

ap. 2

KANSAS FARMER

MAIL & BREEZE

Volume 67

September 14, 1929

Number 37



Greetings to the People of Kansas

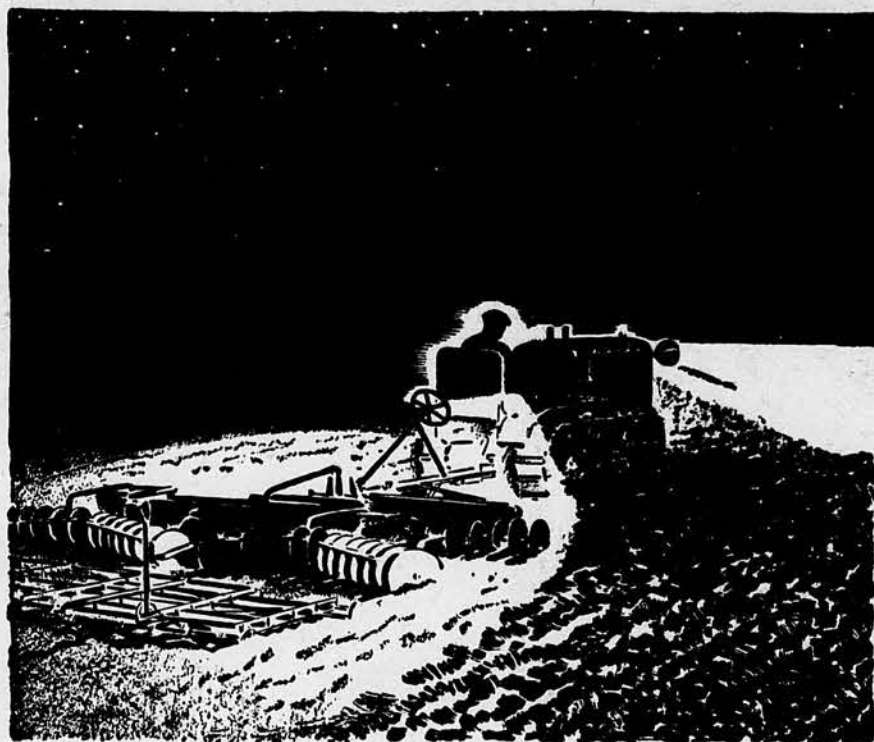
THE Kansas State Fair at Hutchinson, September 14-20 is expected to surpass any of the 28 held heretofore. All available stalls and pens will be filled with blue ribbon livestock on the great fair circuit comprising eight states. The space in the exhibit buildings will be filled with the choicest specimens from the fields, orchards and gardens, and the handiwork of the women of the state. The 4-H Clubs of Kansas will be in encampment filled with enthusiasm to win or to learn how to win thru excellence. More state institutions will exhibit educational features than heretofore. It will be the real show window of Kansas. In addition, the Agricultural Department of the State of Florida will have an exhibit of the products of that state, and Canada will show its alluring products.

Our entertainment program is excellent. The entire Hagenbeck-Wallace Circus and Menagerie will give two performances every day (except Sunday.) The Thearle-Duffield Fireworks Spectacle (Vesuvius) will close the night programs. Each afternoon there will be racing—Monday and Friday, automobile racing—and Tuesday, Wednesday and Thursday, racing by standardbred and thoroughbred horses.

Every Kansan is invited to be an exhibitor, a visitor, or both.

A. L. SPONSLER,
Secretary,
Kansas State Fair, Hutchinson.





BIGGER *than time!*

WEATHER, friction and time. The three great destroyers of all mechanical equipment meet their match in "Caterpillar" track-type tractors.

Weather just doesn't count with the "Caterpillar."

Careful, experienced engineering has brought design that has the friction problem well in hand . . . roller bearings . . . hardened steels . . . reduced vibration.

And the "Caterpillar" is bigger than time itself. Bigger than the full, hurried days when seasons are short . . . and important. Bigger than the years that add their toll of scrap iron to the heap that will be found somewhere on 'most every farm.

For "Caterpillars" are built to deliver full, honest days of work through years of profitable farming . . . that pay their own way and earn for their owners the profits and the leisure to which every man . . . farmer or banker . . . is entitled.

Caterpillar Tractor Co.

EXECUTIVE OFFICES: SAN LEANDRO, CALIFORNIA
Sales Offices: Peoria, Ill.; 50 Church Street, N. Y.; San Leandro, Calif.
Holt Combined Harvesters Russell Road Machinery
"Caterpillar" Tractors

CATERPILLAR

REG. U. S. PAT. OFF.

TRACTOR

It Is a Season of Extremes!

Despite the Dry Weather, Corn Cutting Will Be Late on Many Fields

BY HARLEY HATCH

ALTHO a few scattered showers fell in Coffey county during the last week there was no moisture for this southwest corner. The dry week did not seem to cause any particular damage; corn that had started an ear when the August 10 rains fell has gone ahead and made a very fair crop; that which started after the rains will make little real grain, but the shoots carrying a few grains will help this late fodder for cattle feeding. Kafir and cane appear well from a motor car view, and folks who have examined the growing crop say prospects are for a fair yield. A good rain about August 20 would have made a lot of late corn, but it did not come, and the crop season of 1929 soon will pass into history. It was one of great extremes of wet and dry weather, and in this is more like the season of 1916 than any I can recall. Corn cutting will be no earlier than usual; in fact, in a large number of fields it will be later than normal. Early corn has a good stalk growth; late corn on land of ordinary fertility will have rather a light tonnage.

of this plowed acreage to wheat. With our small fields we scarcely can be expected to compete in wheat growing with Central and Western Kansas, so wheat growing probably would not be very profitable for us. On the other hand, it is not a good plan to carry all your eggs in one basket, and to put the entire cultivated acreage on the farm into corn would be doing that very thing. We like to have around 40 to 50 acres in small grain to balance the rest of the crops, and to put that much into oats would be staking too much on a crop that is like hay; profitable in most instances to feed but unprofitable as a cash crop. We will have to make up our minds pretty soon about this wheat sowing as we like to have the seed in the ground around September 25, and that date soon will be here.

60 Per Cent of Corn?

A trip to Lebo this week, going one way and returning another, gave us a pretty good idea of the condition of the corn crop in western and northwestern Coffey county and that, with the view of the crop gained in a trip to Waverly two weeks ago, enables me to make at least a guess as to the outcome in the county. I have not seen the southeast part, but am told that it is pretty dry down there. With this in mind I am going to guess the 1929 corn crop in Coffey county at about 60 per cent of normal. The late corn failed to receive moisture during the last two weeks, and this has cut at least 10 per cent off the yield. Corn planted early on good soil will make a very good crop; that planted late on poor soil will make some fodder, and that is about all. If we had more fertility in our soil we could better stand both extremes of wet and dry, and we had to stand them both this season. I don't know of any better prescription for our poor soil than a course of Sweet clover. To get it to grow one may have to sow it alone and may even have to spread a coat of manure on the poorest soil, but it will be worth working for. I believe that Sweet clover has added 10 bushels of corn to the acre on this farm where corn was planted following the clover; what it will add in seasons to follow can be told later.

Fine Fair at Lebo

Our trip to Lebo was to attend the Grange fair held there. This fair started at a nearby schoolhouse years ago where local products were exhibited, and so successful did it become that larger and better grounds had to be secured, and so the fair was moved to the park just west of Lebo, where conditions are ideal for a gathering of this sort. Lebo is the center of one of the best communities in Kansas, and the exhibits at the fair were an indication of what can be done in a year of extremes of wet and dry weather. Not only was the corn shown a credit to any locality in any year, but the exhibit of fruit was equally as good. Lebo is the center of a great Hereford feeding ground, but the cattle shown at the fair were all dairy stock, with, I think, three exceptions. With the Hereford the pivot of most of the past prosperity of that region, not a whiteface was exhibited. Lebo is located in a level country, but for all that, it is on a height of ground, the water to the north flowing to the Marais des Cygnes and to the south to the Neosho. Folks think around Lebo that they have about the best show for corn in Coffey county, they also think the same thing at Gridley, so both localities ought to be satisfied.

Influence of Einstein?

Soon the nation will know whether Herbert Hoover is going to "get along with Congress." Politicians think he will do the trick, perhaps to a larger extent than any of his successors during the last 25 years.—Farm Journal.

Time takes care of all things, and the tobacco coupon passed out of existence just in time to keep from being confused with the new paper money.

Hog Prices Will Decline?

Farmers in this part of Kansas who have spring pigs on hand are wondering whether to sell them light or to hold until along in the early winter and make them heavier on corn which now seems likely to sell for \$1 a bushel. On this farm there are some 35 February pigs which at this time will average in weight around 175 pounds; will it be best to sell them before September 15 or feed them to weigh around 250 pounds? If we knew what the packers had in their minds regarding the opening of the winter packing season we might know better what to do. But if the packers run true to form there is likely to be a \$2 drop in hogs between now and December 1. Packers talk as if hogs were now high in price, and we can guess what such talk means. But how they expect to get farmers to feed hogs on less than the present margin is beyond me. Corn is \$1 a bushel and seems likely to sell close to that figure; hogs in Kansas City today are \$11.15 a hundred, which means about \$10.50 locally. At the established ratio this means that the feeder is getting \$1.05 a bushel for his corn; he can sell it on the market at \$1 and run no risk of losing hogs. If the packers wish to knock the 1930 supply of hogs in the head, this fall is a good time to begin.

Big Crop of Hay

The last of the bluestem hay is in barn, stack or bale here, and the crop probably was 25 per cent above normal. As a cash crop this hay is the worst proposition we have in the farm products market; as a feed crop it is even better than usual. While it has no great cash value, selling today baled and on the cars for little more than \$5 a ton, many farmers have had their hay baled. They have barn room to hold the hay in a baled form, but if put up loose it would have to be stacked. The cost of baling is high as compared with the value of the hay; most balers are charging \$2.50 a ton for baling and sweeping in, they providing wire and everything. But with a loss in stack hay running in some instances to 50 per cent and in no case less than 25 per cent, many folks figure it is best to pay the baling charges and have good bright hay to feed. On this farm we have storage for around 110 tons of loose hay, and have the space filled with about 15 tons stacked outside. We like to feed loose hay better than that which is baled, especially when it can be fed from the mow right into the racks.

Should We Sow Wheat?

We have close to 40 acres plowed on this farm, much of it being plowed more than a month ago. We had intended fitting some of this ground for alfalfa sowing, but that was impossible. It is now too late to sow and the ground still is very dry. What we are studying on now is whether to sow part

KANSAS FARMER

By ARTHUR CAPPER

Volume 67

September 14, 1929

Number 37

Who Is the Best Corn Husker for 1929?

\$100 in Cash, a Silver Trophy Cup and a Free Trip to the National Contest in Missouri Will Be State Champion's Reward

By Raymond H. Gilkeson

THE third annual battle to determine the best corn husker in Kansas will be sponsored by Kansas Farmer in the early fall as usual. Contests in the two previous years have proved to be outstanding athletic events, and drawing cards for 4,000 to 5,000 real boosters. No better spirit of sportsmanship could be found than that exhibited by the 30 county champions who banged plump ears of corn into their wagons last year so rapidly that they imitated machine-gun fire.

This year's event will be another gala holiday. Plans are being laid for a harder-fought battle that will turn out a champion who will go on to the national contest and earn additional honors for

is by bringing county champions together in the big state meet, and letting them fight it out there. In this state-wide contest, which will be held sometime early in November, Kansas Farmer offers \$200 in cash prizes. The top man will receive \$100, the silver trophy and the free trip to the national contest in Missouri. The second man will receive \$50; third man, \$25; fourth man, \$15, and the fifth man, \$10. Certainly these prizes are worth the best efforts of Kansas corn huskers.

In 1928, William J. Lutz, of Riley county, won the Kansas championship

demonstrate that the Jayhawker state can produce a national champion. Kansas Farmer is going to conduct the big state meet to find out who shall be our representative in Missouri, and when that man is found we will back him to the limit to win all honors.

But before we get to the state contest we must first find out who the champion corn husker is for each county. There are so many good huskers in the state that it would be impossible to get a field large enough to accommodate all of them in one big contest. So the only thing to do is to hold county elimination contests, and then bring the county champions together in the state event. Only those living in a county will be allowed to enter that particular county contest, and the state meet will be restricted to the winners of county contests. This is necessary as there will be room for only a limited number in the state contest, and they should be the best huskers from the various counties.

Every husker who wishes to get into the state contest and have a try at his share of the \$200 cash prize money, the trophy cup and the trip to the national contest, with the possibility of winning national honors and another \$100 cash, should get things started at once to find out who is the champion in his county. If you wish to get in on this, simply fill out the blank on this page and mail it to the Corn Husking Editor, Kansas Farmer, Capper Building, Topeka.

After sending in your name get in touch with other huskers and get them to enroll as contestants. After that, talk the matter over of holding a county elimination corn-husking contest with your county agent if you have one, or the secretary of your local chamber of commerce, your vocational agriculture instructor in your local or county high school, the presidents of county farm organizations, Rotary and Kiwanis clubs and any other organizations that will be interested. The big thing is to stir up interest in your county event. Why, last year, some contestants in the state meet had their expenses paid by local



Ralph Snyder Was Snapped Presenting the Championship Cup, on Behalf of Kansas Farmer to William J. Lutz, Riley County, Last Year's Winner

organizations. You won't have any trouble getting interest aroused in this event in your county.

As soon as we receive your name, either on the blank printed on this page or in a letter which states that you wish to enter your county contest, we will send you the name of the person we are asking to conduct the contest in your county. We will do everything we can to help you locate a suitable contest manager, but, of course, we need your help in this. We will supply your local committee with the standard rules for the contest, which will be the same as the rules under which the state and national meets will be conducted. Your county elimination contest should not be held later than November 5, and if it is necessary to hold it before that time, you will be so informed by Kansas Farmer.

There is no reason why Kansas cannot produce a corn husker who will

(Continued on Page 13)



This Photograph Shows Ralph Snyder, President of the Kansas State Farm Bureau, Weighing the Gleanings of One of Last Year's Contestants in the State Husking Meet. Gerald Ferris, Manager of the Protective Service Department for Kansas Farmer, is Keeping an Accurate Record. Each Contestant Lost 3 Pounds From His Load for Every Pound of Marketable Corn He Left in the Field

himself and for our state. A larger crowd of rooters and sport enthusiasts is expected, and these folks are not going to be disappointed in the accommodations and entertainment for them.

Who will be this corn-husking champion of Kansas for 1929? He must be found, and when he is, he will receive a cash prize of \$100 from Kansas Farmer, a fine silver trophy cup properly engraved from Senator Arthur Capper, and a trip with all expenses paid to the National Corn Husking Contest, which will be held in Missouri this year sometime in November. Our Kansas champion will match his strength and ability in the Missouri event against the champions from Illinois, Indiana, Iowa, Nebraska, Minnesota and of course, Missouri, for the national championship and other cash prizes of \$200.

It may be that the best husker in Kansas lives in your county, and you who are reading this may have an idea who you know who he is. Perhaps you can peel the husks off of an ear of corn in a hurry yourself. It doesn't hold that the champion of a year ago will take the honors again this year. The winner of 1928 beat the champion for 1927, so there isn't any telling who will win for 1929. But there is one thing certain—every single contestant will have a fair chance to show his ability.

There is only one sure way to find the state champion for 1929, and that

in the final contest held near Ottawa, on November 7, and he is the man who received the first cash prize of \$100, the silver cup and the fine trip to the national meet where he fought a good battle for Kansas. In our state meet near Ottawa, Mr. Lutz out-classed 29 other contestants by husking more than 24 bushels of corn in 80 minutes. That was his net after all deductions for husks and missed corn were made, as provided in the rules. If you are a husker you can compare your ability with this record and figure out about how you would stand. In fairness to Mr. Lutz and all of the other good huskers in last year's contest, we must remember that weather conditions on the day of the contest were not the best. Moisture made the husks damp and husking tough. But every man went after his job with a determination to win. They were real sportsmen. Perhaps you will remember that the contest had to be postponed once, and that a number of huskers from long distances had to start for Ottawa before weather conditions made the postponement necessary, and before telegrams could reach them. But back they came on the second date, and what a contest they made!

The national contest is in Missouri this year, out where conditions and wagons and corn will be more nearly like those found in Kansas. So let's

Corn-Husking Editor, Kansas Farmer
8th & Jackson Sts., Topeka, Kansas

Dear Sir: I am a good corn husker and would like to represent my county in the Kansas State Corn Husking Contest this year. I will enter a contest in this county to determine the champion to represent our county in the state contest.

Name.....

Town.....

County.....R. F. D.....

My age is.....I can husk.....bushels of corn in one

hour. Corn in this section will average.....bushels an acre this year.

There are no entry fees of any kind in these contests. All the huskers have to do is husk all the corn they possibly can in 1 hour and 20 minutes. The county contests are open only to huskers living in the county. The state contest is open only to huskers living in Kansas. If you are a good corn husker you may win \$100, the Kansas champion's cup, and a free trip to the Mid-west contest in Indiana where you will have a chance at the world's championship and another \$100 cash prize.

If You Wish to Enter Your County Elimination Corn-Husking Contest, Please Fill Out This Coupon and Mail It to the Corn Husking Editor, Kansas Farmer, Capper Building, Topeka. We Will Help You Get a Contest Manager in Your County

DEPARTMENT EDITORS
G. E. FERRIS.....Protective Service
RAYMOND H. GILKESON.....Livestock Editor
FRANK A. MECKEL.....Agricultural Engineer
HARLEY HATCH.....Jayhawker Notes
A. G. KITTELL.....Poultry
RAYMOND H. GILKESON.....Dairying

Entered as second-class matter February 16, 1906, at the postoffice at Topeka, under act of Congress of March 3, 1879.

KANSAS FARMER

Published Weekly at Eighth and Jackson Sts., Topeka, Kan.
Member Audit Bureau of Circulations Member Agricultural Publishers' Association

ARTHUR CAPPER, Publisher
F. B. NICHOLS, Managing Editor
RAYMOND H. GILKESON, Associate Editor
ROY R. MOORE, Advertising Manager
T. A. McNEAL, Editor
R. W. WOHLFORD, Circulation Manager
Subscription Rates: One Dollar a Year. Subscriptions Are Stopped Promptly at Expiration

DEPARTMENT EDITORS
FLORENCE G. WELLS.....Farm Home Editor
NELLE G. CALLAHAN.....Food Testing
LEONA E. STAHL.....Young Folks' Pages
J. M. PARKS.....Manager Capper Clubs
T. A. McNEAL.....Legal Department
DR. C. H. LERRIGO.....Medical Department

Please address all letters in reference to subscription matters direct to Circulation Department, Kansas Farmer, Topeka, Kan.

Passing Comment

By T. A. McNeal

SOUTHWEST Kansas and a good part of the western third of the state will have an exceptionally prosperous year from this year's farm yields, but Kansas from all accounts is more spotted than usual this season. Some of the more favored counties ordinarily are suffering from short crops of both wheat and corn.

But Kansas is more diversified agriculturally than formerly, and not as dependent on these great staples. For the 20-year period ending with 1914 the average annual value of farm products apart from livestock and horticultural was 151 million dollars. But with no greatly increased farm population, if any, the value of these products was 347 million dollars in 1927 and 382 millions in 1928, an increase of about 160 per cent. Adding livestock products and horticultural the average annual value for the 20 years closing with 1914 was increased 79 million dollars, while for 1927 their value was 156 millions and for 1928 was 154 millions, an increase of about 100 per cent.

In the 20-year period mentioned the average value of corn for the year was 55 million dollars, and of wheat 51 millions, as against 130 million dollars for wheat in 1927 and 167 millions in 1928, and 114 million dollars for corn in 1927 and 118 millions in 1928.

From these comparisons it appears that Kansas this year, other things being equal, would produce crops and livestock, if no corn or wheat whatever was raised, worth fully as much as the annual value of all crops and livestock products in the 20-year period before 1915, and that with no appreciable increase in farm population.

Diversification and machinery have made this possible. And diversification has still a long way to go before its profitable limits are reached.

Kansas Road Laws

IRECEIVE a good many requests from readers to publish the road laws. As our road laws have been the growth of many years, and as our whole system of road building and road control has been changed from its original scope by legislative enactment, it is entirely too voluminous to publish entire, but a summary of it showing as briefly as possible the evolution of the system may be of interest and may satisfy these inquirers.

Originally the matter of laying out public roads was wholly within the power of the county commissioners, and this is largely true yet. The law required that before a road was established, a petition should be presented to the board of county commissioners, signed by at least 12 householders of the county residing in the vicinity where the road was to be laid out, altered or vacated. A bond also was required, conditioned that if the road was not finally approved, the signers of the bond would pay the necessary costs of the proceedings, including the cost of the view.

