

# KANSAS FARMER

For the improvement of the Farm and Home

Volume 57, Number 37. TOPEKA, KANSAS, SEPTEMBER 13, 1919. Established 1863. \$1 a Year

## FAIR AT TOPEKA OPENS

### Big Fair Season of Kansas Begins Under Ideal Conditions

WITH the opening of the Kansas Free Fair at Topeka on Monday morning, September 8, the big fair season for Kansas opened up under unusually favorable circumstances. As we write, Monday afternoon, the indications are for one of the best and most instructive exhibitions of agricultural and industrial progress ever held in Topeka. The exhibits were practically all in place when the gates opened at 9 o'clock. The weather could not be better. Topeka has been unfortunate in drawing a rainy week several days since the inauguration of the free fair idea, and no fair, however carefully planned, can overcome the handicap of bad weather. Monday was Topeka Day, and practically all the business houses in the capital city closed for at least a part of the day and crowds surged through the gates and over the ground viewing the many attractions.

The Kansas Free Fair has become definitely established as one of the big stock exhibitions of the Middle West. Last year two new hog barns were added, each accommodating about 50 hogs. Two more of equal capacity have been built this year, making ten in all, and every pen is filled. In addition a monster tent has been put up containing over a hundred pens and a smaller tent for the pig club exhibits with a capacity of fifty pens. The exhibits sent by the boys and girls of the state pig clubs are under the immediate supervision of Paul Imel, state pig club leader from the Kansas Agricultural College at Manhattan. The junior classification where entries of boys and girls members of the state pig clubs are made, are also under his supervision.

Sheep are housed in a big overflow tent. Among the leading exhibitors of sheep are Gilmore & Hague, Peabody; Lawrence Lacey, Meriden; Homan & Son, Peabody; C. E. Wood, Topeka; Gilmore & Farm, Fredonia, and the Agricultural College exhibit of fifty head representing several of the leading breeds. There has been a remarkable improvement in the sheep show at the Free Fair, and much credit must be given A. Peterson of the animal husbandry department of our agricultural college

for what has been done in pushing up the standards in sheep. Sheep breeders are entitled to a building of their own for housing their exhibits, and it is to be hoped that one will be provided by another year.

At the cattle barn all the space is filled, and half of the horse barn is filled with cattle, the Holsteins and Ayrshires occupying this space. Since the showing of horses has changed from large exhibits made by importers to a showing by farmer breeders who keep a few purebred mares to perform farm work and raise colts as well, the barn originally planned for horses is larger than necessary. In the north half of this barn there are four exhibit herds of Holsteins and two of Ayrshires. Probably the largest and most striking exhibit of the dairy cattle show is that of The Farm Colony, United States Disciplinary Barracks, Leavenworth. This herd is being shown by one of the Chestnut boys. Chestnut & Sons, of Denison, are showing only four head this year. The bull, Rosa Bonheur Champion 2d, developed and shown for many first prizes and championship awards by Chestnut & Sons, now stands with The Farm Colony herd, having been purchased from the Chestnuts along with a number of cows and heifers some months ago. Other exhibits of Holsteins are the Smith & Hughes herd of the Lilac Dairy Farm, Topeka, and the Segrist & Stephenson herd of Holton, each with twelve entries. Fair visitors were greatly interested in the two exhibits of Ayrshire cattle also shown in this barn. John Linn & Son, of Manhattan, for the first time are making a public showing of their accomplishments in developing a high class producing herd of this breed. The nine animals are typical of the breed and show real dairy conformation. The Gosard Breeding Farm, of Turon, Kansas, also shows a classy lot of calves and young stock of this breed. The balance of the dairy cattle show consists of a herd of Guernseys entered by Dairyland Farm, Storm Lake, Iowa, a Jersey herd by G. T. Braden of Oklahoma, and a Jersey herd by R. A. Gilliland of Denison, Kansas. This latter herd is the work of a young man who has been able to build it up only as the cattle them-

selves have paid the cost from their actual production.

Shorthorns and Herefords constitute the big end of the beef cattle show. Nine exhibitors are showing in the Shorthorn classes. Among those from Kansas are John Regier of Whitewater with some fine calves showing the type of the Alfalfa Leaf Shorthorns he is breeding; Tomson Brothers of Dover, with a remarkably uniform lot, mostly by Village Marshal; T. J. Daw & Son of Bendena, W. R. Peterson of Troy, and Park Salter of Wichita. Rees & Sons, of Pilger, Nebraska, with their herd bull Violet Dale fresh from his championship honors at the Nebraska and Iowa state fairs; W. E. Pritchard, Walnut, Iowa; Plano Farm, Clio, Iowa, and W. A. Forsythe, of Greenwood, Missouri, made the remainder of the Shorthorn show, in all about seventy animals being exhibited. Achenbach Brothers, of Washington, who won grand championship on Sunny Sultan at Nebraska in close competition, were alone in the showing of Polled Shorthorns.

Over eighty Herefords are on exhibition. Kansas breeders were represented by R. H. Hazlett of El Dorado with fifteen head, among them the cow Yerba Santa, undefeated as yet; Klaus Brothers, Bendena; Carl Miller, Alma, and Goernandt Brothers, of Aurora, with Polled Herefords. C. M. Largent & Sons, of Merkel, Texas, who showed at Topeka last year, have an unusually well balanced herd on exhibition. N. B. Pike, of Weatherford, Oklahoma, who showed at Topeka two years ago but dropped out last year, and O. Harris, of Missouri, constitute the remainder of the Hereford show. Three strong Angus herds are showing—those of L. R. Kershaw, Muskogee, Oklahoma; J. C. Simpson, Eufala, Oklahoma, and R. W. Plummer, Marshalltown, Iowa. Topeka people are especially interested in the Simpson herd because their cow, Myra of Topeka, which has had an unusually good record in the show ring, was born on the Topeka fair ground. She will be no mean contestant for championship honors as against Twinburn Pride 5th of the Kershaw herd, the grand champion female at Nebraska last week. The agricultural college had steer entries in

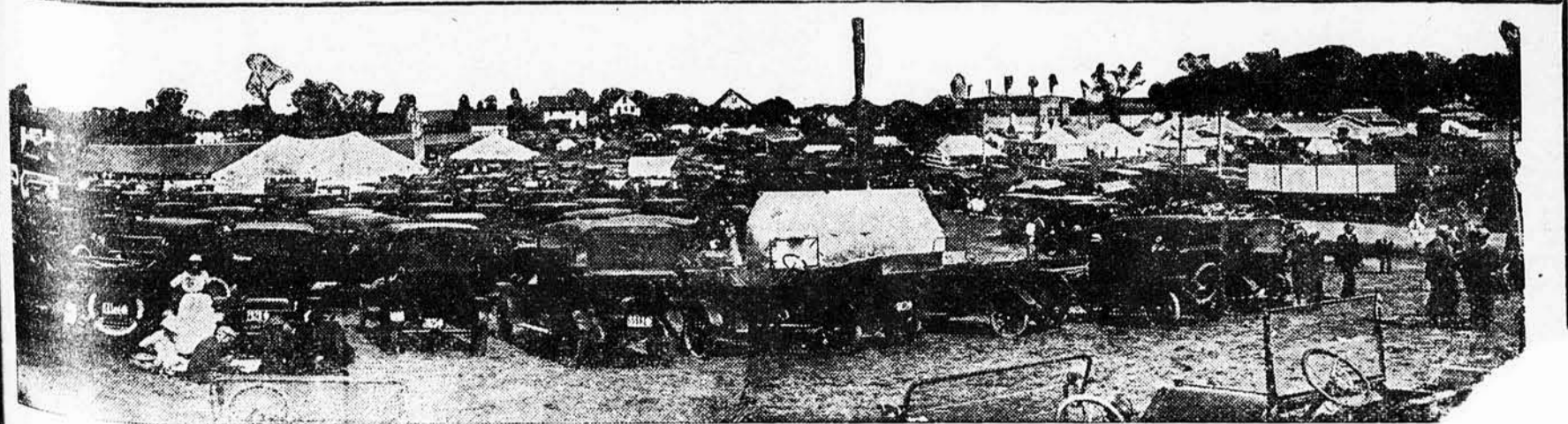
the different breeds and also two or three entries in the breeding classes.

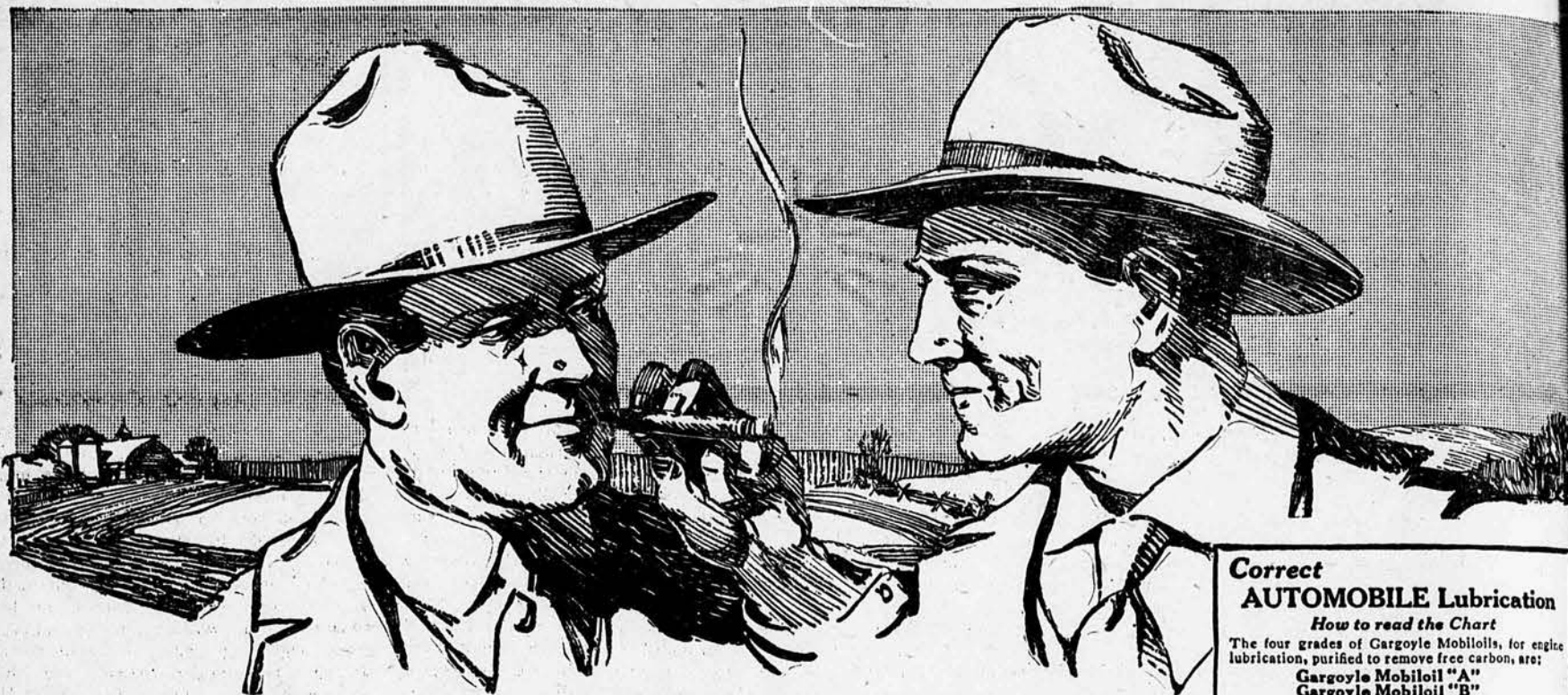
The showing of horses is made entirely by farmer breeders. In the neighborhood of 150 animals are on exhibition. J. A. Howell, of Paris, Missouri, showing Percherons, is the only out-of-the-state exhibitor. He is showing the brown yearling, Maud, winner of the grand championship at the Missouri State Fair, although some ringside judges thought the iron gray yearling, Twilight, which Mr. Howell bought of D. F. McAlister, of Topeka, the better filly of the two. Among other Kansas exhibitors showing from one to seven or eight head are J. T. Schwalm & Sons, of Baldwin; Mahlon Groenmiller, of Pomona; D. F. McAlister, Topeka; C. E. Dustin, Topeka; C. S. Soward & Son, Baldwin; Adam Becker, Meriden; C. C. Towne, Valencia; O. N. Wilson, Silver Lake; G. L. Rossiter, Will Saunders, F. A. Barney, and Mr. Ferguson, of Topeka, and the Gossard Breeding Farm, of Turon. This latter firm has with it the grand champion Kapataine of last year and last year's junior champion, Kantanel II, which they purchased from Mr. Wilson.

The boys' and girls' club work this year has been given splendid recognition in the shape of a fine building devoted exclusively to the display of mother-daughter canning club exhibits, garden club exhibits, and sewing club exhibits. The work here shown, it must be remembered, is by girls from ten to eighteen years of age. There were thirty-five hundred-jar exhibits from as many mother-daughter clubs, besides many entries by individual mother-daughter teams.

The "Victory Show" made by the government was a remarkable collection of fighting equipment and war trophies, made in a separate building which was crowded with visitors to its fullest capacity throughout the week. Army officials were in charge of this exhibit. The Department of Agriculture also made a most instructive exhibit of its work.

An unusually large display was made of improved farm machinery and equipment of all kinds, including many labor-saving devices for the farm home as well.





## "How many miles to the gallon?"

How American farmers are finding the answer:

### Correct

#### TRACTOR Lubrication

##### How to read the Chart

The four grades of Gargoyle Mobiloils for tractor lubrication, purified to remove free carbon, are:

**Gargoyle Mobiloil "A"**  
**Gargoyle Mobiloil "B"**  
**Gargoyle Mobiloil "BB"**  
**Gargoyle Mobiloil Arctic**

In the Chart below, the letter opposite the tractor indicates the grade of Gargoyle Mobiloil that should be used.

| TRACTORS                    | 1916 Models |        | 1917 Models |        | 1918 Models |        | 1919 Models |        |
|-----------------------------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
|                             | Summer      | Winter | Summer      | Winter | Summer      | Winter | Summer      | Winter |
| Albaugh-Dover (Square Turn) | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Allis-Chalmers              | B           | A      | BB          | A      | BB          | A      | A           | A      |
| All World                   | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Andrews                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Appleton                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Aultman-Taylor              | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Best                        | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Avery                       | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (5-10 HP)                 | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (10-15 HP)                | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Bates Steel Mule            | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Bean Truck Pull             | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Best                        | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (5-10)                    | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Big Bull                    | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Bower City                  | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Buckeye (Indiana)           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Indiana) (Giant Baby)    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Ohio)                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Cas                         | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (9-18)                    | A           | A      | A           | A      | A           | A      | A           | A      |
| " (10-20)                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (12-20)                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (20-40)                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Chas                        | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Cleveland                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Commodore                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| C. O. D.                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Corn Belt                   | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Crescent                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Crescent (EB)               | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Emerson-Bradford (EB)       | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (EB) (Big Four)           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Big Four)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Farm Horse                  | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Flour City                  | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Galloway                    | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Gas Pull (Rumely Co.)       | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Grain Belt                  | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Happy Farmer                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model B)                 | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Hart Parr                   | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Heider                      | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Holt Caterpillar            | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 18)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Huber                       | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Imperial Forty              | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Ingers                      | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Kardell                     | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| K. C. Prairie Dog           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Kinkaid                     | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Lion                        | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Little Chief                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Little Giant                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Maytag                      | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Minneapolis                 | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Mogul (I. H. Co.)           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (8-16) (I. H. Co.)        | A           | A      | A           | A      | A           | A      | A           | A      |
| Moline Universal            | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| New Age                     | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Nichols & Shepard           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Nilson                      | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Oil Pull (Rumely Co.)       | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (14-28, 10-20, 20-40)     | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Rumely Co.)              | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Parrett                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Peoria                      | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Pioneer                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Plow Boy                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Flow Man                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Pontiac                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Rumely                      | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (8-16)                    | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Russell                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (Little Four)             | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Sandusky                    | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Simplex                     | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Standard                    | B           | A      | BB          | A      | BB          | A      | A           | A      |
| Strait                      | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Titan (I. H. Co.)           | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| Tom Thumb (4 cyl.)          | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " in City                   | B           | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 15)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 16)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 17)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 18)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 19)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 20)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 21)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 22)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 23)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 24)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 25)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 26)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 27)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 28)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 29)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 30)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 31)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 32)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 33)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 34)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 35)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 36)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 37)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 38)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 39)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 40)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 41)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 42)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 43)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 44)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 45)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 46)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 47)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 48)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 49)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 50)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 51)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 52)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 53)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 54)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 55)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 56)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 57)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 58)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 59)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 60)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 61)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 62)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 63)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 64)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 65)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 66)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 67)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 68)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 69)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 70)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 71)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 72)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 73)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 74)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 75)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 76)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 77)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 78)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 79)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 80)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 81)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 82)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 83)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 84)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 85)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 86)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 87)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 88)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 89)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 90)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 91)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 92)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 93)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 94)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 95)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 96)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 97)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 98)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 99)                | BB          | A      | BB          | A      | BB          | A      | A           | A      |
| " (Model 100)               | BB          | A      | BB          | A      | BB          | A      | A           | A      |

THIS is getting to be one of the most frequently asked questions in America.

Every farmer who operates an automobile or tractor is interested in fuel consumption.

He wants to know, because mileage per gallon, or acreage per gallon, indicates closely what his automobile or tractor is returning on his investment.

When the engine is apparently in good mechanical condition, and still delivers less power per gallon of fuel than some other engine of the same type, size and equipment, look to these points for your answer:

1. Are you using the *spark* correctly?
2. Do you use an engine lubricating oil that forms and maintains a perfect piston-ring seal?
3. Do you, at regular intervals of operation of your car or tractor, drain the used crank-case oil (which invariably is diluted by the fuel) and replenish with new oil of the correct body and character?
4. Are you expecting more of the engine than it was ever designed to do?
5. Doesn't the other engine that gives better service use

the correct grade of Gargoyle Mobiloils, as specified in the Chart of Recommendations?

(Charts for both automobiles and tractors are shown on this page.)

Often the answer lies in Point Five.

The importance of correct lubrication cannot be emphasized too much.

The correct oil for your automobile or tractor engine must meet the lubricating requirements of your engine with scientific exactness. It must be of the correct body and character to withstand the heat of operation, furnish maximum lubrication to all friction surfaces, and maintain at all times a perfect piston-ring seal. It must be distributed readily and freely by the system of lubrication.

There is a grade of Gargoyle Mobiloils that is correct for your engine. This correct grade prevents carbon deposit. It withstands high temperatures, and furnishes maximum lubrication to all friction surfaces. It conserves power by keeping the piston rings tightly sealed—these are the big reasons for "more miles or more acres to the gallon."

Gargoyle Mobiloils are put up in 1- and 5-gallon sealed cans, in 15-, 30- and 55-gallon steel drums, and in wood half-barrels and barrels.

Write for our booklet "Correct Lubrication," which contains complete automobile and tractor charts and other valuable data.



## Mobiloils

A grade for each type of motor

In buying Gargoyle Mobiloils from your dealer, it is safer to purchase in original packages. Look for the red Gargoyle on the container.

VACUUM OIL COMPANY, New York, U. S. A.

Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world

Domestic Branches: New York Philadelphia Detroit Minneapolis Kansas City, Kan.  
Boston Pittsburgh Chicago Indianapolis Des Moines

### Correct AUTOMOBILE Lubrication

#### How to read the Chart

The four grades of Gargoyle Mobiloils, for engine lubrication, purified to remove free carbon, are:

**Gargoyle Mobiloil "A"**  
**Gargoyle Mobiloil "B"**  
**Gargoyle Mobiloil "BB"**  
**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 passenger and commercial vehicles unless otherwise noted.

