

KANSAS FARMER

ESTABLISHED IN 1863.
VOL. XXXVI. NO. 40.

TOPEKA, KANSAS, THURSDAY, OCTOBER 6, 1898.

SIXTEEN TO TWENTY
PAGES—\$1.00 A YEAR.

BREEDERS' DIRECTORY.

Cards will be inserted in the Breeders' Directory as follows: Four line card one year, \$16.00; six lines, \$23.00; ten lines, \$30.00; each additional line \$3.00. A copy of the paper will be sent to the advertiser during the continuance of the card.

HORSES.

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

CATTLE.

ROCK HILL HERD OF SHORT-HORNS.—Straight R and cross-bred Scotch and Bates; good as the best. A No. 1, all red, 19 months old bull \$150. J. F. True, Newman, Kas.

FAIRVIEW STOCK FARM.—Registered Short-horn cattle. Royal Bates 2d No. 124404 at head of herd. Young stock for sale. E. H. Littlefield, Newkirk, Oklahoma.

ENGLISH RED POLLED CATTLE—PURE-BRED. Young stock for sale. Your orders solicited. Address L. K. Haseltine, Dorchester, Green Co., Mo. Mention this paper when writing.

NEOSHO VALLEY HERD OF SHORT-HORNS.—Imported Lord Lieutenant 120019 at head of herd. Young bulls and heifers for sale. Address D. P. Norton, Council Grove, Kas.

SWINE.

D. TROTT, ABILENE, KAS., famous Duroc, Jerseys and Poland-Chinas.

KAW VALLEY HERD POLAND-CHINAS.—One of the best sons of Chief I Know at head. Pairs and trios not akin; of all the leading strains. M. F. Tatman, Rossville, Kas.

S. F. GLASS, Marion, Kas., breeder of thoroughbred Jersey cattle, Poland-China and Large English Berkshire hogs, M. B. turkeys, B. P. Rock and S. C. White Leghorn chickens, peacocks, Pekin ducks and Italian bees.

KANSAS HERD OF POLAND-CHINA SWINE.—Has five choice yearling sows bred to my black U. S. boar, and one Tecumseh boar and thirty-five fall pigs by Model Sanders (20492) by Klever's Model. They have typical ears and show fine markings. Address F. P. Maguire, Haven, Kas.

V. B. HOWEY, TOPEKA, KAS.

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

PURE-BRED POLAND-CHINAS.

Spring crop of pigs by Wren's Model, What's Wanted Wilkes and Tanner by Hildreth's. Dams of Black Corwin, Wren's Medium, Protection Boy, Moss Wilkes Tecumseh, Hadley M. Washington. Get a Corwin Sensation, Darkness 1st, or Moss Wilkes Maid boar before my sale this fall. Some extra fine gilts for sale now. Tanner pigs are marked perfectly and have fine finish. Write me for particulars. J. R. WILLSON, Marion, Kas.

POULTRY.

PURE-BRED POULTRY.

Barred P. Rocks, White P. Rocks, Partridge Cochins, White Cochins, Light Brahmas, S. L. Wyandottes, White Wyandottes, Black Javans, Brown Leghorns, White Leghorns, Buff Leghorns, Silver Spangled Hamburgs, Pearl Guinea and Pekin Ducks. Two hundred this year's breeders for sale. Also 500 Spring Chicks, ready to ship after the first of July. Prices lower than any other time of the year. Circular free. A. H. DUFF, Larned, Kas.

Special Sale of White Wyandottes

FOR NEXT THIRTY DAYS AT

Excelsior Poultry Farm

TOPEKA, KANSAS.

Stock first-class. Prices close, to move stock quickly. If you want stock for early show, here's your chance. Also a fine lot of Black Langshans and Buff Cochins. C. B. TUTTLE.

ROCKS WHITE and BLUE BARRED

Empire, Lash and Conger Strains.

Eight years experience in breeding Rocks exclusively. Have the best young stock this year I have ever raised. Perfect, high-scoring, prize-winning birds. Two hundred pullets and cockerels now ready for shipment. A few cockerels from E. B. Thompson eggs for sale. Write for descriptive circular and prices. Printed recipe for making and using Liquid Lice Killer, 25c. Address T. E. LEFTWICH, Larned, Kas.

SWINE.

BOURBON COUNTY HERD BERKSHIRES.

J. S. MAGERS, Proprietor, Arcadia, Kas. Correspondence invited. Satisfaction guaranteed.

M. H. ALBERTY, Breeder of Registered CHEROKEE, KAS. **DUROC-JERSEY SWINE.** Baby Pig Teeth Clippers, 35 cents by mail.

VERDIGRIS VALLEY HERD PEDIGREED POLAND-CHINAS.

Two hundred head, four herd boars, 150 spring pigs. An extra lot of September boars and gilts for sale. Prices reasonable. Farmers and Stock Hog Raisers cordially invited to write or visit us. WAIT & EAST, Altoona, Wilson Co., Kas.

Standard Herd of Poland-Chinas

A choice lot of gilts sired by Ideal U. S. and bred to Tecumseh Chief. Also some good Tecumseh Chief gilts bred to Look Over Me (he by old Look Me Over) and some good fall pigs, both sexes. Write and get my prices or come and see. WM. MAGUIRE, Haven, Kas.

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

THE SEDGWICK NURSERY CO.,

Sedgwick, Harvey Co., Kas.,

—Breeder of—

Short-horn Cattle and Poland-China Swine Of the Best Strains.

Stock for sale. Correspondence and inspection invited.

HEADQUARTERS FOR POLAND-CHINAS IN KANSAS IS AT SHADY BROOK STOCK FARM.

H. W. CHENEY, Prop., NORTH TOPEKA, KAS.

Cheney's Chief I Know 19518 (S) at head. All popular strains represented in matrons. Write for prices, which are always reasonable. Buyers met at train and shown stock free.

BERKSHIRES.

Our herd numbers forty head, with fine prospects for large increase this fall. Foundation stock from leading Iowa and Kansas herds. 2d Seven Oaks Col. Mills 46719 herd boar. We have also for sale fifty Silver-Laced Wyandottes. Address MANWARING BROS., Lawrence, Kas.



POLAND-CHINAS.

Guy Darkness 18292 and Best Nims 19612, herd boars. Sept. '97 boars and gilts for sale. Guy Darkness gilts will be bred to Best Nims for fall farrow. Correspondence or inspection of herd solicited.

S. W. HILL, Hutchinson, Kas.

SUNNYSIDE HERD PEDIGREED POLAND-CHINAS.

Herd Boars are Grand Sons of J. H. SANDERS and SHORT STOP, the World's Fair Prize Winners. Bred to 20 large mature sows of Corwin Black U. S. and Black Bass blood. We aim to produce the money-makers, not sacrificing size and feeding qualities to fancy points. Choice young stock for sale at reasonable prices. M. L. SOMERS, Altoona, Kas.

Nation's Poland-Chinas.

Fifty boars and gilts for this season's trade. My herd boars consist of Darkness Quality 14861, Princeton Chief 14543, Col. Hildreth's 37247 and Standard Wilkes. My sows are splendid individuals and of the right breeding. Personal inspection and correspondence invited. LAWRENCE NATION, Hutchinson, Kas.

E. E. AXLINE, Oak Grove, Mo. POLAND-CHINAS.

Most Fashionable Strains.

MODEL BOY, WESTERN WILKES, Now in Service. YOUNG STOCK FOR SALE.

SWINE.

Wamego Herd Imp. Chester Whites and Poland-Chinas.

Mated for best results. Also Barred Plymouth Rock chickens and eggs for sale. Correspondence or inspection invited. Mention FARMER. C. J. HUGGINS, Proprietor, Wamego, Kas.

W. B. VAN HORN, LAWRENCE, KAS. Breeder of POLAND-CHINAS.

Twenty boars by Combination Model 20112, Look Me Up by Look Me Over, Tecumseh Short Stop and other choice boars. I breed for size and bone as well as finish. Satisfaction guaranteed. Fifty Plymouth cockerels for sale.

HIGHLAND HERD POLAND-CHINAS.

We have a fine line of boars of fall and spring farrow sired by Highland Chief 18334, he by Chief Tecumseh 2d; Knox All Wilkes 18179 by Little Mo by McWilkes; Look at Me by Look Me Over. We also have as good a lot of gilts by the above boars as we ever raised. Our prices will be right. Barred Plymouth Rock chicks for sale. DIETRICH & SPAULDING, Richmond, Kas.

PLEASANT VALLEY HERD REGISTERED POLAND-CHINA SWINE

King Perfection 4th 15744 S. at head of herd, assisted by Tecumseh Wilkes 12394 S. and Lambing Ideal 14050 S. The sire of last named is Gov. C. by Black U. S. We have added several very finely bred sows to our herd. Write for particulars. Address either W. E. JOHNSON, Colony, Kas. E. A. BRICKER, Westphalia, Kas.

THE WILKES QUALITY HERD OF POLAND-CHINA SWINE.

Thos. Symms, Prop., Hutchinson, Kas. Herd boars, Darkness Quality and Guy Wilkes. For ready sale 45 very choice pigs out of Bessie Wilkes, Beauty Sedom, Chief I Know, Standard Wilkes, Ideal Black U. S. and Chief Tecumseh 2d sows.

F. L. and C. R. OARD, Proprietors, HEDGEWOOD HERD OF POLAND-CHINAS VASSAR, KANSAS.

Popular Blood. Individual Merit. Brood sows of the most popular strains and individual merit. The best that money can buy and experience can breed. Farm one and one-half miles south and half mile east of Vassar, Kas., on Missouri Pacific railroad.

M. C. VANSSELL, Muscotah, Atchison, County, Kansas, Breeder of Pure-bred Poland-China Swine and Short-horn Cattle of the most desirable strains.

For Ready Sale Thirty Poland-China Bred Sows

One and two years old, bred for fall farrow; very choice; price low if ordered soon; must make room for 170 pigs now on hand. Come and see or write.

MEADOWBROOK HERD.

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

We have for sale 25 pigs by J. R.'s Tecumseh of March and April farrow. Also a few females of choice quality not registered.

BLUE MOUND HERD BERKSHIRE SWINE.

Herd boars, Victor Hugo 41799 (sire Imp.), Barkis 30040 (weight 800 lbs.), Prince Jr. 17th, from World's Fair winner. Choice pigs from five different strains. Also breed Shropshire sheep, M. B. turkeys and B. P. Rock chickens. Write. Allen Thomas, Blue Mound, Linn Co., Kas.

Mains' Herd Poland-Chinas

Headed by the two grand sires, One Price Chief 20114, he by Chief Tecumseh 2d 9115, out of Alpha Price, she by One Price 4207; Model Combination 19853, grandson of Klever's Model, on sire's side, and of Chief Tecumseh 2d on dam's side. I have pigs from other noted boars mated to a selected lot of sows as good as are known to the breed. A very fine lot of fall and spring pigs and quite an extra lot of brood sows of different ages. I will give very reasonable prices on all stock. Satisfaction guaranteed. James Mains, Oskaloosa, Jefferson Co., Kas.

When writing advertisers please mention Kansas Farmer.

SWINE.



DIVERDALE HERD of Chester White swine and Light Brahma poultry. J. T. LAWTON, BURBTON, KAS., proprietor. All stock guaranteed. I can also ship from Topeka, my former place.

Thoroughbred Duroc-Jersey Hogs

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



D. L. BUTTON, North Topeka, Kas., breeder of Improved Chester Whites. Stock for sale. Farm 2 miles northwest of Reform School.

SHEEP.

SEVENTY-FIVE HEAD OF SHEEP FOR SALE.—Pure-bred Cotswold and American Merinos. This includes our tops and show sheep; must be sold by October 1; rams and ewes, all five years old and under. Write at once to Hague & Son, Box 140, Walton Harvey Co., Kas.

SHROPSHIRE RAMS.

A splendid lot of spring lambs at low prices. Two extra fine Cotswold bucks. Write your wants, or better, come and select. Address J. C. STONE, JR., Leavenworth, Kas.

CATTLE.

NORWOOD SHORT-HORNS.—V. D. Sims Gardner, N. Kas. Rose of Sharons, Lady Elizabeths and Young Marys. Richest breeding and individual merit. Young bulls by Godwin 115670 (head of Lincoln herd). Sir Charming 4th now in service.

SILVER CREEK HERD SHORT-HORN CATTLE.

Scotch and Scotch-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.

CLOVER CLIFF FARM.

Registered Galloway Cattle. Also German Coach, Saddle and Trotting-bred horses. World's Fair prize Oldenburg Coach stallion, Habbo, and the saddle stallion; Rosewood, a 16-hand, 1,100-pound son of Montrose, in service. Visitors always welcome. Address BLACKSHERE BROS., Elmdale, Chase Co., Kas.

SUNRISE STOCK FARM.

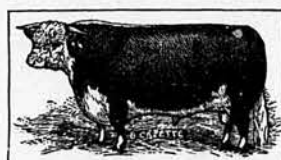
C. A. STANNARD, Prop., Hope, Kas. Breeder of Hereford Cattle and Large English Berkshire Hogs

Bulls in service: Kodax of Rockland 40781, who has won more first premiums at leading State fairs in past six years than any other bull in Kansas; Java 64045. Thirty-five yearling heifers and seven bulls 8 to 7 years old for sale.

PURE-BRED HEREFORD CATTLE

FOR SALE.

Thirty-five Head of Bulls and Heifers.



They are extra good ones. Prices as low as any responsible breeder. Farm adjoins the city. Address H. L. LEIBFRIED, Emporia, Kas.

Agricultural Matters.

WHEAT BREEDING—WHAT IT MEANS.

By W. S. Harwood, in Northwestern Miller.

Of course there is something else to be taken into consideration other than yield. All through the years of experimentation, problems arise as to a variety of features, and the work of the experimenter contemplates not only producing a wheat that shall yield large returns but one that shall have the power to withstand drought, one that has a heavy enough and not too heavy growth of straw, one in which the hinges of the kernel-cases will be so strong that they will not yield under pressure and spill the grain in waste upon the ground, one which shall have the very best and strongest roots in the soil. And again the quality of the grain must be taken into consideration. The grain may be fair to look upon, like a smartly-garbed man or woman with but a teaspoonful of brains; if the fine, strong fiber of the inner life is wanting the appearances are full of deceit. So the completest possible tests have been made as to the quality of this wheat of a larger growth. Though not a miller nor the son of a miller—though much interested in the mysteries of milling—I presume I am justified in the belief that the modern miller cares more for what might be termed the mental powers of the wheat than for its physical—he would, I doubt not, prefer a smaller kernel and greater nutrition than a big fat kernel and a low standard of nutrition.

One important point should not be overlooked in considering this work, and that is that not only is the best type of wheat desired, but that it is equally desirable that the grades of wheat not suited to a locality should be ostracised, so to speak. As the work done at this station is wholly in the interests of the public and is in no way dependent upon or influenced by the men who sell seeds, it can be carried on wholly independently of the outcome of any series of experiments. For instance, if it be shown that a certain family of wheat from which much has been expected, and from which much has been realized in another country, proves unadapted to this region, it is promptly rejected. If it be found, on the other hand, that the farmers in a certain locality, after much and often costly experimenting on their own account, have hit upon a good wheat, samples of this wheat are taken for experimentation in order that it may be rendered still better. The results of this experimentation in producing larger yielding wheats have been quite satisfactory as to quality. It has been demonstrated that the wheat as it increases in stature has not decreased in quality. It has not coarsened, if you will allow a word not generally in use but which seems to express the idea.

The tests of the laboratory and the bake-oven have rigidly been applied. Plainly enough, if the experimentation resulted only in largeness, if it were only possible to make a greater yield of wheat at the sacrifice of its quality, the work would be but half done. In response to the most searching tests the wheat has maintained the standard of quality along with its increase in yield. An expert from one of the Minneapolis mills was selected to aid in this portion of the work, in order that it might be conducted with the least possible show of mistakes. All the theory in the world would fall profitless to the ground if, when it came to demonstration, mistakes and inaccuracies should abound.

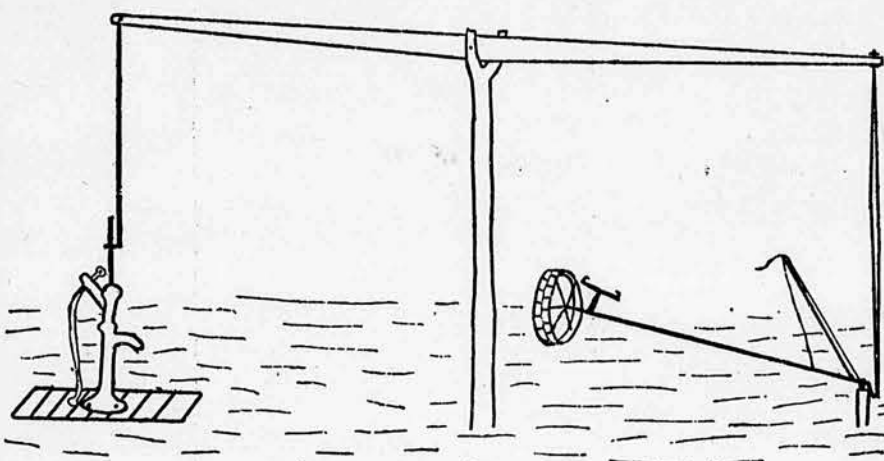
The wheat was ground in a regular roller mill, similar to those in use in the large mills. It was given all the essential tests as to its gluten, its power of expansion, and so on, by the methods well known to the milling trade. It is of interest to note that one of these wheats, starting from one kernel in 1892, would have enough progeny by the end of the century to sow 16,000 acres of wheat. In double this time—sixteen years—the one kernel with its progeny, if averaging fifteen bushels an acre, would, as shown in the article published last October in the Miller, have reached the enormous total yield of 80,000,000,000 bushels of wheat.

All in all, this work seems to be of much practical value. Professor Hayes, in a bulletin to be issued later, will go into details as to the various wheats which have been under test. It is quite probable that the bulletin will be of very general interest. Professor Hayes tells me that he deprecates any wild or extravagant statements over the present quite remarkable showing. He wants to wait another season or two and let these new wheats be tried on a still larger scale, until, too, they have been so far advanced that they can adequately

be placed in the hands of the farmers but I think the readers of the Northwestern Miller will be prepared to accept the results as far as shown as quite sufficient to justify the statement that a new and commanding figure has entered the arena—into the arena, if you care to follow the figure, of the farm, of the mills, of the wheat-pit. The next decade promises to magnificently attest the importance of the wheat experiments of the past decade. It hardly seems too much to say that there is to be a new era in wheat.

Horse-Power Pumping.

Editor Kansas Farmer:—The information asked by Mr. E. A. Umscheid, in last week's Kansas Farmer, reminds me of a cheap, simple and efficient horse-power for raising water I noticed on many ranches while traveling in California last summer, and which I fully determined to have at my stock well here in Kansas. During the rainless season the "coast" rancher's windmill frequently and exasperatingly can't be induced to "get a move" on it, and his practical native wit and common sense forced him to invent the following described pumping power, which I have tried to make plain by enclosed rough sketch: A is a stout post about ten feet high, with forked end above, through which the walking-beam (b), about twenty feet long, works, with one end attached to pump rod and the other end to pitman (c), which in turn works on crank d; e is a heavy rod (an old tumbling shaft or large gas pipe will do), about eleven feet long. Get the blacksmith to bend one end for a crank and crank-pin. Length of crank depends upon length of stroke you wish to give your pump. Get some old boxing, in which rod turns at crank end, and fasten it to a plate with hole in, through which



A HOME-MADE HORSE-POWER PUMPING PLANT.

pass a heavy lag bolt, and screw down to pivotal post (f), which ought to be about as high from ground to top, inclusive of pivotal boxing, as hub of wheels, in order to leave shaft (e) horizontal. Now get the wheels of an old discarded mowing machine, insert them close together into shaft at g. If your well is deep and pump large, you will need both wheels for weight and adhesion. Hitch single-tree and horse to piece of scantling, two feet long, fastened to old boxing near wheel hub. The horse to lead pole (h), and there you are, with a simple home-made engine, which any farmer can make with the aid of a blacksmith, and not to exceed \$5 outlay, and as good as a \$40 horse-power.

While in California I more than once saw an old mule or horse with a gunny sack drawn over his head and no driver in sight, pump water as above. On inquiry, I was told that by this funny method, the animal would go right on method the animal would go right along on his "merry-go-round" without attention.

Randolph, Kas.

HORSE-POWER PUMPING.

Editor Kansas Farmer:—I would like to give Mr. E. A. Umscheid the information he asks for in regard to horse-power pumping. A few weeks ago everybody here who had large herds of cattle ran short of water, so one of my neighbors got me to rig up a horse-power pumping outfit. It consisted of a one-horse power which gave the tumbling rod seven revolutions to one round of the horse. Ten revolutions would have been better. The end of the tumbling-rod was connected by knuckle with a shaft on the other end of which a pitman crank from an old binder was keyed, which gave the desired stroke. From this pitman crank a pitman was connected with a walking beam, which in turn was connected with the pump rod. It is necessary to have everything

about it substantial, as it requires more power to run one of those deep well pumps than is generally supposed.

Colby, Kas. G. R. WERNER.

Observations Through Great Farming Regions.

Editor Kansas Farmer:—I have arrived home from a six weeks' overland trip through Nebraska, Kansas, Missouri and Iowa. Dry weather has damaged the corn crop in eastern Nebraska and northeastern Kansas. Northwestern Missouri has a very good corn crop. Dry weather has damaged the crop in southern Iowa, but towards central Iowa and in western Iowa corn looks better again. The apple crop will be short, and so will peaches, compared with last season. Tame hay, wild hay, millet and sorghum hay seemed to be fairly good in nearly all sections. On the average, I think the potato crop will equal, if not excel, last year's yield. I noticed more farm improvements under way than last season. Cattle in the feed yards were looking well. Pastures needed rain. Hogs had suffered with cholera in several sections. I noticed the supply of rats was holding out wonderfully well in all sections. The seed crop of clover looked very well. I noticed more young colts than last season, but it is my idea that farmers through the sections in which I traveled were making no great efforts toward another generation of horses. In different sections many farmers were fencing their land with woven wire hog fence. In many places it was evident that better roadways would soon be realized. On two occasions I came across road graders with elevators (dirt carriers), taking the dirt from a plow and transferring it some sixteen feet to roadway. It occurred to me that it was a nice and quick way to grade up a road. The neatness and speed of this way

Food Caused Pain

Catarrh of the Stomach Cured by Hood's Sarsaparilla.

"I was taken sick about a year ago with catarrh of the stomach. At times I would have a ravenous appetite and at other times could not eat. My food caused me excruciating pain. I was running down so fast I had to stop work. My friends urged me to take Hood's Sarsaparilla. I did so and soon began to feel better. The disagreeable symptoms of disease gradually passed away and flesh and strength returned. I owe it all to Hood's Sarsaparilla." MARY L. CUMMINGS, North Brookfield, Mass. Remember

Hood's Sarsaparilla

Is the best—in fact the One True Blood Purifier. Sold by all druggists. \$1; six for \$5.

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

The World's Wheat Crop.

The Cincinnati Price Current makes a summary of views as to the present season's wheat crop, from which the following excerpts are taken:

"A recent approximation by Beerbohm's London List gives 180,000,000 quarters, or 1,440,000,000 bushels, as the total wheat crop of Europe this season—about 233,000,000 bushels in excess of the short crop of 1897. The world's total crop is recognized as promising 325,000,000 to 330,000,000 quarters—2,600,000,000 to 2,640,000,000 bushels. The previous largest total was in 1894. Taking 2,620,000,000 for 1898, comparisons for a series of years are as follows:

	Total, bush.
1891	2,332,480,000
1892	2,410,960,000
1893	2,474,080,000
1894	2,562,000,000
1895	2,504,400,000
1896	2,408,600,000
1897	2,286,400,000
1898	2,620,000,000

"This comparison suggests a larger world's production of wheat than in any previous year—the highest record, in 1894, being 2,562,000,000 bushels, or 58,000,000 below the figures here offered for 1898. Beerbohm's List holds up to view the evidence that the world's visible supply for September 1 is nearly 120,000,000 bushels less than at corresponding date in 1894, and the invisible supply probably at least 200,000,000 bushels less than in 1894—implying that while the indicated production is 58,000,000 larger, the reserves are 320,000,000 smaller—making the aggregate supply of wheat 262,000,000 bushels less than in 1894. Quite likely this estimate of difference in reserves may be somewhat excessive. If it be anywhere near correct, the surmise of Beerbohm's List that it 'is a tangible reason why a return to the low prices of 1894-95 ought not to be feared,' is well founded.

"In this connection the Price Current submits the following compilation based on Beerbohm data, as indicating the world's wheat crops for the years indicated:

	Bushels.
1873	1,800,000,000
1874	1,880,000,000
1875	1,800,000,000
1876	1,808,000,000
1877	1,960,000,000
1878	2,000,000,000
1879	1,856,000,000
1880	1,960,000,000
1881	1,960,000,000
1882	2,200,000,000
1883	2,040,000,000
1884	2,240,000,000
1885	2,080,000,000
1886	2,160,000,000
1887	2,280,000,000
1888	2,224,000,000
1889	2,144,000,000
1890	2,264,000,000
1891	2,376,000,000
1892	2,408,000,000
1893	2,472,000,000
1894	2,560,000,000
1895	2,504,000,000
1896	2,408,000,000
1897	2,284,000,000
1898	2,616,000,000

"Averaging these quantities by periods of five years we have the following results:

1872-77	1,850,000,000
1878-82	1,996,000,000
1883-87	2,160,000,000
1888-92	2,283,000,000
1893-97	2,441,000,000

"From the first to the second period the gain in the average was approximately 8 per cent.; from second to third, 8 per cent.; from third to fourth, 6 per cent.; from fourth to fifth, 7 per cent. The latter includes the reduced production in 1897, which in quantity only barely equaled the yearly average of the five year period of 1888-92, or about 7 per cent. short of the average for 1893-97. The approximation for 1898 implies 175,000,000 bushels, or 7 per cent. in excess of the average for five years previously, but against this is the smaller reserves with which the year begins."

Better vote the other ticket once in a while than to let blind partisanship become a chronic disease.

M. M. JOHNSON.

The Stock Interest.

THOROUGH-BRED STOCK SALES.

