

KANSAS FARMER

For the improvement



of the Farm and Home

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THE FARM BOYS HIKE

Over Fifty Embryo Montgomery County Farmers Visit Best Farms of County

THIRTY-FIVE of the best farms in Montgomery County were visited by the boys who took part in the annual farm bureau hike, August 15, 16 and 17. There were fifty-two boys in the party and in spite of the rain and muddy roads the boys stayed with it to the end of the trip. They traveled thirty-three miles on foot and fifteen miles by interurban.

District Agricultural Agent Carl G. Elling of Southeast Kansas and Agricultural Agent H. L. Popenoe of Lyon County assisted E. J. Macy, agricultural agent for Montgomery County, in conducting the tour. Professor Tomlinson of the Independence city schools had charge of the sports, while Frank DeHart, a local chef, took care of the feeding of the aggregation, which proved to be quite a job. The boys were very kind in assisting with this work.

Early on the morning of the first day the party gathered at the city hall at Independence, where the plan of the trip was outlined by Mr. Macy. The boys were then divided into three companies, each company being placed under the leadership of one of the agricultural agents. Three different routes were traveled on the first day of the hike and when the parties came together they told each other of the points of interest they had seen.

The trip through the Western States Cement Plant was of great interest to the boys, many of whom saw for the first time the manufacture of cement. At the Aganippe Spring Farm, Company "A" saw an exceptionally fine acreage of sweet potatoes and a well constructed sweet potato storage house. Company "C" visited the Griffin farm and was shown a fine herd of Poland China hogs and given many practical pointers in hog raising. Corn, wheat, and alfalfa are the crops grown on this farm. In the afternoon of the first day two companies visited Mr. Bressie's round barn. This barn is sixty feet in diameter and fifty-eight feet from the floor to the comb of the roof and is a very good example of this type.

At the Reardon orchard one of the companies inspected the apple trees which had previously been found to be infested with cherry and San Jose scale. All parties met at the Ellis farm, which had recently been purchased by Jerome Travis for \$37,000. The wheat on this farm averaged fifty bushels to the acre and the methods practiced to obtain this yield were studied by the boys. This farm has a modern waterworks system with hydrants at the barn and in the orchard and complete equipment in the house. It also has two splendid peach orchards and two vineyards.

Much interest was taken in the hog raising equipment on the Ellis farm. Mr. Ellis markets annually from four to six carloads of hogs. The 30 x 98-foot hog house is arranged with pens on either side of the alleys through the center, each pen opening into an outside run. The device used on this farm for castration of pigs is very unique and practical. It consists of a small table, about thirty-six to forty inches in height, to which is fastened a leather band that holds the pig firmly on the table. This band is placed over the pig's

belly and is held down by the operator's foot. The proprietors of the farm gave a demonstration of the method of using this castration table.

Almost the entire section visited from the Ellis farm to the end of the trip was in the best orchard land in Montgomery County. It is also in the watermelon growing section, which fact was of special interest to the boys. The adaptability of the soil for these crops was noted especially on the farm of Ernest Miller & Sons northwest of Coffeyville. Mr. Miller has a demonstration orchard under the direction of the Agricultural College. With the help of his sons he has constructed a power sprayer and they have sprayed the orchard under the supervision of George O. Greene, horticulturist of the extension division.

Two irrigation systems are being tried out on the Miller farm. Mr. Miller says the overhead spraying system is especially adapted for early watering where there is need to break the soil. The other was a sub-irrigation system using lines of drain tile every fifteen feet to carry the water. He prefers this latter system when any great quantity of water is needed by the growing crop. The crops noted here were the eggplant, different varieties of tomatoes, different varieties of sweet potatoes, and the effect of prepared tree paint on peach trees. Mr. Miller's son Gus gave a budding demonstration which proved a very interesting feature to the boys. This farm made an impression because of its neat appearance, and the hospitality extended to the boys will long be remembered. Roasting ears, grapes, watermelons, cantaloupes, two pounds of butter, and five dozen hot rolls were added to the commissary.

At the Cline farm the boys were given work in the selection of horses, a pure-bred Percheron mare purchased at the Percheron sale at Manhattan last February being used as an object lesson. This mare is an unusually fine specimen of the breed, and gave the boys a good type to keep in mind when either selecting or judging horses.

On Thursday, the second day of the tour, the march was made through mud and rain. The boys arrived at the Bushnell farm about six o'clock, and after drying out their clothes and getting a good supper, turned in for a long night's sleep only to be interrupted about midnight by heavy showers.

Mr. Bushnell has a splendid herd of pure-bred Shropshire sheep, and the boys were made acquainted with the points of good sheep. They were also told how to avoid trouble from stomach worms, these parasites being most troublesome to the lambs. Mr. Bushnell gave a demonstration of the method of drenching a lamb, showing how to give it a dose of medicine without strangling. The party also inspected his herd of pure-bred Herefords, his gambrel-roof barn, and hollow tile silo.

At the Banks farm, which is managed by C. W. Conrad, the boys found one of the best producing orchards in the county. It has a wonderful set of fruit and shows effects of the spraying work that has been done in demonstrations conducted by the farm bureau. The boys were shown a tree that the county agent had pruned last spring and the differences between it and the adjoining trees of the same variety were noted. The apples were larger and of better color and the tree presented a more thrifty appearance.

At Walker's a 42 x 84 barn was inspected, giving special attention to its tile roof. At the Wheeler farm near Jefferson a dozen melons awaited the company. After these were put where all good melons go, Mr. Wheeler showed his system of raising White Leghorn chickens. He told of his start about fourteen years ago with eleven pullets and one rooster and said that at the present time, even with the high price of feed, his flock is making him a nice little sum for the bank each month. Mr. Wheeler also has a splendid patch of cowpeas which were noted.

On the farm of W. D. Godwin the boys had an unusual opportunity to inspect Jersey cattle, his herd being one of the best in this section. Two of the indi-

viduals in this herd came in for special study. One of these had been in the Southwestern Dairy Show at Kansas City last fall and was a remarkably fine specimen of the breed. Mr. Popenoe, county agent of Lyon County, indicated the points to consider in the selection of dairy cows.

At the Ewing farm south of Independence the boys found one of the most interesting places visited on the trip. They inspected Mr. Ewing's dairy barn, his silos and his herd of Holstein cattle and noted the operation of his milking machine. This was very interesting as well as practical to the boys. A class of three aged cows was brought out and the boys tried putting into practice what they had learned about selecting dairy cows. Mr. Ewing's farm was the last one visited. From there the boys took the interurban car for Independence, arriving there at 4:15 the afternoon of the third day of the tour, having traveled thirty-three miles on foot and fifteen miles by the interurban car and having visited thirty-five farms and noted points of interest on all those passed, which amounted to over sixty.

The total expense of a trip of this kind amounts to a trifle over one hundred dollars, the most of this being for foods consumed. With the exception of one place on the route the boys were well received. This is a very practical method of calling the attention of our young people to the best agricultural practices of the section in which they live. Judging from the number of boys who have taken the three hikes, it is evident that they consider it a splendid outing as well as an opportunity to study practical farm methods as followed by the best farmers of the county.

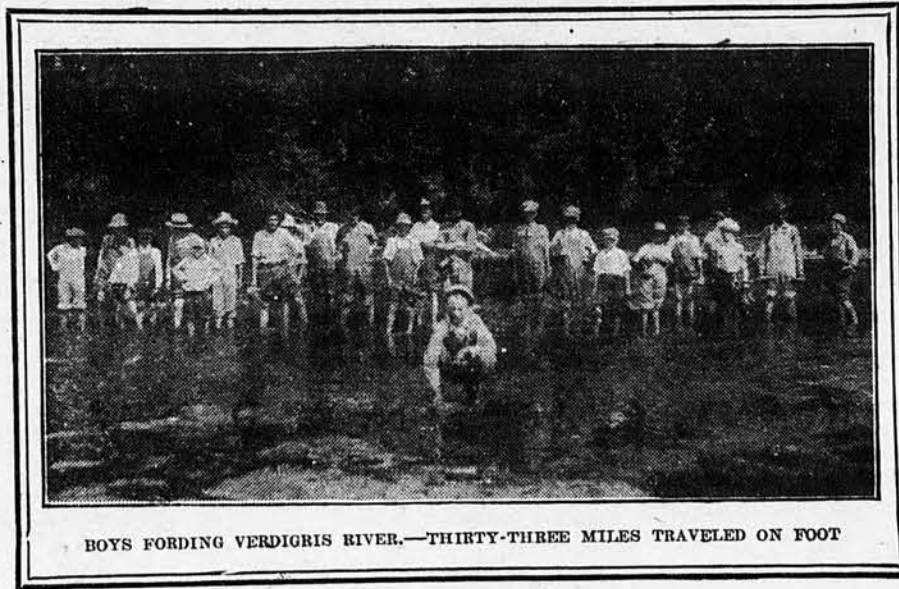
Kansas Movie in East

It is rather interesting to learn that one copy of the motion picture film, "Winning with Wheat," prepared by the Kansas Council of Defense and already shown to large audiences in 200 Kansas "movie" houses, is doing service for the Red Cross in Massachusetts this week. Edward C. Johnson, dean of the division of extension in the agricultural college, who is in Massachusetts, is using the film in a Red Cross benefit lecture on Kansas and the war in Medway and Franklin, Mass. L. E. Call, professor of agronomy, is showing the film at New Bedford, Mass., in a Red Cross benefit performance. Mr. Johnson and Mr. Call are on vacation trips.

The Red Cross chapters at all three points requested to have the film shown as a demonstration of some things the great producing section of the United States is doing in this war.

Demand for Better Cows

In Harvey County, respite the early dry weather and threatened scarcity of feed, there is a good demand for dairy cows, especially among farmers who now have a few cows of dairy breed. F. P. Lane, agricultural agent, and three of his farm bureau members spent one day of last week in Sedgwick County where eight head of dairy cattle were bought for one farmer, and three cows for another.



BOYS FORDING VERDIGRIS RIVER.—THIRTY-THREE MILES TRAVELED ON FOOT



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with remedies and complete Charts of Recommendations for Automobiles, Motorcycles, Tractors and Marine Engines.



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In buying Gargoyle Mobiloils from your dealer, it is safest to purchase in original packages. Look for the Red Gargoyle on the container. If the dealer has not the grade specified for your car, he can easily secure it for you.

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Gargoyle Mobiloil "A"
Gargoyle Mobiloil "B"
Gargoyle Mobiloil "E"
Gargoyle Mobiloil "Arctic"

In the Chart below, the letter opposite the car indicates the grade of Gargoyle Mobiloil that should be used. For example, "A" means Gargoyle Mobiloil "A," "Arc" means Gargoyle Mobiloil "Arctic," etc. The recommendations cover all models of both pleasure and commercial vehicles unless otherwise noted.

This Chart is compiled by the Vacuum Oil Co.'s Board of Engineers and represents our professional advice on Correct Automobile Lubrication.

Model of	1917	1916	1915	1914	1913
CARS	Summer	Winter	Summer	Winter	Summer
Abbott-Detroit (8 cyl.)	Arc	Arc	Arc	Arc	Arc
Allen	A	A	A	A	A
Apperson (8 cyl.)	A	A	A	A	A
Autumn (8 cyl.)	A	A	A	A	A
Autocar (8 cyl.)	A	A	A	A	A
Birco	A	A	A	A	A
Buick (8 cyl.)	A	A	A	A	A
Cadillac (8 cyl.)	A	A	A	A	A
Carr	A	A	A	A	A
Chalmers (Mod. 6-40)	A	A	A	A	A
Chandler Six	A	A	A	A	A
Chevrolet (8 cyl.)	A	A	A	A	A
Cole	A	A	A	A	A
Cummins (8 cyl.)	A	A	A	A	A
Dart (Mod. C)	A	A	A	A	A
DeSoto (8 cyl.)	A	A	A	A	A
Dodge (8 cyl.)	A	A	A	A	A
Dort	A	A	A	A	A
Empire (8 cyl.)	A	A	A	A	A
Federal	A	A	A	A	A
Ford (8 cyl.)	A	A	A	A	A
Franklin	A	A	A	A	A
Giant	A	A	A	A	A
Gray-Twin	A	A	A	A	A
Haynes (12 cyl.)	A	A	A	A	A
Hudson	A	A	A	A	A
Hupmobile	A	A	A	A	A
Jaguar (8 cyl.)	A	A	A	A	A
Keaton	A	A	A	A	A
Knight	A	A	A	A	A
Knight (8 cyl.)	A	A	A	A	A
Knight (12 cyl.)	A	A	A	A	A
Land Rover	A	A	A	A	A
Lippard Stewart	A	A	A	A	A
Lucas (Mod. M.V.)	A	A	A	A	A
Lucas (Mod. M.V.)	A	A	A	A	A
Marmon	A	A	A	A	A
Maxwell	A	A	A	A	A
Mearns	A	A	A	A	A
Mitchell	A	A	A	A	A
Mitchell (8 cyl.)	A	A	A	A	A
Moon (8 cyl.)	A	A	A	A	A
National (12 cyl.)	A	A	A	A	A
Oakland (8 cyl.)	A	A	A	A	A
Oldsmobile (8 cyl.)	A	A	A	A	A
Overland	A	A	A	A	A
Packard (12 cyl.)	A	A	A	A	A
Packard (8 cyl.)	A	A	A	A	A
Pontiac	A	A	A	A	A
Pontiac (8 cyl.)	A	A	A	A	A
Pontiac (12 cyl.)	A	A	A	A	A
Pontiac (16 cyl.)	A	A	A	A	A
Pontiac (20 cyl.)	A	A	A	A	A
Pontiac (24 cyl.)	A	A	A	A	A
Pontiac (32 cyl.)	A	A	A	A	A
Pontiac (40 cyl.)	A	A	A	A	A
Pontiac (48 cyl.)	A	A	A	A	A
Pontiac (56 cyl.)	A	A	A	A	A
Pontiac (64 cyl.)	A	A	A	A	A
Pontiac (72 cyl.)	A	A	A	A	A
Pontiac (80 cyl.)	A	A	A	A	A
Pontiac (88 cyl.)	A	A	A	A	A
Pontiac (96 cyl.)	A	A	A	A	A
Pontiac (104 cyl.)	A	A	A	A	A
Pontiac (112 cyl.)	A	A	A	A	A
Pontiac (120 cyl.)	A	A	A	A	A
Pontiac (128 cyl.)	A	A	A	A	A
Pontiac (136 cyl.)	A	A	A	A	A
Pontiac (144 cyl.)	A	A	A	A	A
Pontiac (152 cyl.)	A	A	A	A	A
Pontiac (160 cyl.)	A	A	A	A	A
Pontiac (168 cyl.)	A	A	A	A	A
Pontiac (176 cyl.)	A	A	A	A	A
Pontiac (184 cyl.)	A	A	A	A	A
Pontiac (192 cyl.)	A	A	A	A	A
Pontiac (200 cyl.)	A	A	A	A	A
Pontiac (208 cyl.)	A	A	A	A	A
Pontiac (216 cyl.)	A	A	A	A	A
Pontiac (224 cyl.)	A	A	A	A	A
Pontiac (232 cyl.)	A	A	A	A	A
Pontiac (240 cyl.)	A	A	A	A	A
Pontiac (248 cyl.)	A	A	A	A	A
Pontiac (256 cyl.)	A	A	A	A	A
Pontiac (264 cyl.)	A	A	A	A	A
Pontiac (272 cyl.)	A	A	A	A	A
Pontiac (280 cyl.)	A	A	A	A	A
Pontiac (288 cyl.)	A	A	A	A	A
Pontiac (296 cyl.)	A	A	A	A	A
Pontiac (304 cyl.)	A	A	A	A	A
Pontiac (312 cyl.)	A	A	A	A	A
Pontiac (320 cyl.)	A	A	A	A	A
Pontiac (328 cyl.)	A	A	A	A	A
Pontiac (336 cyl.)	A	A	A	A	A
Pontiac (344 cyl.)	A	A	A	A	A
Pontiac (352 cyl.)	A	A	A	A	A
Pontiac (360 cyl.)	A	A	A	A	A
Pontiac (368 cyl.)	A	A	A	A	A
Pontiac (376 cyl.)	A	A	A	A	A
Pontiac (384 cyl.)	A	A	A	A	A
Pontiac (392 cyl.)	A	A	A	A	A
Pontiac (400 cyl.)	A	A	A	A	A
Pontiac (408 cyl.)	A	A	A	A	A
Pontiac (416 cyl.)	A	A	A	A	A
Pontiac (424 cyl.)	A	A	A	A	A
Pontiac (432 cyl.)	A	A	A	A	A
Pontiac (440 cyl.)	A	A	A	A	A
Pontiac (448 cyl.)	A	A	A	A	A
Pontiac (456 cyl.)	A	A	A	A	A
Pontiac (464 cyl.)	A	A	A	A	A
Pontiac (472 cyl.)	A	A	A	A	A
Pontiac (480 cyl.)	A	A	A	A	A
Pontiac (488 cyl.)	A	A	A	A	A
Pontiac (496 cyl.)	A	A	A	A	A
Pontiac (504 cyl.)	A	A	A	A	A
Pontiac (512 cyl.)	A	A	A	A	A
Pontiac (520 cyl.)	A	A	A	A	A
Pontiac (528 cyl.)	A	A	A	A	A
Pontiac (536 cyl.)	A	A	A	A	A
Pontiac (544 cyl.)	A	A	A	A	A
Pontiac (552 cyl.)	A	A	A	A	A
Pontiac (560 cyl.)	A	A	A	A	A
Pontiac (568 cyl.)	A	A	A	A	A
Pontiac (576 cyl.)	A	A	A	A	A
Pontiac (584 cyl.)	A	A	A	A	A
Pontiac (592 cyl.)	A	A	A	A	A
Pontiac (600 cyl.)	A	A	A	A	A
Pontiac (608 cyl.)	A	A	A	A	A
Pontiac (616 cyl.)	A	A	A	A	A
Pontiac (624 cyl.)	A	A	A	A	A
Pontiac (632 cyl.)	A	A	A	A	A
Pontiac (640 cyl.)	A	A	A	A	A
Pontiac (648 cyl.)	A	A	A	A	A
Pontiac (656 cyl.)	A	A	A	A	A
Pontiac (664 cyl.)	A	A	A	A	A
Pontiac (672 cyl.)	A	A	A	A	A
Pontiac (680 cyl.)	A	A	A	A	A
Pontiac (688 cyl.)	A	A	A	A	A
Pontiac (696 cyl.)	A	A	A	A	A
Pontiac (704 cyl.)	A	A	A	A	A
Pontiac (712 cyl.)	A	A	A	A	A
Pontiac (720 cyl.)	A	A	A	A	A
Pontiac (728 cyl.)	A	A	A	A	A
Pontiac (736 cyl.)	A	A	A	A	A
Pontiac (744 cyl.)	A	A	A	A	A
Pontiac (752 cyl.)	A	A	A	A	A
Pontiac (760 cyl.)	A	A	A	A	A
Pontiac (768 cyl.)	A	A	A	A	A
Pontiac (776 cyl.)	A	A	A	A	A
Pontiac (784 cyl.)	A	A	A	A	A
Pontiac (792 cyl.)	A	A	A	A	A
Pontiac (800 cyl.)	A	A	A	A	A
Pontiac (808 cyl.)	A	A	A	A	A
Pontiac (816 cyl.)	A	A	A	A	A
Pontiac (824 cyl.)	A	A	A	A	A
Pontiac (832 cyl.)	A	A	A	A	A
Pontiac (840 cyl.)	A	A	A	A	A
Pontiac (848 cyl.)	A	A	A	A	A
Pontiac (856 cyl.)	A	A	A	A	A
Pontiac (864 cyl.)	A	A	A	A	A
Pontiac (872 cyl.)	A	A	A	A	A
Pontiac (880 cyl.)	A	A	A	A	A
Pontiac (888 cyl.)	A	A	A	A	A
Pontiac (896 cyl.)	A	A	A	A	A
Pontiac (904 cyl.)	A	A	A	A	A
Pontiac (912 cyl.)	A	A	A	A	A
Pontiac (920 cyl.)	A	A	A	A	A
Pontiac (928 cyl.)	A	A	A	A	A
Pontiac (936 cyl.)	A	A	A	A	A
Pontiac (944 cyl.)	A	A	A	A	A
Pontiac (952 cyl.)	A	A	A	A	A
Pontiac (960 cyl.)	A	A	A	A	A
Pontiac (968 cyl.)	A	A	A	A	A
Pontiac (976 cyl.)	A	A	A	A	A
Pontiac (984 cyl.)	A	A	A	A	A
Pontiac (992 cyl.)	A	A	A	A	A
Pontiac (1000 cyl.)	A	A	A	A	A