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

| AUTOMOBILES               | 1916 Models      |        | 1917 Models |        | 1918 Models |        | 1919 Models |        | 1920 Models |        |
|---------------------------|------------------|--------|-------------|--------|-------------|--------|-------------|--------|-------------|--------|
|                           | Summer           | Winter | Summer      | Winter | Summer      | Winter | Summer      | Winter | Summer      | Winter |
| Abbott.....               | Arc.             | Arc.   |             |        | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Abbott-Detroit.....       | (8 cyl.)         |        | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Allen.....                |                  |        |             |        | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Apperson.....             | (8 cyl.)         | A      | A           | Arc.   | Arc.        | Arc.   | A           | Arc.   | A           | Arc.   |
| Auburn.....               | (4 cyl.)         | A      |             |        | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| • (5-8 & 8-39).....       |                  |        |             | A      | Arc.        | A      | Arc.        |        |             |        |
| • (6-39B) (Teeter H)..... |                  | A      | Arc.        |        |             |        |             |        |             |        |
| • (6-39B) (Cont'l.).....  |                  |        |             |        |             |        |             |        |             |        |
| Autocrat.....             | (6 cyl.)         | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Briscoe.....              | (8 cyl.)         | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   |
| Buick.....                |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Cadillac.....             | (6-40)           | Arc.   | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   |
| Case.....                 |                  | Arc.   | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   |
| Chalmers.....             | (6-40)           | A      | A           |        |             |        |             | Arc.   | Arc.        | A      |
| • (6-40)                  |                  |        |             | A      | A           | Arc.   |             |        |             |        |
| Chandler Ship.....        | (8 cyl.)         | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Chevrolet.....            | (8 cyl.)         | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| • (8 cyl.)                |                  | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   |
| • (8 P.A.).....           |                  | A      | Arc.        |        |             |        |             |        |             |        |
| Cole.....                 | (8 cyl.)         | A      | A           | A      | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| Cunningham.....           | (8 cyl.)         | A      | A           | A      | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| Dart.....                 | (Mod. C)         | A      | A           | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      |
| • (3 & 3½ ton).....       |                  | A      | A           |        |             |        |             |        |             |        |
| Detroit.....              | (8 cyl.)         | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | E      | E           | Arc.   |
| Dodge Brothers.....       |                  | Arc.   | Arc.        | A      | Arc.        | A      | Arc.        | E      | E           | Arc.   |
| Dort.....                 | (8 cyl.)         | Arc.   | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   | Arc.        | Arc.   |
| Empire (4 cyl.).....      |                  | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   | Arc.        | Arc.   |
| Empire (6 cyl.).....      |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Federal.....              | (Mod. S-X-3)     | Arc.   | A           | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| • (Special).....          |                  | Arc.   | Arc.        |        |             |        |             | B      | E           | B      |
| Fiat.....                 |                  | B      | E           | B      | E           | B      | E           | A      | E           | A      |
| Ford.....                 |                  | E      | A           | E      | A           | E      | A           | A      | A           | A      |
| Franklin.....             | (8 cyl.)         | A      | A           | A      | A           | A      | A           | A      | A           | A      |
| Grant.....                |                  | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   | Arc.        | Arc.   |
| Hall-Twelve.....          |                  |        |             |        |             |        |             | A      | Arc.        | A      |
| Haynes.....               | (8 cyl.)         | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | Arc.   |
| Hudson.....               | (Super Six)..... |        |             |        | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Hupmobile.....            |                  | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      | Arc.        | A      |
| Kearfott.....             | (8 cyl.)         | Arc.   | A           | A      | A           | A      | Arc.        | A      | Arc.        | A      |
| King.....                 | (8 cyl.)         | A      | A           | A      | A           | A      | Arc.        | Arc.   | Arc.        | Arc.   |
| • (Com'l.).....           |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | A      | A           | A      |
| Kluge-Kar.....            | (Mod. 48)        | A      | Arc.        |        |             | A      | Arc.        | A      | A           | A      |
| • (12 cyl.).....          |                  | A      | A           | A      | A           | A      | A           | A      | A           | A      |
| Lexington.....            |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Lippard Stewart.....      |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| • (Mod. M.V.).....        |                  |        |             |        | A           | Arc.   |             | E      | E           | E      |
| Locomobile.....           |                  | A      | E           | E      | E           | E      | E           | A      | Arc.        | A      |
| McFarlan.....             |                  | A      | Arc.        | A      | A           | A      | A           | Arc.   | A           | A      |
| Madison.....              | (8 cyl.)         | A      | Arc.        | A      | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| Marmion.....              |                  | A      | Arc.        | A      | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| Maxwell.....              |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Mercury.....              | (70)             |        |             |        |             |        |             | A      | Arc.        | A      |
| Mitchell.....             | (8 cyl.)         | A      | Arc.        | A      | Arc.        | A      | A           | Arc.   | Arc.        | Arc.   |
| Moline.....               | (Knight)         | B      | A           | A      | Arc.        | A      | A           | A      | A           | A      |
| National.....             | (12 cyl.)        | Arc.   | A           | A      | Arc.        | A      | A           | Arc.   | Arc.        | Arc.   |
| Oakland.....              | (8 cyl.)         | A      | A           | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Oldsmobile.....           | (8 cyl.)         | A      | A           | A      | A           | A      | A           | Arc.   | Arc.        | Arc.   |
| Overland.....             | (8 cyl.)         | Arc.   | Arc.        | A      | A           | Arc.   | A           | Arc.   | Arc.        | Arc.   |
| Packard.....              | (Com'l.)         | A      | A           | A      | A           | A      | A           | A      | Arc.        | A      |
| Paige (4 cyl.).....       |                  | A      |             |        |             |        |             |        |             |        |
| • (6 cyl.).....           |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| • (6-36)                  |                  | A      |             |        | Arc.        | A      |             |        |             |        |
| • (6-40)                  |                  | A      | Arc.        | A      |             |        |             |        |             |        |
| Paterson.....             |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Pathfinder.....           | (12 cyl.)        |        |             | Arc.   |             | A      |             |        |             |        |
| Peerless.....             | (8 cyl.)         | Arc.   | A           | Arc.   | Arc.        | Arc.   | A           | Arc.   | Arc.        | Arc.   |
| Pierce Arrow.....         | (Com'l.)         | A      | A           | A      | A           | Arc.   | A           | Arc.   | Arc.        | Arc.   |
| Premier.....              |                  | A      | A           | A      | A           | A      | E           | E      | E           | E      |
| Regal.....                | (8 cyl.)         | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | A           | Arc.   | Arc.        | Arc.   |
| Renault (French).....     |                  |        |             |        |             |        |             |        |             |        |
| Riker.....                |                  | A      | A           | E      | E           | E      | E           | E      | E           | E      |
| Saxon.....                | (Mod. 48 ton)    | A      | E           | E      | E           | E      | E           | Arc.   | Arc.        | Arc.   |
| Selden.....               |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | A           | Arc.   | Arc.        | Arc.   |
| Simplex.....              |                  |        | A           | A      | A           | B      | B           | A      | B           | A      |
| Stearns-Knight.....       | (8 cyl.)         | B      | A           | A      | A           | A      | A           | Arc.   | Arc.        | A      |
| Studebaker.....           | (8 cyl.)         | A      | A           | A      | A           | A      | A           | Arc.   | Arc.        | A      |
| Stutz.....                |                  | A      | A           | A      |             |        |             | Arc.   | Arc.        | A      |
| Velie (4 cyl.).....       |                  |        |             |        |             |        |             | Arc.   | Arc.        | A      |
| • (6 cyl.).....           |                  | Arc.   | Arc.        | Arc.   | Arc.        |        |             |        |             |        |
| • (7 & 3½ ton).....       |                  | Arc.   | Arc.        | Arc.   | Arc.        |        |             |        |             |        |
| Westcott.....             |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| White.....                | (16 valve)       | A      | A           | A      | A           | B      | B           | A      | A           | A      |
| Willys-Knight.....        |                  | A      | A           | A      | A           | A      | A           | Arc.   | Arc.        | A      |
| Willys Six.....           |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |
| Winton.....               |                  | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   | Arc.        | Arc.   |

Editorial, Advertising and Business  
Offices, Topeka, Kansas

Entered at Topeka Post Office  
as Second Class Matter

Published Weekly by The Kansas  
Farmer Company, at Topeka

# KANSAS FARMER

THE FARM PAPER OF KANSAS

G. C. WHEELER, EDITOR

REPRESENTATIVES: E. KATZ SPECIAL ADVERTISING AGENCY

New York: 15 Madison Square, North  
Kansas City, Mo.: 1402 Waldheim Building  
Chicago: Harris Trust Building  
San Francisco: Monadnock Building

SUBSCRIPTION RATES: One Year, \$1.00; Three Years, \$2.00.

Established by First State Board  
of Agriculture, 1863

Member Audit Bureau of  
Circulations

Oldest Agricultural Publication in  
Kansas

## FARMERS AND THE PLUMB PLAN

As far as we have been able to ascertain, farmers see nothing in this demand for the railroad employees for government ownership of the roads with labor having the whip hand in their operation but increased cost of transportation. The roads now under government operation are costing two and a half millions a day over and above all income, and must be paid by the people. Freight rates have been advanced 25 per cent and still there is not enough revenue to pay for the increased cost of operation. The increases being almost entirely due to the continued demand of employees for higher and higher wages.

The Oklahoma Farmers' Union offers a spirit of irony a counter proposition to this proposed plan of the railroad employees in the form of a resolution adopted at a recent meeting. It represents the farmer attitude on the brotherhood plan for railroad operation, and is just as consistent. The resolution is as follows: "If congress in its wisdom sees fit to give these railroad men their demands, we ask that congress shall also buy all of the farms in the United States with their equipment and employ all the farmers to operate them, paying to the farmers a wage equal to two-thirds of the hourly wage at the average railroad employee receives; and then sell all farm products to the consumer at cost." This government ownership of farms proposition would appeal to the consumer as more reasonable than the proposed brotherhood operation of railroads, says the Daily Oklahoman, because it provides for the products being sold at cost, whereas the unions propose to run the railroads at a profit, apportioning to themselves a goodly share of these profits.

Organized agriculture is opposed to any form of government ownership of railroads, and particularly the railroad employees, or Plumb plan, as it is called. The Oklahoman points out that if the whole people are to pay for the railroads and turn them over to any class of workers it would be more to their interest to donate them to the farmers, for agriculture is vitally concerned in guaranteeing to the public uninterrupted operation of trains and an efficient service at the lowest cost. Railroad employees constitute only about 3 per cent of all employees in the United States.

\*\*\*

## INCREASED PRODUCTION NEEDED

All the energies of the officials trying to lower the cost of living seem to be centered on beating down the prices of food, or in other words the prices of products of the farm. Food is assumed to be the only item to be considered in the high cost of living. This tendency of city dwellers to demand cheaper living at the cost of producers on the farm will lead to disaster. It is most dangerous to violate the laws of economics to the extent of making it possible for the consuming classes of our population to get food at less than the cost of production. A demand for the government to buy wheat at the guaranteed price, reselling it at a loss in order to lower the price of bread, was made in all seriousness a few weeks ago. Fortunately Mr. Barnes was wise enough to stand out against this proposal.

The constant tendency to center the whole attack on products of the farm will bring worse conditions upon consuming classes for production will con-

tract if the return is not sufficient to pay cost and a reasonable profit. Farmers are already contracting operations in making their plans for the future. The acreage of wheat put out this fall will be greatly reduced all over the country. Men through the central states, who ordinarily feed hogs and cattle are marking time, holding all their plans in abeyance pending the working out of the results of the attack on food prices. No one questions the need for fighting profiteering in foods, but it is only one of the many items involved in the high cost of living.

Last week while President Wilson was speaking in Indiana, the Indiana Committee on Food Production and Conservation which was appointed by the governor of the state at the entrance of the United States into the war in April, 1917, put in the President's hands a letter taking up the effect on production which the drive on profiteering is having. After pointing out the nature of the agricultural production of that state and setting forth the decreases in production which can already be predicted for next year as a result of the uncertainty prevailing and the manner in which the profiteering campaign is being conducted, the letter went on to say:

"Inadequate supplies of foodstuffs to meet the unusual demand are responsible to a large extent for the present high prices of food. If conditions are to be bettered, the production of foodstuffs should be increased. Every encouragement and assurance, therefore, should be given to the farmers so that the program of production may go forward in a strong way.

"Up to the present time, the campaign on the high cost of living has been largely directed on food. It is appreciated by all that rents, clothing, recreation and many luxuries are taking the larger share of the income of the wage earner and the salaried worker. It would seem, therefore, that all the people should be encouraged and urged to reduce unnecessary expenditures along these many lines. The demand for luxuries, amusements and non-essentials is far beyond that of any previous time, and all of this causes the committee to feel that people are giving undue attention to expenditures for food and are failing to economize and conserve along other lines, which is taking the larger share of their income.

"There is a general feeling among our farmers that the short hours of labor observed in industrial lines is militating against the efficiency on the farm and is reflected in the cost and volume of production. The same is true with all other activities in the preparation, handling and distribution of food.

"The Indiana Committee on Food Production and Conservation respectfully calls these matters to your attention and urges that in all possible ways, the attention of the public be directed to the essential needs for greater production, conservation, thrift and economy."

\*\*\*

## DEMAND FOR PACKER CONTROL

Many of our large producers of live stock are objecting to the bills now in congress designed to control the activities of the great meat packers. We do not believe producers should get in the position of appearing to be against any form of legislation to prevent abuses on the part of the packing industry. The very magnitude of the packing business makes it a potential menace, and this in spite of the fact that it has developed

a marvelous degree of efficiency in handling and distributing meats and meat products.

There are honest differences of opinion as to the effect of various sections of the proposed legislation. Most of the opposition which has developed has been directed toward certain features of the Kenyon bill. It is the function of congress to weigh carefully every point involved in legislation of this kind. Congress is made up of many men representing many sections of the country and having many different viewpoints. The men among the producers who have gone on record against the Kenyon bill in all probability are not opposed to some form of legislation for safeguarding the people and the producers against possible abuses on the part of the big packers. It is simply some detail of the bill before congress which they question, as for example the operation of all refrigerator cars by the government or the method of handling public stockyards.

The Kansas Stockman, which may be considered as officially speaking for the Kansas Live Stock Association, makes the following statement in closing a long editorial in a recent issue on "The Proposed Regulatory Legislation:" "The Stockman does not assume to oppose legislation which will regulate the packers. They are so big that it will ultimately be necessary for them to operate by rules laid down by Uncle Sam. We believe that a more exhaustive study of their business should be made by qualified experts and that at a later date a bill could be drawn which all producers could agree upon. But the demand is for action, we are told. The wise ones say that the Kenyon bill will pass in some form. Therefore the Stockman will go on record as favoring this bill amended as follows: Substitute for Section 2, which provides for a commissioner of food stuffs appointed by the President—That there be appointed by the President, by and with the advice of the senate, a foodstuffs commission consisting of three or five members a majority of whom must have been actively engaged in the production of live stock for at least ten years prior to their appointment. The members shall hold office for a term of five years and shall each of them receive a salary of \$10,000 a year. This foodstuffs commission shall under the direction of the secretary of agriculture, administer and enforce the provisions of this act and the rules and regulations made in pursuance thereof."

Other suggested amendments are to eliminate the portions of the bill requiring the licensee to refrain from handling other foodstuffs and other live-stock products and prohibiting ownership or interest in stockyards, and the ownership of refrigerator cars.

The editor of the Stockman states that he believes that after modification along the line suggested, the Kenyon bill would meet with the approval of a majority of the stockmen in Kansas, Missouri, Illinois, Ohio, Virginia, Indiana, and Oklahoma, and few of them would voice any opposition to it.

In view of the fact that public sentiment against the packers is constantly gaining strength, it would seem that they would be glad to accept a reasonable bill giving the government some sort of supervision over their operations.

\*\*\*

City papers are now complaining that the repeal of the so-called Daylight Saving Law by passing it over the Presi-

dent's head is a case of minority rule. Even the Outlook, usually so broad-minded in its viewpoint, argues at considerable length in a recent issue that the clamor of the minority has fooled congress into believing that this was an unpopular law. We cannot believe that congress often makes such a mistake in interpreting public opinion. When more than two-thirds of the people's representatives vote to pass a measure over a second veto by the President, it can be safely assumed that they are reflecting the views of a considerable majority of the whole people. There is no law to prevent the workers in any industry from beginning work an hour earlier during the summer season, and thus having the extra hour of daylight in the afternoon without tampering with the clocks. Perhaps we will be able to measure the real sentiment in favor of the daylight saving scheme by observing the action of industrial centers next season.

\*\*\*

The following statement is made by the United States Department of Education: "Less than one per cent of American men are college graduates, and yet this one per cent has furnished fifty per cent of the constitutional conventions, fifty-five per cent of all the presidents, thirty-six per cent of all the members of congress, forty-seven per cent of all the speakers of the House of Representatives, fifty-four per cent of all the secretaries of state, fifty per cent of the secretaries of the treasury, sixty-seven per cent of the attorneys-general, and sixty-nine per cent of the justices of the supreme court." These figures illustrate the commanding position of the college man in places of responsibility and power. The farmer of today must also of necessity be a broadly educated man, not only in the technical features of his occupation, but in a general way. The young man who expects to farm cannot afford to pass up the chance for a college education if it is within his reach. Parents who would discourage in their children the idea of getting a higher education are not alive to the conditions which will confront the young man in these times of high-priced land and high production costs all along the line. The boy or girl with a college training will be better fitted to live a full well-rounded life, and even measuring success simply from a dollars and cents standpoint the training will pay.

\*\*\*

The value of land in the last analysis depends on what it will produce. Land being purchased now for \$300 or \$400 an acre will probably not produce any more than it did four or five years ago unless handled much more efficiently. The man who buys land at high prices, making only a small cash payment, should not overlook the fact that he is creating an obligation on the basis of a depreciated dollar. If the high price level is permanent, as some economists maintain, the transaction will perhaps bring no hardship, but if the dollar has shrunk in purchasing power when the debt must be paid, real hardship will ensue.

\*\*\*

The first society in the world for the prevention of cruelty to children was founded by the same man who founded the first society for the prevention of cruelty to animals. Back of both same motive—the protection of less.

# WASHINGTON GRANGE NOTES

## National Grange Keeps Tab on Congress in Interests of Farmer

INTERESTS of agriculture in congress are being closely watched by Thomas C. Atkeson and A. M. Loomis, Washington representatives of the National Grange. The following notes prepared by Mr. Atkeson and Mr. Loomis, touch briefly on some of the important questions before congress and express the sentiment of a large body of the organized farmers of the United States.

### Victories for Agriculture

Congress, which has been awaiting committee reports on a score of important legislative matters during the better part of August, is speeding up following the Labor Day recess, and many indications point to decisive action on a number of important matters of legislation within the next four weeks.

The month just passed is, however, to be marked in red, by all farmer interests because of the passage of the Daylight Law repealer over the veto of the President; the cancellation of the potash import restrictions by the War Trade Board; the awakening of the public to the inadequacy of superficial remedies for the High Cost of Living; by the bold stand taken by agricultural interests before congress and the President, charging wastefulness and extravagance and unwillingness of other interests to perform a full day's work for a fair day's pay as the real cause of the under-supply of necessities of life; and the knock-out blow delivered at the now notorious "Plumb Plan" of railway ownership and operation by the National Grange. In these four events organized farmers found their strength, and their method of accomplishing definite results. It presages a more hopeful outlook for fair consideration of farmer interests in the coming weeks and months of legislation.

### Opposition to Militarism

The army reorganization bill is before Congress, carrying provisions for a standing army of approximately 600,000 men. A special bill increasing the officer personnel to 18,000 has already passed both the House and Senate. The whole proposition, it is frankly stated, means an annual cost of \$600,000,000.

The Grange speaks for the farmer people of the country in opposing any plan, state or national, which features a compulsory military training. It is on record to this effect in vigorous language in a resolution adopted at its last annual session. It has endorsed plainly and freely, the League of Nations, the prime object of which is to do away with the standing armies which menaced and nearly crushed the best civilization the world has yet produced. The National Grange now sees in the drive for the adoption of this \$600,000,000 a year program of the American militarists a plan to build up here what we have crushed in Germany, a military machine. This machine, if created, will rest on the narrow and autocratic authority with which each officer is vested when the first shoulder strap is pinned on the shoulder of the new second lieutenant. The human weakness for authority and then more authority, functioning from the second lieutenant to the lieutenant general has reached even to the one time pacifist of the cabinet, the present war secretary. It is not an American ideal and the Grange is opposed to it. There is, of course, a necessity for some standing army, but no demand and no necessity outside of an artificially created demand, plus the very plain desire of a lot of lieutenants and captains and perhaps a few higher-ups, to live at government expense, for a 600,000 man army and a \$600,000,000 burden. If it thinks this is a popular subject to discuss it with a group of dough-brothers from France.