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

OCTOBER 10—Ziegra Bros., Poland-Chinas, McCune, Kas.
OCTOBER 12—Robt. I. Young and U.S. Byrne, Poland-Chinas, St. Joseph, Mo.
OCTOBER 19—Tom C. Ponting, Herefords and Horses, Moweaqua, Ill.
OCTOBER 24—E. E. Axline, Poland-Chinas, Oak Grove, Mo.
OCTOBER 25—K. B. Armour, Herefords, Kansas City, Mo.
OCTOBER 27—C. P. Shelton, Poland-Chinas, Paola, Kas.
OCTOBER 31 AND NOVEMBER 1, 2, 3—C. H. Whitman, Herefords, Kansas City, Mo.
NOVEMBER 3—John Bollin, Poland-Chinas, Kikapoo, Kas.
NOVEMBER 3—Guss Aaron, Poland-Chinas, Leavenworth, Kas.
NOVEMBER 15—Gudgell & Simpson and Jas. A. Funkhouser, Herefords, Kansas City, Mo.
NOVEMBER 17—W. T. Clay and H. C. Duncan, Short-horns, Kansas City, Mo.
NOVEMBER 22—George Bothwell, Short-horns, Nettleton, Mo.; sale at Kansas City, Mo.
NOVEMBER 23—W. P. Harned, Short-horns, Bunce ton, Mo.
DECEMBER 8—Miles Bros., Poland-Chinas, Peabody, Kas.

CHANGE IN THE RANGE CATTLE INDUSTRY.

In an interview, recently, Mr. Robert Weems Tansill, formerly a merchant of Chicago, now of Eddy, N. M., spoke of some new light he had just received on the range cattle industry:

"I learned these facts in relation to cattle feeding," said Mr. Tansill, "while coming in on the Santa Fe train the other day, in talking with James A. Lockhart, Vice President and General Manager of the Alfalfa Land and Cattle Company, whose offices are at Colorado Springs and their ranches at Fowler, Rocky Ford and Colorado Springs. Had I known them a few years ago I could have saved myself the loss of thousands of dollars. I am convinced that this knowledge will be of the highest value to every farmer and stock-raiser on the irrigation lands of the West, and I earnestly desire to have it disseminated as widely as possible, without money and without price, among them. They will find it priceless.

"This, then, is Mr. Lockhart's plan: He takes calves at, say, 6 months old and puts them in fenced lots and feeds them on alfalfa, supplemented by one pound of fine-ground corn meal per day, fed dry from troughs, increasing the corn meal as winter approaches to two pounds per head per day. As soon as the calves become used to the feed he dehorn them. Five men can dehorn from 600 to 800 head in a day. In the spring he turns them on native grass pasture or range. In the fall he takes them up and puts them in feed lots again, giving them now a full feed of corn, for, say, six months, with other solid food. At from 18 months to 2 years they are ready for the market, will weigh about 1,100 pounds, and command top prices.

"The secret of the great advantage in the plan is that by taking the calves from the cows and feeding them as described the stomach is rapidly distended instead of being allowed to become contracted and rigid, which must of necessity result if the young animals are allowed to run on the range after weaning. For when the stomach is permanently contracted by eating dry food and range grass directly after the calf has been weaned it is impossible to obtain satisfactory results from full feeding later on. These facts will account for the poor results obtained from the full feeding of stock which has been allowed to run on range until 3 or 4 years of age.

"Another advantage should be noted. By taking calves early from the cows the latter are enabled to recuperate in flesh so as to be in better condition to go through the winter—a fact which unquestionably will largely increase the percentage and quality of the calves, besides increasing the capacity of the range. Mr. Lockhart stated that it had cost his company \$25,000 to demonstrate the foregoing, citing as an illustration that several years ago he had purchased 3,500 range cattle in Mexico at \$7 per head, shipped them to the most desirable points in Kansas, after feeding them all winter, and marketed them at a loss of \$18,000. I have proved this fact in my own experience, for I and my neighbors have endeavored to feed range cattle with exactly the same results; in fact, have, in several instances, lost no less than \$10 a head, aside from the feed we put into them. The Alfalfa Land and Cattle Company has 1,600 acres of alfalfa at Fowler, Col., in the Arkansas valley, and fed 6,000 head of cattle last year.

"Yet another advantage is gained by this plan in saving the cost of branding the calves, and the detriment thereby caused to the hides. This alone will, I

have no doubt, pay the expense of fencing the range pasture.

"Farmers should also note that this plan for feeding calves applies with equal force to sheep, and its general adoption would prevent immeasurable loss in the raising of the latter animals.

"When these important facts," declared Mr. Tansill, "become generally known to farmers and range men not only will the value of every acre of land throughout the arid regions be greatly enhanced, but other advantages will be secured. I have spoken of the great advantage to be derived from lessening the stock upon the range, and at the same time greatly increasing its quality; furthermore, this carefully fed young stock may be put upon the market at one and one-half years, at which time it will command top prices, instead of going on the market two or three years later, and selling for canners at bottom prices.

"Elwood Mead, State Engineer for Wyoming," Mr. Tansill went on, "is preparing a bill which he hopes will pass the national Congress, which will provide that for every acre of land taken up under a canal sixteen acres of arid land adjoining thereto will be leased at a nominal rent, say 1 cent per acre. He estimates that if this can be accomplished, even at this rental, it will produce a revenue of about \$4,000,000 per year. This in turn he proposes shall be expended in building storage reservoirs and further reclaiming our vast arid region. I consider the projected bill one of the most important steps that has yet been taken for the reclamation of the arid land of America, and if it can be carried out it will be a practical solution of this important question."

Concerning the district where he resides Mr. Tansill says: "The Pecos valley, in southwestern New Mexico, is most admirably situated to take advantage of these conditions. The railroad which is now being constructed from Roswell, N. M., to Amarillo, Texas, will form a connecting link between the Pecos Valley road, which extends to Pecos, Texas, on the south, to the Denver & Gulf road, and the Atchison, Topeka & Santa Fe system on the east, 375 miles. This will bring the valley in direct connection with and within thirty-six hours' time of Chicago. This road will draw from a country as large as the State of Iowa. This is the finest stock-breeding section in the United States, and on a conservative estimate it is believed that it will deliver at least 15,000 car-loads of cattle and sheep to the Santa Fe system yearly."

Omaha Exposition Stock Show.

The live stock show at the Trans-Mississippi and International Exposition commenced October 3 and will continue until October 20, 1898. It is perhaps one of the greatest shows of live stock ever held in America.

The list of official judges for the various classes are as follows:

Horses.—Joseph Watson, Hastings, Neb.; F. M. Welch, Des Moines, Iowa.
Cattle.—R. Gibson, Delaware, Ont., Canada; Claude Makin, Florence, Kas.; T. J. McCreary, Highland, Kas.; David McKay, Ft. Wayne, Ind.; H. C. Taylor, Orfordville, Wis.; H. H. Coolidge, Galesburg, Ill.; C. F. Curtis, Ames, Iowa.

Swine.—W. E. Spicer, Winchester, Ill.; F. M. Lail, Marshall, Mo.

Sheep.—G. W. Hervey, Omaha, Neb.; Prof. John A. Craig, Ames, Iowa.

The dates for awarding prizes for the various classes of stock are as follows:
Thursday, October 6.—Short-horns, bulls a. m., females p. m. Jerseys, bulls a. m., females p. m. Cotswold sheep, Standard trotters, French Coach horses, horses in harness, Berkshire swine.

Friday, October 7.—Short-horns, herds and produce a. m., Galloways p. m. Holsteins, bulls a. m., females p. m. Lincoln sheep, Clydesdale horses, horses in harness, Berkshire swine, Duroc-Jersey swine.

Saturday, October 8.—Devons a. m., Brown Swiss p. m. Jerseys, herds and produce a. m. Holsteins, herds and produce p. m. Leicester sheep, Shire horses, Duroc-Jersey swine.

Monday, October 10.—Herefords, bulls a. m., females p. m. Guernseys, South-down sheep, Suffolk Punch horses, Poland-China swine.

Tuesday, October 11.—Herefords, herds and produce a. m., Red Polled p. m. Polled Durhams, Shropshire sheep, Hackney horses, Poland-China swine.

Wednesday, October 12.—President's day.

Thursday, October 13.—Aberdeen Angus, bulls a. m., females p. m. Oxford sheep, saddle horses, Chester White swine.

Friday, October 14.—Aberdeen Angus herds and produce a. m., sweepstakes by ages, beef breeds, p. m. Hampshire

sheep, jacks, mules, etc., Small Yorkshire swine.

Saturday, October 15.—Grand sweepstakes beef breeds herds, Merino A sheep a. m., Merino B p. m. Essex swine a. m., Victorias p. m.

Monday, October 17.—Sweepstakes by ages, general-purpose breeds cattle, Delaine Merino a. m., French Merino p. m., Shetland ponies, Cheshire swine.

Tuesday, October 18.—Grand sweepstakes general-purpose herds, Dorset Horn sheep a. m., Angora goats p. m. Other breeds swine.

Wednesday and Thursday, October 19 and 20.—Fat stock.

Mr. C. H. Elmendorf, Superintendent, reports the following list of live stock exhibitors at the Trans-Mississippi Exposition from the State of Kansas: R. S. Cook, Wichita, twenty Poland-China swine; W. P. Goode & Sons, Lenexa, six Poland-China swine; Gresham & Collins, Connor, three Poland-China swine; C. F. Hutchinson, Bellaire, ten Poland-China swine; C. M. Irwin, Wichita sixteen Poland-China swine; Kirkpatrick & Son, Connor, twenty-four Poland-China swine; H. G. Sims, Smith Center, eight Poland-China swine; F. J. Porter, Glen Elder, two Poland-China swine; C. S. Cross, Emporia, fourteen Hereford cattle; McCandless & Son, Cottonwood Falls, eleven Galloways; W. W. Guthrie, Atchison, five grade cattle; E. D. King, Burlington, fifty Merino sheep; J. N. Grau, Asherville, three Merino sheep.

About Red Polled Cattle.

There are no handsomer cattle than the Red Polled cattle. There is a growing demand for them as a satisfactory combination dairy and beef breed. In last week's Farmer, the Ottawa fair report gave an account of Geo. Groenmiller & Son's herd that won herd prizes in both beef and dairy displays.

Everybody admires these hornless red cattle because of their quiet, gentle disposition and handsome color. For beef the Red Polled do not rank with the Herefords or Short-horns. They are splendid milkers, but do not compare with the Jerseys and Guernseys as a butter breed, although they have made some remarkable butter and milk records.

In the herd shown this season by A. J. Shoemaker, of Centerville, Kas., are some descendants of Mayflower 2965, who was in a public dairy test at the Ohio State fair and in three days yielded 115.37 pounds of milk, which contained, by analysis, 14.30 per cent. solids, 4.46 per cent. butter fat. She won the first prize for the largest amount of butter fat and for the largest amount of butter fats and solids produced. Her record at the time was ahead of any cow of any breed ever tested at the Ohio State fair. Village Lassie, the dam of Mr. Shoemaker's herd bull, Volunteer, last year tested 10,000 pounds of milk.

There are quite a number of small herds in Kansas, the largest being that of D. F. Van Buskirk, of Blue Mound, Linn county, and those advertised in the Farmer. Most of the breeders of the State do not advertise, because their herds are not large enough to spare any of the females, and bull calves are all spoken for as soon as dropped. The rapid development of the Kansas dairy industry is causing a brisker demand for this breed than heretofore.

Whitewash for Exterior of Buildings.

The Washington or government whitewash is made as follows: Take half a bushel of unslaked lime, slake it with boiling water, cover during the process to keep in steam, strain the liquid through a fine sieve or strainer, and add to it a peck of salt, previously dissolved in warm water, three pounds of ground rice boiled to a thin paste and stirred in while hot, half a pound of Spanish whiting and one pound of clean glue, previously dissolved by soaking in cold water and then hanging over a slow fire in a small pot hung in a larger one filled with water. Add five gallons of hot water to the mixture, stir well and let it stand a few days, covered from dirt. It should be applied hot, for which purpose it can be kept in a kettle or portable furnace. The east end of the President's house at Washington is embellished by this brilliant whitewash. It is used by the government to whitewash lighthouses.

A pint of this wash mixture, if properly applied, will cover one square yard, and will be almost as serviceable as paint for wood, brick or stone, and is much cheaper than the cheapest paint.

Coloring matter may be added as desired. For cream color add yellow ochre; pearl or lead, add lampblack or ivory black; fawn, add proportionately four pounds of umber to one pound of Indian red and one pound of common lamp-

MICA

lightens the

AXLE

load—shortens the

GREASE

road.

Makes the wagon pull easier, helps the team. Saves wear and expense. Sold everywhere.

black; common stone color, add proportionately four pounds raw umber to two pounds lampblack.

Paint Talks--IX.

A PRACTICAL DEMONSTRATION.

In the preceding papers of this series I have given various reasons for preferring the better class of combination paints. I now propose that the property owner shall put this teaching to a practical proof, which is within the reach of any one that has a house to be painted this fall.

I propose that he shall paint one-half of each side of the house with pure white lead and oil (being careful to purchase lead bearing the brand of an actual coroder), and the other half with some good combination paint. I am particular about the brand of lead, because a combination paint might easily be purchased by mistake, and the test would then be between two combination paints, and would prove nothing as to the qualities of lead. Let him note, first, the actual cost of painting equally well each of the two halves; then let him observe the comparative appearance of each; and, as time passes, let him watch the deterioration of each.

Within a year or two the superiority of the combination paint will be demonstrated; and if the experimenter, when repainting becomes necessary, would repaint only the portion requiring it with the original material, adding the cost to the original item, under its proper head, he could eventually settle this question so effectually in his own neighborhood that there would be no longer room for any argument about it.

It would not be proper for me to advertise here any of the many combination paints suitable for this test; but if any one desiring to make the experiment will address me in care of this paper, I will furnish a list of approved makes, obtainable in his neighborhood.

To make this experiment fair, each exposure of the house should be divided (roughly) into two halves, of which one should be painted with pure white lead, the other with the combination paint. Every exposure will thus have an equal chance, which is necessary to a fair test, as the southern exposure is much more severe on paints than the other exposures. The brands should also be removed from the packages and private marks substituted, so that the painter may not be tempted to treat the two kinds of paint differently. It might also be instructive to inquire which paint the painter regards, from its appearance and working qualities, as the better.

Here is a practical suggestion, which, if carried out by a sufficient number of property owners throughout the country, will settle the paint question definitely, and will eventually save a great deal of money and annoyance to the paint-consuming public.

I have asserted that a properly prepared combination paint containing a large proportion of zinc white, is cheaper, covers more surface, holds its color longer and is more durable than any other form of house paint, and if paint authorities know anything about the subject, the paint user will save himself money and trouble by following my suggestion.

STANTON DUDLEY.

Among the Ozarks,

The Land of Big Red Apples, is an attractive and interesting book, with views of south Missouri scenery. It pertains to fruit raising in that great fruit belt of America, the southern slope of the Ozarks, and is of interest to fruit growers and to every farmer and home-seeker looking for a farm and a home. Mailed free. Address J. E. Lockwood, Kansas City, Mo.

It may well be doubted if real trouble causes as much unhappiness in the world as imaginary.

The fellows who know not the smell of new mown hay, who never saw a sheaf of wheat, and who don't know a hill of corn from a bull thistle, are now telling the farmers how rich they are this fall.—Ex.

THE RIDGEWOOD HEREFORD SALE

to Be Held at Kansas City, Mo., Oct. 31 and Nov. 1, 2 and 3, 1898.

If the reader be interested in the Hereford breed of cattle and desirous of securing some of the best, both as to individuality and breeding, he should address Mr. R. W. Bromell, Ruble, Leavenworth county, Kansas, and secure a free copy of the coming sale catalogue, that gives full particulars concerning the coming public sale that will be held at Kansas City stock yards sale barn, where 125 head, consisting of bulls, cows with calves at foot and bred heifers, will be offered, that belong to the best of white-face families. This herd was founded in 1882 by the best then known to the Hereford breed and since recruited with the foremost of Hereford breeding. To assure himself that this is true the interested reader is very respectfully invited to look over the tabulated pedigrees found in the catalogue. These cattle have always been handled with that care that is sure to give the best possible results, and in confirmation of this the prospective buyer is cordially invited to inspect the offerings and pass judgment on their respective merits regardless of anything that may be said by their owners. Being bred right and subsequently handled with the object ever kept in view that constitution and vitality should be strengthened and the real merits of the Hereford breed kept to the

young bull claims for his sire Beau Brummell 51817 by Don Carlos 33734; his dam is Blight 4th 61518 by Druid 46833, also by Don Carlos.

The Spring Valley herd, which is strong in the blood of Lord Wilton and Anxiety, numbers forty odd head, and it is the intention of Mr. Dillon to increase his herd, both in numbers and quality. The foundation stock was secured from Thos. J. Higgins, of Council Grove, in 1892.

A Farmer representative visited the herd, last month, and found some very choice females with fine lusty calves. The younger stock are especially good. There are six young bulls of salable age this fall that are carrying a good per cent. of the blood of The Grove 3d.

Mr. Dillon invites the personal inspection of all who are interested in first-class Herefords.

Armour's Sale, Oct. 25 and 26.

It is, the writer thinks, reasonable to expect that a representative Hereford gathering will take place in Kansas City on Tuesday and Wednesday, October 25 and 26, it being the first public sale of white-faces by Mr. K. B. Armour, President of the American Hereford Cattle Breeders' Association. Upon a glance through the sale catalogue, bound in expressive yellow, the Armour standard color, one finds 115 head—thirty-seven bulls and seventy-eight females, twenty-eight classed as cows and fifty heifers.

Geo. H. Adams' Herefords.

In taking a retrospective view of the American Hereford interests for a period of, say five years, one finds but two, possibly three, white-face breeders that have exceeded Mr. Adams, and they only in numbers, in recruiting the best possible domestic and foreign-bred cattle for their herds. The visitor at the San Luis Valley herd now finds therein a very strong array of individuals whose Hereford character and individuality are strong enough and good enough to take rank in the front line of the country's best. In the registered herd there are 106 breeding cows or heifers in expectancy that represent nearly all of the most fashionable blood known to the breed. Over a score of them are either imported or sired by imported animals. There are far too many for individual description in a field note like this, hence the individuals only that have been selected as the show herd will be briefly noticed. Twelve head, four bulls and eight cows and heifers, will don the holiday show yard dress and make their first appearance as a herd, outside of the State, at Omaha during the live stock exhibit that will be made under the auspices of the Trans-Mississippi and International Exhibition from October 3 to 20, 1898.

At the head of this galaxy of selected white-faces will be the bull, Orpheus 71100, dropped October 8, 1896, bred at Sunny Slope and sired by the noted breeding and prize-winning bull, Wild Tom 51592, he a son of the great Beau Real 11055, the most successful show winner (see Vol. IX, A. H. R.), gotten by the noted Anxiety 4th 9904. The dam of Orpheus, Lily Cochran 3d 42290, has back three removes in her tabulated pedigree Quickset 6553, Regulus 3849, The Grove 3d 2490, and Lord Wilton 4057, while Wild Tom has Anxiety 2238, Aberdeen 5248, Horace 2492, and Aberdeen again. Here is a pedigree that can be truly called gilded, and very naturally the breeder's



Love that Alters.

"Love is not love that alters when it alteration finds."

That is one of the sublimest lines in all literature. It is the final definition of love by the world's greatest reader of the human mind,—Shakespeare. Nearly all women who truly love, love in this sublime way. Men seldom do.

Woman's most glorious endowment is the power to awaken and hold the pure and honest love of a worthy man. When she loses it and still loves on, no one in the wide world can know the heart agony she endures. The woman who suffers from weakness and derangement of her special womanly organism soon loses the power to sway the heart of a man. Her general health suffers and she loses her good looks, her attractiveness, her amiability and her power and prestige as a woman. Dr. R. V. Pierce, of Buffalo, N.Y., with the assistance of his staff of able physicians, has prescribed for many thousands of women. He has devised a perfect and scientific remedy for women's ailments. It is known as Dr. Pierce's Favorite Prescription. It is a positive specific for all weaknesses, diseases, disorders, displacements, irregularities, and debilitating drains peculiar to women. It purifies, regulates, strengthens and heals. Medicine dealers sell it, and no honest dealer will advise you to accept a substitute that he may make a little larger profit.

"I was afflicted with kidney trouble and I have always had a torpid liver," writes Mrs. E. Crosswhite, of Duffau, Erath Co., Texas. "When I commenced your medicine I was not able to stand on my feet. I used one bottle of Dr. Pierce's Favorite Prescription and five vials of his Pleasant Pellets. I am now well. I had not walked in four months when I commenced the treatment; but in ten days I was able to walk everywhere."

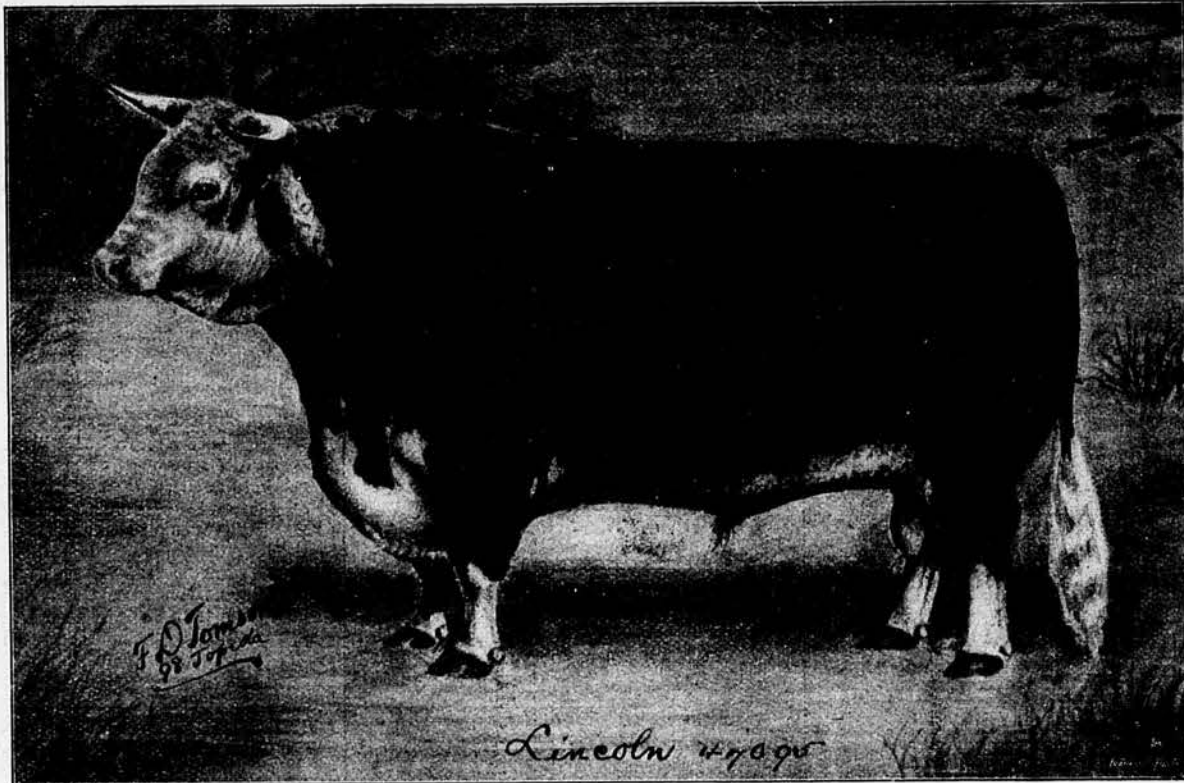
fact, the writer thinks the four-year-old about the best one on the ranch. One of the sure attractions is the three-year-old Miranda 60979, bred at Sunny Slope, got by Wild Tom 51592 and out of Elvira 2d 42358, a granddaughter of Beau Real 11055, the sire too of Wild Tom 51592. If any there yet be that are a little sensitive on the commingling of near kinship blood, let him study the results as exemplified in this beautiful animal. Last year she was a member of the Sunny Slope show herd and won third at the Minnesota and Indiana State fairs, second at the Wisconsin and third at St. Louis. She dropped a calf in May and is now safe in expectancy to Ashton Boy 52058. It may not be out of place to state that she cost Mr. Adams in the competitive sale ring at Sunny Slope last March \$905.

Of course, those familiar with the history of the imported two-year-old Luminous 76027 that, after a sharp contest by several American breeders, she fell to Mr. Adams at an even \$1,500, ranking her as the highest-priced cow of recent years in this country. She was bred by H. Heywood, Blakemere, Herefordshire, England, sired by Post Obil Vol. 18 (1542) and out of Lustre Vol. 18 (Vol. 27, p. 337), a granddaughter of Lord Wilton 4057. She won second prize at the great English Royal show last year. The best description, in a brief way, to be given of her would be to say her price, competed for by leading American breeders, is a sufficient introduction until the visitor shall have inspected her and formed his own conclusions of her worthiness and value. In the yearling class Duchess 2d 71053, bred at the home of and by Wild Tom 51592, her dam being Lily Duchess 2d 34058. Here is one of the nicest, straightest, broad-backed matronly yearlings seen by the writer, this year, good enough to go anywhere, possessing an elegant coat and matronly Hereford character. Another handsome yearling is Florence 70022, bred on the farm, sired by Perkins 36550 and out of Baubois Purity 44286. She was out last year and won in her calf form first at the Monte Vista, Col., fair. She was then the apple of the Hereford man's eye, but accidentally got with Medavo Chief 70025 during the fair and now has a July heifer calf at foot that is a promising little miss. Another yearling, Mountain Queen 70028, herebefore referred to, is by Dean 36534 and out of Graceful 10th 36539. She has not had extra care or professional attention, yet she shows how good a Hereford can come in the short grass country. Her half sister, Graceful's Gift 75010, by Ashton Boy 52058, is an ideal Hereford calf, one that seldom comes to a herd, however good it may be. Another daughter of Ashton Boy 52058 is Vera 75018 and out of Fancy 22913. If Ashton Boy had no other of his get for the inspection of the prospective buyer, these two last named lassies would call attention to his worth as a breeder. The reader desirous of further information concerning the merits of the San Luis Valley herd will, if he consults the announcement of Mr. Adams elsewhere in this issue, obtain pointers that will lead to further information.

W. P. B.

How to Prevent Hog Cholera.

HOG CHOLERA is caused by indigestion, and can be prevented by feeding cooked feed. We advise our readers to write the EMPIRE MFG. CO., 646 Hampshire Street, Quincy, Ill., for Catalogue of FEED COOKERS. These Cookers save at least one-third the feed, put stock in healthy condition, save your hogs and will more than pay for themselves in one week's use.



Hereford Bull, Lincoln 47095. Property of Albert Dillon, Hope, Kas.

front as among the best of beef cattle, the owners respectfully ask your inspection and judgment as to how well they have succeeded.

In order to illustrate how well the white-face crosses and how true to type and character a graded herd may, in a short time, be made to produce, the owners, Messrs. Scott & Whitman, will also offer 500 head of early spring high-grade calves, mostly heifers, selected from the celebrated L. S. ranch, situated in the northwest Texas Panhandle. The dams of these youngsters are as near pure-breeds as it is possible to get them, and they have all the characteristics, both in form and promise, of the best of pedigreed animals. This herd is a Kansas institution and, like most Kansas things, is up to date in every way. In the next issue of the Farmer a history of the herd will be given. W. P. BRUSH.