When the petition and bond were properly filed the commissioners appointed three disinterested householders of the county to act with the commissioners as viewers of the proposed road. The viewers were to assess the damages that would accrue to the landowners whose lands would be affected by the road. The landowners have the right to appeal from the award of the viewers, and have the question of damages tried by a jury in the district court.

Originally the improvement of the roads, after they were established, was left to the local township authorities, that is, the local road overseers, who called out the male citizens between the ages of 21 and 45 to work the roads. These citizens were supposed to put in two days' work in a year, or if the citizen furnished a team he was only required to put in one day, or in lieu of labor he might pay a poll tax of \$3.

Each road overseer worked the roads within his jurisdiction according to his own ideas of how a road should be constructed. Once in a while there was a road overseer with some sensible ideas about the construction of a road, but he was the rare exception. Road building was a farce, and very often the road work left the road in worse condition than if no work had been done.

The first legislation looking toward something like systematic road building was enacted by the legislature of 1885. This law provided for township highway commissioners, consisting of the township trustee, clerk and treasurer, who had general jurisdiction over the roads in their re-

spective townships. That helped a little, because at least, it did, to an extent, centralize the authority in this board, and each road overseer no longer had full authority to do whatever was right in his own eyes. But it was very far from being an efficient road building system. For more than 20 years there was very little improvement in Kansas road building. The township control of roads continued, except in a few counties, which managed to get special bills thru the legislature, giving the board of commissioners in these counties authority to designate certain roads in the county as county roads and to appoint county engineers to lay out and superintend the construction of these roads.

Along about 1907 a Missourian made the discovery that it improved a dirt road to run a drag over it after a rain. These first drags were very crude affairs, maybe a rail or a two-by-four, dragged over the road by a team, this, at least, partly filling up the ruts made by the wagon wheels when the road was muddy.

In 1909 the legislature enacted the first drag law. This law provided that the township boards should designate certain roads as "drag roads," provide road drags shod with steel blades and



appoint a "drag" man for each section designated by the township board. There was a bit of politics in this law which provided that in selecting the drag man, the residents abutting each section should have the preference.

This legislature of 1909 took another step forward by providing that counties having a population of 20,000 or more might appoint a county engineer of highways and bridges, who should have general supervision of all the highway and bridge work in the county, and consult with the township highway commissioners and direct the manner of carrying on the repairs and improvements of the roads. To show, however, what estimate was placed on the value of the services of these county engineers, the highest salary provided in any county was \$1,200 per annum.

The law also provided that in counties of less than 20,000 inhabitants the county commissioners might, by resolution, take advantage of the act and appoint county engineers. The salaries of county engineers in these counties of less than 20,000 inhabitants ranged from \$400 to \$700 per annum. This was an improvement over the old law, but it still left the care of the roads to the township officers, and there was still very little, if any, scientific road construction. There was no unified plan, no general and competent survey and no systematic drainage.

This legislature also enacted another very important piece of legislation providing for the creation of improvement districts in the different counties. This law provided in brief that the commissioners of any county might submit to the voters of the county a proposition to establish benefit districts and levy a tax on the entire property of the county, and special taxes on the lands within the benefit districts when created.

At the general election the ballots were designated "For the good roads tax levy" and "Against the good roads tax levy." In the formation of the benefit districts the law provided that a majority of the property owners in the proposed benefit district should first petition the county commissioners to establish the district; then the commissioners had the right to determine whether such district should be established.

These districts included the lands within a mile of the proposed road. The funds for constructing the road were raised in part by a tax on all the property in the county, in part by a tax on the property in the township thru which the road ran and in part by a tax on the land included in the benefit district, to be paid in installments by the taxpayers to retire the road bonds.

All the cost of bridges along the proposed highway, which cost more than \$200, was to be paid by the county.

It was in 1911 that our present road system really began to take shape. It was a pretty poor system, but two powerful influences were at work in favor of better roads, the free rural delivery, and the automobile. Most of the automobiles were pretty crude as compared with the present machines, but they were rapidly becoming common, and every owner of one wanted better roads. He probably had in mind better dirt roads, but at any rate he did not like to plow thru the mud. Still there was not much co-ordination, and very few folks who knew much about road making.

The legislature of 1913 did not pass much road legislation; perhaps the most important act relating to roads was one providing for the purchase of rock crushing machinery by the boards of commissioners, to be used in the construction, maintenance and repair of roads, but this authority was contingent on the presentation of a petition by not less than 35 per cent of the resident taxpayers of the county.

In 1916 Congress passed an act entitled, "An act to provide that the United States shall aid the states in the construction of rural post roads and for other purposes." This marked a new era in road legislation in Kansas. The legislature of 1917 created the first State Highway Commission, which consisted of three members, the governor being the ex officio chairman, and the other two members were appointed by the governor. The appointive members received, as compensation for their services, \$5 a day for the time actually spent in the performance of their duties, and their actual and necessary traveling expenses, but their total compensation, aside from their traveling expenses, could not exceed \$200 a year. The Highway Commission was given general supervision of all road and bridge laws and over the construction of roads, bridges and culverts thruout the state, except township roads. This law also required the boards of county commissioners to employ competent county engineers. Previously in counties of less than 20,000 inhabitants the employment of a county engineer was optional. The law, however, did permit the commissioners in counties of less than 10,000 inhabitants to postpone the appointment of a county engineer until January 1, 1919. It also provided that two or more counties with a small population might employ engineers jointly. This law also made it the duty of the county engineer and county commissioners to designate the county road system and, so far as practicable, eliminate all steam and electric railroad crossings and all dangerous places on such highways. There is a good deal to do yet in that line.

This was quite a long step forward. It took a good many of the roads out of the hands of the township boards, and before long there began to be a marked difference between the county roads and the township roads. The same law provided that the various boards of commissioners must levy a road tax for county roads of not less than 1/4 mill, and not more than 1 1/2 mills, on all taxable property in the county. The system of letting road building contracts at public lettings was provided for by this legislature, and for the first time, began something like a state system of roads, which with all its faults was a great improvement on what the roads had been in the past. The legislature of 1919 amended the law of 1917 by extending the powers of the State Highway Commission somewhat and increasing their compensation to \$10 a day for the time actually spent in

performance of their official duties, limiting the total salary to \$400 per annum.

The legislature of 1921 established the first state aid road fund. The county treasurer of each county was required to deposit, in a special road drag fund, the sum of \$4.50 from each registration fee paid to him for the registration of motor vehicles other than motorcycles or dealers' licenses. The law also provided that the county commissioners of any county desiring to avail itself of the state aid funds should designate to the State Highway Commission the roads or highways on which said funds should be applied. This state aid fund was made up of what was left of the registration fees for motor vehicles after deducting the special road drag fund and the 50 cents for registration fee, which was turned over to the secretary of state to pay the expenses of supplying the tags and other expenses of the automobile license department.

The legislature of 1923 further amended the law to comply with an amendment to the federal aid law so that counties might participate in the federal aid by taking from the state aid fund to the extent of not to exceed \$10,000 a mile, the remainder of the county's share to be paid from the county's road and bridge fund.

The legislature of 1925 again amended the law creating the State Highway Commission, by dividing the state into three highway commissioner districts. The commissioners were to be appointed by the governor and to serve for four years. The commissioners were to receive compensation at the rate of \$10 a day for the time actually spent in the performance of their duties plus their actual traveling expenses; their salaries being limited to \$1,500 per annum. The commission was authorized to designate, in conjunction with the boards of commissioners in the several counties of the state, certain highways to be part of the state highway system, with a total mileage of, not to exceed 8,600 miles. All of the motor vehicle registration license fees, with the exception of 50 cents allowed the secretary of state to pay for license tags and other expenses of the automobile department, were to be applied to the building and maintenance of roads. Seventy-five per cent of these fees were to be deposited in the state highway fund. Forty per cent of this fund was to be distributed among the counties of the state equally, and 60 per cent to be distributed in proportion to the population of the counties. The state fund could be used to aid in the construction of roads to the extent of 25 per cent of the total cost, with a limit of \$10,000 a mile.

This law also provided that the state and county funds might be used by the various county commissioners to reimburse landowners in benefit districts who live 1 mile or more from the road for which the benefit district tax had been col-

lected, and the commissioners also might reimburse those living in the benefit district less than 1 mile from the road in the amount over and above 2 per cent of the appraised value of said lands and improvements, provided that no such reimbursement could be made until proper maintenance of the road had been provided for.

The legislature of 1927 again amended the State Highway Commission law by enlarging the commission to six members, dividing the state into six commissioner districts and providing for the appointment of one member of the commission from each district. The members were allowed \$10 a day and their traveling expenses, the total salary not to exceed \$1,000 per annum. The legislature of 1925 had greatly increased the funds at the disposal of the State Highway Commission by imposing a tax on gasoline of 2 cents a gallon. This law was amended by the legislature of 1929 by increasing temporarily this tax to 3 cents a gallon. My guess is that the tax will continue at that rate after the limitation period has expired.

For more than 10 years after the passage of the first federal aid law, Kansas had managed to "get by" without complying with the general government requirement that the state must agree to meet the appropriation for road construction in the state with as much as the government contributed, but finally an ultimatum was issued from Washington that Kansas must have a state highway system. This necessitated the amendment of our constitution. Two amendments were submitted to be voted on at the election in 1928: one provided that the state might maintain a state system of highways, but that no general property tax shall ever be laid or bonds issued by the state for such highways. The second amendment provides that the state shall have power to levy special taxes on motor vehicles and motor fuels for road and highway purposes. Both amendments carried, and the last legislature adopted our present road law, based on these amendments. This law provides that the State Highway Commission shall consist of six members selected from six districts into which the state is divided. The members of the Commission receive \$10 a day for the days actually served and a maximum salary of \$1,500 per annum and actual traveling expenses. The commission is directed to establish a system of state highways, the total mileage not to exceed 8,600 miles, to be known as "state highways;" all other highways shall be either county or township highways. The State Highway Commission is authorized to construct the roads in this state highway system. A sum not to exceed \$500,000 in any one year is allowed for the support of the commission, including salaries, traveling expenses and all expenses connected with the work of the State Highway Commission and the state high-

way department. The sum of \$800,000, quarterly, up to April 1, 1930, and \$900,000, quarterly, after that date shall be transferred by the state treasurer from the highway fund into a fund known as the county and township road fund. Forty per cent of this fund is distributed equally among the 105 counties, and 60 per cent is distributed in proportion to the assessed valuation of the property in the counties.

The commission also apportions quarterly to the cities on the state highway system \$250 a mile for the maintenance of streets in such cities designated by the commission as connecting links in the state highway system. The commission is limited to constructing 100 miles a year of hard surfaced roads until all the roads of the state highway system have been improved with an all-weather surface such as sand, gravel or chat. In the case of cities of the third class the State Highway Commission may maintain the streets thru such cities as are part of the state highway system.

The legislature also provided for county road systems and also provided that the county commissioners may take over and add to the county system such township roads as have been improved by the townships in accordance with the plans and specifications furnished by the county engineer. The county roads are divided into two classes, Class A and Class B. Class A roads are the main traveled highways, selected by the county engineer and board of county commissioners. Class B constitutes the other laid out roads.

When the county commissioners adopt the county unit system they are authorized to levy a tax for road purposes of not more than 3 mills on the dollar, and for bridges not more than 3½ mills on the dollar. We still have township roads, but in all probability within a few years practically all the roads in the state will be either state or county roads.

By Will to the Children

Is a wife in Kansas compelled by law to divide half of her inheritance from her parents with her husband? In this case the parents are yet living, and the daughter married a man who had been married before and has children by his first marriage. These parents do not wish the children to receive any of their property, which would be the case if the son-in-law was entitled to any of it. Could anything be done to prevent the son-in-law from receiving part of the estate without cutting the daughter out entirely?

Mrs. B. H.

This property is still in the hands of the parents of the wife. They still have the power to dispose of it as they see fit. They might will it to the children of the daughter. If it is real estate they might will a life estate to her, with the remainder to be divided among her children. This would cut the husband out of any share in it.

The Country With the President

PRESIDENT HOOVER notifies shipbuilding corporations he will not tolerate their interference in international negotiations for naval disarmament, directing the Attorney General to consider what action may be brought against them. The basis of the President's statement is the methods William B. Shearer, a naval expert, says he used in 1927 at the unsuccessful Geneva preliminary arms conference and elsewhere as the agent of three American shipbuilding corporations. Also a suit filed against them by Shearer for \$308,885 for services rendered as a big-navy lobbyist in which he acknowledges receiving \$51,230 on account.

The corporations, the Bethlehem Shipbuilding Corporation, the American Brown Boveri Electric Company and the Newport News Shipbuilding and Dry Dock Company, make public a general denial that Shearer represented them.

Doubtless the facts, whatever they are, will now come out. Meanwhile it is instructive to look into the constantly mounting costs of our military establishment which now exceed those of any other nation.

Before the war came that was "to end war" this country was spending about 266 million dollars a year on its army and navy.

Since the World War we have led all other nations with our expenditures for purely military purposes—for preparedness. We now have a naval program which calls for spending \$1,170,800,000. Warfare becomes more expensive with every new discovery.

In the fiscal year 1927-'28 we spent \$624,600,000 on our army and navy.

In the year 1928-'29, we spent \$684,700,000.

In 1929-'30, it is estimated, we shall spend 741 million dollars. This estimate compares with \$547,274,000 to be expended this year by Great Britain; \$523,241 by France, and \$235,351 by Japan.

At the present rate of increase our annual expenditures for the army and navy will have reached 800 million dollars by 1933, President Hoover calculates. And I think his estimate is most conservative.

In other words, dollar for dollar, we are the most military nation on earth at a time when, as President Hoover points out, there is less danger of war than at any period within the last 50 years.

The possibility of reducing taxes now depends to a large extent on curtailing needless expenses of government wherever found.

President Hoover probably knows as much about the inside and the outside of the World War as any man living. He is a practical, fact-facing man, not the kind of man likely to have visionary notions about Europe's condition then or now. He wouldn't be likely to leave this country inadequately prepared to defend itself in case its defense became necessary. And as commander-in-chief of the army and navy that responsibility is his.

Yet the President's program for disarmament and the elimination of those features of the military service which are of little or no value in modern warfare, is going to bring him face to face with the strongest opposition he has had to meet in Congress and the biggest lobby that has ever assembled in Washington.

But the President will have the country with him, and that will be a source of strength if public sentiment manifests itself strongly.

President Hoover, who has sources of information open only to the head of a great government, declares the Kellogg treaties mean something. When nations "renounce war as an instrument of national policy" he believes it is folly to spend more money for armies and ships of war than was done before the World War.

He believes that joint agreements for naval disarmaments are entirely possible and can save immense sums to the people of all nations.

He believes that a great deal of our army and navy equipment has been made obsolete by new inventions and that many present methods should be abandoned and their equipment junked.

No one with President Hoover's experience in Europe during the war and after, could have any illusions, or merely pacifist notions about war. This makes it the more significant that knowing as much about that war as any man living, he has worked constructively and effectively for a basis of international peace ever since he has been in the White House.

President Hoover attacked this subject in his inaugural address. Later in his Memorial Day address, he outlined a world plan for disarmament which would leave the world powers armed for defense instead of aggression. "With war renounced as an instrument of national policy," he said, "if we are to set standards that naval strength is purely for defense . . . then strength in fighting ships is but relative; moreover other nations concede our contention for parity. With these principles

before us," he concluded, "our problem is to secure agreement among nations that we shall march together toward reductions in naval equipment."

That same month President Hoover sent Ambassador Gibson to the Geneva conference with an offer to reduce armament, ship for ship, gun for gun, and the ambassador's message was received with a roar of assent from the representatives of the powers. Then he sent Ambassador Daves to London on a mission of naval parity. And these principles of naval reduction are now being worked out on a sane basis.

When Premier MacDonald ordered work stopped on two British cruisers, President Hoover directed work to be suspended on three cruisers of our 15-cruiser program.

The big navy faction even questions the President's authority to do this. The fact is that the cruiser act authorizes the President to suspend the construction program in whole or in part if an agreement is reached for a new limitation of armaments. The same act also directs the President to "encourage" the calling of another arms conference, as he has done and is doing.

In 131 years, the Government of the United States has spent \$52,607,489,927 on war and its consequences. That amounts to nearly four-fifths of its total ordinary disbursements for that period.

This has been ascertained by the Boston Peace Foundation, and I do not doubt the figures are approximately accurate, for today, after nearly 11 years of peace, 82 per cent of our national expenditures still are for wars past and present.

Europe, too, seems as weary of paying more than three-quarters of her upkeep to the war god, as we are of paying him our 82 per cent.

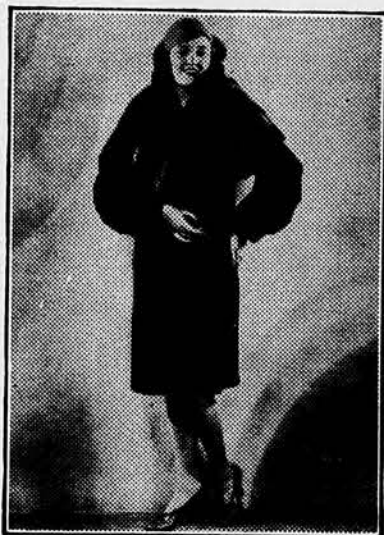
The big powers are a threat to the weaker nations. Let them reduce their naval strength by agreement and the upkeep of big and little armaments will gradually become less, and the world's greatest waste of human energy be stopped.

Such an achievement is not beyond a civilization of average intelligence and sanity. There is no such thing as a successful war.

Arthur Capper

Washington, D. C.

World Events in Pictures



An Impressive Hudson Seal Coat With a Fisher Fitch Collar, for the Winter Season; 'Tis One of the New Designs Now Being Sold in the East



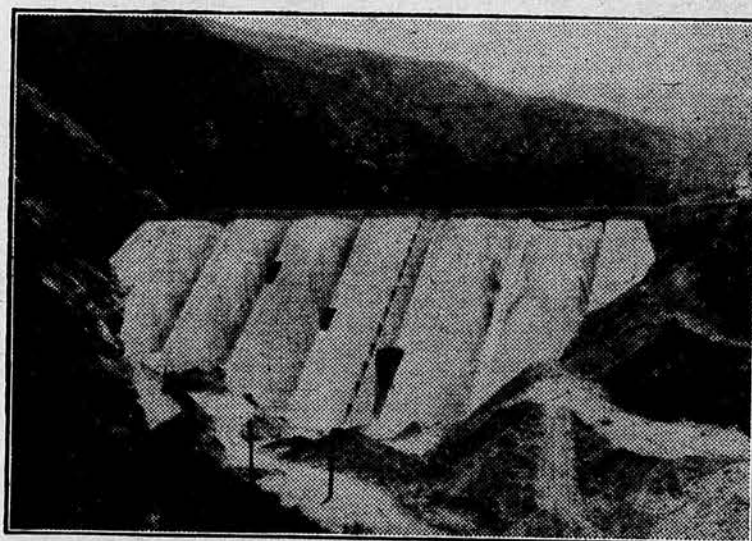
Left to Right, Dr. Hugo Eckener, Commander of the Graf Zeppelin, and Mayor Walker of New York City, Seated in an Automobile After the Reception Given to the Gallant Commander Following His Trip Around the World. A Parade up Broadway Followed, Which Was Seen by Several Million New Yorkers



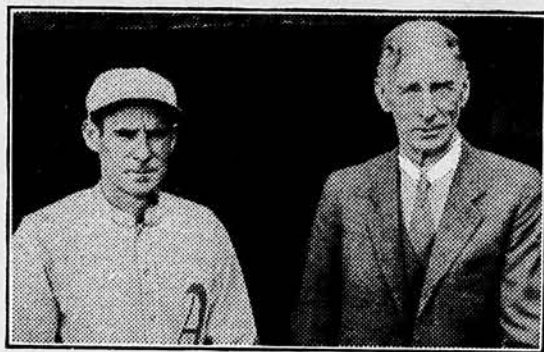
At the End of the Long Trail! Here is the Graf Zeppelin Coming to the Earth at Lakehurst, Following the Round the World Trip



Here is the Famous "Wailing Wall" at Jerusalem, the Scene of the Recent Outbreak Between the Jews and the Arabs. It Was Supposed to be Reserved for the Exclusive Use of the Jewish People, But Was Invaded by the Moslems, Who, in a Bloody Conflict, Killed 45 and Wounded 59 Jews



This New Irrigation Dam Was Finished Recently Near Glendora, Cal., at a Cost of 1 Million Dollars. It is 500 Feet Wide and 150 Feet High, and is the Second Highest Multiple Arch Structure in the World (the Arches Shown on the Face Bear the Tremendous Pressure of the Waters of the Lake the Dam Has Formed)



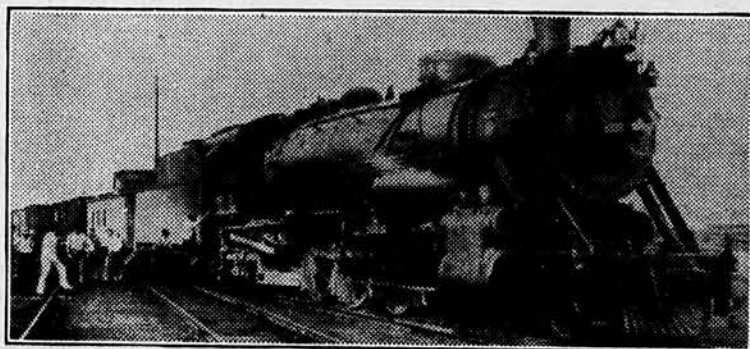
Connie Mack, Veteran Manager of the Philadelphia Athletics, Favored to Win the American League, and His Son, Connie, Jr., Who is a Member of the Philadelphia Team



A Gray Felt Hat With Upturned Front and Ears at the Side and a Turban With Dark Gray Velvet Showing in the Facing



Mr. and Mrs. Francis A. Flood at Honolulu, Where They Met After Being Apart for More Than a Year, While Mr. Flood Was on His Trip Around the World for the Kansas Farmer



San Francisco Locomotive No. 4,113, Which Recently Set a New Non-Stop Endurance Record, Covering 7,350 Miles, or Five Round Trips Between Kansas City and Birmingham, in 587 Hours of Constant Service. The Old Record Was 3,500 Miles, Made by the Great Northern Railway in 1927; it Was More Than Doubled



Bedouin Leaders Gathered at Night to Discuss the Happenings of the Day and Plans for the Next Day; This is the Type of Arabs in Palestine Who Are Fighting the Jews. Probably the Trouble Has Been Settled for the Time, But it Will Develop Again. The Problem of the Near East is Serious From the Standpoint of World Peace

Covered Wagons to Rubber Tires

The Motor Car Has Brought a New Era in Road Construction in This Country

By Wainwright Evans

ONCE went camping in Kansas. My tent was pitched in a field not far from a fine macadam road which flowed toward the spot like a long, white ribbon, and, as it reached it, turned sharp to the right. Had it continued straight on, it would have descended into a depression 100 feet wide and 4 feet deep that stretched like a deep gash across the field, and wound its way over the prairies beyond, out toward the horizon. My tent stood on the edge of that curious formation. The bottom was overgrown with brush, thickets and buffalo grass; but in that rolling landscape it was as plain to the eye as a dried river-bed.