### Cold Storage Regulations

The House committee on agriculture has been working on a cold storage regulatory law recently, and Dr. Harvey W. Wiley, former head of the pure food work, now a farmer in Virginia, and Prof. T. C. Atkeson, Washington representative of The National Grange were witnesses the same day. Both men told the committee that cold storage facilities were of great value to the farmers, subject to such regulations as would make cold storage facilities available to all interests at all times at equal costs. They agreed that food stuffs should not be permitted to remain in storage over one year. They agreed that there might be some profiteering and that it was reprehensible, but that if it were all prevented, it would not effect a five per cent reduction in the cost of foods to the public. They agreed further, and this is important, that the cause of the High Cost of Living relative to wages, could be affected materially only by increased production of the necessities of life.

### Farmers Against Nationalization

By a sort of mutual agreement the consideration of the packer legislation is before the Senate Committee of Agriculture; while consideration of railroad legislation is before the House committee on interstate commerce. When the hearings are over—they are likely to last some weeks—some bill on each subject, together with committee amendments, will be reported. This is about as far as predictions can go at this time. The licensing provisions of the various packer bills are being studied with care. This has been called "Government by Permission," by one of the big farm papers. Much opposition is

manifest to any licensing system, sufficient at least to warrant the statement now that there is a possibility that any licensing provision in any bill which may be reported in either House or Senate will be defeated. There is equal, if not greater, opposition to all provisions looking to nationalization or government ownership of the railroads, and equal warrant for the statement that the probabilities now indicate the defeat of any nationalization plan should such plan be reported.

### Cost of Living and Farming

Secretary of the Interior Lane, having seen Attorney General Palmer assume the leadership of the President's rush campaign to force down the high cost of living, and "jail the profiteers," is now urging that his pet plan for a "conference" be now carried out. The eclipse of the versatile secretary of the interior by the pugnacious attorney general threatens to be total unless something of this kind happens. The ease with which all the members of the administration forget the farmers is emphasized in both sides of this little by-play, for the Attorney General is acting on the theory that prices may be lowered without consideration of either amount or cost of production; while the Secretary of the Interior is acting on the theory that a "conference" between labor, capital, business leaders, and "the public," forgetting that the farmer exists or has any part in this problem, can accomplish some result. However, the farmers may view the futility of any efforts of either one or the other to solve the present puzzle with entire equanimity, content to be left out because of the predestined futility of all effort which does not start with increased pro-

duction of the things we all must have to eat and wear. It is just another of the long list of intentional or accidental sins of omission against agriculture which can be charged to those now in high places. If the word "ignore" is the root of the word "ignorance" then two or three members of the Wilson cabinet need some education.

### Government Ownership National Issue

William J. Bryan's Madison Square Garden speech of 1903 for government ownership of railroads will be recalled by his appearance before the interstate commerce committee August 29, when he reiterated and amplified his argument for government ownership. It is the same orphan, but now is in a new dress and there are a number of anxious people trying to claim parentage of it. Mr. Bryan has a good claim to priority. The reappearance of the distinguished Nebraskan in the limelight may be significant of coming political events. There is now great force behind the movement for government ownership or nationalization or "Democratization" as the President phrases it, not only of railroads but of other great American industries. The leader who can command this force especially if one who has already behind him the great prohibition and woman suffrage movement, has a potential vote-getting capacity which must be reckoned with. The possible change in the fundamental American policy from individualism to nationalization or socialization of industry may easily become the paramount issue as soon as the Peace Treaty is ratified; and even if that treaty is still a political football in 1920, this issue will loom up large among the issues of the presidential campaign. The reappearance just now of Mr. Bryan "on the front page" is a matter of unusual interest.

### Grange Fights Mondell Bill

Gossage has it that the Mondell bill—the Lane Soldier Settlement plan so miscalled—has been definitely sidetracked until later, perhaps the next session. Perhaps it has, but the propaganda is still working twenty-four hours a day, and five governors endorsed the plan recently. This is no time to slow up in opposing this raid on the treasury. The soldiers themselves have a half dozen substitute plans under consideration, and deserve a hearing. Certainly they are the persons most concerned. The Grange urges all agricultural interests to keep up the fight against the Mondell bill, and to carry the fight to every congressman who favors it.

### Dismiss Wartime Boards

The President's recommendation that wearing apparel be included in the food control law has been approved by the House committee on agriculture and the amendment passed by the House. The Senate has acquiesced and added an anti-rent profiteering amendment which is still pending. The National Grange is on record as strongly opposing not any detail of the law as formerly written or now amended, but any continuation of this kind of "control" legislation for a single day past the end of the war or the definite announcement of peace. Next to the necessity for greater production, and as an essential factor for greater production, the Grange believes the most necessary step to be taken is to open the channels of trade, remove all wartime restrictions, and insure the free flow of products from producer to consumer. The removal of all war time food restrictions, and of all war time export restrictions are essential items in this program.

The Grange opposes any extension or continuation of special war time boards or commissions in any form.

## RECORDS AND STANDING OF DAIRY CLUB MEMBERS

OF THE eighty-three boys and girls enrolling in the second Kansas Farmer Dairy Club, sixteen were prize winners. Those of the number who had been members of the first year's club contested only against each other, comprising what was known as the "Advanced Class." This division was made lest beginners should be discouraged by the thought that they were competing with those of more experience. The four handsome trophy cups illustrated in our last week's issue were awarded to those winning first and second places in each class. Three other members of the advanced class and nine of the other group completed the work so creditably that it was felt they were entitled to some recognition, and an appropriate souvenir has been sent to each of these.

The boys and girls enrolling in the Dairy Club purchased good dairy cows with money borrowed from a banker, giving their notes for a year and agreeing to pay each month what remained of the gross receipts after deducting feed costs. The milk was weighed at each milking and once a month a sample was tested for butter fat. All feed was weighed or carefully estimated and complete records were kept under the supervision of the junior editor of KANSAS FARMER.

In ranking contestants consideration was given to the total production of the cow, the profit made over cost of feed, and accuracy and neatness of records, as well as promptness in sending them in each month.

In many cases the cow was paid for before the end of the year, the proceeds from the sale of the calf sometimes being applied on the note, and in most cases where the note had to be renewed it was only for a few additional months.

The table below gives names and rank of winners, and a summary of their records:

| Name                    | Rank | Total Milk, Lbs. | Total B. F. | Value of B. F. | Cost of Feed | Profit for Year |
|-------------------------|------|------------------|-------------|----------------|--------------|-----------------|
| Claude Carter .....     | 1    | 11,588.2         | 387.8       | \$180.63       | \$79.00      | \$100.03        |
| Thelma Adams .....      | 2    | 9,133.0          | 359.4       | 166.48         | 72.10        | 94.38           |
| Floyd Gerardy .....     | 3    | 8,760.1          | 301.9       | 135.88         | 64.21        | 71.67           |
| Lucile Radcliffe .....  | 4    | 7,769.2          | 279.0       | 117.05         | 43.71        | 73.34           |
| Hazel Shriver .....     | 5    | 8,483.5          | 309.8       | 142.99         | 67.99        | 75.00           |
| Marion M. Lee .....     | 6    | 9,978.9          | 356.3       | 162.23         | 114.05       | 48.18           |
| Clarence Radcliffe .... | 7    | 6,334.9          | 239.8       | 100.08         | 44.72        | 55.36           |
| Roland E. Roney .....   | 8    | 8,722.3          | 233.2       | 106.24         | 73.20        | 33.04           |
| Frank Greenlee .....    | 9    | 7,986.5          | 257.8       | 108.17         | 66.18        | 41.99           |
| Gary Cook .....         | 10   | 5,136.2          | 181.4       | 82.50          | 44.90        | 37.60           |
| Merrill Greenlee .....  | 11   | 6,660.0          | 215.8       | 93.37          | 55.10        | 38.27           |
| ADVANCED CLASS          |      |                  |             |                |              |                 |
| Glen Romig .....        | 1    | 12,416.0         | 420.6       | 189.58         | 104.60       | 84.98           |
| Harvey Russell .....    | 2    | 9,974.9          | 397.0       | 168.43         | 76.89        | 91.54           |
| Elise Regier .....      | 3    | 13,857.6         | 424.7       | 182.18         | 142.40       | 39.78           |
| Harold Bentz .....      | 4    | 5,384.5          | 232.4       | 107.47         | 55.01        | 52.46           |
| Theresa O'Mara .....    | 5    | 7,896.1          | 253.4       | 116.06         | 91.15        | 24.91           |

# TESTS OF MULTIPLE HITCH

## Field Demonstrations of Tandem Hitch to Eliminate Side-draft

By R. W. KISER, K. S. A. C.

IT HAS been authoritatively stated that the tandem or multiple hitch for horses, worked out and tested by Professor E. A. White of Illinois University, decreases the draft twenty-five per cent. Six, eight, and even ten horse teams can be handled by this method. This increase in efficiency means that the farmer who has found it necessary, for example, to work five horses when hitched abreast can do the same work by this method of hitching with four horses.

Professor White in discussing the relative advantages of the multiple hitch says, "With the abreast hitch it is impossible to use three horses on a sulky plow or four horses on a gang plow—no horse walking on the plowed ground—without causing side draft. If more horses are used the side draft is increased."

In the central states, the great wheat and corn producing section of the United States, one of the greatest problems confronting the farmer at the present time is the shortage of labor or man power. In order to overcome this labor shortage it is necessary to substitute horse power. The time was when a man's productive power was limited to the amount of work he could do with his own hands. Today the limiting factor is the amount of horse power one man can control.

Of necessity this horse power must be as efficiently used as possible if farm production is to be profitable. In order to utilize this power efficiently in working horses in large teams, the most advantageous line of draft must be secured in order to avoid needless strains and loads.

The first principle of decreasing draft is to so hitch our horses to the various implements as to eliminate side draft. In the arrangement of an efficient hitch one should consider the following points: the number of horses required for the work, equalizing the pull between the horses, method of driving, giving the horses the most favorable conditions under which to work, and the elimination of all side draft.

In field demonstrations of the "White Multiple Hitch" recently conducted at the Kansas Agriculture College very good results were obtained. A study of the accompanying illustrations will give the reader a fairly good idea of the



THE White Multiple Hitch is here shown in operation on the Agricultural College farm, Manhattan. Note in the side view that the tugs of the lead team are parallel to the tugs of the wheel team and form a right angle with horse's shoulder. The weight on doubletrees of lead team insures this correct line of draft. The view between the horses from the rear shows the method of equalizing pull, and also the draw rod to which lead team is hitched. Carefully conducted tests have shown that this tandem hitch by elimination of side draft reduces the total draft in handling farm machinery 25 per cent, or makes it possible for four horses to do the work of five hitched abreast.

working principles of this hitch.

Objections are often made to the tandem hitch on the ground that the draft is increased because the lead teams are too far from the load. With the average tandem hitch used on the farm, the lead teams work at a disadvantage. It is conceded by all horsemen that in performing hard work the tugs should make a right angle with the shoulder of the horse. In the cut here shown, which is from a photograph taken of a team hitched by this method, it will be noted

that the tugs of the wheel team and those of the team ahead are parallel, having the same angle of pull and making right angles with the shoulders of the horses. This correct line of pull is secured by placing a fifty-pound weight on the doubletree of each team except the wheel team. In this method of hitching all side draft is eliminated. Regardless of the number of teams used, the line of pull is always directly forward. Any number of horses may be used with approximately the same re-

sults by selecting the proper units. Four, six, eight, or ten horses may be hitched in tandem fashion with the pull equalized for the ten as efficiently as for a four-horse team.

The average Kansas farmer requires but four, five, or six horses to pull any farm implement in common use. The wheat farmer generally uses five horses on the gang plow. When five horses are worked abreast it is impossible to entirely eliminate side draft without working at least one horse on plowed ground.

So much interest is being shown by farmers in Kansas in this method of hitching horses that a series of demonstrations of the White Multiple Hitch has been arranged in counties having farm bureau organizations. These demonstrations will be under the direct supervision of the county agents in their respective counties. Information concerning the dates and places where such demonstrations will be held may be secured from the extension division of our agricultural college at Manhattan.

### Typewriter on Farm

A city man who recently visited a farmer friend for the first time in years expressed surprise on finding the farmer equipped with a business-like desk and a typewriter.

"I was astonished with the ease and speed with which the farmer used the typewriter," said the man from the city. "I, myself, have had need for a typewriter for personal use for a long time, yet I've never felt equal to the task of operating one. And here I found myself being shown by my farmer friend."

If this city man would extend his investigation in the country he would find that the typewriter in no new thing to the farmer. Hundreds of farmers have been using the typewriter for a long time and more are coming to its use every day.

The modern farmer has a great deal of writing to do, and he finds the typewriter extremely useful. He uses it for his correspondence, for it is not only easier than pushing a pen, but it gives his letters a more business-like appearance.

He finds too, that pedigrees, card indexes, daily reports, accounts—in fact everything to be put in writing—is better done on a typewriter.

## Golden Age of Shorthorns

A GROUP of Shorthorn enthusiasts, members of the Chicago Shorthorn Club, recently spent a day on Edellyn Farm, Ill., owned by Thos. E. Wilson. One of the speakers on the program was Alvin G. Sanders. In speaking on the subject which he had chosen, The Golden Age of Shorthorns, Mr. Sanders said, in part:

"The standard of individual merit is being maintained at a higher level than at any previous time within my recollection. We no longer look for the big, upstanding, table-backed sort once so popular, as exemplified by the champions at the old-time fairs and fat stock shows. We live in the day of baby beef. This calls for early maturity, and puts a premium on quick-feeding quality. But making allowances for the change of type which has taken place, I mean to say that there are vastly more good cattle of the type popular today than there were of the top specimens of the breed as I first knew them."

"The question may be asked, 'To what can we attribute this marked rise in average quality?' My own theory is that it is because there has never been

a time since the earliest dawn of Shorthorn history when so many intelligent men were engaged in sustaining and extending the Shorthorn power by the application of sound, rational principles and practices. There has never been a time within my recollection when the business was so nearly free from fads, follies and fancies prejudicial to progress. Never within my recollection has it been so generally conceded that the basis of all real success in this business must be the quality of the cattle themselves, and the character of the immediate ancestry. Even the old 'family' worship, once so universal, is gradually being relegated to the limbo of things that were, but are not, and never should have been."

"Coincident with the establishment of this high-water mark in actual merit, we observe the highest average range of money values yet registered in the annals of the breed. This also is a matter for congratulation, for I can remember the time when animals actually possessed of little real value beside their hide and horns sold in the auction ring at from \$2,000 to \$20,000 each, merely

because they happened to be called Kirklevington, Barringtons or Duchesses; and the joke of all that situation was that many of the animals trafficked in under those names carried more Princess and Oxford blood than anything else. Happily all this is now changed. You men who are now carrying forward the Shorthorn colors so triumphantly are living in what may truly be called the golden age of the Shorthorn breed. You are by your sanity of procedure, and by your generosity in valuations, bringing to the steadfast adherents of the Shorthorn faith a reward that has been fairly won, and therefore richly deserved."

"The only word of caution I would urge is that the payment of long prices be limited to animals bearing within themselves, rather than in their pedigrees, the evidence of probable efficiency as instruments in the perpetuation of desired qualities. In this connection I want to urge as a breeding proposition the importance always of looking carefully for femininity in your cows and heifers, and, conversely, for strength and masculinity in your herd bulls. There was a time when I thought we

heard too much about character as revealed by heads, but the longer I study and observe the transmission of hereditary qualities, the more convinced I am that pronounced individuality, as indicated by the formation of the head and expression of the eye, can scarcely receive too much attention."

"There must be strength and an air of commanding power in the bull, and real refinement in the case of the female."

"But before closing, I will remind you that you have in your keeping, in the hollow of your own hands, the fortunes of a breed of cattle that has enriched the entire farming world. It came into your possession from the hands of others as an estate to be administered as a sacred trust. Never forget for a moment therefore, that you are but its temporary custodians. It came down from preceding generations, and it belongs quite as much to those who are to come after as to those who are today. It must be transmitted all its acknowledged virtues along with the blue grass on which it feeds."

### Hogging Off Corn

**L**ETTING hogs harvest the crop of corn was long held to be an extravagant practice, a practice followed only by the shiftless farmer. But in the light of later experience and careful experimentation it has been found to be a profitable and economical method of using the crop. In some tests made at the Minnesota Experiment Station it was found that an acre of good corn would carry from five to eight pigs through the hogging down season. Their records showed that even an acre of rather poor corn harvested by this method has produced pork worth from \$35 to \$50. It is also stated that reports even of \$100 to \$150 worth of pork produced per acre are not uncommon. The following are some of the advantages of harvesting a corn crop which stand out most prominently:

Saves labor of feeding the pigs in the old way and of harvesting the corn.

Makes appreciable saving of time for the farmer in a busy season.

Hogs will harvest the corn more efficiently than it can be husked by man or any type of harvesting machine.

The greatest possible percentage of the crop is left on the land to take the place of fertilizer as no part of the crop is removed except what the hogs take away in the form of pork.

Cornfields harvested by hogs are left in excellent condition to be plowed for another crop.

The type of hogs best adapted to harvesting corn, is the early farrowed spring pig that should weigh from 115 to 135 pounds by September 1. Pigs of this weight will be ready for market by the time the corn harvesting period expires. They should and usually do gain more than a pound per head each day while harvesting corn.

If soy beans or rape are planted in the corn, the pigs will have a well balanced ration before them all the time. If the fields are bare aside from the corn, the feeding of a nitrogenous supplement such as linseed oil meal or tankage placed in a self-feeder will prove profitable.

### Fertilizing Kafir Paid

We are often asked if it pays to use commercial fertilizers. J. B. Bennett of Jackson County has convinced himself that it does. You probably would agree with him if you could see some of his test fields, and particularly a field of Blackhull kafir.

Mr. Bennett is a wide awake farmer who is always looking for something that will increase his efficiency. Last year he obtained very good results in using commercial fertilizers on potatoes and other truck crops. Early this spring after consulting with E. H. Leker, the county agent, he decided to get a supply of several grades of fertilizers and give them field tests on his farm. He used this fertilizer on corn and kafir, and the results as they appear at the present time are most promising. The fertilized corn shot ahead of the unfertilized from the start, and from present indications will yield about twice as much to the acre.

The difference between the fertilized and the unfertilized kafir is most striking. He planted this in alternate rows, two rows with fertilizer and two rows without. When inspected recently, the fertilized kafir was fully headed out with big well filled heads, and the plants had a vigorous stalk and strong root system. The unfertilized rows had not headed out and will have to hurry if they mature ahead of the frost. Even with a late frost, they have no chance for equaling in production the fertilized rows, because they are lacking in stalk and root development.

Mr. Bennett planted this kafir May 8, using a lister with fertilizer attachment. Fertilizer was applied at the rate of 200 pounds to the acre. The best results came from the 2-12-2 formula. These combinations gave good

## New Development in Horse Business

By E. B. White, President, Percheron Society of America.