Spring Valley Herefords.

We publish this week an illustration of the Hereford bull, Lincoln 47095, sired by Beau Real 11055 and out of Laura 36941, a granddaughter of the famous Lord Wilton 4057, on the sire's side, and grandsire on the dam's side is Old Count 6918 by Horace 2492.

Lincoln is very smooth, beefy, of good weight and stands at the head of the Spring Valley herd of white-faces, owned by Albert Dillon, Hope, Dickinson county, Kansas, whose "ad." appears in another column. To assist Lincoln, Mr. Dillon secured the rugged, beefy, curly-coated yearling bull Klondyke 72001, bred by Gudgell & Simpson. This

Among these are forty-two imported individuals, seven bulls, eleven cows and twenty-four heifers. The imported ones are selections from Mr. Armour's three importations and were purchased from the very best herd in all England. There are far too many to enter upon any special individual description at this writing, but a more extended notice as to individuals will appear in the next issue of the Kansas Farmer. The attention of those that peruse the catalogue is called to the arrangement or the placing, as far as was possible to do so, the get of each sire in consecutive order, as the daughters of Kansas Lad 36932 are under Nos. 2 to 16 inclusive, while those of Pilot 50096 include Nos. 17 to 20. The sons of Beau Brummel Jr. 65073 extend from No. 91 to 99. One finds, too, the get of several of the most noted sires, both in this country and England. Several are individuals that have come from herds other than that of the Armour herd that have been catalogued and will be sold not because of any fault but on the determination to afford prospective buyers an opportunity to possess the equal of any in the herd whether American or English bred.

We are in receipt of Mr. C. P. Shelton's Poland-China sale bill, claiming October 27 as the date of sale, with Col. J. N. Harshberger auctioneer. Mr. Harshberger made an average of \$35.50 on forty-five head of the same quality of stock for Mr. Shelton in February, and six of those sold were under six months old.

old axiom, "Individual merit by inheritance," is expected to be seen in the result of this commingling of blood coming through such noted ancestry. Orpheus came to his present abiding place from the great public sale held March 2 and 3 at Sunny Slope, Emporia, Kas., and was the highest-priced son of Wild Tom, costing his present owner \$355. Individually he is pronounced the peer of his sire, and by some, in a few points, his superior. He has come out quite well in his short grass environments, and such is his promise that he is being bred to the daughters of Ashton Boy 52058, the very successful breeding bull that holds the premier place in the herd. Next in rank comes the yearling Zapato Chief 70034, bred on the farm, dropped January 27, 1897, sired by Perkins 36550 and he by Royal Grove Jr. 29500, a grandson of The Grove 3d 2490. His dam is Lady Grove Wilton 30603, a daughter of Lord De Vere 14904 and out of Daisy 3d 14700, she a daughter of The Grove 3d 2490. This young fellow presents a good head, face and horn, full in crop and loin, heart and flank, good rear quarter and on good, strong, short pins, with plenty of Hereford bull character. Another is the home-bred Whistler 75021, dropped October 5, 1897, and sired by Ashton Boy 45003. His dam, Machacha 45003, is a daughter of General Roberts 4894. Here in this youngster is a nice, straight, sappy one, well marked and a promising calf. The fourth one in the quartette of bulls is another one to the manor born, Spanish Boy 75015, a son of Ashton Boy 52058 and out of Eva 43115, she by Fancy Lad 17238 and out of Evangeline 20039. He is a calf of good scale and all right in good white-face company.

The ten-year-old Graceful 10th 36539 has the honor of the matron's place in the female division of the outing class. She is a daughter of Archibald A. 23109 and out of Graceful 9th 21168. Here is a cow that is not only an attractive one to the Hereford man's eye, but a very successful producer. Two of her daughters, Mountain Queen 70028 and Graceful's Gift 75010, that will be shown in class, two animals of either sex the produce of one cow. There are two of her daughters, a three- and a four-year-old, on the farm that are good ones, in

Gossip About Stook.

Mr. B. W. Gowdy starts his "ad." in this issue.

Scott & Marsh, of Belton, Mo., will have a sale of Herefords, at Kansas City, on November 30.

T. K. Tomson & Sons report their fall crop of calves from Gallant Knight as being by far the best lot of calves ever dropped at Elder Lawn.

W. P. Goode & Sons announce their annual sale of Poland-China swine for November 1, 1898, at Olathe, Kas. See advertisement for particulars. Write them for catalogue. Their address is Lenexa, Kas.

Don't overlook the sale of Kirkpatrick & Son, to be held on November 2, 1898. Catalogues will be sent only to those of our readers who make application for the same. Notice advertisement and write them at once.

W. J. Snodgrass, of Gordon, Kas., received first prize on Short-horns, at the Wichita fair. In the Poland-China department, Iva Wilkes (48773), owned by F. P. Maguire, of Haven, Kas., was awarded second prize.

In last week's issue of Kansas Farmer, under the head of "Notes from the Fairs," the firm of W. H. Miller & Son was mentioned as exhibiting Short-horns, which was an error, as their exhibit consisted of Jerseys.

Col. S. A. Sawyer, of Manhattan, is kept busy with the fall sales. Mr. Sawyer is conceded to be one of the very best fine stock auctioneers, and his general acquaintance throughout the central West render him a valuable salesman.

W. P. Goode & Sons, Lenexa, Kas., announce their next annual sale of Poland-Chinas to be held at Olathe, November 1, 1898. The offering includes the produce of the best boars and sows, including the great Hadley Jr. Drop a card and get

This week we advertise the closing-out sale of Maple Grove herd of Poland-Chinas, owned by Wm. Plummer, Osage City, Kas. He has concluded, after nineteen years in the business of breeding and handling Poland-Chinas, that he is entitled to a respite from the responsibility of active work and retires in favor of the younger members of the profession. We trust that he may have a good attendance of representative breeders and leading farmers at this sale.

Mr. D. Trott, of Abilene, Kas., breeder of Duroc-Jersey and Poland-China swine, writes: "I have a nice lot of the famous Duroc-Jerseys and Poland-Chinas on hand ready for both old and new customers. They are in the best of health, and as our corn crop is short this season I will price them away down. I can surely satisfy every reasonable person, both in price and quality." W. L. Jones, of Clyde, Kas., writes Mr. Trott as follows: "The Duroc-Jersey sow I bought of you in February, 1898, farrowed nine pigs in May. They are growing like weeds. I am well pleased with my investment. I could sell them all at good prices if I would. They will bring me good returns." Mr. W. H. Dietrick, of Silver Lake, Kas., also writes Mr. Trott: "The pig reached here safely and I think he is an excellent one. I am well satisfied with him." Mr. Trott advises us that he can show lots of just such letters as the above.

catalogue at once.

J. A. Judd, Stanberry, Gentry county, Missouri, is advertising a closing-out sale of Poland-Chinas to take place at his farm, seven miles north of Stanberry, Thursday, October 20. This is an absolute closing-out sale, every good animal on the farm goes without reserve or by-bid of any kind. This sale is occasioned by Mr. Judd having engaged in the live stock commission business at St. Joseph, and is not willing to intrust the care of so valuable a herd to hired men. The four herd boars are all kings of their kind, and it is doubtful if any other herd can boast of four boars that will compare with them either in breeding or individual worth. Iowa Chief was advertised by W. A. Jones as the best son of Chief Tecumseh 2d, and he cost Mr. Judd \$1,000. Hadley 2d is one of the best breeding sons of the World's Fair Hadley, and his dam was Queen Klever 4th, by Look Me Over. Look's Chief is a two-year-old son of Look Me Over and he looks most like his noted sire of any hog we have ever seen. He is a massive fellow, and is as smooth and mellow as a peach, with plenty of finish, good feet and legs, and good color and markings. Star Tecumseh is a yearling son of Chief Tecumseh 2d and is so good that he has been selected by some as the most valuable boar in the quartette. We think, however, that Iowa Chief surpasses the other three in almost every essential feature demanded in a great herd boar. These four boars will be sold with a positive and special guarantee, that will

be put in writing, so there can be no risk whatever in buying them. In addition to these there will be five other sons of Chief Tecumseh 2d, some of them fit to go to the head of good herds, and four other sons of Look Me Over that are away up in quality. Then there will be young boars by Iowa Chief, Hadley 2d and other great sires, also a lot of yearling sows and tried brood sows that altogether constitute one of the best offerings that will go under the hammer this year. Send for the catalogue.

Among those that drove and shipped selected Texas beef cattle to Chicago and New York was the old-timer down in Illinois, Mr. Tom C. Ponting. He is accredited with being one of the oldest American Hereford breeders, and subsequently engaged in breeding Hackney horses. He and his present associates, his two sons, desire to invite all interested in the best of Hereford cattle and high-class driving horses to write them at Moweaqua, Ill., and receive by return mail a free copy of their sale catalogue which gives full details concerning the seventy head of Herefords and the fifty head of Hackney and draft horses that they will offer at their regular annual public sale, to be held on Wednesday and Thursday, October 19 and 20, at their farm, known as the Homestead farm. The writer, last week, paid the farm a visit and found the Herefords a much better lot than were sold at the annual sale last fall. There will be forty cows and young heifers and about all of those other than cows with calves at foot will have been bred to the \$1,500 bull, Excellent 78834, now nearing his three-year-old form, that was in his calf form champion over all beef breeds at the Minnesota State fair and first in class at the Illinois State fair. The visitor finds that the Earl of Shadeland 41st 33378 holds the premier place in the herd. He is the grandsire of the \$1,000 Dale, while his granddam, Gay Lass, was the mother of Anxiety 4th 9904. Many of the offerings are by Defiance 21849, a son of old Lord Wilton 4057, some by Columbus 44570, he by Cherry Boy 26459, Ben Imboden 67958, a grandson of Lord Wilton 4057, also Rudolph 67992, having for his grandsires Defiance 21849 and Columbus 44570. The catalogue also shows a number of the offerings by other sires that are strongly Anxiety and Lord Wilton. The visitor finds the horses, twenty-eight Hackneys and twenty drafters, a better lot than is usually offered from a breeding establishment. There are eight matched Hackney teams that are well broke, extra fine movers and individually strong in Hackney character. The heavy offerings were sired by the imported English Shire stallion, King John 4503. He is a beautiful dark bay. He is only three removes on his paternal line from the noted English horse, Honest Tom 1105, a great walker and an all-round superbly good one.

Axline's Swine Sale, Oct. 24.

The well-known and successful Poland-China breeder, Mr. E. E. Axline, of Oak Grove, Jackson county, Missouri, will hold his regular annual public sale of pedigreed Poland-China swine, on his farm, four miles north of Oak Grove, a station thirty miles east of Kansas City, on the C. & A. R. R., on Monday, October 24, 1898, when he will offer sixty head, consisting of ten fall and winter boars and sows, also fifty head of early spring pigs of both sexes.

This is Mr. Axline's sixth public sale, and, being acquainted with the character of the offerings that went at the former sales, the visitor will find this lot now to be the best individually and in breeding aggregation yet put up by Mr. Axline. For assurance that the Poland-Chinas bred by him are highly appreciated by the swine breeding public, one need not hunt up the herd's record farther back than the October 29 sale last year, when seventy-six head made an average of \$42. At the combination brood sow sale his consignment of ten brood sows bred to his \$1,000 Model Boy brought an average of \$110, and the fifteen sold averaged \$95. At the combination sale held at Kansas City, August 16, 1898, twenty head—sows, gilts and young boars—brought an average of \$35.50. The reader is kindly requested to send at once for a free copy of the illustrated sale catalogue, wherein one finds full details concerning the offerings. Among the offerings there are four boars and seven sows by the noted Chief Tecumseh 2d 9115 S. The tried and very successful herd boar, Western Wilkes 12846 S., a line-bred Wilkes and Tecumseh combination and one of the best arched and ribbed backed Poland-China boars now known by the writer. He possesses also large, short, big-boned pins, that are set out on the corners. He is just such an individual wanted to get more size and future usefulness in herds that have, through a little too fancy am-

Dirty Butter



pure sweet butter, the kind that gets the top price.

BRANCHES:

Elgin, Ill.
Omaha, Neb.
Dubuque, Iowa.

P. M. SHARPLES,
West Chester, Pa.

bition for the "pretty thing," resulted in under size and short litters. Individually he's a harem master that nine out of ten of the Kansas breeders stand in need of.

Home Treatment for Cancer.

Dr. Bye's Balm Oils, for cancer, is a positive and painless cure. Most cases are treated at home without the service of a physician. Send for book telling what wonderful things are being done by simply anointing with oils. The combination is a secret; gives instant relief from pain, destroys the cancer microbes and restores the patient to health. Thousands of cancers, tumors, catarrh, ulcers, piles and malignant diseases cured in the last six years. If not afflicted, cut this out and send it to some suffering one. Address Dr. Bye, Box 464, Kansas City, Mo.

TRIENNIAL CONCLAVE.
Knights Templar,

PITTSBURG, PA., OCT. 10-14.

ONE FARE For the Round Trip from all points on

The Union Pacific.

For dates of sale and limits on tickets, call on F. A. Lewis, City Ticket Agent, or J. C. Fulton, Depot Agent, Topeka.

HARNESS Write for illustrated catalogue. Largest Harness and Carriage house in the Northwest. NORTHWESTERN HARNESS & CARRIAGE CO., 172 6th St., St. Paul, Minn.

BELGIAN HARES.

Thoroughbred high-grade stock. Any farmer can raise them and the flesh is in constant demand at fancy prices. Write for circular. LANPHERE BELGIAN HARE CO., Kansas City, Kas.

20

BUSHELS MORE PER DAY is what you can husk and save your hands by using Kees Improved Corn Husker. See your dealer or sent postpaid on receipt of 50c. (No stamps.) Address, F. D. KEES, Beatrice, Neb.

RIVERSIDE STOCK FARM.

Short-horn cattle, Percheron and Roadster horses and Shetland ponies—stock of each class for sale. A car-load of extra good young bulls.

O. L. THISLER,
Chapman, Dickinson Co., Kas.

MAPLE LAWN HEREFORDS.

E. A. Eagle & Son, Props., Rosemont, Osage Co., Kas. For sale, five young pure-bred bulls of serviceable age. Also car-load of high-grade cows and one car-bull calves.

Geo. Groenmiller & Son,

Centropolis, Franklin Co., Kas.,

BREEDERS OF { RED POLLED CATTLE,
COTSWOLD SHEEP and
FANCY POULTRY.

For Sale—A few bulls; also young bucks.

FOR SALE.

My entire premium herd A. J. C. C. registered Jersey cows. Ten from 3 to 7 years old, part of herd fresh November and December, balance January, February and March. One breeding bull 2 years old. Three bull calves 11 months old. Four heifers 11 months old.

CHEAP FOR CASH.

Stoke Pogis and other strains. E. A. SMITH,
Lawrence, Kas.

ANNUAL PUBLIC SALE

—OF—

POLAND-CHINA SWINE

To be held at Olathe, Kas., on the first day of November, 1898. The produce of the best boars and sows. I have two thousand catalogues giving full information. Drop a card for one catalogue, quick. Give your address full and plain.

W. B. GOODE & SONS,
Lenexa, Kansas.



DEER PARK FARM.

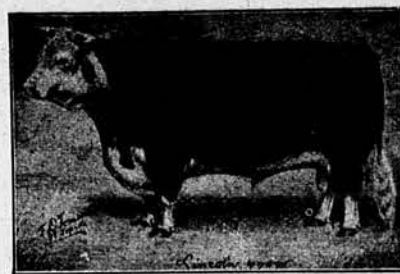
H. E. BALL, Proprietor.

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.



SPRING VALLEY HEREFORDS.

Lincoln 47095 by Beau Real and Klondyke 42001, at the head of the herd. Young stock of fine quality and extra breeding for sale. Personal inspection invited.

ALBERT DILLON, Hope, Kas.



GLENDALE SHORT-HORNS, Ottawa, Kas.

Leading Scotch and Scotch-topped American families compose the herd, headed by the Cruikshank bulls, Glendon 119370, by Ambassador, dam Galanthus, and Scotland's Charm 127264, by Imp. Lavender Lad, dam by Imp. Baron Cruikshank. Young bulls for sale.

C. F. WOLF & SON, Proprietors.



SHORT-HORN CATTLE.

I have combined with my herd the Chambers Short-horns and have the very best blood lines of the Bates and Cruikshank families. Herd headed by Baron Flower 114352 and Kirklevington Duke 126104. The Cruikshank Ambassador 110811 lately in service. Best of shipping facilities on the A. T. & S. F. and two branches of Mo. Pac. Rys. Parties met by appointment. B. W. GOWDY, Garnett, Kas.

ELDER LAWN HERD SHORT-HORNS.



THE Harris bred bull, GALLANT KNIGHT 124466, a son of Gallahad, out of 8th Linwood Golden Drop, heads herd. Females by the Cruikshank bulls, Imp. Thistle Top 83274, Earl of Gloster 74523, etc. Size, color, constitution and feeding qualities the standard. A few good cows for sale now, bred to Gallant Knight.

T. K. TOMSON & SONS, DOVER, KANSAS.

LIVE STOCK ARTIST.

F. D. TOMSON,

514 Monroe Street, - - Topeka, Kansas.
Breeders' correspondence solicited.

Publication Notice.

No. 19665.

In the District court of Shawnee county, State of Kansas.

Keturah R. Bailey, plaintiff,

vs.

Samuel G. Bailey, Jr., defendant.

The defendant, Samuel G. Bailey, Jr., will take notice that he has been sued by the plaintiff herein, who filed her petition in the above entitled action, in said court, on the 17th day of September, 1898, and that he must answer said petition on or before the 11th day of November, 1898, or said petition will be taken as true and judgment rendered in said action against him, the said Samuel G. Bailey, Jr., granting plaintiff a divorce from him and restoring to plaintiff, and adjudging plaintiff entitled to hold and enjoy, all of her personal property, and also all of her real estate, described as follows, to-wit: Lot No. one hundred and sixty-three (163) and the north half of lot one hundred and sixty-five (165) on Harrison street, in the city of Topeka, Shawnee county, Kansas; also the north half of the northeast quarter of section No. thirteen (13), in township No. twelve (12), south, of range No. twelve (12) east of the sixth principal meridian, in Wabaunsee county, Kansas, free from his control, and awarding to the plaintiff the care, custody and control of the two children, the issue of said marriage, and granting plaintiff all other equitable and proper relief.

KETURAH R. BAILEY.
Attest: E. M. Cockrell,
[Seal.] Clerk of District Court.

The Home Circle.

SUMMER'S SOUL.

O earth! thou hast not any wind which blows
That is not music. Every weed of thine,
Pressed rightly, flows in aromatic wine,
And every humble hedgerow flower that grows,
And every little brown bird that doth sing,
Hath something greater than itself, and bears
A loving word to every living thing—
Albeit it holds the message unawares.
All shapes and sounds have something which is not
Of them. A spirit broods amid the grass;
Vague outlines of the everlasting thought
Lie in the melting shadows as they pass;
The touch of an Eternal Presence thrills
The breezes of the sunset and the hills.
Sometimes—we know not how, nor why,
Nor whence—
The twitter of the swallows 'neath the eaves,
The shimmer of the light amid the leaves,
Will strike up thro' the thick roots of our sense,
And show us things which seers and sages saw.
In the gray earth's green dawn something doth stir,
Like organ hymns within us, and doth awe.
—Richard Realf, in the Congregationalist.

THE HEAVENLY MEETING.

Tell, oh! tell me, Book of Visions, bright
With promise, sweet with prayer,
Shall I know the angel faces that are waiting,
Over there?
Shall I find my children children? Will my gentle mother lay
Her dear hand upon my forehead in the old, earth-loving way?
Father, keep them as I loved them!—or, if changed to other guise,
May the Heavenly transformation dawn
May they slowly on mine eyes.
Let me take them to my bosom, once, upon that shining shore,
As I saw them when we parted, in the love-lit days of yore.
—James Buckham, in Ladies' Home Journal.

To "John's Wife."

I, too, have been wondering why all of the old members of the "Home Circle" had become so silent. Sometimes I would imagine one reason, and sometimes another. There is always the emergency to be considered, where the silence may never be broken; but I hope "Bramblebush" and the others have not yet thus left us. I remember that Mrs. Hunter has gone to Oklahoma—have more moved away from the "beat" of Kansas Farmer? Perhaps a change of editors has also changed the general make-up of this department, and things so trivial as housekeepers' letters have been "lost." Or another, perhaps—have these housekeepers told all they had to say, and have they failed to learn anything new? I hardly think this last true, either, because I am sure none of us would be willing to confess that we are too old to learn; and there is always something to learn and something to unlearn—more's the pity.

I, for one, have learned many things from our department. I learned in a late day—proving I am not yet in my dotage—that canning fruit need not have been such a bug-bear to me in years past if Mrs. Belle Marple had sooner given us instruction; but perhaps she had only just found out for herself how to can fruit when she imparted the knowledge in that essay of hers.

I hardly know why I am writing this letter at this time, because I haven't any new message. There is, however, one habit of my life which I am trying to unlearn—perhaps more than one ought to be unlearned. Some recent experiences have been teaching me the necessity of "unlearning." Does this remark cause you to remember what class of people can learn in no school but that of experience? Well, wise people will believe in early life that hurrying leads to a waste of life's forces; they will profit by the old advice to make haste slowly. Foolish people will exercise no restraining will power when a multitude of duties is presented, but with misdirected, ill-advised energy will try to accomplish more than the strength given them can possibly do.

Now, my friend, if you can gather my meaning from my words, and can guess what habit is to be unlearned, if you have any influence with some young housewife or wives, will you pass this letter around and tell them what I say to myself over and over again these days: "The life is more than meat, and the body more than raiment." Tell them to take time to breathe—out under the trees, to think where the sunlight and free air of heaven can reach them, and not to count success with the stores of food and the pretty but unnecessary clothing upon your shelves and within your closets.

I remember that Mrs. Wilder, of Manhattan, told us something like this not so very many years ago, in our department. "But fools will learn in no other school but experience."

I would like to add a postscript, by way

of an apology to the publisher of Kansas Farmer. I once read a story written in the first person and published in a little country newspaper. What the story was I have forgotten; but I shall never forget the italicized I's which were made to do duty when the proper type had been exhausted on the story, and the consequent queer emphasis involuntarily given where no emphasis was intended.

Query: Have publishing houses of larger business and experience large quantities of capital "I" type to accommodate the egotistic variety of correspondence which is inevitable—and sometimes useful? If not, I shall not complain, this time, if I see this letter in print with some "I's," and even some "i's."

PHOEBE PARMELEE.

[Note.—The Kansas Farmer type is made new every week on a Linotype machine. It is only a question of type metal, and we have enough of that to print all the I's Phoebe Parmelee can write. (However, we do not use any italic type.) We happen to know that Mr. Parmelee very much admires Phoebe's eyes—even more than he did five years ago, when he began courting her, a girl of 16. Kansas Farmer admires Phoebe's I's, and is always pleased to print them whenever she will send them for the entertainment of "Home Circle" readers.—Editor.]

The Young Queen of the Netherlands.

On August 31, 1898, a young girl in Holland celebrated her eighteenth birthday. Six days later, in royal robes, seated on a throne erected in the



QUEEN WILHELMINA OF HOLLAND

"Nieuwe Kerk," in Amsterdam, she took the oath which made her Queen of the Netherlands. Not since the coronation of Queen Victoria, of England, sixty years ago, has a young girl come to a throne; and as Victoria was, so is Wilhelmina: a charming, brilliant, and thoroughly feminine woman, and with great possibilities in prospect, although her kingdom is so much smaller. Her full name is Wilhelmina Helena Paulina Maria. The hereditary name, Wilhelmina, was given to her, as she comes of a long line of Williams, or Wilhelms, in direct descent from William of Nassau. She is the daughter of William III., King of the Netherlands, who died November 23, 1890, and Emma, Princess of Waldeck and Pyrmont.

In appearance, according to Edith Lawrence, who describes the installation in Harper's Bazar for September 10, the young Queen is most pleasing. She has fair hair—a light brown—blue eyes, and a sweet, laughing expression. She is neither tall nor slender, as has been said, but is petite, with a well-rounded shapely figure. Her complexion is beautiful. She loves to be well dressed, although up to the present time she has had little opportunity of indulging herself in fine clothes and costly raiment. To wish to look her best is any woman's privilege, may she be queen or peasant maid.

When you are out of sorts, feel tired, languid and dull, you need Hood's Sarsaparilla. It will brace you up and give you strength and energy, vigor and vitality.

Hood's Pills are the best family cathartic and liver tonic. Gentle, reliable, sure.

When water gets dry an empire and a republic can be one.—Exchange.

DISHES WASHED

Gold Dust does it. Morning, noon and night. Makes all dull things bright. Housework's a delight with

GOLD DUST

Washing Powder

It gives to an humble home or a palace the cleansing touch that both alike require. It's woman's best friend and dirt's worst enemy.

THE N. K. FAIRBANK COMPANY, Chicago. St. Louis. New York. Boston. Philada.



At the Front.

Friday evening, tramping along with Company A, of the Seventh infantry, when it was hurried out from Caney under marching orders, I got an idea of the way the individual soldier viewed the fighting in which they had taken part. The talk was mostly of fallen comrades.

"Did you know Shea's dead?" inquired one. "He's only wounded," was the reply. "No, he died on the way to the hospital. Poor Shea! He was a good fellow."

"Did you hear about Dowd? Had a package of letters from his wife and her picture in his pocket. Bullet went right through them. He never knew."

"There was a lad lying by my side on the top of the hill. He was mighty careful of his aim and he got one Spaniard, sure. He raised his head an inch and then they got him. I'd rather take the chance of being hit standing up. Not so apt to get you in a vital spot."

"How's O'Brien?" "Pretty fair. His arm was shattered and he'll lose it, but that bullet in his leg made a clean hole and won't bother him much."

"Three fellows went over by my side and not one of them got up. I kept saying to myself, 'Old fellow, your turn'll come next,' but here I am without a scratch."

"My kid had a birthday—two years old to-day—and when they were slaughtering us along that ridge I couldn't help thinking of home. That's so, fellows. My time's up in eight days, and I hope I will have done up these Spaniards in that time, for if I re-enlist I can't see that kid."

The talk, of which the above is as literal a transcript as can be made from memory, ran along in this way for some time. Then, following a pause, some one said, "I suppose there'll be some hot fighting to-morrow. Wonder if I'll be in it?"

"In it, you chump! Some of us'll be in it and won't come out of it."—Charles M. Pepper, in Washington Star.

American Enterprise.

As the young man entered the old man looked up and scowled.

"Well?" said the old man sharply.

"Your daughter," began the young man; but the old man cut him off abruptly.

"I've noticed that you've been hanging around a good deal," he said. "I suppose you've come to tell me that you love her and want to marry her."