I had just wandered down into it with a shotgun, and without the help of a dog had within 5 minutes brought back a brace of rabbits for dinner. As I returned, the rancher on whose land I had squatted came by. "What is that thing?" I asked, pointing to the hollow at my feet.

He reined in his horse, on which he had been going the rounds of his 1,000-acre wheat ranch.

"That?" He looked down at it contemptuously, with a curious gleam of feeling in his eyes. "Why, that's the Old Santa Fe Trail. That new macadam road is built on top of it from way back yonder; but when the engineers reached this point I guess they figured it would take too much grading to fill it up; so they turned sharp to the right, as you see, and made a half circle around my ranch. The road goes back to the Old Trail further on. Generally speaking, they can't improve on it, nor on the Oregon Trail either."

Then he rode away. That night I sat in the moonlight, and looked my fill and dreamed. Whenever a cloud chanced to cross the moon, it was not hard to imagine a procession winding its way in ghostly silence past my tent, and out toward the horizon—the buffalo, the Indian, the longhorn, the cowboy, the miner, the trapper, the settler, the men in blue uniform, armed with short carbine and rattling saber, the Covered Wagon! Only when the automobiles swept up the new macadam at 50 miles an hour, piercing the gloom with their headlights, did the ghosts vanish for a moment. Then in the silence and under the moon, they came back, trooping there, on and on and on into the west. It was an eerie place, a haunted spot. A hundred feet wide and 4 deep, worn to the depth of a horse's shoulder! Centuries from now that untouched segment of the Old Trail will still be there, unheeded, while the traffic of the nation to which it helped give birth whizzes by.

Old Pike Left to Die?

It is a far cry from that age to this. And there are scores of old trails in the United States today where the contrast suggested between the present and the past is equally dramatic, and where the epic meanings of a great road are made equally clear. There is the Oregon Trail, for instance, where it passes not far north of that spot before it begins its long march to the Northwest. There the ghostly procession is perhaps even longer and more rich in historic meaning.

Or one can journey east, if one will, into Illinois, say, and pick up the Old Cumberland Trail, whose spirited saga lives more vividly in song and story, perhaps, than any other historic road to be found in the East and the Middle West.

This was the road from Cumberland, Maryland, to St. Louis. It was begun by the Federal Government in 1808; it was open to traffic in 1818; by 1832 it stretched with imposing straightness clear to the Illinois line. Then came the railroad, and work on the Cumberland Trail ceased abruptly. The Government completed the grading to St. Louis, however, on the theory that the pike had obviously had its day, the railroad could make use of the grade. It was in mournful commemoration of this event that a contemporary poet wrote:

We hear no more the clanging hoof,
And the stage-coach rattling by;
For the steam king rules the traveled world,
And the old pike's left to die.

The writer of those lines—does his ghost, too, perhaps, haunt the old pike in the glimpses of the moon? If so, what he sees now is for the most part a white stretch of hard concrete, over which a stream of rubber-tired traffic sweeps by 24 hours a day, their headlights at night dispelling strange shades of the past: the Conestoga wagons, the picturesque, hard-sweating, hard-fighting tribe of teamsters, the 6,000-pound loads of freight, drawn 15 to 20 miles a day by relays of horses changed every 15 miles; the Great Eastern and Great Western mails, making the distance between Washington and St. Louis in 94 hours at a steady speed of 10 miles an hour; the quick change of horses, with the driver throwing down his lines, and never leaving his seat, till in a twinkling, another set was in his hands, and his whip cracked, and away they flew.

It was the turn of the century; and the day of the automobile, which was destined to change the face of our civilization, and incidentally of our highways and moribund pikes. Nor are the great roads any longer at the mercy of county politicians. On these matters the Federal Government

has a word to say. Today the old Cumberland Trail is merely a segment of a system of national highways over which automobiles by millions travel at high speed from the Atlantic to the Pacific and from Canada to the Gulf.

But they didn't know it then; and soon after the coming of the railroad began the disappearance of the tribe of teamsters. One can picture the surviving remnant of them. They still carried in their great Conestoga wagons the supplies of tobacco leaf which they used to roll into "Conestoga cigars" as they sat around their campfires at night. The cigars sold in the towns for good prices, and were noted for their strength and flavor. It took a strong man to survive the smoking of one of them. Gradually they came to be known in the vernacular of the day, and in the hearts of the people as "Stogas," and finally as "Stogies." They make them in sanitary factories now. For the teamsters soon passed out; the end came swiftly. But still there comes to us down the years the echo of the swan song they roared as they rolled the stogies by the light of their dying campfires:

Now all ye jolly waggoners, who have got good wives,
Go home to your farm, and there spend your lives,
When your corn is cribbed and your small grain is good
You'll have nothing to do but curse the railroad.

One by one the trunk highways went thru that same first blaze of glory as veins and arteries of the Commonwealth; one by one with the coming of steam they ceased to function, and degenerated into something somewhat better than average rural roads used by farmers to haul their produce to market or the nearest railroad station; and one by one they have come back, in a way that passes the wildest dreams of the men who thrilled to them in the day when the stage-coach went by at a gallop, to the tinkling of harness bells, the cracking of whips, and the shouts of the drivers.

Looking back in retrospect, we say, "How picturesque it was!" But had they been able to look forward, they would have cried, "How tame this

THE history of a nation may well be reconstructed from its highways. There are 6½ million miles of highway in the world, and nearly half the total is in the United States. Mr. Evans is a former Kansas man and his article appeared originally in The Outlook; he traces the extraordinary development of roads in this country, and shows the profound effect they are having on modern life.

is." On the whole, perhaps, there is loss and gain alike in such a change; but the new is surely better than the old. It must be so, unless, indeed, the whole vast development of our civilization is, as some pessimists seem to think, a futility.

There were many other important roads in that day. One was the Lancaster Pike, running from Philadelphia to Pittsburg, now one of the great highways of the country. Another was the Boston Post Road. But the Cumberland Trail was the only one ever built wholly by the United States Government. When the railroads came, highway building was just approaching the point where it would have really amounted to something. Then every thought of highway building was abruptly dropped. Steam was better. And yet, at first, steam didn't have everything its own way, either. Locomotives didn't always get there. A sensational race was put on between a stage coach and a B. and O. train, for instance; and the train at first had all the best of it, the engine presently slipped a belt which operated the blower; steam pressure dropped, and the stage coach won.

There was no further active interest in highways till the invention of the bicycle in the late '80's and early '90's. The League of American Wheelmen was organized in 1890. By 1890 it had started a good roads racket which swelled in volume as bicycle clubs formed all over the country, and Sunday bicycle trips became a craze. One immediate result of this agitation was the appearance of sheet asphalt in some of the larger cities, and a general attempt to drag and grade the dirt roads in and adjacent to towns.

It was in 1891 that New Jersey made a pioneer move by enacting state-aid legislation, whereby the state contributed toward the improvement of the more important roads. Two years later the Federal Government, 55 years after its abandonment of the Cumberland Trail, established a United States Board of Road Inquiry, to investigate the whole highway problem. A little later Massachusetts, California, Connecticut, New York, Vermont and other states had state-aid legislation in force.

In the meantime, three enterprising, visionary,

and impractical gentlemen named respectively Duryea, Haynes, and Ford, had been tinkering with a curious novelty called the horseless carriage. It was amusing, but nobody took it seriously. Also, out in Bellefontaine, Ohio, the community went suddenly crazy and made a concrete road—the first thing of its kind. There was all of a mile of it.

It took about 14 years, till 1904, for the automobile to make itself really felt. By that time there were 54,590 passenger automobiles in the United States and 410 motor trucks. The registration for 1895, nine years previous, had been precisely four. And so, in 1904, the Government made a road survey. It was found that we had 2,150,000 miles of rural highway, and that 154,000 miles of road were surfaced with various materials, most of which were not standing up under the pounding and attrition of rubber-tired traffic, tho they had done very well for horse-drawn vehicles.

Ended the Macadam Surface

Particularly did the automobile put an end to the efficiency of water-bound macadam. The first remedy attempted was the application of tar and asphalt to such roads for binder, after the practice already familiar in the cities. The system of construction continued 10 years, but it never kept up with the constantly increasing wear and tear caused by the growing number of automobiles. By 1914 the car registration was 1,711,000, of which 85,000 were trucks; and we had 10,500 miles of this early bituminous construction, which had now reached its peak. What forced the next change, from 1914 on, was the motor truck. Bituminous surfaced roads that had sufficed for passenger cars crumbled under the weight and impact of this new monster. And so began the swing toward concrete brick, and bituminous concrete on a concrete base. We are in that era of rigid construction now.

We had 5 miles of concrete highway in 1909; 2,348 miles of it in 1914; 31,000 miles in 1924; and, in 1928, four years later, the total was 49,000 miles of concrete, 26,000 miles of bituminous macadam, 4,500 miles of paving brick, 3,300 miles of asphalt, and 76,000 surviving miles of water-bound macadam, much of which is bound to be resurfaced before long with something that will take punishment from trucks.

There are 6,582,000 miles of highway in the world. We have 3 million miles of them right here in the United States. Europe has approximately, 2 million miles, Africa 200,000 miles, Asia 400,000 miles. Europe has 350,000 miles of water-bound macadam, 2,600 miles of surface-treated macadam, 3,800 miles of asphalt, and 31 miles of cement concrete. Compare these figures with ours, as given in the paragraph above, and you have the story of what the World War did to Europe. Europe had better roads, on the whole, than we did—roads built up thru generations for the use of horse-drawn traffic. Today Europe's roads are breaking down under motor-driven traffic, and there is no money for making the hard-surfaced roads now required. This is one of the most perplexing of the difficulties confronting Europe.

Trunk Line Folks Won

When the coming of the automobile made the good roads question acute in this country, there arose a controversy as to whether the money for improved roads should be spent on farm-to-market roads or on trunk-line developments. The trunk-line advocates won. What settled the matter was the passage of the Federal Aid Roads Act in 1916. This act appropriated 75 million dollars to be expended in five years under the direction of the Secretary of Agriculture in co-operation with state highway departments of whatever states might choose to avail themselves of the provisions of the act. The law provided that the Federal Government would pay half the cost of new highways approved by its engineers with respect to construction and location. A limit was finally set on the Government's contribution at \$115,000 a mile; and it was also provided that Federal Aid Roads could not exceed 7 per cent of the road mileage of a state, save in certain desert regions of long distances.

It followed that any state wishing to avail itself of this help had to create a State Highway Department. The result was a much more rapid development of trunk highways, in a co-ordinated, continuous system running from state to state, than would otherwise have been possible. The mileage of these Federal Aid roads now approaches the 200,000-mile limit set by the present statute. By the latest figures available the Government has so far spent nearly 626 million dollars on Federal Aid roads. In conjunction with this, there has been a tremendous development of State Aid roads which act as feeders to these great Federal Aid highways. In the building of such roads the state shares the cost with the county. Thus a greater and greater number of rural roads are being improved to whatever degree may be justified by the flow of local traffic.

(Continued on Page 12)

Will Insects Win the Day?

The Battle for the Supremacy of Man Apparently is Never Ending

BY ROBERT STEWART

THE bacterial race in ancient times nearly conquered the human race. The plagues of those times were the result of bacterial warfare against the human race. It is estimated, for example, that the Great Plague of the Orient in the Sixth Century killed 100 million human beings. The Black Death of the Fourteenth Century killed nearly three-fourths of the population of Europe. Each of those battles between the bacterial race and the human race was more disastrous than any battle between different groups of the human race recorded in history. And the egotistical human race did not even know who their enemy was or how to combat him.

Modern scientists have developed methods of sanitation whereby a recurrence of these near disasters for the human race is an impossibility. The bacterial race is now in subjection, from which it cannot escape to do a big damage, as in the olden times. But, while the bacterial race is in subjection, the insect race is not, and a contest is now being carried on between the human race and the insect race that may be far more disastrous to humanity than the plagues of the former years.

Food is a Vital Factor

The outcome of this warfare is problematic. As in the recent World War, food is the vital factor. The race which controls the food supply will win the war. The insect race at the present time is competing with the human race quite successfully for the food supply of the world. Despite all the developments of modern science by the human race, the insect race occupies many positions of advantage in the warfare.

Insects propagate much more rapidly than the human race, and reach the active stages of warfare in a much shorter time. The Ohio Experiment Station, for example, has studied the rapidity of multiplication of plant lice. A single aphid was caged on an unfested plant. At the end of 12 days her progeny, daughters and granddaughters, totaled 76, five of which were already producing young aphids. The rapidity of the increase from this time on can be left to the imagination or to the mathematician. One mathematician has estimated that if there were no fatalities and sufficient food were available, the progeny of a single plant aphid, at the end of a single year, would produce a ball the size of the earth!

In the insect world, also, only the fittest reproduce and reproduce most frequently. The weak and inefficient are ruthlessly eliminated. In the human race it is just the opposite. The efficient restrict reproduction while the inefficient may reproduce without restraint, and organized human society protects the offspring and regards it as a marvelous achievement of modern civilization!

Insects Are Well Organized

The insect race is better organized for warfare than the human race and its warfare is carried on without graft. The ants are more ancient than the humans. Beautiful specimens of ants are preserved in the amber of the lower Oligocene probably dating back to 20 million years, B. C. Probably the ants will still be on earth long after man has passed away. The ants are better organized for warfare than is man. The ant individual differs from man not only in its activity but also in its structure. As a result the ant has solved many of its social problems. The necessary work to be done is allocated to the several groups. There is no question as to who shall work, who shall fight, and who shall bear children. This is all determined before birth. The fighters are organized into squads, companies, regiments, and battalions efficiently officered. The attack is carried on in a definite, systematic, and effective manner.

There are some dozen crops which produce the great bulk of the food

supply of man. The corn crop is vital to the welfare of humanity. It produces many articles of direct use as food and furnishes a large part of the feed of livestock. The insect world is putting up a vigorous fight for the control of the corn crop.

Many insects use corn as food. The most insistent and vigorous of these probably is the European corn borer. The corn borer invaded this country nine years ago and came to us from Hungary. The yellow-winged moths, mothers of the borers, lay their eggs on the under side of the corn plant leaves. The eggs hatch out and borers are produced in quantity. In one infested cornfield 75 corn plants were selected at random. In one stalk alone there were 117 borers. The whole 75 stalks averaged 46 borers to the stalk. This gives one a vivid conception of the rapidity of the development of the borer and the destructiveness of its work on the corn-stalk.

The corn borer is not only diligent but also is extremely hardy and re-

sistent to efforts to destroy him. Corn-stalks covered with the brown worms have been put in a burlap sack, the whole weighted with stones and cast into an ice-cold brook. At the end of a month 81 of the 166 borers to take the ice cold bath came out alive!

The moth mothers lay the eggs not only on the under side of the corn leaves but also in the grass headlands and fence rows, any place where the eggs are protected from the direct rays of the sun. The moth mother frequently lays as many as 1,000 eggs in two weeks' time. The mother moth is extremely active and travels great distances. She is the Lindbergh of the insect world, and has been known to travel more than 25 miles entirely over the water.

The borers themselves are only $\frac{1}{16}$ inch long at first, but they are very active, hungry and persistent. For three months, from July to October, they feed on the corn plant without stopping, and are 16 times their original size within two months' time.

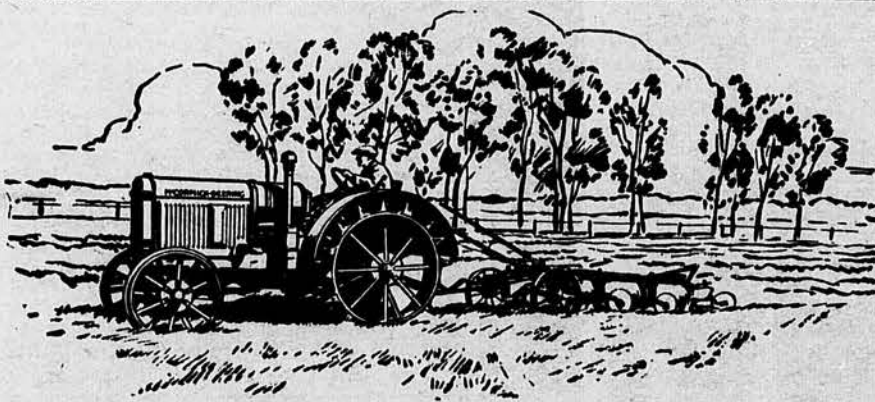
Man's Defense

The rapidity of distribution and continuous reproduction of these borers makes ordinary methods of control impossible. Spraying with arsenic is futile. The difficulty of eliminating the pest by attacks on the moth or the worm itself led to the discovery of the pest's weakest spot in its armor of defense, and that is the egg stage. Efforts are

now being concentrated on the destruction of the pest by destroying all places where the eggs are laid or may be laid. The result is clean culture everywhere by farmers. Old corn-stalks are destroyed. The three steps being carried on in this fight with the corn borer are: (1) Feed all corn-stalks; (2) Plow all corn stubble clean; (3) Burn all corn remnants before June 1. By following these methods of clean culture humanity has dug in for a fight with the corn borer. The advance has been checked, but the fight is stalemate. The borer is still with us and is here to stay and at any time may secure the advantage despite our best efforts and the use of all the weapons of science.

The possibility of using all corn-stalks for making wall board may be further developed and thus give to the man the advantage in the fight by completely removing from all fields the last possible refuge of the borer.

The potato crop furnishes a large supply of human food. There are at least 16 different groups of insects that compete with man for this article of food. These combined enemies of man take an enormous toll from the potato crop, valued at many millions of dollars annually. Much of the toll also is taken by insects which are difficult or impossible to control, such as flea beetles, aphids, leaf-hoppers, tuber moths, and the eel-worms. The insect enemies that attack the potato which



The Powerful New McCormick-Deering 15-30

THE POWER in the new 15-30 McCormick-Deering is the symbol of profit farming on a comfortable, efficient scale. With this powerful perfected tractor special opportunities lie ahead of you. Its owner is equipped to rise above the old cramped style of farming—to take full advantage of man-power, acreage, crop, and season—to cut to the bone the production costs that eat profit away—and to build for future expansion.