PURE-BRED PERCHERON COLTS ON A. J. WEMPE FARM, FRANKFORT, KANSAS.  
ALL FARM WORK DONE BY SIX PERCHERON BROOD MARES

**T**HE HORSE business has taken a definite turn for the better in the last few months. The wet weather of the spring and early summer which held back farm work all over the United States demonstrated that tractors are not so dependable as good draft horses when it comes to working under all kinds of climatic conditions, none of which are controlled in any way by man. From this time on the tractor and the draft horse are going to be considered in the minds of the American people purely on the basis of which one can do farm work most economically. The average farmer using a diversified system should not tie up a lot of money in a tractor when horses can be purchased as cheaply as they can now. Farmers are now beginning to realize this and consequently prices for big draft horses are going up. A few days ago an Illinois farmer sold a pair of draft geldings right out of the harness and past their best days of usefulness for \$700 and refused the same figure for another pair. A Kansas farmer a few weeks ago sold a pair of draft geldings for \$1,050. His neighbor sold three pairs of big mules out of grade Percheron mares for \$2,400. In Oklahoma, farmers pay \$7 to \$10 a day for a man and two horses to work in the wheat fields. In the large cities in the eastern part of the United States buyers find it impossible to purchase enough drafters to meet the demand. It isn't any wonder that big horses are getting scarce either, for breeding practically stopped all over this country four years ago, but stallion owners have a different tale to tell this season. I made a trip by auto recently through Ohio, Virginia, Pennsylvania, Maryland, and West Virginia, visiting Percheron breeders, and every man I found standing a good Percheron stallion was getting about all the business he could handle. Every one said that a great many more mares were being bred than a year ago. Not many mares weighing under 1,400 pounds are being bred though, and that is a very encouraging feature for it simply means that the class of horses raised from now on will be bigger and better than this country has ever produced before. It doesn't pay the average farmer on this high priced land to raise a small horse any more—nothing but good drafters pay.

I live on the land because I love the great out of doors. I raise corn, wheat, hay, apples, and Percheron horses, to provide an income that I may enjoy the comforts of a country home and not as a means of providing an outlet for spending an income earned in some other business. If I find that some practice on my farm isn't making money, I try to find the reason and change, if possible to a better way. Like thousands of our best farmers, I bought tractors because I thought they could be used to advantage on my farm. I have owned several different makes. The agents seemed able each time to persuade me that tractors were all right but that I had been unfortunate in the make I had bought each preceding purchase. This venture cost me \$3,000 which was lost

inside of one year, and the lesson I learned is that I can till my acres a good deal cheaper, a great deal better, and much more satisfactorily with the help I can hire, by using good draft horses than I can with tractors. I thought I could surely deliver my apple crop with a tractor. The salesman assured me that one man could take five or six wagon loads of apples, one tied behind the other, and deliver them in town four miles away as quickly as a man with a team could deliver one load. If it were true that one man could do the work of six, it would be a splendid business policy to follow this practice, but it wouldn't work. I had an expert mechanic employed on my farm by the year. He got this tractor mired down in the orchard until it almost buried itself because there had been some rain. He made a few trips to town, and then the president of the turnpike company stopped him because he had almost ruined the road. I had to abandon the use of the tractor for this purpose entirely. I thought I could surely sell it back to the man I got it from because I had only used it for five round trips. It cost me \$2,250 in the first place, and I kept coming down in my offers to this salesman until I finally agreed to take \$1,000 for it—good as new of course, but he wouldn't take it back, saying he was not in the market for old tractors.

A purebred mare that will raise a colt that I can sell for \$300 at weaning time, or a grade draft mare that will produce a \$300 gelding and do the work on my farm while raising these colts, is a better investment than tractors that raise no little tractors and in a few years are worn out. The man who works his land with good draft horses instead of tractors as a rule has better credit at his bank than has the tractor farmer. The reason is he is taking less risk of loss.

Percheron breeders have by far the most popular draft breed in the United States. With the return of better horse prices which is now an assured fact, there is everything to encourage the farmer to produce high class Percherons. He can not possibly go wrong if he uses good breeding animals and then feeds out the offspring properly. Breeders have been decidedly slack the last two or three years in taking care of their stud colts because they have not sold very readily, particularly the ordinary kind. I look for a reasonably good trade for stallions next spring and an unusually big demand is bound to come by 1921. If breeders are not extremely careful this trade is going to be upon us before we know it and a lot of us will not have our colts grown out well enough to get the big prices. Every breeder should erect grass paddocks to run his stud colts in so that they can get plenty of out door exercise, and an abundance of blue grass pasture. That is what it takes to grow bone and muscle and to develop good wind and strong hocks that are clean. This is the only way to grow stallion colts properly. Any farmer can handle colts this way and they will be the least amount of trouble to him.

### Alfalfa on Upland

The proper use of manure and fertilizer in conjunction with lime is making alfalfa successful on many types of soil in Eastern Kansas where it had formerly been thought alfalfa could not be made to grow. This has been demonstrated on the farm of A. M. Dunlap near Caryl, Kansas, where co-operative tests under the supervision of the experiment station have been conducted for several years. At a neighborhood meeting held on this farm last May it was shown that a piece of alfalfa which had been treated with barnyard manure in 1914 and limed each year since had averaged two and half tons of hay to the acre, while alfalfa on unfertilized land had yielded at the rate of only a little more than a ton to the acre each year for the same period. Some plots which had received fertilizer treatment had produced as high as three and three-fourths tons of alfalfa in a season and had averaged more than two and a half tons to the acre for the past four years.

Five different treatments were used in this series of tests on the Dunlap farm. One plot has never been fertilized in any way and has served as a check. Its average annual production for the four-year period has been 2,482 pounds of hay. One plot received an application of lime each year and has produced an average of 3,234 pounds of hay each year. Upon the third plot barnyard manure at the rate of ten tons to the acre was spread in 1914. The average production on this plot has been 4,533 pounds of hay annually. The fourth plot received the same application of manure, but in addition was treated with lime each year and produced an average of 5,243 pounds of hay annually. A fifth plot was treated with acid phosphate and lime each year, producing an average of 4,985 pounds of hay each year.

A sixth plot was treated with rock phosphate, manure, and lime at the beginning of the tests, in 1914, but no figures of production have been kept on this plot, since the rock phosphate does not become available for several years. Records of its production, however, will be kept this year and at the time of the meeting in May it looked as though the rock phosphate plot would outyield all other plots for this season. The acid phosphate and lime plot gave indications of becoming second in yield this year and the plot treated with barnyard manure in 1914 and limed annually, third. R. I. Throckmorton, soils specialist of the agricultural college, who was present at this meeting, pointed out that the effect of the barnyard manure application is decreasing, as shown by the results from the plots this year. For four years this plot has outyielded all the others, but this year two other plots are outyielding it. It would appear that the alfalfa responded more quickly to the barnyard manure fertilizer than to any of the commercial fertilizers. The season of 1918 was the first in which the effect of the manure was decreasing, as in that year this acid phosphate plot treated with lime outyielded all other plots. The large yield this year from the plot treated with the rock phosphate in addition to the lime and manure is without doubt to be attributed to the phosphate since the plot receiving manure and lime without phosphate is far behind the rock phosphate plot.

This series of tests in soil treatment for alfalfa is being watched with a great deal of interest in this section of the state, and the results will be of great value. C. C. Cunningham, who has general charge of the co-operative experiments being conducted in various parts of the state, believes that with the proper use of fertilizers and lime it will be possible to grow alfalfa successfully in practically all sections of Eastern Kansas.

The annual meeting of the National Grange will be held at Grand Rapids, Michigan, November 12-23, 1919. A reduced rate of a fare and a third, on the certificate plan, has been granted by all railroads on account of this meeting.

# Tractor Lubrication Is a Science

**T**HE difference between correct and incorrect lubrication is the difference between under production and efficient farm management.

The Standard Oil Company (Indiana) gives you the benefit of its many years' experience—in—

## **Heavy Polarine Oil Stanolind Tractor Oil Extra Heavy Polarine Oil**

One of these three oils is the correct oil for your tractor. The official chart prepared by our Engineering Staff will tell you which one. The nearest Standard Oil representative has this chart, and will be glad to show it to you.

**You Are Invited  
to Send for  
this Booklet**



It is FREE for the asking. Address

**Standard Oil  
Company**

(Indiana)  
910 S. Michigan Ave.  
Chicago, Illinois

1797

## **TRACTOR LUBRICATION**

A TEXT BOOK ON  
THE LUBRICATION OF  
INTERNAL COMBUSTION ENGINES  
AND TRACTORS

**W**HETHER the reader be a tractor owner—an experienced operator—a prospective purchaser—or a student in an agricultural college or technical school, he will find this book a valuable addition to his reference library.

In simple, direct language and by the aid of many illustrations, the writer has explained in a clear and interesting manner the construction, the function, and the operation of the various parts of the tractor and the tractor engine, and how the highest efficiency can be obtained at the least expense in fuel, lubrication, and wear and tear on the parts.

Even though the reader may have no knowledge whatever about tractors or internal combustion engines, he can read this book from cover to cover, understand every word of it, and gain for himself a most comprehensive knowledge of the subject.

Yet the more experience he has had in the operation of a tractor the more valuable and interesting will the book become.

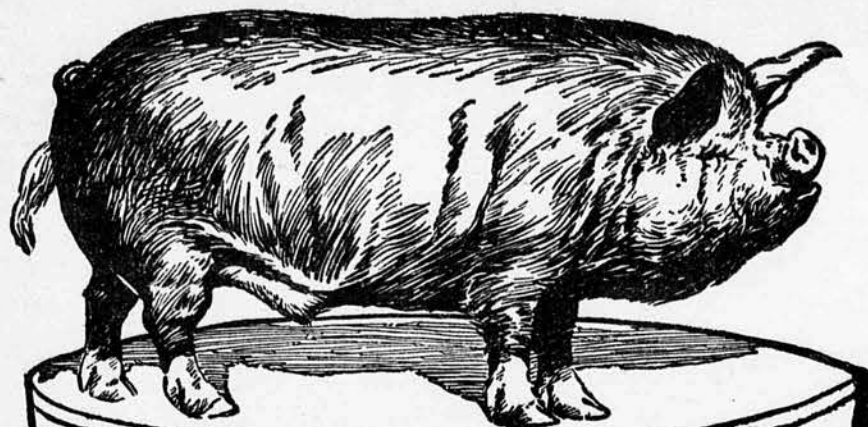


PUBLISHED BY

*The Lubricating Department*  
**STANDARD OIL COMPANY**

(Indiana)

CHICAGO, U. S. A.



## Get Rid of Worms

Always keep one compartment of your self-feeder supplied with Dr. Hess Stock Tonic. Make it half Tonic, half salt. Animal instinct will do the rest. Mr. Hog will not only help himself to this great worm destroyer, but—

He'll get a Tonic that will keep his appetite on edge and his digestion good. He'll get a laxative that will keep his bowels moving regularly. He'll get a Diuretic that will help his kidneys throw off the poisonous waste material.

Remember that worms are not a hog's only trouble—making a six-months market hog calls for a stuffing and cramming process with corn, or its equivalent. You are laying on fat faster than nature ever intended. Let your hog's system clog and your hog is in trouble; if there is any disease in the neighborhood, your hog gets it.

## Dr. Hess Stock Tonic

### Put it in the Self-Feeder

Here's the remedy—Always keep Dr. Hess Stock Tonic before your hogs in the self-feeder; or add it to the swill, or the drinking water—anyway, just so they get it.

Here are your results—You have a herd with good appetite—you have a herd free from worms—you have a healthy herd. Their systems are free from poison, free from fever, because the bowels and kidneys are active. They throw off and carry off the waste material.

Dr. Hess Stock Tonic is good alike for cattle, horses, hogs and sheep. It makes the ailing animals healthy, the whole herd thrifty. It expels worms. Now, listen to this: You buy Dr. Hess Stock Tonic according to the size of your herd—2 pounds for each average hog to start with. Add it to your self-feeder, or the swill, or the drinking water. You'll see the good results, or the dealer will refund your money. Always guaranteed.

### Why Pay the Peddler Twice My Price?

25-lb. Pail, \$2.25; 100-lb. Drum, \$7.50  
Except in the far West, South and Canada.  
Smaller packages in proportion.

DR. HESS & CLARK, Ashland, O.



## Dr. Hess Dip and Disinfectant Kills Hog Lice

## GROUND LIMESTONE

For Agricultural Purposes

Write for Price and Free Sample.

**DOLESE BROS. COMPANY**

14 So. LaSalle St. CHICAGO, ILLINOIS  
Plant: El Dorado, Kansas.

## GREEN CORN CUTTER



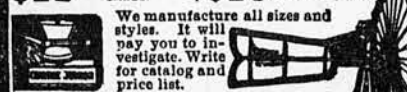
Cuts and gathers corn, cane, kafir corn or anything planted in rows.

Runs easy. Long lasting. Thousands in use. Fully

protected by patents. Send for free circulars. Price \$16.00 f. o. b. Topeka.

J. A. COLE, Mfr., TOPEKA, KANSAS

## \$22.00 Sweep Feed Grinder \$28.00 Galvanized Steel Wind Mill.



We manufacture all sizes and styles. It will pay you to investigate. Write for catalog and price list.

**CURRIE WIND MILL CO.,**

610 E. Seventh Street, Topeka, Kansas.

## CASH FOR BAGS

Don't throw them away. Save them and send them to us. We'll pay you HIGHEST MARKET PRICE. Get your neighbor to bring bags yours. Established 1870.

**BAG & COTTON MILLS**  
St. Louis, Mo.

When Writing to Advertisers,  
Please Mention Kansas Farmer

### Cost of Milk Production

Some rather interesting figures have been worked out in Ohio relative to the cost of milk production. It was found that the average Ohio family consumed 68½ gallons of milk in a year and that it took the average Ohio cow thirty-nine days to produce this amount of milk. To produce this milk the average cow is fed three-tenths of an acre of pasture, 685 pounds of silage, forty-five pounds each of cottonseed meal and linseed oilmeal, forty-nine pounds of corn, fifty pounds of oats, 190 pounds of hay, 106 pounds of corn stover, and three pounds of salt. In the bedding 176 pounds of material are used. It takes a man eighteen and one-fifth hours to milk the cow seventy-eight times during the thirty-nine days and otherwise give her proper care. Among other items entering into the cost of milk, aside from the original investment, are the upkeep of the dairy barn and its equipment for feeding and watering the herd, taxes, insurance, bull and veterinary service, and transportation of milk to the railway station and thence to city milk plants where it is clarified, tested, pasteurized, iced, and put into sterilized bottles. This milk then has to be delivered by the milkman, rain or shine, 365 days in the year.

At fifteen cents a quart, the annual milk bill for this average family using 68½ gallons would figure out \$40.95.

## The Powdered Milk Industry

THE production of milk powder is a new industry which is likely to increase in importance. The federal law states that whole-milk powder must contain at least 26 per cent fat and not over 5 per cent moisture and skim-milk powder not over 5 per cent moisture. Neither powder will contain over 2 or 3 per cent moisture as found on the market. If this is the case 100 pounds 4 per cent milk will yield 15 or 16 pounds of powder and 100 pounds of skim-milk 9 pounds of powder.

One might ask, why go to the trouble of drying milk? The reasons for drying milk are essentially the same as those for condensing milk only they are a little stronger, says N. F. Judkins, in the Creamery Journal. Dried milk is simply condensed milk carried a step farther. The two conditions that have prompted the drying of milk are the fact that in territory where milk is plentiful at certain seasons of the year it is short at other seasons and in the hot climates dairying has not been developed and milk is always scarce. To get milk in a form so it can be stored on the shelf without refrigeration and to get it in shape to ship long distances at low cost has been the cause of the development of the milk powder industry. Some of the advantages that it possesses over condensed milk for this purpose are: First. It does not have to be put up in sealed cans and then sterilized or sweetened to keep it. Second. It is a more concentrated product and hence can be shipped and stored more economically. Third. It is more convenient to use in that there is less waste.

### Methods of Drying

Practically all powdered milk is dried by the "roller" or the "spray" process. The machinery that is used for drying milk is covered by patents and it is either used by the patentees or else concerns using it must pay a royalty for its use or pay good prices to the manufacturer of the machine to begin with. There is no simple machine or method so that most anyone can make dried milk. Outside of the manufacturers no one knows much about the actual details of the process. The roller process is as follows:

A large steel cylindrical drum is heated from the inside with steam. This drum rotates and as it does so just dips into a large pan of milk located beneath it. It is arranged so that fresh milk enters the pan always keeping the milk at a constant level. A thin film of milk sticks to the drum and dries on at once. Just as the drum has made about a three-quarters turn it encounters a scraper which scrapes off the dried milk into a trough and leaves the surface of the drum clean to dip into the milk again and pick up another load. The dried milk is then pulverized to a powder and packed.

In the spray process the milk is condensed to about one-fifth its original volume. It is then sprayed through a fine jet into a chamber of heated air. The air takes out the balance of the moisture and the powder falls to the floor of the chamber.

### Size of Business

According to the dairy division 4,000,000 pounds of whole-milk powder and 25,000,000 pounds of skim-milk powder not to mention the buttermilk and cream powder were manufactured in 1918. These cream powders contain from 50 to 72 per cent fat. The keeping properties of milk powders at ordinary temperatures is wonderful. The writer even kept some of the 72 per cent butterfat powder at room temperature over six months with only a very slight rancid taste developing. The percentage of moisture is so low bacteria do not grow.

The great consumers of powdered milk are the bakeries, confectioners, hotels, restaurants, steamships, army camps, ice cream plants, milk plants, creameries, condenseries and hospitals.

To restore any milk powder to liquid form, water and powder are weighed out in the right proportions and the powder is beaten into the warmed water.

### Relationship to Creamery

By far the larger part of the powdered milk used is skim-milk powder. This is used some as "remade" skim-milk, but for the most part in connection with unsalted butter and water for making whole-milk for various purposes listed above or for making cream in milk and ice cream plants. To do this weigh out 9.5 pounds of skim-milk powder and 90.5 pounds of water. The powder is sifted into the warmed water in a vat, coil in motion. Unsalted butter is then sliced up and melted in the skim-milk. This is heated to 145 degrees Fahrenheit for thirty minutes and then run through an emulsor or homogenizer and the resulting product is milk or cream depending on the amount of butter used. Truly these machines are "mechanical cows." Only the best grade of butter can be used for this purpose. The market for this butter will increase rapidly as people more and more use milk, the fat of which was produced in Iowa, the solids in Michigan and the water, only, in the "old home town."

Another phase of the powdered milk game of interest to creameries, is the use of skim-milk powder for starter. Still another phase of the milk drying industry of interest to creamery men is the possibility of drying the buttermilk. Already the large centralizers are doing this. This product is used largely by bakers and to considerable extent in poultry and hog feeding. It is possible that where the creamery does not do enough business to warrant equipment for drying buttermilk that a plant central to several creameries could be started and the buttermilk hauled to the drying plant in tank wagons. This scheme is in operation to considerable extent in some cities, notably Omaha.

### Future of Powdered Milk

Powdered milk is here, and here it stay. There is no reason why it should not be here to stay. The United States Bureau of Chemistry has ruled that milk from milk powder may be sold when labeled "reconstituted," "reconstructed," or "remade." Remade seems to be the label in growing favor. Dr. McCollum has demonstrated that the valuable vitamins found in milk are not injured by drying. In England, in particular, "remade" milk has been very successfully used for infant feeding. It most certainly means that the source of so-called bulk milk used in the cities will be farther from the city than ever, where it can be produced the cheapest in the form of butter and milk solids. As to what the ultimate effect will be on the general city milk trade remains to be seen.

### Dairying a Big Industry

Dairying is one of the great industries of this country. It is a feature of our agriculture which perhaps is not given due consideration. There is no better way of obtaining a broad view of the bigness of this industry than by attending some of the big fairs and expositions and making a close study of the dairy exhibits. The National Dairy Show to be held in Chicago this fall is devoted exclusively to this great industry. "One of the great lessons to be gathered from a visit to such a show as the National Dairy Show is that dairying is not an insignificant sideline in this country and that there is more to it than a means of occupying the time and energies of women and children," said O. E. Reed of Purdue University, formerly professor of dairying at Manhattan. Professor Reed says that one cannot fail to get a new vision of the importance of milk and milk products in their relation to the development of a nation by attending and carefully studying the exhibits shown at one of these big expositions.

# MECHANICS ON THE FARM

Items of Interest About Automobiles,  
Engines, Tractors and Motorcycles

## National Highway System

THE PURPOSE of the Townsend highway bill now before Congress is to establish a national highway policy, to create a federal highway commission which shall locate, construct and maintain entirely at the expense of the United States a national highway system and to encourage efficient and economical highway transportation.

The above statement embodies the main purpose of the Townsend bill. This measure was introduced by Senator Townsend, chairman of the Senate committee on post offices and post roads, on June 2, 1919, read twice and referred to the proper committee on June 3, where it now awaits further consideration following the disposal of other important legislation.