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T. A. BORMAN, President and Editor
S. E. COBB, Vice President

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KANSAS FREE FAIR A WINNER

Monday morning, September 10, the Kansas Free Fair for the third time opened its gates to the public without admission charge. The idea of a free gate at a big fair was an innovation in the fair business, and when this Kansas Free Fair Association had the nerve to make the experiment three years ago officials of big fairs and leading exhibitors of the country watched the result with keenest interest. The idea centered around the thought that a big fair was an educational institution and as such should be made absolutely free so that no one need be prevented from getting all the good possible by having to pay for the privilege of attending and studying the exhibits. It is no longer an experiment. The free gate idea has been approved both by the people who attend and by the exhibitors. Those who go to the expense of fitting their products for exhibition are never so well satisfied as when they have a crowd of people around them studying the exhibits and asking questions. The exhibitor is primarily interested in showing his skill to as many people as possible. This is the outstanding feature of the free gate fair. In many of its classes this year's exposition of the Kansas Free Fair breaks all previous records. As we write, the finishing touches are just being given, and before the day closes everything will be in readiness for the people who already are beginning to stream in through the wide open gates.

In hurriedly looking over the exhibits in the live stock department, our attention was first attracted to the fact that the show of draft horses was being made by fifteen or twenty Kansas farmer breeders. The usual horse breeding firms were conspicuous by their absence. This is an indication of the developments certain to take place in breeding draft horses. These men do all their farm work with pure-bred horses and have no difficulty in disposing of the surplus at good prices. Handled in this way the necessary power for conducting farm operations pays for itself. A conspicuous example of this kind of horse breeding is that of the Goodland Stock Farm, of Shawnee County. W. E. Dustin and his son, C. L. Dustin, who have adopted the above name for their farm, are exhibiting twelve head. Two fine mares are in the group that have raised good colts in addition to working hard all the season. One of these mares is only six years old, but now has four filly colts to her credit. Three hundred dollars was recently refused for her yearling. A. P. Loomis, of the Diamond Stock Farm, is showing seven head, among them the three-year-old mare, Francine, the grand champion of the show last year. This mare has five championships and eight blue ribbons to her credit, two of the blues being awarded on groups in which she was shown. Every one of the mares on this farm pays her way in the work performed. Branson & Son, of Overbrook, are on hand with four exhibits headed by their four-year-old iron gray stallion, Hector, that crowded the winning horse for championship last year. Captain Creek Stock Farm, of Baldwin, Kansas, shows mares and colts, all bred and raised on the farm. D. F. McAllister, of Topeka, who showed the champion stallion last year, is another farmer-breeder having ten head in the show this year. A number of others have one or two head each, among them being John Peck, Topeka; R. J. Johnson, St. Marys; W. T. & D. V. Pence, Elmont; O. N. Wilson, Silver Lake; O. P. Bickelhaupt, Silver Lake. Edward Cook, of Freeport, shows four Percheron stallions, and the Kansas section of the Gossard Breeding Estates, Preston, Kansas, shows five year. Barney & Bell, of St. Marys, are the only exhibitors of jacks, and John Bell shows some exceptionally good mules. The largest single

exhibit in the show is that made by David Cooper & Son, of Freeport, Kansas, consisting of twenty-four head of Belgians. This herd is headed by as good a Belgian stallion as has ever been shown in Kansas. Take the show of draft horses as a whole, the quality ranks higher than at any previous fair. There are absolutely no tail end exhibits. The management of the fair decided not to conduct the horse show which has been held for several years. This of course removed one of the spectacular features, but from a strictly practical standpoint it is a feature that could be spared without loss. Owing to the fact that none of the exhibitors had large numbers of entries, there was room enough left in the barn to house the horses of Battery A, which is encamped on the fair ground. In one section of the barn was the usual string of Shetland ponies, the principal exhibitor being R. J. Foster, of Topeka. This section is exceedingly popular with the children.

The cattle barn is well filled. Here as in the horse barn there are no animals not worthy to be shown in such a fair. In the Shorthorn breed there are eleven exhibitors showing almost ninety animals. All but five herds are shown by Kansas farmers. There are now no special Kansas classes, and the Kansas breeders seem well able to compete on fairly even terms with breeders from such states as Iowa or Missouri. Among the Kansas breeders showing are A. L. Harris, Osage City; H. H. Holmes, Topeka; A. F. Kitchen, Burlingame; John Regier, Whitewater; T. J. Dawe & Son, Troy, and Doyle Park Stock Farm, Peabody. The principal out-of-the-state breeders are Rapp Brothers, St. Edwards, Nebraska; William Herkleman, Elwood, Iowa; W. E. Pritchard, Walnut, Iowa, and E. M. Parsons & Son, Carroll, Iowa.

Only two exhibitors are showing Polled Durhams, one being Achenbach Brothers, of Washington, Kansas, and the other Albert Hultine, of Saronville, Nebraska. Both have high class show herds, and the competition will be keen when the judges come to place the ribbons. In point of numbers the Herefords have the largest number of entries in the cattle division, although there are not as many breeders represented as in the Shorthorn breed. Only three out-of-the-state herds of Herefords are being shown. Among the Kansas exhibitors are W. I. Bowman & Company of Ness City; Carl Miller, Belvue; Klaus Bros., Bendena. There are only two entries of Polled Herefords, these being shown by Goernandt Brothers, Aurora. Three strong Angus herds are competing for the prize money—Sutton & Porteous, Lawrence, Kansas; R. L. Kershaw, Muskogee, Oklahoma, and D. K. Robertson & Sons, Madison, Nebraska. H. & G. Croft, of Bluff City, Kansas, show Galloways. This is one of the best herds of Galloways in the country. They have always been winners wherever shown. Breeding stock has been too much in demand for the average breeder to fit and show steers. The Agricultural College is the only exhibitor of steers, ten head being shown representing the Shorthorn, Hereford, and Angus breeds.

In point of numbers the dairy cattle show is smaller than that of some previous fairs. As in the other breeds of stock, however, there is a noticeable absence of inferior animals. This might be taken as an indication that it is being more generally recognized that only the very best of live stock can now be profitably kept. In the Holstein breed the Galloway-Messer Farm Company, of Waterloo, Iowa; David Coleman & Son, Denison, Kansas; J. W. Chestnut & Son, Denison, Kansas; Albechar Holstein Farm, Independence, Kansas, and Mr.

Harris, of Pauline, are the exhibitors. The Coleman herd bull is showing some offspring of high quality. In the Chestnut herd also can be seen evidences of the prepotent power of the herd sire. The Galloway-Messer Farm herd bull was champion of the Free Fair last year, but the Kansas breeders are not willing to concede defeat this year until the ribbons are tied. The Jersey breed is represented by only two exhibitors, Fred Laptad, of Lawrence, showing ten, and G. T. Braden, of Tulsa, Oklahoma, twenty. Johnson of Aulne is showing a Guernsey bull, and the Guernsey bull owned by the Agricultural College is also on exhibition. This college bull is an outstanding animal of the breed and the college is to be congratulated on having such a high class animal at the head of its Guernsey herd. The only exhibitor of Ayrshires is William Galloway, of Waterloo, Iowa. This is one of the good herds of the country. It is to be regretted that they do not have some competition. As usual the three-day milk and butterfat test is being conducted by the superintendent of the dairy department. Nearly all the cows in good flow of milk are entered in this three-day contest. Good money prizes are offered for the winning cows, and in addition a sweepstake prize consisting of a silver cup is offered by the Kansas Farmer Company. In order to hold this cup permanently it must be won three years in succession by the same exhibitor. It is now held by the Genoa Indian School, Genoa, Nebraska.

In spite of the high prices of corn and all kinds of concentrated feeds, the hog men have turned out in such numbers that the hog show is overflowing the barns provided. A mammoth tent in which have been built over a hundred pens is being used to house the overflow from the regular hog barns. One or two other buildings are also being used to house hogs. There are probably over a thousand hogs entered. The Poland Chinas and the Duroc Jerseys are most numerous. In both of these breeds futurity shows under the auspices of their respective record associations are being held. Fifteen exhibitors are showing full herds of Poland Chinas; nine, Duroc Jerseys; four, Chester Whites; three, Berkshires; and five, Hampshires. The fact that a number of breeders of Spotted Polands have come some distance to make this show adds to the interest in the Poland Chinas. A separate record association has been formed for the Spotted Poland Chinas; and they have been given a separate classification. They differ from the ordinary Poland only in the fact that they are liberally spotted with white. Thirteen boys have taken advantage of the opportunity to show pigs which they had fed and handled since birth. These pigs came in from all over the state, some of them from far western counties.

Only four exhibitors are showing sheep this year. The Agricultural College has representatives of the Shropshire, Hampshire, Dorset, and Southdown breeds, thirty-two animals all told. Prof. A. M. Paterson, who has charge of this exhibit, is an enthusiast on sheep and is doing much to promote the improvement of the sheep of Kansas and their wider use on the farms of the state. Clarence Lacey, of Meriden, Kansas, who has shown sheep at Kansas fairs for a number of years, has fifteen head. As a result of judicious purchases and careful handling of his flock, he has greatly improved the quality of his animals during the past few years. The same might be said of the flock of Cotswolds shown by C. E. Wood, of Topeka. W. W. Waltmire, of Peculiar, Missouri, shows sheep of several different breeds. There is quite a falling off in the number of

sheep shown this year, but this is partly due to the fact that the classification was cut down to include only the breeds best adapted to Kansas. In the past when full classifications have been made some out-of-the-state breeders have brought animals of all the breeds for which premiums were offered and won the money without competition, and frequently on animals that were not especially creditable to the breeds they represented.

One of the live stock features of the opening day was the boys' judging contest conducted by Dr. C. W. McCampbell of the Agricultural College. Eighteen boys, representing all sections of the state, took part in this contest which was held Monday forenoon. They judged two classes of horses, two of beef cattle, two of dairy cattle, and two of hogs. It was an interesting sight to see these alert young fellows going carefully over each ring as it was brought out for them to work on and finally marking down their placings and handing them to the superintendent. Upon the young men of the state who begin thus early to study the principles of live stock judging depends in large measure the progress made in live stock improvement in the years to come.

Probably no exhibit in the remodeled agricultural building is attracting more attention than that of the boys' and girls' club work of the state. In this exhibit is shown fully fifty dozen jars of canned fruits and vegetables. Eighty girls have sewing exhibits, and there are numerous exhibits of potatoes, corn, and vegetables. The pigs and chickens shown by boys and girls of the state clubs of course were necessarily exhibited in their proper departments. The Junior Department, which included exhibits made by the boys and girls over the state who were not members of any of the state clubs, also attracted considerable attention. We noticed one exhibit made by a boy which was so unusual as to call for special comment. This exhibit was that of Elwyn Engler, a fourteen-year-old Shawnee County boy. This boy apparently had made collections of every weed, grass, and agricultural plant to be found on the home farm. He had a large collection of insects and the larvae of many insects, all of which had been collected and preserved or mounted during the past season. It would seem from the comprehensive nature of this exhibit that the boy could hardly have done anything else, but we learned that the work of collecting this exhibit material was done at odd times when he was not busily employed in helping out with the regular work of the farm.

Not for several years has such a large showing been made of the various kinds of farm equipment and machinery. There has been a disposition for several years on the part of some of the larger machinery companies to refrain from showing at the big fairs. This year practically all the space available on the fair grounds at Topeka is filled with tents of machinery and implement exhibitors. There are a number of different kinds of tractors shown, and the exhibits range on down to machinery for doing the work of the house, such as washing, etc. There are a number of different types of farm electric lighting plants on exhibition. This feature of the fair is being closely studied by the visitors. The increasing scarcity of farm labor is making it more and more important that the best of machinery and equipment be used in performing the various farm operations. Farmers are on the alert to find equipment that will enable them to keep their farming operations up to maximum efficiency with a minimum of hand labor.

CONCRETE STORAGE CELLARS

*Air-Cooled Storage For
Fruit and Vegetables
Prevents Much Waste*

PERISHABLE products such as potatoes, other root crops, and fruits like apples, when stored on a commercial scale, are usually kept in first-class condition by mechanical refrigeration or cold storage. Such methods, however, are impossible on the average farm, as a mechanical refrigeration plant involves an expensive building and equipment. One solution of the farm storage problem for vegetables and fruits is to build some type of air-cooled storage house.

This year, more than ever before, it will be advantageous to provide suitable storage facilities on the farm for fruits and vegetables. The advantages of such storage are that the crop can be marketed in accordance with natural demands, thus preventing any glutting of the market and resulting in maintaining fair prices throughout the year.

On the average farm the practice is to immediately unload on the market practically all of any crop as soon as harvested. All that the producer keeps is a slight surplus over what is needed for domestic use. This glutting of the market occurs at a time when the demand for the produce is not at its maximum, and brings the price level down, frequently to a point where the crop does not bring the cost of production.

PROPER STORAGE PREVENTS WASTE

Thousands of dollars of waste in the potato crop can be saved by providing suitable storage. The large annual loss in normal years both in potatoes and apples cannot continue under our new scheme of farm economy. If stored under suitable conditions apples and potatoes can be kept in good condition from one season's end to the beginning of the next.

The requirements for vegetable and fruit storage are essentially the same, that is, potatoes and other vegetables and apples may be kept in good condition under practically the same conditions.

Both fruit and vegetables which are to be stored must be properly handled from the beginning. This means first that the seed or trees should be treated to a germicidal solution or spray, so that only healthy produce will result. The crops must be carefully handled to prevent bruising or other injuries when harvested, then they must be cooled quickly to the required temperature, which must be maintained uniform. The storage cellar must also be provided with sufficient moisture to prevent shrinkage and thus keep the fruit or vegetables crisp and plump.

Storage cellars for potatoes and other vegetables and apples are best built at least partly if not entirely underground, therefore the location best adapted to the construction is a hillside. In such a location the excavation generally furnishes enough loose earth to cover the entire structure afterward if this is desired.

TEMPERATURE OF STORAGE

Although cold storage experts are not in entire accord as to the exact temperature which is best for keeping potatoes, apples, and root crops, the majority seem to agree that a temperature of 40 degrees Fahrenheit should not be exceeded for best results.

The average normal temperature of the earth is about 50 degrees Fahrenheit, which is too high for ideal storage conditions. During the early fall months there are nights when the temperature drops near or below the freezing point. This condition should be taken advantage of by building the storage cellar or cave so that it has a good ventilating system, which will provide rapid and ample circulation and change of the contained air. After the interior of the storage cellar has been brought to proper temperature, the cellar should not be opened until the next change of weather which will permit doing so without again warming up the interior.

Root and vegetable storage cellars being built mostly in excavation, the construction material is in constant contact with the earth. Due to the changing conditions of dryness and moisture which naturally prevail in the soil, tim-

ber construction rots rapidly. The best wood storage cellar is therefore nothing but a temporary structure. No other material can be used to such advantage in securing all the requirements for a fruit and vegetable storage cellar as concrete.

PLAN FOR CONCRETE STORAGE CELLAR

The concrete storage cellar shown in the cut has been so designed that it can be made any length desired. This plan permits adding to or taking from the length of the structure so that it may be built to any required capacity. The cellar is twelve feet wide and fourteen feet long as designed and nine feet deep on the inside. The entire structure—floor, walls and roof—is of concrete. Such a cellar is not only moisture-proof but will entirely prevent the waste which rats and mice cause to some stored crops.

Concrete mixed in the proportions of one part cement to two and one-half parts sand, to four parts pebbles or stone, may be used throughout except for the floor and the arch of the roof, for which a 1:2:3 mixture should be used as indicated in the plan. Advertisers of cement will gladly furnish booklets giving detailed instruction for concrete work.

The side walls of the plan shown are ten inches thick at the base and taper to six inches thick at the crown. End walls are ten inches thick. This design has been prepared with special reference to ventilation. During cool evenings manhole and cold air intake covers are removed and the cold air permitted to pass down the intakes, circulating through the passage between the concrete floor and the false floor of the bins. The false floor is made by 2x4 joists,

covered by 1x4 boards nailed one inch apart. Openings in the floor allow the air to pass up through the stored contents, thus cooling them.