This is a McCormick-Deering tractor. So you may be positive that its liberal power is matched by new improvements and refinements all along the line. The 4-cylinder power plant, clutch, transmission and differential assemblies, built into a rigid 1-piece main frame, give great reserve strength. All important wearing parts run in a bath of oil. Ball and roller bearings at 34 points add to easy running and long life.

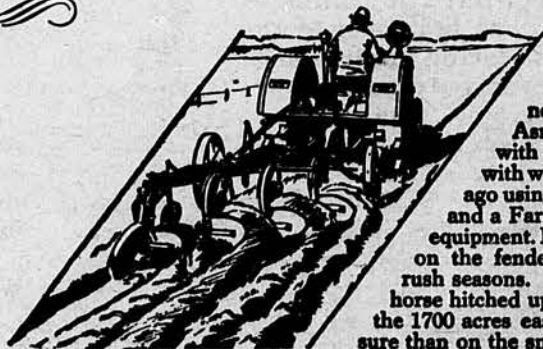
Considering ample power, flexibility, long life, economy, price, service, and easy operation with the equipment which is as important as the tractor itself—here is the tractor of tractors. Ask the dealer about the new 15-30 McCormick-Deering. Other McCormick-Deering Tractors—the 10-20 and the all-purpose Farmall. Catalogs on request.

INTERNATIONAL HARVESTER COMPANY

606 So. Michigan Ave. of America Chicago, Ill.
(Incorporated)

A Few 15-30 Features

McCormick-Deering high-tension magneto ignition.
New manifold design, increasing fuel efficiency.
Protected air supply.
Circulating splash engine lubrication.
Filtered fuel supply.
Efficient kerosene carburetion.
Friction-free ball-bearing crankshaft.
Three forward speeds.
Accessible construction.
Removable cylinders.
Replaceable parts throughout.



A Little Story of Power Farming

This picture is drawn from a photograph of W. A. Asmussen, of Agar, S. D., riding his new 15-30 McCormick-Deering tractor. Mr. Asmussen is farming 1700 acres of land with the same crew (himself and two men) with which he farmed 600 acres three years ago using 18 horses. Now he has the 15-30 and a Farmall and modern power farming equipment. Note the special lamp mounted on the fender, permitting night work in rush seasons. He says he hasn't had a horse hitched up this year. They handle the 1700 acres easier and have more leisure than on the smaller acreage.

McCORMICK-DEERING

are capable of control cause man a considerable loss in the defensive warfare he must constantly wage. In some cases spraying with arsenic compounds is effective, but during certain years the grower is forced to spray at least 16 times during a single season to protect his crop!

The flea beetle is a small, black jumping beetle about $\frac{1}{16}$ inch long. The mature beetle eats small holes in the potato leaf, working from the under side. It thus is extremely difficult to control by the use of sprays of any kind. The eggs of the beetle are laid in the rubbish of the field and when hatched the larvae feed upon the underground portion of the plant, including the tubers. Again man has dug in for a prolonged fight with this small insect. By using clean methods of cultivation and various devices for trapping the insect, a small control is obtained.

The leaf-hopper has been known since 1853. It is a small, pale green insect about $\frac{1}{8}$ inch long, with wings which fold over the back. It is very active and will jump and fly away on the slightest disturbance. It attacks the leaf of the potato plant, causing shriveling and burning, thus reducing the yield of tubers. In many cases it destroys 50 per cent of the potato crop. On account of its active nature and the rapidity of reproduction, it is extremely difficult to control.

Known Since 1853

The eel-worm, while not strictly speaking an insect, is a very close ally. It attacks other members of the vegetable kingdom as well as the potato. It is widely distributed in the potato growing areas of America and does enormous damage every year. It attacks the roots and tubers, causing enlargements on the roots and making the tuber unsightly and of poor quality. Man is practically helpless against this enemy. He must give up growing potatoes where the eel-worm is present and attempt to grow other crops which it will not attack! Clean culture and rotation are helpful, but no other remedial measures are of any value.

Sugar is an important article of human diet. It is produced mainly from the sugar cane and sugar beet. The insect race is competing with man for these two crops. In India the white ant has been successful in defeating man and the Indian farmer has been forced to give up the growing of ordinary sugar cane and has attempted to substitute Japanese sugar cane, which has a repellent effect on the white ant. Whether this device will long be successful is a question.

In the United States sugar is largely produced from the sugar beet, which is grown almost exclusively in Western America. In this region the beet leaf-hopper attacks the beet, causing a disease known as curly leaf. When beets are attacked by the hopper, the leaves shrivel up, the growth ceases, and the crop is ruined. The beet leaf hopper has successfully ruined the sugar beet industry in many regions of the West.

Idle factories and sugar beet lands given over to other crops are mute evidence of the success of the insect race in competing with man for the sugar beet crop. At Fallon, Nev.; Grand Junction, Colo.; in Utah and California, sugar beet factories are now idle largely because of this small insect. Man is helpless in the face of its efforts. No known methods are available for its control. Spraying, trapping, clean culture, rotation of crops, and all the ordinary methods usually used to combat the effects of insects are futile in case of the beet leaf-hopper. Nothing is being done about the matter and apparently nothing can be done. At present human efforts are being directed along the lines of finding some parasite in Mexico, the original home of the hopper, which will help man in his extremity.

Hay is to agriculture what steel is to industry. Every type of forage crop used for hay has a large group of insect pests which compete with man for the crop. One of the most important forage crops is alfalfa. Alfalfa is really the basis of successful agriculture in western America. The alfalfa weevil has practically eliminated this crop in many regions of the Far West.

In the warfare against the insects, the farmers constitute the shock troops of human civilization. They are bearing the brunt of the battle. Sometimes they are successful in the contest, but often they are not.

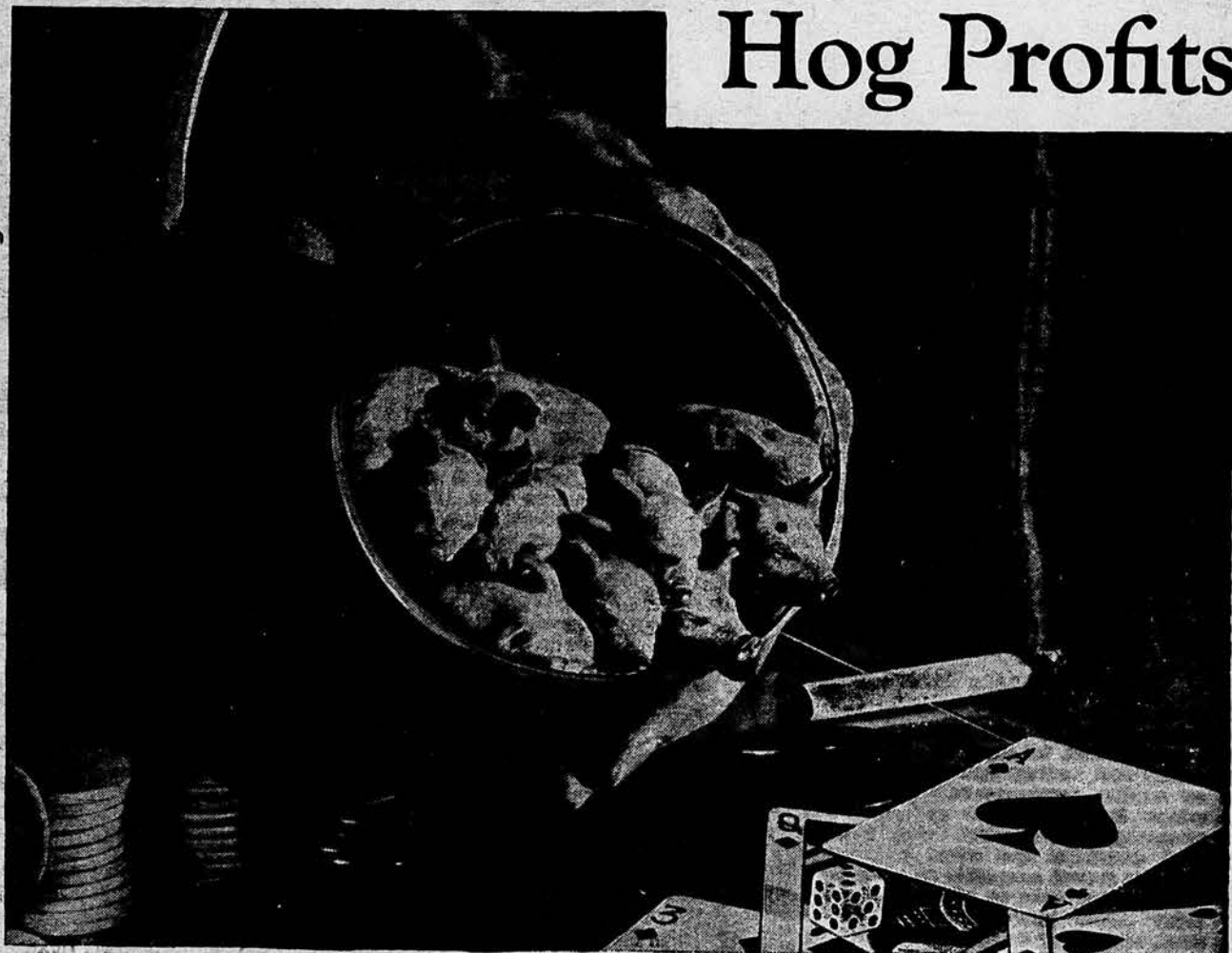
The World's Oldest Thing

The oldest as well as the most important thing in the world is the weather. It was here and doing business when the first human life awoke to gaze upon the wonders of nature. It will still be here at the same old stand when the last soul wings off on the final flight to the land of eternity. The weather is the one unchanging thing Father Time left us. It is the same yesterday, today and forevermore. There is only one known spot in all the world where the weather is different. Even there it doesn't change. It is just "unusual." That's in California. If it happens to rain out there on any given day the native will exclaim, "Well, well, how unusual. I never knew this to happen before." If it blows hot or blows cold, it is always the same—a bit "unusual." The word

"unusual" was a useless thing until California weather was invented. It was put in the dictionary more to fill out a page than for any other reason. Outside of California there is no unusual weather. It never gets so cold it hasn't been colder, and it never gets so hot, it hasn't been hotter. Now, for instance on August 13, this year, in the middle of the afternoon the mercury stood at 84. We find that the hottest August 13 on record here occurred in 1887, when the mercury climbed to 104. Just to show what it could do, the weather turned right around the next year, in 1888, and produced the coldest August 13 on record, when the mercury dropped to an even 54 degrees. The weather can do anything. It didn't even have to practice a year to produce that difference of 50 degrees on the same day in consecutive years. No records are broken by the

weather these days. They were all broken thousands of years ago. People just imagine the weather is breaking a record. The greatest handicap the weather has is that people will forget. If it should drop to zero in Kansas tomorrow it would break no record. It has been that cold in Kansas on the same date—but you might have to go back several million years for the exact date. Why, icebergs used to float up and down the prairies of Kansas. They declared a Roman holiday when Mt. Oread, over where Lawrence now stands, first appeared above the rolling waves. This thing of the weather is a good deal like the tariff—you can argue it all day, but it never seems to do any good. But when you say the weather never changes you are on safe ground—roosting high and dry on a mighty Gibraltar that will not fail you.

Quit Gambling with your Hog Profits



IN the fall of 1926 there occurred one of the worst outbreaks of hog cholera on record. Hogs died by the thousand over night. Entire herds were wiped out. The losses to agriculture ran into the millions.

Much of this loss was due to the fact that thousands of farmers who had been in the habit of having their young pigs immunized regularly each spring and fall, that year decided to "take a chance". It was a disastrous gamble.

Farmers who refused to gamble marketed their hogs as usual, while their neighbors, who thought vaccination unneces-

sary, stood helpless and saw their profits wiped out.

Properly vaccinated hogs are immune to hog cholera. Unvaccinated hogs are susceptible to cholera, and may be attacked by the disease at any time.

Quit gambling with your hog profits. Protect your herd by having a graduate veterinarian vaccinate your young pigs just after weaning *each spring and fall*. When this becomes a universal practice, hog cholera losses will be unknown, and the profits of the hog raisers of the country will be enormously increased.



For the Protection of America's Live Stock

Pitman-Moore Company
Indianapolis

Royal Serum Company
Kansas City

Sioux City Serum Company
Sioux City, Iowa

Sioux Falls Serum Company
Sioux Falls, S. D.

United Serum Company
Wichita, Kas.

Operating Divisions of

ALLIED LABORATORIES, Inc.

Quality is the Aim in Sheep

Producers Must Study Modern Conditions if They Are to Make a Living Profit

BY J. F. WALKER

THE MAN who enters into livestock production today must not only consider the particular breed for which he has a preference and its adaptability to his particular circumstances but he must look carefully into present and possible future market demands. Changed living conditions have caused changed consumptive demand. No longer does the average family lay in large stocks of groceries or buy in large quantities.

The manager of a large grocery said recently: "When I started in business we bought and sold in bulk, in barrel lots. To-day our average package weighs 8 ounces." The same thing can be said for meats. The beef producers no longer bring the 4-year-old steer to market but an early maturing lightweight car-

than they have with the character and quality of the fleece or the fleshing qualities of the animal.

Sheepmen in other countries have bred with a practical end in view. The question there is: "How many pounds of high-grade wool will this animal shear, and how will his carcass look on the hooks?" As one New Zealander expressed it, "We demand the answer in pounds, shillings and pence rather than show-yard ribbons."

There has been a general impression in this country that fine wool sheep should be bred for fleece and the down breeds for mutton. In a broad way this is true, but there is no reason why a fine wool sheep should not have a fair carcass or a mutton bred one a good merchantable fleece.

To secure these ends one must begin in the breeding yards. Culling must be done consistently and according to fixed standards based on consumptive demand. Sires should be purchased to remedy weak points in the flock and intensify the good ones.

Large Sheep Are Costly

In mutton the demand is for a lightweight finished carcass. This demand will in all possibility continue. The brood ewe should be selected accordingly, long legs and necks, raw backs and light loins and twist open ribs or inability to put on finish early and at proper weights, are all points to be watched and guarded against. A thick, compact, low-set ewe, with roominess for the lamb should be the type selected.

Proper conformation is more essential than extreme size. Large sheep are more costly to keep than those of medium size and do not fill the present demand. American farmers must learn to consider the proposition in terms of carrying capacity of the land rather than returns from individual animals. If three ewes can be maintained on the same feed and pasture that will only support two of a larger type, it may be very possible, in fact, extremely probable that they will return a greater net profit than the latter.

With wool at present prices, the fleece cannot be idly passed by. It should be at least staple in length and show breeding and quality. Coarse, botches, kempy fibers, short, weak staple, light weight or excessively nasty fleeces should be discarded. Evenness and trueness over the entire body should be sought for. The grade may show a relative variation in price from year to year, due to fashions, but good wool will always find a market if properly grown and cared for.

Excepting Russia, all of our war debtors have now signed up. It is estimated that in the next 57 years Europe will pay us 10½ million dollars in principal, 11½ million dollars in interest and 2½ million editorials.

KANSAS folks are showing more interest in sheep than has been evident at any time in this century. And they do present some real opportunities. But as Mr. Walker shows in this article, which appeared originally in the *Indiana Farmers' Guide*, the rewards will come only to the producers who understand the modern demands. It should be read with real interest by every person who is thinking of starting into the sheep business.

case. The hog producer is sending 6-months' pigs to slaughter, where in years back they were twice to three times that age, and the sheep producer must order his breeding to meet this demand of the consumer for a small cut of palatable meat, if he desires to expand or even hold his present market.

He must also recognize the necessity for producing as much wool as possible and of a character which wool manufacturers demand if he hopes to get the most profit from his business. Other countries have seen this necessity and in some respects have advanced beyond the sheepmen of the United States.

Must Consider the Types

If then the sheep producer in our country desires to take advantage of his own market, he must so order his breeding and feeding operations as to meet market requirements. He must consider the types of sheep and the environment under which they have proved successful and select a breed which has proved adaptable to his conditions, rather than to blindly follow popular breed propaganda. It has seemed that many breeders have been more concerned in recent years with show ring standards; the covering of the face and leg or the set of the ear,



GREASE SPOT, INDICATING FORMER LOCATION OF ALL COMPETITION IN THEIR OWN LINES

THE MOST INTERESTING DOG-EATING CONTEST IS YET TO COME—WHEN, HAVING CONSUMED ALL THE LITTLE DOGS, THE BIG ONES START ON EACH OTHER.

PARSONS

Daw-Gaw!



"I buy COLORADO FENCE because it has a neater, brighter finish than other brands of fence, and I believe the copper-content of COLORADO FENCE makes it last longer than any other."

Signed

G. W. Jones

R. F. D. 1, McMinnville, Oregon

MR. JONES IS RIGHT!

COLORADO FENCE says to the world "Here's a farm to be proud of!" Appearance does count, now that the world rides by on wheels.

Neater, because it stands with the rigid correctness of the parade line. Brighter, because it is heavily galvanized; longer lived, because made from the finest copper-bearing steel.

COLORADO SILVER TIP FENCE POSTS have the unbreakable backbone that keeps COLORADO FENCE so enduringly straight.

Colorado Wire Products are better because—

1. Strong, durable, long-lived.
2. Made of finest rust-resisting, copper-bearing steel, heavily galvanized.
3. Uniform, because controlled by one company from mine to you.
4. Truly economical.
5. Made by a western company for western conditions.
6. A type of fence for every purpose.
7. Properly packed. Easy to erect.

This backbone of heavy steel, with its deep, non-slip notches, securely holds the fence wires, easily clamped on, without nails or staples.

To further safeguard against moisture, acids and alkali, SILVER TIP POSTS are protected with asphalt base green enamel.

More economical because of longer life, dependability and fine appearance.

SOLD BY
WESTERN
DEALERS

The COLORADO FUEL & IRON CO.
"A Western Industry"
DENVER COLORADO

COLORADO
Fence
"Defies Time and Wear!"

SILVER-TIP
STEEL
FENCE POST

To Thriftville
and
Comfort.

After you read your Mail & Breeze, hand it to a neighbor who is not a subscriber. He, as well as you, can profit by the experience of others engaged in similar work.

Sunday School Lesson

by the Rev. N. A. McCune

WHEN the people had gotten the wall built around Jerusalem, the leaders, Ezra and Nehemiah, gathered them together for a meeting. At this meeting the book of the law was read (probably it was the book of Deuteronomy) and the people were reminded of the religious teachings of their fathers. Ezra and Nehemiah felt that this was the only way in which a community worthy of the Hebrew people could be built up. It must come by teaching, by patient and intelligent and repeated teaching, until the people naturally taught what they had learned to their children in turn.

Now, the need of well qualified teachers of religion never dies out. It is always with us. And the methods of teaching do not necessarily remain the same, generation after generation. Just as we have improved machinery for farm operations, we have improved ways of getting at the human mind. Not long ago an old man, who had taught in Southern Germany for 40 years, retired. He boasted of his record. He said he had administered 910,000 floggings, 210,000 canings, had made 700 boys stand barefooted on dried peas, and 500 stand on a sharp edge of wood, while some 600 had been made to wear the fool's cap. That was not unlike the record of the public school in Massachusetts about 1840. In a school of 400 pupils some 40 or 50 whippings a day would be given, or one about every 6 minutes. The result of this teaching thru the epidemics was that in many of the small towns the schools were not open at all. The big boys had thrown out the teacher.

So, I think most of us will agree that the teaching methods of today, while not perfect, are a very great improvement on those of 75 years, or less, ago.

Now, it has often been observed that the teachers in Sunday School are not so good as those in the day school. That is, not so proficient in their methods, so that they cannot handle their material as well as those in public schools. This criticism ought not to be too severe, however, when it is remembered that a vast army of teachers in the Sunday Schools receive no pay whatever for their work, except the pay of doing something worth while. It also must not be forgotten that the influence of a conscientious Sunday School teacher is very great. This has been proved again and again.

However, we do not mean to say that the Sunday School teacher should not get the best methods possible, and be as proficient as he can be. In many classes in church today the instruction is of as high grade as it is in the public schools. For one thing, the modern church is being built on different lines from the old church. Formerly the entire architecture was designed for adults only. The Sunday School classes were held in the auditorium of the church, the teacher sitting on the back of a pew, facing his class while all around were other classes, each teacher trying to talk louder than the others. That is far better than nothing, and many a good lesson was taught in that manner.