Taking up its provisions in more detail, the purpose of the Townsend bill is to enlarge and concentrate the administrative powers of the government in its relation to road building. It proposes to do this by creating a special body having exclusive charge of the administration of federal highway affairs. It proposes to concentrate this enlarged power by laying out a certain definite policy of highway construction, and setting the newly created power to the accomplishment of that task.

The Townsend bill is not an expedient. It is framed to provide for the future. It recognizes the fact that the increased use of the public highways of the United States has brought about a condition which requires all hands on the job—one waiting for the other, but each assigned to a certain definite part of the logical connections at the boundary lines of each state, and the state highway departments on the other hand developing the main market routes within state jurisdiction.

It is the purpose of the Townsend bill to clothe the federal highway commission with initiatory powers in order to insure the economical location and development of the national system. It will be in no wise dependent upon the other factors outside of itself. In the location of the proposed national line it will take counsel with the states. Having taken counsel, it will proceed with the construction of the system along lines that will render the greatest good to the greatest number.

The one great purpose of the Townsend bill is to get somewhere in fitting the roads to modern use in response to modern demands. It seeks to get the work done and put cost reducing roads into full operation throughout the entire country at the very earliest date possible.

The Townsend bill makes certain provisions as to mileage. It proposes that the national highway system shall comprise not less than two per cent nor more than five per cent of the total mileage actually used as such in any state. To this extent each state will be relieved of future construction and maintenance of whatever mileage may be embraced in the national system. Each state therefore will benefit to the extent of having its financial burden lifted in the construction and permanent maintenance of its heaviest traffic lines, leaving it free to develop connecting lines within its own borders.

In proposing the creation of a federal highway commission for the construction and development of American highways upon a scale commensurate with the needs of the present, and to make adequate provision for the future, the Townsend bill is proceeding upon the logical lines of national growth.

Public highways have reached a degree of importance in public service which calls for a broadening of adminis-

trative powers, and the placing of such administration upon an equal footing with other departments of the government. This the Townsend bill proposes to do without taking from, but adding to the functions of the state highway departments. It proposes to do this by establishing a definite permanent policy of practical and effective co-operation, to the end that a complete system of county, state, and national highways may begin serving the public within the present decade.

### Trucks With Trailers

Long distance hauling between cities has developed into a thriving business in almost all sections of the country where roads are passable. In many places where roads are good and grades not too stiff, truckmen are finding it possible to haul somewhat more than the ordinary capacity of their trucks and to use trailers to add to the profits of the trip. In cases of this kind a low gear ratio is considered advisable by truckmen, to enable the truck to start the heavy loads with ease and to handle the load on stiff grades.

A concrete example of this condition is found in trucking problems which were met by the Leonhardt Truck Company of Los Angeles, California. This company uses a 3½ ton truck and a four

wheel trailer in their regular operations from Ventura to Los Angeles over the Santa Susan Grade. This grade is three miles long and contains as high as a twelve per cent grade.

This truck has been in constant operation for the past eight months over this route and has regularly been loaded with five tons, with the trailer carrying seven tons.

An instance of how California farmers have come to adopt the truck to their advanced farming methods is found in the work this company is doing with the bean growers of the Camirillo region. The trucks are sent right into the fields and pull out with a load of from ten to twelve tons on truck and trailer. The loads are transported direct to the warehouse, thus saving rehandling, and delivers the beans to the consignor fifty miles from Camirillo within five hours. This same work, when performed by the railroads requires at least three days and the bags were handled from three to four times.

This is another excellent example of the part motor trucks are playing by relieving the railroads of the unprofitable short-haul work, so necessary to get food products to the market.

### Estimating Silo Capacity

The extensive use of silos is responsible for numerous calls for information regarding the capacity of silos and for an estimate of the weight of silage under a variety of conditions. The common method of making such estimates is by the use of tables of silo capacities published by silo manufacturers and by experiment stations. These tables are based directly or indirectly upon a table published by King of Wisconsin in 1893. Recent investigations show that even

when these tables are used according to the directions of the originator, the results are too high, but as generally applied the tonnage is often estimated twenty-five per cent too high.

The Missouri and Kansas agricultural experiment stations have taken the weights of silage in thirty-two silos, representing four seasons. From these figures it is learned that the tonnage of silage is usually estimated too high by tables in common use: that the weight of a cubic foot of silage at the time filling is completed varies widely, according to the depth of the silo; the percentage of water present, the proportion of grain, the thoroughness of packing, the rate of filling, and the diameter of the silo. In silage that has had time to settle the thoroughness of packing and the rate of filling will be of minor importance as influencing the weight, but all the other causes for variation still exist.

It was apparent that a table used to estimate the capacity of a silo or the weight of silage at the time filling is completed is not adapted to estimating the weight of settled silage, and that on account of the many complications influencing the weights of silage it is impossible to give any estimate of weight that is more than an approximation. When silage is bought or sold it is recommended that it be weighed whenever possible rather than to estimate its weight.

The data gathered by the two experiment stations are used as a basis for two new tables—the one for estimating silage weight when filling is completed, the other for estimating the weight of settled silage. These tables are presented in Circular 89 of the Missouri college of agriculture.

## Cletrac The Embodiment of Compact Power— TANK-TYPE TRACTOR

(Formerly known as the "Cleveland" Tractor)



THE Cletrac Tank-Type Tractor is only 96 inches long, 52 inches high and 50 inches wide.

But in spite of its small size it will do the work of six horses or mules—and has a speed of from forty to fifty per cent greater than the average tractor.

It is the embodiment of compact power. It produces food but consumes none of it. It never gets tired. It works all day—and all night too if necessary.

It does better, quicker, cheaper work—and does it twelve months in the year.

Plowing is only the beginning of its work. It harrows, plants and reaps, binds, threshes and hauls, grades, saws, and fills silos, spreads manure, digs potatoes and does

More kinds of work  
More days in the year

practically all the other jobs formerly done by animal and stationary power.

Because of its distinctive tracklaying construction the Cletrac is specially adapted to seed bed work. Eight hundred square inches of traction surface enable it to go over soft plowed ground or moist or sandy surfaces without sinking in and without packing down the soil.

The Cletrac operates on a surprisingly small amount of gasoline, distillate or kerosene, but is specially designed to use kerosene or distillate.

See your Cletrac dealer now, or write us for information and our interesting booklet "Selecting Your Tractor".

**The Cleveland Tractor Co.**  
19097 Euclid Avenue Cleveland, Ohio  
Largest producers of tank-type tractors in the U.

## Classified Advertising

Advertising "bargain counter." Thousands of people have surplus items of stock for sale—limited in amount or numbers hardly enough to justify extensive display advertising. Thousands of other people want to buy these same things. These intending buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over 60,000 farmers for 5 cents a word per week. No "ad" taken for less than 60 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms, always cash with order.

**SITUATIONS WANTED** ads, up to 25 words, including address, will be inserted free of charge for two weeks, for bona fide seekers of employment on farms.

### AGENTS WANTED

**AGENTS—MASON SOLD 18 SPRAYERS** and Autowashers one Saturday; profits \$2.50 each; square deal; particulars free. Rusler Company, Johnstown, Ohio.

**AGENTS—MAKE A DOLLAR AN HOUR.** Sell Mendets, a patent patch for instantly mending leaks in all utensils. Sample package free. Collette Manufacturing Co., Dept. 103, Amsterdam, N. Y.

**AGENTS MAKING \$200 WEEKLY:** Everyone wants it. Formulas for 200 beverages to be made at home. Book form. Send \$1 for copy and territory proposition. Act quickly. Buyers' Export Agency, 487 Broadway, New York.

### CATTLE.

**HOLSTEIN AND GUERNSEY CALVES.** Write for our proposition. Burr Oak Farm, Whitewater, Wisconsin.

**PRACTICALLY PURE-BRED HOLSTEIN** calves, either sex, beautifully marked, six weeks old, from registered sire and choice heavy milking Holstein cows; \$30.00, delivered to any station by express. Paid here. Send orders or write. Lake View Holstein Place, Whitewater, Wis.

### DOGS.

**PUPS, KITTENS, BIRDS, SUPPLIES.** Kansas City Bird Store, 1421 Main, Kansas City, Missouri.

**FOR SALE—PUPS FIVE MONTHS OLD,** half Russian, half Stag, \$15 per pair. Lora Farr, Emporia, Kansas.

**PEDIGREED COLLIE PUPS, ALSO** grown dogs for farm. Circular of other breeds, 10c. Shadydel Kennels, York, Pa.

**RABBIT HOUNDS, FOX HOUNDS, COON,** opossum, skunk, squirrel dogs. Setters. Pointers. Brown's Kennels, York, Pa.

**FOR SALE—JERSEY BULL CALF, DAM** heavy and rich milker, granddaughter of Noble of Oakland. Dr. Shirley, Englewood, Colo. (Formerly from Hiawatha, Kan.)

**FOR SALE—HIGH CLASS COON, SKUNK** and opossum dogs. If you want the kind that delivers the goods, I have it. Stamp for reply. A. F. Sampey, 862 So. Campbell St., Springfield, Mo.

**AIREDALES, COLLIES, AND OLD ENG-**lish Shepherd dogs. Trained male dogs, brood matrons, pups all ages. Flemish Giant, New Zealand, and Rufus Red Belgian rabbits. Send 6c for large instructive list of what you want. W. R. Watson, Box 128, Oakland, Iowa.

### REAL ESTATE.

**FOR SALE—FARMS AND RANCHES IN** Jewell, Mitchell and Osborne counties, \$40 to \$125 per acre. Send for list. J. H. King, Cawker City, Kansas.

**FOR SALE—EIGHTY ACRES IMPROVED** land near Purcell, Doniphan County, Kansas. Address owner, F. L. Schneider, Box 464, Albuquerque, New Mexico.

**FOR SALE—FARMS AND RANCHES IN** Jewell, Mitchell and Osborne counties, \$40 to \$125 per acre. Send for list. J. H. King, Cawker City, Kansas.

**NO HOT WINDS IN MOFFAT COUNTY,** Colorado. Six farms at state fair. Alfalfa and wheat lands, \$15 to \$40. Fine stock ranches with plenty of range in the forest reserves. Relinquishments. Business openings in the best town in Northwest Colorado. Full information. Craig Realty Co., Craig, Colorado.

### FARM LANDS—TEXAS.

**BIG CROPS IN NORTHWEST TEXAS ON** the new line of the Santa Fe. The Federal Railroad Administration has authorized the completion of the new Shattuck branch of the Santa Fe Railroad to take care of this year's big crops—wheat, oats and sorghums. This will open for immediate settlement and development a large block of my land in a wheat and stock farming section of Ochiltree and Hansford counties in Northwest Texas near Oklahoma state line, where the first crop has in a number of cases paid for the land, and where cattle and hogs can be raised at low cost. Land is of a prairie character ready for the plow, no stone, stumps, no brush to be cleared, at attractive prices on easy terms. Climate healthful, rain falls during growing season. Write for free illustrated folder, giving experience and results settlers have secured in short time on small capital. T. C. Spearman, 927 Railway Exchange, Chicago, Ill.

### THE STRAY LIST.

**TAKEN UP—BY WM. E. SMITH, OF LIN-**coln, Rice County, Kansas, on July 24, 1919, one mare about eight years old, color dark bay, spavin on right hock, few wire marks. Appraised at \$50. Perry A. Evans, County Clerk.

**TAKEN UP—BY SID CARTER, OF** Johnson, Kansas, Mitchell Township, the 10th day of June, 1919, four mares, ages 10, 8, 4 and 3 years; one gelding, age 2 years. Colors—Mares: Bays, white and black. Gelding: Bay. One mare no mark, two branded on left thigh. No brand on leg. Appraised value, \$95. Robert H. County Clerk, Johnson, Kansas.

**WANTING TO ADVERTISERS**  
ON KANSAS FARMER

### POULTRY.

**COLUMBIAN WYANDOTTE COCKERELS** and fancy pigeons. J. J. Pauls, Hillsboro, Kansas.

**SINGLE COMB WHITE LEGHORNS,** past winners Topeka, Leavenworth, Hutchinson, Wichita, Kansas City, etc. Trap-nest bred to record 268 eggs. 200 fine March cockerels, \$2 to \$5. 200-egg-bred yearling hens, \$2 to \$3 while they last. Send for list or order from this ad today. Dr. C. E. Ackerman, Stewartsville, Mo.

### POULTRY WANTED.

**SHIP POULTRY AND EGGS NOW TO** "The Copes," Topeka. Established 1883.

**RUNNER DUCKS WANTED—BANTAMS** for sale or trade. Emma Ahlstedt, Lindsborg, Kansas.

### HONEY.

**NEW CHOICE EXTRACTED HONEY, 120** pounds, \$25; bulk comb honey, 116 pounds, \$30. Bert W. Hopper, Rocky Ford, Colo.

**PURE EXTRACTED HONEY—SIXTY-**pound can, \$12.25; two, \$24.00. Frank H. Drexell, Crawford, Colo.

### TANNING.

**LET US TAN YOUR HIDE—COW, HORSE** or calf skins for coat or robe. Catalog on request. Crosby Frisian Fur Co., Rochester, New York.

### FARMS WANTED.

**IF YOU WANT TO SELL OR EX-**change your property, write me. John J. Black, 15th St., Chippewa Falls, Wis.

### SEEDS

**KANRED WHEAT, \$3.00 PER BUSHEL.** Arthur A. Patterson, Ellsworth, Kansas.

**KANRED SEED WHEAT, \$3.00 PER** bushel, sacks extra. J. H. Taylor & Sons, Chapman, Kansas.

**MIRACLE SEED WHEAT FROM LAST** year's hand selected seed, free from smut. \$3 per bushel, sacks free. Also Red Rock seed wheat. J. C. Starr, Vinita, Okla.

**INSPECTED KANRED SEED WHEAT** for sale. Write for a list of members of the Kansas Crop Improvement Association having Kanred seed for sale. B. S. Wilson, Secretary-Treasurer, Manhattan, Kansas.

### MISCELLANEOUS.

**DE LAVAL CREAM SEPARATOR NO. 15,** nearly new. Mrs. H. Buchanan, Abilene, Kansas.

### WANTED—TO BUY.

**WANTED—ALFALFA, SWEET CLOVER,** Timothy, Sudan and all seeds. The Barteldes Seed Co., Lawrence, Kansas.

### Why Waste Sympathy?

If there were in the world just a definite limited amount of sympathy and compassion and tenderness which was in danger of being exhausted by use there might be some reason in the remark sometimes heard, "Why waste your pity on animals when there are human beings suffering? Why try to protect and care for the lower animals when human beings need help?"

As a matter of fact the person who takes thought for his beast is so much the less likely to be heedless of human suffering, while the man who would not respond to the need of a helpless dumb animal is hardly to be trusted with the happiness and safety of his fellows. Not altogether for their sakes, but quite as much for your own, we must encourage a kindness of heart broad enough to include in its sympathies the most helpless and insignificant creatures. "Doth God take care for oxen?" asks the Apostle Paul, referring to the old Mosaic command, "Thou shalt not muzzle the mouth of the ox that treadeth out the corn," and then answers his own query: "For our sakes no doubt this is written."

"The last and least of things  
That soar on quivering wings  
Or hide among the grass blades out of  
sight  
Has just as clear a right  
To his appointed portion of delight  
As queens or kings."

If men could only understand horses as well as horses understand men, it would be better for both.

## HELPFUL POULTRY HINTS

Practical Ideas on How to Fill the Egg Basket and Increase Profits

### Hens With Official Records

**A**N AVERAGE profit of \$6.15 apiece above the cost of all feed is the nine months record of seventy-five pullets competing in a laying contest under the supervision of the American Poultry School at Leavenworth. This splendid record, points out R. F. Palmer, certainly proves that standard bred poultry, properly bred and selected for egg production and given proper housing and care, will make unusually good returns.

Fifteen pens, each containing five females, or a total of seventy-five standard bred pullets, each pen owned by a different breeder from various states and Canada, are being given the very best care, feed, and housing in this laying contest.

They are being fed scratch grain consisting of choice, sifted cracked corn and whole wheat. This is scattered in medium deep litter in the early morning and again one hour before roosting time in the evening.

A dry mash consisting of wheat bran, shorts, hulled ground oats, corn meal, bone meal, beef scrap, charcoal, and fine salt is always kept before them in self feeding hoppers.

At ten in the morning and again at two in the afternoon a moistened mash is given. Care is always taken to feed no more than what the hens clean up in twenty minutes. Every other day this mash is made moist by the use of fresh beef bone soup, which is first properly diluted with water.

It is unnecessary to use these exact grains mentioned above. One should be guided largely by the available supply and its price, says Mr. Palmer. The important thing to consider is that a hundred pounds of one kind of grain will make more yolks and less whites as compared with another grain which makes more whites and less yolks. To get full value in health—fowl condition and egg production—we must consider these things. Regardless of what kind of food stuff we use, it must be proportioned so that it represents a possible equal number of yolks and whites.

Between November first, 1919, and August first, 1919, these seventy-five pullets consumed an average of eleven pounds of food per month for each female. The total consumption for all seventy-five females for the nine months period was 3215 pounds of dry and moist mash and 2130 pounds of scratch grain. One inch square of green sprouted oats was supplied each female per day. Hard grit and oyster shell is always kept before them. All this food has been purchased through the local dealers. Its total cost delivered was \$173.47.

These seventy-five pullets have produced 13,144 marketable eggs which have sold at an average of 58 cents a dozen or a total of \$635.29, leaving a profit for the nine months above feed cost of \$461.82 or a profit of \$6.15 per hen.

This production is the more remarkable in view of the fact that it takes in the consecutive months of November, December, January, February, March, April, May, June and July. At least three of these months gave much extremely cold and stormy weather, while during two months there was very intense heat and much dry weather.

A great deal of interest is being taken in the pullets in this year's contest. Seldom a day passes that inquiries are not received as to the ownership of certain high producers, and whether they can be purchased. Already several of these females have been sold for delivery after the close of the contest at prices from \$25 up to \$100 per fowl. "We have reason to believe," said Mr. Palmer, "that some fine producers are

likely to change owners at prices even higher."

The demand for fowls with official records or actually bred from such is greater today than ever before in the industry's history. It is to be regretted there are not more official contests held. As matters stand, the demand for space in most all contests is greater than the number of pens that can be handled. Last year and the year before, Professor Quisenberry found it necessary to return entries for the American Egg Laying Contest as more were received than could be handled.

Considering the hot, dry weather of July, Mr. Quisenberry and his assistants were more than pleased with the performances of the hens in the whole contest. The grand pen leadership, considering all breeds, is now being held by a White Leghorn pen from Washington, although the leading Pennsylvania pen is only five eggs behind it.

The pen making the best July record was the mottled Anconas owned by Dr. O. T. Manley, Warren, Ohio. These five pullets produced 137 eggs. The best pullet in that pen has laid 184 eggs in nine months and very likely will end her year at about 230 to 238 eggs.

The fine pen of Barred Plymouth Rocks owned by W. D. Holterman of Fort Wayne, Indiana, was close on the heels of the Ancona pen for leading monthly production records for July. This pen produced 133 eggs. One female in the pen made a perfect score of 31 eggs, tying with a S. C. White Leghorn for individual high monthly record for the month. The high individual in the whole contest to date is a White Orpington with a record of 219 eggs in nine months.

### Keep the Good Pullets

Every well-developed, early-hatched pullet in good health is a potential egg layer. Just as there is no method of judging the speed of a horse before he has been raced, or of determining the butter-fat record of a heifer before she has freshened, so there is no accurate means of telling how many eggs the pullet will lay until she has been given a trial. T. S. Townley says that as a rule most pullets which start laying before cold weather will lay at least enough eggs to pay for their feed during their first laying season. All mature, vigorous pullets should be kept. Any weak, undersized, late-hatched, or deformed pullets should be culled out in the fall. Other methods of estimating the future egg production of pullets are inaccurate and their use is not advised.

The real problems in culling a poultry flock are found with hens that have finished one or two laying seasons. The general rule with pullets is to keep practically all, and with aged hens to dispose of all, but with all yearling hens and with two-year-old hens of the lighter breeds some should be sold and others kept. To cull hens of these ages, every bird must be studied to determine her value. Nature has marked the poor producer, and the poultry keeper should be able to recognize the marks.