"No," replied the young man, calmly. "I've come to tell you that she loves me and wants to marry me."

"What!" roared the old man.

"She says so herself," persisted the young man.

"I never heard of such an exhibition of egotistical impertinence," said the old man.

"Then you misunderstand me," explained the young man. "My assertion is dictated by policy and not by impertinence. You see, it's just this way: What I want is nothing to you; now is it?"

"Why—er—not exactly."

"I might want \$1,000,000; but that would not cut any figure with you, would it?"

"Certainly not."

"You're under no obligations to supply me with what I want, are you?"

"Hardly."

"Then what a fool proposition it would be for me to come to you and say, 'Mr. Parkinson, I have been very favorably impressed with your house and lot, or I think I'd like your daughter, or anything else in that line. But when

your daughter wants anything, it's different. Now isn't it different?"

"It certainly is different," admitted the old man, cautiously.

"Precisely," said the young man. "She and I figured that all out very carefully last night. You see, I have no particular prospects, and we could both see that there wasn't one chance in a hundred that you would give her to me. Then she suggested that you never yet had refused anything that she wanted, no matter what the cost might be, and that perhaps it would be a good plan to change the usual order somewhat. We sort of felt that it wouldn't be right to ask you to do anything for me; but it's different in her case, as I remarked before. So I'm here merely as her agent to say that she wants me, that she wants me very much, and to ask you to please see that she gets me. She never has wanted anything so much as she wants me, and I am so favorably disposed toward her that, if you care to make the investment, I shall be quite willing to leave the terms entirely to you and her."

Naturally she got him. No wide-awake business man is going to overlook a chance to get such a fine sample of nerve in the family.—Chicago Post.

Deafness Cannot Be Cured

by local applications as they cannot reach the diseased portion of the ear. There is only one way to cure deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube is inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed, Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by catarrh) that cannot be cured by Hall's Catarrh Cure. Send for circulars; free.

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

Sold by Druggists, 75c.

B. & B.

PRICE.....

Is nothing till you see the goods.

The way this store makes its prices of advantage to you is with choice styles and qualities—better goods for the money—large assortments to choose from.

Send for samples neat all wool Dress Goods, Novelties and Mixtures, 35c yard—goods and prices will show we're determined to get business by making it pay you to buy here.

Fifty styles fine Dress Goods 65c yard—compare with any at 75c. And nobby styles 85c, we'd like you to compare with any at a dollar and see what you can save here.

42-inch all wool Black Jacquards 35c—made to sell for not less than half a dollar.

Fine Silks 50c to \$3.00. Two hundred pieces plain and striped and plaid Taffetas 75c yard—superb quality for the money.

Send your name and address for the new Catalogue, ready soon.

BOGGS & BUHL

Department G. G.

Allegheny, Pa.

The Young Folks.

A GOLDEN SIDE.

There's many a rest on the road of life,
If we could only stop to take it;
And many a tone from the better land,
If the querulous heart would wake it.
To the sunny soul that is full of hope
And whose beautiful trust ne'er falleth,
The grass is green and flowers are bright,
Tho' the wintry storm prevailleth.
Better to hope, tho' the clouds hang low,
And to keep the eyes still lifted,
For the sweet blue sky will soon peep
Through
When the ominous clouds are rifted.
There was never a night without a day,
Nor an evening without a morning,
And the darkest hour, the proverb goes,
Is the hour before the dawning.
There's many a gem in the path of life
Which we pass in idle pleasure
That is richer far than a jeweled crown,
Or the miser's hoarded treasure.
It may be the love of a little child,
Or a mother's prayer to Heaven,
Or only a beggar's grateful thanks
For a cup of water given.
Better to weave in the web of life
A bright and golden filling,
And do God's will with a ready heart,
And hands that are swift and willing,
Than to snap the delicate silver threads
Of our curious lives asunder,
And then blame Heaven for the tangled
ends,
And sit and grieve and wonder.
—Unidentified.

Written for Kansas Farmer.

YOUNG FOLKS IN THE OLD COUNTRY.

BY ANNA MARIE NELLIS.

NUMBER 41.

SAINT ELIZABETH.

It is not my purpose to go very deeply into the history of the somewhat numerous saints who used to live in Germany, but this one having been so intimately connected with the castle Wartburg, it may be worth while to give her a thought or two.

Elizabeth was the daughter of Andrew II., King of Hungary, and was born at Presburg in the year 1207. When she was four years old she became engaged to be married, although her attention wasn't called to the fact until several years later.

Louis, the oldest son of Hermann, Landgrave of Thuringia, was the gentleman to whom she became engaged; and I believe he, also, failed to note the circumstance until he was casually reminded of the matter in 1221.

Immediately after the engagement, she was transferred to the Wartburg and became a member of the Landgrave's family, so she could be brought up and educated in the manners, customs and religion of her future husband's family.

She was an exceedingly lovely child and became a devotedly religious young lady. Some four years, or possibly five, after the marriage, which occurred in 1221, her husband, Louis, who had succeeded his father as Landgrave of Thuringia, went on the third crusade to the Holy Land to help kill the folks who lived there, as was his religious duty to do.

Louis died in Jerusalem and became a saint—Saint Louis by name. (There are several of that name.)

Elizabeth, left a widow with three little children, was then subjected to very hard luck, indeed. Her brother-in-law claimed the castle and the province of Thuringia and turned Elizabeth and her children out of doors, with not even a change of raiment or a bit of money to buy food. Although a daughter of the King of Hungary, she and her children had to go hungry for many, many days, subsisting on the charity of sympathetic ones. By and by she was cared for by her aunt, the Abbess of Kitzengen, and later on her uncle, the Bishop of Bamberg, gave her a home and servants.

In a few years the influence of her friends induced her brother-in-law to reinstate her in the Wartburg, and acknowledge her oldest son as Landgrave. She now had plenty of wealth again, but she renounced it all and lived a life of self-denial, and spent her whole time caring for the sick and afflicted. She ministered to those who were afflicted with the most loathsome diseases and who, but for her, would have had to die unattended. After less than three years spent in this manner, she died in 1231 and was entombed at Marburg. As she had been so faithful in helping the afflicted in life, her tomb became a shrine to which many sick people came and were miraculously healed. The stone step at her tomb became deeply worn by the knees of devout ones. Gregory, the Pope, being informed of these facts, placed her name in the list of saints, and she became Saint Elizabeth. So that family furnished two names for the calendar—one because he was faithful in killing, the other because she was faithful in relieving suffering. But here in the Protestant Wartburg Saint Elizabeth is still honored.

Passing from the Elizabeth gallery we

entered the ancient chapel, which was built in 1319. It became badly out of repair during the seventeenth and eighteenth centuries, but since then it has been finely "restored." The elegant silver cross on the altar was presented by the Grand Duke of Baden, and religious services are regularly held in this chapel. Dr. Luther preached here regularly for nearly a year in 1521 and 1522. This little chapel was all "geschmueckt" also in honor of the Grand Duke's birthday, and he attended early service there the same day we were in the castle.

LUTHER.

Having given Saint Elizabeth's history in connection with the Wartburg, I am inclined to make a somewhat extended notice of Dr. Luther's sojourn here and the causes which led to his coming.

You know that Luther in 1521 was inclined to be an awful heretic—that is, from a Catholic point of view. Charles V., Emperor of Germany, summoned the Germanic Diet to meet at Worms early in April of the year mentioned and then sent word to Dr. Martin Luther to appear before it and give an account of his teachings. Dr. Luther's friends tried to persuade him not to go, and especially was Frederick the Wise, Elector of Saxony, urgent in his advice to the good man not to venture. But Dr. Luther was a man of great courage, and then made the famous expression:

"I would go to Worms if there were as many devils there as there are tiles on the roofs of the houses."

He did go, but his friend Frederick and others arranged that he should not go alone. Nearly 2,000 Protestants either accompanied him or were so near him that even the Emperor was not sure of his ground. However, he entered the "Kaisersaal" at Worms alone, and as he passed through the door, General Freundsburg tapped him on the shoulder and quietly said: "Monk, monk, thou art on a passage more perilous than any which I and many other commanders ever knew in the bloodiest battle fields. If thou art right, fear not; God will sustain thee."

Dr. Luther marched boldly up to the front, and listened to the charges made and was then given an opportunity to defend himself. He improved the occasion and stuck a whole lot of theological pins into the quivering flesh of the Emperor and the holy clergy who composed this "Diet of Worms." He ended with one of his famous sentences:

"Hier stehe ich, ich kann nicht anders. Gott helfe mir, Amen."

Luther was then permitted to leave the hall while action could be taken as to his case. His friends knew he would scorn to run away; so, as he was walking in the outskirts of the city, a band of masked men surrounded him and he was taken prisoner and hurried off, he knew not where.

This diet of worms would have been the death of him, and no wonder. He was adjudged to be a heretic and the ban of the empire was pronounced against him, and he became an outlaw before both Church and State.

It was then reported in Worms that he had been intercepted and killed by his enemies, as undoubtedly he would have been, had not his friends secured him first. He was conveyed to the Wartburg, where he became known as "Junker Georg" to all outside of the castle; and in this castle he remained for nearly a year, during which time he translated the Bible into German, which translation is the "authorized version" in Germany still.

Luther called this his Patmos, and he enjoyed his stay by hunting, fishing and praying, as well as writing hymns and translating the Bible.

Having told how he came here, we will walk to the other end of the hall from the chapel, and up one flight of steps, to the room occupied by the famous German Monk, Doctor, Heretic and Reformer, as his study and bed chamber. It overlooks the valley of the Hoersel, and down nearly five hundred feet below the window we see the pretty little footpath which we followed coming up the hill.

The room is very small; and, in fact, none of the many rooms of this big castle are very large.

To the right, by the door, is the bed which was occupied by Dr. Luther; nothing but the frame of it is left, however. At the left is the one window which overlooks the valley and the beautiful forest. By the window is his old wooden desk on which are his Bible and his inkstand. Over the desk are several pictures of the Reformer and Catharine, his wife. By the table is his chair in which he sat while writing; it is an oddly-shaped chair. To the right of the desk, on the wall by the stove, is a spot about a yard square which is all chipped up, and the plastering dug out. I asked the

guide how the wall became so marred. He said: "Americans, souvenirs," and then explained that Dr. Luther one time threw his inkstand at the devil, and, while it hit him square between the eyes, the ink splattered all over the wall; that from time to time visitors had chipped the wall to get pieces of the ink to take along—to keep the evil one away, I suppose. He confidentially whispered to me that it was time to plaster it all over again and daub some more ink on to make some more souvenirs for that species of crank. Seeing that the old man was inclined to be communicative, I asked him quietly if it was a fact that Luther threw his ink bottle at the devil. He said that he supposed "Junker Georg" was at one time enraged at one of the servants, who didn't bring him his food or drink as he wanted it, and in his rage he threw the inkstand at the offending one; for he was "very quick in his uptake;" that afterward, in remorse for his hasty action, he said that the devil was the cause of his passionate movement, and he endeavored to hit his Satanic Majesty, and succeeded.

The guide also said that when Dr. Luther was writing his translation of the Bible, and writing hymns and sermons, he was practically flinging ink into the devil's face, and in that respect he actually threw his inkstand at Satan. Now, I like the latter explanation the better, and I think if I ever tell the story again, I'll use only it. We had no particular use for any of the plastering, so we took no "souvenir."

Everything in the room is supposed to be just as Dr. Luther left it, 376 years ago. The Bible was one of the first printed after his translation of it was completed, and it was used by him at Wittenburg, but could not have been used by him in the Wartburg.

On the highest floor of the main part of the castle is the spacious "Festsaal," decorated with rich, symbolical ornamentation and beautiful gobelins presented by the ladies of Thuringia.

Descending into the court again, we are taken into another wing of the castle to see the "Rustkammer," or armor-room. Here are suits of mail and weapons of all kinds from the twelfth to the eighteenth century—the tournament armor figuring prominently. The guide pointed to a suit of armor in particular that had been worn by a lad of about eighteen years, which showed a bullet hole through the breastplate from front, to rear of pauldron on left side. From the location of the wound in the armor the bullet must have pierced through the center of the heart within it. An old lady in the party asked the guide if the boy was still living. He glared at her a moment and said: "Nein, det tree hoontert yar." Our guide could speak English.

We were now informed that we had seen everything open to inspection by visitors, as the rest of the castle is reserved for private apartments of the Grand Duke and his retinue. We were also informed that Emperor William, as his father did before him, visits the Wartburg every year out of respect to the memory of Dr. Martin Luther.

We wandered about the gardens and

FRUIT LANDS IN TEXAS

20,000 acres of the most desirable land in Texas. Located in De Witt and Victoria Counties. Especially adapted to Corn, Cotton, Havana Tobacco, Fruit and Vegetables, as well as Stock Raising. High, healthy, free from malaria. Abundance of pure water. Refreshing gulf breeze. Sold in tracts to suit, at moderate price and on easy terms. Don't freeze and suffer another winter. Come to Salubrious Texas, take comfort and acquire wealth.

Full description and details free.

ADDRESS: E. H. FORDTRAN, THOMASTON, DE WITT CO. TEXAS.

then ascended the highest tower to view the valleys and beautiful wooded hills on all sides. The railway in the valley below us appeared like a shining ribbon winding in and around the hills.

To the left we noticed a "clearing" on the side of a pretty hill, and in the center were tall trees so planted that they formed the letters C. A., which, we were informed, represented the initials of the present Grand Duke, and were planted many, many years ago, when this old Grand Duke was new.

We returned to the city and enjoyed the very numerous decorations spread everywhere in honor of Carl Alexander. The people were all apparently happy. From my observations, I am inclined to think that Germany loves her Dukes and Kings and Emperors and Princes and wouldn't know how to get along without them.

We left Eisenach with many pleasant memories of a very beautiful place, whose history is connected with that of two saints and one reformer. No Kansas town can beat that record—at least as to Saints.

After all is said and done, it is the silent sowing by the husbandman that keeps the world's noisy machinery moving.

Dr. Bull's Cough Syrup cures coughs and colds. Don't go to church or public meeting and disturb the audience by incessant coughing, but use this wonderful remedy at once.

EDUCATE FOR BUSINESS. We offer best facilities. Commercial, Shortland, Telegraph, Typewriting, Penmanship. Eighteenth year. Good board \$1.35 per week. More calls for graduates than we could supply. Train here and now. Elegant two-colored "Cold Facts Budget" free. Add. Emporia Business College, Emporia, Kas.

Mothers! Mothers!! Mothers!!!
MRS. WINSLOW'S SOOTHING SYRUP has been used for over FIFTY YEARS by MILLIONS OF MOTHERS for their CHILDREN while TEething, with PERFECT SUCCESS. IT SOOTHES THE CHILD, SOFTENS THE GUMS, ALLAYS ALL PAIN; CURES WIND COLIC, and is the best remedy for DIARRHŒA. Sold by Druggists in every part of the world. Be sure and ask for "Mrs. Winslow's Soothing Syrup," and take no other kind. Twenty-five cents a bottle.

BOOK AGENTS WANTED FOR
the only Official and superbly illustrated HISTORY OF
OUR WAR WITH SPAIN
ITS CAUSES, INCIDENTS, AND RESULTS. A reliable and exhaustive story of the war, Civil, Military, and Naval, from its beginning to the close. With many fine steel plates, maps, and choice engravings. By Hon. HENRY H. RUSSELL, assisted by SENATOR PROCTOR (Vt.) and SENATOR THURSTON (Neb.). One dollar cleared \$200.00 in first two weeks, another \$400.00 in three weeks. 1,000 more Agents wanted. Distance no hindrance. For we Pay Freight, Give Credit, Extra Terms, and Exclusive Territory. Write for terms to the exclusive publishers
A. D. WORTHINGTON & Co., Hartford, Conn.

ONLY ONE DOLLAR DOWN.



SEND ONE DOLLAR

1898 Model Gents' or Ladies' Bicycle by express C. O. D. subject to examination. You can examine it at your nearest express office and if found perfectly satisfactory, exactly as represented and the most wonderful bicycle you ever saw or heard of, pay the express agent the balance, \$19.75 and express charges.

At \$19.75 we shall send you this **HIGH GRADE** bicycle. We have **1,000 SPECIAL** bicycles at \$19.75. These are strictly high-grade and equal to any bicycle you can buy anywhere at \$40.00 to \$50.00. Such values as were never offered before.

THIS SPECIAL WHEEL at \$19.75 is a wonder of value, strictly high-grade and equal to any bicycle you can buy anywhere at \$40.00 to \$50.00. Such values as were never offered before.

WE HAVE BICYCLES for 1898 at \$19.75, \$19.75 and \$22.50. Such values as were never offered before.

OUR GUARANTEE. We issue a written binding, one year guarantee, during which time if any piece or part gives out by reason of defect in workmanship or material, we will replace it **FREE OF CHARGE**. With care the bicycle will last 10 years.

SEND US ONE DOLLAR and we will send you the bicycle by express C. O. D. subject to examination, you can examine it at the express office and if you find it equal to any bicycle you can buy elsewhere for \$40.00 to \$50.00, and such a bargain as you never saw before, pay the express agent the balance, \$19.75, and express charges. **OUR FREE BICYCLE CATALOGUE** shows a complete line of bicycles at \$19.75, \$19.75, \$22.50, etc. Also a full line of bicycle sundries, bicycle clothing, etc. **SEND FOR IT.**

AS TO OUR RELIABILITY. We refer to the publishers of this paper, our customers everywhere, Metropolitan Nat'l Bank, Nat'l Bank of Republic, Bank of Commerce, Chicago; German Exchange Bank, New York; any business house or resident of Chicago. We occupy entire one of the largest business blocks in Chicago, employ 700 people, and we guarantee to save you \$30.00 to \$50.00 on a high-grade bicycle. Order to-day. Don't delay. Only \$5,000 to be sold at \$19.75.

BEARS, ROEBUCK & CO., (Inc.) Fullen, Desplaines and Wayman Bldg., CHICAGO.

(BEARS, ROEBUCK & CO. are thoroughly reliable and for \$19.75 this is surely a wonder bicycle.—EDITOR.)

In writing mention Kansas Farmer.

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

A REMARKABLE ADDRESS.

At the annual meeting for 1898 of the British Association for the Advancement of Science, a remarkable address was delivered by the President, Sir William Crookes, F. R. S., V. P. C. S. Some of the positions taken have been severely criticised by journals of many countries. The scholarship of the address is, however, of the very highest order, and the points most criticised are likely to be verified before the present generation shall have passed away. No effort has been spared by Sir William to secure the widest and most accurate information on the matters treated. He has complimented America and the State of Kansas by coming to Mr. C. Wood Davis, of Peotone, for data upon the subject of food supplies and the demand upon them. For the assistance here obtained he makes elaborate and appreciative acknowledgment.

Readers of the *Kansas Farmer* need not to be told that Mr. Davis is abundantly able to defend any positions he has taken, and it is not to be doubted that he has placed in Sir William's hands the means of making good every material statement from information obtained from Mr. Davis. On the other hand, Mr. Davis is himself not ready to accept without criticism some of Sir William's positions. In a letter to the editor of the *Kansas Farmer* on this subject, Mr. Davis says:

"My criticism of Sir William's nitrogen remedy is that it will be hundreds of years before you can get the peasants of Russia, North Africa, Anatolia and India to use nitrogen, and these regions grow about half the wheat of the world. Our own farmers will adopt it very slowly, nearly as slowly as the Southern negro does phosphates for cotton; and this because the nitrogen will cost nearly the selling price of the added bushels. That is, the smaller product will be the more profitable one, as I figure it out. Moreover, what need the farmer care if the nitrogen is used and becomes a competitor? Its very use implies a high price for wheat, and this is all we, as farmers, desire, while the consumer not only desires wheat, but cheap wheat, and cheap wheat he can never have when the grower spends \$5 an acre—about the retail cost on the farm, according to my interpretation of the Crookes figures—for nitrates—or adding a possible eight bushels an acre at a money outlay of \$5 for nitrate, and another dollar for its distribution. That is, the added bushel would cost about 80 cents in the field, before threshing, or from 90 to 95 at the farm market. When this state of affairs is reached—if ever—wheat lands will have three times their present value, and the interest account will be expanded in like measure. If such lands are now worth \$33 average, they will then be worth an average of \$100 an acre, and the interest account will equal, at 5 per cent, 25 cents a bushel, of which 16 cents will be directly due to an enhancement resulting from an advance in prices for soil products, and this would add enough to the cost of the wheat to make it worth over the desired dollar the bushel. The use of nitrogen, if it ever becomes general, will indicate the greatest prosperity for the grower of food products who owns the land he cultivates. And yet, the silly editors are expatiating on this phase of the Crookes address as assuring the world cheap

bread, and gloating, apparently, upon the thought, or over the thought, that they will still have the farmer's products for little or nothing."

MINERAL RESOURCES OF KANSAS.

The people of Kansas have learned from experience to expect something valuable whenever Prof. Erasmus Haworth, of the State University, appends his name to a published report. They will not be disappointed in the annual bulletin on the "Mineral Resources of Kansas," of which that for 1897 has appeared. The classification of the work is such that the vast amount of information it contains is easily available.

No attempt is made to unduly magnify the importance of mineral in comparison with other productions of the United States. It is shown that the total value of the mining production for the country, for 1897, was \$762,061,106, while the total of crops for the same year was \$1,300,000,000, and the value of meat produced was \$750,000,000, of dairy products \$500,000,000, of poultry products \$350,000,000, horses and mules \$90,000,000, and wool clip \$62,000,000, making a total for products of agriculture and mining of \$4,312,000,000, of which about five-sixths must be credited to agriculture and one-sixth to mining.

The proportions in Kansas are not greatly different from those of the entire country. In this State products of mining and smelting amount to \$26,990,544, this being 16.09 per cent. of the entire values produced in the State during the year, while Kansas crops amounted to \$89,351,336, or 53.27 per cent., and animal products to \$51,374,049, or 30.64 per cent. of the entire production for the year.

It should not be overlooked that a very large part of the mineral product herein mentioned is not dug out of the earth in Kansas, but is shipped to this State from the mountains to the westward, for smelting at the great works at Argentine. Neither gold nor silver is mined in Kansas, and yet there was smelted at Argentine during the year an amount of these metals valued at nearly \$12,000,000. The total value of the year's product of this smelter was \$15,077,048, for which the crude bullion was shipped into the State.

Lead and zinc are the metals mined in Kansas. Formerly the mines were worked only for lead and the zinc ore was regarded as deceptive waste. But for many years the output of zinc has greatly exceeded that of lead. The values of ores for 1897 were, for lead \$762,469.96, and for zinc \$1,492,663.04. The mines of lead and zinc ore are situated in the southeast corner of Cherokee, the southeast corner county of the State.

Coal is the greatest Kansas mining product. The coal produced in 1897 amounted to 3,672,195 tons, valued at \$3,931,707, or \$1.07 per ton on the average. The total production of coal since 1880 is placed at 37,047,285 tons. The output previous to 1880 is placed at 3,000,000, making a grand total product of Kansas coal mines of 40,047,285 tons, valued at an aggregate of \$51,335,808.

Oil and gas have of late become important mineral products of Kansas. The area in which these have been found embraces about 8,500 square miles. Its boundaries are given, approximately, as follows: From Kansas City draw a line to Lawrence, a distance of forty miles; from Lawrence pass a sinuous line to Sedan, in Chautauqua county. The portion of the State included between these two lines may, Professor Haworth thinks, all be considered as oil and gas territory, except a small area in the extreme southeastern part. This is not more than 500 miles in extent, and may be approximately limited by passing a line from the southwest part of Cherokee county to the middle of the east side of Crawford county, about ten miles north of Pittsburg.

In point of value of product the gas wells have so far greatly exceeded the oil wells. Thus the value of oil produced in 1897 is placed at \$54,000, while the value of gas produced in the same period is placed at \$155,500.

Salt is an important and valuable mineral product in Kansas. The great salt beds underlie the central portion of the State. They are capable of salting all the world for ages. The production for 1897 was 1,224,000 barrels, valued at \$417,626.94, or 34 cents per barrel. Coopers cost about 25 cents per barrel, or almost as much as the salt.

Gypsum is an important mineral product of Kansas. The raw material is found in several sections in a broad band extending across the central parts of the State. Factories are located at Blue Rapids, Solomon City, Hope, Dillon, Longford, Rhodes and Medicine Lodge. The Kansas product has found its way into all markets of the country and is

of excellent quality. The amount of the output is not stated.

The last chapter of Professor Haworth's report deals with clays. These are used for making bricks, tiles and pottery. The value of the output for 1897 is placed at \$265,320.27, nearly all of which is for bricks, which are classified as common, pressed, vitrified and fire brick.

Stone, sand, lime and hydraulic cement produced in 1897 had a value of about \$251,000.

It will be seen, however, that while the mineral productions of Kansas are not to be despised, they constitute but a small part of the wealth produced in the State. The creative power of Kansas is mainly in the line of crops and live stock. The wealth that is now enjoyed and that of the future is and must always be that from the soil. The wisdom that can add a small percentage to the value of our productions on farms will confer greater benefits upon the State than that which may do relatively much greater things for mining or any other industry.

Manufacturers of roller skates report a great revival in the demand for their wares. It is suggested that the skating rinks, which were so popular several years ago, are to be again centers of amusement.

The Kansas State Agricultural College, Manhattan, Kas., extends help in conducting farmers' institutes whenever such help is desired so far as funds permit. Members of the faculty are sent at the expense of the college, which also prints, free of charge, programs for all institutes which it assists. This year, on account of other work, the college force can attend institutes in December only, and applications should be sent in October in order that satisfactory arrangements may be made in regard to dates and speakers. Send applications to the President, stating what subjects you desire the college people to speak on. The farmers' institute is one of the most effective means of bringing farmers and their families together for the exchange of experiences and for social enjoyment.

Life Zones and Crop Zones.

Among the bulletins now in press and soon to be issued by the United States Department of Agriculture is Bulletin No. 10, Division of Biological Survey, entitled "Life Zones and Crop Zones of the United States," by C. Hart Merriam, Chief Biological Survey.

For ten years small field parties have been traversing the public domain for the purpose of studying the geographic distribution of our native land animals and plants and mapping the boundaries of the areas they inhabit. This report explains the relations of this work to practical agriculture and shows the results thus far attained.

It states that North America is divisible into seven trans-continental belts, or life zones, and a much larger number of minor areas, or faunas, each characterized by particular associations of animals and plants.

The life zones are the Arctic-Alpine, Hudsonian, Canadian, Transition, Upper Austral, Lower Austral, and Tropical regions. These zones and areas, up to the northern limit of profitable agriculture, are adapted to the needs of particular kinds of varieties of cultivated crops. The report says, when the natural life zones and areas, seemingly of interest only to the naturalist, were found to be natural crop belts and areas, they became at once of the highest importance to the agriculturist. A map showing their position and boundaries, so far as ascertained at the close of the field season of 1897, accompanies the report, and lists of the more important crops of each belt and its principal subdivisions are published for the first time.