The outside walls are built so that cool air can circulate up along them. The warm air passes out through the manholes. In the course of one night the entire air in the storage cellar is in this way changed many times, thus thoroughly cooling the cellar before morning.

A root or vegetable storage cellar of concrete is built to stay. Like a concrete silo a concrete storage cellar of proper size should almost pay for itself in a year. This is more than likely to be true when times are as at present, since marketing of crops can be controlled in strict accordance with supply and demand and the most favorable conditions, and waste by rot entirely prevented if crops are stored carefully and when in proper condition.

Planning the Farmhouse

Today the building of a farmhouse is not as simple a problem as it was once when it was made of logs and contained but two or three rooms. The farmhouse now must have nearly all of the conveniences that the modern city home has. In fact we farmers must get away from the idea that our houses must be workshops and figure that we need a home the same as the city man has, and a separate workshop.

There are many conveniences that a modern farmhouse should contain. There should be a large roomy basement with a furnace, a medium-sized kitchen, a large dining room, a large, comfortable living room with an open fireplace, and several large bed rooms, the number of bed rooms should be fixed according to

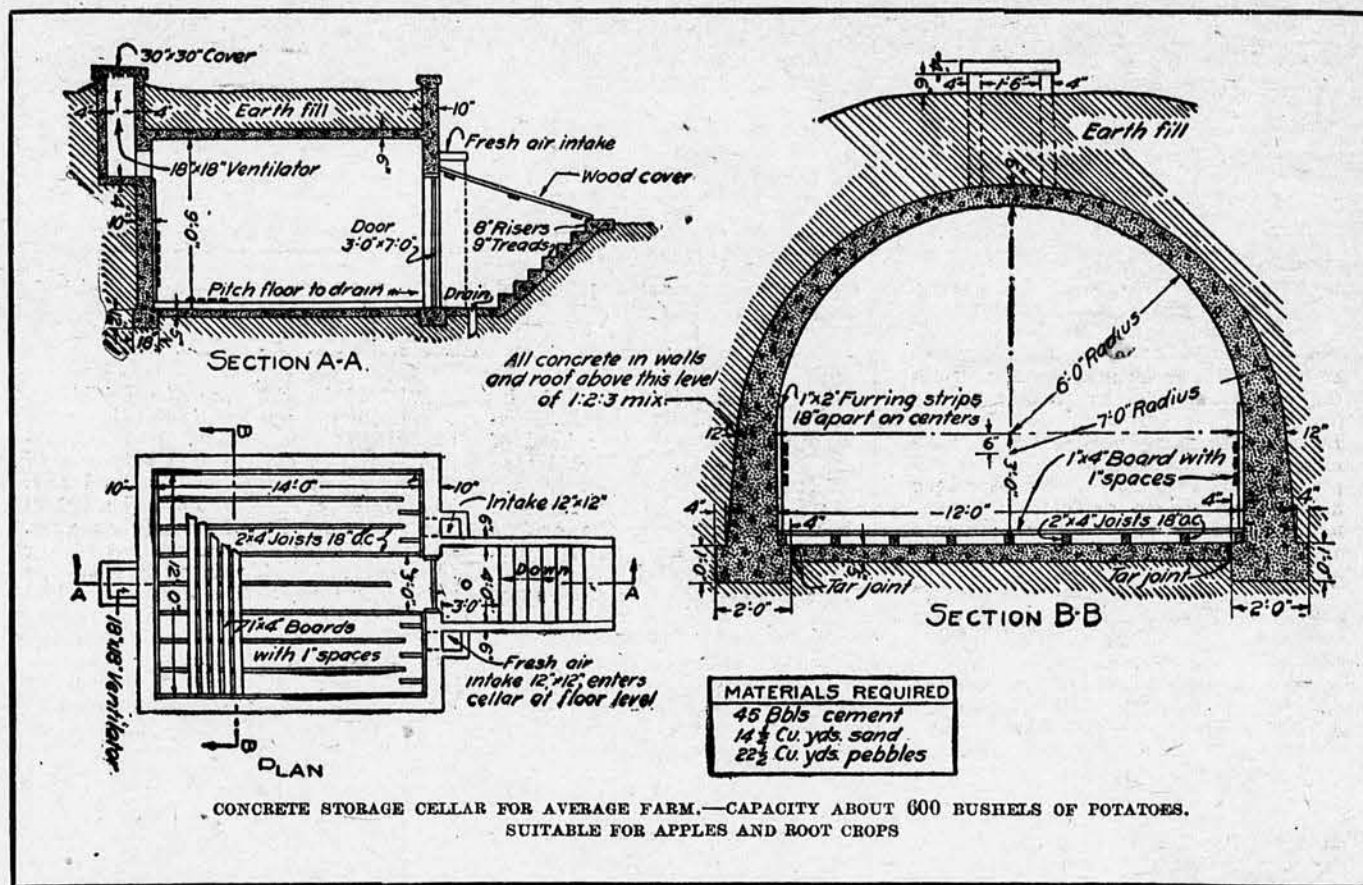
the number of people in the family, providing at least one more than is ordinarily needed.

A few of the conveniences that a farmhouse should contain that are not so essential are as follows: An office at the front, a clothes and wash room at the back of the house with a door opening into the dining room in order that the farm hands may wash and enter the dining room without going through the kitchen; a bath room if running water can be obtained, and if not a sanitary privy in connection with the back of the house or the wood shed so that little children and old people will not have to go out in the severe winter weather to tend to a call of nature. The old-fashioned 2x4-privy set out in the back yard has been the cause of a great deal of sickness because of people dreading to venture out in stormy and cold weather and neglecting the calls of nature.

A closed stairway can be arranged to open off the dining room, while an open staircase is not objectionable in the living room provided a back stairway is made so that the farm hands will not have to go through the living room to get upstairs. An emergency bed room down stairs is often very desirable. Any person who has cared for sick people and run up and down stairs to wait on them can readily appreciate the value of this room. The basement should have an entrance from the kitchen, but it is just as important to have an outside entrance so that the potatoes and fruit can be carried in and out without entering the kitchen.

The arrangement of the rooms in the house is a problem on which one can afford to spend much study. The kitchen should be so located as to be convenient to the dining room and other rooms of the house in order that the housewife can do her work with as little walking as possible. She may easily be forced to walk many miles in a year in a poorly arranged house that it would not be necessary for her to walk in a well arranged house. The kitchen should not be in sight from the dining room or living room. If the living room and the dining room can be so located as to allow for a large door between them, the arrangement will be appreciated when entertaining company.

In summing up the points I have mentioned we see that the farmhouse should be provided with up-to-date, convenient equipment and arrangement of rooms. The farmhouse should not be devoted to the industries of the farm. If other buildings are provided for the farm industries the farmhouse is made a home, and that will go a long way toward solving the problem of keeping the farm hands on the farm, as it is the desire for city conveniences that makes them leave.—P. C. JAMIESON.



MONTGOMERY COUNTY BOYS JUDGING HOLSTEINS ON T. W. EWING FARM

COMMUNITY BREEDING

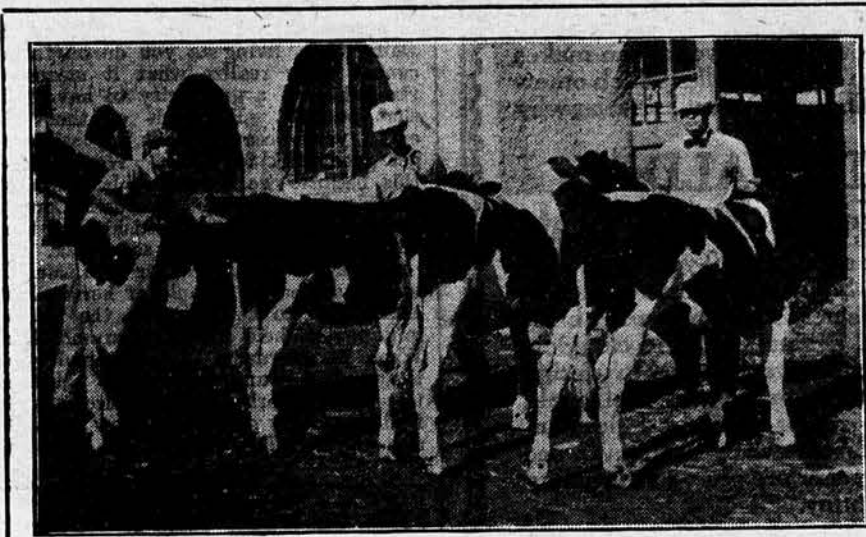
Great Possibilities in Live Stock Improvement Through Neighborhood Cooperation

THE possibilities in live stock improvement from community co-operation in breeding have been abundantly demonstrated in various parts of the country. We have been impressed over and over again with the value of such community work. The establishment of community breeding centers where all farmers or breeders confine themselves to one breed of beef or dairy cattle and to one breed of horses or other classes of live stock has many advantages over the usual haphazard method of live stock improvement. With the probability that in the future this country will be called upon to restock European breeding herds, the improvement of our own stock becomes more important than ever before. We have been much interested in reading of a community project worked out and put into operation in North Dakota. The results of this effort toward cattle improvement were given by Prof. J. H. Shepperd of the North Dakota Experiment Station at the annual meeting of the Improved Live Stock Association of that state.

This community improvement project of which Professor Shepperd told in his address started in the New Salem community in 1909 and by 1910 was well under way. It was a dairy cattle proposition, the breed selected being Holstein. The members of the association all agreed to breed only this kind of dairy cattle. A co-operative enterprise was entered into by the New Salem association, the U. S. Department of Agriculture, and the state experiment station. Representatives from each organization constituted a committee which passed on the sires selected and adjusted all matters of transfer, including the price paid by different members of the association when breeding sires were exchanged. The work of the whole circuit was supervised by a superintendent in the pay of the experiment station and the Federal Government. This man made such tests as were necessary and made himself generally useful by suggesting improvements in methods of feeding and caring for the cattle.

The plan has given the very best of results in actual practice, and Professor Shepperd gave some interesting figures which show the extent of the improvements made in the herds during the time the project has been under way. He called attention to the fact that the Holstein-Friesian A. R. O. requirements are 250.8 pounds of butterfat in one year from a two-year-old cow and one-tenth of a pound for each additional day over two years until the cow is five years of age. At this age and over the cow is required to produce 360 pounds of butterfat in a year. He said: "I have classified the cows of this circuit on the basis of their performance records and have divided them into four classes. In the first class are those which have exceeded the standard requirements. In the second class are those which have come within forty pounds of the standard; in the third class those which have come within one hundred pounds of the standard, and in the fourth class the cows one hundred pounds or more below the requirements." In working out the percentages it was found that in 1914, 26.3 per cent of the cows were in the first class, and in 1915, 40 per cent. For the same years 37 per cent of the cows were in the second class the first year and 26.7 the second year. In the third class 26.2 per cent of the cows were found in 1914, and 33.3 per cent in 1915. In the fourth class there were 10.5 per cent of the cows in 1914 and none in 1915. "I do not flatter myself," said Professor Shepperd, "that improvement in breeding is responsible for all the increased production shown. Silos have been built and silage added to their rations. Grimm alfalfa has been grown, and the circuit cows are getting the hay. Their barns have been improved, and circuit men are feeding more grain. All of these items have had an influence, but I am certain that the subtle thread of heredity has been in part responsible. I am proud of the fact that the two bulls which were sorted out and retained until five and thirteen years old, respectively, should have their three-eighths blood relative and half-sister earn world's championship records.

"The table shows the record of the



A HOLSTEIN BING, TOPEKA FREE FAIR

only herd of the thirteen that I have the 1916 records summed up for. It is the herd which I think has made the best showing during the past year; that is the reason it was summed up first.

No. of Cows.	Year.	Butterfat.	Cost of feed.	Net profit.
17	1910	131.90	\$27.25	\$16.90
12	1911	140.70	24.66	13.20
17	1912	189.50	26.52	35.45
16	1913	211.40	38.99	35.09
10	1914	282.44	35.71	50.98
13	1915	291.80	37.09	64.50
14	1916	427.60	57.30	90.24

"It will be noted that this herd started in with about state average performance record in 1910, 131.9 pounds of butterfat, and in 1916 made a herd average of 427.6 pounds of butterfat. The poorest calendar year individual record in this herd for 1916 was 329.8 pounds of butterfat, and the highest 524.8 pounds. The figures quoted are for his entire pure-bred herd of fourteen cows. The circuit as a whole is showing good yields of butterfat progress.

"The circuit was instituted primarily so that large numbers could be secured as a basis for breeding study. In addition, a study of plans and results from co-operation is a feature.

"Any student of breed history will have been impressed with the fact that almost every prominent breed of live stock has sprung from a district of the country where a single breed and type is kept by all citizen farmers. In England and Scotland, where most of them have arisen, a given breed was usually kept exclusively in a county or shire, and you find the fact mirrored in the very names carried by the breeds: Ayrshire, Berkshire, Yorkshire, Hampshire and Shropshire are examples. It is recorded that the father of live stock breeding, Robert Bakewell, hired out his sires, requiring for their hire the choice of their get from the herd upon which they were used.

"Territorial proximity of stock of similar breeding allows the genius for that work to see and sort over large numbers of stock, bringing together the like and fit from among their number. On this general historical basis of fact, the New Salem circuit was founded, with

the hope of producing Great Plains bred dairy cattle of a superior performance capacity.

"A breeding problem requires time as well as numbers to give positive and permanent results, and while the New Salem project shows marked progress and clear feasibility for the plan, much of what should accrue to it must come in the future. A measure has been established, the lowest class in performance eliminated, and the highest markedly increased. An individual herd has been raised from state average to 427.6 pounds of butterfat per year, while the number of advanced registrations has been greatly increased. The circuit now furnishes approximately 300 head of pure-bred animals to work with, and is on such a basis that all desirable animals for the work of the circuit can be retained. I feel that the preliminary work is accomplished, and that the circuit will be able to secure results much more rapidly in the future."

This is but an illustration of what might be accomplished in many a community in Kansas. Already beginnings have been made in the starting of several cow testing associations. The dairy department of the Kansas Experiment Station is tireless in its efforts to co-operate with dairymen of the state. The members of this department have already accomplished a great deal in the way of aiding in improvement of the dairy cattle of Kansas. The same is true of the dairymen of the extension division.

Marketing Stock Raised

The whole proposition of live stock farming centers around marketing the stock after it is raised. This broad statement was made by ex-Governor W. R. Stubbs, president of the Kansas Cattlemen's Association, at the cattlemen's meeting held at the Kansas Agricultural College in June. In his talk to the cattlemen Mr. Stubbs said that it was no trouble to raise beef and pork, but the biggest question in the live stock business was to find a permanent market

at a fair price. Prices to the consumer are too high; there are millions of people who cannot afford to eat meat now.

"We may get good prices for our stuff this fall because of the war," said Mr. Stubbs, "but during the last few years cattle have frequently been sold at a loss of several dollars a head. The man who produces live stock and the farmer who raises a lot of other food products does not get much over half of what the consumer pays for them. Producers will have to get together and there cannot be an effective organization without the expenditure of some time and money. I think it would be a good plan to have an organization of live-stock interests charging five cents a head on cattle and two and a half cents on hogs and sheep in order to obtain sufficient financial aid to do effective work in the interests of the live-stock producer.

"Cattlemen will come to a place before long where they will feed calves from the time they leave their mothers and ship them out when they are five or six months old. When cattle are marketed at this early age, it will take a lot more of them to produce the beef needed. I believe, however, that it is on this basis that the cattlemen has more daylight ahead of him than in any other direction."

In the course of his talk ex-Governor Stubbs presented the thought that stockmen ought to get better acquainted. If a man loses money he ought to tell his brother stockmen about it and tell why. If he makes money, tell how he did it. The suggestion was made that stockmen ought to have a newspaper that would carry every month or every week the experiences of a large number of those interested in live-stock production. It is not, however, so much a matter of more newspapers as it is a matter of the stockman offering his experiences freely to the public. There are plenty of papers that would gladly give publicity to such experiences.

Danger from Grade Bull

We wish every grade bull in Kansas could be replaced by a pure-bred of good breeding. We are frequently asked why a grade bull from a good cow should not be used. A writer signing himself "Herdsman" writes on this question in Farm and Dairy. He says:

"At the National Dairy Show at Chicago a few years ago I saw exhibited the grade Guernsey cow, 'Jerry,' bred in Wisconsin. Her record was 15,744 pounds of milk and 729.89 pounds of butterfat; over 900 pounds of butter as our Holstein friends figure it. Thousands of pure-bred cows with pedigrees as long as a city sidewalk have no such records as this to their credit. In fact, there are few pure-bred cows of the Guernsey breed that have done better. As an individual, too, 'Jerry' was a wonderful cow—dairy temperament, wonderful capacity and beautiful to look at. And many who looked at her would have jumped at the chance to have gotten one of her bull calves had they then been in the land of the living.

"Jerry" inherited her wonderful performing powers from her ancestors. Her blood was from two sources; one fountain was a long line of pure-bred sires of the richest breeding; the other source was a common scrub or native cow back in the early days of Wisconsin breeding, and back of that scrub was a long line of scrubs; just as long a line of scrubs as there were aristocrats in the family of 'Jerry's' sire. In 'Jerry's' veins flowed these two lines of breeding. In her progeny either line might come to the front. Here would be the danger of using a grade bull even from so good a cow as 'Jerry.' In a good strain of pure-bred cattle there is no scrub blood to assert itself. Hence the greater prepotency of the pure-bred sire. And viewing the question in the larger light, I never saw a good herd of grade dairy cows that had been developed by the use of grade bulls. Did you?"

A surtax on idle land is proposed by a recent resolution introduced in Congress by Senator Kenyon of Iowa, which calls for an investigation by the Federal Tariff Commission, in order to determine the constitutionality of such a tax with the purpose of amending our constitution in this respect if necessary.



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Easy to erect or move. No pit to dig or expensive foundation to build—no expert needed. Full directions with every scale which anyone can follow.