Mites and lice frequently sap the vitality of the fowl and prevent growth or lessen the egg production. A thorough cleaning of the house, regular applications of disinfectants to the roosts and nests, and a frequent dusting of the fowls will control these pests.

The world suffers more from hardening of the heart than from softening of the brain.—VINCENT STARRETT in Our Dumb Animals.

## Preparing Hides For Market

COUNTRY hides, as they are called, are as a rule so inferior to packer hides that they bring considerably lower prices. This is not necessarily because they are always poor quality hides. It is largely due to improper methods of handling and marketing.

Much may be done to improve the country branch of the hide and skin industry by marketing the hides and pelts on a graded and selected basis, according to relative merits, and by avoiding many of the profit-absorbing, intermediary agencies through more direct marketing by the rural producers. In this way, says the United States Department of Agriculture, country producers will not only derive more profits, but the profits will be commensurate with the quality of their products, a condition which will give an incentive to produce hides and skins of the best possible quality.

The preparation of hides and skins for market is of great importance, as where they are not properly prepared and shipped they are subject to great deterioration. The farmer who has thoroughly cured a number of hides and skins by the green salting method commonly followed should place them over some elevated object, such as a barrel. They should remain there over night, to drain free of excess moisture; after which the surplus salt should be swept off or removed by thoroughly shaking the hides. If the hides are handled in this manner, and thoroughly cured before being shipped, the shrinkage should be relatively small when they are finally weighed at the hide house. If the hides are not thoroughly cured, if they have been in salt only a day or two before shipping, do not remove any of the salt as the hides may spoil.

As a rule hides are folded so that the side is out. It is essential to fold the head and neck on the body of the hide, flesh surfaces together, and to turn the tail in a similar manner. Then a narrow fold on each side should be made by throwing back the body edges and upon the body of the hide, flesh surfaces together, keeping the lines of the folds parallel. The legs should then be folded back and these lapped with the hair surfaces together, bringing the break of each fold near the middle line of the back. The side folds should then be completed by bringing together the two breaks of the folds, with the middle line of the back as the main fold, in this way making one long rectangular bundle. The butt end of the folded hide should then be thrown forward about four-fifths of the distance to the neck fold, whereupon the forward portion of the bottom lap should be folded back on top of the first fold, bringing the break of the rear fold even with that of the fold just made.

Each hide should be bundled separately and tied securely, about seven feet of strong cord being necessary to tie one hide bundle. A soft rope or line at least one-fourth inch thick is suitable for this purpose, although regular bar hide rope is preferable. Wire should never be used, as it is likely to damage

the hide by rusting. Calf skins should be folded in the same manner as cattle hides. However, when more than one is to be shipped two folded calf skins should be placed together and tied into one bundle instead of tying each one separately.

Sheep skins are bundled differently from either cattle hides or calf skins. The wool sides are laid down and the skins are folded along the median line of the back with the wool side out. As many as five skins folded in this manner can be placed in a single bundle for shipment. It is not advisable to pack more than this number in one bundle, as the wool helps to generate heat very rapidly. Two pieces of stout rope should then be wound around the pack from back to belly, one passing around the back portion just in front of the hind legs and the other passing around the front portion immediately back of the fore legs. All bundles should be tied securely, using the nautical bow-line knot, as it does not slip easily. Bundles often become untied or otherwise lose their identification marks, in which case the railroad employees have no means of determining the identity of either shipper or consignee, especially if there are other hide shipments in the car. All shipments of hides should be tagged with good, strong linen tags with a paper finish and brass eyelets, and all addressing should be done plainly with moisture-resisting ink. Hides and skins should be shipped as soon as possible after bundling without needless exposure to sun, draft, water or rusty or corroded metals.

Complete information regarding the best methods for skinning, curing, and preparing hides for market is given in Farmers' Bulletin 1055 which may be obtained upon request to the United States Department of Agriculture, Washington, D. C.

### Uses of Silo

Some silo users are finding that their silos can be kept more constantly in use than is the common practice. This is of course an advantage since it reduces the overhead expense. The first and most important use of the silo is to preserve forage in a succulent condition for winter use and for periods of short pasture in the summer. Some farmers, however, are in addition using their silos as a storage for fodder which has been cut and shocked in the fall. They feed out the silage put up in the fall and during the early winter months fill it again with shocked corn, kafir, or cane, adding enough water to make this dry material pack so it will be properly preserved. A fair quality of silage can be made in this way, and much better results obtained than from feeding the fodder in the dry form.

Hay is so extremely high in price that farmers having live stock can well afford to make every effort possible to carefully save and use all the fodder produced. If there is enough stock on the farm it is certainly a practical and wise policy to cut up all the corn, kafir, or cane which cannot be stored in the silo and later run it through the cutter and convert it into silage.

Some of the earlier users of the silo maintained that a silo was needed wherever a corncrib was needed, but the experience of the Kansas silo user has proven that a silo is needed on many a farm where a corncrib is not necessary. There are any number of farms in Kansas where only a very small corncrib is needed, but where a very large amount of forage is grown which can be converted into a most valuable feed by storing it in a silo.

The League of Nations will mean the unloosening of the shackles of militarism and the marching of the civilized nations of the world toward a future of universal law and universal peace.—DR. HENRY VAN DYKE.

**GALLOWAY'S**  
**SPECIAL**  
**30-DAY**

# HARVEST SALE



**Buy Now!**  
**SPECIAL 30-DAY**  
**SALE OFFER**  
**SAVE MONEY**

### Harvest Sale of 9,000 Low Down 60-70 Bushel

**9,000 Spreaders in Harvest Sale.** Take less horse and man power. Enables you to cash in big on record-crop for top prices. Has new distributor. Besides has eleven other great features. Low down. Has wide-spreading V rake. Patented automatic stop uniform clean-out push-board. Short turn, all wheels under the load. All steel beater—tears manure to shreds—cannot twist, warp or break. Spreads from four to twenty-four loads per acre.

## Spreaders

### Harvest Sale of 12,000 Masterpiece Seven

**The Harvest sale price on this Masterpiece 7 is a quantity price. You could not buy the 12,000 at a lower figure, because the price is based on the 10,000 factory run. Our new Masterpiece 7 gives 7 actual horsepower for the price of 6. Portable or stationary. Big bore, long stroke, heavyweight, every part standardised and interchangeable.**

## Engines

Near Shipping Points Save Freight

### Harvest Sale 15,000 750-lb. Separators

The price is the same for one or the whole 15,000. The 750-lb. size is the best all around size—our biggest seller. Has all our latest improvements. Skims close. Easy to run and clean. Every drop of milk gets full skimming force of the bowl. Sold on 180 milking tests.

### Mail the Coupon

You farmers who have been waiting for prices to come down, here is your chance. But you must **ACT QUICK. Mail the coupon tonight, sure!**

**Wm. Galloway Co.**  
1197 Galloway Station,  
WATERLOO, IOWA

This is the time to get the implement you need at the right price. As a special Harvest Sale, I am making a special factory wholesale run on one size Spreader, Engine and Separator. I am passing the saving along to you in this Harvest Sale. Act now! Mail the coupon today and get the low price on a Galloway Spreader, Engine & Separator.

### MAIL THIS COUPON

Send me Harvest Sale Prices.

Name.....

P. O. ....

R. F. D. .... State.....

Dept. 1197

## U.S. Gov't Barbed Wire!

### Buy Now!

FOR a limited time only, we offer highest grade extra heavy 12 gauge barbed wire at less than the cost of manufacture; 4 point barbs 1/2 in. long, spaced 3 in. apart. Coated with best special weather resisting paint. Put up in reels of 750 ft. weighing 53 lbs.

### Special Low Prices!

|                                    |               |             |
|------------------------------------|---------------|-------------|
| No. 2-SX100. Carload, 625 reels,   | per reel..... | <b>1.80</b> |
| No. 2-SX101. 100 reels, per reel.. |               | <b>1.95</b> |
| No. 2-SX102. 50 reels, per reel... |               | <b>2.00</b> |
| No. 2-SX103. 25 reels, per reel... |               | <b>2.05</b> |
| No. 2-SX104. Less than 25 reels,   | per reel..... | <b>2.10</b> |

**HARRIS BROS. CO., Dept. RX 49**  
35th and Iron Sts. CHICAGO

## Silo Filling Engines KEROSENE GASOLINE

**2 To 30 Horse Portable Ready To Use**



### Reduced Prices

Buy direct—Cash or Terms. Save big money on this all-steel outfit. Get Quick Shipment. WITTE Engines take less fuel—easy to use—big surplus power. Best for ensilage cutters, blowers, threshers. 10 years ahead of old-style makes. Every part of engine guaranteed as long as you own it—no strings!—no time limit. Write for New Book Today.

**WITTE ENGINE WORKS**  
1603 Oakland Ave., Kansas City, Mo.  
1603 Empire Bldg., Pittsburgh, Pa.

## Real Estate For Sale

### It's Out!

### Strout's Fall Farm Catalog!

You will never have seen the best until you read the 100 pages of our big illustrated catalog, just out, of unequalled money-making farm bargains in the most prosperous states from Maine to Florida and west to Nebraska. For example, on page 74, 80-acre middle west producer, near railroad town, good buildings, two horses, cows, hogs, machinery, crops, all for \$4,000, half cash. Page 12, details 170 acres, horses, eight head registered stock, tools, crops, good buildings, silo, etc., for \$3,500. See picture page 10, attractive home on 60 acres, horses, cows, hogs, implements, furniture, \$2,000, easy terms. Full details page 33 of 345 acres, 75-cow dairy, milk checks running \$500 per month, fine 10-room house, big basement barns, four horses, 33 head stock, machinery, crops, all for \$7,000, part cash. Write today for your free copy showing you the farm you want, where you want it, at the price you want to pay.

### Strout Farm Agency

831 A. S., N. Y. Life Bldg., Kansas City, Mo.

### HOME FARM, 320 ACRES

Out 6 1/2 miles. Good buildings. Fine water, 160 wheat, half with sale; some alfalfa. Only 08,500, with \$2,500 cash, balance long time. One good 160, out 9 miles, small house, 100 smooth, 60 wheat, 40 spring crops, one-fourth with sale; shallow to water; only \$2,500, with \$500 cash, balance terms. Have other farms and ranches on small payments now, another payment after harvest.

**R. C. BUXTON, Utica, Ness County, Kansas**

**SOUTHEASTERN KANSAS**—Farms, all sizes; lowest prices. Terms, \$1,000 and up. Send for booklet. **THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.**

The proposed League of Nations is part and parcel of this great idea of international justice now having its new birth and baptism.—PROFESSOR IRVING FISHER.

If the hesitation of the United States results in a collapse of the League Nations the world faces another war in the future.—DR. WILLIAMS.

**WE WANT ALL KINDS OF FURS**  
**FOX, BEAR, BEAVER, LYNX,**  
**WILDCAT, MUSKRAT,**  
**MARTEN, MINK, ETC.**  
**WEIL PAYS THE MOST.**

**Remits Quickest. Pays Cash.** Holds shipments 5 days. **WEIL BROS. & CO.**  
"The Old Square Deal House"  
Box 16 Post Wayne, Ind. U.S.A. Capital \$100,000.00 Paid  
Everybody Interested Write

**CORN HARVESTER**—One man, one horse, one row, self-gathering; equal to a corn binder; sold direct to farmers for 25 years. Only \$25, with fodder binder, shipped by express to every state. Free catalogue showing pictures of Harvester.  
**CORN HARVESTER COMPANY - SALINA, KANSAS**

# THE HOME-MAKER'S FORUM

ETHEL WHIPPLE, Editor

Letters from readers are always welcome. You are urged to send in helpful suggestions, to give your experiences, or to ask questions. Address the Editor of this Department.

## Touch-Hunger

Psychologists say that every child has a hunger for experiences which are necessary for his development. He is hungry for sounds, sights, tastes, smells and muscular strains and stresses. These are all of fundamental importance in the building of his mind. A child would be an idiot who was not hungry for these sense experiences. The only way he can learn about objects is by investigating them with every sense that will give him any information regarding them.

Many persons who realize that a child must see, hear, taste and smell all the objects around him in order that he may come to understand them, do not appreciate that the hunger to touch objects is probably more acute than any other kind of hunger. Frequently people think a child is mischievous or wilful when he handles the things around him when he is told not to do so. How often one hears parents and policemen and guards at museums and all such folks say to children, "Don't you touch that! Can't you keep your hands off from things? I told you if you touched any of those things again I would punish you," and so on. But a child will handle objects, even in the face of certain punishment, because his hunger for touch sensations is so overpowering that he cannot restrain it.

What is to be done about it? In the first place the child should have as great a variety of objects as possible to touch and use in his play activities. He should be permitted to explore everything around him by means of the sense of touch. If necessary the parent or the teacher or the guardian should stand by and see that no harm is done to valuable objects or to the child himself. But if the typical child be permitted to investigate such objects as books and china until he has discovered how they feel and how they are constituted, until his touch-hunger regarding them is gratified, he will be likely to let them alone thereafter unless he needs to use them in some of his games or plays. A wise parent or teacher would provide books, dishes and the like which could be used in play, and which would make it unnecessary for the child to experiment with delicate things of real value.

If a parent leaves an unoccupied child in a room which is furnished with fragile, delicate furniture which he can reach, and if he is not permitted to gain touch acquaintance with these things under the guidance and supervision of the parent, then there is almost certain to be trouble. The child will handle the furniture when the parent is not looking, and accidents will happen. Montessori apparatus, kindergarten materials or Candoit toys in a house will keep a young child out of "mischief" that may result disastrously to valuable books or china or other furnishings. Catalogs describing these various educational playthings may be obtained upon request from the manufacturers: Montessori apparatus, House of Childhood, New York; kindergarten materials, Milton Bradley Co., Springfield, Mass.; Candoit toys, the Fallis Toy Shop, Denver, Colo. A sand pile or gymnasium apparatus out of doors will surely lessen any child's "mischievousness."—M. V. O'SHEA, U. S. Bureau of Education.

## The Home vs. the Barn

A woman on the farm can make her life about what she wishes it to be, for a great deal depends upon her attitude towards farm life and the work that it brings.

is an equal partner with "Dad"

and they should work together. There can be no set and definite lines drawn between outdoor and indoor operations. The improvements that are necessary and can be afforded outside to save time, labor and money, can be afforded and are fully as necessary inside for the same reason.

Any farm that can afford running water to be piped into the barn for the old red cow can afford to furnish the house with the same necessity. If the farmer needs a gang plow, the farmer's wife needs a washing machine run by power. The woman is to blame because her home improvements do not keep pace with the outside improvements. She is too willing to keep doing without and using the tools her grandmother had. Any man is willing if he is financially able to make the kitchen the right kind of workshop for the farm women, but she must study her problem and then both together must determine the greatest needs so that home improvements may be made.

Let us resolve to get away from primitive methods and plan and work to have well equipped, comfortable, convenient and sanitary farm homes.—MIRIAM M. HAYNES, Colorado Agricultural College.

## Green Tomato Preserves

The bride of last year who was disappointed because her war garden produced only tomatoes, and complained, "You know there are two kinds of tomatoes—the big, red ones and the hard, green ones; ours are all the little hard, green kind, and we don't care for them at all," would have found her green tomatoes even more appetizing than the red ones if she had preserved them according to this recipe:

Chop one peck of green tomatoes, add six pounds of sugar and four to six lemons, sliced thin. Cook the mixture until it is thick and clear. Pour it into scalded jars and seal.

## Sauer Kraut

To prepare cabbage for sauer kraut, shred the cabbage into narrow strips and weigh. For each ten pounds of cabbage weigh six to eight ounces—one-half pound—of cooking or fine dairy salt. Mix the salt and cabbage very thoroughly in a stoneware crock or wooden container. Place a false wooden head or plate on top, with a weight to hold it down. Do not use limestone as a weight, because it is acted upon by the sauer kraut. Leave it in a warm place. The juice of the cabbage dissolves the salt and forms a brine. Fermentation will soon start, and foam appear. After about three weeks the "kraut" should have the desired flavor.

When a skum appears, skim it off. If left undisturbed, it may completely spoil the product. When fermentation ceases and the kraut has developed the proper flavor it may be kept by sealing over with paraffin. A better method of preserving is to heat it to boiling and pack boiling hot in jars. Sterilize for half an hour in a washboiler sterilizer at 212 degrees Fahrenheit and seal. It will then keep indefinitely.—California College of Agriculture.

## Apple Pralines

6 apples  
¾ cup sugar  
1 cup water  
½ cup blanched almonds,  
chopped fine  
½ cup sugar.

Pare and core the apples. Dissolve the sugar in the water and let it cook five minutes. Then cook the apples in the syrup until tender, turning often to keep them in shape. Remove to serv-

ing dish. Caramelize the sugar. Add the nut meats. Turn the mixture onto the apples, taking care that none falls on the dish. Boil the syrup in which the apples cooked until quite thick and pour this around the apples. Serve with or without cream.—Department of Domestic Science, Michigan Agricultural College.

## Indian Chutney

2 dozen ripe tomatoes, medium size, chopped  
6 onions, medium, chopped  
3 red peppers, chopped  
1 dozen tart apples, chopped  
1 pound seedless raisins  
1 cup celery, cut fine  
2 quarts vinegar  
3 cups sugar  
Salt.

Combine the ingredients and cook until all are soft and the chutney is thick. Pour into hot sterile jars, and seal them.

## FASHION DEPARTMENT

Price of All Patterns, 10 Cents



No. 2940—Girl's Dress: Cut in four sizes—eight, ten, twelve and fourteen years. Size 10 will require 4½ yards of 36-inch material. No. 2951—Girl's Dress: Cut in four sizes—six, eight, ten and twelve years. The eight-year size requires 3½ yards of 36-inch material. No. 2962—Practical Work Dress: Cut in seven sizes—34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 requires 5½ yards of 36-inch material. Width of dress at lower edge is about 2½ yards. No. 2947—Ladies' Apron: Cut in four sizes—small, medium, large and extra large. The medium size requires 4½ yards of 36-inch material.



No. 2963—A Smart Gown: Cut in three sizes—sixteen, eighteen and twenty years. Size 18 will require 5½ yards of 36-inch material. No. 2809—Ladies' Dress: Cut in seven sizes—34, 36, 38, 40, 42, 44 and 46 inches bust measure. Size 38 will require six yards of 44-inch material. Width of skirt at lower edge is about two yards, with plaits extended. No. 2960—Girl's Dress: Cut

in four sizes—six, eight, ten and twelve years. The ten-year size will require yards of 44-inch material. No. 2966—Dress: Cut in four sizes—eight, ten, twelve and fourteen years. Size 12 will require yards of 40-inch material.

## School Girls' Fall Dresses

For the girl of six to twelve, patterns 2951 and 2960 are shown. Plaid or ham was used for the former with poplin for trimming. Plaid and woolen could be combined for this dress. It is also nice for linen and organza challie and satin, or velveteen and crepe de chene. All wash fabrics are good. 2960, likewise serge, gabardine, poplin, repp, voile, plaid and check suiting, feta, and velvet. Either 2966 or 2967 is a good model for the girl a little older. Serge, gabardine, repp, poplin, checked or plaid woolen, crepe de chene, taffeta, corduroy, velvet, and all wash fabrics may be used for these styles. No. 2963 is a good style for a slip figure. Taffeta, satin, velvet, gabardine, serge, and tricotine are suitable materials.

A very attractive ladies' gown is shown. This style would be effective in white with cluny or filet lace, or in shantung with embroidered bands. It is good for serge, voile, foulard, taffeta, gabardine, and other wash fabrics.

The sleeveless apron shown, while protecting the entire dress, is easy to put on over the dress and so is a good model for winter.

The reversible front for work dresses is apparently with us to stay. Another application of this idea in neat, practical house dress is shown.

Almost every week we receive a pattern order from someone who forgets to give the size desired. This causes delay before mailing your order because you have given the size of all patterns ordered, and sign your name plainly. Address Fashion Department, Kansas Farmer, Topeka, Kansas.

## THE ANNUAL PROTEST

Huh? What? Vacation's over with. I got to find my books? W'y, ma—w'y, me an' Willie Smith. Just got some more fish hooks! W'y, we'd made up to catch that big one. Down in the willer pool! I don't care who will head my class—

Aw, Pshaw, Ma!