Some Kansas Pears at Omaha.

That Kansas, and perhaps especially Douglas county, products are creditably in evidence at the Trans-Mississippi and International Exposition, is evidenced by the following excerpt from a letter from Judge Wellhouse to B. F. Smith, of Lawrence:

"Eleven boxes of your pears came since I am here and they opened up in good shape. In fact, they are about the only pears Kansas has on her tables at this time. Your largest Duchess measured twelve and a half inches in circumference. The largest on Missouri tables measured twelve and a fourth inches, and those from the other States are so much smaller that I did not measure them. Your Seckel, Winter Nellis and Sheldon are the largest and finest in the building. Illinois shows a fine collection of pears, smooth and good color,

but below yours and those from Missouri in size.

"There are twelve States showing fruit: California, Missouri, Kansas, Iowa, Nebraska, Illinois, Colorado, Montana, Oregon, Idaho and Wisconsin.

"Some of them are very fine. Wisconsin shows one hundred varieties of very fine apples. Idaho, Colorado and Montana make good displays of irrigated fruits, and, as a whole, the fruit display is good, very good."

October's Work.

Finish up the seeding.

Commence shucking out the fodder.

Store away the fruits and vegetables.

Get as fully ready for winter as possible.

Feed the fattening hogs all they will eat now.

Do not attempt to winter more stock than you can shelter.

Get the stalk fields ready for the stock as soon as possible.

Stock will winter better if in good condition now.

Fix up the feed racks in good shape for use.

Do not expect stock to thrive on but one kind of grain.

See that all low places in the wheat and grass fields are properly drained.

So far as other conditions will admit, plow all of the sod land that is to be planted next spring.

Wait until the ground freezes hard before applying the mulch to newly-set trees and small fruits.

Cows that are expected to give a profitable flow of milk during the winter must be well fed and comfortably sheltered.

Do not sell off the fruits and vegetables too close. Be sure to store away a sufficient supply for your own use.

While it is often an advantage to feed the stock in the fields while the weather will admit, they should all be sheltered when it is cold and stormy.

Before stock are turned into the stalk fields, be sure that they have all of the salt and all of the water they want. Then do not allow them to stay in too long at first.

Much damage is often done to land at this time by allowing stock to tramp over it when it is wet and soft. The safer plan is to keep them out unless the soil is firm.

A fairly good growth of grass in the meadows and pastures at this time will act as a mulch to protect the roots during the winter and lessen materially the injury from thawing and freezing.

To a considerable extent it will be found best to feed the fodder and feed that is stacked out of doors, saving that which is stored under shelter for feeding later, when the stock must be more closely confined.

By having a feed mill on the farm and grinding the grains, not only is a better opportunity afforded of supplying a good variety and of making up a complete ration, but the food is prepared in a form that makes it easier masticated and secures a better digestion and assimilation.

The sooner the supply of seed corn for next spring planting is selected out and stored away, the better. If left out and subjected to freezing, and especially if damp, the vitality is often injured, to the detriment of the next year's crop. Dry thoroughly and store away where it is safe from vermin.

Eldon, Mo. N. J. SHEPHERD.

Care of Corn Fodder.

Every man of experience knows that the value of corn fodder as a stock food depends very largely upon storing it away in good condition. There is no other product of the farm that suffers more or deteriorates more rapidly from being wet—rained upon—than corn fodder. It, therefore, becomes a necessity to handle fodder with great speed and promptness when it is in condition to stack or mow away.

The wise man will leave the shucked corn lie upon the ground for days at a time, knowing that ripened grain will suffer but little, if indeed at all, while he immediately hauls in the fodder and stores it away when it is in good condition, thus avoiding the time and expense of reshocking it, to say nothing of probable loss later in food value. Anything that will facilitate in this labor is of positive advantage to the farmer. The Electric Handy Wagon, manufactured by the Electric Wheel Co., of Quincy, Ill., would be of great help. Their book, "Farm Savings," illustrates its operation. Send for a copy before you begin to haul in your corn fodder.

Experience With Artichokes.

Editor Kansas Farmer:—I noticed, some weeks since, in your columns, a call for light regarding artichokes, but as none has appeared in the Kansas Farmer that I have seen, I will say that last year I planted about an acre (four bushels) of the Mammoth White French variety on good Verdigris river bottom land, with very satisfactory results. It is the easiest crop raised of which you can imagine. It is drought- and flood-proof. The tubers did not form until in September, last year. It was a dry month here, but they went right along and made a crop that astonished the natives.

At this writing (September 12) my five-acre plantation is just beginning to bloom, and the tubers are just setting, and, with the ground saturated with three inches of rainfall this week, I look for a more bountiful harvest this time.

All kinds of stock are ravenously fond of artichokes. I like to eat them, myself. They are healthy diet for man or beast. The hog cholera medicine man's nostrum is not to be compared to a few bushels of artichokes.

A. Z. BROWN.

Guilford, Wilson Co.

Publishers' Paragraphs.

Excelsior Liquid Lice Killer has been found satisfactory to the poultry editor of the Kansas Farmer. It can be obtained from C. B. Tuttle, proprietor Excelsior Poultry Farm, Topeka, Kas.

The "Frisco Line" announces in a finely-designed circular the inauguration of its traffic by its own trains to Kansas City. The "Frisco" will be a popular route to the East and South.

Mr. E. P. Fisher, of Sterling, Kas., a persistent propagator of new varieties of grapes, sends to this office some fine specimens of fruit from his new seedling vines. Of these, the "Willard, Seedling No. 19," is purple, large berry, small clusters, compact, fine flavor. The "September Queen, Seedling No. 20," is large, firm and of fine flavor. The "Sterling grape, Seedling No. 21," is of the largest size, sweet and flavor excellent.

Our readers will notice by the advertisement on another page that the Star Mfg. Co., of New Lexington, O., are with us again this season. These people report a very satisfactory trade during the past season, which is, in itself, a first-class indorsement of the high quality of their sweep and power grinding mills. They have improved their machines for this season's trade so as to materially increase the capacity and general efficiency. They have been in business a long time and have the reputation of supplying high quality goods and dealing honestly and fairly with the public. Write them for circulars and prices before buying a feed grinder of any kind.

CUT OFF THE HORNS.—What is the best dehorner to use? This question has been definitely answered to the satisfaction of every one who has given the Improved Convex Dehorner a trial. This instrument is a radical departure, both in shape and working principle, from all other makes of dehorners. It consists of only two castings and one knife. The larger casting forms an open hook that holds the horn. The peculiar shape of the knife gives it a drawing or shearing cut, from one side only, allowing the horn to ease off; this effectually prevents crushing the horn or pulling it apart. The Improved Convex Dehorner is the simplest, strongest, easiest-operated, smoothest-cutting and cheapest horn cutter yet invented. The manufacturers, Webster & Dickinson, Christiana, Pa., will send free upon request a book upon the best method of dehorning.

GOOD WELLS.—The dry weather, which has prevailed over large sections of the country during the past few weeks, and the bountiful harvest which is at hand, and which has made our farmers more prosperous this year than ever before, has greatly increased the demand for good wells, and there is no business by which as much money can be made as by the putting down of wells during the fall and winter months. If you have a traction engine or an extra team, you can make \$150 to \$300 per month in boring wells for your neighbors. Great care must be taken in the selection of an outfit for this work, as in this lies the secret of success. There are well machines of all kinds and character, made by concerns of different degrees and responsibility. Some are good, more are bad. Every particular part of the country requires a different machine to handle the soil successfully and in such a way that the most money can be made out of the business. The W. M. Thompson Co., Sioux City, Iowa, have been engaged in the manufacture of well

machines for nearly fifteen years. They know thoroughly the requirements of the different sections of the Western country, and know whether or not a machine is adapted to the work which is required. They issue catalogues and pamphlets describing their machines, and any one contemplating the purchase of this class of machinery or desiring any information regarding the money to be made in this business can be assured of strictly reliable information by writing them.

The Champion Kansas Short-horns.

No State in the Union has better Short-horn cattle than Kansas, yet our breeders for several years past have been derelict in the matter of advertising and exhibition. But there is now a general revival of the Short-horn interest since the demand is once more greater than the supply. The Kansas breeders have done more advertising this year than for several years in the past, but yet few have regained sufficient courage to venture out with exhibition herds at the fairs to show the farmer the merits of this great beef breed. However, this season there is one notable exception in the firm of C. F. Wolf & Son, owners of the Glendale herd, Ottawa, Kas.

The Glendale herd is mainly Cruickshank or Cruickshank-topped, and is headed by the pure-bred Scotch bull;

Glendon 119370 by Ambassador, dam Galanthus, and Scotland's Charm 127264 by Imp. Lavender Lad by Imported Baron Cruickshank. This herd was first shown at the Anderson County fair, at Garnett, where it was necessary to compete with Herefords in every class, as all beef breeds had to show together, and yet they won first premium in each class, also sweepstakes on bull, cow and herd. The next week, at Allen County fair, at Iola, with stronger competition, they won most of the first premiums and all the sweepstakes. The week following, the herd was shown at Bismarck Grove, at the Kaw Valley fair, held at Lawrence, when they met still stronger competition among beef breeds and won all the first and second prizes entered for, also sweepstakes on bull and for four animals the get of one sire. They closed the show season at their home fair, at Ottawa, where was shown the greatest beef cattle exhibit in Kansas for several years. At this fair they met the crack show herd of Geo. Bothwell, of Missouri, and secured six premiums in class and the Franklin county special gold prize for best beef herd shown in the county.

No other Kansas herd of Short-horn cattle has made such a grand record in the show ring for the season of 1898, and accordingly the Glendale herd, owned by C. F. Wolf & Son, of Ottawa, is the champion Short-horn herd of the State until such time as the record is beaten by other breeders.

A factor of some importance in the beef market is the increasing consumption of mutton, attributed to the improved quality. The growth in public favor of mutton is largely due to the lamb-feeding industry which during the past few years has assumed such large proportions. The flesh of alfalfa-fattened lambs is superior in flavor to the choicest product of the Eastern States. Many people have avoided mutton, fearing to encounter a woolly taste. But from experience with our Western fattened lambs they will become regular customers and their prejudice against mutton will disappear.

Righting wrongs, like charity, should begin at home.

Most of us resemble Admiral Dewey—no matter what we are doing we are always ready to drop it for breakfast.

Some pumps are sources of much muscle waste, particularly those that announce their working over half a township for want of a little oil.

The author of the saying: "A contented mind is a continual feast," did not have in mind the kind of contentment that prevents one from struggling for higher and better things.

More dollars for our own people to use, and less guns, soldiers and ships for them to pay for is a national policy that would make hearts happier and faces brighter, but possibly would not be so "glorious."—Farm, Stock and Home.

THE SATURDAY EVENING POST

The Oldest Paper in America
FOUNDED A.D. 1728
BENJAMIN FRANKLIN

A high-grade illustrated weekly magazine, equal in tone and character to the best of the monthlies. In addition to the best original matter obtainable, the Post will present each week the best in the newspapers, periodicals and books of the world. It will aim to be to contemporary literature what a Salon exhibit is to art, bringing together the choicest bits of literature from all modern sources and giving them a deserved place together, 'on the line.' We have the literary resources of the world to draw upon. The best writers of the world are practically a retained corps of contributors. It would be impossible for any magazine, no matter how boundless its wealth, to obtain, as



original matter, the wealth of literature we have to offer weekly. The handsome illustrations in the Post are original.

To introduce it into your family, it will be mailed every week from now to January 1, 1899, on receipt of

ONLY TEN CENTS, Silver or Stamps

(The regular subscription is \$2.50 per year)

THE CURTIS PUBLISHING COMPANY, Philadelphia

Horticulture.

COLD STORAGE FOR FARMERS.

F. P. Vergnon read a paper before the Ohio State Horticultural Society which gave directions for building a small cold storage plant for the keeping of fruit, the dimensions being suited to the needs of apple growers on a small scale. Mr. Vergnon began his paper by telling of the advantages to be gained by not being compelled to market fruit at a time when almost every one else is selling.

The directions for building the plant designed by Mr. Vergnon as he told about it, are as follows:

"I patterned after the retail butchers' refrigerator, but built it twenty-four feet square, with a sorting and packing room twelve feet broad on the north side, shed fashion. The main building has a cellar under it, three feet deep, and four openings in the wall, on the east and west sides, one foot wide by four long, equal distance apart, covered with heavy wire screen. Batten doors on the side of the building can be closed at will.

"The cellar is used only for ventilation and heat for fruit chamber, when necessary. The balloon frame is put up with oak joist 16 feet long, 2x12, 2 1/2 feet apart; and sills, double, patent sliding and thoroughly packed with sawdust inside, as it is lined up; packing room same way; floor double, and filled same as sides; the floor above is not double, and is placed three and one-half feet below the top of the square. This makes room for the ice chamber above, which is 16 feet square, 7 feet high; made with 2x6 scantling, lined and packed with sawdust. The floor in the ice chamber slopes a little to the north for the drip, and is covered with best galvanized iron. An opening six inches wide in the floor around the ice chamber lets the cold descend. Flat, funnel-shaped conductors made of galvanized iron, two on each side, east and west, broad end down, extend just through the floor into the fruit chamber, to convey the air from the ceiling below to center of ice chamber above. The warm air rises and the cold air descends. There is a difference of 1 1/2° in temperature between the floor of the fruit chamber and the ceiling above. It is seen that there is a space of about three and a half feet around the ice chamber which admits of a little stairway inside of fruit chamber, on north side—small trap door at top of stairs, to reach the work above. This floor is covered with six or eight inches of sawdust.

"All the floors are made flaring, double and packed. The only door by which to enter the fruit chamber opens into packing room. One small door above, in each gable end, just above the square. The ice is taken in through the south one of these. A rope is attached to these doors, opened and closed from the ground, for ventilation. A small wooden trough catches the drip from the ice chamber, which runs into a conductor and empties into any small vessel in the cellar, forming a trap. Roof, one-third inch pine, with a neat little ventilator on the middle of the comb, and a little projection at the roof on the south gable end to which to attach the pulley, to elevate the ice. The entire structure should be strongly built, and as nearly air-tight as possible. The beams below and overhead should be not less than 10x14 inches, best oak, with posts in center. The cost of the plant was about \$900, and has proved quite satisfactory; do not know that I could better it now, for my purpose, except to have air chambers in place of the sawdust.

"The cost of operating it is principally the ice, which costs here, usually, \$1.50 per ton at the ice house. We put in about twenty tons a few days before the apple harvest commenced. This amount runs us until the ice forms on the water; then it is filled again, capacity forty tons. This can be done ordinarily for \$25, if the hauling is not too far; total cash cost annually, \$55, teams not counted in.

"In my case it does not cost so much, as I have a house at my lake, and conveniences for cutting and hauling the ice. This runs the cold storage until the last of June; by this time the apples, with us, are closed out. After winter has set in for good, we put a couple of loads of sawdust around the walls. Then the cellar warms up in extreme cold weather. If we find that there is danger in the fruit chamber lift out one or both of the trap doors in the floor. The six-inch openings in the floor around the ice chamber can also be closed, if necessary.

"It will be found, after the contents of the house are cooled down, that the temperature moves very slowly; we hold it as nearly at 35° as possible. The crates are stacked up as close as possible, and

not moved, only as orders are filled. For best results, it is not best to let apples hang too long on the trees. When the seeds are ripe and the apples well colored, it is about time to harvest. The ripening process of breaking down and getting mellow, should be delayed and finally go on in the fruit house. The keeping quality has been very much improved since we commenced spraying. Apples that are bored with worms and cracked open from the effect of scab, will not keep anywhere. Such varieties as Bellflower, Snow Apple, Rambo, Jonathan, Peck's Pleasant and Spy, that you wish to commence marketing about holidays, had better be picked a little earlier. It must not be presumed that nothing is lost in cold storage. We lose there as well as anywhere else, only not so much. Good keeping varieties do not lose so much as poor keepers. The loss on Rome Beauties, Ben Davis, Minklers, Baldwins and Stark is usually about 4 per cent. And they are the principal varieties among our late keepers. Some seasons they keep better than others. Two years ago, the building getting a little old, we lined the fruit chamber inside with heavy paper, such as is used in frame buildings for protection from cold, with good results. We have never been infested with rats about the fruit house, but the house mice and that little fellow with long tail and thin ears, do some damage. How they get in I do not know; either they slip in when the door is open, or get through where there are no holes. The field mice get in to some extent, but they ride in in the crates sometimes, when they are as plenty as they are this year. They draw the leaves into the crates, between the large apples, when they are left out filled over night, and get carried into the fruit house in that way. It is difficult to get entirely rid of these little pests; can trap and poison some, but they soon 'catch on.' We feed them shelled corn, in the fruit chamber, and save many apples by it. It is mostly the seeds of the apples that they are after. This is seen in the number of decayed apples that are dug into the core by them, for simply the seeds."

Some Reasons Why Fruit Does Not Set.

From Botanical Department, Kansas Experiment Station:

"In order that fruit shall set it is necessary that the flowers be fertilized. Fertilization is the union of the pollen with the ovules, which are the small bodies that develop into seeds. Fertilization is essentially the same in plants and animals. A perfect flower consists of stamens, which produce the pollen, and pistils, which contain the ovules. In some flowers, however, the stamens and pistils may be produced in separate flowers on the same plant, as the corn, or even on different plants, as the willows and cottonwood.

"When the pistils are fertilized by pollen from the same flowers, the flowers are said to be self-fertilized. This can happen only in perfect flowers. Self-fertilization usually takes place in wheat and other cereals and in some other plants. However, most plants, especially those having showy flowers, are not fertilized by the pollen from the same flower, but from a different flower; that is, they are cross-fertilized. It has been proven experimentally that cross-fertilization usually produces hardier progeny than self-fertilization. (It should be borne in mind that these remarks do not necessarily apply to hybridization, in which the pistil is fertilized by pollen from a different species.) In cross-fertilization the pollen may be transferred from one flower to another by wind or by insects. In our common edible fruits the pollen is carried by insects. As a rule such plants have flowers which secrete nectar, and the insects visit the flowers for the nectar, accidentally carrying the pollen upon their bodies. Bees, especially honey bees are the most important insects in this respect.

"There are four important reasons why fruit may fail to set:

"1. The pollen may be insufficient in quantity. This applies particularly to the strawberry. Many of our cultivated varieties, the so-called pistillate sorts, produce only a small amount of pollen, not enough for complete fertilization (such as Bubach, Warfield, Crescent). A failure from this cause may be easily prevented by planting pollen-producing varieties (the so-called staminate sorts) alongside the others (such as Capt. Jack, Parker Earle, Gandy).

"2. Insects may be prevented from visiting the flowers during the receptive period. If bees are kept from fruit blossoms by netting or other artificial means, the amount of fruit set is little or none. It not infrequently happens that inclement weather prevents or hinders the flying of bees during the period

ARMSTRONG & McKEE
Pittsburgh.
BEYMER-BAUMAN
Pittsburgh.
DAVIS-CHAMBERS
Pittsburgh.
FAHNESTOCK
Pittsburgh.
ANCHOR
Cincinnati.
ROKSTEIN
Cincinnati.
ATLANTIC
New York.
BRADLEY
New York.
BROOKLYN
New York.
JEWETT
New York.
ULSTER
New York.
UNION
New York.
SOUTHERN
Chicago.
SHIPMAN
Chicago.
COLLIER
St. Louis.
MISSOURI
St. Louis.
RED SEAL
St. Louis.
SOUTHERN
St. Louis.
JOHN T. LEWIS & BROS CO
Philadelphia.
MORLEY
Cleveland.
SALEM
Salem, Mass.
CORNELL
Buffalo.
KENTUCKY
Louisville.

A PROMINENT wholesale and retail dealer in paints writes: "We have discontinued handling mixed paints entirely, for the reason that we can furnish Pure White Lead (see list of genuine brands) and the National Lead Company's Tinting Colors with which to make any shade desired, thereby giving our customers the best paint that can be made; besides, we know what we are selling, and are not afraid that the purchaser will come back next year and ask us to paint his house over again."

FREE By using National Lead Co.'s Pure White Lead Tinting Colors, any desired shade is readily obtained. Pamphlet giving valuable information and card showing samples of colors free; also folder showing pictures of house painted in different designs or various styles or combinations of shades forwarded upon application to those intending to paint.

National Lead Co., 100 William St., New York.

when the flowers are receptive. A fruit tree, half of which was subjected to a continuous spray of water during the flowering period, produced no fruit upon the sprayed portion, but an abundance upon the other. A failure due to the above mentioned cause cannot well be prevented, but may be modified by having bees near at hand to utilize the short favorable periods which do occur.

"3. In some varieties of fruits the flowers are self-sterile and refuse to take pollen even from another flower on the same plant. Fertilization can then take place only when the pollen comes from a separate plant, that is, from a plant arising from a separate seed. All our varieties of orchard and small fruits are reproduced by cuttings, grafts, buds, layers or other similar methods and not from seed, hence are merely one plant cut up into a great many parts. Therefore in self-sterile varieties (such as Bartlett pears, the Brighton, Merrimac and Wilder grapes) the pollen must be obtained from another variety. Isolated plants or large orchards of a single variety may fail to set fruit from this cause. To prevent such failures mix the varieties. The quickest way to remedy cases which have reached maturity is to top graft another variety upon them in sufficient quantity. (The Seckel and Kieffer pears and the Concord, Niagara, Agawam and Green Mountain grapes are self-fertile.)

"4. An insufficient supply of bees will hinder the setting of fruit. While other insects may take part in the carrying of pollen, the fruit raiser must rely chiefly upon honey bees. Experience shows that though hungry bees may fly two or three miles, hives should be within half a mile of the orchard or small fruit patch."

Rocky Ford Melons Raised in Kansas.

In corroboration of the claim made by Secretary Coburn of the State Board of Agriculture that the so-called Rocky Ford melons, of high quality, can be raised successfully in Kansas, and even away from the Arkansas valley, as well as in Colorado, Whiteker Brothers, fruit merchants and growers, of Topeka, give some interesting testimony.

From two acres of sandy upland in the suburbs of Topeka, set in young peach trees, and only planted to melons incidentally for the purpose of keeping the ground in cultivation, they have already this season sold \$327 worth of cantaloupes raised from Rocky Ford seed, and without irrigation. They handle large quantities of Rocky Ford melons, but find that those grown by themselves have the advantage of soundness, freshness and keeping quality not possessed by those reaching Topeka after being crated and making the journey of 400 miles from Colorado.

It is not improbable that by experimenting Kansas growers may find they have the soil and climate for producing melons as much superior to those now shipped from Colorado as the Colorado melons are superior to the ordinary muskmelon.

The quality of melons is often impaired by their being grown in too close proximity to cucumber, pumpkin and other similar vines with which they cross fertilize, and Whiteker Brothers attribute the high quality of their melons

to the fact of their not being raised within a mile of any other vines, an important precaution too often overlooked.

Missouri Fruit at Omaha.

Missouri proposes that her fruit exhibit at the Omaha Exposition shall be worth seeing. The officers of the Missouri State Horticultural Society have issued the following appeal to Missouri fruit-growers:

"The last month of the Omaha Exposition is at hand, and it is the most important month for our fruit exhibit. The apple exhibit will be worth more to our counties and to our State than all other fruits, hence we are more than anxious that this month's display be the best one of all the exhibits we have made.

"To make it such, we shall need your assistance. You can help us very much on this last call if you will. If you can get only one, two or three varieties, then select a dozen specimens of each, wrap them in paper, pack them well in box and send them along. If you can make a larger collection, select a half peck or more of each variety, and, after wrapping them, pack tightly in a barrel. If you wish to have your county represented, please send on what you can at once. Every little helps, and your portion, however small, will make a show. Do not put this off, but act promptly, and if you will take a day for this you can send something. Send to G. A. Atwood, Missouri Exhibit, Horticultural Building, Omaha, Neb., and we will pay the express."

TO LIVE WELL AND HAPPILY
Use "Garland" Stoves and Ranges.

COLUMBIAN WHITE
Shots white, remaining so as long as it for use; robust and vigorous. Nick Obmer, largest new Strawberry, 70 varieties. Miller's Red Raspberry, the finest. Consult our budding list of peach trees—over 1,300,000 for sale. Catalogue free. HARRISON'S NURSERIES, Berlin, Md.

600 ACRES—13 GREENHOUSES.
TREES & PLANTS

We offer a large and fine stock of every description of
FRUIT AND ORNAMENTAL TREES, SHRUBS, ROSES, VINES, SMALL FRUITS, HEDGE PLANTS, FRUIT TREE AND FOREST TREE SEEDLINGS.
Priced Catalogue Mailed Free. Established 1852.

Phoenix Nursery Company,
Successors to Sidney Tuttle & Co.,
Bloomington, - - Illinois.

Protect

your Trees from rabbits, mice, borers, and injury from careless cultivation with

Improved
Vener Tree
Protectors.

Cheaper than cornstalks.
12 inches wide and 20 inches long.
Send for circular giving full description and price, also prices on full line of choice Nursery stock.

Hart Pioneer Nurseries,
Fort Scott, Kas.



BUY BERRY PLANTS THAT WILL GROW and which are true to variety and name. I grow that kind in greater quantity than anybody else in the world. Raspberries, Gooseberries, Strawberries, Blackberries, Currants, Grapes, etc. Every plant free from disease. Sold under certificate of State Entomologist. This is the home of the famous **PEARL GOOSEBERRY.** Don't place your order until you get my catalogue and price list. **ALLEN L. WOOD, ROCHESTER, N. Y.**

In the Dairy.

Conducted by D. H. OTIS, Assistant in Dairying, Kansas Experiment Station, Manhattan, Kas., to whom all correspondence with this department should be addressed.

NO MONEY IN MILK—WHY?

Mr. —, a patron of the Meriden Creamery Co., sends in his dairy report for 1897. He milked seven cows, raised seven calves, which he valued at \$200, and fed 10,320 pounds of skimmed milk to his pigs, valued at from \$8 to \$10. His cows he calls "scrub, a little Short-horn mixed in," which were fresh in the spring. They were pastured seven months on grass and two months on corn stalks. Mr. — says he fed his cows corn for three months of the time they were on pasture, but found that it did not pay. His winter feed was ear corn and a mixture of clover and timothy hay. He keeps a Short-horn bull in order "to get good calves." Mr. — says he cannot figure much pay out of milk, although he thinks he averages up with his neighbors.