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 SEPT. 18-29 PEORIA, ILLINOIS

We wonder if Dairy Club members know that serious epidemics of typhoid are sometimes traced to a single farm where the people have not been careful to destroy all disease germs. When typhoid fever occurs on a dairy farm it is of the greatest importance that every precaution possible be taken to prevent the germs getting into the milk. Sometimes through carelessness the water supply becomes infected and through washing of milk utensils the germs get

into the milk. Nearly all disease germs increase very rapidly in milk, so when milk becomes infected it becomes a serious danger to those who use it. Club members have learned that thorough scalding with boiling water kills germs of all kinds, whether they be the ones that simply cause milk to sour or germs that cause serious diseases. Milk is a human food and if we always have that in mind we will be sure to do everything we can to keep it perfectly safe for such use.

Kansas Farmer Dairy Club

Importance of Clean Milk

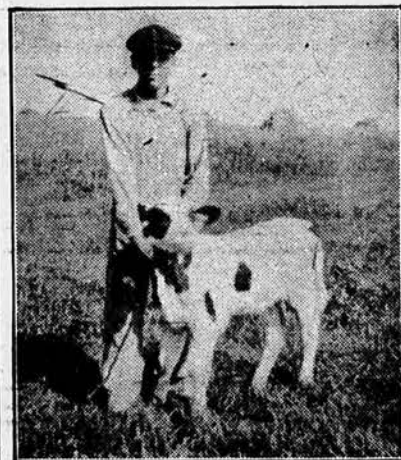
BABIES and invalids are much more apt to suffer from the use of impure milk than grown-up people in perfect health. Boys and girls of the Dairy Club, living as you do on farms, cannot fully realize what it means to the babies of a great city to have milk that is safe. Hundreds of them die every year because it is impossible to get good milk for them. We speak of this because we have just learned how Mahala Smith, of Leavenworth County, has done her "bit" in furnishing at least one baby with perfectly safe milk.

Through no fault of her own, Mahala could not send a sample of her milk to Manhattan to be scored in the market milk contest held during Farm and Home Week in February. As the quality of the product counts for twenty points in the year's work, it was necessary to find some way of learning how carefully she was handling her product so as to

We do, and have given Elise the full twenty points on quality of product. We really feel proud of the record made by all on this point of quality.

Now, boys, these two stories are about what girls have done. Let us not have it appear that the girls are any cleaner or neater in the dairy work than the boys. Cannot some of you write and tell us all about how you keep the barn clean where you milk your cow and how you keep your milk and cream free from injurious germs of all kinds? We would like to print some stories of this kind, because a lot of people who produce milk and cream do not realize how important it is to protect the product from dirt of all kinds. The cow tester we quoted above visits a great many dairy farms, and we must infer from what he says that on a good many of them the dairy work is not conducted in a thoroughly clean and sanitary manner.

Do not get the idea that modern dairy barns and all sorts of expensive equipment are the important things in producing clean milk. All these things help, but it is "the man behind the gun" that counts most. Some of the poorest of results in producing milk and cream of good quality come from the most expensively equipped dairy farms because the men doing the work do not have the natural instincts of cleanliness. If you want to be clean, you will not let a lack of equipment make you filthy in your work of handling dairy cows and their milk. It may be a little more work where you do not have all of the best of equipment to work with, but do not forget that you yourself are the most important factor after all.



PAUL STUDDARD AND HIS CALF

Member Loses Cow

One of our new club members has suffered a serious loss. Emma Mae Lenthert, of Hope, writes us that her cow died last week as a result of what the veterinarian said was acute indigestion. She is almost broken-hearted over her loss, and we are sure the Dairy Club members will sympathize with her. None of you so far have suffered such a serious loss. Perhaps some of you will want to write a few lines of encouragement to Emma. She had her cow insured for a hundred dollars, although of course she cost more than that.

We are advising Emma to try to get another cow as soon as possible and go on with the club work. We know that a good cow will pay for herself and we hope that this setback will not prevent Emma from starting in a second time to pay for a cow. Life is full of disappointments, and the way in which we meet and overcome them is a test of our strength of character.

What do the rest of you think Emma should do? If you have any suggestion or words of comfort, write to her, addressing her at Hope, Kansas, R. F. D. No. 2.

Ernest Wendel's father writes that Ernest has sufficiently recovered from typhoid fever to come home from the hospital. It takes quite a time to get back to usual strength after having typhoid. We hope that Ernest's recovery will be rapid and that he will soon be able to write the story of his year's work in the Dairy Club. Ernest's father bought two of the 101 head of good dairy cows brought into the county by Mr. Wulfekuhler of the Wulfekuhler State Bank and distributed at the farm bureau picnic. We wonder if as close records will be kept on these two cows as on the one Ernest milked and fed in his year's work with the Dairy Club.

Cow Freshens Late

According to the rules of the second year's club, all records must begin on or before October 1. Benjamin E. Zoll, Leavenworth, writes us that he finds his cow is not due to freshen until about the middle of October and wants to know whether he can enter the contest with a cow freshening so late.

We will have to abide by the rule and begin all records October 1, so that members having cows that do not freshen until later will have to begin to keep feed records on that date. They will of course begin their milk records as soon as the cows freshen, and their record year will close with the last milking of September 30, 1918.

know how many points to give her. We learned that milk from her cow had been fed to a two-months-old baby whose mother was taken down with typhoid fever. We wrote to this lady, who is now fully recovered, and asked her about it. She writes us that she was in the hospital five weeks and of course baby had to be fed on cow's milk. Mahala's cow, Beauty, supplied the milk for this baby and Mahala was so careful to keep all kinds of germs out of the milk as she handled it that baby grew and thrived. When its mother came from the hospital, she, too, was put on a diet of milk from the same source. Typhoid fever patients are nearly always given a milk diet while they are recovering and it is very important that the milk be perfectly clean and safe. The baby is now getting milk from Mahala's new cow. Its mother says Mahala certainly knows how to take care of milk so it will be safe for even little babies and people getting over typhoid fever.

We thought this evidence of the proper care of the product meant as much as a score of eighty points in the milk contest, and have given Mahala the full twenty points on quality of her product. We hope to have a picture of the baby to show in the near future.

Another story of methods of keeping milk clean and safe as practiced by a club member might be interesting to all the boys and girls reading this page. Elise Regier, of Whitewater, could not send a sample of milk to Manhattan to be scored in the milk contest, and in order to find out how many points to give her for quality of product, we asked P. C. McGilliard, the cow tester for the cow testing association to which Elise's father belongs, to write and tell us how she cared for her milk. He says: "On the Regier farm milk is produced under very sanitary conditions. The barn is kept as clean as spade and broom can keep it. The cows' udders and flanks are wiped with a damp cloth before milking and the milking is done in partly covered pails. The milk is strained through a double strainer and separated immediately after milking. The whole farm shows a degree of cleanliness which is found on very few dairy farms. Miss Regier does most of the work with their herd, and I can recommend her very highly as a manager of dairy cattle."

Do you not think milk cared for in this way ought to score eighty points?



Resolutions For Dairymen

IN THE form of a proclamation, the American Jersey Cattle Club has published a leaflet in which it is pointed out that we have come to a crisis in the history of our country where it devolves upon every loyal citizen to do his part for his country as his circumstances and opportunities allow. One great need of the future is the conservation of human industry and the maintenance of human effort by an adequate food supply. It is stated that, while many foods are valuable and all are desirable, there is one indispensable food, and that is the product of the dairy cow. In view of the fact that many dairy cattle have been sent to the butcher on account of the high price offered for beef on the one hand and the high prices of feed and labor on the other hand, the American Jersey Cattle Club calls upon its members and upon all Jersey owners and breeders to take to heart and put into practice forthwith the following resolutions:

1. I will not kill, nor permit to be killed, a productive Jersey cow, nor any of her promising female offspring, because the Jersey is the greatest natural food-making machine, one such cow being capable of producing one of the most necessary elements in human food—fat—equivalent to that obtained from seventeen slaughtered steers.

2. I shall bring my heifers to maturity, not only because this is now a patriotic duty, but because a good Jersey cow has the earning capacity of one thousand dollars securely invested at 5 per cent; and surely it is folly to sell for \$125 or less a machine which equals the earning capacity of one thousand dollars.

3. I will not keep or use a poor bull in my herd. My resolve is to breed up, not down, to the end that each generation of my herd shall be an improvement on the preceding one, because my country needs better stock, as well as better and more bountiful production.

4. I will intelligently study feeding, so that the production of my herd may be equal to its capacity. I owe it to my cows, to myself, and to my country to give time and thought to the important subject of profitable and economic feeding; and it is my duty to set an example in intelligent feeding, so that my neighbors may go and do likewise.

5. I will use every endeavor to prevent the waste of skim-milk, as it constitutes a fine food for human beings.

6. I shall plan intelligently to grow my cattle feed on my own farm as far as possible; and thereby lower the cost of production to my customers and increase my own profits at the same time. As in all other lines of work, the nation has the right to demand efficiency and low production cost on my part.

7. I will do all in my power to maintain the fertility of the soil in my care, realizing that I simply hold my lands in trust for coming generations. The welfare of my country in the future depends upon the conservation of the fertility of the soil, and I resolve that I will do my part along this line, so that I will be enabled to give a good account of my stewardship, and hand on to my successors lands better and not worse from my having lived upon them.

These resolutions are equally applicable to those handling any kind of dairy cattle. The dairyman who will follow closely the principles laid down in these brief statements is sure to make progress in his business of milking cows at a profit.

Feeding Grain to Cow

Floyd Gerardy, Americus, Kansas, writes as follows:

"The cow which I purchased a little over two months ago will freshen in about a month or six weeks. She is on good prairie pasture. It is nice and tender since the rains we have had during the last three weeks. She was two years old last spring and has never been milked before. Would you think it advisable to feed her any grain? If so, what kind and how much should be fed each day?"

Now that the pasture is so good, this young cow ought to do well and be in

fine condition when she freshens. Of course if she is rather thin in flesh, it might pay to give her some grain even though the pasture is good. We do not lose the grain fed to good milk cows while they are dry. A really good milk cow has the capacity of using the fat of her own body in making milk. It is nearly always a good plan to have such cows in rather fleshy condition when they freshen. They will give more milk than cows that are so poorly fed during the dry period that they are scrawny and thin when they freshen.

If this cow is so thin as to really need some grain, the kind to feed would be a mixture containing considerable protein. Bran and oil meal mixed in the proportion of two or three times as much bran as oil meal would be good. A good standard mixture is four parts of corn chop, two of bran, and one of oil meal or cottonseed meal, all by weight. This is a good grain mixture to feed a cow when she is giving milk. Since grain is so expensive it is probably not advisable to feed very much to a young cow on pasture unless she is very thin and does not seem to be gaining as she should. We would suggest two or three pounds daily as about the limit.

Winter Dairying

On too many of the farms in Kansas where cows are milked, the cows will be going dry in the next few weeks. The old range habit of having calves come in the spring is hard to overcome. Of course the cows give a heavy flow of milk on the luscious spring and early summer pasture and at small feed cost, but it is the busiest time of the year and this period of abundant pasture does not last long. Later in the summer the pastures are certain to dry up and along in the fall when there is time to milk the cows and care for them, they dry up. They have been milked through a comparatively short period when dairy products bring the lowest price of the year and when farm labor is rushed with field work. Through the winter season the feed is simply maintaining a non-producing herd.

The real dairyman who studies the business finds that fall and winter is the time of the year in which there is the greatest profit in milking cows, therefore he plans to have his cows freshen in the fall. He knows that during this season of the year butterfat commands the best price and he also has time to look after the cows and attend to feeding the calves properly. It is also a fact that the cow freshening in the fall and given reasonable care will produce more milk on the average than the cow that freshens in the spring. Under the stimulus of recent calving a good dairy cow will start in and milk during the fall and winter to her fullest capacity, even drawing on her own body if feed is not supplied in abundance. If she is given liberal rations through the winter season and provided with suitable shelter, she will give a good flow of milk all winter, and when the grass comes her milk production is given another stimulus and she will be good for a heavy flow through the flush pasture season. Cows handled in this way are ready to go dry the same time the pastures go dry. Their resting period comes at a time when conditions are most unfavorable for milk production. The dairyman who will make provisions for suitable feed and proper shelter during the winter will find winter dairying means better prices for his products, a larger total production for the year, and a much more even distribution for the labor of the farm, since the heaviest of the dairy work comes at a time when there is no field work and during the season of heavy field work there is the minimum amount of dairy work to perform.

Official Tests of Cows

Early fall is the best time to start cows on official tests. The Nebraska Experiment Station has found that cows will give ten per cent more milk each year when they freshen in the fall than

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when they freshen in the spring. This is because cows are not bothered by heat and flies at the time they are suffering the hardest strain.

Furthermore, at the end of about seven months, when production usually falls, the milk flow is bolstered up by green grass in the spring. Information regarding official testing may be obtained upon application to the dairy department of our agricultural college at Manhattan.

"Canned green corn," or silage, substituted for grain in the diet of the dairy cow, will keep milk production up to its present level and at the same time save large quantities of cereals for human food. Silage supplies succulent feed for the cow, just as canned fruits and

vegetables supply the succulence necessary for the human. Siloing is a good way of preserving a mature crop or of saving a crop that for any reason must be harvested before maturity. About 40 per cent of the total food material in the corn plant is found in the stalks and leaves. Thus, a farmer who harvests only the ears loses nearly half the crop, but the farmer who uses a silo loses but little. When there are no ears, not infrequently the whole crop is lost.

Hominy feed or meal is a by-product from the manufacture of hominy grits for human consumption. It is a good feed for hogs and can be substituted for corn even when one and one-seventh the price of corn per pound.



A Sermon Picture

A SHORT time before the above picture was taken, there was a \$5,500 barn between the two silos. It burned down. The silos were unharmed. Ask E. H. Salisbury, Kirksville, Mo., who has since erected a new barn, what he thinks of the silos.

Consider the Silo

With forty per cent of the food value of corn in the stalks and leaves, silos are an economic necessity on the modern farm. Any agricultural leader, farm expert or banker can give a hundred reasons for silos. In these times of conservation and efficient food utilization—when grain prices are sky high, the silo is a money-maker from the start.

And the Concrete Silo

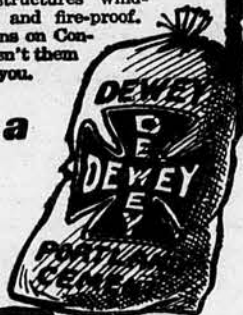
is the silo that stays put; that storms, fires, rats, cannot touch. Concrete means reasonable initial cost, no repairs, no repainting, no maintenance. Concrete means permanence and dependability.

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What is Silage Crop Worth?

A MAN who will not have enough of a crop on his own farm to fill his silos asks what he can afford to pay for a silage crop two miles away, this consisting of corn which may not yield more than two or three tons of silage to the acre.

We do not believe that as a general proposition it will pay to haul silage two miles. Silage is heavy material, and with labor as high as it is now the cost of hauling it this distance will add quite materially to the cost of the crop in the silo. Of course the need which exists for rough feed must be taken into consideration. If this seems the only means of securing enough feed so that valuable stock can be carried through the winter, it might pay to put this amount of labor into such a crop. Of course the price asked for the crop in the field is another important consideration.

The buying of silage crops in the field raises frequent questions as to the price that should be paid. Frequently men who have raised a crop to the silage point do not know what they should charge, and the man wishing to buy is uncertain as to what he can afford to pay. We were recently told of a man in Harvey County who asked a neighbor \$30 an acre for a crop of corn which was so poor that probably no ears would mature, and it probably would not make more than two or three tons to the acre. The neighbor did not buy this crop, but bought another field at \$5 an acre, which probably is a low price, considering the scarcity of rough feed.

When a field of corn will mature some grain, an estimate of the probable yield can be made by snapping the ears from a measured portion of several rows. The value of the corn is a known factor, and it becomes a matter of getting at the cost in the field of a given amount of corn and fixing the value of the fodder which accompanies it. The man who is in a position to sell a crop in this way cannot place a very high value on the fodder because the market for such feed is rather limited except as it can be marketed through good live stock. If he does not have the live stock himself, this part of the crop is worth nothing to him unless some neighbor having stock needs more rough feed than he has grown on his own farm.

In getting at the actual value of silage, a comparison of the total nutrients it contains with the nutrients of hay will help in giving it a cash value. Three tons of good silage contains in total digestible nutrients about as much as a ton of hay. Of course alfalfa or other legume hay contains relatively more protein than silage, and protein has a higher market value than the carbohydrates. Hay usually has a fairly definite market value. When hay is worth \$18 to \$20 a ton, good silage in the silo ready to feed should be worth \$6 or \$7 a ton.

Getting a silage crop into the silo is a part of its cost that must always be considered. The cost of filling with good machinery and proper organization should not exceed 75 cents a ton. It will usually range from 50 cents to a dollar a ton. It costs more to harvest a poor crop than a good one, because so

much more ground must be covered to get enough to fill the silo.

Wheat Price Statement

Immediately following the report of the wheat price-fixing committee, President Wilson issued the following statement:

"Section 11 of the Food Act provides, among other things, for the purchase and sale of wheat and flour by the Government, and appropriates money for the purpose. The purchase of wheat and flour for our allies, and to a considerable degree for neutral countries also, has been placed under the control of the Food Administration. I have appointed a committee to determine a fair price to be paid in Government purchases. The price now recommended by that committee—\$2.20 per bushel at Chicago for the basic grade—will be rigidly adhered to by the Food Administration.

"It is the hope and expectation of the Food Administration, and my own also, that this step will at once stabilize and keep within moderate bounds the price of wheat for all transactions throughout the present crop year, and in consequence the prices of flour and bread also. The Food Act has given large powers for the control of storage and exchange operations, and these powers will be fully exercised. An inevitable consequence will be that financial dealings can not follow their usual course. Whatever the advantages and disadvantages of the ordinary machinery of trade, it can not function well under such disturbed and abnormal conditions as now exist. In its place the Food Administration now fixes for its purchase a fair price, as recommended by a committee representative of all interests and all sections, and believes that thereby it will eliminate speculation, make possible the conduct of every operation in the full light of day, maintain the publicly stated price for all, and, through economies made possible by stabilization and control, better the position of consumers also.

"Mr. Hoover, at his express wish, has taken no part in the deliberations of the committee on whose recommendation I determine the Government's fair price, nor has he in any way intimated an opinion regarding that price."

Buying Seed Co-operatively

The present emergency is teaching some valuable lessons in co-operation. Methods adopted under the stress of present conditions can be followed with profit at all times.