I don't wan' tuh go tuh school!

I'll bet th' teacher will be mean; I know just what she'll do—She'll say my han's an' face ain't clean! An' make me wash 'em, too! I'd a heap rather not go.

I'll not grow up a fool! Aw, shucks! A boy don't have no school.

Aw, Pshaw, Ma!

I don't wan' tuh go tuh school!

What? Got to carry all them books? They're awful heavy, ma. I'm sick! You'd know it by my looks!

I don't care! Just tell pa! I don't want to be a president—Ain't stubborn as a mule! You'll whip me? I don't care a cent.

Aw, Pshaw, Ma!

I don't wan' tuh go tuh school!

—Selected

The demand for young men and women is greater now than in any times.

Think of graduates receiving \$1,200 to \$1,800 per year as stenographers, bookkeepers and secretaries. Your success depends upon your college.

Expert teachers in all departments. Equipment latest and most up to date. Banks, Railroads and Commercial firms demand our graduates because they are qualified.

We employ no solicitors. Every graduate a position.

**Strickler's**  
TOPEKA BUSINESS COLLEGE  
167-109-111-112-113-114  
East Eighth Street  
Topeka, Kansas

## LEARN TELEGRAPH

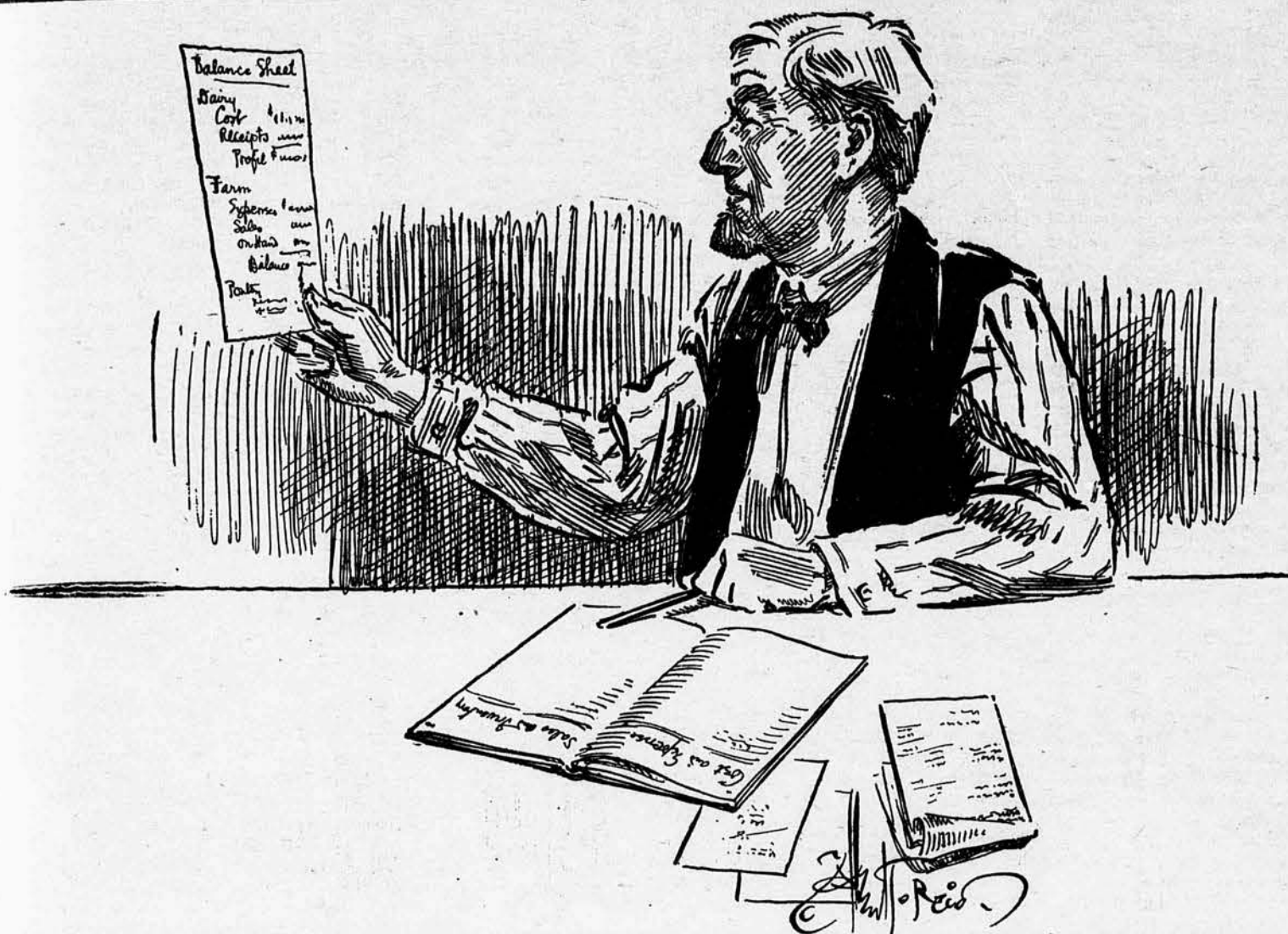
Students Earn Board while Learning. A practical school with railroad equipment and operated by a S. F. Ry. Earn from \$35 to \$50 per month. Write for catalog.

Santa Fe Telegraph School  
505 Kansas Ave., Topeka, Kans.

—OTTAWA—  
**Business College**  
OTTAWA, KANS.  
CATERING

# Begin Your Farm Account Records Now !

THE FIRST OF THE YEAR HAS PASSED, BUT YOU CAN START YOUR RECORDS FROM JANUARY 1, 1919, IF YOU GET YOUR ACCOUNT BOOK NOW. YOU WILL HAVE NO TROUBLE WITH YOUR INCOME TAX STATEMENT IF YOU USE THIS BOOK.



## FARMERS' ACCOUNT BOOK GIVEN FREE

### GET STARTED RIGHT

There is no better time than right now to begin keeping Farm Records so that you will have the required information ready to make your income tax statement next year. No doubt you are already keeping your records. You want the most simplified and easiest way. Get this book. It's FREE.

### PRACTICAL ACCOUNT BOOK

This book is a PRACTICAL Farm Account Book which has been developed under the direction of the United States Government men, working in co-operation with hundreds of farmers in Kansas. It is not merely theoretically correct, but has been prepared to fill the needs as shown

by practical use on farms in this state.

### THIS BOOK WILL MAKE YOUR WORK EASIER

Keeping accurate records of farm business is becoming more and more popular, not only because it is practically necessary for the income tax statement, but also for the value of the records to the farmer. The most important thing, however, is to secure and keep the information desired with the least amount of work and time; that is, in the simplest way.

The book which KANSAS FARMER is offering on this page, FREE to subscribers, is gotten up with the idea of keeping all the information necessary and valuable with the smallest amount of work. The book is a

one-year record. It is small and convenient to keep. It contains full but simple instructions on how to keep the records required, with sufficient blanks for all entries.

### A PRACTICAL BOOK NOW IN USE BY FARMERS

The book is published by the KANSAS BANKERS' ASSOCIATION. It has been prepared by Dean Edwin C. Johnson and Preston E. McNall, both of the Extension Division of the Kansas Agricultural College, who have done their work on the book in co-operation with the United States Government.

This book has been used in Farm Management studies on hundreds of farms in Kansas where owners have heartily co-operated and offered many val-

uable suggestions for making it thoroughly practical and suited to actual farm conditions. These suggestions have been incorporated in this latest edition.

### CONFORMS WITH REQUIREMENTS OF THE GOVERNMENT

It is the ultimate object of the Internal Revenue Office to adopt a uniform method of computing farmers' incomes. This includes farm inventories, farm receipts, and farm expenses, and follows very closely the book which is given by KANSAS FARMER to its subscribers. From year to year there may be a few slight changes made. For this reason it is best to buy a one-year book in order that each year your book will conform to the Internal Revenue rulings for that year.

## OUR OFFER

We will mail you ABSOLUTELY FREE and postpaid one of these Account Books with your renewal subscription to KANSAS FARMER at \$1.00. Send us your order today and get your accounts started in such a way as will be easy to keep and which you know will be correct.

### ORDER BLANK

KANSAS FARMER, TOPEKA, KANSAS.

GENTLEMEN: Inclosed please find \$1.00, for which renew my subscription for one year and send me the Farmers' Account Book as per your offer.

Name..... R. F. D.....

Town..... State.....

## HOLSTEIN CATTLE.

## HOLSTEIN CALVES

## SAND SPRING HOLSTEIN FARM

FEDERAL AND STATE TUBERCULIN TESTED.

The first fourteen cows to finish the A. R. O. yearly test on our farm averaged 13,329.6 pounds milk, 522.6 pounds butter fat, in 348 days, and eight were first calf heifers, and we are breeding them better. Our last bull calf went to St. Joseph Orphanage, Abilene, Kan. The man who buys a bull from our herd finds us working for him all the time. Our Aim—Production, Individuality and Breeding.

FARMERS! MILK HOLSTEINS. SUPREME DAIRY BREED OF THE WORLD.

E. S. ENGLE &amp; SON

ABILENE, KANSAS



## Holsteins and the Milk Check

The size of your milk check depends less upon the size of your herd than upon the size of your cows. Get big, healthy, pure-bred cows with the ability to convert feed into milk at a profit. Wherever dairying is on a prosperous footing, that's the home of the Holstein cattle. Besides being the leading dairy breed, they bring top prices when beefed. They breed regularly, and the calves are easily reared.

If interested in

## HOLSTEIN CATTLE

Send for our booklets—they contain much valuable information.

HOLSTEIN-FRIESIAN ASSOCIATION OF AMERICA, Box 114, Brattleboro, Vt.

## HOLSTEINS!

We are offering a choice selection of both registered and high grade springer cows and heifers. Also pure-bred bulls and young females. All reasonably priced. Come and see them or write.

T. R. Maurer &amp; Co.

EMPORIA - - - KANSAS

## Collins Farm Holsteins

A chance to purchase 40-pound breeding. We have choice sons of the great 40-pound bull, Vanderkamp Segis Pontiac, for sale. The dams of these bulls have creditable A. R. O. records. Price reasonable. Write or come and see our herd.

Collins Farms Co., Sabetha, Ks.

PRACTICALLY PURE BRED HOLSTEIN CALVES

Six to eight weeks old, nicely marked and excellent individuals, from registered sires and choice heavy milking cows, \$30 each. We pay express.

CLOVER VALLEY HOLSTEIN FARM, WHITEWATER, - - - WISCONSIN.

SEGIST & STEPHENSON, WOLTON, KANSAS. Breeders exclusively of pure-bred prize-winning record-breaking Holsteins. Correspondence solicited.

## BRAEBURN HOLSTEINS

Looking for a bull? I can generally offer you choice of half a dozen, by two different sires. That saves time and travel.

H. B. COWLES

608 Kansas Avenue Topeka, Kansas

## BUTTER-BRED HOLSTEINS

Three choice registered Holstein bulls, ready for light service, and some bred heifers to a 32-pound sire.

J. P. MAST, - - - SCRANTON, KANSAS

-FOR SALE-

## Large Red Close-Up Springers

In carload lots, also registered and grade Holsteins, Bock's Dairy, R. 9, Wichita, Kan.

## DUROC JERSEYS.

## Woodell's Durocs

A choice lot of extra well bred gilts bred for late farrow. Few fall boars.

G. B. WOODDELL, WINFIELD, KANSAS.

## PETFORD'S DUROCS

FOR SALE—Fifty spring pigs by the grand champion Model Ally, Illustrator Orion 3d and General Pathfinder, out of my best herd sows. These boars are good and priced to sell. Send for catalog. Bred sow sale February 14.

JOHN W. PETFORD, Saffordville, Kansas

## DUROC BOARS

FOR SALE—Fifteen choice spring boars and one fall yearling that are too good to send to market. Priced at \$60 to \$80 for spring boars, \$100 for fall yearling. First check or draft gets choice. Guaranteed right and of choice breeding.

S. B. REPLOGLE, Cottonwood Falls, Kansas

## HORSES AND MULES.



Percherons--Belgians--Shires

My stallions have been again awarded premier honors at the State Fairs. Show horses and real herd-headers for sale. FRED CHANDLER, Rte. 7, Chariton, Iowa. Above Kansas City.

## PERCHERON SALE

I will sell twenty registered Percheron Horses at Public Sale, WEDNESDAY, OCT. 15, 1919

Eleven Mares : Four Stallions : Five Colts

The mares are young and good individuals. All of suitable age are bred to Casino, Admiral Casino or Imp. Karnatio. The colts are sired by one of the above stallions. Admiral Casino 115951, a five-year-old black son of Casino 27830 (45462) will be sold. Three two-year-old stallions sired by Admiral Casino will be sold. Inquiries answered. Send for catalog.

E. LILL

MOUNT HOPE, KANSAS

## RED POLLED CATTLE.

## RED POLLED BULLS

Twelve head coming two-year-olds and twenty head of coming yearling bulls. This is an extra nice and well colored bunch of bulls sired by ton sires. Inspection invited.

E. E. FRIZELL &amp; SONS, FRIZELL, KAN.

## RED POLLED CATTLE

For Sale—One 2-year-old herd bull, two yearling heifers and a few cows. Come and see my herd.

J. H. FERGUSON - GYPSUM, KANSAS

RED POLLS, BOTH SEXES, BEST OF BREEDING. Charles Morrison & Son, Phillipsburg, Kan.

## AUCTIONEERS.

LIVE STOCK AUCTIONEER - Fifteen years' experience. Wire for date. JOHN D. SNYDER, HUTCHINSON, KAN.

## BREEDERS' DIRECTORY

ANGUS CATTLE.

Geo. Dietrich, Carbondale, Kansas. RED POLLED CATTLE. Mahlon Greenmiller, Pomona, Kansas. Horn Dorset Sheep. H. C. LaTourette, Rte. 2, Oberlin, Kan.

## MULEFOOT HOGS.

## KNOX KNOLL MULEFOOTS

Nothing for sale but Spring Gilts. Orders now taken for September litters. One boar of servicable age.

S. M. KNOX HUMBOLDT, KANSAS.

## JERSEY CATTLE.

## BROOKSIDE JERSEYS

REGISTERED JERSEY BULLS, few old enough for service from Eminent Flying Fox dams, sired by Idalia's Raleigh, a son of the great Queen's Raleigh. Write for prices.

THOS. D. MARSHALL, SYLVIA, KANSAS.

## ALLEN CENTER STOCK FARM

Registered Jersey bulls of choice breeding from high producing cows. Ready for Service. Priced low. U. S. Government tuberculin test.

TREDWAY &amp; SON, LA HARPE, KANS.

## POLAND CHINAS

## CLINTON HERD

## BIG TYPE POLAND CHINAS

Is ready to ship you a spring boar that will make you a real herd boar, sired by Giant Buster's Equal. Will sell a few trios not related. We have satisfied customers in 25 different states and can satisfy you. Everything immune and we record them.

P. M. Anderson, Holt, Missouri

## MYERS' POLAND CHINAS

Large spring pigs in pairs or trios, priced to sell. Write your wants. Annual fall sale October 14.

H. E. MYERS - GARDNER, KANSAS

## POLAND CHINA BOARS

For Sale—25 Spring Boars by Giant Lunker by Dishier's Giant and out of Old Lady Lunker, from my best herd sows. These pigs are good, the tops from 80 head, priced reasonable.

H. R. Wenrich, Oxford, Kan.

## PIONEER HERD POLANDS

Black Buster and Columbus Wonder at Head of Our Herd

Two great sons of Giant Buster and Big Bob Wonder. For sale, a few choice gilts bred for September litters. Annual bred sow sale February 12, 1920.

F. Olivier &amp; Sons

DANVILLE - - - KANSAS

## HAMPSHIRE HOGS

Registered Hampshire Hogs—Sows and Spring Gilts, bred or open. Choice spring boars. Double treated. Geo. W. Eln, Valley Falls, Kansas

## SPOTTED POLAND CHINAS.

## SPOTTED POLANDS.

Last call for early boars. Order gilts early. T. T. Langford & Sons, Jamesport, Mo.

## Kansas Shorthorn Breeders' Association

PARK E. SALTER, Pres.  
Wichita, Kans.G. A. LAUDE, Sec'y  
Humboldt, Kans.

## SHORTHORN CATTLE

Herd Bull, Sultan Seal.

175 in herd. Scotch and Scotch-topped. For Sale—Ten choice bulls, yearlings to 18 months. A few choice heifers and bred cows, priced reasonable. Come and see our herd.

Barrett &amp; Land

Overbrook - Osage County - Kansas

## SHORTHORN CATTLE.

Herd Bull, Nell's Goods by Silk Goods by Choice Goods. For Sale—A few young bulls, reds and roans. Come and see my herd.

FRANK GRAGG - DENISON, KANSAS

## Snowdon Herd Shorthorns

For Sale—One herd bull and eight young bulls. Reds and roans. Priced reasonable. Write or come.

D. N. PRICE - BAILEYVILLE, KANSAS

## SHORTHORN CATTLE

For Sale—Ten bulls, serviceable age. Twenty females from heifers and mature cows with calves at foot. Priced reasonable. Come and see me.

J. R. ELY - - - MARION, KANSAS

## ALL SCOTCH SHORTHORNS

Herd headed by Walnut Type, a grand son of White Hall Sultan, and Silver Plate, a son of Imp. Bapton Corporal. A few young bulls for sale. Robert Russell, Muscotah, Ks.

## SHROPSHIRE SHEEP

## FOR SALE

A bunch of registered Shropshire rams ready for service, priced worth the money. HOWARD CHANDLER, Chariton, Iowa.

## SHROPSHIRE SHEEP

Twenty pure bred unregistered Shropshire rams for sale. K. HAGUE PEABODY, KANSAS.



## LAUGHLIN'S SHROPSHIRE

RAMS—Registered Yearling Shropshires, for immediate delivery.

E. E. LAUGHLIN, Rich Hill, Bates Co., Mo.

## How About an Account Book?

Hundreds of farmers have sent to Kansas Farmer for their Farm Account Book. Have you got yours? If not, HURRY!

## Our Liberal Offer Will Soon Be Withdrawn

Do not delay in starting your records for this year, but get the best and cheapest book. The account book furnished by KANSAS FARMER is small, convenient, easy to understand and easy to keep. ORDER IT TODAY.

## HERE IS OUR OFFER

We will mail you absolutely free and postpaid one of these Account Books with your renewal subscription to KANSAS FARMER for one year at \$1.00.

## ORDER BLANK

KANSAS FARMER, TOPEKA, KANSAS.

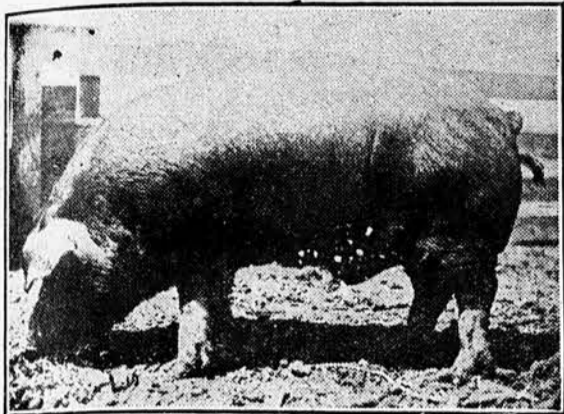
GENTLEMEN: Inclosed please find \$1.00, for which renew my subscription for one year and send me the Farmers' Account Book as per your offer.

Name.....R. F. D.....

Town.....State.....

# KETTER BROTHERS

BIG FALL SALE OF IMMUNED BOARS AND GILTS



Valley Tim, Our New Herd Boar

40 Head

20 BOARS  
and  
20 GILTS

Seneca,  
Kansas,  
Saturday,  
Sept. 27

An Attractive Offering Featuring Litters by  
ORPHAN BOS

the February yearling son of Meyer Bros.' Bos Premigenius out of Princess Orphan by Big Orphan Wonder.

BIG GIANT BOB

a February yearling by Bob's Giant by Mellow Bob out of Orphan Rose by The Big Orphan.

A FEW OF THE ATTRACTIONS

Two boars and four gilts by ORPHAN BOS out of the great breeding sow, Valley Ex Bell. (Our Futurity litter.)

