is impracticable, and it is necessary to remove foreign matter by some mechanical means. The sooner milk is strained the better. It should pass through a metal strainer having a fine mesh and a flannel cloth or cheese cloth folded enough to prevent running through too fast. Both the cloth and metal strainer ought to be frequently rinsed during the milking to avoid gumming and to wash away fine particles of dirt removed from one pail which might be later carried through, leaving the milk as badly infected as it would have been if not strained. The dirt should be removed from the milk so completely that when the milk is again strained at its destination there will be no cause for returning the cloth through which it passed to show to the dairyman the dirt collected.

Milk pails are sometimes used whose tops are covered with tin, the center of which is replaced by a circular piece of wire gauze about seven inches in diameter, through which the streams of milk pass. This form of pail is of advantage in keeping out hairs or large pieces of dirt. When the milk is emptied from these pails it should be passed through a cloth, and the pail and its strainer should be rinsed. The common strainer pail should not be used in the stable. It offers no special protection to the milk and may even collect dirt that would otherwise be avoided.

The common strainer used over cans has flaring sides and a concave bottom, the wire gauze being in the center of the bottom. This only partially serves its purpose. It removes coarse materials, but holds them in the milk stream, and the soft impurities which are easily broken up by agitation and soaking, may be forced through the small openings by the constant current of milk.

Dairy Notes.

Feed and milk the cows by the clock. It is announced that a creamery will be established at Cedar Vale, Kas.

Big horns, big tall and big, meaty udder are bad signs as a dairy cow.

A. G. Eyth, Enterprise, Kas., proprietor of the Enterprise and Woodbine chain of creameries, is about to start another station in Union township.

The creamery at Salina, Kas., though only eight months old, is in a flourishing condition. It has fifty patrons and the prospects for next year are very promising.

Beauty and color do not go far with a business cow. It is easy to be prejudiced in favor of a bovine beauty, but quantity and quality of milk are the true standards.

Fill the barn with poor hay and the result is felt all winter. Nothing can wholly make it up. Hay greenish in color and

CREAM SEPARATORS.

De Laval "Alpha" and "Baby" Separators.

First—Best—Cheapest. All Styles—Sizes.

Prices, \$50.00 to \$800.00.

Save \$10 per cow per year. Send for catalogue.

THE DE LAVAL SEPARATOR CO.,

Randolph and Canal Sts., 74 Cortlandt Street, CHICAGO, NEW YORK.

sweet in taste is the only legal tender hay which a cow will take at full value.

Jefferson county, Wisconsin, wherein the city of Fort Atkinson is located, with an area of seventy-six square miles and a population of 36,317, has over 36,000 cows, eighty-seven creameries and four cheese factories. The value of the total dairy product is about \$2,000,000 annually. This county also boasts of having the finest creamery in the world.

Cows should have not less than 600 cubic feet air space, and more would be better, unless there is adequate provision for ventilation. This would require 24,000 cubic feet for forty cows, and if the stable is ten feet in the clear, 2,400 square feet of floor surface. Allowing three and one-half feet in width for each cow, and providing necessary and convenient passage-ways, a row of twenty cows would cover nearly or quite eighty feet; then if the stable was thirty feet wide in the clear, we would have the estimated minimum floor space. But thirty feet is too narrow for conveniently feeding and handling two rows of cows, and hence, when we rebuild our stables, they will be at least thirty-two feet wide in the clear, and possibly thirty-four feet. In addition to this, there should be provision for two or more hospital stalls, each not less than ten feet square, and quarters for the bull and calves.—Hoard's Dairyman.

In the matter of prices for butter 1897 was some ahead of its predecessor. The lowest price came in May last year and was 13½ cents. The highest was 23 cents, which was in October, November and December. The lowest price for 1896 was also 13½ cents, reached in April, and the highest was 24 cents, in January. The table given below shows the highest and lowest, also the average price for each month of the year just closed:

	High.	Av.	Low.
January	20	19 1-3	19
February	20½	19 2-3	18
March	21	18½	18
April	21	17½	16
May	16	14 2-3	13½
June	14½	14½	14
July	14½	14½	14½
August	18½	16 1-3	14½
September	22	18¾	17
October	23	22	21½
November	23	22	21
December	23	22	21

The average price of butter for 1897 was 18.3 cents; for 1896 it was .6 cent less, or 17.7 cents.

\$100 Reward. \$100.

The readers of this paper will be pleased to learn that there is at least one dreaded disease that science has been able to cure in all its stages, and that is catarrh. Hall's Catarrh Cure is the only positive cure known to the medical fraternity. Catarrh being a constitutional disease, requires constitutional treatment. Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system, thereby destroying the foundation of the disease, and giving the patient strength by building up the constitution and assisting nature in doing its work. The proprietors have so much faith in its curative powers that they offer \$100 for any case that it fails to cure. Send for list of testimonials.

Address F. J. CHENEY & CO., Toledo, O.

Sold by druggists, 75 cents.

HAMMOND'S FREE SEED DISTRIBUTION

Government Free Seeds are simply "not in it."

To introduce the Best Michigan Northern Crown New Land Seed Potatoes, Farm, Garden and Flower Seeds everywhere, I will give away, ABSOLUTELY FREE, 500,000 packets of choicest Vegetable and Flower Seeds. Your name on a postal card gets my Free Seed Book from which you may select FREE your supply of seeds for an entire garden. Write to-day. Get your order on file; we're very busy.

HARRY N. HAMMOND, Seedsman, Bx. 18, Decatur, Mich.

BURPEE'S FARM ANNUAL 1898

The Leading American Seed Catalogue.

The best seeds that grow, at lowest prices. This handsome new book of 144 pages is mailed free to planters everywhere. WRITE TO-DAY. W. ATLEE BURPEE & CO., PHILADELPHIA.

\$100 for 25 cents.

AND FIVE MINUTES WORK.