As a result of seed wheat shortage in Washington County, the county farm bureau and the farmers' union are co-operating with the county council of defense in an effort to supply the farmers of the county with seed. Through these agencies the entire county was completely organized with four men in each township acting as a committee on information as to the seed wheat situation. This committee is responsible for locating the seed wheat and seed rye and also for listing those farmers who are in need of seed of either grain.

Through the canvass made 7,900 bush-

THE point has been reached where war is waged by whole nations. Every man, woman, and child is involved and nearly every adult and most boys and girls can be efficient factors. We are in this war for the purpose of defending our rights, of making sure that, as a nation, we shall be able to live the sort of life and to have the sort of institutions we desire, of making democracy persist in the world, and of safeguarding the world against the recurrence of such a war as this. To accomplish this the nation must aim at the perfection of organization, and therefore each individual must recognize the necessity of making sacrifices for the common good and more than ever of working under limitations—of doing team work. Our people have a genius for organization, and they will not fail in the task they have assumed. Our farmers, on whom a great responsibility rests, are the most efficient farmers in the world when they do their best. They will not be found wanting in this crisis.—D. F. HOUSTON, Secretary of Agriculture

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"If there were silos enough to hold all the fodder in this county we could winter twice as many cattle as there are in the county," is the statement made by Neil Rucker, emergency demonstration agent of Hodgeman County. This county's 1916 silo census showed only twenty-seven of these efficient feed savers, but many more have been built this summer. Many farmers realize that the silo represents the difference between a well stocked farm and one dependent upon cash grain crops.

The grain sorghums, kafir, milo, and feterita, may be substituted for corn when slightly lower in price per pound. They should be ground and fed as meal.

els of wheat and 2,900 bushels of rye suitable to be used for seed, were located in the county, and this information was sent to 750 inquiring farmers. R. W. Schafer, county agricultural agent, has acted as middleman for the farmers in the seed transactions. In addition to the seed found in the county, five cars of wheat have been ordered from outside the county and this will be financed by the farmers' union and will be handled at cost. This outside wheat will be inspected before being purchased, by the farmers' union manager, the county agricultural agent, and one or two farmers.

Seed wheat has been bought by the bankers and business men of several of the towns in Cloud County and sold to the farmers at actual cost. The county agricultural agent acted as the middleman in this county also in the transactions between the bankers and business men and the farmers. It is expected that five additional carloads of seed wheat will be needed for Cloud County.

Protecting Alfalfa Hay

Alfalfa growers in Central Kansas are using cheap hay sheds to shelter their rough feed. J. E. Payne, of Oklahoma, tells of seeing sheds of this kind on a recent visit he made to Wabaunsee County.

A type quite generally used in this section consists of a roof of corrugated iron, which rests on the ground when the hay shed is empty. A post set firmly in the ground at each corner of the roof holds the roof in place. The roof can be raised to any height necessary to protect the hay which is stored in the shed.

When filling the shed, the roof is raised above where the top of the stack is to be, and when the hay is in, the roof is lowered to rest on it.

Some farmers are using iron roofing as covers for stacks. The sheets are fastened together so as to make roofs for the stacks and are weighted down to keep them from blowing off.

With the scarcity and high price of feed it is good business policy to plan to protect what has been grown.

Treat Seed for Smut

It has been estimated that the average annual loss over the whole country due to the smuts of wheat and rye amounts approximately to 27,500,000 bushels. This is equal to about 3 1/2 per cent of the entire yearly wheat crop and is regarded as a conservative estimate, since only smutted heads actually lost are considered. The increased number of heads which healthy plants would have thrown out were not taken into account. The loss to the billion-bushel wheat crop we hope to see harvested next year would, at 3 1/2 per cent, amount to 35,000,000 bushels. With wheat selling at \$2 a bushel this would amount to an exceedingly high tax on the farmers of the country.

Treatment of wheat against stinking

smut is fairly easy, not expensive, and fully 95 per cent effective. The efficiency of the treatment is, in fact, practically 100 per cent in most of the wheat-growing regions. Seed treatment costs not to exceed five cents an acre for materials and labor. To this cost, however, must be added the cost of grain, the germinating power of which may be destroyed by the treatment. This amounts at the most to 20 per cent. In every case the value of the wheat saved by treatment would amount to several times the cost of treatment.

Statistics show that the average annual loss of rye from smut is about 1 per cent—considerably less than the loss of wheat. It is well worth while, however, to treat rye seed also.

Several methods of treating seed for the destruction of smut spores are in use, but the best, it is believed, is the formaldehyde treatment. The grain should first be cleaned thoroughly with a fanning mill so that smut balls, shriveled grain, chaff, etc., will be removed. After the grain is clean it may be spread on a floor or a tarpaulin in a layer or pile several inches thick and sprinkled with a solution of formaldehyde made by mixing one pound of commercial formaldehyde with forty-five gallons of water. An ordinary sprinkling can or a spraying machine is used and the grain is shoveled over and over until every kernel is wet. The grain is then placed in a pile and covered with sacks, blankets, or a tarpaulin for two hours or over night. It is then dried sufficiently to be run through the drill, after which it may be sown. If the grain is not passed through a fanning mill it should be placed in a vat or tank of the formaldehyde solution instead of being sprinkled. The smut balls will rise to the surface and may be skimmed off.

If the grain is not to be planted immediately, it must be dried sufficiently to prevent spoiling when placed in bins. If planted while damp and swollen, more grain by measure must be used to allow for the expansion.

Silos in Hodgeman

Many silos will be built in Hodgeman County this year, is the report received from Neil Rucker, emergency demonstration agent for that county. He states that since the rains came a local contractor of cement silos has received all the orders that he can take care of this fall.

Mr. Rucker took four Hodgeman County stockmen to the Ness City meeting of the silo truck special which is being run co-operatively by the Kansas Agricultural College and the Hays Experiment Station, and one of these men started a pit silo the following morning. The feed situation in this county has been changed materially and sufficient roughage for local needs will be produced in many localities.

Rate of Seeding Wheat

Much hard wheat will be sown this

Rainfall Over Kansas for August

Reports Furnished by S. D. Flora, Meteorologist, Weather Bureau, Topeka

Cherokee	7.44	6.30	3.34	3.15	2.77	3.34	3.30	2.23	3.59	3.05	7.06	4.58	3.67	6.94	5.88	5.88
Adair	3.65	5.99	1.70	2.65	3.27	2.62	4.93	2.63	6.63	6.72	5.06	7.62	4.42	5.36	4.42	5.36
Atchison	3.88	2.39	2.34	3.81	5.73	7.44	4.91	2.83	4.36	7.36	5.58	5.88	5.88	5.88	5.88	5.88
Barber	2.30	1.58	2.45	3.09	6.08	3.07	4.85	3.83	6.37	8.52	9.72	6.83	7.22	9.41	5.98	5.98
Barton	4.67	3.22	3.26	5.13	4.29	10.20	4.29	5.79	4.73	4.63	3.80	5.11	4.79	4.38	4.33	4.33
Beecher	5.60	5.44	3.84	4.36	4.46	4.30	6.30	8.20	4.38	4.68	4.70	6.50	7.10	4.68	4.68	4.68
Bell	7.40	6.96	5.30	2.37	7.71	8.35	6.93	7.94	6.37	6.65	3.39	5.49	4.31	4.31	4.31	4.31

THIS was one of the wettest and best crop-growing Augusts ever experienced in Kansas. The rains were widespread and general almost from the first of the month and there were more days on which measurable rain fell than in any other August on the state record. It was the most rain that has fallen in August in twelve years and more than three times the amount that fell in July preceding.

The revival of crops after the rains began was almost magical. Pastures that were bare and brown when the month began soon furnished excellent grazing, and the entire corn crop took on a new growth. The ground was in such fine shape for fall plowing that the greater part of it was finished by the end of the month.

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THE next step, after installing a water system, is the addition of a labor-saving Kitchen Sink, a Bath Tub, Laundry Trays—real plumbing comforts that belong in every home whether it be new or made over.

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A Copy of
This Book to
You FREE



Feed the Fighters! Win the War!

Harvest the Crops! Save the Yields!

On the battlefields of France and Flanders the United States boys and the Canadian boys are fighting side by side to win for the World the freedom that Prussianism would destroy.

While doing this they must be fed and every ounce of muscle that can be requisitioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

THE COMBINED FIGHTERS IN FRANCE AND FLANDERS
AND THE COMBINED HARVESTERS IN AMERICA
WILL BRING THE ALLIED VICTORY NEARER

A reciprocal arrangement for the use of farm workers has been perfected between the Department of the Interior of Canada and the Departments of Labor and Agriculture of the United States, under which it is proposed to permit the harvesters that are now engaged in the wheat fields of Oklahoma, Kansas, Iowa, North Dakota, South Dakota, Nebraska, Minnesota, and Wisconsin to move over into Canada, with the privilege of later returning to the United States, when the crops in the United States have been conserved, and help to save the enormous crops in Canada which by that time will be ready for harvesting.

HELP YOUR CANADIAN NEIGHBORS WHEN YOUR OWN CROP IS HARVESTED

Canada wants 40,000 Harvest Hands to take care of its
13 Million Acre Wheat Field

One cent a mile railway fare from the International Boundary line to destination and the same rate returning to the International Boundary. High wages, good board, comfortable lodgings.

An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States.

AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to

GEO. A. COOK, Canadian Government Agent, 2012 Main St., Kansas City, Mo.

year on account of the premium offered by the millers. This recalls a dispute which once occurred concerning the rate of seeding wheat.

Two men were asked about the rate of seeding wheat. One advised seeding forty-five pounds and the other advised seventy-five pounds per acre. When they got together they found that the one who advised sowing forty-five pounds per acre was thinking of hard wheat while the other was thinking of large-grained soft wheat. Upon counting grains, they found that forty-five pounds of hard wheat per acre would

put more grains per foot of row than seventy-five pounds of the soft wheat. Is this worth considering when we seed our wheat land?—J. E. PAYNE, Oklahoma.

Held as it is in the center of a great live stock breeding and agricultural section, the National Dairy Show, with more cattle, more demonstration, more exhibits, more entertainment than ever before insures the most valuable National Show ever held. The place is Columbus, Ohio, and the time October 18-27, 1917.



It's Natural for a Hog to Wallow

Here's a good thing to do: Provide a wallow close to the feeding grounds to which add Dr. Hess Dip and Disinfectant. As the hogs pass back and forth from the wallow to the feed trough, the **DIP** will kill the lice and cleanse the skin, while the **DRIP** will destroy the disease germs and the worms that pollute the ground. That will mean a clean, healthy skin, freedom from lice, a safeguard against disease and larger, better porkers.

Dr. HESS & CLARK
Ashland Ohio

DR. HESS DIP
and
DISINFECTANT

FERTILE KANSAS LAND CHEAP

Those who located in Central Kansas 20 years ago are the big farmers today. Their land has made them independent.

Your chance now is in the five Southwestern Kansas counties adjacent to the Santa Fe's new line, where good land is still cheap.

With railroad facilities this country is developing fast. Farmers are making good profits on small investments. It is the place today for the man of moderate means.

Wheat, oats, barley, speltz, kaffir and broom corn, milo and feterita grow abundantly in the Southwest counties referred to. Chickens, hogs, dairy cows and beef cattle increase your profits.

You can get 160 acres for \$200 to \$300 down, and no further payment on principal for two years, then balance one-eighth of purchase price annually, interest only 6 per cent—price \$10 to \$15 an acre.

Write for our book of letters from farmers who are making good there now, also illustrated folder with particulars of our easy-purchase contract. Address

E. T. Carlidge,
Santa Fe Land Improvement Co.,
1892 Santa Fe Bldg., Topeka, Kansas.

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CLIMAX CUTTER \$125 and up
Including Pipe and Extra Knives
Inward shear cut. Free Trial.
Prompt shipment. Write now.
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Kansas City,
Missouri.

A new book entitled "Farm Concrete" has just come from the Macmillan press. The use of concrete on farms is being widely extended and it is of considerable importance that dependable information be at hand such as is found in this book. The cost of good concrete in labor and materials is no more than that of poor concrete. This volume, which has been prepared by Prof. K. J. T. Ekblaw, of Illinois University, brings together in logical form the essential principles of concrete work and gives many plans for the use of concrete on the farm. The book is priced at \$1.60.

FARM POWER

Items of Interest About Automobiles, Engines, Tractors, and Motorcycles

SOME surprising information concerning the use of roads in several Iowa counties has been obtained by a traffic census which is being carried on by the Iowa State College and State Highway Commission. The census is by no means complete and the results obtained up to the present time may be materially modified by later information. They show, however, that the travel over Iowa roads is of a character that makes the improvement of such roads a matter requiring careful thought and sound judgment.

The following facts relate to the travel counted at eight stations on highways leading into market towns of considerable importance. These roads are known as tourists' highways, yet the census shows unexpectedly that only 3 per cent of the traffic should be classed as tourist. The counts were made during the tourist season and should put to rest the assertion that road improvements are mainly for the advantage of people who make no payment of taxes toward the cost of the betterments. As a matter of fact, the great bulk of the traffic—87 per cent—was between towns, what would be called interurban traffic by electric railway companies. The traffic from farms along the roads amounted to only 10 per cent of the total.

Attention is called to this distribution of the traffic because it emphasizes the fact that towns and cities have direct interest in road improvements. Where more than three-fourths of the travel over main roads originates in towns along those roads, as is the case in the Iowa highways which have been under observation, it is self-evident that the expense of road improvement should not be borne mainly by the farmers, as at the present. The principle of rate making for most classes of public service is that the charge for the service should be based on the use made of it. Road improvements form a class which heretofore has generally been exempt from the application of this principle. If more traffic enumerations are made like those in progress in Iowa, the injustice of putting most of the expense for improvement of market roads on farmers will lead eventually to a change in this policy.

It has been known for some time that there are more automobiles in Iowa, in proportion to the population, than in any other state. The returns from the traffic census show that these automobiles are being used very frequently. They are not pleasure vehicles, for Sunday excursions. If the returns which included July 4 are thrown out because of the unusual traffic on that day, the proportion of motor vehicles to horse vehicles using the roads ranges from two to one on one road to eighteen to one on another road. The average proportion at all eight stations, including the counts made on July 4, shows that eleven motor vehicles were used to one horse vehicle. It was also observed that these roads were carrying an average of 387 vehicles daily. When it is considered that this traffic was carried on dirt roads, as a rule, it is evident that the construction and maintenance of Iowa roads with the funds available for the purpose is a very hard problem to solve satisfactorily.

One of the most instructive features of the census returns is the information regarding the use of motor trucks. On one road there were five horse-drawn trucks for every four motor trucks, the lowest proportion of the latter at any of the census stations. On one road there were 2.6 motor trucks for each horse truck and on another road there were 3.3 motor trucks for each horse truck. The average of all the stations was 1.1 motor trucks for each horse truck. It goes without saying that this proportion will be changed during the season when heavy trucking is being done from the farms to the market towns. It is expected that the proportion of horse trucks to motor trucks will be much higher then. Motor trucking has come so rapidly into favor among farmers, and trucking companies in cities are sending so many trucks into the country to haul agricultural prod-

ucts to market, that it would be surprising if the returns of traffic during the heavy hauling period do not show that motor trucks are rapidly becoming essential for the farmer.

This fact adds to the difficulties of maintaining dirt roads, such as are so numerous in Iowa. While something can be done by regulating the loads and speed of motor trucks to reduce their destructive influence on dirt roads, there is no form of maintenance, so far as is now known, which will keep a dirt road in good condition when many motor trucks are operated at more than very moderate speed over it. It would be interesting and instructive to determine the effect on dirt and gravel roads of trucks operated at different speeds, for it is possible that speed may be found the most important factor in determining the destructive effect of such vehicles. If this should prove the case, road officials will have a means of controlling the destruction of their low-cost roads until they are able to secure the funds for the construction of surfaces better adapted for such traffic.

Faulty Lubrication Waste

Proper lubrication is a most important factor in determining the life of internal combustion engines. The investment in this sort of equipment is almost at the mercy of lubrication. It is one of the important phases of economical operation. The protection of the pocketbook demands that every man using such engines and farm machinery in general realize the deep significance of proper lubrication.

The output of steel is being turned to war materials. Manufacturers of farm machinery are finding it difficult to procure sufficient material to keep up with orders. This shortage must, of necessity, mean higher prices for machinery. This is an added reason why we should save machines by proper care.

The man who buys his first tractor, automobile or gas engine should make the lubrication of his motor a subject of special study. The ravages of friction will quickly destroy unless all moving parts are protected by a clinging film or cushion of good oil. He must not be satisfied with "just oil," but should use the utmost care in selecting his lubricants. And once he has made this selection he should never mix one grade of oil with another.

A temperature of over 2,000 degrees is often developed in the cylinder and, unless his motor oil be of the highest grade and uniform, it will quickly break up and separate. This results in two grave conditions: an inefficient lubrication that causes ruinous wear and an unburned deposit of carbon that reduces power and causes fuel waste.

The best oil is, therefore, one that will perform its function and then mix with the fuel and be entirely burned up. No residue must be left; no friction permitted.

Many motor owners have the idea that too much oil cannot be used. This is not a fact. The sump or reservoir of a motor should not be filled above its correct level. If too much oil is used more will be drawn into the firing chamber than can be used and burned and a carbon-forming paste will result.

This is especially true of tractors for these motors are continually taking in dirty, gritty air and these substances mix with this paste causing a destructive wear on pistons, piston rings and cylinder walls.

If the splash system is used, it is a good practice to drain the oil out of of tractor crank cases at least once a week and replace it with new oil. Some authorities recommend the changing of oil every three days. In either case kerosene should be put in and the engine allowed to run a few minutes to wash out gum and grit, then draw out the kerosene and refill with new oil. Be sure that your filling funnel is absolutely clean and free from sand, dirt and other substances.

The changing of oil in an automobile need not be done as often, but remember that new oil and clean motor surfaces are cheaper than a new motor or

even repair bills. The best oil, changed often, is economy.

There has always been more or less criticism of the treatment given to farm implements and machinery. Some of this criticism is just and some is not. Many farmers are not provided with implement sheds. The fact remains, however, that there has been an enormous waste in farm machinery, taking the country as a whole. Under the present conditions this is a waste that should by all means be avoided in the future as much as possible. For many classes of machinery correct lubrication is one of the surest ways to give it longer life and make it return full productive power while it is in use.