A boar and three gilts by ORPHAN BOS out of Liberty Belle.

A top litter of one boar and five gilts by BIG GIANT BOB.

A superb litter by ORPHAN BOS out of Rose Ex.

Also sons and daughters of

Cornhucker Bos, Ketter's Blue Valley, and the noted Blue Valley

Send for the catalog and come to our sale.

KETTER BROS., SENECA, KAN.

COL. J. C. PRICE, AUCTIONEER

## 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.

#### Percheron Horses.

Oct. 11—P. E. Lill, Mt. Hope, Kansas.

#### Shorthorns.

Oct. 7—Johnson County Shorthorn Sale, Olathe, Kan.

Oct. 8—Eastern Kansas Shorthorn Sale, Olathe, Kan.

Oct. 9—Kansas Shorthorn Breeders' Sale, Independence, Kan.

Oct. 8—Franklin County Shorthorn Sale, Ottawa, Kansas.

#### Holsteins.

Nov. 14—Holstein Calf Club Sale, Tonga, Kan. W. J. O'Brien, manager.

Nov. 15—Breeders' Holstein Sale, Tonga, Kan. W. J. O'Brien, manager.

#### Poland Chinas.

Sept. 27—Ketter Bros., Seneca, Kan.

Oct. 2—Ezra T. Warren, Clearwater, Kan.

Oct. 4—Geo. Morton, Oxford, Kan.

Oct. 7—Jones Bros., Hiawatha, Kan.

Oct. 8—Dr. J. H. Lomax, Leona, Kan.

Oct. 9—Herman Groninger & Son, Bendena, Kan.

Oct. 6—Ross & Vincent, Sterling, Kan.

Oct. 11—H. E. Meyers, Gardner, Kansas.

Oct. 13—H. L. Glover, Grandview, Mo.

Oct. 14—A. J. Erhart & Son, Oregon, Mo.

Oct. 20—C. M. Hettick & Sons, Corning, Kan.

Oct. 12—H. B. Walter & Son, Effingham, Kan.

Oct. 17—Adams & Mason, Gypsum, Kan.

Oct. 20—W. K. James, St. Joseph, Mo. Sale at Savannah, Mo.

Oct. 20—L. V. O'Keefe, Bucyrus, Kansas.

Oct. 22—Fred G. Laptad, Lawrence, Kan.

Oct. 23—McCalland & Sons, Blair, Kan.

Oct. 24—Debauch Bros., Wathena, Kan.

Oct. 30—John D. Henry, Leocompton, Kan.

Feb. 11—Ross & Vincent, Sterling, Kan.

Feb. 25—Clarence Dean, Weston, Mo. Sale at Dearborn.

#### Durocs.

Oct. 22—Fred G. Laptad, Lawrence, Kan.

Nov. 7—Kempin Bros., Corning, Kan.

Feb. 14—John W. Pettford, Saffordville, Kan.

#### Chester Whites.

Oct. 21—Chester White Pig Club Sale, Tonawanda, Kan. W. J. O'Brien, manager.

### Spotted Poland Chinas.

Oct. 11—R. W. Sonnenmoser, Weston, Mo.

Oct. 29—George G. Eakin & Son, Della, Kan.

Feb. 14—R. W. Sonnenmoser, Weston, Mo.

Volume 40 of the Holstein Friesian herd book is now ready for distribution. This volume contains the pedigrees of bulls from No. 244872 to 259900, and pedigrees of cows from No. 449547 to 481760, up to February 1, 1919.

Frank Gregg, of Denison, Kansas, is building up one of the good herds of Shorthorn cattle. At the head of his herd is a splendid roan bull by Silk Goods, he by Choice Goods. This bull was bred by H. E. Huber, Medicine, Kansas, owner of Silk Goods, a bull now twelve years old and still doing service in the Huber herd. Mr. Gregg has been breeding Shorthorn cattle for six years and has found them the best money-makers of any live stock on his farm. A feature of his herd at this time is a splendid lot of young stock.

Clarence Dean, of Weston, Missouri, has announced Wednesday, February 25, for his annual Poland China bred sow sale at Dearborn, Missouri. A large part of the offering will either be sired by or bred to Dean's Big Timm. This hog is sired by the 1,125-pound champion and grand champion of the Nebraska State Fair in 1915. His grand-sire and great grand-sire were also champions and none weighing under 1,060 pounds. His dam is an A Wonder sow.

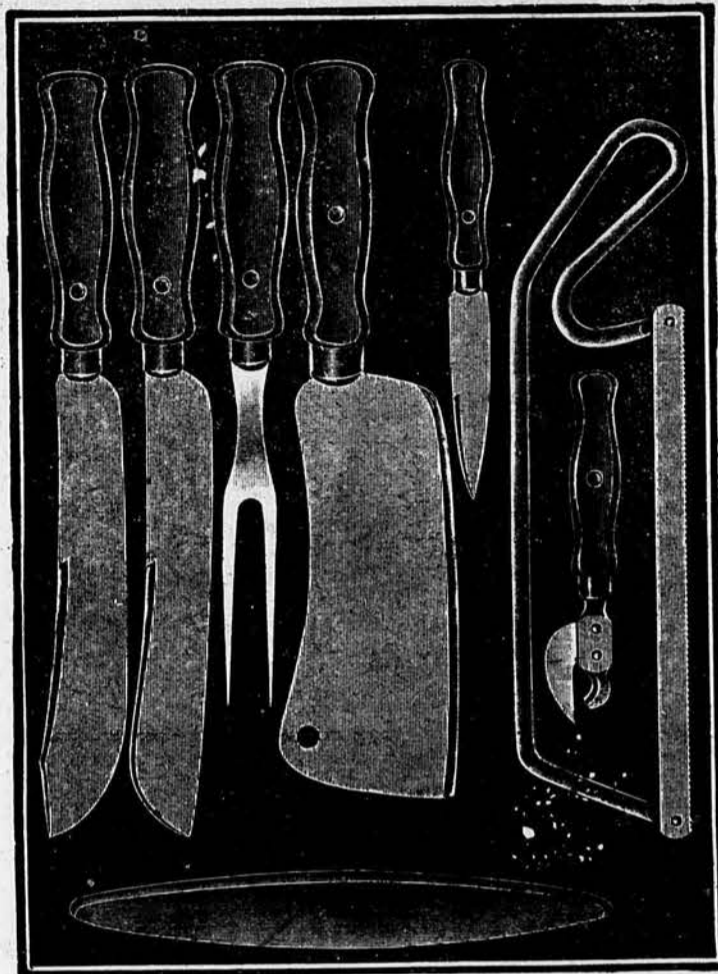
Ketter Brothers, the well known breeders of Poland China hogs at Seneca, Kansas, have announced September 27 for their annual fall sale. The offering will consist of four fall boars and sixteen spring boars of early March and April farrow. Several in this lot are real herd boar prospects of the large medium easy-feeding Poland Chinas. Twenty large spring gilts will be catalogued and sold open. In this lot will be included the futurity show herd, also an outstanding litter by Big Giant Bob, out of Model Dale by Big Smooth Model. This sale offering promises to be one of the good lots to be sold in any sale in Kansas this year.

The Eastern Kansas Shorthorn Association will hold its annual sale at Ottawa, Kansas, on October 8. About eighty-five head of cattle will be consigned by the following breeders: Barrett & Land of Overbrook, Kansas, will consign thirty head of very fashionably bred cattle. This firm will probably be the largest consignor. A few head each will be consigned by Joseph J. Sabke, Osage City, Kansas, and W. O. Rule & Son, Ottawa, Kansas. F. J. Robbins, of Ottawa, Kansas, will manage the sale.

Judge W. K. James, of St. Joseph, Missouri, has announced October 20 for his annual fall sale of Poland Chinas. The offering will consist of twenty-five tried brood sows sold open, fifteen spring and fall gilts and ten spring boars. The brood sows represent all the most popular breeding, and the spring and fall gilts, also the ten spring boars, will be sired by two great herd boars, Hillcrest King by King Wonders and Big Bob King by Big Bob Wonder. This boar is one of the good sons of Big Bob Wonder and, while never shown, he proved a great sire of large even litters while used by Dr. J. H. Lomax at Leona, Kansas. The offer-

# Eight Piece Kitchen Set

FREE



This fine and useful eight-piece Kitchen Set, consisting of bread knife, carving knife and fork, meat cleaver, meat saw, paring knife, can opener and sharpening stone, is a practical necessity in every household. The bread knife and carving knife have eight-inch blades, the cleaver a five-inch blade, and the other articles are in proportion as shown in illustration. Every article in the set is guaranteed and will be replaced if found defective. It is a genuinely good kitchen outfit. Send for yours today.

**SPECIAL OFFER.**—Send us two yearly subscriptions to Kansas Farmer at \$1.00 each—\$2.00 in all—and we will send you FREE and POSTPAID one of these eight-piece Kitchen Sets. Use order blank below.

### ORDER BLANK

KANSAS FARMER, Topeka, Kansas.

Gentlemen: Enclosed find \$2.00 to pay for one year's subscription for each of the following:

Name .....

Address .....

Name .....

Address .....

Please send .....to

Name .....

Address .....

ing is a well bred lot and promises to be as good as any lot to be sold in any sale this fall. The sale will be held in Savannah, Missouri, ten miles north of St. Joseph. Electric cars run hourly from St. Joseph to Savannah.

Dr. M. F. Marks, of Valley Falls, Kansas, has built up a splendid herd of all red Shorthorn cattle. It is a notable sight to see every animal, from herd bulls to young calves, solid red. At the head of this good herd of cows is Clipper Dale 652047 by Sytton Sultandale, the sire of the great bull Avondale. Clipper Dale is one of those low-down blocky-type Scotch Shorthorns and is proving to be a sire of a uniform lot of calves of the useful sort. Doctor Marks has been breeding cattle about eight years and has built a good herd of all red cattle of good breeding. A feature of the Doctor Marks herd at this time is a splendid lot of young stock.

### Kansas Fairs in 1919

The following is a list of the fairs to be held in Kansas in 1919, their dates (where such have been decided on), locations and secretaries, as reported to the State Board of Agriculture and compiled by Secretary J. C. Mohler:

International Wheat Show—E. F. McIntyre, general manager, Wichita; September 29-October 11.

Barton County Fair Association—Porter Young, secretary, Great Bend; September 30-October 3.

Coffey County Agricultural Fair Association—C. T. Sherwood, secretary, Burlington; October 5-10.

Gray County Fair Association—C. C. Isely, secretary, Cimarron; September 30-October 3.

Labette County Fair Association—Clarence Montgomery, secretary, Oswego; September 24-27.

Marshall County Stock Show and Fair Association—J. N. Wanamaker, secretary, Blue Rapids; October 7-10.

Mitchell County Fair Association—W. S. Gabel, secretary, Beloit; September 30-October 4.

Montgomery County Fair Association—Elliott Irvin, president, Coffeyville; September 16-20.

Morris County Fair Association—H. A. Clyborne, secretary, Council Grove; October 7-10.

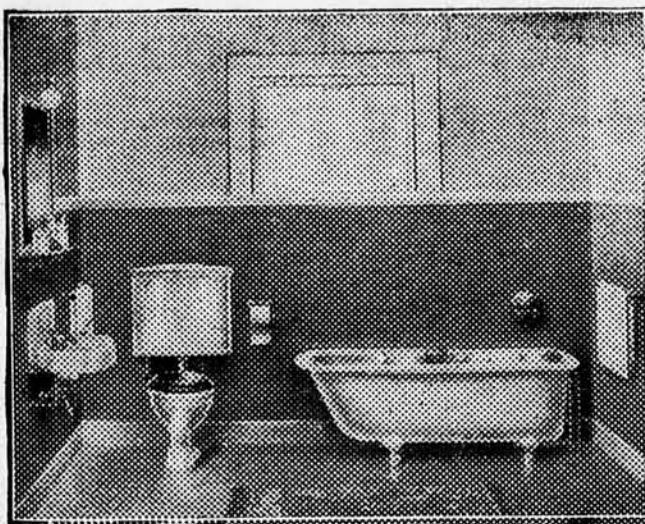
Neosho County Agricultural Society—Geo. H. Bideau, secretary, Chanute; September 29-October 4.

Pawnee County Agricultural Association—H. M. Lawton, secretary, Larned; September 24-26.

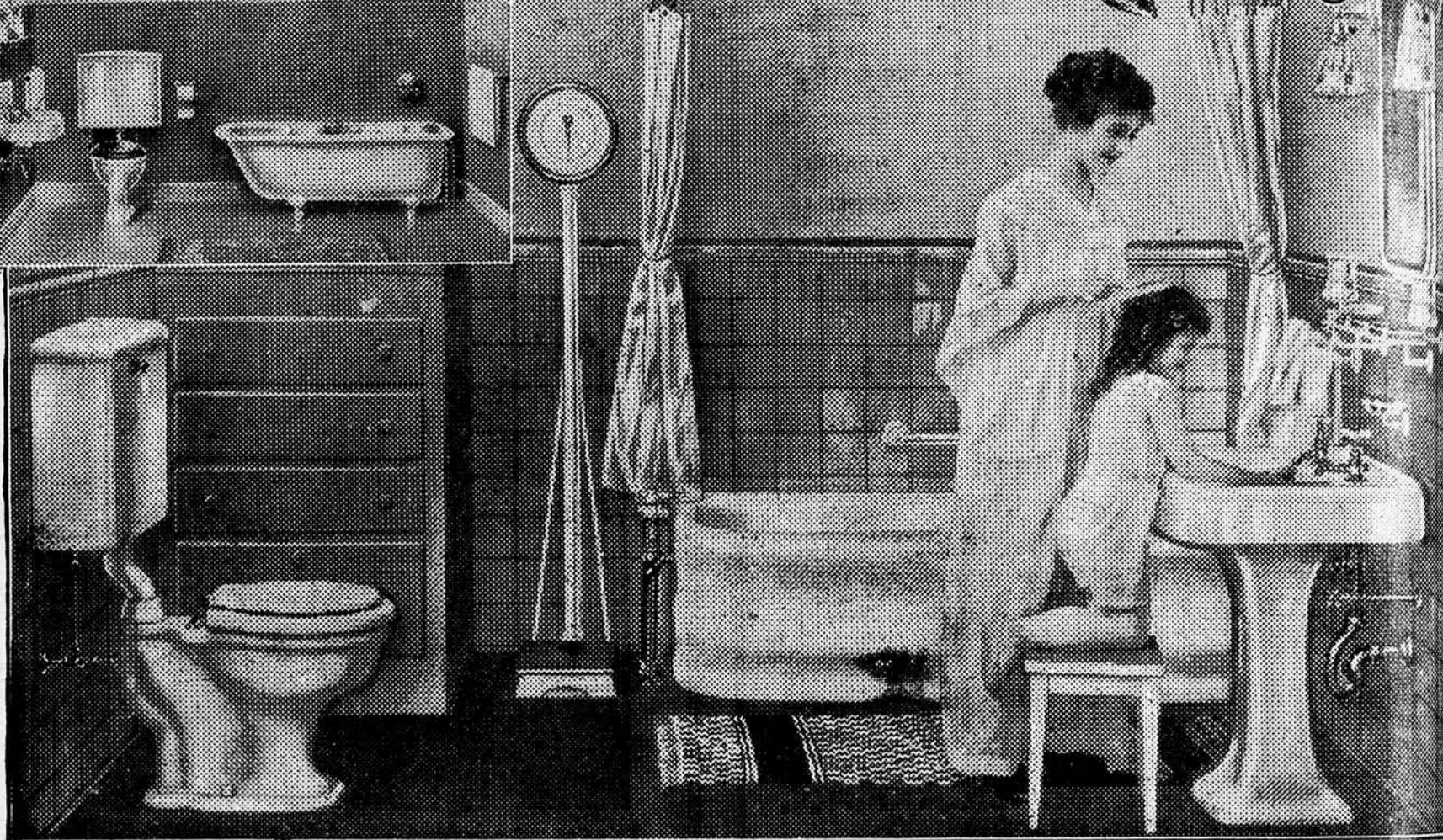
Pottawatomie County—Onaga Stock Show and Carnival—C. Haughwout, secretary, Onaga; September 24-26.

Russell County Fair Association—F. Dawson, secretary, Russell; September 30-October 3.

Vinland Free Fair, October 3-4



## Every Farm Home Should Have Plumbing



**GOOD** plumbing is not a luxury, meant just for a few. It's a real home necessity, and needed in the farm home more than almost anywhere else.

Think of the convenience of having a completely equipped bathroom—clean, sanitary wash-stands with hot and cold water at the turn of a faucet. Enjoy a restful tub bath or shower after a hard day's work. Have the toilet indoors—more convenient, and more sanitary.

Make work easier and more pleasant in the kitchen with a "Standard" one-piece sink.

Take the drudgery out of washday with "Standard" enameled laundry tubs. These are conveniences which every woman wants.

Once you have these life's necessities installed in your home you will wonder how you ever got along without them. They mean so much in home comfort, family health and saving in work that it's to your interest to have them installed as soon as possible.

You can get "Standard" Plumbing Fixtures for any kind of home from the small cottage to the large mansion. And in a variety of designs at a wide range of prices. All built with that high quality which has made the "Standard" Green and Gold Labels the guide to good plumbing everywhere.

Forty-four years' manufacturing experience are back of the name "Standard" on plumbing fixtures. Write us for special booklet, "Standard" Plumbing Fixtures for the Farm Home," illustrated in four colors and showing many styles of fixtures. You will find it a big help when you make your selection.

Standard Sanitary Mfg. Co., Pittsburgh, Pa.

# "Standard" Plumbing Fixtures

In addition to the displays of "Standard" Plumbing Fixtures shown by Wholesale Dealers and Contracting Plumbers in all parts of the country, there are permanent exhibits in the following cities:

|                              |                           |
|------------------------------|---------------------------|
| NEW YORK                     | 35 W. 31ST                |
| NEW YORK (EXPORT DEPARTMENT) | 50 BROAD                  |
| BOSTON                       | 156 DEVONSHIRE            |
| PHILADELPHIA                 | 1215 WALNUT               |
| WASHINGTON                   | SOUTHERN BLDG.            |
| PITTSBURGH                   | 439-440 WATER             |
| PITTSBURGH                   | 108 SIXTH                 |
| PITTSBURGH, E. E.            | 6873 PENN AVE.            |
| CHICAGO                      | 14 N. PEARA               |
| ST. LOUIS                    | 810 N. SECOR              |
| EAST ST. LOUIS               | 15 N. COLLINSVILLE        |
| CLEVELAND                    | 4409 EUCLID               |
| CINCINNATI                   | 633 WALNUT                |
| TOLEDO                       | 311-321 ERIE              |
| COLUMBUS                     | 248-258 S. THIRD          |
| CANTON                       | 1108 SECOND ST. N. E.     |
| YOUNGSTOWN                   | 458 W. FEDERAL            |
| WHEELING                     | 3120-30 JACOB             |
| HUNTINGTON                   | SECOND AVE. AND TENTH ST. |
| ERIE                         | 128 W. TWELFTH            |
| ALTOONA                      | 918 11TH                  |
| MILWAUKEE                    | 426 BROADWAY              |
| LOUISVILLE                   | 311-313 FIFTH ST.         |
| NASHVILLE                    | 321-323 W. MAIN           |
| NEW ORLEANS                  | 846 PEARLINE              |
| HOUSTON                      | 201 RIDGE AVE.            |
| DALLAS                       | 1200-1206 JACKSON         |
| SAN ANTONIO                  | 212 LOSORA                |
| FORT WORTH                   | 828-830 RIDGEM            |
| KANSAS CITY                  | 201 RIDGE AVE.            |
| SAN FRANCISCO                | 140-55 CENTRAL            |
| LOS ANGELES                  | 215-225 S. CENTRAL        |
| DETROIT OFFICE               | 414 HAMMOND BLDG.         |
| CHICAGO OFFICE               | 1010 KARPEN BLDG.         |
| TORONTO, CAN.                | 59 E. RICHMOND            |
| HAMILTON, CAN.               | 20 W. JACKSON             |

For "Standard" Farm Lighting Plants and Water Supply Systems, write branch marked (\*) in list above.