But today rooms for different classes are built, as far as possible, and thus the boys and girls have a better chance of hearing and asking questions. The modern church (if the architect and the plans committee know their business) is built with the children and young people in mind, as well as the adults. The problem of Nehemiah's day is still our problem. We must teach the young.

These two good men, Ezra and Nehemiah, had some serious faults. The Bible does not paint plaster-of-paris saints. You cannot find one of that sort. When Cromwell was sitting for his portrait, the painter, thinking he was pleasing the great protector, left out the warts. "Paint me just as I am," said Cromwell, "warts and all." That is the Bible way of delineating character. The deficiencies of men are put down, or even their crimes, as well as their good qualities. David, for instance, or Saul, or Peter, or Mark.

Well, take our two heroes of this week. They were good men, but they were intensely narrow men. They seemed to think that God was the God of the Israelites only, and of no other nation. Amos and Hosea and Isaiah

had come and gone, and left their great teachings behind them, but it does not seem as if Ezra or Nehemiah had ever heard of these men. They held the same old attitude of narrowness, as if God cared for no nation on earth except the Jews. And Ezra went so far as to break up families where the man had married a non-Jewish wife, entailing a large amount of suffering in the name of religion.

However, two little books saw the light of day about this time that have become famous, and which show how clearly some people of that time recognized the principle of the breadth of God's love and mercy. The book of Ruth tells the story of how a Moabitess became the great-grandmother of David, and David was an ancestor of Christ. And the tiny book of Jonah relates how God sent a prophet to preach repentance to a great city of non-Jews, and thus became the fore-

runner of the missionary enterprise of today. Thus God did not leave himself without witness in the days of the two intense reformers, Ezra and Nehemiah.

Lesson for September 15—The Call for Trained Teachers. Neh. 8:1-18. Golden Text—Psa. 119-130.

Believe in Testimonials?

BY DR. CHARLES H. LERRIGO

If you were a very short young man about 20 years old, and someone said, "I can tell you how to add 4 inches to your height," would you bite? Very likely. Thousands of young men did. They sent \$8.50 for a contraption composed of two canvas bands designed to be placed about the head of the user and suspended by a sash cord from an overhead beam. Pulled your neck and your leg at the same time, as it were. Cost all of 50 cents to make. Until stopped by a fraud order from the Post Office the promoters were getting wealthy.

You would never have been taken in that way, of course. But suppose you were a very short young man, eager

to add to your inches, and there was sent to you a book of testimonials in which scores of people wrote that they had actually increased their height. What then? The Post Office inspectors checked up and found these testimonials false; but not until hundreds had swallowed them eagerly. The next time you read of some wonderful way to get tall, or to get strong, or to get thin, or to become handsome, pay no attention to the pointed testimonials. It is possible for such things to be given honestly and yet be the result of delusion. You may take it as a general principle that these miraculous aids to nature that are known only to some "Professor" who wants to make a sale to you at a low price are invariably fraudulent. And if you want to make quite sure, don't forget that the Kansas Farmer maintains a Health Adviser who makes it his business to know the facts.

If Edison's protege can resist temptations offered by vaudeville managers, magazine publishers and lecture bureaus to tell how he succeeded, he has the stuff in him for success.

Make 2 to 20c More per Bushel by Growing Smut-Free Wheat

Prevent Stinking Smut and Increase Your Profits by Treating Seed Wheat with CERESAN

YOU pay a penalty of 2 to 20 cents a bushel when your wheat grades smutty, says the U. S. Department of Agriculture. Here is the reason. Smut in wheat must be removed by a costly scouring process before the wheat can be made into flour. Somebody must pay for making wheat fit for milling—you do when you are docked for smutty wheat! Nor is loss from dockage the only way in which smut takes your hard-earned profit. It also reduces your yields. In *Successful Farming*, August, 1929, Professor P. H. Stewart of the Nebraska Experiment Station, says: "It has been found that when 10% of the heads of a wheat field are smutty the yield of wheat is reduced 10%, or in other words the yield is ordinarily reduced in proportion to the percentage of heads that are smutty."

Turn that possible loss of from 2 to 20 cents a bushel into a positive profit by preventing smut right at the start, before you sow. Simply treat your seed with Du Bay Ceresan, the new, remarkably effective dust disinfectant.

Tests Prove Ceresan's Value

Ceresan is deadly only to seed-borne disease organisms. It is en-



Stinking smut, on the wheat head at left, reduces yields and causes price dockage. Ceresan prevents and controls smut.

tirely harmless to seed wheat, and will not injure the drill or slow up the rate of drop. Severe tests by growers have proved that seed-borne flag smut and seedling blight caused by seed-borne scab are also controlled by Ceresan treatment of seed wheat.

Leap's Prolific winter wheat, when treated with two ounces of Ceresan per bushel, showed less than one-half of 1% of smut. Infection on the untreated check plots ran from 57 to 67%. Where

three ounces per bushel of high-grade copper carbonate was used, over 1.5% of smut was present—while over 4.5% of smut occurred where low-grade copper carbonate was employed for treatment.

Treat Seed Oats with Ceresan

Because dust treatment of oats with Ceresan controls both loose and covered smuts without injury to seed, it is vastly superior to uncertain and dangerous liquid treatment with formaldehyde. Dr. Benjamin Koehler, of the Illinois Agricultural Experiment Station, reported that Ceresan treatment gave perfect smut control, and produced a yield increase of 13.8 bushels per acre on 60-Day Oats, and an increase of 19.1 bushels per acre on Big 4 Oats. These increases averaged about double the increases obtained by formaldehyde treatment.

Low-Cost Disease Protection

Ceresan protects your crops from disease losses at a cost of about one-third of a cent per bushel of harvested grain. Just dust it on your seed—no soaking or drying. Only two ounces required per bushel of seed wheat or rye; three ounces per bushel of seed oats or barley. Ceresan-treated seed, when stored, tends to repel moths, weevils and certain other damaging pests. Ask your dealer for our free Ceresan pamphlet or mail the coupon now.

Use Du Bay Semesan for Vegetable and Flower Seeds and Bulbs



DUBAY
CERESAN
REG. U. S. PAT. OFF.

Dust Disinfectant for Seed Grains

BAYER-SEMESEN CO., Inc., 105 Hudson St., New York, N. Y.

Please send FREE Ceresan pamphlet.

Name

Street or R. F. D.

Town

County

State

Dealer's Name

W.C.2

Grain View Farm Notes

BY H. C. COLGLAZIER

A good soaking rain would be a welcome visitor in this community. Part of the county has had considerable rain, and we have had two light showers, but not enough to do much good. Most of the wheat ground is about ready for sowing. For the most part the ground is in fine condition for seeding, other than being dry. It seems to be rather a general idea that seeding will be done earlier this season than has been the custom for several years. This likely is due to the fact there is little or no volunteer wheat, and that last year most of the earlier wheat yielded better than the late-sown wheat. We will finish the preparation of our wheat ground this week if silo filling does not delay us too much.

Last Saturday was silo filling time on this farm. We rented a cutter and pulled it with our tractor. We had quite a lot of trouble with the cutter. It is getting rather old, and in much need of repairs. The corn was a little too dry to make the best silage. The new electric pump was put to work pumping water on the silage as it was being put into the silo. There was considerable grain on the corn, and most of it was dented. Much of the grain going into the silos this season has been in the roasting ear stage. Grain no more mature than roasting ears has very little feeding value. We did not get the silo completely filled, but got enough in it to supply our needs next winter.

One of the neighbors is trying to get away from so much help at silo filling time. He is using a field cutter that has a power take-off from the tractor. Four men and two wagons are all that is needed to run an outfit of this kind. It does require the use of two tractors, one on the cutter and the other on the blower at the silo. He has fixed up two large racks for his wagons, and pulls them with four horses. It does not take very long to get about all the four horses can pull. There is no man used in the silo to handle the distributor pipe. It is likely that with some improvements on the field cutters this method will be used altogether in the future. There are evidences that the large crew in silo filling is passing.

The opening of school Monday morning made quite a stir around this place. Books, tablets and pencils have been packed and repacked for several days. Just which direction the bus would come from has been a much argued subject by those who expected to ride in it. The smallest member of the family was up early and ready to go first. His idea of school is a wonderful place to play. Just what the effect will be when he has some knotty problems to work will be rather difficult to determine.

There usually are several new teachers and several beginners and everything is new, so getting things to going is quite a task. About the first thing the community does is to entertain the teachers, and everyone gets acquainted with the new teachers and welcomes back the old ones. Before long the athletic bug gets started and things are off for a busy year.

We were fortunate enough to have an opportunity one day last week of seeing considerable of Northwestern Kansas. A farmer in this neighborhood owns some land south and west of Colby, and we went along with him to visit it, and saw a lot of mighty fine country. We have been pretty well over the Southwest, but had never been in Northwest Kansas a great deal.

There is more rough land to the northwest. Crops appear to be very good along most of the road. We were surprised to see so much corn had been planted. The hot, dry weather had ruined most of the crop, and the hoppers had eaten off most of the foliage in some fields. Why so much ground was devoted to so uncertain a crop as corn is quite a question. We noticed, too, that practically all of the crop had been planted every row. If grain is desired why not raise some of the dwarf varieties of the sorghums? As we drove thru Hays we noticed the crops on the Experiment Station farm. There were acres of different kinds of kafirs and grain sorghums

that were heavy with grain. Some of the plots would easily yield as much as 50 bushels an acre.

Good seedbed preparation was somewhat lacking the farther west we traveled. Several farmers were planning on sowing in the stubble. Others plan to sow right behind the one-way, and the one-way has never turned a furrow yet! Good, early farming pays anywhere. We noticed that every once in a while we would see a nicely improved farm, and usually the land near the house or on both sides of the road was well prepared for wheat. Frequently there would be several large last year's straw piles about the farm. All of which indicated the farmer was prosperous because he was a good farmer.

Wagons to Rubber Tires

(Continued from Page 7)

In addition, the Federal Government has opened up great areas of national forest and national parks to automobile traffic. What this means to the American people is shown by the fact that nearly 20 million motorists visited the national forests in 1928. This was an increase of about one-fifth over the previous year.

To this change the World War contributed by breaking down the then existing highways under motor truck traffic, while, at the same time it forced a cessation of most highway construction. Highway maintenance and construction was declared to be a "non-essential industry." One of the first things of importance that happened in this connection was that the state of Maryland fell out with the Federal Government because the Federal Government refused to pay part of the cost of repairing a lot of fine Maryland roads that were being ripped to pieces by the passage of army trucks. Maryland decreed that there would be no reciprocity in the matter of motor tags henceforth—and there wasn't. I believe the feud was called off recently.

Another event of importance at this time was a row between highway engineers in general and motor truck manufacturers in particular. The engineers protested against heavy trucks: while the manufacturers declared for bigger and better trucks, and for highways strong enough to carry them. Finally the two sides conferred, and compromised on the 7½-ton truck as the limit.

The engineering problem was one, not merely of constructing durable roads, but of constructing them for a reasonable cost. Merely to build a strong road is simple enough if the job is to be done by main force. The old Romans did it that way, for instance, by laying a rock foundation 3 or 4 feet deep. Concrete on such a base would stand up all right enough, but it would cost about \$300,000 a mile. How to get something as good or perhaps better for from \$35,000 to \$45,000 a mile was the problem. The old Romans weren't a patch on our modern engineers in that game.

Great advances have been made in the science of road-making during the last 10 years—and we are still learning. A concrete pavement laid now, for instance, is quite a different matter from one laid even five years back. Engineers have learned, for instance, that there is a world of difference in the behavior of a hard-surfaced road laid on sand and one laid on clay. Formerly it was supposed that there was no difference. Drainage, soil seepage and the like present special problems. Frost does things in the North that it does not do in the South. A pavement thick in the middle and thinner at the edges behaves differently, and not nearly so well, as one that, relatively speaking, has a flat stomach and thick shoulders. Nobody ever thought of that in the old days.

Testing machines have been devised to find out such things. There is one that can pound an inflated truck tire on a block concrete or other material with such energy that the concrete gets more testing in a few hours than it

7% Continental Telephone Co.
PREFERRED STOCK With
Common Stock Purchase Privileges

Dividends Quarterly
Over \$300 in Assets Back of Each Share
Earnings More Than
THREE AND ONE-HALF TIMES
DIVIDEND REQUIREMENTS

Municipal Utility Investment Company

703-10 Pioneer Trust Bldg.,
Kansas City, Mo.
Telephone Harrison 7822

115 West Sixth Street
Topeka, Kan.
Telephone 6714

NATIONAL Hollow TILE SILOS
Last FOREVER
Cheap to Install. Free from Trouble.
Buy Now
Erect Early
Immediate Shipment
Steel Reinforcement every course of Tile.
Write today for prices. Good territory open for new agents.

NATIONAL TILE SILO CO.
R.A. Long Bldg., Kansas City, Mo.
Get Factory Prices on Hollow Building Tile

6%
100% Safe Since 1885
(\$100 to \$5,000 accepted)

This association has paid 6% to its members for the past 44 years. (Why worry or take chances?) You can withdraw your money any time. You get back the full amount invested, plus interest. We send you a full paid Building & Loan Certificate, and then mail you a check the first day of March and September, of each year, for 6% on the amount invested. Our funds are invested only in first mortgages on highly improved city real estate. We have many accounts in different states and in all probability have investors in your city or town. Write us for circular. Make checks payable to—

Union Savings & Loan Association
107 E. 10th St. Kansas City, Mo.



A Definite FARM PLAN

Builds Farm Prosperity and Independence From Only 80 Acres

From a \$10,000 farm debt to a \$32,000 clear title and financial independence; 83 bushels oats and 70 bushels corn per acre; top prices for 100 pigs a year; a modern farm home and excellent buildings—all these the result of following a definite Farm Plan. This is the record of Mr. Conrad Kessler, McNabb, Illinois—a man who has made Farm Planning save a lot of work.

Clover and livestock are Mr. Kessler's chief soil builders. His rotation plan is protection against a total crop failure and the best possible insurance against a run down farm. He makes money on Spring pigs because clean pastures avoid the disappointments of the old fashioned pen method. Hogs and dairy cattle consume what is raised and put these crops back into the soil in the form of fertilizer.

RED BRAND FENCE

"Galvannealed"—Copper Bearing

lets you turn stock into any field to pick up corn missed in husking; clean up shattered and down grain; hog down crops; clean out weeds with sheep; pasture stock in any field. With "RED BRAND" you can send crops, roughage and waste to market on the hoof and keep the fertilizer at home, where it belongs.

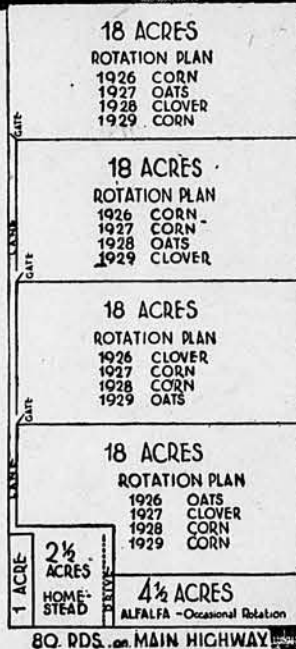
RED BRAND is good, old reliable

Square Deal—but better now than ever before because of our "Galvannealing" process (discovered and patented by Key-stone) that welds on an extra heavy rust-resisting zinc. Copper in the steel adds many more years of wear. Full gauge and honest weight; springy line wire; picket-like stays; can't-slip knots—the easy to erect, trim, strong fence. Ask your dealer to show you "RED BRAND."

Valuable Farm Planning Book

Successful farmers in fifteen states have contributed the material for this interesting, illustrated book on "Farm Planning." Describes actual, successful Farm Plans. Covers proper crop rotation. Shows value of legumes. How marketing crops on the hoof brings extra profits and builds up soil fertility through natural fertilization. Ask your dealer for one of these special edition books, or write us.

KEYSTONE STEEL & WIRE CO., 2159 Industrial St., Peoria, Ill.



Always look
for the
Red Brand
(top wire)



would under 40 years of traffic. They have another thing that travels in a circle in an effort to find out how long it will take to wear a rut in the concrete. This is a slow process unless they put non-skid chains on the tires. Those chains can eat up a pavement at an almost visible rate and call for more. Test roads have been built by both state and Federal Governments, wherein are stretches of varying construction, some of which stand up and others break up at once.

Formerly engineers thought it didn't matter how much water they used in mixing concrete. Now they know that there is a precisely right amount, and that the slightest variation from it makes an entirely different degree of hardness in the result. Aggregate used to be determined by volume; now it is determined by weight. Asphalt and sand used to be mixed by rule of thumb till the right color was obtained; and it would roll up, curl up, and have convulsions when the traffic was heavy or the sun was hot. Now the proportions are weighed, after formulas provided from laboratory tests. Once the finishing of a surface was done by hand and by eye; now it is done with straight-edge devices that make it really smooth.

Who Is Best Corn Husker

(Continued from Page 3)

win the world's championship—for that is exactly what it will mean if our man wins the national meet in Missouri. We are out to give the best man his chance at the big prizes.

Following are the instructions for holding a county corn husking contest. Please read them carefully. Then fill out the blank, if you wish to get into your county contest. Or if you cannot enter the contest, get some speedy corn-husking friend of yours to do it.

Now please look over these instructions and make sure that your county is represented:

These suggestions are offered to sponsors of county corn-husking contests. There are other details and local problems that will come up, but these cover the main points which have been found important in several years' experience of state contests, and from conferences with leading farm papers that have had contests in Nebraska, Iowa, Illinois, Minnesota, Indiana, Kansas and Missouri.

Since the winners of the various county contests, that are to be held in Kansas this fall, will compete together in the Kansas State Contest to be held early in November by Kansas Farmer, it is desirable that all these county contests be as uniform as possible, not only with one another, but with the rules and regulations that will be followed in the state and national contests as well. In case there are more county winners than can be accommodated in the state contest, it may be necessary to eliminate some of these county winners upon the basis of records made in the county contests, and this can be done fairly only if uniform rules are followed.

The first thing is to interest enough people who will be willing to give the

small amount of time, but careful attention to the details, and appoint a responsible committee of three to carry the thing thru. The local newspaper should be encouraged to play it up and the business men of the towns probably will be glad to help, especially if the benefits from such an occasion are pointed out to them in the matter of town advertising and the large crowds that flock to these contests. Last year there were about 5,000 people who came to each of the state contests and the national contest.

The date should be late in October or not later than November 5. Provision should be made for a postponement in case of a bad storm. The Kansas State Contest probably will be held early in the second week of November and county contests should be over by the end of the first week of November.

Selection of field. Most important in this connection is that the corn field must be offered by a man willing to co-operate with the committee. He must be willing to divide the field off into as many small plots as there will be contestants, not more than 10 or 12, or 15 at the outside, and there should be rows husked out between each plot, about four is sufficient. The rows should be at least a quarter of a mile long, and half-mile rows are all right. The field should have a pasture or open fields of some kind at least on the ends, where the crowd may stand. This is very important and provision also must be made for room to park cars and handle the crowd in general. The field must be as level and free from weeds and grass as possible, preferably listed with few down stalks, and a yield of between 40 and 60 bushels an acre. Most huskers prefer yellow corn. It is very important that the ears hang low on the stalks; that the stand is even thruout the field, and that the ears are of a uniform size. These are the first considerations.

Each plot should be marked, numbering by means of a piece of cardboard on a tall pole placed at the end of each plot.

Each wagon should be numbered by means of a large piece of cardboard nailed to the top of the bangboard in front so it will not be likely to be knocked over.

Numbered tags should be pinned to the backs of the gleaners, two for each wagon.

Another set of numbered tags is placed in a hat and drawn by the contestants. The tag that each contestant draws is pinned to his own back and he automatically draws the plot, wagon and gleaners that bear the same number.

The gleaners must be carefully selected in advance, and they must be depended upon to be on hand promptly. Do not try to pick them up the last minute. Two are required for each wagon. Their duty is to pick up all the corn that is missed by the husker as well as what he husks but fails to land in the wagon, to put it in sacks that are carefully numbered with the husker's own number, and deliver it to the judges at the end of the contest as that husker's gleanings.

In addition to all those wagons, driv-



When the Circus Came to Town

WHEN the gigantic, stupendous, colossal circus parade, consisting of one slightly moth-eaten elephant and three wagons, turned the corner at Perkin's alley the Johns family were all there to buy tickets. The Johns were up before daylight that morning. Horses currycombed, buggy polished, chores done . . . for the circus was coming to town!