Mr. —'s creamery record shows that during the year he delivered 17,241 pounds of milk, that yielded 654 pounds butter fat, making an average test of 3.79 per cent. The financial account stands as follows:

Cash received from sale of milk.....	\$ 98.14
Value of skim-milk fed to pigs, 10,320 lbs., at 10 cts. per cwt.....	10.32
Value of calves.....	200.00

Total receipts from herd.....\$308.46
This makes an average yearly income per cow of \$44.06, not such a very bad record, after all. However, it will be noticed that over two-thirds of this amount comes from the value placed on the calves. The annual income per cow for milk produced is only \$15.49. The average yield of milk is 2,463 pounds, butter fat 93 pounds, equal to 109 pounds of butter. If Mr. — retains his Saturday night's and Sunday morning's milk to make butter for the family, one-sixth should be added to these figures. From this record it is not surprising that Mr. — complains that there is no money in milk. If it were not for the high value placed on the calves, doubtless his cows would be running him in debt. During the same year another patron of the same creamery realized from each cow 5,541 pounds milk, 317 pounds butter fat, equal to 373 pounds butter, and had a total income from his milk alone of \$46.80 per cow, against \$15.49 in the previous case. He raised sixteen calves from his twenty cows, which he valued at the end of the year at \$200 (the same as the first patron valued his seven calves). Counting both milk and calves, the former patron realized an annual income of \$44.06 per cow and the latter \$56.80 per cow, making a difference of \$12.74 per cow.

Judging from these figures Mr. —'s cows are either not dairy cows or they are not fed in a way to produce milk. No dairyman can afford to keep a cow a year for 109 pounds of butter. That kind of machine is out of date. If a man expects to make any money out of dairying he must have a cow machine that will return a profit for the food consumed.

In the first place, Mr. — pastures six months in the year without giving his cows any extra feed. During hot dry spells his cows undoubtedly shrink in their milk yields, and after that it is very hard to restore them to their former capacity. A little milk-producing feed just at this time would not only tide over the dry spell but would materially aid in maintaining the flow of milk for the rest of the milking period, and possibly would extend the period of lactation. With the college herd we have found that extra feed during the summer netted us from 20 to 25 per cent. profit.

In the second place, when Mr. — did give extra feed, he fed corn, and doubtless it was at the time when his cows were running on the stalk field. Now, both corn and corn fodder are deficient in protein, the element absolutely necessary for the formation of milk. It will thus be seen that the whole tendency of this feed was toward the formation of fat and not for the production of milk.

Let us look for a moment at the winter feed used. The quantity is not stated, but doubtless each cow ate in the neighborhood of twenty pounds of clover and timothy hay, and in the neighborhood of eight pounds corn for each 1,000 pounds live weight. This would give digestible nutrients in the following quantities:

Ten pounds clover.....	1.36	7.08	.34
Ten pounds timothy.....	.58	8.74	.28
Eight pounds corn.....	.62	5.33	.34
Total	2.56	21.15	.96
Required	2.5	12.5	.4

From these figures it will be seen that

there is the right amount of protein but nearly 70 per cent. too much carbohydrates and 135 per cent. too much fat. No wonder the cows did not milk well. The whole tendency of the ration was to cause the cows to lay on fat, and we all know that when milch cows grow fat there is a tendency for the milk cans to go empty. The owner of a race horse would not think of feeding all corn. He knows too well that his horse could not begin to make his best record when thus fed. Neither would the soldier fill his cannon with all powder, nor again with all cannon balls. He knows the effect he wishes to produce and gauges the different elements entering his machine accordingly. The cow owner should be no exception to the rule. D. H. O.

Importance of Thorough Scalding or Steaming of Milk Dishes.

One dozen milk bottles were sterilized in the bacteriological laboratory by heating in live steam (212° F.) five to six hours daily for four consecutive days, so as to kill every germ. Another dozen bottles were taken as they are ordinarily washed with hot water. Uniform samples of milk from the same can were put in each bottle. The milk remained in one-third of these bottles for about one hour, in another third from two to three hours, and in the last third from three to four hours before bacteriological plates were made. The one-hour samples in the unsterilized bottles contained from 32,000 to 490,000 more bacteria per cubic inch than the samples from the sterilized bottles. The samples that stood from two to three hours in unsterilized bottles contained from 980,000 to over 4,900,000 more bacteria per cubic inch than the samples that remained for the same length of time in sterilized bottles. Lastly, with the samples that remained in the bottles from three to four hours, those from unsterilized bottles contained from 5,900,000 to over 1,960,000,000 more bacteria per cubic inch than the samples from the sterilized bottles.

As far as the appearance of the bottles were concerned, the unsterilized looked the cleanest. This shows that we cannot trust the eye to tell us when a dish is clean. Wherever possible, every milk dish should be subjected to live steam, and the longer it is exposed the better. In some places, where special pains are taken, milk dishes are subjected to live steam under pressure for fifteen to twenty minutes. Where steam cannot be had, scalding hot water should be used, and the longer the dishes remain in this hot water the cleaner they will be, as many bacteria that can withstand the heat a few seconds will be killed if exposed several minutes. This treatment will not insure sterility, but it will materially reduce the number of bacteria. D. H. O.

Results From a Mixture of Breeds.

Mr. S. M. Marlatt, of Carlton, Kas., a patron of the Rhinehart Cheese Company, writes that for one year he delivered to the cheese factory from his herd of fifteen cows, which are a mixture of different breeds, 43,011 pounds of milk, besides the Saturday night's and Sunday morning's milk, which was kept at home for the purpose of supplying the family with butter. Aside from this, all the milk that a large family could use and drink was retained from the daily milking. Mr. Marlatt's financial account stands as follows:

Received from sale of milk.....	\$284.05
One-seventh added for butter made at home	40.58
Value of calves	210.00

Total income from herd.....\$534.63
This gives an annual income per cow of \$35.64. Add one-seventh to the milk delivered to the cheese factory, and there is an annual average per cow of 3,276 pounds of milk. This milk tested on the average 4.5 per cent., which would make 147 pounds butter fat, equal to 173 pounds butter per cow per annum.

Prof. Henry, in the Breeder's Gazette, gives some pointers to those who are raising calves, pointing out the different treatment that a dairy calf should receive from one raised for beef. He says corn is not the best grain for a calf, since it does not furnish food nutrients in the proportion for developing bone and muscle. The character of the grain ration will depend upon the character of the roughness. Where good clover or alfalfa hay is used, more corn can be added to the grain than where the roughness consists of timothy, prairie hay or corn stover. With a mixture of roughness, as may be found on the ordinary farm, Professor Henry recommends for calves designed for the block a grain ration of two-fifths corn, two-fifths bran and one-fifth oats, middlings or oil meal. For heifers designed for milk produc-

tion, the object should be to keep them in a healthy, growing condition, but do not allow them to lay on much fat. For this purpose one-fifth corn would be sufficient, increasing the proportion of bran and oats. As to the amount of grain to feed, one and one-half pounds for every 100 pounds live weight is recommended.

An Opportunity Opened.

The United States Department of Agriculture has been doing some valuable work in introducing American butter into the English market. A sufficient number of shipments have been made to demonstrate that our butter is entirely satisfactory to the English taste and that it can be maintained at a uniform quality. No doubt the English market would be an excellent one for our surplus summer butter. The great obstacle in the road is, that the English market demands a constant supply the whole year, and during the winter months our home demand for butter is such that our creameries and butter-makers are not disposed to send their butter abroad. Just as soon as our butter dealers can be induced to send a constant supply the year round, we can enter the English market in successful competition with other countries.

The above facts speak out in no uncertain tones as to the value of winter dairying. An opportunity is opened before us in the shape of enlarged markets if only creamery patrons could be induced to give more attention to the production of milk during the winter months. The advantages of such a course are many. If a patron will sit down and take the yield of butter fat from one of his cows by months during her period of lactation, and then, with the prices of butter fat by months before him, figure out the cash he would receive if the first month of lactation came in April, and again if it came in October, he would doubtless obtain results that would astonish him. From records and prices of butter fat before us, we find that there are differences of over \$4 per annum in favor of the cow that comes in in the fall.

But this is not all. The fall cow will give a good flow of milk during the winter, and when grass comes in the spring she will receive a second stimulus in milk production, and the total product for the year will be more than if she calved in the spring. The calves will also do better, since there will be more time to attend to them, and the skim-milk will be returned in a good, sweet condition, and by spring they will be ready to turn on grass. The work on the farm will be more evenly distributed throughout the year.

With the opportunity for enlarged markets, the increased yield per cow, the higher price for butter fat, and the prospect of a more valuable calf, it would seem as though creamery patrons would give more attention to winter dairying. If there is doubt about it paying, let it be tried with a portion of the herd and accurate records kept of the comparison. In these days of fierce competition the farmer as well as the merchant needs to embrace every opportunity for increased profit. D. H. O.

"Dairy Day" at Omaha.

Kansas dairymen will be pleased to know that the authorities of the Trans-Mississippi International Exposition have arranged for a special "Dairy day." Ex-Governor Hoard, of Wisconsin, is to take part in the exercises, and an effort is being made to secure Secretary Wilson. There will be special exhibits of dairy cattle, aside from the regular exhibits of butter and cheese.

The date set is October 11, and any Kansas dairyman who is thinking of attending the Exposition will do well to lay his plans to be there at this time. Railroad rates have been secured at only 80 per cent. of the regular single fare for roads centering at Omaha.

Now the voice of the fakir is heard in the land, attempting to gather his harvest.

Dr. Bull's Cough Syrup cures croup. It has saved the life of many a child. Mothers, keep this medicine always on hand; it will save you many restless moments. Price 25c.

CREAM - SEPARATORS

De Laval "Alpha" and "Baby" Separators. First—Best—Cheapest. All Styles—Sizes. PRICES \$50 TO \$800. Save \$10 per cow per year. Send or Catalogue. THE DE LAVAL SEPARATOR CO. Randolph & Canal Sts., CHICAGO. 74 Cortlandt Street, NEW YORK.

DR. A. B. SEELYE'S WASATUSA

THE GREAT HEALER

For Internal and External Use.

FOR MAN OR BEAST.

CURES

Rheumatism, Neuralgia, Earache, Toothache, Headache, Croup, Sore Throat, La Grippe, Colic, Cholera Morbus, Diarrhoea and Summer Complaint, Pains in the back by acting on the kidneys, Corns, Bunions, Etc.

EXTERNALLY.

Rub it well on affected parts. In severe cases apply hot cloths well saturated with the Wasatusa over seat of pain.

INTERNALLY.

ADULTS.—15 to 60 drops in 2 tablespoonfuls of hot water or milk as often as necessary until relieved.

CHILDREN.—3 to 15 drops, according to age, every 25 or 30 minutes until relief is obtained.

An excellent remedy for Horses in cases of barbed wire cuts, colic, etc. Dose internally 1 to 3 tablespoonfuls in a cup of warm water, drench.

Price 50c and \$1.00 Per Bottle.

Insist on your druggist getting it.

A. B. SEELYE MEDICINE CO., ABILENE, KANSAS.

Ask your grocer for Dr. Seelye's Flavoring Extracts. Triple strength. The best on the market.



COOK Your FEED and Save Half the Cost—with the PROFIT FARM BOILER. With Dumping Caidron. Empties its kettle in one minute. The simplest and best arrangement for cooking food for stock. Also make Dairy and Laundry Stoves, Water and Steam Jacket Kettles, Hog Scalders, Caidrons, etc. Send for circulars. D. R. SPERRY & Co., Batavia, Ill.



IF YOU COULD buy a wagon that had everlasting wheels WOULD YOU DO IT? Wouldn't it be economy to do so? Well here's how: Buy a set of Electric Steel Wheels. They can't dry out and get loose; they CAN'T ROT OR BREAK DOWN. Don't make any difference what wagon you have we can fit it. Wheels of any height and any width of tire. May be the wheels on your wagon are good. If they are buy a set of these and have two wagons—a low one and a high one. Send for catalogue, it is free. Electric Wheel Co., Box 46, Quincy, Ills.

THE UNIVERSAL REPAIR MACHINE FOR FARMERS AND MECHANICS.

Vise, Drill, Anvil, Tool Grinder, Pipe Clamp and Cut-Off. ONCE SHOWN, SELLS ITSELF. For particulars, enclose stamp, and mention this paper Address. BLOOMFIELD MFG. CO., BLOOMFIELD, IND. Salesmen Wanted.

Keeps him in. Keeps others out.

HORSE-HIGH

With our Duplex Automatic Fence Machine you can make 100 styles of fence at the rate of 60 rods a day. Every rod of it will possess the three leading attributes made prominent in this ad. Makes a perfect general purpose fence at 18c. per rod. Poultry fence 19c. per rod. Rabbit-proof fence 19c. per rod.

BULL-STRONG

for nurseries, orchards, etc., 16c. per rod, and a good hog fence for 12c. per rod. Plain, coiled spring and barbed wire to farmers at wholesale price. Get our free catalogue before buying wire or fencing.

KITSELMAN BROS., Box 64, Ridgeville, Ind.

PIG-TIGHT



The Improved U. S. Cream Separators

In thoroughness of separation take the lead. In completeness of design and ease of operation excel all others.

Are more substantially made and are superior in all points to all others.

All Styles and Sizes. \$75.00 to \$625.00.

Agents in all dairy sections.

Send for latest illustrated catalogues.

VERMONT FARM MACHINE CO., - Bellows Falls, Vt.

The Veterinarian.

We cordially invite our readers to consult us whenever they desire any information in regard to sick or lame animals, and thus assist us in making this department one of the interesting features of the Kansas Farmer. Give age, color and sex of animal, stating symptoms accurately, of how long standing, and what treatment, if any, has been resorted to. All replies through this column are free. In order to receive a prompt reply, all letters for this department should give the inquirer's postoffice, should be signed with his full name, and should be addressed direct to our Veterinary Editor, Dr. Paul Fischer, Professor of Veterinary Science, Kansas State Agricultural College, Manhattan, Kas.

CONTAGIOUS ABORTION.—I am still having the worst luck with this disease (contagious abortion). I have lost twenty calves since January 1, and the cows that lost their calves then are dropping them again. Will the sound cows get the disease if I don't let the bulls to the affected cows? Is it catching on the range or not? We have the best of range and water. I wrote you once in regard to this and read the article in the Kansas Farmer of the 20th of January. C. S. H.

Russell Springs, Kas.
Answer.—The "luck" you refer to will stay with you indefinitely until you treat your cows as directed in the Veterinary column of the Kansas Farmer of January 20. Remember, that all cows in the herd, aborting and non-aborting, must be treated. If an aborting cow is bred before she has been treated she will very likely abort again and continue to do so for several years. She may then carry a calf full time but still be a source of contagion for other animals (if not treated), in spite of the fact that she herself does not abort. A bull from an aborting herd is unsafe, even though he may not be known to have served an aborting cow. The only safe plan for you to follow is the plan of treatment outlined in the number of the Kansas Farmer just mentioned, treating all cows, sick and well, and breeding them to a healthy unexposed bull, only after all secretions from the genital organs have ceased, and after having been properly treated with the corrosive sublimate solution. This disease is "catching" on the range, just as well as in the stable, although the danger is greatest where animals are housed or kept close together. An infected bull is just as dangerous on a range as in the stable, but in the former case there is less opportunity for the disease to be communicated from cow to cow. There is practically no danger from water in this respect.

ACTINOMYCOSIS—LUNG TROUBLE. (a) I wish to ask for advice in regard to a cow that was kicked just below the right eye, about a year and a half ago. The kick bruised and tore the skin and perhaps fractured the bone. It was quite sore, but healed finally and left a lump or prominent place just below the eye, which is quite hard and seems tender when touched. There is also a raised place, quite hard but not solid bone, extending from the lump to within four inches of nose. It is three or four inches wide and has several openings in it which run occasionally. Can't say whether from the long place or lump. Breathing in right nostril seems to be affected. When cow chews her cud she slobbers some. She is 7 seven years old, brown color and in fair condition. I have used iodine on the prominent parts for a week but see no change. Would like to remove the growth if possible, as she will be fresh in December. (b) My pigs cough or sneeze a great deal. They seem to have something in either nose or throat which comes up at the time in their mouth, as they chew something right after coughing. Have never seen any worms among them; have had the same trouble for two years. Doesn't seem to hurt them, as they do well, only they bleed at the nose after coughing. Two out of twenty-two are affected this year. They run on clover and timothy and are fed corn and milk and have good clear water to drink. I use government remedy, but it does no good. They have salt and ashes also. S.

Meriden, Kas.
Answer.—(a) This is probably actinomycosis, but I cannot be definite in my diagnosis. Give the animal a daily dose of 2 drams of potassium iodide dissolved in its drinking water. Continue this for ten or twelve days and then report to me if no improvement sets in. A lengthy article on this subject was written for the Veterinary column of the Kansas Farmer of May 19, which it might be well for you to consult. (b) I cannot diagnose the trouble with your pigs. There is some local trouble, the nature of which cannot be learned, and consequently treatment cannot be advised until a careful local examination is made. If the pigs are doing well, continue to take good care of them until they are ready for slaughter. You might then kill them for your own use, making a careful in-

spection of the air passages, and if anything abnormal is revealed, make careful notes and send them to me, referring to this number of the Farmer. We may thus be enabled to get at the facts and learn something of value for future cases, and at the same time learn whether or not the carcasses of these particular animals are fit for human food.

MYCOSIS.—There is a disease among horses here which nearly always proves fatal. The horse loses his appetite, looks weary, gets weak, walks uncertain, wants to push against something with his head and breast and leans against the side of stall sometimes. One was in the pasture; he would walk around, stepping high, did not eat for three or four days, and finally got well, but most of them die. B. E. M.

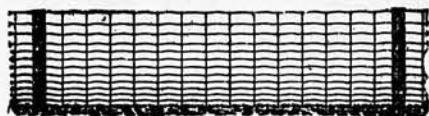
Alert, Okla.

Answer.—You describe symptoms of one of the numerous forms of mycotic diseases, the exact nature of many of which is as yet little understood. Most of these diseases are due to a food infection, i. e., the fungus which produces the disease gains entrance into the body through the alimentary canal by means of various kinds of feed, roots, grains, but especially grasses, on which it (the fungus) grows. There are always certain conditions of soil and climate, season of year, etc., that have a special influence on the development of these fungi, and when these conditions are very favorable, the fungi, which are supposed always to be present in small numbers, suddenly multiply very rapidly, perhaps even develop special disease-producing powers, and these, taken up with the animal's food, attack the internal organs and produce disease. Swampy regions are especially dangerous in this respect. Therapeutic remedies for these diseases have, to the present time, proved of little value in most instances, because the diseases usually run too rapid a course, and death overtakes the animal before proper medical aid can be given. Even if saved, such an animal would immediately be re-exposed to the cause of the same disease if it were kept in the same place on the same feed. The only rational treatment that can at present be recommended is to change the feed or range of animals among which the disease breaks out. Sometimes the poisoned food will be injurious for a certain time only, after which feeding it can be resumed without danger. In some cases such feed can be mixed with other feed free from injurious fungi and thus much loss prevented. This is a common practice with smutted grains and grasses. This, however, is an economic question, which, after a thorough study and proper consultation, must be settled independently for each individual case or outbreak. After an animal is once attacked, the medical treatment, if at all attempted, must, from the nature of the disease, be symptomatic, and, of course, this could not be discussed here. In general, however, an immediate change of food, together with a good purge to evacuate the bowels of their poisoned contents and thus limit further absorption of injurious products, would be indicated. The purge for an average-sized horse might consist of powdered Barbadoes aloes 4 to 6 drams, mild chloride of mercury, 1 dram and powdered althaea root sufficient to make a pill mass. This is made into an oval pill and administered in the usual way. After this, keep bowels open with succulent digestible food, bran mash, etc. Keep the animals in a quiet, dark stable, give pure water, and good care in general.

Recognized as a Specific.

Nasal catarrh quickly yields to treatment by Ely's Cream Balm, which is agreeably aromatic. It is received through the nostrils, cleanses and heals the whole surface over which it diffuses itself. Our plan is to give every one a chance to try the merit of the Cream Balm for the cure of Catarrh, Hay Fever and Cold in the Head, by mailing for 10 cents a trial size to test its curative powers. We mail the 50-cent size also, and the druggist keeps it. Test it and you are sure to continue the treatment. Relief is immediate and a cure follows. Ely Brothers, 56 Warren Street, New York.

A remedy for Nasal Catarrh which is drying or exciting to the diseased membrane should not be used.



Turn to Page 12-58

for complete solution of "line fence" quarrels. High enough, close enough, strong enough, and cheap enough. Ask for "Fall styles and prices." Page Woven Wire Fence Co., Adrian, Mich.

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.

THE STRAY LIST.

FOR WEEK ENDING SEPT. 22, 1898.

Ottawa County—W. M. Trullitt, Clerk.

MARE—Taken up by A. W. Swayze, P. O. Minneapolis, August 22, 1898, one sorrel mare, three white feet, light mane and tail, star in forehead, weight about 800 pounds; valued at \$20.

Crawford County—F. Cunningham, Clerk.

MARE—Taken up by L. C. Brown, in Sheridan tp. (P. O. Cherokee), August 20, 1898, one gray mare, two dark spots on right shoulder; valued at \$15.

FOR WEEK ENDING SEPT. 29, 1898.

Miami County—L. Flanagan, Clerk.

FOUR HEAD CATTLE—Taken up by D. W. Oyster (P. O. Paola), June 10, 1898, one white yearling heifer, white face and seems to be part Hereford. One white yearling heifer with red specks more or less all over. One light-red yearling steer with a few white hairs all over body. All the above cattle on the southwest order. Also one black two-year-old native steer, white star in forehead, some white under belly. None of the above cattle have horns and all of them have hogrings in the upper part of the ear, and all are branded on the left hip with brand which looks like letter C or V; total value, \$65.40.

Harper County—W. W. Taylor, Clerk.

MARE—Taken up by Elmer D. Oldfather, in Banner tp., September 7, 1898, one roan mare, 14 hands high, left hind foot white, slip in left ear and star in face; valued at \$25.

Sedgwick County—A. M. Denny, Clerk.

MARE—Taken up by John Landwehr, in Sherman tp. (P. O. Andale), September 5, 1898, one light bay mare, 10 years old, star in forehead, weight about 900 pounds; valued at \$15.

FOR WEEK ENDING OCTOBER 6, 1898.

Haskell County—S. E. Cave, Clerk.

COW—Taken up by Rufus Wyatt, in Haskell tp., September 5, 1898, one white cow, about 6 years old, brand similar to F; valued at \$18.

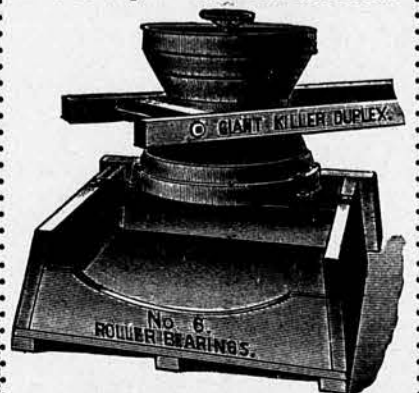
COW—By same, one white cow with red neck, about 6 years old, brand similar to F; valued at \$18.

COW—By same, one red and white cow, about 7 years old, brand similar to F; valued at \$18.

COW—By same, one red and white cow, about 6 years old, brand similar to F; valued at \$18.

Giant Killer... Duplex Grinder.

A BIG MILL ON A BIG BOX.
Roller Bearings. 3,000 Sold Last Season.



IMMENSE CAPACITY.

Equal to a 25-inch double-gear machine. No gearing to bind or break. All power applied direct to duplex burrs. Double auger force feed and steep cone. Corn and cob will not lodge or "hang up" in hopper. Warrented under like conditions to grind one-third more than an 18-inch double-gear mill, and furnished with a feed-box in proportion to capacity. Write

DAVIS GASOLINE ENGINE WORKS CO., Waterloo, Iowa.

We ship from Omaha, Neb.; Kansas City or St. Louis, Mo.; Bloomington, Ill.; Indianapolis, Ind.; Minneapolis, Minn.

HOW DO WE DO IT?
By having
No Agents, No Peddlers,
No Middlemen.
You pay one small profit.
One-half saved.
7 styles to select from.
\$45 machines only \$27. No
money in advance. Also
Buggies, Harness and all
Farm Implements and 1000 other articles. Send for
free catalogue. Ask your bank to look us up.
Hagood Plow Co., Box 48, Allen, Ill.
Only Plow factory in U. S. selling direct to consumer.

IT DOES
BEAUTIFUL WORK
AND RUNS EASY

PRESERVATIVE
SAVES THE MEAT.
NO SLIME—NO SKIPPERS.
NO SOUR MEAT. Box enough
for 500 lbs. post-paid, on receipt of 50c.
Preservative Co., 12 Cedar St., N. Y.

THE BEST CREAMERY BUTTER SALT

In the world is manufactured in Kansas. INSIST on having RIVERSIDE brand.

A free sample will be gladly furnished on application by... Kansas Salt Co., Hutchinson, Kas.

Public Sale of Poland-Chinas.

WEDNESDAY, NOVEMBER 2, 1898.

SEVENTY HEAD, INCLUDING OUR OMAHA SHOW HERD. We want every breeder to have a catalogue, but will send them only on application.

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

SHORT-HORNS FOR SALE.

Having lost the greater portion of our hay by lightning, we offer for sale twenty-five or thirty SHORT-HORN Cows, Heifers and Spring Calves at bottom prices. Also one extra fine red yearling bull of the Duchess family. Come and pick them out before they are all gone.

G. W. GLICK & SON, Atchison, Kansas.

PONTING'S ANNUAL PUBLIC SALE

At Homestead Farm, Moweaqua, Ill., Wednesday and Thursday, Oct. 19-20, 1898.

70==REGISTERED HEREFORDS==70

40 YOUNG COWS AND HEIFERS--30 BULLS.

28 HACKNEYS AND 20 DRAFT HORSES.

We believe that none better will be offered in this country this year. Write for sale catalogue that gives full particulars.

COL. J. W. JUDY,
COL. J. W. SPARKS, } Auctioneers.
COL. T. W. WARD,

TOM C. PONTING & SONS,
MOWEAQUA, ILL.

CLOSING-OUT POLAND-CHINA SALE

I will offer my entire herd of Poland-China hogs for sale to the highest bidder at Maple Grove Farm, one mile south and three miles west of

Osage City, Kansas, on Friday, October 14, 1898.

The herd consists of about fifty head of the best families, such as Sanders, Wilkes, Tecumseh and Chief I know, consisting of brood sows, sows with pigs by their side, and spring pigs of both sexes.

TERMS OF SALE:—All sums of \$10 and under cash, without discount; over that amount, six months' time, with interest at 6 per cent., with approved note. Five per cent off for cash. Lunch at 11:30. Sale at 12:30. Come early and inspect the stock.

COL. S. A. SAWYER, Auctioneer.

WM. PLUMMER, Breeder,
OSAGE CITY, KAS.

MARKET REPORTS.

Kansas City Live Stock.