WE want the names of your neighbors who buy seeds, and, if you will send us the addresses of five persons whom you can recommend as being interested in gardening or flowers, we will send you the following assortment of seeds worth \$1.00 for only 25 cents: Market Gardeners' Best, Washington Wakefield Cabbage, Pink Aromatic Celery, Astro Cucumber, 30 varieties of Lettuce, mixed, Iowa Mastodon Musk Melon, Canary Island Onion, Improved Guernsey Parsnip, 40 varieties of Radishes, mixed, Honor Bright Tomato, Snow Ball Turnip and New Rainbow Parsley. Total, 12 full sized packets, making a complete garden supply, value \$1.00, for 25 cents and the five names. Large, beautifully illustrated catalogue free to all. Mention this paper when writing. Address

IOWA SEED CO., (Established 1871.) Des Moines, Iowa.



STANDARD VALUE


Counts for more in the selection of fruit trees than almost any other place. Why? Because fruit trees are bought on faith. We have the standard kind of all the leading varieties. Fruit Trees, Berry Plants, Evergreens, etc., etc. Strong, healthy trees free from Black Knot, Yellow, Blight, Scale, etc., etc. Do not place your spring order until you get our catalogue and prices. Sent free; write to-day.

J. W. MILLER CO. Box 260, Freeport, Ill.

CATALOGUE FREE. **HOME GROWN SEEDS** at Low Prices.

SEND for OUR large, fine CATALOGUE TO-DAY, mailed FREE. It tells all. Market Gardeners ask for Wholesale Price List.

ALNEER BROS., No. 17 Alneer Bldg., Rockford, Ill.



STAR STRAWBERRY

Large, perfect shape vigorous, prolific, drought-resisting. Best varieties Strawberry Plants; also Asparagus Roots, Peas, Apple and Plum Trees. Peaches grown from natural seed in section free from scale and yellows. Write for latest catalog—FREE. HARRISON'S NURSERY, Berlin, Md.



SEEDS

Cheapest ever grown; BEST in the world; none other as GOOD; warranted to be by far the CHEAPEST. Prettiest book in all the world FREE. SEEDS 1c and up for large packets. Send yours and neighbors names for my Beautiful Illustrated Catalogue.

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In buying seeds "economy is extravagance," because the cost of cultivation wasted on inferior seeds always largely exceeds the original cost of the best and dearest seeds to be had. The best is always the cheapest. Pay a trifle more for

FERRY'S SEEDS

and always get your money's worth. Five cents per paper everywhere. Always the best. Seed Annual free. D. M. FERRY & CO., Detroit, Mich.

FOR 14 CENTS

We wish to gain 100,000 new customers, and hence offer

- 1 Pkg. 13 Day Radish, 10c
- 1 Pkg. Early Spring Turnip, 10c
- 1 " Earliest Red Beet, 10c
- 1 " Bismarck Cucumber, 10c
- 1 " Queen Victoria Lettuce, 15c
- 1 " Klondyke Melon, 15c
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- 3 " Brilliant Flower Seeds, 15c

Worth \$1.00, for 14 cents. Above 10 pkgs. worth \$1.00, we will mail you free, together with our great Plant and Seed Catalogue upon receipt of this notice and 1c. postage. We invite your trade and know when you once try Salzer's seeds you will never get along without them. Potatoes at \$1.50 a Bbl. Catalogue 5c. No. 70

JOHN A. SALZER SEED CO., LA CROSSE, WIS.

Special Want Column.

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

WANTED—TO TRADE—New incubator for alfalfa or alsike clover seed. F. M. Curyea, Hanna, Indiana.

FOR SALE OR EXCHANGE—Full-blood English Shire, bay, 1,900 pounds. John A. Hollister, Grigsby, Scott Co., Kas.

POLAND-CHINAS—Extra spring boar by Wren's Model 17400; big bone and good at both ends. Deep middle, \$25. Gilts bred to Hadley Boy, \$15. W. S. Powell, Moline, Elk Co., Kas.

NASON'S FEEDER, SOAKER AND STEAMER.—Recommended by feeders and farmers generally. For sale by the inventor, E. J. Nason, Washington, Kas.

CORRESPONDENCE WANTED—Barrred Ply. Rocks and Mammoth Light Brahmas. Stock and eggs for sale. James Nourse, Ellsworth, Kas.

SHARON SPRINGS, January 28, 1898.—Does the Chicago House-Wrecking Company, of West 35th St. and Iron St., Chicago, Ill., send goods according to their catalogue and samples? Is not their roofing and belting 50 per cent. below their catalogue statements and samples? Lewis Williams.

A FORTY-ACRE FRUIT FARM—One and one-half miles from Hutchinson. The finest varieties of every class of fruit; good soil, fine water. Terms to suit purchaser. Address Whitelaw Houk, Partridge, Kas.

FOR REAL BARGAINS—In Berkshire boars write J. J. Achenbach, Washington, Kas.

RED POLLED BULL CALVES.—Wilkie Blair, Beulah, Crawford Co., Kas.

CHICKENS ALL SOLD.—Mrs. John Hill, Vinland, Kas.

BRONZE TOMS—Write for prices. Snyder Stock Farm, Kildare, Okla.

A SOBER YOUNG MAN, OF GOOD ADDRESS, wishes to correspond with a lady with some means, with a view to matrimony. A farmer's widow preferred. Address A. G. Plum, Waynoka, Okla.

STRAYED—From 1503 East Sixth street, Topeka, Kas., a gray horse, weight about 1,050 pounds; has small wire cut on left front foot. Leave information, or address above street and number.

VINELESS SWEET POTATOES—For sale, very productive. T. J. Skinner, Columbus, Kas.

FOR SALE—Pure-bred Black Minorca pullets, 50 cents each. Horace Northington, Rose, Kas.

FOR SALE—Two Holstein bulls; extra fine milk and butter strains, age 11 and 13 months. John Witschy, Fairview, Brown Co., Kas.

FOR SALE OR TRADE—One fine black jack, 4 years old; also 100 acres, farm in Pratt county, Kas. Address, Thomas Brown, Box 53, Palmer, Kas.

SWEET POTATOES—Sent out to be sprouted on shares. No experience required. Directions for sprouting free. T. J. Skinner, Columbus, Kas. Mention this paper when writing.

MY NEW ELEGANT POULTRY CATALOGUE—Contains colored plates, illustrations and much valuable information. Don't miss it. Will be sent for only 6 cents in stamps. Address F. B. Stork, Freeport, Ill.