Ten years ago or more a circus was an event. Crops were forgotten and country roads were crowded for miles around. The farmer and his family had few amusements to break the grim monotony of life. The educational and entertainment advantages of city life were unknown to the isolation of the farm.

Today the world comes to them. The Johns family can have all the entertainment they want, without stepping outside their own house. They have a radio! Operated by Eveready Radio Batteries, it is trouble-free—more economical than going to town—and they can hear the latest hits as clearly as if they were in a box seat in the smartest city theater. They know what is happening in the world before the city man can buy his newspaper.

Henry John receives the latest quotations, direct from city markets. He has profited enough from this one feature to pay for the radio! Sunday evening brings them all the grand old hymns they love so well. Week-days are full, with an infinite variety of music, songs, speeches, educational lectures. Virginia John has even made herself a stunning Paris frock from instructions she received over the radio!

Buy a new, modern, 1929 battery-operated radio set. There are several good makes, including the Eveready. If you have an older set, you are missing a lot. Modern radio is so much better!

Use Eveready Layerbilt "B" Batteries on your set. These use the unique, patented flat cells that pack together tightly, abolishing waste space and giving you more for your money, longer service, greater reliability. Write for our interesting booklet, "Why Radio Is Better With Battery Power."

NATIONAL CARBON COMPANY, INC.
New York  San Francisco
Unit of Union Carbide and Carbon Corporation

TUESDAY NIGHT IS EVEREADY HOUR NIGHT—East of the Rockies, 8 P. M., Eastern Standard Time, through WEA and associated N. B. C. stations.

NEW EVEREADY RADIO RECEIVERS—A. C. and battery-operated—NOW ON SALE

EVEREADY
Radio Batteries



ers, gleaners and sacks, a reserve supply of each of these should be ready in case of a breakdown or other emergency, especially an extra supply of bangboards in case some wagons come with a limited number.

The contest may be started by means of a shotgun and all contestants should start at once. Three minutes before the time is up, two or three shots should be fired from the middle of the field so that all the huskers can hear it and so their drivers and gleaners may be listening for the final gun.

A judge should follow each contestant to see that the crowd does not get in the husker's way or break down stalks or break off ears, or otherwise interfere with his progress; to see that he stops when the final gun is fired; to see that the gleanings are properly taken care of; to see that he does not pull the big ears off the third row; to be ready to take time out in case of a breakdown or other delay; and in general to be responsible for the particular husker. In case it is difficult to get so many officials, one of the two gleaners should be appointed "head gleaner" and he should be charged with the above mentioned responsibilities.

The 100 pounds of corn that is taken from the wagon to determine the weight of the husks should not be taken from the rear end of the wagon alone after removing the dump board, because there will be some contestants who will throw all the clean ears in the rear end of the wagon, and all the dirty ears to the front end. A bushel basket may be placed in each end of the wagon and the 100 pounds taken from these two baskets considered as representative of the cleanness of the husking. Or, if the loads are unloaded by means of an elevator it will be easy to take out 100 pounds that will be truly representative of the entire load. Rules for making deductions on husks and gleanings will be supplied before the contest upon request.

The contest must be open to every husker in the county in order for the winner to be officially entered in the state contest. A date should be fixed about a week ahead of the contest and it should be announced that all contestants must register their names as contestants by that date. In case there are more than can be accommodated, record blanks can be supplied, one for each man to fill out after a trial in his own corn field. From these blanks the 10 speediest huskers can be selected and notified to appear for the contest. These record blanks will be supplied upon request as well as an ample supply of rules for the county contest.

Growth Will Be Slow

Fears that corporation farming on a large scale will supersede the family farming, reducing the farmer to the level of a mere wage earner, are held to be groundless in a report on large-scale farming made by the Chamber of Commerce of the United States.

"Concern sometimes is evidenced," the report states, "over the social effects upon the rural population which might result from a substantial development of corporation farming. It is argued that the operation of the country's farms by great corporations would reduce the present independent proprietors to dependent corporation employees, regiment the farm population in the same manner as urban industrial workers are now regimented, deaden the independent spirit of the countryside which has been the ac-

companiment of the system of small individual enterprises, cut off a prolific source of industrial and governmental leadership and destroy the traditions and institutions of rural life.

"Such fears are at least premature. Corporation farming still is a negligible factor in the social organization of rural communities. Its growth, for reasons heretofore enumerated, probably will be slow. It is doubtful whether corporation-operated farms will ever supplant entirely the small units."

Elevator Costs Analyzed

"Country Elevator Margins and Costs in Marketing Kansas Wheat" is the title of a bulletin by R. M. Green and E. B. Ballow, published by the Agricultural Experiment Station, Manhattan. The data are based upon the study of a large group of Kansas elevators, co-operative and private, over a period of three crop years, 1920-22. Elevators of the "mill line," "commercial line," "co-operative line," "co-operative (independent)" and "commercial (independent)" are included in the study.

The average local elevator operating cost a bushel during each of the three years was found to be between 7 and 8 cents. When analyzed on the basis of volume, it was found that elevators handling a volume in excess of 200,000 bushels in 1922-23 (including, however, only six elevators) had costs of approximately 3½ cents a bushel, while those handling less than 25,000 bushels had an average cost of 12.6 cents. More than half of the elevators studied that year (109 out of 189) handled less than 75,000 bushels an elevator and experienced costs averaging 6.86 cents a bushel for those in the group 50-75,000 bushels, and 8.48 cents a bushel for those in the 25-50,000 group. A total of 121 elevators below the group average had costs averaging 8.02 cents.

An analysis of the volume handled by elevators of different types in 1922 shows that the average for 36 commercial line elevators was 57,385 bushels; for 74 mill line, 46,739; for 21 co-operative line, 53,586; for 19 independent co-operatives, 120,106; while the average of all was 60,303 bushels. Average costs for the same year were: commercial line, 5.55 cents a bushel; mill line, 5.45; co-operative line, 5.02; co-operative independents, 3.56; and commercial independent, 3.86 (volume not given.) Results for the preceding year show slightly lower costs in every group, the difference being greatest in the case of the co-operative line elevators which had average costs of only 3.40 cents compared with 5.02 for 1922.

The authors also deal extensively with such problems as the handling of sidelines, hedging, methods of selling, risks and price fluctuations. Among their conclusions are the following: wide variations in buying margins result from radical price fluctuations at terminal markets; hedging as a means of lowering costs is of little value to elevators operating as they do in Kansas; the risk arising from possible variation in the size of the wheat crop is the most significant factor affecting costs; the handling of sidelines may be profitable to single unit elevators but is of doubtful value to elevators of the line type; local consolidations and extension of well located line elevator systems offer the greatest possibility of safely reducing margins.

That dry British embassy in Washington is like unto a desert in an oasis.

Cash Prizes for Alfalfa Letters

WHAT'S the matter with the alfalfa acreage of Kansas? In 1915 we were growing 1,359,498 acres of this crop—last year it was 806,573 acres, and there has been a further decline this season. The state has produced alfalfa in a single season worth \$61,837,386—last year it was worth \$22,560,807. We have grown as much as 300 carloads of alfalfa seed a year—very little is produced now.

How come? What are the reasons for this astonishing situation? Alfalfa is the most profitable field crop grown in Kansas. In addition, it has an extraordinary value in increasing the soil fertility, especially by adding nitrogen and humus. Has the decline been due to insects? To diseases? Or to general indifference? What should be done to correct this situation? The Kansas Farmer should like to receive letters on the reasons for this decline in the alfalfa acreage and what can be done to get farmers to plant more of this legume. We think this decline in the acreage of alfalfa is one of the most important economic problems which confronts the agriculture of Kansas. For the best letter on this subject we will pay \$10; second, \$5; third, \$3. The contest closes September 24. Please address Alfalfa Editor, Kansas Farmer, Topeka, Kan.

WATCH A GILLETTE OUTWEAR ANY OTHER TIRE

LET a Gillette tire prove to you that it will outwear any other tire made at anywhere near the price. Test a Gillette on your own car—alongside any other tire—and watch results.



RADIO

Tune in on station WTAQ (1330 kilocycles) owned and operated by the Gillette Rubber Co., Eau Claire, Wis. Educational and entertaining programs including the popular Gillette Bears.

Gillette tires are better built—by modern, more efficient methods—pioneered and perfected by Gillette. They stand up because a purer, livelier rubber—and more of it—scientifically cushions their cords. Their treads are tougher, too. Test a Gillette yourself. Then you'll want Gillettes all around.

GILLETTE RUBBER CO.
Eau Claire, Wis.



Gillette
TIRES AND TUBES

15-5-29

Jumbo Collars

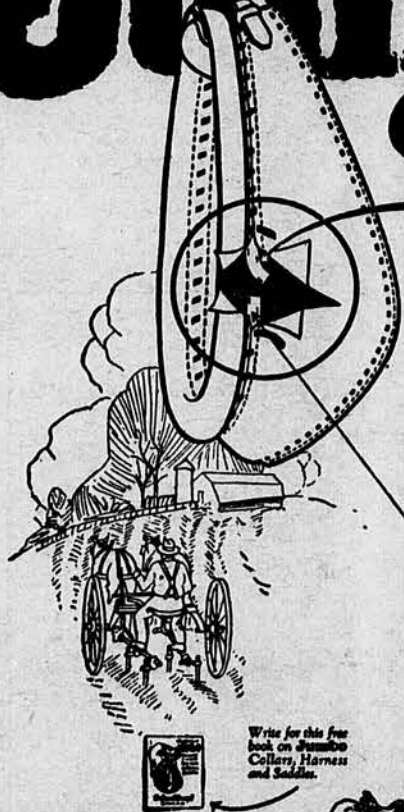
with the reinforced Hame space

Jumbo collars not only have a wider and deeper hame space that lets the hames in closer to the neck, increasing the comfort and pulling power of your team... but a reinforced hame space, that makes it stronger and last longer than other collars.

This filler of solid leather on the inside reinforces the seam. It also seals up the seam so dirt and water can't get in to rot out the leather from the inside.

This reinforced seam is a patented feature of Jumbo Collars.... the patents are owned and controlled by The Schoellkopf Co.

Ask your dealer for a Jumbo, the long life comfortable collar



Write for this free book on Jumbo Collars, Harness and Saddles.

Schoellkopf
JUMBO
DALLAS



Protective Service

Membership in the Protective Service is confined to Kansas Farmer subscribers receiving mail on a Kansas rural route. Free service is given to members consisting of adjustment of claims and advice on legal, marketing, insurance and investment questions, and protection against swindlers and thieves. If anything is stolen from your farm while you are a subscriber and the Protective Service sign is posted on your farm, the Protective Service will pay a reward for the capture and conviction of the thief.

The Federal Trade Commission Warns Against False and Misleading Advertising

THE FEDERAL Trade Commission has advised all newspapers and magazine publishers of their disapproval of them carrying what is commonly looked upon as false and misleading advertising and warning that the commission will take action against all publications so doing, as rapidly as possible. The following is a fair sample of the class of advertising that the commission feels should be suppressed:

Patent medicines for incurable diseases.
Appliances for the correction and cure of bodily deformities.
Anti-fat remedies.
Hair restorers.
Obscene advertisements that are based on so-called "sex appeal."
Medicines and appliances relating to the various sexual subjects.
Lotions, creams and various toilet preparations, promising impossible improvements in personal appearance.
So-called puzzle advertisements that offer as "bait" automobiles or other valuable inducements.
Advertisements soliciting manuscripts and articles on which patent may be obtained.
Various schools that hold out false and fraudulent promises as to their courses and employment upon completion.
Lottery schemes disguised in almost countless ways.
Matrimonial advertisements.

In taking the stand they have, the commission is entirely right, and it is to the credit of the National Publishers' Association and the National Better Business Bureau and its members, many of whom long ago adopted the policy of protecting their subscribers against fraud, that has prompted this move by the Federal Trade Commission.

To the credit of Kansas Farmer it can be said truthfully that this publication is among the pioneers in adopting the policy of guaranteeing its subscribers against fraud and dishonesty of its advertisers and notwithstanding the fact that advertising copy running into thousands of dollars every year Kansas Farmer has declined, it has found this a policy that has paid. To every one of you who are readers of the Protective Service you know without saying that this department has published warnings repeatedly against your patronizing concerns similar to these above mentioned, as well as many others this department has investigated and found to be fakes. You

understand, folks, it often is necessary for you to read between the lines of this department's letters or published warnings. The Protective Service cannot always come right out and tell you what it would like to. A hint from this department must often suffice, and take this department's word for it, you will profit if you will take the hint and adhere to the Protective Service slogan to "investigate before investing" and when in doubt write this department first.

A Question Service

Farm magazines are an important source of up-to-date information in teaching vocational agriculture, according to Lester B. Poltom, supervisor of vocational agriculture in Kansas high schools. To provide this opportunity to the vocational agriculture classroom, Kansas Farmer has organized the Kansas Farmer-Vocational Agriculture Question Service.

Each high school in Kansas teaching vocational agriculture has been put on the mailing list to receive two copies every week of Kansas Farmer, and a short list of questions dealing with the article or articles in the current issue which link up practically with vocational agriculture teaching and which bring out the most important points in the article.

These questions will be used in one of two ways. The vocational agriculture class as a whole will make use of them as a reference study, or every week one or more students will make use of the questions as a guide for an oral report made to the class after they have studied the article or articles in Kansas Farmer.

Care of Farm Horses

Farmers' Bulletin No. 1,419, Care and Management of Farm Work Horses, may be obtained free from the Department of Agriculture, Washington, D. C.

An old proverb shortened: All work and no play makes jack.

\$135 Reward for Two Eye Doctors

FOLLOWING is a letter the Kansas Farmer Protective Service has received from Sheriff C. E. Carman of Nemaha county: "I am inclosing a circular regarding two swindlers who are operating at this time in Kansas. They beat an old couple in my county out of \$200. They have been operating in Missouri, also. I do not know of any greater service you could render to the farmers of Kansas than to give this wide-spread publicity in your Protective Service Department. These fake eye doctors are calling on old people in the rural districts as well as in towns, and are swindling them out of hundreds of dollars. Your co-operation in this matter will be greatly appreciated by the sheriffs of Kansas."

The circular mentioned in the letter follows:

Fifty dollars reward for the arrest and conviction of two men going under the names of G. A. Harper and Dr. Davis. These two men are fake eye specialists and were operating in northern Kansas on August 20. They are using a so-called radium which they drop in people's eyes and are swindling old people out of hundreds of dollars. On August 20 they were driving a new Pontiac sedan with Illinois license tag.

Description of G. A. Harper: Age 38, height 5 feet 8 or 9 inches, slender, light complexion, weight 140 pounds.

Dr. Davis: Age 40 years, height 5 feet 6 inches, stout build, complexion dark enough to look like a Mexican, weight 165 pounds.

These same parties have been operating in Missouri recently.

I hold a felony warrant for these men and will extradite them from any state. Be on the lookout, as they may operate in your county. If found, arrest, hold and wire at my expense. The State Board of Optometry also offers a reward of \$35 for the conviction of such swindlers.

C. E. CARMAN.

Fifty dollars additional reward is hereby offered by the Kansas Farmer Protective Service. This makes a total reward of \$135 for the capture and conviction of these two fake eye doctors. Telephone your sheriff if you learn of any trace of them.



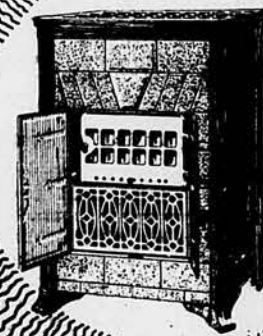
Winter-is just around the corner-prepare for it

Time to think of those cold wintry mornings. Time to decide whether you'll spend another winter in a poorly heated house. Winter is just around the corner—and the greatest of all home warming appliances is ready to bring to your entire home, new warmth, comfort and cheer through the long winter days.

FIREPLACE RADIONA

Heats the Whole House

Fresh heated air is circulated throughout the house by this wonderful heater. The cheerful glow of the open fireplace when the outer doors are open, combined with the heating ability of the Furnace. Burns any fuel—wood, soft coal, hard coal or coke. Extra large feed door, takes big chunks of soft coal or large pieces of wood. Porcelain enameled finish. Front is a perfect reproduction of Vermont granite—Front doors are in wrought Bronze effect and the balance of heater is Walnut Brown, hand-grained. Outstanding beauty—adds to appearance of any room. There is a Fireplace Radiona dealer near you—see this heater before buying.



Rock Island Stove Co.

Dept. KF-3
ROCK ISLAND, ILLINOIS

Rock Island Stove Co., Dept. KF-3 Rock Island, Ill.
Send information on the Fireplace Radiona to

Name

Address R. F. D.

Town State

☐ Am also interested in a new Kitchen Range.



FREE MONEY SAVING PLANS

Show exactly how to build a corn crib or granary with the least cost for materials—even from old lumber

Kewanee

FARM ELEVATORS

12 Models Beat shoveling a mile. The load it would take a half-hour to scoop off can be handled with a Kewanee in 3 to 5 minutes. There's a model for every farm—for engine, horse, tractor or electric power. All have exclusive features which guarantee the most trouble-proof service per dollar of cost.

4 Models Now made entirely of galvanized Copper steel—double protection against rust. The main elevator is a new design—far stronger, and more rigid yet weighing no more. And all principal shafts of elevator, lifting jack and horse-power are journaled in real roller bearings.

Write Kewanee Implement Company 6147 Burlington Ave., Kewanee, Ill.

NOW IS THE TIME

to prepare for fall fencing and fence repairing.

WHEN YOU FIGURE UP

your requirements—don't overlook the fact that if you use

NATIONAL LUMBER AND CREOSOTING CO. POSTS

"You can set them and forget them"

ASK YOUR DEALER
OR WRITE US



GENERAL OFFICE
TEXARKANA, ARK.

National Lumber & Creosoting Co.

8 Modern Pressure-Process Wood Preserving Plants

At the End of the Rainbow Trail

My Wife Was Waiting for Me at Honolulu, on Our Wedding Anniversary

By Francis A. Flood

ALOHA! Aloha Oe!" Just as Mt. Fujiyama and a row of flapping windmills are the trademarks of Japan and Holland, just so are the fervent Alohas and the fragrant leis that greet every visitor to Honolulu, the symbol of Hawaii's place in the sun.

It may seem trite to suggest these two hackneyed terms as symbolic of the Hawaiian Islands, but I am not implying that the beauties and enchantment of those Pacific isles begin and end with grass skirts, ukeleles and lazy waves.

No, the whining melodies of Tin Pan Alley and the grass huts and hula dances of vaudeville do not truly represent that Paradise of the Pacific any more than a steel guitar can be called a symphony orchestra or an adolescent tap dancer is symbolic of the Russian ballet.

The charm of the Hawaiian Islands cannot be reproduced on a phonograph or represented by hot-house palms and a ukelele chorus behind the footlights of vaudeville. To those who have visited the islands, Hawaii means more than a song and a dance and sunny skies and cool trade winds. "Aloha" means more than the name of a lilting song, and a lei is something more than the loops of crepe paper that hang about the dark-dyed necks of "Hawaiian" dancing girls who are as American as their costumes.

An Expression of Sympathy

Aloha is a part of the very spirit of the islands itself, and one who has failed to appreciate something of the depth of feeling which that word conveys has failed to understand Hawaii and her peoples. It is more than simply the Hawaiian "word" for "welcome" or "farewell" it is a polynesian benediction. It is an expression of love, sympathy, joy and sorrow, a word of many meanings. It is synonymous with Hawaii. As a word it has traveled into many lands but it has, unfortunately, lost much of the richness of its meaning except in the land of its origin. I suppose this is partly true because nowhere else in the world has it been warmed by the same hospitality, the same friendly thoughtfulness for others, as in these beautiful islands in the Pacific from whence it came.

When Mark Twain had written a chapter of description about Rome he congratulated himself upon the fact that in doing so he had not once used the expression, "butchered to make a Roman holiday," a popular phrase which every writer on Rome is tempted to use sometime during his treatise. Likewise, I suppose, that every visitor to the islands and every writer who tells of Hawaii mentions the word "Aloha"—but no discussion of Hawaii would be complete without it. It would not be Hawaii without it. It expresses a feeling of friendliness and welcome and brotherly love that seems to exist nowhere else in the world as it exists in those islands which Mark Twain called "The loveliest fleet of islands that lie anchored in any ocean." We have no English word synonymous with it—because, I fear, we have no need for such a word as do the friendly, hospitable Hawaiian people.

An Armful of Leis

Naturally, I met more than an ordinary welcome myself when my ship, the Rakuyo Maru, docked in the harbor of Honolulu, for my wife, whom I had not seen for nearly a year, was waiting there for me. This is not a romance but a story of Hawaii, and so I need not describe our meeting there that day, our wedding anniversary. We said, "Aloha, Aloha Oe!"