Kansas City, Oct. 3.—Cattle—Receipts since Saturday, 1,292; calves, 1,159; shipped Saturday, 1,593 cattle; 283 calves. The market was slow and weak on stock cattle. The following are representative sales:

DRESSED BEEF AND SHIPPING STEERS.
18.....1,277 45.15 19.....1,494 45.10
9.....978 4.85 1.....1,494 4.50
1.....950 4.35

WESTERN STEERS.
19.....1,368 4.55 1.....1,510 4.50
39 stk.....588 4.37 70 stk.....512 4.05
35.....884 4.10 26 stk.....746 3.80
29.....712 3.50 120 stk.....802 3.40

NATIVE HEIFERS.
4.....747 4.45 78.....796 4.40
4.....735 4.40 1.....460 4.00

NATIVE COWS.
2.....1,025 4.30 4.....1,105 4.30
3.....1,120 4.40 1.....1,090 4.25
2.....1,181 3.20 1.....1,311 3.15
16.....910 2.25 5.....962 1.90

NATIVE FEEDERS.
15.....1,154 4.45 7.....991 4.35
79.....949 4.25 3.....1,036 4.25
1.....960 4.25 5.....1,176 3.75

NATIVE STOCKERS.
2.....510 4.75 3.....653 4.15
Hogs—Receipts since Saturday, 5,180; shipped Saturday, 315. The market was 2 1/2 to 5c lower than Saturday's best time. The following are representative sales:

73.....257 4.75 71.....264 4.70 96.....221 4.70
69.....301 3.70 68.....214 3.70 73.....254 3.70
70.....250 3.70 69.....215 3.70 87.....245 3.70
79.....238 3.70 62.....247 3.70 63.....237 3.70
78.....226 3.67 76.....208 3.67 70.....232 3.67
92.....163 3.67 73.....202 3.67 58.....296 3.67
71.....213 3.65 65.....295 3.65 63.....264 3.65
79.....203 3.65 75.....280 3.61 68.....230 3.65
70.....224 3.65 67.....254 3.65 71.....213 3.65
39.....221 3.65 49.....300 3.65 84.....238 3.65
32.....193 3.65 61.....200 3.62 83.....142 3.40
65.....200 3.60 68.....224 3.60 63.....200 3.60
17.....117 3.60 10.....154 3.60 94.....194 3.60
11.....124 3.60 28.....141 3.74 91.....223 3.55
87.....128 3.51 142.....144 3.55 10.....121 3.50
21.....121 3.50 4.....145 3.35 2.....405 3.35
83.....179 3.25 8.....135 3.25 1.....330 3.25
2.....291 3.15 2.....265 3.00 1.....410 3.00

Sheep—Receipts since Saturday, 5,480; shipped Saturday, 293. The market was active and strong. The following are representative sales:

24 nat. lbs. 72 45.25 6 nat. sh. 62 44.50
1 nat. lb. 50 4.00 7 nat. sh. 80 3.75
4 feeders. 82 3.35 5 feeders. 88 3.25
42 sw. stk. 56 3.25 29 sw. stk. 54 3.25

St. Louis Live Stock.

St. Louis, Oct. 3.—Cattle—Receipts, 4,000; market steady; native shipping steers, \$4.70@4.75; bulk of sales, \$5.00@5.50; light and dressed beef and butcher steers, \$3.40@5.40; stockers and feeders, \$2.90@4.50; cows and heifers, \$2.00@4.80; Texas and Indian steers, \$3.00@4.25; cows and heifers, \$2.20@3.40.

Hogs—Receipts, 3,500; market steady; yorkers, \$3.80@4.90; packers, \$3.80@3.95; butchers, \$3.90@4.00.

Sheep—Receipts, 1,000; market steady. native muttons, \$4.00@4.30; lambs, \$4.00@5.35; Texas sheep, \$4.00.

Chicago Live Stock.

Chicago, Oct. 3.—Cattle—Receipts, 21,003; market steady to 10c lower; beefs, \$4.00@5.75; cows and heifers, \$2.00@4.70; Texas steers, \$3.10@3.90; westerns, \$3.60@4.55; stockers and feeders, \$3.20@4.60.

Hogs—Receipts, 35,000; market steady; light, \$3.55@3.95; mixed, \$3.55@4.00; heavy, \$3.45@3.95; rough, \$3.45@3.95.

Sheep—Receipts, 20,000; market steady; natives, \$2.90@4.60; westerns, \$3.50@4.45; lambs, \$3.75@6.00.

Chicago Grain and Provisions.

	Oct. 3.	Opened	High'st	Low'st	Closing
Wht.—Oct.	63 1/4	63 1/4	62 3/4	63 1/4	63 1/4
Dec.	61 1/2	62 1/4	61 1/4	62 1/4	62 1/4
May.	63 1/4	61 1/4	61 1/4	63 1/4	63 1/4
Corn—Oct.	28 1/2	28 1/2	28 1/2	28 1/2	28 1/2
Dec.	29 1/2	29 1/2	29 1/2	29 1/2	29 1/2
May.	31 1/2	31 1/2	31 1/2	31 1/2	31 1/2
Oats—Oct.	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2
Dec.	20 1/2	20 1/2	20 1/2	20 1/2	20 1/2
May.	22 1/2	22 1/2	22 1/2	22 1/2	22 1/2
Pork—Oct.	8 00	8 00	7 95	7 97 1/2	7 97 1/2
Dec.	9 00	9 02 1/2	8 95	8 97 1/2	8 97 1/2
Lard—Oct.	4 77 1/2	4 77 1/2	4 73 1/4	4 73 1/4	4 73 1/4
Dec.	4 85	4 85	4 82 1/2	4 82 1/2	4 82 1/2
Jan.	5 27 1/2	5 30	5 25	5 27 1/2	5 27 1/2
Ribs—Oct.	4 65	4 65	4 62 1/2	4 62 1/2	4 62 1/2
Dec.	4 65	4 65	4 62 1/2	4 62 1/2	4 62 1/2
Jan.	4 65	4 65	4 62 1/2	4 62 1/2	4 62 1/2

Kansas City Grain.

Kansas City, Oct. 3.—Wheat—Receipts here to-day were 693 cars; a week ago, 378 cars; a year ago, 575 cars. Sales by sample on track: Hard, No. 1, nominally 60¢@61¢; No. 2 hard, 58¢@61¢; No. 3 hard, 55 1/2¢@58 1/2¢; No. 4 hard, 51¢@59¢; rejected hard, 49 1/2¢@50 1/2¢. Soft, No. 2, 63 1/4¢; No. 3 red, 61¢@62¢; No. 4 red, 55¢; rejected red, 46¢@51¢. Spring, No. 2, nominally 57¢@59¢; No. 3 spring, 55¢; rejected spring, 52¢.

Corn—Receipts here to-day were 21 cars; a week ago, 56 cars; a year ago, 122 cars. Sales by sample on track: Mixed, No. 2, 26 1/4¢@26 1/2¢; No. 3 mixed, 26 1/4¢; No. 4 mixed, nominally 24¢@25¢; no grade, nominally 24¢@25¢. White, No. 2, nominally 26 1/2¢@27¢; No. 3 white, nominally 25 1/2¢@26¢; No. 4 white, nominally 25¢.

Oats—Receipts here to-day were 28 cars; a week ago, 34 cars; a year ago, 55 cars. Sales by sample on track: Mixed, No. 2, nominally 22¢; No. 3 mixed, 21 1/4¢; No. 4 mixed, nominally 19¢@20¢. White, No. 2, nominally 22 1/4¢@23 1/4¢; No. 3 white, nominally 22¢@23¢; No. 4 white, nominally 21¢@22¢.

Rye—No. 2, 41¢; No. 3, nominally 40¢; No. 4, nominally 34¢.

Hay—Receipts here to-day were 76 cars; a week ago, 84 cars; a year ago, 62 cars. Quotations are: Choice prairie, \$6.00@6.25; No. 1, \$5.50@6.00. Timothy, choice, \$6.75@7.00. Clover, \$5.50. Alfalfa, \$6.50. Straw, \$4.00.

Kansas City Produce.

Kansas City, Oct. 3.—Eggs—Strictly fresh, 13c per doz.

Butter—Extra fancy separator, 20c; first, 18 1/4¢; dairy, fancy, 16c; store packed, 14c; packing stock, 11c.

Poultry—Hens, 7c; broilers, 8c; roosters,

15c each; ducks, 5c; young ducks, 6 1/2¢; geese, 4c; goslings, 6 1/2¢; turkeys, old, 9c; young, 9 1/2¢; pigeons, 50c per doz.

Fruits—Grapes, 20c per peck. Peaches, 50¢@55¢ per peck. Apples, home grown varieties, \$2.50@3.00 per bbl.

Vegetables—Roasting ears, home grown, 5¢@6¢ per doz. Tomatoes, home grown, 50¢@75¢ per bu. Cucumbers, 20¢@45¢ per bu. Green and wax beans, 35¢@50¢ per bu. Lettuce, home grown, 50¢@60¢ per bu. Onions, new, 25¢@40¢ per bu. Beets, 30¢ per bu. Cabbage, home grown, 20¢@40¢ per doz. Celery, 30¢@45¢ per doz. Pumpkins, \$1.00 per doz. Squash, 75¢ per doz. Turnips, 35¢ per bu.

Potatoes—Home grown, 25¢@30¢ per bu. Sweet potatoes, home grown, 50¢ per bu.

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!

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

FOR SALE—Fifty pedigreed Duroc-Jersey Red spring pigs. Address Charles Dorr, Peterton, Kas.

WANTED—Eight or ten first-class milch cows, Short-horns preferred. Must give at least three gallons a day; state price, age, when fresh, breed and where they can be seen. No scrubs wanted. Address "Purchaser," Kansas Farmer Office.

POLAND-CHINA PIGS—Three dollars to five dollars each, eligible to record and choice breeding; no feed and must sell. M. C. Hemenway, Hope, Kas.

WANTED, AGENTS—We want an agent in every county in Kansas. Those acquainted with the farmers and threshers preferred. Liberal commission. For particulars, address The Victor Oil Co., Cleveland, Ohio.

WANTED—Young men to learn barber trade. Only eight weeks required. Splendid opportunity. Tools donated. Wages Saturdays. Positions guaranteed. Send for free catalogue. Moler's Barber College, St. Louis.

BLOCKS OF THREE.—Two new subscriptions for one year for \$2, and, in addition, a renewal for one year free to any old subscriber who sends two new subscriptions and \$2 in one order. Kansas Farmer Co., Topeka, Kas.

TEN THOUSAND MAMMOTH BLACK TWIG apple trees, six feet high, for sale, two years old. G. S. Sweet, Columbus, Kas.

WANTED—One or two reliable salesmen to represent an old established firm manufacturing a profitable and salable line of staple products. References required. Address Manufacturer, Commercial Bldg., Cleveland, Ohio.

WANTED—Ladies and gentlemen to procure subscriptions for the best fifty-cent woman's monthly magazine in the United States. The most beautiful and popular woman's magazine on very liberal commissions. Terms, sample copies, special helps and premiums furnished free. Address THE AMERICAN QUEEN, 78-80 Walker St., New York.

WE WANT men to take orders at once for our farm machinery, and other lubricating oils and greases. Liberal commission. Write for terms. Canfield Oil Co., Cleveland, Ohio.

ALFALFA SEED WANTED by F. Farteldes & Co. Lawrence, Kas. Correspond with them.

WANTED—Team of good young draft horses, mares preferred, not over six years old; weight 1,300 to 1,400; cash. Write full particulars, stating price, D. F. Wickman, P. O. Box 107, Topeka, Kas.

SHORT-HORNS FOR SALE—Forty-six cows and heifers, Crutcher, Young Marys, Rose of Sharon and others; an extra lot. Nearly all were sired by that grand Crutcher, Royal Prince 100646. Six bulls ready for service, sired by Young Mary bull, Glendon 119871. Parties met by appointment. Theodore Saxon, St. Marys, Pottawatomie Co., Kas.

FOR SALE—Three herd boys which have proven great sires, but now can be separated. These Poland-China boys are Look Me Up 40529 by Look Me Over, 2 years old; Hadley Jr.'s Equal 19115 by Hadley Jr. out of Spot H. 2d, 18 months; and King Tecumseh 19307 by King Perfection and out of Queen Tecumseh, 5 years old. Address, R. H. Wheeler, Lawrence, Kas.

WE WANT RELIABLE MEN in every locality at once to sell to farmers, threshers and millers our high-grade lubricating oils, greases and specialties. Makes an excellent side line for farm implement dealers. We are manufacturers, and with our instructions an inexperienced man can become an expert oil salesman. Write at once for terms. Malone Oil Company, Cleveland, Ohio.

TRADE FARMS.—I want eighty or 120 acres, improved or wild, good soil, for twenty-five acres one mile from Fort Scott (population 12,000); improvements cost \$3,000, unfailing good water, land in clover and fenced with woven wire for hogs, fine location, clear title. Geo. Purdy, Box 181, Fort Scott, Kas.

WANTED TO EXCHANGE—The pure-bred Crutcher bull, My Lord 110563, bred by Col. Harry; sire Imp. Spartan Hero 77932; dam Imp. Lady of the Meadow (Vol. 30, p. 615), for a pure-bred Crutcher bull—can't use him any longer in my herd. H. W. McAfee, Topeka, Kas.

FOR SALE—CHEAP—200 acres of well-improved, well-watered land. For particulars, address Samuel Boaz, Linwood, Leavenworth Co., Kas.

TWO STOCKMEN—Feed Mills and Corn-Shellers used as samples and at fairs, special bargains. Write or see us. Sandwich Mfg. Co., 1205 Union avenue, Kansas City, Mo.

WANTED—One or two reliable salesmen to represent an old established firm manufacturing a profitable and salable line of staple products. References required. Address "Manufacturer," Commercial Bldg., Cleveland, Ohio.

FOR SALE—Five hundred head of breeding ewes, 300 head yearling wethers, 300 head of wether lambs. Address H. B. Slaven, Dodge City, Kas.

FOR SALE—Three fine registered Jersey bulls, old enough for service. Also some young bull and heifer calves; will sell at a bargain. Lindsay Creek Dairy Farm, Chas. H. Johnson, Prop., Minneapolis, Kas.

WE MAKE A GOOD FARMER'S SPRING WAGON, two lay-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.

MACLEAN FARMERS' SUPPLY CO., Kansas City, Mo. (Between Union Depot and Stock Yards.) Sell machinery and other supplies to farmers direct, saving the consumer middlemen's profits. Send now for 1898 Spring Price List.

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.

RICHLAND HERD.—I want to close out the entire herd of Poland-China sows and herd boys, including Kiever's 1st Model 18245 S., What's Wanted Jr. 2d 18534, and B's Black U. S. 19067. The breeding and quality of these boys ought to suit anybody. Come and inspect, the only way to get suited. F. W. Baker, Council Grove, Morris Co., Kas.

DAIRY WAGON FOR SALE—Good two-horse covered dairy wagon, custom made. A. E. Jones, Topeka, Kas.

FOR SALE OR TRADE—Three Shetland ponies. Call or address H. W. McAfee, Topeka, Kas. (Prospect Farm, three miles west of Kansas avenue.)

HIGH-GRADE Shropshire rams, lambs and yearlings. E. W. Melville, Eudora, Kas.

640 ACRES ARKANSAS LAND—Two miles from station, to trade on Kansas farm. Will pay balance or assume incumbrance. E. W. Melville, Eudora, Kas.

BERKSHIRES—Choice bred sows by Imported Lord Comely, and boys ready for service. Wm. B. Sutton & Son, Russell, Kas.

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

BERDEEN-ANGUS BULLS—Three individuals of serviceable ages; registered. Wm. B. Sutton & Son, Russell, Kas.

FOR SALE—Five first-class registered Clydesdale stallions. H. W. McAfee, Topeka, Kas.

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

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.

COTTSWOLD RAMS FOR SALE—W. Guy McCandless, Cottonwood Falls, Kas.

HEREFORD CATTLE—Breeding stock for sale. Archibald cattle a specialty. Visitors welcome. J. C. Curry, proprietor "Greenacres Farm," Quenemo, Osage Co., Kas.

ELI ZIMMERMAN,

Proprietor of the Brown County Herd of Poland-China Swine and General Live Stock Auctioneer, is prepared to make sales anywhere. He is a first-class salesman and keeps posted on the prices of live stock and the best time when to sell and when not to sell. Registered Poland-China Swine of both sexes of the best strains of blood always on hand. Address him at

FAIRVIEW, KANSAS.

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 boys in the West, such as Banner Boy 2441, Black Joe 2806, World Bester 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.

200—PURE-BRED POLAND-CHINA SWINE FOR SALE—200

By GEO. CHANNON, Hope, Dickinson Co., Kas., Breeder of Poland-China Swine and Short-horn Cattle.

I must reduce my herds to the minimum on account of short feed and insufficient accommodations for winter, therefore will sell at prices that should be a big object to purchasers. My offering consists of tried brood sows, gilts and boars, all ages. Will sell singly or in lots to suit. The young stock is by my herd boars Prince Bismarck 1867, Seldom U. S. 18218, Duke of Weston and Corwin. Come now and get a bargain. Also, for sale thirty extra fine young Short-horn bulls, sired by Glendower 10338. None better in Kansas.

Sir Charles Corwin 14520 and Harry Faultless, Jr.

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.

VALLEY GROVE SHORT-HORNS.

THE SCOTCH BRED BULLS

Lord Mayor 112727 and
Laird of Linwood 127149

HEAD OF THE HERD.



LORD MAYOR was by the Baron Victor bull Baron Lavender 2d. Out of Imp. Lady of the Meadow and is one of the greatest breeding bulls of the age. Laird of Linwood was by Gallahad out of 11th Linwood Golden Drop. Lord Mayor heifers bred to Laird of Linwood for sale. Also breed Shetland ponies. Inspection invited. Correspondence solicited. A few young bulls sired by Lord Mayor for sale.

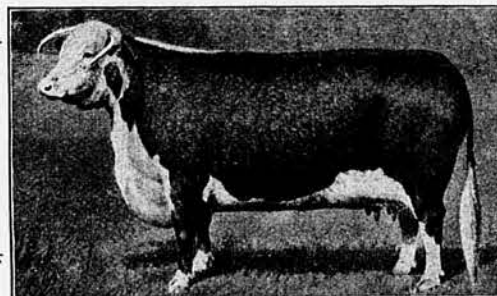
address T. P. BABST, PROP., DOVER, SHAWNEE CO., KAS.

SUNNY SLOPE,

EMPORIA, KANSAS.

WILD TOM
51592,

the great son of
the great sire,
Beau Real 11055,
heads the herd.



Other Bulls in
service are:
CLIMAX,
LOMOND,
Imp. KEEPON,
and others.

Registered Hereford Cattle.

At the spring sales of 1898 we sold the highest-priced male and highest-priced female, and also had the highest averages for 5, 10, 20, 40, 60, 80 and 100 head. These averages were higher than that of any Hereford sale of recent years. Salisbury, sold to Mr. Murray Boacook, brought the highest price any Hereford bull ever sold for at public sale in America. Last year the herd won more premiums than any other Hereford herd. We point to the above facts as the best evidence of the superior character of the animals comprising the herd. The attention of discriminating buyers is called to the fact that we have for sale a splendid lot of males and females, bred in the purple, which will be sold as low as equal merit and equal breeding can be purchased elsewhere. Sixty head of the females are bred to imported bulls. Visitors always welcome.

THOS. EVANS, Mgr.

C. S. CROSS, Emporia, Kas.

The Poultry Yard

Conducted by C. B. TUTTLE, Excelsior Farm, Topeka, Kas., to whom all inquiries should be addressed. We cordially invite our readers to consult us on any point pertaining to the poultry industry on which they may desire fuller information, especially as to the diseases and their symptoms which poultry is heir to, and thus assist in making this one of the most interesting and beneficial departments of the Kansas Farmer. All replies through this column are free. In writing be as explicit as possible, and if in regard to diseases, give symptoms in full, treatment, if any, to date, manner of caring for the flock, etc. Full name and postoffice address must be given in each instance to secure recognition.

KANSAS STATE POULTRY ASSOCIATION.
President, A. M. Story, Manhattan.
Secretary, J. W. F. Hughes, Topeka.

Poultry Show—At Topeka, January 9 to 14, 1899 C. H. Rhodes, judge.

Loss of Chickens

Large numbers of young chickens are lost each year from failure to provide for them and keep them within wire cages, which will prevent cats from reaching them, and, upon isolated farms, hawks also get many, says the American Cultivator. Then there are the nocturnal prowlers—rats, weasels, skunks, etc., which prefer to commit their depredations under cover of the darkness, though sometimes bold enough to work by daylight, and which can easily be guarded against by the use of close coops, so shut that an animal cannot enter them at night. From our own past experiences we should say that one-half the losses were from these causes and attributable only to carelessness or a lack of forethought on the part of some one. But there are those who lose more by the attacks of those little crawling insects, which can as easily be guarded against as the foes we have spoken of. Cleanliness and the use of insect powder are sure preventives of this trouble, and such losses are less excusable than the others, because they show a failure to give proper care instead of a lack of vigilance, which may have caused the trouble in one day or night, after weeks of close guarding. Others lose chickens from allowing their coops to stand in wet places or so long in one place that the ground gets foul and unwholesome as a malarial swamp. Then they usually charge the loss to gapes or pip or some other filth disease, as also do those who do not give proper food, using wet, sloppy mashers and perhaps mixing them and allowing them to sour, or feeding so much at a time that it cannot be eaten while fresh and then economizing by refusing to throw it away or to give more until that is all gone. And when it is the chickens are likely to be gone, and they call it cholera among them. Some feed upon good grain, whole or cracked, but fail to provide the chickens with teeth or the grit that is necessary to enable them to grind their grain in the gizzard, and do not discover the mistake until sick or dead chickens show it. And some chickens die because they ought never to have been hatched at all, and dying is the only way to remedy the mistake. Hatched from the eggs from hens in an unhealthy condition, partially recovering from roup, or over-fat, even to the extent of a fatty degeneration of the very organs of vitality, they come into the world without strength enough to exist excepting under the most watchful care, or enough even then than to do much more than exist, it cannot be called a loss when they die. Possibly nobler animals are born and die under similar conditions. But from all these causes, due in some cases to carelessness and in others to ignorance, it is doubtful whether one-half the chickens that are hatched out each year live to attain a size suitable even to market as broilers, while many more fail to grow and mature as they should, because of having been weakened by these causes. Therefore, each poultry-keeper should watch the list of mortality among his chickens, and if he finds it over 1 per cent, he should try to ascertain whether there is not a cause for the trouble which can be removed by a little care-taking.

Poultry Notes.

Old hens make poor winter layers.
Coal ashes are good for the poultry.
Do not allow the males to remain in the flock.
A little oil meal will assist the moulting hens.
Give the fowls plenty of shade and fresh water.
Don't permit bad odors about the poultry house.
Borax is a good thing to sprinkle in the nest boxes.
That soft feed that stands over from morning till night is not just the thing

for the next feed. It won't hurt the hogs, however.

Waste tobacco and stems are good vermin destroyers.

Worms may result from feeding raw meat too freely.

Leghorns are less tame, usually, than most other breeds.

Give the youngest chicks a chance to eat by themselves.

See that the eggs are clean before being sent to market.

Don't build a fancy poultry house. Put it up plain but warm.

An earth floor in the poultry house is not only good, but the best.

If an old rooster is not fit for the table, kill him anyhow and bury him.

The rooster is of no use in the flock for the balance of the season.

Lay in a supply of grain and vegetables for the long winter months.

Prepare now for the winter and make the house and yard comfortable.

Table scraps will start those early pullets to laying. Nothing better.

Never mind threshing the oats for the fowls; they prefer to do it themselves.

Hens lay better and the eggs keep longer if no males are allowed with them.

A poultry house should be high enough for a person to stand in, and that is high enough.

Never give fowls medicine in metallic vessels. Chemical combinations might be injurious.

Ducks and geese should never be kept with chickens. They are sure to breed disease in the flock.

The earlier the hens shed their old coats the sooner they will begin to make a winter egg record.

The Poultry Messenger advises putting away some second-growth clover for feeding hens in winter.

Freedom from lice and plenty of range will make the growing chicks "hump" themselves these days.

The sooner you are rid of the old stock except those intended for next season's breeders, the better.

A writer declares that while old fowls can stand corn meal and bran, they never should be fed to chicks.

Be careful how the new grain is fed. It is liable to produce cases of what you will probably call cholera.

Some hens do not possess the egg-laying habit and no system of feeding will make good layers of such hens.

Pure-bred fowls first, last and all the time. The breed does not matter so much, provided you are satisfied with it.

Give as much of a variety as possible. Young chicks soon tire of the best of feed if confined to it for any length of time.

Hens that are permitted to range all summer will not lay as many eggs as those in reasonable confinement and properly fed.

Too much young stock is used for breeding purposes. The young chicks will be harder and make larger fowls if from two-year-old stock.

The poultry house should have plenty of windows, and if the fowls are permitted to roost in it in summer all the windows should be open.

Kerosene and lard will prevent further loss of feathers and produce new growth on the head from which the feathers are falling out in summer.

Better give your water troughs and dishes a thorough cleaning before it runs too long. It will head off some of those numerous cases of drooping among the flock.

If the fowls can have the run of the premises from this out they will moult better and be in much better condition to go into winter than if kept confined in the breeding yards.

Remember, there are a few lice around this month. Some sticketh to the hens unto death, others "ditto" to the roost. You can call those on the roost mites if you prefer. They are "mighty" when it comes to blood sucking.

If the male bird is still with the flock, take him away, even if you have to make a separate run for him. If it is intended to use him again next season he will pay you well for the extra care and the hens will moult better and do better if kept by themselves.

For quickness of growth the young chick is not in it with the duckling, but they should be hatched early to catch the high prices. It will not pay to raise late ducklings for market any more than it will late chicks. With both it is the early ones that bring the large profits.

Troubles of a Pastor's Wife

This woman was peculiarly afflicted; physicians could do nothing to relieve her, yet she was cured in a simple way. She now sends a message to suffering humanity which should be helpful.

Probably no other woman ever suffered just as Mrs. Adams did, the wife of Rev. A. R. Adams, pastor of the Christian church at Blandinsville, Ill. Physicians were baffled by her ailment, and for years she was compelled to live a life of torture.

To-day she is well and the story of her suffering and recovery will touch a responsive chord in the heart of every woman.

"About six years ago," said Mrs. Adams, "my health began to fail. The first trouble I noticed was with my stomach; food did not agree with me, and my appetite failed until I could scarcely eat.

"I would begin to bloat before I was through with a meal, and the food felt like a stone in my stomach.

"After eating I would have pains in my stomach with a smothered feeling which would finally extend into my throat and chest accompanied by a choking sensation.

"I began to bloat all over and my hands and feet commenced swelling until I thought I had dropsy.

"In a short time I had pain and soreness in my left side which extended across my back accompanied by dizziness, and then followed severe paroxysms of pain extending from the lower part of my stomach into the region of my heart.