COCKERELS FOR SALE—Seventeen B. P. Rocks, 10 Light Brahmas, 3 Golden Seabright bantams, 10 Light Brahma pullets, at \$1 each where more than one are taken. Mrs. E. E. Bernard & Son, Dunlap, Kas.

BELMONT STOCK AND POULTRY FARM—Cedar Point, Chase Co., Kas. Send for descriptive catalogue. Geo. Topping, Proprietor.

WANTED—Buyers for bred sows and gilts, Berkshires and Poland, all pure-bred. Priced to sell them. O. P. Updegraff, North Topeka, Kas.

FOR GREENHOUSE PLANTS, ROSES, etc., now or next spring. Send for price lists. Tyra Montgomery, Florist, Larned, Kas.

PREMIUM PEKIN DUCKS—Thirteen fine drakes and a few ducks, Newman stock, now ready for customers. Also some good M. B. turkey toms and pullets. M. S. Kohl, Fairley, Kas.

JACK FOR SALE—Black with mealy points, fifteen hands one inch high, heavy bone, 7 years old; all right. Will be sold at a bargain. Porter Moore, Parsons, Kas.

99 PER CENT. TEST SEED CORN—100 bushels per acre. For particulars as to how to get one bushel free, address J. B. Armstrong, Pleasant Valley Seed Corn Farm, Shenandoah, Iowa.

SUNFLOWER HERD DUROC-JERSEYS.—For sale, S choice pigs, September farrow. A. D. & H. L. Perrin, Prescott, Linn county, Kansas.

BARRED AND WHITE PLYMOUTH ROCKS—White and Silver Wyandottes, White Holland Turkeys, White Pekin Ducks and White Guineas. Stock and Eggs for sale. Porter Moore, breeder and judge, Parsons, Kas.

FOR RENT—Eighty-acre fruit, truck and poultry farm, five miles from Topeka. Two-story poultry building, fifty feet long, equipped with hot water apparatus. For particulars apply to Claton Hummer, Grantville, Kas.

FOR SALE—Thirteen fine Poland-China boars. Call on or address H. W. McAfee, Topeka, Kas. (Farm three miles west of Kansas avenue.)

CANNON'S LIQUID FRUIT PROTECTOR—A safe and effective wash for trees, vineyards, etc., destroying insects, and will keep off rabbits, mice and borers. It is used by successful horticulturists everywhere. For sale by druggists or the Cannon Chemical Co., 124 N. Main St., St. Louis, Mo.

PIG FORCEPS and watering fountains save farmers many dollars. Write for advertising prices. J. N. Reimers & Co., Davenport, Iowa.

75 BERKSHIRES—Boars and gilts, weighing 125 to 250 pounds, sired by Imported Lord Comely 34744 and Golden King V. 43936. These are pigs of choicest breeding and extra individuality. Prices \$12.50 and \$15 for next ten days. Satisfaction guaranteed. Wm. B. Sutton & Son, Russell, Kas.

HOW TO FATTEN THE POOREST HORSE LIVING in two weeks and twenty-five best horse receipts in the world for 10 cents. J. H. Burdick, Millington, Kendall Co., Ill.

FRUIT TREES—In surplus! That must go! 100,000 Apple, Peach, Cherry, Plum and Pear. First-class, healthy, true to name and cheap. For thirty days orders will be accepted for spring shipment at less than half usual prices. Agents wanted. List free. S. J. Baldwin, Seneca, Kas.

SPECIAL WANT COLUMN—CONTINUED.

FOR SALE—Imported English Shire stallion, weighs 1,800, jet black, gentle disposition. Will trade for stock. J. W. Shackleton, Walnut, Kas.

FOR POLAND CHINAS—Of all ages and sexes of Corwin, Tecumseh, Courtney, Wilkes, Medium and Ideal U. S. strains. Sows and gilts mated to Black Wilkes 2d 14703 C. Model King 15557 C. (by King's Model 38351 A. by Kiever's Model 29719), Guy U. S. 15559 C. (by Guy Darkness 18292 A.), Hadley's Model Sanders 15761 C. (by Hadley's Model 35913 A.), at special prices for thirty days. Inquire of Henry Comstock & Sons, Cheney, Kas.

SWEET POTATOES—Sent out to be sprouted on shares. No experience required. Directions for sprouting free. T. J. Skinner, Columbus, Kas. Mention this paper when writing.

FOR SALE—A few boars, fifty bred gilts, twenty-two bred sows, 125 full pigs, all pure-bred, both Poland and Berkshires. I have too many and will price anything you want so low you will buy them, and guarantee satisfaction. O. P. Updegraff, North Topeka, Kas.

WANTED.—Millet and Cane Seed. Correspond with F. Barteldes & Co., Lawrence, Kas.

REGISTERED TROTTER OR PACING HORSES.—Will trade for Registered Short-horn cattle. L. F. Parsons, Salina, Kas.

BLOSSOM HOUSE—Opposite Union depot, Kansas City, Mo., is the best place for the money, for meals or clean and comfortable lodging, when in Kansas City. We always stop at the BLOSSOM and get our money's worth.

WRITE TO ALEX RICHTER—Hollywood, Kas. How to sub-irrigate a garden, etc., and cost of same. Send him the size or dimensions of your garden, and he will give full information.

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

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

FOR SALE—BOARS.—Kansas Boy 15405, he by Hoosier Boy 7838, his dam Little Beauty 29776; one spring boar by Princeton Chief, one by King Hadley 15087; also a few sows, bred to Kansas Boy 15045. H. Davison, Waverly, Kas.

PURE MAMMOTH BRONZE TURKEYS—Gobblers, \$2; hens, \$1.50. Emma Anno, Colony, Kas.

WANTED—Every farmer and stockman to write for our new Fall Catalogue, containing prices on everything direct to consumer. Free. Kansas City Machinery Co., 1104 Hickory St., Kansas City, Mo.

SHORT-HORNS FOR SALE—A desirable lot of young bulls, also females, any age, by the World's Fair show bull, Lavender King 4th 108682. D. K. Kellerman & Son, Mound City, Linn county, Kansas.

FOR SALE—Two herd boars, bred gilts and pigs See "ad." on first page. Allen Thomas, Blue Mound, Kas.