She had an armful of leis to hang about my neck, genuine Hawaiian leis made out of real flowers whose fragrance and coloring was as rich as the meaning of the Alohas uttered by the smiling, friendly Hawaiian family who had come down with my wife to meet the ship. It was a real Honolulu welcome.

To a visitor from our own United States, which the Hawaiians call "the

mainland," Honolulu, of course, looks excitingly foreign and tropical and strange; but for me who had come from the other direction it looked excitingly domestic and American and familiar. It looked like home again. There was the American flag. The customs officers, porters, policemen—they spoke English. The good old American dollar was the official coin of the realm. The signs on the street cars and the fronts of windows, they were in English and advertising the old familiar American products that we never think of except in times like this. A cafeteria, ice cream, barber shops, drug stores, a baseball sign. Here was home again.

There was a white man running a street car, another driving a taxi, white waiters in the restaurant windows—policemen, barbers, delivery boys, white men and women everywhere, talking my language, wearing American clothes. To me it was home again.

But to the visitor from "the mainland," there are plenty of sights and sounds, and smells, yes, and even tastes, to satisfy the one who has expected a purely foreign land. We have all heard so much of Honolulu that I had thought I would get the disappointment that so often comes from too much expectation. Such was not the case at all.

Highly advertised as this much-touted Paradise of the Pacific has long been, it is not over-advertised, and it struck me so from the start. It was June. The sun was shining, as it always shines on that beautiful fleet of islands, but the steady trade wind cooled the air, as it always cools the air. It is only a gentle breeze, but day and night that steady wind keeps up, cool and gentle, soft and sure. Sunshine and trade winds, it is springtime all the year.

Now and then it rains, to be sure, several times a day perhaps. But the Hawaiians do not call it rain; they call it liquid sunshine, for that is really what it is. A gentle rain begins, the sun keeps shining thru, you step beneath a sheltering tree for a few minutes and enjoy the rainbow, and in a few minutes the sunshine is dry again—always sunshine everywhere.

We checked our baggage out to a little tavern on Waikiki where we would stop a few days and enjoy this island paradise before boarding another ship for home. We had no idea how long we would stay. We would

simply settle down on that famous beach and do as everyone else in Honolulu does—just let the rest of the world go by.

Beautiful palms lined the avenue on either side as we rode out toward Waikiki. Luxurious tropical gardens garnished the residences, school grounds, and even business blocks all the way out to the beach. There were the huge and complex banyan trees, rising like an ordinary tree from the ground but whose branches drop and take root and spread again until a single tree resembles a complete arbor of shade, and also a shelter from an occasional gift of liquid sunshine.

Million dollar hotels have helped, rather than hindered the effect of the broad swing of Waikiki Beach as it curves on up in the direction of Diamond Head that frowns above it all like an Olympus where the gods of this lovely garden must live and play about.

Our tavern where we settled down was directly on the beach, Waikiki itself, that famous beach where the surf and the trade winds have met since the first song was sung of Hawaii no one knows how many centuries ago. We could stand in our own back yard there on that famous beach and see the surf come curling in against a rainbow background, row upon row of white-topped breakers of surf, like rank upon rank of charging cavalry, heads tossing in the air, hoofs rolling in the sand until finally, as they broke in the face of the sloping beach, they were melted away and ran back, back to the rainbow and the great ocean from whence they had come.

We could feel the trade wind upon our backs, whispering thru the palms and monkey pod and mango and breadfruit tree about us, and then frisking on to play with the breakers as they came charging in at our feet. We could sit on that cool beach at twilight and watch the tropical dusk come creeping in on one side as the surf and tide crept in on the other, each silent, blending each other into a million tints until darkness dropped the curtain and only the sound remained.

We could sit on the beach at midnight and see only the flash of moonbeams on the glistening surf, the spray liquid moonlight dancing across the beach. And then as tho the laughing gods on Diamond Head had called for music suitable for such a scene we

could hear the lapping of the ceaseless surf that gurgled at our feet, the breakers' booming basso, and the melody of the wood-wind instruments in the palms above our heads. And then, to make this tropical orchestration complete there came floating on the trade winds the softly-strummed melodies from steel guitars and the slumberous croonings of Hawaiian voices singing in the night.

We could sit in the cool shade of our backyard on Waikiki Beach in the morning and see the brown native surf riders come charging in on the mane of a roaring breaker, poised on their boards like a bronze figure mounted on a dart. Riding out of the sun these bronze Hawaiian men would mount their glistening surf board in the face of a speeding breaker and then rise, as graceful as a sprite on the bow of a boat, erect, to come scudding into the beach like an offering from the ocean's depths.

Morning, evening and night the beach at Waikiki is the playhouse of the gods where nature and Neptune stage their daily pageantry with no two acts the same. And in that hippodrome we lived—and never inquired about the sailings of ships for home. Here was a place to live, if that is all one had to do. Climate, nature, people, all healthy, all pleasant, all beautiful and sublime. That is Honolulu, and the beach at Waikiki.

'Twas a Great Trip

BY J. R. JOHNSON

One Christmas when I was a child, a few years after the grasshoppers had left Kansas, I was given my first toys. I remember sitting on the floor among them, confused but very happy. I felt much the same way while a passenger on the Kansas Farmer Jayhawker Special.

I soon found the car in which W. E. Grimes, professor of agricultural economics in the Kansas State Agricultural College, the state's best known economist, and R. M. Green, the marketing expert, were riding. I knew where the dirt farmers were located, all thru the train, and became acquainted with school teachers who were gathering information to make their profession more useful. There were mothers interested in home building, clerks, lawyers and some children. Three-fourths of the folks were farmers. Many of them were taking their first vacation.

The mountains, rivers and lakes were all very impressive, but it was easier to leave them than it was to say goodbye after two weeks of association together. From the standpoint of real values, I think the day spent in Regina was the high point. It is evident that the farmers of Canada are making a real success of their wheat pool, and we learned a great deal about this while we were at Regina. A livestock pool, organized along the same general lines, while not so old, is making just as great a success.

Equal in interest and educational value was the day spent in Edmonton, the capital of Alberta. John Leedy, former governor of Kansas, now a citizen of Edmonton, was with us. He is more than 80 years old, but is as active in body and mind as most men of 60. When a speaker from our party introduced him he called attention to the fact that most of the measures for which Mr. Leedy worked while he lived in Kansas have now been enacted into law. He also mentioned that it was especially fitting that farmers from his former state should come to visit him riding on a railroad owned by all the people instead of by a corporation.

A Cleveland man has left thousands as a permanent endowment for birth control, but if his bequest is a complete success there may be eventually no one to administer it.

The President is taking steps to put the postoffice on a self-supporting basis. We have a gloomy foreboding that they are going to subtract some more stickum from the stamps.

A Good Start for Stabilizing Wheat

WHEAT conditions for the world as now reported by the Department of Agriculture's bureau of agricultural economics are altogether favorable to the efforts to aid the wheat grower thru stabilizing corporations and loans from the Federal Farm Board thru the crop year. Briefly summarized the bureau reports a smaller United States crop by 128 million bushels than last year, a Canadian crop of but 300 million bushels against 534 million bushels in 1928 and total European crops, excluding Russia, 100 million bushels short of last year. While Russia's outlook is more favorable, yet the bureau reports that it will provide no wheat for export. Taken together the crops of the Northern Hemisphere therefore are estimated as something like 460 million bushels, or considerably more than the total Canadian crop, short of 1928 yields. To offset this reduced production the world carryover from 1928 was about 136 million bushels greater than a year ago.

In the Southern Hemisphere the estimates are equally bullish for wheat. Neither Argentine nor Australia has recovered from prolonged drouths. Their crops are estimated at about 110 million bushels short of 1928 yields.

"The above indicated reductions," says the bureau estimate, "total 570 million bushels, but these will be offset by some increases in production in Africa and Asia, where crops are somewhat larger than last year. With a shorter Canadian crop, competition with the United States in supplying the European demand thru the late fall and winter months will be much less than last year."

Notwithstanding the short world wheat crops promising large demands upon the carryover before the close of the crop year, prices have declined somewhat lately. This is a temporary condition according to the Agricultural Economics bureau, "generally due to heavy marketings of new wheat in the United States which tend to depress both the cash and futures markets, and a speculative reaction from the rapid rise thru June and the early part of July."

Wheat growers are encouraged by such conditions to make use of all available facilities the Federal Farm Board has to offer to distribute the marketing regularly thru the year.

The Inside Story of Outstanding Endurance

BENEATH the tread of every Firestone Tire, you will find layer upon layer of the highest quality cord fabric. These cords are twisted to provide the greatest strength and elasticity . . . then every fiber of every cord, is saturated and surrounded with live rubber which prevents friction and heat.

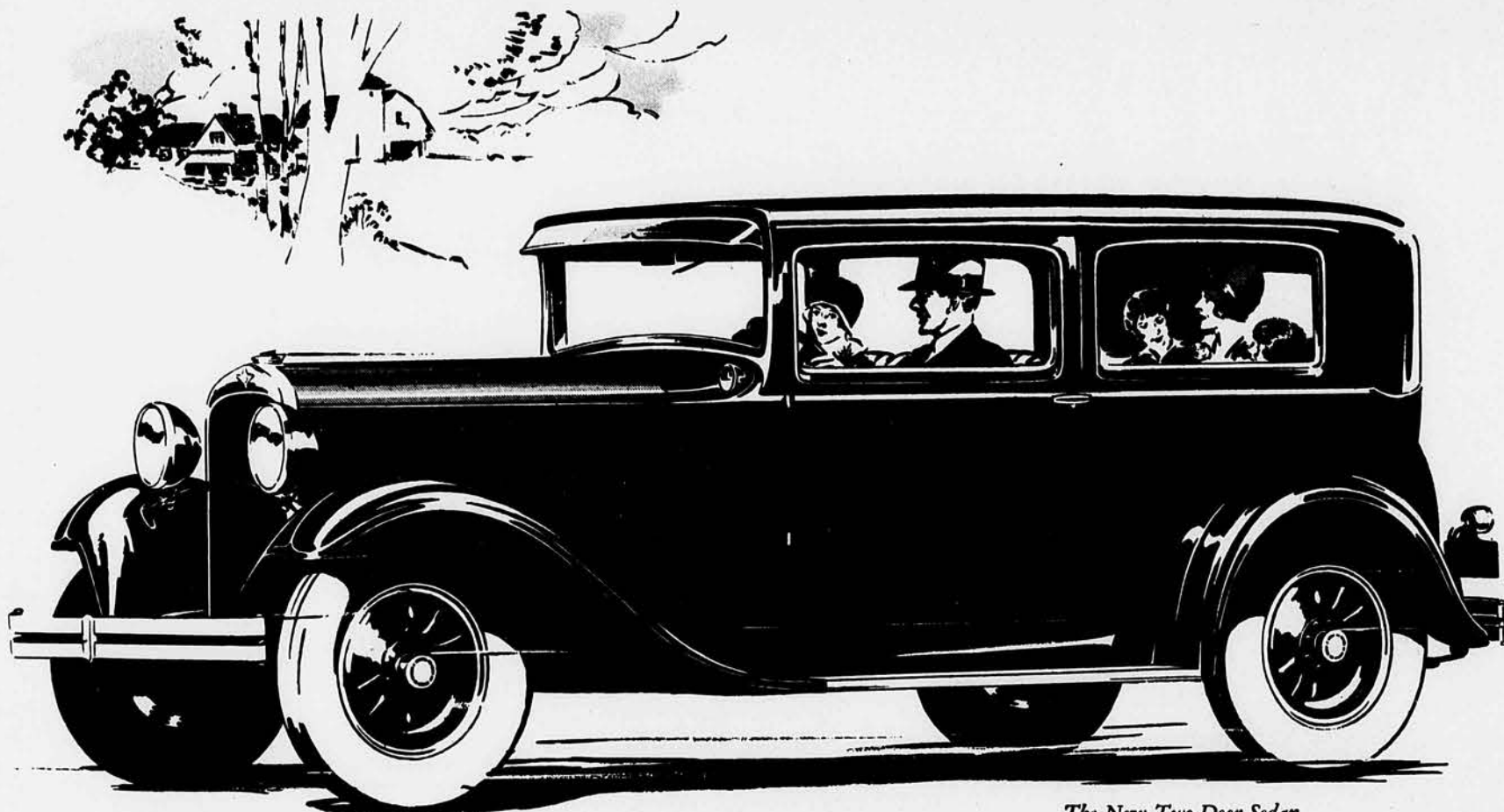
This is the patented Firestone process of gum-dipping which doubles the flexing life of the cord. Thick cushions of live rubber between the plies provide further protection . . . combined with this is the toughest, safest, longest wearing tread ever developed.

These are reasons why Firestone Tires hold all world records for safety, endurance and mileage.

Write to the Firestone Tire & Rubber Company, Akron, Ohio, or Los Angeles, California, for booklet "The Secret of a Long Life."

Firestone

Firestone reaches around the World to serve you better.



The New Two-Door Sedan

From the Farmer's Stauncest Ally Comes the Farmer's Ideal Car

**DODGE BROTHERS PRESENT
A NEW TWO-DOOR SEDAN
AT A NEW LOWER PRICE**

\$925
f. o. b. Detroit

A most welcome motor car announcement to the American farmer comes from that stronghold of Dependability, Economy, Sturdiness and Long Life—*Dodge Brothers.*

It heralds a new all-purpose family car—with all the quality and performance of other Dodge Six models—with a new full 5-passenger

body style of extraordinary roominess, usefulness and convenience—with a price even lower than the previous Dodge Six price.

The new Two-Door Sedan is ideal for the farmer and his family. It is a sensational new Dodge Brothers achievement in value—offered at the surprisingly low price of only \$925 at the factory.

NINE BODY STYLES — CONVENIENT TERMS



*All branches on the same tree;
all growing out of the Chrysler root principle
of standardized quality*

CHRYSLER IMPERIAL

CHRYSLER "77" CHRYSLER "70"

CHRYSLER "66"

DODGE BROTHERS SENIOR

DODGE BROTHERS SIX

DE SOTO SIX PLYMOUTH

DODGE BROTHERS TRUCKS,
BUSES and MOTOR COACHES

FARGO TRUCKS and COMMERCIAL CARS

CHRYSLER MARINE ENGINES

All Products of Chrysler Motors

Dedicated to Dependability

In the great Chrysler Motors Engineering Laboratory in Highland Park, Michigan, over 900 persons are constantly and solely engaged in tests, experiments and research. Thus is the high quality of all Chrysler Motors products assured and the leadership of Chrysler Motors engineering protected.

**CHRYSLER
MOTORS**

BETTER PUBLIC SERVICE

NEW DODGE BROTHERS SIX



CHRYSLER MOTORS PRODUCT



Where Motors are cheaper than Muscle

Let the electric motor fill your silo—it's cheaper, easier, swifter. And this is just one of the many applications where G-E motors, controllers, and other electric equipment cut costs and labor. ¶Electric grain elevators, motorized grinders, huskers, and shredders will save four-fifths of the time you now spend on these jobs. G-E motors can economically pump your

water, do your threshing, milk your cows, separate the cream, and sharpen your tools.

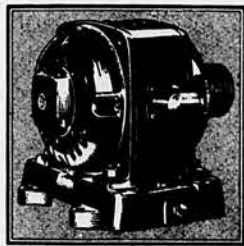
¶For farm households, G-E MAZDA lamps, refrigerators, fans, and cooking and heating appliances are economical labor-savers.

¶If you are located on or near an electric power line, ask the power company for complete information concerning the possible uses of electricity on your farm.

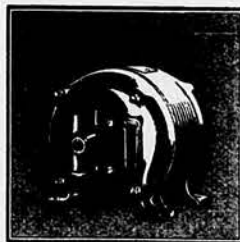
Tune in on the General Electric Special Weekly Farm Program on WGY (Schenectady), KOA (Denver), KGO (Oakland). In addition, every Saturday evening at 8 P.M. Eastern Standard Time the "General Electric Hour" is broadcast over a nation-wide chain.



Glue melts rapidly in this G-E electric glue pot



Makes good with the men—G-E single-phase motor Type SCR



G-E fractional horsepower motors are big helpers on many little jobs



The G-E electric soldering iron is easy to handle and stays hot

GENERAL ELECTRIC

Then...up it goes again!

it's Calumet's
double-action

that makes
better baking

"WHY do I get such wonderful results when I bake with Calumet?" women are always asking. "Fluffy cakes, light biscuits, all my baking just the way I want it."

It is because Calumet Baking Powder has double-action. *Two* leavening actions, not *one*. And these two leavening actions protect your baking from failure to a remarkable degree. Women who used to have "bad luck" with baking, women whose ovens were always "acting up," find it easy to bake successfully with Calumet.

They tell all their friends about this modern baking powder . . . they run in and show their cakes and biscuits to their neighbors. That's why Calumet today is the most popular baking powder in the world.

The test above illustrates Calumet's two leavening actions. The *first* action takes place in the mixing bowl—a steady, even rising that gets the leavening properly started. Calumet's *second* action begins when you put the cake in the oven. It literally "props up" the batter while the oven heat does its work. As a result a cake made with Calumet has a smooth, velvety texture that is simply beautiful . . . Calumet biscuits are light and feathery . . . muffins rise right up to perfection . . . and waffles and corn-bread turn out exactly the way you always hope they will.

Easy Success With Calumet!

All baking powders are required by law to be made of pure, wholesome, healthful ingredients. But not all baking powders are alike in their action. Not all give you equally fine results in your baking. Calumet is scientifically

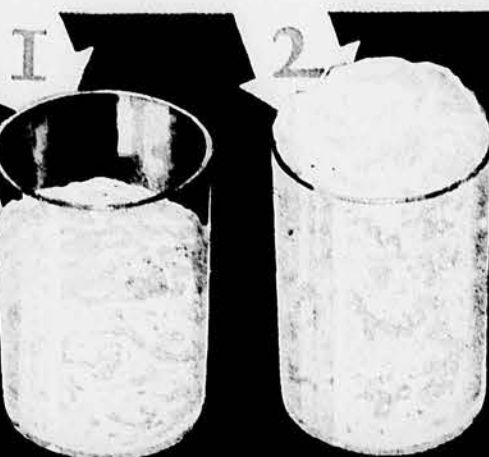
made of exactly the right ingredients in exactly the right proportions to produce perfect leavening action. Its dependable double-action brings surer baking success, even to women who cannot regulate the temperature of their ovens exactly.

Here's a recipe for Calumet Coconut Cake. Notice that it calls for only *one* level teaspoon of Calumet to a cup of flour. This is the usual Calumet proportion. A double economy, since Calumet's cost is moderate to begin with. Mail the coupon and Marian Jane Parker will send you the Calumet Baking Book—a collection of splendid up-to-date recipes prepared by baking experts.

© 1929, P. Co., Inc.



CALUMET
THE DOUBLE ACTING
BAKING POWDER



TEST CALUMET'S DOUBLE-ACTION

Naturally, when baking, you can't see how Calumet's double-action works inside the dough or batter to make it rise. But, by making this simple demonstration with only baking powder and water in a glass, you can see clearly how baking powder acts—and how Calumet acts twice to make your baking better. Put two level teaspoons of Calumet into a glass, add two teaspoons of water, stir rapidly five times and remove the spoon. The tiny, fine bubbles will rise slowly, half filling the glass. This is Calumet's first action—the action that takes place in the mixing bowl when you add liquid to your dry ingredients.

After the mixture has entirely stopped rising, stand the glass in a pan of hot water on the stove. In a moment a second rising will start and continue until the mixture reaches the top of the glass. This is Calumet's second action—the action that takes place in the heat of your oven.

Make this test. See Calumet's double-action which protects your baking from failure.



COCONUT CAKE (3 eggs)

- | | |
|-----------------------------------|--|
| 2 cups sifted Swans Down | 1 cup sugar |
| Cake Flour | 3 eggs, unbeaten |
| 2 teaspoons Calumet Baking Powder | ½ cup milk |
| ¼ teaspoon salt | 1 teaspoon vanilla |
| ¾ cup butter or other shortening | 1 can (1½ cups) Baker's Coconut, Southern Style. |

Sift flour once, measure, add baking powder and salt, and sift together three times. Cream butter thoroughly, add sugar gradually and cream together until light and fluffy. Add eggs, one at a time, beating well after each addition. Add flour alternately with milk, a small amount at a time. Beat well after each addition. Add vanilla. Bake in two greased 9-inch layer pans, 25 to 30 minutes in moderate oven (375° F.). Spread boiled frosting between layers and on top and side of cake. Sprinkle thickly with coconut while frosting is still soft. Double the recipe for three 10-inch layers. (All measurements are level.)