Care of the Binder

Providing a shed for the binder to protect it from rain is a paying proposition. When housing the binder for winter, all wearing surfaces should be protected against rust by covering them with heavy grease or oil that will not wash off. The knotters requires special attention because this part of the machine will cause much trouble if it is not in the best condition. Farm machinery of any kind always pays dividends on proper care.

Fuel, spark and compression are the three essential features of your motor. If you will remember these points, you will save yourself a good deal of time. If you are out of fuel, fill your tanks. Test out your magneto for "shorts" and loose connections. You can test compression by turning your engine over by hand, and if it goes easy, you want to examine the valves, also the piston rings. Don't put off caring for them. When you adjust the connecting rod bearings, be sure to replace the cotter pins and spread them.

There appears to be a tendency on the part of farm equipment manufacturers to come back to the state fairs with their exhibits. For a number of years machinery companies refrained to a considerable extent from showing. More tractor companies than ever are showing at the fairs this year. We believe there is no better place to exhibit farm machinery than at our big fairs. Farmers are being compelled more and more to study closely their equipment needs, and exhibits of farm machinery are always the center of groups of interested farmers striving to see if they can in any way more efficiently perform their farm work through the employment of new tools and labor-saving equipment.

Advice to Boys

Every boy should finish his school course. We shall secure more men under the draft than we can arm at the present time.

The individual obligation on the part of each and every citizen for service is manifest, but the boys should remember that they are now serving in the best possible way by preparing themselves to serve more efficiently when the time comes. What we want now is for the boy in school or college to finish his education in order that we may have each year a dependable output of well-educated and well-trained young men.

It is a great mistake for partly educated young boys to rush to the colors now. We don't need them. It is very important they should finish their education.—MAJ. GEN. LEONARD WOOD, in The American Boy.

One of the choice herds of Ayrshire cattle in this country is owned by John Sherwin, of South Farms, Willoughby, Ohio. This herd was started by Mr. Sherwin nine years ago with a few very carefully selected animals. Today the herd numbers 300 head, all of which are registered in the Ayrshire Breeders' Association. Of these 300 head, seventy-five are imported from Scotland. During the last six years 145 cows have qualified and entered into the Advanced Registry. Also during this period several of the cows at South Farm have broken world's records in milk and butterfat as two and three-year-olds. The herd at South Farm has been fortunate in having at its head several of the noted bulls of the Ayrshire breed. The Imp. Bagenoch Bonnie Scotland 11974, Imp. Craigbrae Lord Rosebery 15001, Imp. Holehouse Wanderer 16390, and Imp. Foulton Spicy John 12584 have headed the herd. Also the famous White Cloud of Hickory Island 10377, the bull whose daughters have made him second in the list of the sires in the Advanced Registry for their highest average of milk and butterfat. At the present time Victor of South Farm 13286, a son of White Cloud of Hickory Island, is at the head of the herd. There have also been many other famous bulls at the head of this herd. Recently South Farm made an importation of twenty-five heifers from Scotland, they all being out of Howie's Sir Hugh 9026, the unbeaten champion as a two, three and four-year-old of all the shows of Scotland.

WHEN WRITING TO ADVERTISERS PLEASE MENTION KANSAS FARMER



More Meat at Less Cost

THE greatest problem confronting stockmen is how to raise more meat at a lower cost. This statement was made in a recent report of the Market Committee of the American National Live Stock Association. This committee advises that under the present conditions animals should only be fattened to a commercial marketable condition. That is the most economic utilization of animal feeds. The making of fancy finished animals should be discouraged, as it is economic waste. A valuable service would be rendered if the experiment stations of the federal and state governments would enlarge their research work along these lines. The above propositions and others were carefully presented at Washington last week by the members of the Live Stock Industry Committee appointed to co-operate with the Food Administration in working out plans for increasing our meat production.

Under the terms of the Food Control Act, no authority is given the President or any agency he may appoint to fix live stock or meat prices. As already expressed, the Food Administration has no intention of disturbing conditions as regards prices of live stock or meats. It seems to be the aim of the administration to stimulate production by improving market conditions, doing what is possible to facilitate methods of distribution, using its influence in stabilizing prices on a fairly profitable and liberal basis, and in every way inspiring the confidence of live stock producers. The very first official statement made on this point was as follows: "We wish to restore the confidence of the farmer and stockman in his industry by convincing him that he will get a fair share of the price paid by the consumer."

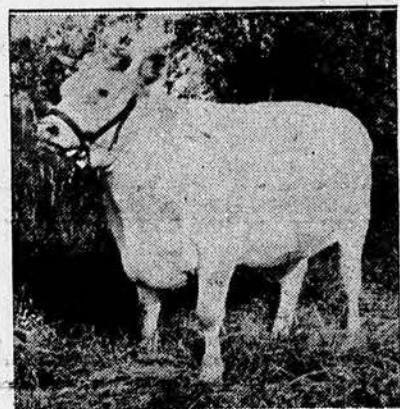
The Marketing Committee of the National Live Stock Association points out that the Government has the power to fulfill this pledge without fixing absolute prices for the future. It will purchase the food supplies needed for our soldiers here and abroad. The centralized buying agency for the allies will probably work co-operatively with that of our own government. The total of these combined purchases will constitute a sufficiently large volume to practically establish a price level to the producers and consumers of this country. Under the licensing power provided for in the law, our Government can equitably protect both consumers and producers from abnormal middlemen's profits and eliminate unnecessary expenses.

The members of the Market Committee and other officers of the National Live Stock Association had a lengthy conference in Chicago recently with the Federal Trade Commission regarding the meat investigation. They also met representatives of the Food Administration and discussed in considerable detail the live stock business of the country. The following are part of the recommendations outlined as a general plan and policy which were submitted at the Washington meeting of the Live Stock Industry Committee:

"While we appreciate the importance of increasing the production of live stock to meet the shortage claimed to exist in the world supply, we also recognize that there are many fundamental factors affecting production—such as lack of confidence in the stability of the market, high prices of animal feeds, better returns from other agricultural pursuits, and fear of disastrous results from overproduction—which exercise a most deterrent influence against any increase, and which must measurably be removed before any increase in production is possible. We believe it is vitally essential for the Government to recognize that, through its purchases of meat products for our army and the Allies, it can practically fix the general level for live stock and meats in this country, and should therefore promptly assure producers that its purchase will be made on such a basis that there will be a liberal profit, so as to encourage those who may be able to increase their production. The Government should also fully announce its plans for the stimulation of production and conservation of the live stock industry, and for the protection

of producers as well as consumers. The campaign of the Government urging discrimination against meat and for meatless days certainly does not tend to encourage production. Economy in the use of all foods is highly desirable, but it can be practiced in a rational manner without interfering with the normal dietary. Likewise the clamor to save all breeding stock is both ill-advised and illogical, and impossible to carry out except in certain localities. If put in force, it would unsettle all live-stock conditions, and would result in a prompt decrease of our immediate supply of meat, and a probable glut later on when increased supplies are not needed."

The Market Committee of the National Live Stock Association is doing some fundamental work in the interests of this great industry. The committee was created at the annual convention held in El Paso in January, 1916, and funds to carry on its work were guaranteed by thirty-five stockmen of the country. At the annual convention held in Cheyenne in 1917 it was decided to re-



SHOW HEIFER BELONGING TO
H. H. HOLMES

lieve these men of the portion of their guarantee yet unpaid and depend upon the stockmen of the country and of the different live stock associations for the needed money to carry on the work. As yet only a few associations and individuals have contributed to the expense of this committee's important work. Every stockman is vitally interested in what they are doing and will be benefited. The secretary-treasurer is T. W. Tomlinson, 515 Cooper Building, Denver, Colorado. Anyone wishing to contribute to this fund should send his money to this address.

C. S. W., Pottawatomie County, asks if black smut on corn will kill cattle if it is put into the silo. Apparently there is no danger of cattle being poisoned by eating ordinary corn smut. W. A. Henry, the senior author of "Feeds and Feeding," once fed two milk cows at the Wisconsin Experiment Station on well cleaned corn smut mixed with wheat bran in an experiment to find out its effect. He increased the amount of smut until the cows were getting two pounds a day. At this point one refused her feed and the allowance of the other was increased to four pounds a day, or one peck. This cow seemed to be thriving and getting fat, but suddenly sickened and died. At the Michigan Experiment Station Professor Smith once fed cows on well cleaned corn smut until they were eating from one to ten pounds daily. Only one cow showed any indisposition and she recovered. The Bureau of Animal Industry of the Federal Department of Agriculture also has conducted experiments which indicate that in reasonable quantities at least corn smut is probably harmless unless the cows become inordinately fond of it and eat large quantities. As it would occur in the silo there is practically no danger whatever of any one animal getting enough to be harmful.

Barley when crushed is an excellent feed for hogs and can be substituted entirely for corn, even when it costs the same per pound.

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Through an arrangement with a large book publishing house, KANSAS FARMER is able to extend to its readers the following exceptional offer in books:

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....She's All the World to Me
....The Shadow of a Crime

By ALEXANDER DUMAS—

....Taking the Bastille
....The Hero of the People
....The Knight of the Red Castle
....The Queen's Necklace
....Camille

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....Three Men in a Boat—Jerome
....The Scarlet Letter—Hawthorne
....St. Elmo—A. J. Evans
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....Twenty Good Stories—Reid
....Black Rock—Conner
....The Double Life—Wilcox
....Crocket on the Hearth—Dickens
....Robinson Crusoe—DeFoe
....The Wedding Ring—Talmadge
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MAN TO WEAR FINE SUIT, ACT AS agent; big pay, easy work. Banner Tailoring Co., Dept. 738, Chicago.

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120 HEAD OF HIGH GRADE HOLSTEIN cows and heifers, priced for quick sale. H. F. McNutt, Oxford, Wisconsin.

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TRAINED BEAGLES, RABBIT HOUNDS, foxhounds, coon, opossum, skunk dogs, setters, pointers, house, farm dogs. Ferrets. Catalog 10c. Brown's Kennels, York, Pa.

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AIRDALES AND COLLIES—GREATEST of all pups. Grown dogs and brood matrons. Large instructive list, 5c. W. R. Watson, Box 128, Oakland, Iowa.

SEEDS

PURE-BRED HIGH-YIELDING TURKEY red hard seed wheat, cleaned and graded, at \$3.00 a bushel. Ferdinand Hubka, Vilets, Kansas.

FULCASTER AND SEEDLING SEED wheat for sale, \$2.70 per bushel f. o. b. cars Vinita. Sacks free. \$2.50 per bushel in car loads, not sacked. J. C. Starr, Vinita, Okla.

TIMOTHY SEED, \$4.00 PER BUSHEL. High purity and germination, first class in every way. Timothy-alsike mixture, \$4.50 per bushel. Satisfaction or your money back. Henry Field, Shenandoah, Iowa.

BUSINESS CHANCES

FREE FOR SIX MONTHS—MY SPECIAL offer to introduce my magazine, "Investing for Profit." It is worth \$10 a copy to any one who has not acquired sufficient money to provide necessities and comforts for self and loved ones. It shows how to become richer quickly and honestly. Investing for Profit is the only progressive financial journal in America. It shows how \$100 grows to \$2,200. Write now and I'll send it six months free. H. L. Barber, 431.28 W. Jackson Boulevard, Chicago.

THE STRAY LIST.

TAKEN UP—BY W. A. PATCH, OF Olpe, Center Township, Lyon County, Kansas, on August 15, 1917, one cow, color red with white on flank, dehorned. No marks or brands. Appraised at \$45. G. L. Miller, County Clerk.

TAKEN UP—BY EDWARD WARE, OF Eureka Township, Greenwood County, Kansas, one red three-year-old steer branded with letter "W" on left side, 3-4 on left hip. Right ear cropped, appraised at \$40. Ethel Eastwood, County Clerk.

TAKEN UP—ON THE 23D DAY OF August, 1917, by Alex Shepard, residing nine miles southwest of Leoti, Wichita County, Kansas, one bay pony mare, weight 750 pounds, wire mark across right shoulder; no brands. Deon Trueblood, County Clerk.

POULTRY.

WHITE ROCK EGGS, \$4 PER HUN- dred. Nora Lamaster, Hallowell, Kansas.

PURE BOURBON RED TURKEYS, FOUR months old, \$3. Lily Robb, Neal, Kansas.

CHOICE MARCH-APRIL HATCHED White Rock cockerels, \$1.50 and \$2. Mrs. Rudolph Johnson, Bendena, Kansas.

SINGLE COMB BROWN LEGHORN cockerels, 75c and \$1 each. C. H. Robinson, Ulrich, Missouri.

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POULTRY AND EGG MARKET HIGHER. Coops free. For prices, "The Copes," Topeka.

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WANTED—AULTMAN-TAYLOR OR Reeves tractor, large size, late model. Also good eight-bottom gang. B. L. Elliott, Stanley, Iowa.

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FERGUSON COUNTY LAND.—WRITE TO Box 440, Roy, Montana.

MISCELLANEOUS.

1,024 YEARS AMERICAN HISTORY, 80c postpaid. Elias Pelton, Hudson, Kansas.

LUMBER.

LUMBER, MILLWORK, POSTS, DIRECT from mill, wholesale prices. Send for carpenter's list for freight prepaid estimate. Millwork catalog free. Keystone Lumber Company, Tacoma, Washington.

HONEY.

HONEY—NEW CROP. SEND FOR PRICE list. Bert W. Hopper, Rocky Ford, Colo.

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10,000 ACRES of good grazing land, well watered, for \$3 to \$5. All crops good. No drouth, no hot winds. Grass for cattle and corn for hogs. Best country in the world to live and make money.

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Four hundred acres in cultivation, 160 acres meadow, balance pasture. Splendid alfalfa, wheat or corn land. Splendid oil possibilities. A fine bargain for some one. Only \$75 per acre. Might take a small farm in on the deal. Write
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EIGHTY ACRES, 6 miles McAlester, city 15,000. 50 a. cult. mostly dry, black bottom land. All fenced. Some improvements. Corn now on farm, make 40 bu. per acre. \$21 per acre. Terms.
SOUTHERN REALTY CO., McAlester, Okla.

Beautiful Shawnee County, Kansas, Farms Near Topeka.

160 a. farm, fine improvements, \$80; 160 a. farm, good improvements, \$35; fine 43 a. farm, good improvements, \$3,800. I can fit you out in any size farm desired. One to two crops will pay for farm. E-Z terms.
J. E. THOMPSON (The Farmer Land Man) Tecumseh, Kansas

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The great Sumner County withstood the long drouth and high winds of the spring and then produced more high-priced wheat than any other county in the U. S. and yet land prices are very low on improved farms—\$40.00 to \$75.00 per acre. Write for description and prices.

WILLIAM HEMBROW
The Land Man Caldwell, Kansas

A BARGAIN

158½ Acres, 3¼ miles from good town of 1,000 people, with high school, good school house on the land; seven-room house, good barn, plenty of water, on state automobile road. A splendid farm. Price, \$7,200.00; \$1,000 cash, balance from one to fifteen years at low rate of interest. Why rent? Send for views of this farm. Address
THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

NORTH CENTRAL KANSAS

Osborne County seed, grain and stock farms, \$20. Best wheat and corn land, \$35 to \$50. "Here is the place."
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Or Exchange for Kansas Property
220 acres of rice and timber lands six miles south of Stuttgart, Ark. Address owner,
JOHN W. HARBESON, Tonganoxie, Kansas

A pleasing color as well as flavor is imparted to baked or stewed apples by the little red cinnamon candies known as "cinnamon imperials."

Have you had your teeth examined?



We desire to make this department just as helpful as possible, and believing that an exchange of experiences will add to its value, we hereby extend an invitation to our readers to use it in passing on to others experiences or suggestions by which you have profited. Any questions submitted will receive our careful attention and if we are unable to make satisfactory answer, we will endeavor to direct inquirer to reliable source of help. Address Editor of Home Department, Kansas Farmer, Topeka, Kansas.

This is the gospel of labor.
Ring it, ye bells of the kirk,
The Lord of Love came down from above
To live with the men who work.
This is the rose he planted,
Here in the thorn-cursed soil;
Heaven is blest with perfect rest,
But the blessing of earth is toil.
—Henry Van Dyke.

It is customary but I think it is a mistake, to speak of "happy" childhood. Children are often overanxious and acutely sensitive. Man ought to be man and master of his fate; but children are at the mercy of those around them. Mr. Rarey, the great horse tamer, has told us that he has known an angry word to raise the pulse of a horse ten beats in a minute. Think then how it must affect a child!—LORD AVEBURY.

Women Emergency Agents

Thirteen Kansas counties have asked for emergency home demonstration agents. Arrangements have been made for these agents in Chase, McPherson, Cowley, Anderson, Finney, Ness, Seward, Stevens, Shawnee, and Wyandotte counties. Agents will be appointed to these counties as soon as capable, experienced women can be found for this work.

Other counties asking for emergency home demonstration agents, but in which the organizations are not complete as yet, are Washington, Morris and Riley.

Emergency home demonstration agents have been at work in Atchison, Kansas City, Wichita, and Topeka, for several weeks.

Miss Frances L. Brown, who is director of home economics of the division of extension of the Kansas Agricultural College, is temporary leader of the emergency home demonstration agents in this state.

Save the Bottles

Catsup, olive, pickle and mustard bottles are ideal containers for grape juice. They may be corked and the cork coated with paraffin. It is often easier, however, to make stoppers of cotton. Make a cotton plug which will fit tightly into the neck. Allow it to remain for a time so that it will retain its shape when removed. When the stoppers are all made, place them on pie tin in the oven. Let them remain until they begin to brown. If not ready to use them, let them remain in oven, but turn off the heat and open the door. When the bottles are filled, place the cotton plugs in securely. Do not fill bottles so full that cotton will touch juice.

Light from Left Side

The well known fact that when using the eyes for any near work the illumination should come from the left side rather than the right, is often disregarded. Let anyone who considers the matter of little importance once demonstrate to himself the difference and he will never forget it. Take a pencil and paper and try to write while in such a position that the light will fall from the right side. The shadow of the hand or pencil or both is thrown on the paper in such a way as partly to cover the characters one is making. This necessitates a closer viewpoint and a conscious strain on the eyes. Now let the position be reversed so that the shadows fall away from the work and leave the field unobscured. In making the change one cannot help noticing the feeling of ease that immediately is experienced by the eyes. This applies to any other kind of near work in which the fingers work under the guidance of the eyes. This fact should be remembered in planning school rooms, work rooms, offices, and any places where steady close work is to be performed.—Bulletin of Kansas Board of Health.