FOR SALE—A LARGE SPANISH JACK, FOUR years old; price \$350. Also a thoroughbred Holstein bull just about two years old. Elm Beach Farm, Wichita, Kas.

COTSWOLD RAMS FOR SALE—Six head yearlings and lambs, by Pleasant View farm. W. G. McCandless & Sons, Cottonwood Falls, Kas.

FOR SALE—A grandson of the \$5,100 Kiever's Model, \$18,000 S.; the \$555 Hadley Jr. 18314 S.; Upright Wilkes 18246 S.; and J. H. Sanders Jr. 18729 S. Ten extra fine gilts. J. R. Killough & Sons, Ottawa, Kas.

WANTED—A limited quantity of Jerusalem corn and milo maize seed. Correspond with us. F. Barteldes & Co., Lawrence, Kas.

STOCKMEN AND FARMERS—Can find big bargains in corn-shellers and feed mills, but little used, by calling on or writing Sandwich Mfg. Co., 1217 Union Ave., Kansas City, Mo.

1,000 Peach Trees one year from bud, 4 to 3 ft., mostly branched, with fruit prepaid to any station in Mo., Kas. and Ia., for \$21; or 500 for \$12. Sample prepaid, 25c. Other sized trees proportional prices. R. S. JOHNSTON, Box No. 17, Stockley, Del.

BEST CORN FOR KANSAS. I get a big trade from Kansas because my corn greatly outstrips your native corn in yield and is much surer crop. Twenty-six best kinds. Two samples, catalogue and proof free. Address, J. C. SUFFERN, Seed Grower, Voorhies, Ill.

Plant! Plant! Plant! Strawberry Plants! I have them to sell. Best of the old with best new varieties. For my 1898 illustrated instructive catalogue, five 2-cent stamps. Price list free. B. F. SMITH, Box 6, Lawrence, Kas.

POTATOES—Northern Grown Seed. Five best from 140 kinds to produce on Western soil. 3,000 bushels in premiums or we pay the freight. How to raise a big crop. Circular free. Fountain Head Experimental Potato Farm, Beaver Crossing, Neb. T. G. Ferguson, Proprietor.

EVERGREENS! 100 6 to 8 in., \$1.00; choice of 32 packages, 100 choice, transplanted, 2 feet, \$10.00 prepaid. Millions to offer: hardy varieties, all sizes. ORNAMENTAL & FRUIT TREES, Shrubs, vines, etc. Catalogue prices, and 40 great bargains sent FREE. D. HILL, Evergreen Specialist, Local Agents Wanted. DUNDEE, ILL.

Seed Corn Leading Varieties. Mammoth White-side Oats—rust-proof and stands up—only 30c per bu. in 10 bu. lots. Barley, Spring wheat, Kaffir corn, Grass Seeds and Timothy Seed. Write for catalogue, which is free, by mentioning Kansas Farmer. It will tell you all about seeds and save you \$'s in buying and \$'s in planting. Address A. A. BERRY SEED CO., Clarinda, Iowa.

VITA-NOVA Protects trees from insects and fungus diseases, and insures perfect fruit and foliage. One treatment lasts four years. For \$1 we will send sufficient for twenty-five trees. J. Williams Bros., Danville, Pa.

THE STRAY LIST.

FOR WEEK ENDING JANUARY 20, 1898.

Montgomery County—J. W. Glass, Clerk. STEER—Taken up by Jas. Blevins, in Caney tp., December 13, 1897, one staggy red and white steer, 6 years old, branded H. T. on left hip and bar on left side; valued at \$12.50.

STEER—By same, one blue steer, 6 years old, branded H. T. on left hip and bar on left side; valued at \$2.50.

Lyon County—H. E. Peach, Clerk. COW—Taken up by G. S. Butler, in Americus tp., October 3, 1897, one pale red cow, mottled head, no horns, no brands, right ear cropped, under-cut in left ear.

Cherokee County—S. W. Swinney, Clerk. STEER—Taken up by A. O. Gandy, in Garden tp., December 7, 1897, one yellow brindled steer, 3 years old, branded on left hip with OO, weight 700 pounds; valued at \$30.

Woodson County—W. O. Eades, Clerk. FIVE CALVES—Taken up by J. L. Sullivan, Owl Creek tp., December 22, 1897, one roan steer calf, one red steer calf, white on end of tall and white on forehead, and three red heifer calves, all dehorned; value \$10 each.

Nemaha County—F. M. Hartman, Clerk. PONY—Taken up by A. S. Thomas, in Adams tp.; December 12, 1897, one bay horse pony, both hind feet white, about 6 years old; valued at \$10.

HORSE—By same, one brown horse, blaze in face and both fore feet white, about 4 years old; valued at \$10.

FOR WEEK ENDING JANUARY 27, 1898.

Pottawatomie County—A. P. Scritchfield, Clerk. STEER—Taken up by Wm. Fisher, in Lone Tree tp., January 1, 1898, one red steer, 2 years old, blind in right eye; valued at \$15.

Elk County—J. A. Benson, Clerk. STEER—Taken up by James Moore, in Union Center tp., January 15, 1898, one blue and white spotted steer, 2 years old, an unknown brand and both ears split; valued at \$15.

Thomas County—Ike W. Crumly, Clerk. TWO MULES—Taken up by George F. Kern, in Kingsley tp., December 26, 1897, two black mare mules (matches), each about 10 years old; valued at \$25 for both.

FOR WEEK ENDING FEBRUARY 3, 1898.

Cowley County—S. J. Neer, Clerk. HORSE—Taken up by Jay Brown, in Cedar tp. (P. O. Cedar Vale), January 12, 1898, one gray horse 6 years old, five feet high, right ear split; valued at \$12.

Chase County—M. C. Newton, Clerk. MARE—Taken up by E. G. Crocker, in Matfield Green tp., January 5, 1898, one dark brown mare; no marks or brands; valued at \$18.

Cherokee County—S. W. Swinney, Clerk. MARE—Taken up by V. Z. Ball, one mile south and a half mile east of Sherwin, December 20, 1897, one bay mare, 10 years old, weight 950 pounds, barb wire mark on right front foot, shod all round with heavy shoes; valued at \$20.