"During these spells a hard ridge as large as my arm would appear in the left side of my stomach and around the left side.

"I had a feeling of heaviness in my head and at times could scarcely hold it up or keep my eyes open, yet when night came I could not sleep.

"I also suffered intensely from female trouble.

"I doctored with ten different physicians, but was not benefited. No two of the doctors diagnosed my case the same.

"One day my husband noticed an article regarding Dr. Williams' Pink Pills for Pale People in the newspaper, and induced me to try the pills.

"I began taking them, but experienced no relief until I had used the sixth box. I continued taking them and after using eleven boxes was greatly benefited.

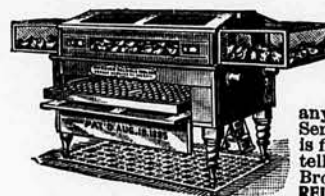
"I was also troubled with nervous prostration and numbness of my right hand and arm. My hand hurt so at times, tingling and burning, that I could hardly endure the pain, but that has all passed away.

"I now know what it means to eat a good meal without suffering afterwards, and enjoy a good night's rest.

"I am again able to do my work, and have done more this summer than in all the last four years put together.

"I feel safe in saying that it is all due to Dr. Williams' Pink Pills for Pale People, and consider it my duty to let people know what these pills have done for me, as it may be the means of relief for others who are suffering."

Diseases strange to physicians; symptoms that defied diagnosis, have succumbed to the potent influence of Dr. Williams' Pink Pills for Pale People. Druggists everywhere consider them to be one of the most valuable remedial agents known to science.



ALWAYS SUCCESSFUL. WITH OUR Incubator and Brooder

any one can make a success of poultry raising. Send 10 cents for 228-page Poultry Catalogue. It is filled with valuable pointers and illustrations. It tells all about our famous Reliable Incubators and Brooders. We sell poultry supplies of all kinds too. RELIABLE INC. AND BROODER CO. Box B 62, Quincy, Ill.

PREVENT HOG CHOLERA.

YOU WILL NEVER LOSE A HOG

by hog cholera or swine plague if you use CHLORO-NAPHTHOLEUM as directed. We guarantee it to prevent these diseases and cure them in the earlier stages. Don't wait until your hogs are sick, but get a gallon at once and you will never be without it. A sample gallon for \$1.50 freight prepaid.

Chloro-Naphtholeum is the most wonderful non-poisonous germicide and disinfectant. Be sure and send for our free booklet, which is a scientific treatise of great value to all breeders. Responsible agents wanted.

212 E. 87th St., N. Y. City.
WEST DISINFECTING CO., 2361 Indiana Ave., Chicago.

BLACK LEG

PREVENTED BY

PASTEUR "VACCINE."

Write for particulars, prices and testimonials of thousands of American stockmen who have success fully "vaccinated" their stock during the past three years in Dakota, Nebraska, Wyoming, Colorado, Kansas, Texas, etc.

PASTEUR VACCINE CO., 52 Fifth Avenue, CHICAGO.

THE KANSAS CITY STOCK YARDS

—ARE THE—
FINEST EQUIPPED, MOST MODERN IN CONSTRUCTION AND AFFORD THE BEST FACILITIES

For the handling of Live Stock of any in the World.

THE KANSAS CITY MARKET

Owing to its Central Location, its Immense Railroad System and its Financial Resources, offers greater advantages than any other in the Trans-Mississippi Territory. It is the Largest Stocker and Feeder Market in the World, while its great packing house and export trade make it a reliable cash market for the sale of Cattle, Hogs, and Sheep, where shippers are sure to receive the highest returns for their consignments.

	Cattle and Calves.	Hogs.	Sheep.
Official Receipts for 1897	1,921,962	3,350,796	1,134,236
Sold in Kansas City 1897	1,847,673	3,348,556	1,048,233

C. F. MORSE, Vice Pres. and Gen. Mgr. E. E. RICHARDSON, Secy. and Treas. H. P. CHILD, Asst. Gen. Mgr. EUGENE RUST, Traffic Manager.

WHEN WRITING ANY OF OUR ADVERTISERS PLEASE MENTION KANSAS FARMER.

Coming Poultry Shows.

Kansas State Poultry Association.—J. W. F. Hughes, Secretary. At Topeka, January 9 to 14, 1899. C. H. Rhodes, judge.

Wichita, State Fair, Kansas. H. O. Toler, Secretary, Wichita, Kas. September 19-24, 1898. C. H. Rhodes, judge.

Garden City Poultry and Pet Stock Association.—A. S. Parson, Secretary, Garden City, Kas. Show September 13-16, 1898. C. H. Rhodes, judge.

Ablene Poultry and Pet Stock Association.—Roy O. Shadinger, Secretary, Abilene, Kas. Second annual exhibit, at Abilene, January 25-28, 1899. Theo. Sternberg, judge.

Butler County Fancy Poultry and Pet Stock Association.—C. H. Pattison, Secretary and Treasurer, El Dorado, Kas. Second annual exhibit at El Dorado, Kas., December 20-23, 1898. C. H. Rhodes, judge.

Topeka Fanciers' Association.—L. V. Marks, Secretary, Topeka. Exhibit January 9-14, 1899, in connection with State show.

Horton Poultry Show.—J. Chase, Willis, Kas., Secretary. November 21-24, 1898. C. H. Rhodes, judge.

Northwest Missouri Poultry Association.—R. V. Glenn, Kingston, Mo., Secretary. Kingston, Mo., November 24-26, 1898. C. H. Rhodes, judge.

Ottawa County Poultry Association.—Mrs. D. Collister, Bennington, Kas., Secretary. Bennington, Kas., November 28-30, 1898. C. H. Rhodes, judge.

Manhattan Poultry Association.—S. J. Norton, Manhattan, Kas., Secretary. Manhattan, Kas., December 1-3, 1898. C. H. Rhodes, judge.

Mitchell County Poultry Association.—A. Whitney, Beloit, Kas., Secretary. Beloit, Kas., December 6-10, 1898. C. H. Rhodes, judge.

Smith County Poultry Association.—S. C. Stevens, Smith Center, Kas., Secretary. Smith Center, December 12-13, 1898. C. H. Rhodes, judge.

Arkansas Valley Poultry Association.—Mrs. H. P. Swedfeger, Wichita, Kas., Secretary. Wichita, Kas., December 13-18, 1898. C. H. Rhodes, judge.

Garfield County Poultry Association.—A. F. Rusmiser, Enid, Okla., Secretary. Enid, Okla., December 24-25, 1898. C. H. Rhodes, judge.

Chase County Poultry Association.—C. M. Rose, Cottonwood Falls, Kas., Secretary. Cottonwood Falls, December 27, 1898, to January 1, 1899. C. H. Rhodes, judge.

Rooks County Poultry Association.—N. N. Neher, Stockton, Kas., Secretary. Stockton, Kas., January 2-5, 1899. C. H. Rhodes, judge.

Glascow Poultry Association.—M. E. Potts, Glasco, Kas., Secretary. Glasco, Kas., January 5-7, 1899. C. H. Rhodes, judge.

Central Oklahoma Poultry Association.—H. F. Stephenson, Kingfisher, Okla., Secretary. Kingfisher, Okla., January 16-21, 1899. C. H. Rhodes, judge.

See that the new poultry house, if you are going to build one, is finished before cold weather.

POULTRY SUPPLIES.

The Peerless brand of Crushed Oyster Shells Bone Mills, Tarred Roofing, poultry foods and remedies. Poultry Netting, etc., etc. Write for price list to T. Lee Adams, 417 Walnut street, Kansas City, Mo.

ITALIAN BEES.

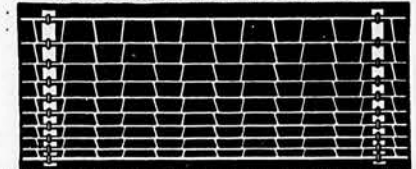
Bred from queens imported from Italy. Full colonies; two, three and four frame nucleus shipped anywhere and safe arrival guaranteed. We ship Bees any time from March to November. Queens, hives and supplies generally.

A. H. DUFF, Larned, Kas.



We make Steel Windmills, Steel Towers and Feed Grinders and are selling them cheaper than the cheapest. Our productions are standards; are first-class in every respect and are sold on trial. Send us a postal and we will tell you all about them.

CURRIE WINDMILL CO., Manhattan, Kas.

FENCE YOUR FARM
With a Good Fence Cheaply.

THE ADVANCE WOVEN WIRE FENCE which is sold direct to the farmer, freight paid, we believe to be the best fence made for the money. Our plan of selling saves the farmer the dealer's profit and brings the fence to a price that beats the hand fence machine both for cheapness and quality of fence. A continuous fence; all the wires being interwoven—no loose ends; the wires can't slip. Prices way down. Send for our new circulars and extra special discount to farmers.

ADVANCE FENCE CO., 18 Old St. Peoria, Ill.

GOODHUE



Self-oiling, Best Governed, Acknowledged to be the most powerful and durable made. We have everything the farmer needs in this line. **Towers, Tanks and Pumps, Outlets, Grinders, Shellers, etc.** **POWER AND PUMPING MILLS** Catalogue, full of valuable points, free. **Appleton Mfg. Co.** 19 Fargo St., BATAVIA, ILL.



ON THE BIAS.

That's the secret of the S.A. Bias Girth Horse Blankets. The girth is on the bias—that means crossed. It works automatically. The blanket can't slip. If you pull one side, the other side keeps the blanket from sliding, and yet it doesn't bind the horse. He couldn't displace it if he rolled in it.

Bias Girth

Horse Blankets are made in all styles—to fit any horse—to suit any purse. Ask your dealer for S.A. Bias Girth Blankets, and look for the trademark. A book on the subject sent free.

W.M. AYRES & SONS, Philadelphia.

Port Arthur's Prosperity Is Based on Business

Over 12,000 tons of export and import freight now being handled over its docks per month.

Three steamship lines now running to British, Continental and Mexican ports.

Over one-half the canal completed to a depth of sixteen feet.

One hundred thousand dollars' worth of property sold in March.

Go to Port Arthur and see what the backing of a 1,227 mile trunk line means.

For information write to

F. A. HORNBECK,
General Manager
Port Arthur Townsite Co.,
KANSAS CITY, MO.

Administrators' Sale of Real Estate.

Pursuant to the will of the late David R. Youngs, I offer at private sale all the real estate belonging to his estate, as follows: 1. The "Home Place" w. hf. of nw. qr. sec. 26, and e. hf. of ne. qr. sec. 27, t. 12, r. 15, 160 acres. Contains good house, barn and sheds, outhouses, corrals, wells and cisterns, wagon scales, three orchards, and all appurtenances constituting a first-class farm. About 130 acres plow land, 12 acres clover, 5 acres alfalfa, remainder pasture land, timber land and creek, all well and conveniently fenced. Price, \$8,000. Terms, one-third cash, one-third in two years and balance on long time. Interest on deferred payments 7 per cent. per annum, secured by mortgage.

2. Also the e. hf. of nw. qr. of said sec. 24 80 acres. About 40 acres first-class plow land and about 40 acres hay land. Well and separately fenced. Price, \$3,200 Terms same as above.

3. Also about 101 acres of pasture land in one body, well fenced and well watered, being nw. qr. of ne. qr. f. l. and sw. qr. of ne. qr. f. l. of said sec. 27, and about 34 acres off the east side of the nw. qr. f. l. of said sec. 27. Price \$20 per acre. Terms same as above.

4. Also about 101 acres of good prairie hay land, being w. hf. of nw. qr. f. l. of said sec. 27, and about 34 acres off the west side of the e. hf. of nw. qr. f. l. of said sec. 27. Price \$25 per acre. Terms same as above.

5. All of the above described land lying contiguous and constituting one large and complete farm and situated about seven miles southwest of Topeka near the Burlington road, will be sold together for \$15,000, on the same terms already stated.

6. Also 42 acres in se. qr. of sec. 9, t. 12, r. 15, near Six Mile creek. Mostly first-class plow land; well fenced. Small house and some other improvements. Price \$1,250. Terms same as above.

For further information write or call on the undersigned at his office, Bank of Topeka building, Topeka, Kas.

CHAS. F. SPENCER,
Administrator, with will annexed, of said estate.

QUIT PAYING TOLL

and get a French Burr Stone Mill. Grinds any kind of grain for stock feed, table meal, buckwheat, rye and graham flour for family use. Thousands of our mills are in use giving the best satisfaction. Easiest to handle. Largest capacity. Less power. It will pay you to get one.

Send for new book on Mills and sample meal.

NORDYKE & MARION CO., Flour Mill Builders,

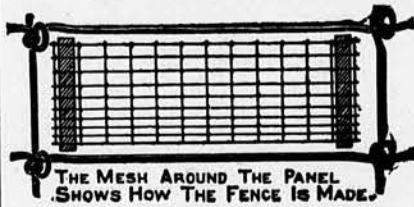
285 Day St., Indianapolis, Ind.



THE "DEWEY" AUTOMATIC STOCK WATERER.

Every objection to hog waterers overcome. Valve eight inches in water; can not freeze; has a brass float which can not rust, water log, or allow mud to collect under it. Attachable to tank, barrel, box or pipe. Will water three hundred hogs a day, any number of sheep, calves, chickens, ducks, horses and cattle. Sent on trial, express prepaid, to be paid for if satisfactory. Costs nothing to try. Send for one. Our offer means something. Costs twice as much to manufacture as any other; retails the same, \$3.00. Address,

STOCK FOUNTAIN CO., LAKE CITY, IOWA.



THE MESH AROUND THE PANEL SHOWS HOW THE FENCE IS MADE.

distributed throughout each foot of fence is, in effect, the same as placing one coil of a spiral spring in every foot throughout the entire length of fence, BESIDES GREATLY STRENGTHENING IT. Our Loop Knots make the fence plainly visible and impossible for stay wire to slip or give. It is Hog tight and Bull strong. Will turn all kinds of stock without injuring them.

Where we have no agents a liberal discount will be given on introductory order. Reliable farmer agents wanted in every township. Send for catalogue and prices.

Pittsburg Woven Wire Fence Co., Pittsburg, Pa.

PERFECT FARM FENCE Made of best doubly steel wire. Top and bottom wires No. 9. All other wires No. 11. We use the strongest stay wire in any woven wire fence on the market—hence more strength and durability.

Our **LOOP KNOT** (entirely new feature, patented) provides perfect expansion and contraction and keeps it tight at all temperatures. Our Loop Knot being uniformly distributed throughout the entire length of fence, it is Hog tight and Bull strong.



Loop Knot.

LIGHTNING HAY PRESS



Special prices. Kansas City Hay Press Co., 101 Mill St. Kansas City, Mo.

FAIRBANKS' STANDARD SCALES.

—FOR—

Stock, Hay, Coal, Etc.,
Mills, Elevators,
Warehouses.

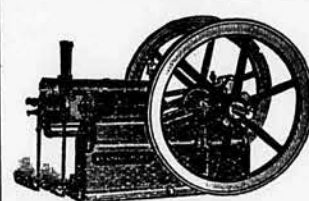
Send for Catalogue.

WINDMILLS.

Eclipse Wood Wheel and
Fairbanks' Galvanized Steel
FOR PUMPING OR GRINDING.

Towers, Tanks, Water-works
and Irrigation Supplies.

Send for Catalogue.

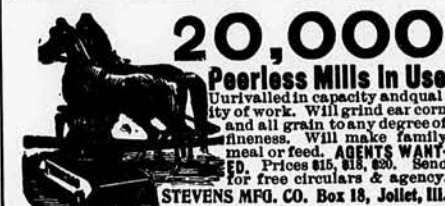


FAIRBANKS-MORSE
GAS AND GASOLINE
ENGINES.

Especially built for Threshing, Pumping, Grinding and general services. Estimates made and complete plants installed.

FAIRBANKS, MORSE & CO.,

1217-19 Union Ave., KANSAS CITY, MO



20,000

Peerless Mills in Use

Unrivalled in capacity and quality of work. Will grind ear corn and all grain to any degree of fineness. Will make family meal or feed. AGENTS WANTED. Prices \$15, \$25, \$35. Send for free circulars & agency.

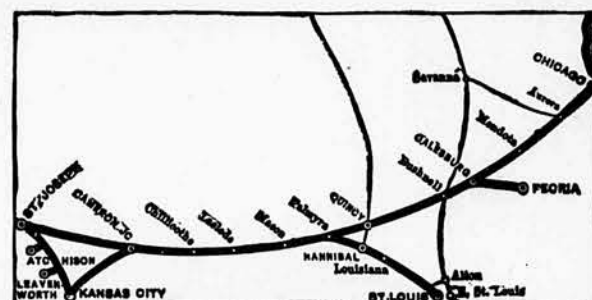
STEVENS MFG. CO. Box 18, Joliet, Ill.

When writing advertisers please mention Kansas Farmer.



Sold under an absolute guarantee to do double the amount of work of any other mill of same size or money refunded. Write for circulars and prices.

DAIN MFG. CO., Carrollton, Mo.



Burlington
Route

**BEST
TRAINS**

**VESTIBULED "ELI" TO CHICAGO.
VESTIBULED LIMITED TO ST. LOUIS.**

FREE CHAIR CARS, LATEST PATTERNS OF SLEEPERS.
W. WAKELEY, O. P. A., St. Louis, Mo. J. C. RAMHALL, T. P. A., St. Joseph, Mo.

ALFALFA SEED FOR FALL SOWING

McBETH & KINNISON, GARDEN CITY, KANSAS,
Wholesale and Retail Seedsmen.

Send for Our Free Manual on the King of Forage Plants.

THIRD ANNUAL SALE**60 Pedigreed Poland-Chinas**

MONDAY, OCTOBER 24, 1898,

At my Farm in Jackson Co., Mo., 30 miles east of Kansas City, 4 miles north of Oak Grove, on C. & A. R. R., and 7 miles southwest of Napoleon, on Mo. P. R. R.

Where I will offer sixty head of pedigreed Poland-Chinas, consisting of ten fall and winter boars and sows and fifty head of early spring pigs, about equally divided as to sex. They are the get of Model Boy 18545 S., Chief Tecumseh 2d 9115 S., Western Wilkes 12846 S., Chief I know 11992 S., Chief I Am 14056 S., Black Chief's Rival 36271 A., Allerton's Tecumseh 37095 A., Model of 97 20158 S., Hands Off 37791 and Joe Dandy 20652 S. About one-third are by my \$1,000 boar, Model Boy. There are also two litters, 4 boars and 7 sows, by Chief Tecumseh 2d. My tried and very successful herd boar, Western Wilkes 12846 S., will be included with the offerings. Myself and others who have visited me consider this the best individual and most fashionably bred offering I have yet sold, this being my sixth public sale. Everything guaranteed as represented on sale day. Visitor, will find free accommodations at either of the Oak Grove hotels, and free transportation from either Oak Grove or Napoleon to and from the sale. Usual sales day lunch at noon. Sale to begin promptly at 1 o'clock p. m. A copy of the illustrated sale catalogue sent free on application.

FOR TERMS OF SALE see catalogue. Bids can be sent to Colonel Sparks, the auctioneer, addressed in my care.

E. E. AXLINE,
Oak Grove, Mo.

COL. JAS. W. SPARKS, Auctioneer.

W. E. SPEARS

RICHMOND, KAS.

For Sale—22 Head of Herefords.

Five registered cows—Lord Wilton and Anxiety—bred to Dial 3d No. 71453; fifteen grade cows, all bred; one yearling bull, Lord Wilton and Anxiety; one five-year-old bull, sired by Banker No. 1324, by Illinois No. 920 (5396).

WRITE FOR PARTICULARS.**Public Sale of Poland-Chinas!**

—AT—
ROSE CREEK FARM

On Wednesday, November 2, 1898.

Sixty-five head of selected boars and choice gilts eight to fourteen months old.
Take Rock Island or U. P. railroad for Belleville, Kas. Send for catalogue.

H. WOODFORD, Mgr., Chester, Neb.

GREAT Short-horn Cattle Sale!

Don't fail to attend the annual sale of Short-horn Cattle, to be held at

Kansas City, Mo., Nov. 22, 1898.

—BY—

GEO. BOTHWELL,
Of Nettleton, Missouri,

BREEDER OF

**THICK-FLESHED, EARLY-MATURING
SHORT-HORN CATTLE.**

Watch for further announcements.

**PUBLIC SALE
Thursday, Oct. 27,**

**400 Unregistered Hereford
heifer calves from the**

**ADAIR
HEREFORD
HERD**

OF PALODURO, TEXAS,

—AT THE—
**STOCK YARDS SALE PAVILION
Kansas City, Mo.**

COLS. J. W. JUDY and F. M. WOODS, Auctioneers.
For descriptive circular and particulars address

RICHARD WALSH, Paloduro, Tex.,
or **T. F. B. SOTHAM,** Chillicothe, Mo.

HARNESS BEST QUALITY FOR LESS
MONEY THAN ANY OTHER CONCERN ON EARTH.
BAR NONE. LARGE ILLUSTRATED CATALOGUE, No. 24, FREE
TILLOTSON BROS., CHICAGO

J. G. Peppard

1400-2 Union Avenue,
KANSAS CITY, MO.

**MILLET
CANE
CLOVERS
TIMOTHY
GRASS SEEDS.**

SEEDS**RIDGEWOOD & HEREFORDS.**

RIDGEWOOD FARM, LEAVENWORTH CO., KAS.

This herd was started in 1882 by Mr. Lucien Scott, president of the First National bank of Leavenworth, and no expense was ever spared by him to keep it up to the highest standard of breeding. Since 1893 it has been owned by Mr. Scott's widow and Charles N. Whitman. It is made up entirely of Grove 3d, Lord Wilton and Anxiety strains. For many years past Star Wilton 18th 33254 has been at the head of the herd, with Duke of Cumberland 53058 and Bratnord 41770 as assistants; and now the imported bull Soudan 75136 Vol. XVIII is at the head of the herd, with imported bull Randolph 79299 Vol. XVIII, Hesiod 20th 61363, old Star Wilton 18th 33254, Tom Beau Monde 71126 and Jonathan 71072 as assistants.

125—Head of Young Stock—125

WILL BE SOLD AT PUBLIC AUCTION AT THE

KANSAS CITY STOCK YARDS SALE BARN

OCTOBER 31 and NOVEMBER 1, 2 and 3, 1898.

Also 500 HEAD OF HIGHEST GRADE HEREFORD CALVES (mostly heifers) from the celebrated L. S. RANCH Catalogues now ready.

COL. F. M. WOODS, } Auctioneers.
COL. S. A. SAWYER, }

Address **R. W. BROMELL, Mgr.,**

Ruble, Leavenworth Co., Kas.

DISPERSION SALE OF POLAND-CHINAS

At Farm, Seven Miles North of Stanberry, Gentry Co., Mo., Thursday, October 20, 1898.

80 HEAD, consisting of herd boars, tried brood sows, fall yearling sows, fall yearling boars and spring boars and sows. This is strictly a closing-out sale and every good animal on the farm will be sold. The special attraction will be the four great herd boars, Iowa Chief, Hadley 2d, Look's Chip and Star Tecumseh. No other herd can boast of four such boars. Iowa Chief, by Chief Tecumseh 2d, dam Belle Tecumseh by Square Tecumseh, and said by W. A. Jones to be the greatest son of Chief Tecumseh 2d; Hadley 2d, by Hadley, dam Queen Klever 4th, by Look Me Over. Star Tecumseh, a crack yearling boar by Chief Tecumseh 2d. Among the sows in the offering will be Free Trade's Delight, with fall litter by Hadley 2d, also one fall of 1897 boar, and one sow out of her and by Look Me Over; Lady Butler with fall litter by Iowa Chief, four yearling sows by Look Out, Flora Wilkes by Noxall Wilkes, with fall litter by Iowa Chief; Belle Tecumseh by Virgin Wilkes Tecumseh with litter by Hadley 2d; also three fall of 1897 boars by Look Me Over, Dandy Maid by Dandy Wilkes, one sow by Geo. Wilkes, one by Black U. S., two by Chief Tecumseh 2d, three gilts by Chief Tecumseh 2d; also a number of yearling sows by Look Out, Iowa Chief, Hadley 2d, Hands Off and other good boars; five fall of 1897 boars by Chief Tecumseh 2d. Some of the sows will be bred and some will be sold open. Everything will be guaranteed breeders, and a special guarantee will be placed on the four herd boars. Send for catalogue.

COL. F. M. WOODS, Auctioneer.

J. A. JUDD, Stanberry, Missouri.

**Armour Sale
Hereford Cattle.**

On Tuesday and Wednesday, October 25th and 26th, 1898, at **Kansas City Stock Yards Sale Barn**, I will make my first public sale of Herefords. The lot will consist of about thirty-five bulls and seventy-five cows and heifers, selections from my own herd and three importations made during the past year. Many cows will have calves at foot and all but a few will be bred. I have put into the sale as good as I have kept and have kept as good as I have put in.

Catalogues now ready.

K. B. ARMOUR, Kansas City, Mo.

The well-known auctioneers, Col. J. W. Judy, Col. F. M. Woods, Col. J. W. Sparks and Col. S. A. Sawyer, will be in charge.

4,500 — Registered and High-Grade — 4,500

HEREFORD CATTLE

Known as the Geo. H. Adams Herd, San Luis Valley, Colorado. The entire herd, including Registered, Pure-Bred and High-Grades, until further notice, will be offered at **PRIVATE SALE**,

IN LOTS TO SUIT PURCHASERS.

The herd, now aggregating about 4,500 head, consists of 450 Registered and Pure-Breds of the best and most fashionable families, whose progenitors and present representatives were selected from the best herds in this country and England. In this division there are over 100 serviceable bulls. The High-Grade division is pronounced one of the best in this country and consists of 1,050 cows, 90 per cent of which are seven-eighths pure-blood or better; 220 two-year-old heifers, 200 yearling heifers, 600 bull calves, 800 heifer calves and 350 off-colored individuals. **THIS OFFERING** will afford the cattlemen of the country an opportunity for fitting up small herds and arranging to breed their own stock bulls.

REASONS FOR SELLING AT THIS TIME: Having been actively engaged in the live stock business for twenty-nine years and always looked personally after the welfare of my live stock interests, I have concluded that age and health calls for a retirement, hence for these reasons, and these only, do I make this announcement.

Cattle delivered free of expense on board cars at Moffat, Colo., on the D. & R. G. R. R. Farm connected by telephone at Moffat. Prospective buyers will find free hotel and livery accommodations at Moffat. Persons interested in Herefords or are desirous of becoming so will be welcome at our headquarters at Omaha, Neb., where our show herd will be on exhibition during the live stock exhibit, October 3 to 20, 1898, under the auspices of the Trans-Mississippi and International Exposition. **TERMS:** Cash or part cash, with time when satisfactory arrangements can be made. For further particulars address

GEO. H. ADAMS, Crestone, Saguache Co., Colo.