Food for Growing Children

Many persons believe that the chief aim in feeding children is to satisfy their hunger. That this is not sufficient is shown by the fact that in al-

most every school there are some pupils who seem to have enough food to satisfy their appetites, but who are incapable of doing good mental work largely because of the lack of proper food. In order to build up the growing body and permit the mind to accomplish its best work, food must be supplied that is nourishing without putting too severe a strain on the digestive organs. Listlessness or headache frequently results from improper eating.

The following breakfast menus for children are taken from a bulletin entitled "Suggestions for the Health of Children," published by the New York College of Agriculture. One of these shows certain defects in meeting the dietary needs of the child, and the other shows how these needs may be met with simple, easily prepared food.

Griddle cakes and syrup, sausage, fried potatoes, bread and butter, and coffee, constitute a type of breakfast unsuited to a child. Although this meal may not be bad for a healthy adult, it is unsuited to a child of school age for various reasons. It needs to be modified by the addition of an acid fruit in order to be easily digested by even a grown man doing heavy work. Griddle cakes are in the class of hot breads, which are not suited to the diet of a child. They are often swallowed without much chewing and hence are digested with difficulty. Sausage is largely pork, a meat to be used with moderation even by many grown persons. Some cases of digestive trouble may be caused by the large amount of pork eaten. It contains much fat, an excess of which retards digestion in the stomach even when it does not cause discomfort. The serving of sausage at breakfast usually means serving meat twice a day, which is not an advisable practice for the children's diet. Many dietary experts now believe that meat eaten once a day is sufficient for anyone, and that children under seven years of age, at least, should have none at all. A vigorous adult may be able to digest fried food without much difficulty, but it places too great a tax on the digestive system of a child. Coffee is a stimulant, and therefore should not be used by school children.

As a type of breakfast suited to a child of school age, Miss Knowlton, the author of the bulletin mentioned, suggests rolled oats with cream or milk, apple sauce, bread and butter, milk to drink, egg if desired. The egg, however, should not be fried. The rolled oats should be cooked in a double boiler for several hours, or in a fireless cooker over night. Tissue-building foodstuffs are generously furnished in the rolled oats, the milk, the bread, and the egg. Energy-giving foodstuffs are abundant in the rolled oats, the bread, the butter, and the cream. Lime, which is needed for the growth of bones, as well as for other purposes, is supplied by the milk and the cereal. Iron, which helps to make red blood cells, is found in the egg and the rolled oats. Phosphorus, which is needed by the tissues of the body and which also helps to keep the body in good running order, is furnished by the apple sauce, the rolled oats, the egg, and the milk. The apple sauce and the rolled oats are valuable in stimulating the activity of the intestines and thus preventing constipation. The apple sauce is also valuable in helping to neutralize certain substances that might otherwise cause trouble. Besides furnishing in a simple meal the requirements for growth and activity, this breakfast does not overtax the stomach and hence draw to it some of the blood needed by the brain for thinking.

I would particularly urge upon the young people who are leaving our high schools that as many of them as can do so avail themselves this year of the opportunities offered by the colleges and technical schools, to the end that the country may not lack an adequate supply of trained men and women.—PRESIDENT WILSON.

Wonderful Egg Producer

Any poultry raiser can easily double his profits by doubling the egg production of his hens. A scientific tonic has been discovered that revitalizes the flock and makes hens work all the time. The tonic is called "More Eggs." Give your hens a few cents worth of "More Eggs" and you will be amazed and delighted with results. A dollar's worth of "More Eggs" will double this year's production of eggs, so if you wish to try this great profit maker, write E. J. Reefer, poultry expert, 4636 Reefer Bldg., Kansas City, Mo., who will send you a season's supply of "More Eggs" Tonic for \$1 (prepaid). So confident is Mr. Reefer of the results that a million dollar bank guarantees if you are not absolutely satisfied your dollar will be returned on request and the "More Eggs" costs you nothing. Send a dollar today or ask Mr. Reefer for his free poultry book that tells the experience of a man who has made a fortune out of poultry.—(Adv.)

Prepared Mustard

- 1 tablespoonful sugar
- 3 tablespoonfuls mustard
- 1 egg
- 1 cupful vinegar
- 1 tablespoonful olive oil or butter

Mix sugar with mustard, then beat in egg until perfectly smooth and add vinegar very gradually to prevent curdling. Cook in a double boiler, stirring for ten minutes, then add olive oil or butter and continue to stir until thoroughly mixed. Remove from fire and cool.

Jelly Roll

- 2 eggs
- 1 cupful sugar
- Grated rind of one lemon
- 1 cupful flour
- 1/2 teaspoonful salt (scant)
- 2 teaspoonfuls baking powder
- 1/2 cupful hot milk
- Glass of jelly

Beat eggs until very light. Cream sugar with them, add grated lemon rind, being careful not to grate any of the white layer under the yellow, as this gives a bitter taste. Add flour, sifted three times with the salt and baking powder, and last of all the milk, scalding hot. The use of hot milk enables the cake to be rolled without danger of cracking. Bake in a buttered cake pan in a moderate oven, turn out on a damp cloth, trim off crisp edges, spread with jelly, turn over and over in a roll while still warm. Dredge the top with powdered sugar.

FASHION DEPARTMENT—ALL PATTERNS TEN CENTS

This department is prepared especially in New York City, for Kansas Farmer. We can supply our readers with high-grade, perfect-fitting, seam-allowing patterns at 10 cents each, postage prepaid. Full directions for making, as well as the amount of material required, accompanies each pattern. When ordering, all you have to do is to write your name and address plainly, give the correct number and size of each pattern you want, and enclose 10 cents for each number. We agree to fill all orders promptly and guarantee safe delivery. Special offer: To anyone ordering a pattern, we will send the latest issue of our fashion book, "Every Woman Her Own Dress-maker," for only 2 cents; send 12 cents for pattern and book. Price of book if ordered without pattern, 5 cents. Address all orders for patterns or books to Kansas Farmer, Topeka, Kansas.

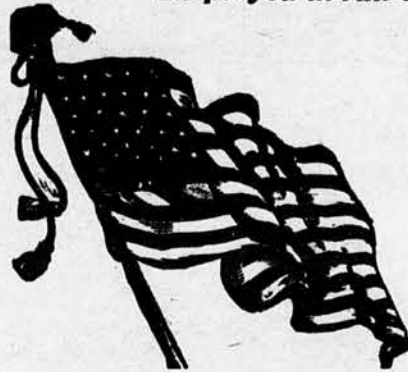


No. 8221—Girls' Dress: Cut in sizes 8 to 14 years. For playtime and school is this little dress. It is just as simple as can be, and therefore very easy for the mother to make. The inset vest is slashed so that the dress may be more easily slipped on over the head, and is laced up with a bright colored ribbon or cord. The two-piece skirt is gathered to the waist. No. 8185—Ladies' Waist: Cut in sizes 36 to 42 inches bust measure. A very dainty and girlish looking blouse is shown herewith. Its broad collar with a new outline is an especially becoming style to the majority of women. Crisp ruffles of the same material or of plain white material hemstitched in a color to correspond with that of the waist, add much to its smartness. No. 8187—Girls' Dress: Cut in sizes 6, 8, 10, 12 and 14 years. The junior girl, who really wants to be just as up-to-date as her big sister, will be delighted with this clever little one-piece dress. It has all the style features of the grown-up, one-piece dresses, including the popular slot pockets. No. 7834—Ladies' Dress: Cut in sizes 36 to 44 inches bust measure. Just full of style and snap with contrasting goods for the collar, rever fronts and cuffs. Novelty pockets in the four-gore skirt give a smart touch to the front where the closing is made. For practical wear in the home, chambray, figured percale or such fabric to withstand wear may be used. No. 7803—Ladies' Skirt: Cut in sizes 22 to 30 inches waist measure. For all its simplicity, this smart skirt possesses some degree of style with side panels, a pocket in each front gore and buttons that ornament and close the garment down the front. On modest lines, with its folds rippling into fullness, it may be made of serge, gabardine, whipcord or linen. No. 7962—Ladies' Apron: Cut in sizes 36 and 40 inches bust measure. In the class of serviceable garments attractively made, we may put this apron. Cut in one piece with a yoke facing; other features of interest are the front closing, elastic fastening at the waistline to evenly divide the fullness, and a diagonal pocket with a stitched trimming band to match the yoke facing and the sleeve finish.

"Your Flag and My Flag"

"Fling out, fling out, with cheer and shout,
To all the winds, Our Country's Banner;
Be every bar and every star
Displayed in full and glorious manner."

—Cole.



"Long may it wave
O'er the land of the free
and the home of the
brave"

The big demand, the scarcity of good dyes and the high price of cotton have made it hard to secure flags. We have been fortunate enough to secure a few high-grade printed flags 3 feet by 5 feet with canvas heading and brass grommets, colors fast.

You May Have One of These
Flags If You Act Promptly
HERE IS OUR OFFER

For only \$1.50 we will enter your subscription or extend your subscription for one year and send you this beautiful flag, postpaid. Price a flag of this size and quality. You will then appreciate our splendid offer.

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The War Department furnishes us all needed additional equipment to handle the great classes of young men and women now enrolling.

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RIGHT
SIZE



3 1/4
INCH

ON THIS EXTRA FINE KNIFE

Two best quality steel blades. German silver tips, brass lined. Transparent handle showing your own name.

We will send this beautiful knife with your own name on it for one yearly subscription to Kansas Farmer at \$1.50 or a three years' subscription at \$2.25. Address KANSAS FARMER - TOPEKA, KANSAS

The larger part of the civilized world will have to be reconstructed after the war. Such reconstruction is almost exclusively the work of engineers. Let me earnestly implore youths who are ready for college and who are not in any way unfitted for technical careers, to take up some branch of engineering or technology. It is not only for the good of the country that I make this appeal but also for the ultimate benefit of the young men themselves.—J. A. L. WADDELL, Consulting Engineer.

Proper selection is as important as the proper amount of food.



Southard's Monarch Herefords

SELL AT

Comiskey, Kan., Saturday, October 6

(The Day Following the American Royal at Kansas City)

125-----HEAD-----125

One hundred cows and heifers, fifty with calves at side and fifty bred heifers. Twenty-five very choice young bulls all of breeding age that will exert a beneficent influence in the herds to which they are taken.

The calves are sired by and the heifers bred to such bulls as the mighty MONARCH, KING FARMER, LOUIS FAIRFAX, BRIGHT DOMINO, NERO FAIRFAX, AND OTHER NOTED SIREs.

In this sale you will have a chance to buy cattle with pedigrees as good as can be written and individuality as good as you can find.

A great chance to buy real foundation stock tracing to and representing the most noted American and English Herefords.

For catalog, please mention Kansas Farmer and address

J. O. Southard, Comiskey, Kansas

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Sixty Head of Females. All in milk or heavy in calf, including Register of Merit cows of dairy capacity, conformation, shapely udders and high class individual merit.

Three High Class Bulls ready for service, out of Register of Merit dams and by Register of Merit sires.

Herd is rich in the blood of Oxford Lad, Noble of Oaklands, Golden Fern's Lad, Rosette's Golden Lad and other celebrated families.

Arrange to attend this great sale of the Best Dairy Cows ever sold in the West. Write today for large catalog on request to

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COL. P. M. GROSS, Auctioneer, KANSAS CITY, MISSOURI

POLLED DURHAM CATTLE.

FOR SALE—A few choice young bulls, sired by Chief, a son of True Sultan. Priced to sell.
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(On Mo. Pac. Ry., 17 miles S. E. of Topeka.)

POLLED DURHAM CATTLE
Seventeen head of well bred Polled Durham and Shorthorn Cattle to be sold at public sale, October 13, 1917. Write for catalog.
MRS. EMMA HUNDLEY
Bogard, Missouri
Route 2

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PERCHERONS—BELGIANS—SHIRES
2, 3, 4 and 5-yr. stallions, ton and heavier; also yearlings. I can spare 75 young registered mares in foal. One of the largest breeding herds in the world.
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Choice Young Belgians, English Shires, Percherons, also Coach stallions, also mares. Many first prizes. Long time 6% notes. Illinois Horse Co., Good Bldg., Des Moines, Ia.

Barn Full of Percheron Stallions and Mares. Twenty-five mature and aged jacks. Priced to sell. **AL. E. SMITH, Lawrence, Kansas.**

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Jas. T. McCulloch Live Stock Auctioneer. I make sales anywhere. **CLAY CENTER, KANSAS**
Write for date.

LESTER R. HAMILTON Live Stock Auctioneer
Write for terms and date. **Clarksdale, Mo.**

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FOR SALE
Spring Pigs in Pairs and Trios Not-related, from my undefeated show herd 1916. Ship at weaning. Send for prices and show record. **COLEMAN & CRUM, Danville, Kansas.**

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Booking orders for spring pigs of National Swine Show blood lines. Fall and spring pigs at bargain prices.
J. H. McANAW - CAMERON, MISSOURI

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ABBOTSFORD SHORTHORNS

Eighteen young bulls for sale. A few of them about ready for service. Priced to sell. The kind that always please.

D. BALLANTYNE & SON, Herington, Kan.

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Master of Dale by the great Avondale heads herd. A few young Scotch bulls and bred heifers for sale.

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F. H. HULL & SONS - EUREKA, KANSAS

ALYSDALE HERD OF SCOTCH SHORTHORNS

Prince Valentine 4th and Clipper Brawith in service. Orange Blossoms, Butterflies, Queen of Beautys and Violets. Choice young stock for sale.

H. H. HOLMES, Route 28, Topeka, Kansas

Pearl Herd Shorthorns

Valiant 346162 and Marengo's Pearl 391-962 in service. Young bulls up to 10 months old for sale. Reds and roans, in good thrifty condition and the making of good useful animals. Inspection invited.

Can ship on Rock Island, Union Pacific or Santa Fe Railway.

C. W. TAYLOR - ABILENE, KANSAS

GALLOWAY CATTLE.

IGALLOWAY BULLS

SIXTY yearling and two-year-old bulls, strong and rugged; farmer bulls, have been range-grown. Will price a few cows and heifers.

E. E. FRIZELL, Frizell, Pawnee Co., Kansas

GUERNSEY CATTLE.

GUERNSEY BULLS.

Buy a grandson of Imp. May Royal, whose dams are granddaughters of Imp. Masher Sequel. One to seven months old. **ADAMS FARM, Gashland, Mo., 12 miles from K. C.**

HAMPSHIRE HOGS

HALCYON HERD HAMPSHIRE HOGS
Best breeding, best type. Stock for sale.
GEO. W. ELA, Valley Falls, Kansas

WHEN WRITING TO ADVERTISERS PLEASE MENTION KANSAS FARMER

Sutton & Porteous August Sale

Thursday, October 4, At Farm

Lawrence, Ks.

78 HEAD

Angus
Cattle

Sixteen Bulls of serviceable age

Twenty-six Bred Heifers

Thirty-six Cows with calves at foot or heavy in calf

All the best families represented—the Blackbirds, Ericas and Prides. Our whole show herd goes in the sale. Twenty-seven championships won by our herd last year. Send for catalog today, mentioning Kansas Farmer.

SUTTON & PORTEOUS - LAWRENCE, KANSAS

Auctioneers—Cooper and Brady

PERCHERON STALLIONS

FOR SALE THIS FALL AT REDUCED PRICES

Two yearling colts; two 2-year-old colts; two 3-year-old colts; two 4-year-old colts, and one herd stallion. All sound and registered in Percheron Society of America. Blacks and bays. If sold this fall I will cut the prices. Also five registered Shorthorn bulls, reds and roans. Come and see me.

J. C. PARKS - HAMILTON, KANSAS

MODERN HEREFORDS

HAZFORD PLACE

Home of the Grand Champion BOCALDO 6TH, assisted by CALDO 2D, PUBLICAN 4TH AND BEAU BALTIMORE.

All our show cattle our own breeding. Inspection of farm and breeding herd invited. A few choice young bulls reserved to head high-class pure-bred herds now ready for inspection and sale.

William Condell, Herdsman.

ROBT. H. HAZLETT, EL DORADO, KANSAS

JERSEY CATTLE.

120 Jersey Cows and Heifers

Pure-bred and high grade. Forty bred yearlings, superior individuals, all from profitable dams, now for sale.

J. W. BERRY & SON, Jewell City, Kansas

Registered Jersey Bulls, butter-bred, from high producing cows. Photo furnished. Maxwell's Jersey Dairy, Route 2, Topeka, Kan.

REDHURST JERSEYS

Will Be Sold at Public Auction October 1. We have thirty cows in the Register of Merit, and many others that will qualify. This is the best lot of producers to be sold this year. Don't fail to write B. C. Settles, Sales Manager, Palmyra, Missouri, for large catalog which will be ready about September 20.

Redmon & Son - Tipton, Mo.

REGISTERED JERSEYS.
Cows, Heifers and Calves.
Good breeding. Good individuals. Must reduce herd. Price reasonable.
C. F. PFUETZ
Manhattan, Kansas

Route 4

Mrs. Emma Hundley, of Bogard, Missouri, has announced a sale of Polled Durham and Shorthorn cattle to be held October 13. A choice offering will be catalogued for this sale.

DUROC JERSEYS.

15 Duroc Spring Boars

Sired by Illustration O'Rion 3d and Fancy Victor and out of my best herd sows. They are real herd prospects, selected from 91 pigs raised. Write today if you want a good spring boar.

John W. Petford

Route 1 Saffordville, Kansas

IMMUNED DUROCS

With size and bone. Bred sows and males a specialty. 150 early pigs; pairs and trios, no kin. All immuned. Satisfaction guaranteed. **C. G. Dittmars & Co., Turney, Mo.**

McBRIDE'S DUROCS

Six-months-old boars for sale, cherry red and good ones. Priced right.
W. T. McBRIDE - PARKER, KANSAS

Redmon & Son, of Tipton, Missouri, owners of one of Missouri's richly-bred heavy-producing herds of Jersey cattle, have announced a public sale of Jerseys to be held at Tipton, October 1. This sale will be under the management of B. C. Settles, the well known Jersey sales manager, of Palmyra, Missouri. The offering will include many Register of Merit cows.