HORSE—By same, one dark sorrel horse, 8 years old, weight 1,000 pounds, shod all round with heavy shoes, no marks or brands; valued at \$20.

Greenwood County—Perry Clemans, Clerk. STEER—Taken up by Edmund Jackson, in South Salem tp., January 7, 1898, one black and white steer, 1 year old, branded 6 on right hip; valued at \$10.

AN INVALUABLE BOOK for Schools, State Granges, Agricultural Societies, Farmers' Institutes, Farmers' Homes. First Principles of Agriculture

By EDWARD V. VOORHEES, A. M., Director of the New Jersey Agricultural Experiment Station, and Professor of Agriculture, Rutgers College, New Brunswick, N. J. 12mo; cloth; 212 pages. 90 cents.

It treats of the composition and improvement of soils; natural and artificial manures; the rotation of crops; the selection of seed; the growth of animals; feeds and fodders; the principles of breeding; pure breeds of farm stock; the products of the dairy, etc.

At the bookstores, or mailed on receipt of price by SILVER, BURDETT & CO., Publishers, Boston, New York, Chicago, Philadelphia.

VERNON COUNTY HERD OF REGISTERED POLAND-CHINAS

125 head in herd. Herd boars, King Hadley 16766 S. and Turley's Chief Tecumseh 2d 17978 S. Ten Choice Gilts sired by King Hadley 16766 S., the second prize boar in Missouri, and bred to Turley's Chief Tecumseh 2d 17978 S., at \$15 to \$20 each. Must have room for coming pig crop.

R. S. COOK, WICHITA, KAS., Poland-China Swine BREEDER OF

The Prize-winning Herd of the Great West. Seven prizes at the World's Fair; eleven firsts at the Kansas District fair, 1893; twelve firsts at Kansas State fair, 1894; ten first and seven second at Kansas State fair, 1895. The home of the greatest breeding and prize-winning boars in the West, such as Banner Boy 28411, Black Joe 28603, World Beater and King Hadley. For Sale, an extra choice lot of richly-bred, well-marked pigs by these noted sires and out of thirty-five extra large richly-bred sows. Inspection or correspondence invited.

Sir Charles Corwin 14520 and Darkness Wilkes 18150 HEADS OF HERD.

We have been in the show ring for the last three years, always winning the lion's share of the premiums. If you want prize-winners and pigs bred in the purple, we have them. All ages of Poland-China swine for sale. Write or come and see us. We have an office in the city—Rooms 1 and 2, Firebaugh Building.

ELM BEACH FARM, Wichita, Kas., C. M. IRWIN, S. C. DUNCAN, Supt.

IF YOU ONLY KNEW 1900 The Price of a Good Horse in

You would buy some good breeding stock now. While our herd is not so large as formerly, we still have the finest collection of

Percheron and Coach Horses

In the West. Prospects never so bright. Prices never so low. All Ages. Either Sex. Choice Colors. HENRY AVERY, WAKEFIELD, KANSAS.



Bulls--Aberdeen-Angus.

Seven head of choicest breeding and individually twenty to thirty-six months old. In fine condition. Weights 1,200 to 1,600 pounds. Prices reasonable. Wm. B. SUTTON & SON, Russell, Kas.

SILVER CREEK HERD SHORT-HORN CATTLE.

Scotch and catch-topped, with the richly-bred Champion's Best 114671 in service. Also high-class DUROC-JERSEY SWINE. Can ship on Santa Fe, Frisco and Missouri Pacific railroads. J. F. STODDER, Burden, Cowley Co., Kas.

PURE-BRED SHORT-HORNS.

I have for present sale thirteen pure-bred Short-horn bulls old enough for service, including my herd bull, Imperial Knight 119669, a pure-bred Cruickshank, which I can now spare. I have also twenty cows and heifers bred or will have calves at foot, all of my own breeding. For sale at reasonable prices. John McCoy, Sabetha, Kas.

DEER PARK FARM.

H. E. BALL, Proprietor. Registered Jersey cattle. Young bulls and heifers for sale. Registered Poland-China swine. Young boars for sale. Farm two miles east of Topeka on Sixth street road. T. P. CRAWFORD, Mgr., Topeka, Kas.

ROSE CREEK FARM JERSEY CATTLE and POLAND-CHINA SWINE.

Our SILVER WYANDOTTES and Mammoth Bronze Turkeys are from premium stock. Write us if you want the best. (Farm in Republic Co., Kansas.) H. WOODFORD, Mgr., Chester, Neb.

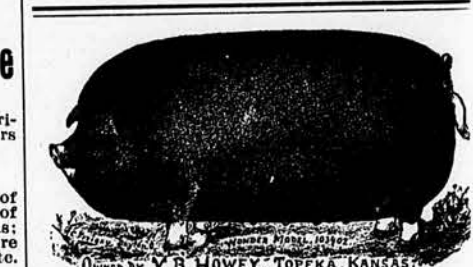
200 EGG INCUBATOR, ONLY \$10

F. M. CURYEA, Hanna, Ind.

BEES

If you keep BEES subscribe for the Progressive Bee Keeper, a journal devoted to Bees and Honey. 50 cents per year. Sample copy free. Also illustrated Catalogue of Bee-Keepers' Supplies. Address LEAHY CO., Higginsville, Mo.

MARK STOCK WITH JACKSONS EAR TAGS. ALWAYS BRIGHT, CAN COME OUT. JACKSON, ST. FRANCIS, ARK. NORTH TOPEKA, KAS., NOV. 11, 1897. Geo. M. Jackson.—Send me some more ear markers. They are the best of all kinds I ever tried, and I am sure I have used all ever gotten up. I have the first one to lose out of ear yet, and they are so handy to put in. O. P. UPDEGRAFF, Secretary Kansas Swine Breeders' Association.



Breeder and shipper of thoroughbred Poland-China and Large English Berkshire swine and Silver-Laced Wyandotte chickens.

MARKET REPORTS.

Kansas City Live Stock.

KANSAS CITY, Jan. 31.—Cattle—Receipts since Saturday, 4,408 cattle; 28 calves; shipped Saturday, 1,112 cattle; 2 calves. The market was steady to strong. The following are representative sales:

SHIPPING AND DRESSED BEEF STEERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include Col., 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

WESTERN STEERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include 17 fdr, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

NATIVE HEIFERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

NATIVE COWS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

NATIVE FEEDERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

NATIVE STOCKERS.