POLAND CHINAS

FAIRVIEW POLAND CHINAS.
Heavy-boned March pigs, either sex. Eighty to select from. Prices reasonable. Write us your wants.

P. L. WARE & SON - PAOLA, KANSAS

Langford's Spotted Polands.—Last call for early spring boars. Yours for good hogs—
T. T. Langford & Sons, Jamesport, Missouri.

POLAND CHINA HOGS 150 HEAD IN HERD
Breeding stock for sale. Immune. Satisfaction guaranteed. Come and see me.

V. O. JOHNSON - AULNE, KANSAS

POLAND CHINAS

For Sale—Ten fall yearling gilts, bred for September farrow to Dalebanks Hadley and King Jumbo; twenty-five spring boars ready for service; twenty-five spring gilts open. One hundred and fifty head registered hogs in my herd. Write today what you want.

E. L. BARRIER - EUREKA, KANSAS



Faulkner's Famous Spotted Polands

The world's greatest pork hog are raised exclusively on

HIGHVIEW BREEDING FARMS

The largest registered herd of old, original, big-boned, spotted Polands on EARTH.
Spring Pigs Now Ready to Ship, Pairs and Tries No Kin.

H. L. FAULKNER - BOX D - JAMESPORT, MISSOURI

Spotted Poland Chinas

Thirty spring boars, thirty spring gilts. Sired by Billie Sunday, Cainville Giant and Perfect Judge. Sows by Brandwine, Budweiser, Old Clipper and Spotted Giant. Priced to sell.

J. O. RILEY & SON - CAINSVILLE, MO.

DEMING RANCH QUALITY

BIG-TYPE POLAND CHINA HOGS.

See our show herd at Topeka Free Fair, Kansas State Fair at Hutchinson, and Oklahoma City. Fifty spring boars for sale. Six hundred head in herd to select from.

H. O. Sheldon, Herd Manager OSWEGO, KANSAS.

TOWNVIEW HERD BOARS

Ten big stretchy fellows farrowed in June. Every one a good one. Two choice fall yearlings. I ship my boars and gilts any place on approval. They make good. Prices are right.

CHAS. E. GREENE, Peabody, Kan.

OLD ORIGINAL SPOTTED POLANDS

Stock of all ages, sired by seven of the very best boars of the East and West. Priced right. Write your wants to the

CEDAR ROW STOCK FARM

A. S. Alexander, Prop. Burlington, Kansas

SPOTTED POLAND BOARS

FOR SALE—Five February boars sired by Spotted Lad and out of Ennis Queen. They are real herd headers, priced at \$40. First check gets choice.

C. A. GOOCH - ORRICK, MISSOURI

SHEEP.

A LIFETIME EXPERIENCE proves the Rambouillet the best sheep for Kansas. Stock for sale. **E. D. KING, Burlington, Kansas.**

DOYLL PARK SHROPSHIRE

Sixty Registered Shropshires—Thirty ewes and ewe lambs, thirty rams and ram lambs. Lambs sired by our undefeated ram, Ohio and Michigan, 1916.

HOMAN & SONS - PEABODY, KANSAS



200 - RAMS - 200

REGISTERED SHROPSHIRE

Our flock was awarded 20 prizes at 1917 Iowa State Fair.

Weight and wool always win. Rams and ewes for sale. **C. W. & Frank Chandler, Kellerton, Ia.**

FIVE EXTRA GOOD HAMPSHIRE RAM

LAMBS

Priced right if taken in the next two weeks.

L. M. SHIVES, ROUTE 1, IUKA, KANSAS

FOR SALE—Ten registered Shropshire

ewes, fifteen registered Shropshire buck lambs, ten pure-bred unregistered Shropshire yearling bucks.

K. HAGUE, Route 6, NEWTON, KANSAS.

FOR SALE—Registered Shropshire ram

lambs and yearlings.

W. T. HAMMOND, PORTIS, KANSAS

OXFORD DOWN RAMS AND EWES

Bred from my \$300 imported ram.

WM. EMPIE - AMSTERDAM, NEW YORK

REGISTERED SHROPSHIRE RAMS

Ten extra large boned yearling Shropshire rams by imported sire, priced to sell.

E. E. LAUGHLIN

Bates County. Rich Hill, Missouri

First Class Shropshire Rams

For Sale

Will exhibit them at Hutchinson, Kansas, State Fair. Don't buy a ram before you see it. I sell and ship on approval.

JOHN COLDWATER, BREEDER,

Chase - - - - - Kansas

S. M. Knox, of Humboldt, Kansas, is

building up a very profitable herd of pure Scotch and Scotch-topped Shorthorn cattle.

While he has only a small herd, they promise to return a nice profit for the money invested. A feature of the herd at this time is a number of choice young bulls.

YOU CAN GET 80 Head - World's Record Breeding - 80 Head

At Waterloo, Iowa

Entries Are From State's Largest Herds

All Over Six Months Tuberculin Tested

This sale on OCTOBER 4 will contain more high record animals than any other in this section this season. Think of two sisters and a 30-pound brother of DUCHESS SKYLARK ORMSBY. You'll find them in this sale. Other females that are daughters and granddaughters of and many bred to such sires as JOHANNA MCKINLEY SEGIS, SIE ORMSBY SKYLARK, OAK DE KOL OLLIE HOMESTEAD, SIE FAYNE CONCORDIA, DE KOL 2D'S BUTER BOY 3D, COLANTHA JOHANNA LAD and KING KORN-DYKE SADIE VALE. A few bulls from these sires. For further information address

IOWA HOLSTEIN BREEDERS' ASSOCIATION
F. C. BARNEY, Secretary
CHAPIN, IOWA

Sale During Dairy Cattle Congress Week

Catalogs Ready Sept. 20

Auctioneer Col. D. L. Perry

POLAND CHINAS.

HOLSTEIN CATTLE.

HOLSTEIN CATTLE.

CLYDE GIROD, At the Farm

HOLSTEIN-FRIESIAN FARM, TOWANDA, KANSAS

BREEDERS OF PURE-BRED HOLSTEINS

We offer special attractions in choice young bulls, ready for service, both from tested and untested dams, at prices within reason. Let us furnish you a bull and improve your herd.

IT WILL PAY YOU TO SEE OUR OFFERING

of high grade young cows and heifers, all springers, in calf to pure-bred sires, large developed females, good udders, nicely marked and the right dairy type at prices that challenge comparison for Holsteins. A visit to our farm will convince you. Keep us in mind before purchasing. Wire, write or phone us.

GIROD & ROBISON - TOWANDA, KANSAS

MAURER'S HOLSTEIN FARM

Why not buy pure-breds when you can get them at near-grade prices? WE HAVE THEM from three-months-old heifer and bull calves to matured cows, all with exceptionally high class breeding. Finely marked and good individuals. Also grade cows and heifers. Write for description and prices or, still better, call at farm and inspect them.



HOLSTEINS AND GUERNSEYS

High grade cows and heifers, carloads or less. Calves crated and shipped anywhere, price \$20.

F. W. WALTER - 4135 14th St. W. Way Side Stock Farm - Whitewater, Wis.

FOR SALE

Registered Holstein Heifer Calves, 3 to 1 months old. Bull Calves, 1 to 2 years old. A. R. O. backing. Also milk cows.

BOCK'S DAIRY, Route 9, Wichita, Kansas.

Braeburn Holsteins

Bull Calves by Walker Copia

Champion, whose dam and sire's dam each held world's records in their day.

H. B. COWLES, 608 Kan. Av., Topeka, Kan.

GOLDEN BELT HOLSTEIN HERD

Herd headed by Sir Korndyke Bess Hello No. 165946, the long distance sire. His dam, grand dam and dam's two sisters average better than 1,200 pounds butter in one year. Young bulls of serviceable age for sale.

W. E. BENTLEY, MANHATTAN, KANSAS

HOLSTEIN CALVES

Very high grade heifer calves, five weeks old, nicely marked, \$25 each delivered to your station. We can supply you with registered or high grade Holsteins, any age or number, at reasonable prices. **Clover Valley Holstein Farm, Whitewater, Wisconsin.**

Segrist & Stephenson, Holton, Kan. Breeders exclusively of pure-bred prize-winning record-breaking Holsteins. Correspondence solicited.

Butter Bred Holsteins

Buy your next bull calf from a herd that won the butter test over all breeds.

J. P. MAST - SCRANTON, KANSAS

The annual report of the British Berkshire Society for 1917 has just been received in this country. The book contains thirty pages of matter pertaining to the activities of this registry association in its different lines of work. Some of the prize-winning Berkshires of England are illustrated and a complete list of Berkshire awards at the leading fairs is given. At the great Smithfield Show of England in 1916, Berkshires won all the prizes in the carcass competition. There were classes for not over 100 pounds, not over 220 pounds, not over 240 pounds and not over 300 pounds. Three prizes were awarded in each class, Berkshires being awarded first, second and third in each class, as well as championship and reserve championship. The table compiled by Secretary Edgar Humfrey and which is included in his annual report, shows that the carcass competition was added to the Smithfield Club Show in 1904. This class is open to any breed, grade or cross. Pure-bred Berkshires have won both the championship and reserve championship and the first prizes in every class have been won every time by Berkshires except on six occasions, and on two of these the winners were a Berkshire cross. Out of a possible seventy-four firsts and championships, Berkshires were awarded all the championships and all the firsts but six, and two of these six prizes were awarded to a Berkshire cross. Another interesting exhibit in this report is the result of the championship at the Smithfield Club show. The champion pig of the show is chosen from the champions of each separate breed. Since 1883 thirty-four championships have been awarded and of this number pure-bred Berkshires have been chosen sixteen times and Berkshire cross-breeds seven times. During the same period pure-bred Berkshires have been awarded the reserve championship nine times.

Wilbur W. Wright, a practical farmer of Harvey County and a Kansas Agricultural College graduate, has been appointed assistant county agricultural agent in Shawnee County. Mr. Wright began his work there September 6. Wyandotte County now has an organized farm bureau and will have an agricultural agent as soon as the right man can be found.

AYRSHIRE CATTLE.

SOUTH FARM AYRSHIRES

300 HEAD.

75 Animals Imported from Scotland. 143 cows have qualified for advanced registry.

Males and females for sale.

SOUTH FARM

WILLOUGHBY - OHIO

FARM AND HERD NEWS NOTES

G. C. Wheeler, Live Stock Editor

W. J. Cody, Manager, Stock Advertising

O. W. Devine, Field Representative

Address All Communications to Kansas Farmer, and Not to Individuals

Personal mail may have to be held for several days, or be delayed in forwarding, and Kansas Farmer cannot assume any responsibility for mistakes occurring thereby

CLAIM SALE DATES.

Holsteins.

Oct. 4—Iowa Holstein Breeders' Sale, Waterloo, Iowa. Address F. C. Barney, Secretary Holstein Association, Chapin, Iowa.

Oct. 16—The Nebraska Holstein Breeders' Consignment Sales Co., Omaha, Neb.; Dwight Williams, 103 Bee Bldg., Omaha.

Oct. 22—W. H. Mott, Herington, Kansas.

Polled Angus Cattle

Oct. 4—Sutton & Porteous, Lawrence, Kan.

Polled Durhams.

Oct. 13—Mrs. Emma Hundley, Bogard, Mo.

Dec. 12—Joseph Baxter, Clay Center, Kan.

Jersey Cattle.

Sept. 27—Lochrie & McCoy, Carl Junction, Mo. B. C. Settles, Palmyra, Mo., sales manager.

Sept. 29—Oklahoma Breeders' Sale, Oklahoma City, Okla. B. S. Settles, Palmyra, Mo., sales manager.

Oct. 1—Redmon & Son, Tipton, Missouri, B. C. Settles, Palmyra, Missouri, sales manager.

Oct. 31—Geo. W. Hagan, Lee's Summit, Mo. B. C. Settles, Palmyra, Mo., sales manager.

Nov. 2—W. L. Hunter & Sons, Lincoln, Neb. B. C. Settles, sales manager, Palmyra, Mo.

Herefords.

Oct. 6—J. O. Southard, Comiskey, Kansas.

Oct. 23—W. H. Rhodes, Manhattan, Kansas.

Shorthorn Cattle.

Nov. 20—W. W. Waltmire & Son, Peculiar, Missouri.

Poland Chinas.

Oct. 4—Dr. J. H. Lomax, St. Joseph, Mo. Sale at farm near Leona, Kansas.

Oct. 13—Arthur Anderson, Clyde, Kansas.

Oct. 16—H. B. Walter & Son, Effingham, Kansas.

Oct. 17—Walter B. Brown, Perry, Kansas.

Oct. 24—Fred G. Laptad, Lawrence, Kansas.

Nov. 6—Ross & Vincent, Sterling, Kansas.

Nov. 6—U. S. Byrne, Saxton, Missouri.

Nov. 7—H. E. Myers, Gardner, Kansas.

Feb. 18—Deming Ranch, Oswego, Kansas.

Feb. 19—Fred B. Caldwell, Howard, Kansas.

Feb. 20—Bert E. Hodson, Ashland, Kansas. Sale at Wichita.

Feb. 20—B. E. Hodson, Ashland, Kansas; sale at Wichita.

Feb. 21—E. J. Erhart & Son, Ness City, Kansas; sale at Hutchinson.

Feb. 22—F. Oliver & Son, Danville, Kansas.

Feb. 23—V. O. Johnson, Aulne, Kansas.

Spotted Polands.

Oct. 19—Fred Rhodus, Excelsior Springs, Missouri.

Hampshire Hogs.

Oct. 12—Kansas Hampshire Swine Breeders' Association and Halcyon Hampshire Pig Club sale at Valley Falls, Kansas. George W. Ela, secretary and manager.

Durocs.

Oct. 20—O. W. Long, Maitland, Missouri.

Oct. 24—Fred G. Laptad, Lawrence, Kansas.



En-ar-co Petroleum Products for Every Farm Need



YOUR machinery is only as good as the lubricant you use.

Your tractor, automobile or gas engine is only as efficient as the gasoline that gives it power.

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En-ar-co "White Rose" is a pure, dry, homogeneous gasoline that gives utmost power to the last drop.

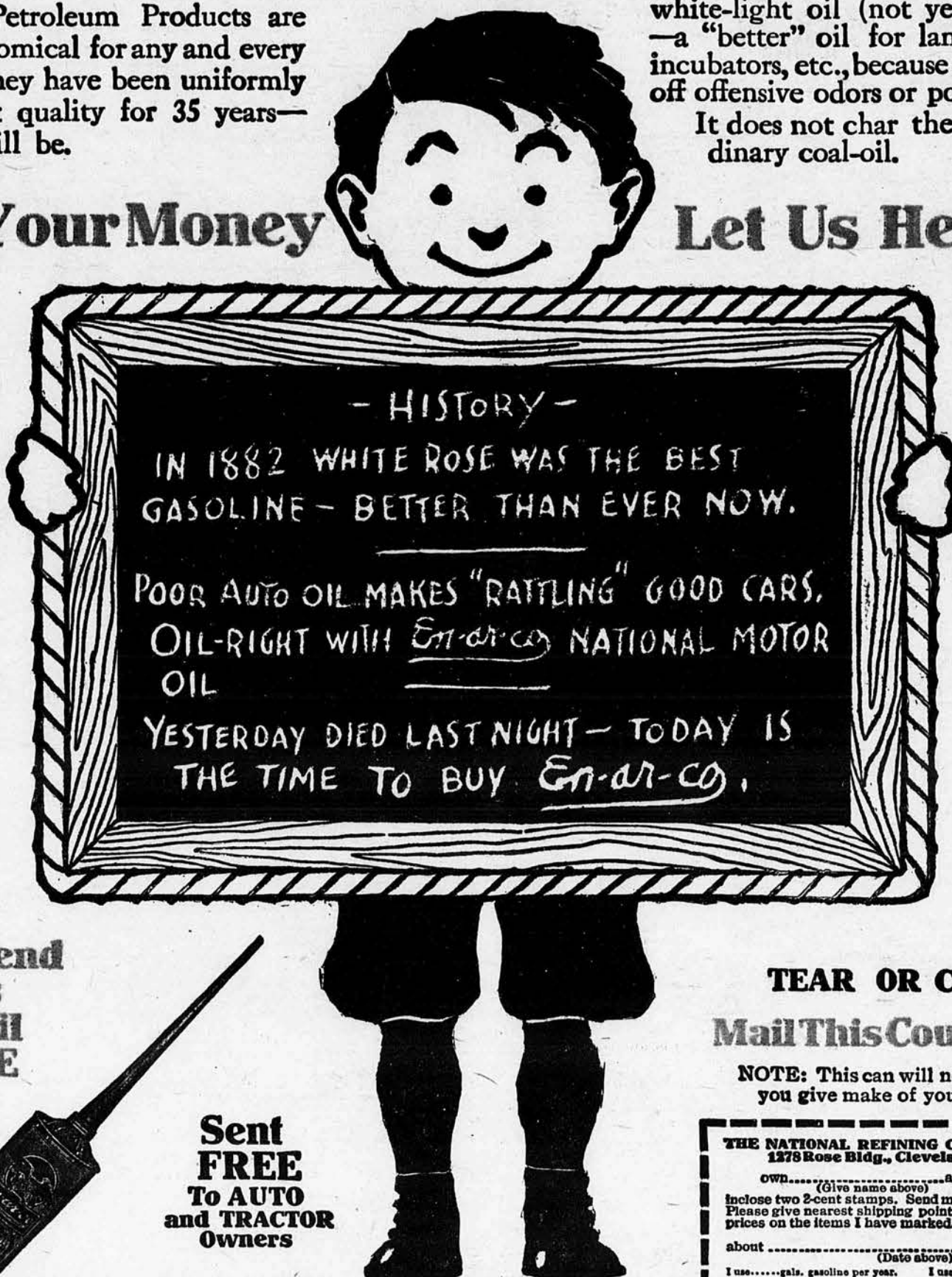
En-ar-co National Light Oil is a white-light oil (not yellow and dim)—a "better" oil for lamps, oil stoves, incubators, etc., because it does not give off offensive odors or poisonous fumes.

It does not char the wick like ordinary coal-oil.

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The first cost per gallon signifies nothing in what petroleum products will do. Economy does not lie in buying oils and gasoline at the lowest possible price. Investing a few dollars in En-ar-co products each season will turn depreciation into profit and bring a hitherto unknown satisfaction.



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