Table with columns: No., Ave. Price, No., Ave. Price. Rows include 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50.

Hogs—Receipts since Saturday, 10,375; shipped Saturday, 246. The market was strong to 2 1/2c up. The following are representative sales:

Table with columns: No., Price, No., Price. Rows include 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150.

Sheep—Receipts since Saturday, 4,184; shipped Saturday, 239. The market was steady. The following are representative sales:

Table with columns: No., Price, No., Price. Rows include 23 nat. lbs., 401 Ut. sh., 231 sheep, 123 N. M. ew.

St. Louis Live Stock.

ST. LOUIS, Jan. 31.—Cattle—Receipts, 7,500; market steady to strong; native shipping steers, \$4.40@5.25; light and dressed beef and butcher steers, \$3.50@4.85; stockers and feeders, \$2.50@4.40; cows and heifers, \$2.00@4.30; Texas and Indian steers, \$3.35@4.35; cows and heifers, \$2.60@3.80.

Hogs—Receipts, 6,000; market strong to a shade higher; light, \$3.60@3.75; mixed, \$3.70@3.85; heavy, \$3.80@3.90.

Sheep—Receipts, 1,000; market steady; native muttons, \$4.00@4.50; lambs, \$4.50@5.50.

Chicago Live Stock.

CHICAGO, Jan. 31.—Cattle—Receipts, 14,000; market strong to 10c higher; beefs, \$3.85@5.45; cows and heifers, \$2.25@4.40; Texas steers, \$3.50@4.35; stockers and feeders, \$3.35@4.35.

Hogs—Receipts 40,000; market fairly active, strong to 5c higher; light, \$3.70@3.90; mixed, \$3.75@3.92 1/2; heavy, \$3.65@3.95; rough, \$3.65@3.70.

Sheep—Receipts, 12,000; market strong; native, \$3.00@3.60; western, \$3.50@4.55; lambs, \$4.00@5.75.

Chicago Grain and Provisions.

Table with columns: Jan. 31, Opened, High'st, Low'st, Closing. Rows include Wheat, Corn, Oats, Pork, Lard, and other provisions.

Kansas City Grain.

KANSAS CITY, Jan. 31.—Receipts of wheat here to-day were 123 cars; a week ago, 97 cars; a year ago, 39 cars.

Sales by sample on track: Hard, No. 1, nominally 88@89c; No. 2 hard, 1 car 60-lb. 80c, 1 car 88 1/2c, 2 cars 88c, 2 cars 58-lb. 87c, 2,500 bushels to arrive 83 1/2c, 6,000 bushels 88c, 2,500 bushels 87 1/2c; No. 3 hard, 1 car 56 1/2-lb. 85c, 2 cars 84c, 1 car 83c; No. 4 hard, nominally 80@83c; rejected, nominally 75@78c. Soft wheat, No. 1, nominally 90c; No. 2, nominally 95@96c; No. 3, nominally 90@93c; No. 4, nominally 87@90c; rejected, nominally 84@86c. Spring, No. 2, nominally 84@83c; No. 3, nominally 81@83c; rejected, nominally 78@80c.

Receipts of corn here to-day were 248 cars; a week ago, 167 cars; a year ago, 464 cars.

Sales by sample on track: Mixed, No. 2, 2 cars 25c, 1 car 24 1/2c, 18 cars 24 1/2c. No. 3, 1 car 24 1/2c, 2 cars 24 1/2c; No. 4, nominally 24c; no grade, nominally 23@23 1/2c. White, No. 2, 2 cars 25 1/2c, 6 cars 25 1/2c; No. 3, 2 cars 25 1/2c; No. 4, 1 car 25 1/2c.

Receipts of oats here to-day were 23 cars; a week ago, 32 cars; a year ago, 23 cars.

Sales by sample on track: Mixed, No. 2, 1 car 22 1/2c, 1 car 22c; No. 3, 1 car 23 1/2c, 1 car 22c; No. 4, nominally 21c. White, No. 2, nominally 23 1/2@24c; No. 3, 4 cars 23c; No. 4, nominally 22c.

Rye, No. 2, nominally 43@44c; No. 3, nominally 42c; No. 4, nominally 41c.

Receipts of hay here to-day were 43 cars; a week ago, 30 cars; a year ago, 76 cars. Quotations are: Choice prairie, \$8.75@7.00; No. 1,

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

Kansas City Produce. KANSAS CITY, Jan. 31.—Butter—Extra fancy separator, 17c; firsts, 14c; dairy, fancy, 14c; choice, 12c; country roll, 10c; store packed, 9@10c; fresh packing stock, 8c. Eggs—Strictly fresh, 13c per doz. Poultry—Hens, 6c; broilers, 8c; roosters, 12 1/2@15c each; ducks, 6 1/2c; geese, 5c; hen turkeys, 8c; young toms, 7 1/2c; old toms, 7c; pigeons, 60c per doz. Apples—Jonathan, \$5.00@6.00 in a small way; Bellefleur, in car lots, \$4.50@5.00 per bbl.; fancy Missouri Pippin, \$3.75@4.00; fancy Ben Davis, \$3.00@3.50; Winesaps, \$3.75@4.25; Willow Twigs, \$3.75@4.00; Huntsman Favorite, \$4.00. In a small way varieties are selling at 40@55c per half bu. Vegetables—Cabbage, northern stock, \$1.25 per 100-lb. crate. Beets, 25@40c per bu. Green and wax beans, \$2.50@3.00 per crate. Onions, new Spanish, \$1.00@1.25 per crate; others, 80@85c per bu. Potatoes—Greeley stock, fancy Rural, 7 1/2c per bu.; choice Pearl, 6c per bu.; Iowa, 5 1/2@6c per bu. Sweet potatoes, 50@50c per bu.

McINTOSH & PETERS, Live Stock Commis'n Merchants. 252-253-254 Live Stock Exchange, KANSAS CITY, MO. Correspondence and consignments solicited. Market reports furnished free on application.

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Kansas City Stock Yards are the most complete and commodious in the West and second largest in the world. The entire railroad systems of the West and Southwest centering at Kansas City have direct rail connection with these yards, with ample facilities for receiving and reshipping stock.

Table with columns: Cattle and Calves, Hogs, Sheep, Cars. Rows include Official Receipts for 1897, Slaughtered in Kansas City, Sold to feeders, Sold to shippers, Total Sold in Kansas City 1897. CHARGES: YARDAGE—Cattle, 25 cents per head; Hogs, 8 cents per head; Sheep, 5 cents per head. HAY, 80c per 100 pounds. CORN, 60c per bushel. OATS, 60c per bushel. NO YARDAGE CHARGED UNLESS THE STOCK IS SOLD OR WEIGHED. C. F. MORSE, E. E. RICHARDSON, H. P. CHILD, EUGENE RUST, Vice Pres. and Gen. Mgr. Secy. and Treas. Asst. Gen. Mgr. Traffic Manager. W. S. TOUGH & SON, Managers Horse and Mule Department.

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The Poultry Yard

Keep the Hens Laying.

Editor Kansas Farmer:—Some one has said that hens are laying machines, or that certain breeds of fowls are laying machines. Now, it would be a hard matter for this person that is guilty of the above assertion to make some people believe (those who don't get any eggs) that any such machinery exists. Too much evidence against it. Why, you can take one plantation after another, and the flocks of dunghill dummies that have adorned the manure pile and the snowbanks, and have unlimited range of hundreds of acres to feed from, and from daylight to dark to hunt grub, and nothing else to do, and even have unlimited range at night, never being confined at any time, and don't lay eggs even then. Are these the kind of fowls you call egg machines?

We answer, "Yes." These same fowls are the identical same egg machines we read about, the only difference being that the machinery is not in good running order in the one case. The term, "egg machine," is very properly applied to all hens of the proper age to produce eggs. It matters not as to what variety, or whether a mixture of varieties, if the machinery is properly handled all will respond profitably, and otherwise not. We very frequently hear persons say, "Our hens are not doing well, and we must change the stock." Now, in most cases like this, all that is needed is to change the management. The feeding and care of poultry is somewhat of a study, and simply because we have kept poultry on the farm for a long time, is not conclusive evidence that we know all about poultry.

The attention necessary to make hens produce eggs to their utmost capacity may be compared to the care a good nurse would give a sick patient. This is running the machinery that turns out the eggs. Regularity in time of feeding, watering, etc., but not regularity in feeding the same kind of food. The more changes in food you can make, the better, providing it is food that they relish. Feeding alone will not produce eggs, but you must make the hens work and exercise. This is easily accomplished by scattering some variety of grain the fowls like best, in straw, and they will never refuse to work, providing they are not overfed. Overfeeding will knock the machinery out of gear quicker than anything else, and must be avoided from start to finish.

You cannot make hens produce eggs at anything near their full capacity by allowing them to run at large during winter or at any other time, but more especially in winter. Some people think, and I believe most farmers do, that it won't do at all to confine the fowls in a house for days or weeks, even in very bad weather. In answer to this I will say, that to make hens produce eggs to their utmost capacity they must be confined the entire winter, either in a house or yard adjoining the same, as the weather will permit. This rule will hold good any time in the year, and no hens will produce as many eggs running at large as they will confined, if the proper and same attention is given them. When hens are confined we can control the machinery in egg-production to a much better advantage than when they are running at large, and the result is more eggs.

It is simply common sense to select all the hens that are liable to make good winter layers, at the beginning of winter, and fix them up with a comfortable house and yard. If the house is small, and you can't make it larger, cull closer and put less fowls in it, and do not forget that the better attention you can give them the more hens you can keep together. Do not put any male bird in with the hens when you want the eggs for common market purposes. Clean all the hens from body lice, and coal oil all the scaly legs, and keep at it until you get them clean and smooth. Have your house in two apartments, the smallest for roosting, and the largest for scratching room in day time. Adopt a good system of feeding, and, my word for it, your egg machinery will be running on full time very soon, and you will be in position to take in the high prices paid for eggs all winter. K. P.

Don't you think for a minute that oats is not a good poultry food. Good, well-filled oats always give good returns. If I were to confine myself to one kind of grain, I would give the preference to oats. Kaffir corn comes next, according to my notion. Millet is a good change, especially when scattered in straw. Good, sound wheat is just a little too much like corn, and is easily run

into excess in the line of fat. Much the greater part of poultry food should be bulk food—coarse green and vegetable food, just like for other farm animals. When you are feeding your fowls nothing but corn or other grain in winter, just think of how your horses or cattle would respond to this kind of feeding.

Inquiries Answered.

Editor Kansas Farmer:—I notice the following queries from M. H. McWhinney, Colby, Kas., in issue of the "Old Reliable" for January 6, which, so far, no one has answered, so will give him the benefit of my experience:

First—How large a room is needed to winter one dozen ducks? How many of such a flock should be drakes?

Answer—Eight by ten feet will be ample, and would be better if built low, say two and one-half or three feet at lowest side, as they do not use perches as do fowls. This makes the house both cheaper and warmer. Two drakes are sufficient, but it would be better to have another in reserve in case of accident.

Second—How many turkey hens is best to place with one tom? How many geese with one gander?

Answer—Three or four females with each male will give surer results than more. This applies to both geese and turkeys.

Third—Is renewal of blood as necessary with ducks and geese as with chickens?

Answer—Yes. Beware of too much inbreeding, especially with ducks.

Fourth—What special tools are needed for caponizing, and where can they be procured?

Answer—Knife, scoop and hook. Write to Allerton Caponizing Mfg. Co., Allerton, Iowa, or to W. H. Wigmore, 912 Rementer street, Philadelphia, Pa.

C. B. TUTTLE,

Manager Excelsior Poultry Yards, Topeka, Kas.

Every one who has used alfalfa clover in winter, or at any other time, knows the great value of it as a poultry food and an egg-producer. It is easily prepared in winter when the hay is dry. With a little pounding the stems will separate from the leaves, and when pretty well pounded it is astonishing to see how little bulk there will be of the stems. This chaff, well sprinkled with bran or shorts and scalded with hot water, makes a feed for poultry in winter that may be equalled, but it is doubtful if it can be excelled.

Fowls enjoy a warm bath in warm water, and if you give it to them a little warm they will soon show you that they appreciate its soothing qualities by diving their heads clear under and have the water running all over their bodies until they are thoroughly wet. They will in this manner clean themselves and very much improve their looks. I believe this bathing process is very beneficial to them, and it seems that they can be thus treated occasionally by making the water slightly warm. At no time in cold weather should fowls be forced to drink ice-cold water, or even very cold water. Some warm water should always be added to it.

Our baby was sick and we bought one bottle of Dr. Bull's Cough Syrup and were well pleased with it. It did the baby a great deal of good.—Wm. Thompson, McKeesport, Pa.

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SILOS HOW TO BUILD ASK WILLIAMS MFG. CO., KALAMAZOO, MICH.

A Fearful Experience

A POSTMASTER LOSES THE USE OF HIS LEGS AND ARMS.

Edwin R. Tripp, of Middlefield Center, Meets with a Hazardous Encounter Which Renders Him Helpless.

From Otsego Republican, Cooperstown, N. Y.

Mr. Edwin R. Tripp, the postmaster at Middlefield Center, N. Y., recently had a dangerous experience which left him in a helpless state. His system was so much shattered that it was feared he might never recover.

In an interview with a reporter of the Republican, regarding this experience which had attracted considerable attention, Mr. Tripp stated:

"In March, 1892, I was taken with what I afterward learned was locomotor ataxia, and was unable to walk, and I kept getting worse until I lost the use of my arms. I doctored with two skillful doctors but received no benefit, and also used a galvanic battery but kept getting worse and the doctors told me they could do no more. This was in May and June, 1892. I gave up all hope of ever having the use of my limbs again, and did not expect to live very long. I was unable to dress or undress myself, and could not get around the house unless I was moved in a chair.

"I think it was in June that I read of the case of a man in Saratoga Co., N. Y., who was taken very much as myself. He had taken Dr. Williams' Pink Pills for Pale People which contained, in a condensed form, all the elements necessary to give new life and richness to the blood and restore shattered nerves, and had been cured by their use. "I learned that the pills were prepared by the Dr. Williams' Medicine Company, Schenectady, N. Y., and only cost 50 cents a box

or six boxes for \$2.50 at any druggist's, and sent for two boxes. I used the pills faithfully and they gave me an appetite. I then sent for four more boxes, and before I had taken all of them my feet and legs which had been cold began to get warm.

"I was a member of the Town Board that summer and had to be carried and put into a wagon to go to the meetings, and in fact was helpless, as my neighbors know. In August I could walk around the house by pushing a chair. I kept getting better and managed to move around more, until at election time that year, I walked with a cane to the polls, a short distance from my home. I continued to take Dr. Williams' Pink Pills for Pale People until I had taken eighteen boxes. I could then get around, and to-day walk to the post office and back, a distance of one quarter of a mile, three times a day, and attend to my duties as postmaster.

"In the spring of 1893 I was elected town clerk, which office I held for three years, I had previously been a justice of the peace for thirty-two years. I am now 70 years of age, and have lived in this town for about forty-six years. For nearly fifty years I worked at the blacksmith's trade. I am able to do work in my garden now, and saw some of my wood. I consider that my restoration to health is due to the use of Dr. Williams' Pink Pills for Pale People.

EDWIN R. TRIPP."

Subscribed and sworn to before me this 23d day of June, 1897. HOMER HANNAH, Notary Public.

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BRASS BEAMS
NOT IN ANY COMBINATION OF THIS
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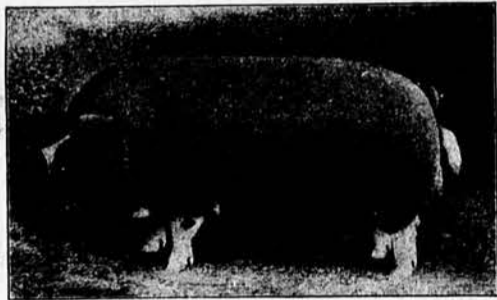
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About fifty head of choice sows sired by Chief I Know, U. S. Chief, Black U. S., Black Chief, Latest Fashion, Look Me Over, Chief Perfection, and others, the best blood of the breed. And they are bred to Chief I Know, U. S. Chief 2d, Matchless I Know, U. S. Chief, Chief Perfection, Perfect I Know and others. Lady U. S. Chief, dam of all the '97 winners at Illinois State Fair, will go safe in pig to Chief I Know. The whole herd is in the pink of condition and has been handled for its future usefulness. My choicest brood sows are included. Don't overlook this grand offering. Write for catalogue to

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Thirteen head of cows and helpers. Five young bulls got by herd bull My Lad out of Golden Knight. Herd bull, My Lad. Fifty head of grades.
SALE COMMENCES AT 9 A. M. LIBERAL TERMS OF PAYMENT.

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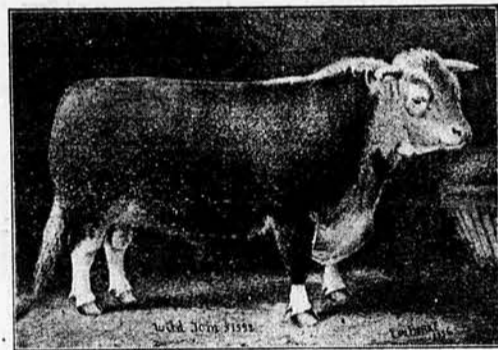
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23d and Grand Avenue,
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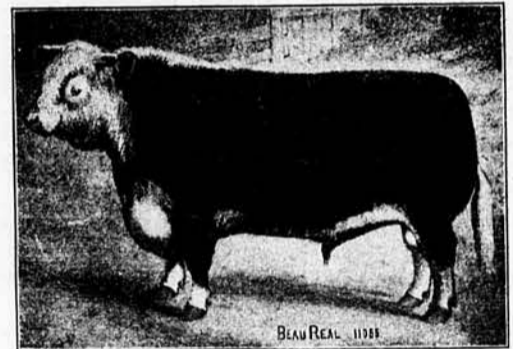


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