MAIL THIS COUPON NOW

MARIAN JANE PARKER

S.F.F.—9-29

c-o Calumet Baking Powder Company

4100 Filmore Street, Chicago, Illinois

Please send me, free, a copy of The Calumet Baking Book.

Name _____

Street _____

City _____ State _____

Please print name and address plainly

What the Folks Are Saying

Local Wheat Seed Is Best, if the Grain Has Been Graded Properly

THERE is an opinion among many wheat farmers that seed wheat runs out from being grown continuously in the same locality. Many farmers make a practice of securing seed from some other locality to correct this feature.

Seed wheat may deteriorate when grown on some farms continuously but it need not. There is no good reason why it should run out and experiments conducted along this line show that home grown seed of best adapted varieties produce better than shipped in varieties.

Wheat is self fertilized and improvement in strains of wheat is brought about principally by selecting the best types of heads and grains.

Thirty years ago a very interesting account of such a test, conducted by Professor Andrew Soule, was reported in the Kansas State Board of Agriculture report.

Professor Soule selected large size heads, medium size heads and small heads. He selected large and small kernels from each of these three types of heads and planted them. In every case the large seed produced more than the small seed with an average increase of 4 bushels an acre.

A 10 year test conducted in Nebraska comparing graded seed with bin run seed gave an average increase in yield of 2.9 bushels in favor of graded seed.

The best adapted strains of hard winter wheat in Kansas are selections from local seed. It isn't practical for every farmer to select the best heads of wheat like he selects ears of corn but he can select the best fields of wheat for his seed and he can eliminate the small shriveled kernels with a fanning mill and grader. Money spent for wheat grading and treating equipment should prove a good investment.

Dighton, Kan. Harry C. Baird.

Now for Flood Control

There seems to be no end to the problems that arise during the life of a state or nation. In general new settlements have different types of problems than the older and more developed communities, and as the years advance the troubles seem to multiply. Kansas is no exception to the rule.

It took a 1903 flood to arouse the Kaw Valley, a 1904 flood to stir the Neosho people and a 1909 flood to interest those of the Marais des Cygnes. Your own recollections are clear no doubt about the terrible floods of such and such years.

For a quarter of a century these catastrophes have repeated themselves in various parts of the state. During the last three years practically every river has given its basin inhabitants cause for worry. The close succession of such devastating floods is of course regretted, but it has forced the attention of all the people on floods and their possible or probable control. This interest has made itself felt in the legislative halls of Kansas and has been instrumental in bringing about at least preliminary consideration of the needs and requirements to cope with the kindred flood problems.

It has been known for many years to those who had a clearer insight of the future that eventually the developments of rivers would require a broader plan of attack.

Former Gov. Ben S. Paulen sensed the will of the people, and accordingly persuaded a group of representative citizens to form a committee to study the problems and suggest, if possible, ways and means to solve them. This committee was commonly known as Governor Paulen's "Flood Control Committee," altho it also concerned itself with water conservation.

I quote from its report, "The committee is of the opinion that there is great need for a state policy and plan for the control and use of the water resources of the state. In its absence, development, whether for the use of water or the control of floods, cannot be expected to proceed along those orderly and well co-ordinated lines which will ultimately bring about the most effective control and greatest use of

this most important natural resource.

"The purpose of such a policy and plan should be to lay the foundation for the systematic control and development of our streams in order that the greatest ultimate benefit may be obtained from them. These matters cannot wisely be left to individuals, private corporations or governmental subdivisions if co-ordinated development and control are to prevail. Various phases of our water problems have in the past been studied independently instead of collectively, and their relationships have not always been properly recognized.

"Probably no other one of the natural resources of the state is related so intimately to all of the others as is water, and it is becoming increasingly important to the life and comfort of man. It is important, therefore, that each entire stream be studied in all of its aspects before works are built which will permanently change its channel or its discharge."

The legislature was freshly reminded by the record breaking floods of last November, and passed without serious opposition the several flood control bills that were recommended and introduced. Time has been too short to note anything but incipient progress on behalf of the flood stricken people, and the lack of both time and funds has

whether the cost will be above or below the benefits that will accrue.

In general the cause of floods is excessive rainfall. There are a number of varying factors that enter. Sometimes their combination accentuates them, and at others they tend to neutralize. No two drainage basins are alike in shape, size, slope, soil texture or plant growth, and this taken into consideration with the variation of rainfall intensity, size of storm and climatic condition provides an infinite number of combinations and consequent flood affects.

It would be foolhardy to attempt to build to cover all possible floods, and hence the engineer has contented himself with trying to find out the economic status of the communities affected and designing the works to take care of floods of such magnitude and frequency as will give fair relationship between cost and benefit.

In 1926 there was published an article in the transactions of the American Society of Civil Engineers in which was tabulated a list of more than 1,000 floods of known record which occurred all over the world. Drainage areas ranged from 100 acres to nearly 2½ million square miles. The highest flood recorded is 4,170 cubic feet a second, from an area of about

were obtained in the short space of six years. A period of 60 or 600 years would give more assurance that the combining influences have been more fully represented.

A number of the other streams have been studied similarly. In the course of time this information will enable responsible authority to forecast with greater precision and consequent benefit to the affected areas. It is information of this character that must form the basis of creative and administrative judgment, neither of which can be had unless data is collected, correlated, and digested into usable form.

Topeka, Kan. J. B. Spiegel.

Legumes Build Up Soil

Nitrogen gatherers belong to the legume or clover family, most of which take their nitrogen from the air and do not reduce the content of soil nitrogen. These crops, when plowed down as green manures, add directly to the crop-producing power of the soil. In order that the plant may obtain its nitrogen from the air the soil must originally contain or must be inoculated with a special type of bacteria, the presence of which is noted by the growth of nodules upon the roots thru which the nitrogen is obtained.

Most well tilled soils contain the bacteria in abundance which inoculate the different kinds of nitrogen gathering plants, especially if the soils are well supplied with lime. Of the nitrogen gathering green manure crops that are used in Kansas, Red clover, Sweet clover, alfalfa, cowpeas, soybeans, and winter or hairy vetch are the most common.

The nitrogen consuming or non-leguminous green manure crops are those which can obtain their nitrogen only from the soil. This type of plant may increase the organic matter supply in the soil to some extent, but it does so at the expense of the other plant food materials that are already present. Some of the most common green manure crops that draw upon the soil for their entire supply of plant food are: rye, wheat, oats, barley, rape, and turnips. The main use of these crops is to prevent the possible loss of nitrogen and other plant foods by leaching. It is true that they greatly improve the physical condition of the soil through the addition of organic matter. Their use should not be generally recommended except on those soils which are not adapted to the production of legumes or nitrogen gathering plants.

Manhattan, Kan. S. D. Capper.

Will Produce Strong Children

I agree with Hal Borland, who in a recent article in Kansas Farmer declared that farm life gives boys self-reliance and a strong physique. When two of my boys were visiting my sister in Lawrence several years ago, and she was showing them over the university grounds, two professors walked behind them for a short distance. One remarked to the other, "Just look at that little boy. See those arms and legs and that head. You don't see 'em around here like that very often."

Later in life, when the two boys were 13 and 15 years old, a salesman in a clothing store, while fitting the boys with suits, told me that they were better developed about the shoulders and arms than any of the city boys. There was a very evident difference.

And I also think that the country boy has a much better opportunity to learn about mechanics. There are some real and definite advantages to rural life which perhaps should be appreciated more by we folks who live out in the open country.

Mrs. Daisy D. Cook.

Randolph, Kan.

It Doubles the Profit

Small savings in costs are usually much more important than they seem. For example a reduction in the cost of producing a bushel of corn from 70 to 65 cents does not seem very much. If the corn is worth 75 cents a bushel, the profit has been increased from 5 to 10 cents or doubled.

Manhattan, Kan. W. E. Grimes.

Give the Packers a Chance

TWO of the big packing companies, Armour & Co. and Swift & Co., have filed petitions asking the Supreme Court of the District of Columbia to modify the famous consent decree so that they may handle other products than meats and may operate their own systems of retail distribution. The petitioners declare (1) that changes in methods of marketing make the consent decree's restrictions unnecessary; (2) that such restrictions on four packers are contrary to public interest, preventing them from making full and economical use of their facilities; and (3) that the decree is unjust and contrary to the law intended to assure free and open competition, since it prevents them from doing what their competitors are permitted to do. Most of which is correct, but not the first. The restrictions were not necessary in 1920. There never was any sense in barring from legitimate business those who could do it economically. There is not the slightest reason now to perpetuate a policy that is not sound, never was sound and is not in accord with the American principle of equal opportunity in business.

Packers not restricted by the consent decree can and do handle whatever foods they choose. They can and do operate their own retail systems. Chain stores can operate meat markets and packing houses too, and do it. All this is fair enough but it is not fair to deny the same privilege to a few packers who hadn't any more gumption than to consent to restrictions under pressure back in 1920. The producer of livestock is interested as well as the consumer of meats in the most economical distribution, for naturally he shares all the economics anyone is able to effect. That is why organizations of producers are supporting the present movement to modify the consent decree.

There is another inequality in the meat business which cannot be corrected by the courts or by any other single agency. Packers doing interstate business and therefore subject to federal inspection must compete with those who are subject to no inspection at all because their business is not interstate. Some of these uninspected houses need supervision for the sake of public health, and they should be subject to state inspection comparable with federal inspection. State legislation alone can attend to this, so it is not likely to come to pass at an early day.

handicapped the Water Resources Division in carrying out its plans. In the absence of such adequate support a more restricted program of investigation has been and is being carried out. The same policy of stream gaging is being done co-operatively with the United States Geological Survey. Twelve years of such records are now available.

It is unfortunate that more data is not at hand so that a better understanding of the physical conditions involved could be obtained.

The chief engineer of the Division of Water Resources has been given certain powers and duties which require the exercise of judgment. Intimate and detailed information is welcome, yet in most cases is not available. However, studies have been made concerning (1) the relation between size of watershed and maximum recorded runoff, (2) relation between amount of rainfall and runoff, (3) relation between magnitude of storms and the frequency of their occurrence in Kansas.

The conservancy act provided that no district shall function if the cost of the improvement shall exceed the benefits. It is plain to even laymen that something more than high water marks are necessary in order to determine

400 acres. For the extremely large areas the runoff a square mile is low, but of course the volume of discharge is very large.

Some studies have been made of data pertaining to Kansas rainfall and runoff which it is hoped will serve at least as a guide in preparing reasonable standards for construction.

The data revealed that in Eastern Kansas an average rainfall of 7 or more inches in 24 hours can be expected once in 30 years and that for a 48-hour period 8 inches or more may be expected once in 30 years. The area involved is about 40,000 square miles. Noted authorities believe that extremely heavy precipitation occurs within areas of not more than 20-mile diameters. What, then, is the probability of a flood of this or that magnitude occurring at a certain place? Wherever the basic data for such determinations are available, the question can be answered because the mathematical machinery is ready.

Of the 14 storms which produced floods at Iola, there were five instances in which more than half of the rain which fell ran off as surface flow, and the ratio of rainfall to runoff varied from 12 to 71 per cent. All these records

Flower Lovers Have Fine Meetings

Johnson County Boasts Floral Club at Shawnee Mission

By Florence G. Wells

HAVE you ever attended a rural flower show? I have, and as I walked along the aisles, bordered by the 148 floral exhibits, I wished every community in Kansas could have a display of their choice blossoms this autumn. Twice a year, in the spring and in the fall, the Shawnee-Mission Floral Club of Johnson county, Kansas, exhibit their flowers at the school house.

It is not a new movement in the Shawnee-Mission neighborhood. The club is 7 years old. Every month a meeting is held, in the school during the winter months and in the gardens of the members in the summer. The program is given at night, which enables men, women and children to attend. At the present time the membership is 150 persons.

A board of nine directors is elected. Each of these nine men is responsible for one program during the year. From the board of directors the officers are selected. This year they are: Percy W. Smith, president; Mrs. J. Boe Murphy, vice-president, and Miss Clara Buck, secretary.

The meetings open with a five minute botanical discussion by one of the club members. Then the program is devoted to the consideration of one flower, as a rule. The last meeting was on native vines, and the speaker brought with him 20 different ones that he had found in the woods of Johnson county.

The community is flower-minded. That I knew when I had been in it less than an hour. Along all the highways are homes surrounded with neat and beautiful grounds. Leaders in the club feel that this is visible evidence of the effectiveness of the organization. It is an inspiring community effort and one that will spread to other sections of the state.

Is Your Child Different?

WE HEAR much about "inferiority complexes." Not understanding it we laugh it off as "bunc." But whether or not we know the meaning of this expression, we must be on the alert to avoid making our children feel "incapable" or "inferior."

The child will learn to think of himself as incapable of accomplishing anything alone with mother or father so constantly assisting the child after he is able and eager to carry on.

If the parents or older brothers and sisters entertain the "baby" by drawing for him, the child's desire to perform will be smothered by the feeling of inability to attain the perfection of his examples.

Children who are commanded about to satisfy every whim of their parents, regardless of the injustice of the demands, will grow to depend upon parental direction, long after they should be making their own decisions.

"Funny" clothes, consciousness of gossip about the family, repeated failure in lessons at school and many another cause tend to set a child apart from his group. He feels inferior because he is not like the other boys. He may become shy, retiring, quiet, preferring to read or play at home to the joyous, boisterous play of his fellows. Or he may become extremely egotistical and boasting of his prowess in his fights, or of his good grades at school. Thus he attempts to divert attention from his weak points.

Parents as artists and scientists, must learn to stand back and observe their children as if they belonged to some one else. Only in this way can they see their mistakes and be able to rectify them before it is too late. Adults who are social failures are the direct result of parents who failed. Thru ignorance or indifference, they let the biggest job of their lives slip.

Is your gift to the world a normal, happy, progressive individual who is trained to think his own thoughts honestly? Or, are you presenting to society a man or woman so dominated and bound by parental commands and prejudices that he is totally unable to assume his share of the world's work and carry thru successfully?

Catharine Wright Menninger.

If you are interested in the nervous system of your child and in his behavior habits, there is a booklet called "Habit Training for Children" which we feel would be helpful to you. We shall be glad to send it to you on receipt of a 2-cent stamp and your name and address. Write to Women's Department, Kansas Farmer, Topeka, Kan.

Let Pickles Help Your Purse

THERE weren't enough green tomatoes, onions, or mangoes to use separately as pickles, so I just put together all the vegetables that were left in my garden and called it "Last of the Garden" relish. That is how I heard one housewife explain the origin of a most delicious relish she served one day at dinner.

Perhaps you have a favorite pickle recipe you like to use late in the fall when the cucumber

crop is dwindling and it is almost time for frost. The foods editor of the Kansas Farmer is eager for these favorite recipes of yours and is offering prizes for the best ones sent in. The first prize is \$5 and for all other recipes that can be used, the editor will pay \$3.

Address your contest letters to the Foods Editor, Kansas Farmer, Topeka, Kan.

Changing Grapes Into Jelly

DEAR LITTLE COOKS: You are indeed fortunate if you have grapevines in your yard, for this time we are going to learn to make grape jelly. The grapes should be picked over, washed, and the stems removed before putting them into a preserving



kettle. Heat to the boiling point, mash and boil for 30 minutes. Strain thru a coarse strainer, then allow the juice to drop thru a double thickness of cheesecloth or a jelly bag. Measure, bring to the boiling point, and boil 5 minutes; add an equal measure of heated sugar, boil 3 minutes, skim, and pour into glasses. Place in a sunny window, and let stand 24 hours. Cover, and keep in a cool, dry place.

Of course Mother will want to help you make this jelly, for it is hard to get it just right, but you will know enough about it to do the principal things. Here are some more little pointers to getting ready to make jelly. It might be well to copy these in your notebook with the other things you want to remember especially.

In getting the glasses ready for the jelly wash

and put in a kettle of cold water; place on the stove and heat water gradually to the boiling point. Remove the glasses, and drain. Place glasses while filling on a cloth wrung out of hot water.

To cover the jelly glasses after they have set for 24 hours, heat paraffine and pour on top of the jelly.

The jelly bag which is used in making most jellies is made by folding two opposite corners of a piece of cotton and wool flannel $\frac{3}{4}$ yard long. Sew up in the form of a funnel, rounding at the end. Bind the top with tape and make two or three heavy loops by which it may be hung.

And now, little cooks, you know how to make

Efficient Fly Trap

IS THE fly swatter too slow for you? Many times it is, especially in homes where small children are running in and out of the house constantly, leaving doors open for the pest to sneak in. If the swatter is too slow, why not try a fly trap and one of your own making? Kansas Farmer has a leaflet "The Home-made Fly Trap" which we will be glad to send you on receipt of a 2 cent stamp. Address your request to Women's Department, Kansas Farmer, Topeka, Kan.

jelly, don't you? Next winter it will taste so good with hot biscuits, or over pancakes.

Next month we will have a contest, and it will be a surprise. Be sure to watch for the announcement in this column.

Your little girl cook friend,

Naida Gardner.

Success or failure in business is caused more by mental attitude even than by mental capacities. —Walter Dill Scott.

White Cloud Finds a Library

By Florence G. Wells

THAT White Cloud community should have a library" was the decision of the study club of that neighborhood and that conviction carried with it an urge for action. The result is that White Cloud with a population of only 500 now has a library dedicated to the town,

the school and surrounding community.

It was just a year ago that this club, composed of 20 women equally divided between town and country, embraced the project. Now they have a library building paid for and 700 selected books aside from a nice collection of magazines and modest



but comfortable furnishings for the building. Co-operation is the keynote to their accomplishment. Waffle suppers and rook parties in which

the whole community took part were the means of collecting a good part of the necessary coin. A book shower for which every member invited five guests each of whom brought a book, increased the number of books materially and in addition they have procured the services of the traveling library which brings a touch of constant change.

Of course it would be impractical to hire some one as librarian so each member of the club takes the responsibility of keeping the library open for a Saturday afternoon, in turn.

The building which was purchased by the club for their library is a deserted office building. By united effort it was put in shining condition. Tables and chairs were donated and the shelves for books are the work of a clever local craftsman. Next year's program calls for paint and general repairs for the building.



Left:—The Interior of the White Cloud Community Library With Its Inviting Rows of Books. Right:—Mrs. W. D. Beven Who Organized the Study Club Four Years Ago Was Snapped Registering Some New Books for the Shelves

Sunday Eats Lead to Farm

BY MARY E. BORDER

THE superfluous Sunday night suppers served by our farmer cousins was the extent of our knowledge of farm life at the time of our marriage 13 years ago," said Mrs. L. C. Henderson, co-manager of a successful dairy, mother and the only Farm Bureau president in the state of Kansas and one of the two in the United States.

When Mr. and Mrs. Henderson set up a home they moved to a 130 acre farm, having decided from Sunday evening supper observations that farming must be prosperous. Everything went well for a year and then the rosy glamor began to wear off, exposing long hours and hard work.

One day Mr. Henderson heard that the Jones' dairy was about to be sold, route and all. Mr. and Mrs. Henderson discussed buying it and called on the banker who gave them some good advice and a loan on the project.

The cows and dairy route of 72 quarts were purchased and the work began. Mrs. Henderson added to her responsibilities of housewife and mother those of caring for the milk and bottling it, while Mr. Henderson attended to the milking and delivering.

The business grew to 150 quarts and no longer is it necessary for Mrs. Henderson to care for the milk house and its duties.

More than 8 years ago Mrs. Henderson joined the Farm Bureau in Cherokee County, just when extension work for farm women was beginning there. She has been active ever since and has been president of her local club for 5 years. In 1928 she was chosen vice-president of the county Farm Bureau organization and at the death of the president a few months later, she assumed his duties. She has recently been elected president for 1929. One might gather that this busy woman neglects her home, but each year sees added improvements there. Last year it was paint for the house. The next improvement she is planning is running water.

carrying her about much at home. However, if she was carried and held a great deal on a trip it would cause her little muscles to be sore the next day. If this were the case tho, she would not cry immediately when arriving home, but she would cry each time you gave her care the next day after the trip. I doubt if the jolting of the car would cause her any discomfort unless she was taken on a long ride of several hours.

Mrs. Page.

An Inexpensive Blackboard

BLACKBOARDS of any size are usually quite expensive but one woman found a way to make one that costs less than 75 cents. She bought an inexpensive dark green window shade and a can of flat black paint. Two coats of the paint were applied to the shade, which when dry became a blackboard that could be rolled up out of the way when not in use.

Plan a One Color Garden

BY ALICE W. WILLIS

FALL is the best time to get garden hints. There are so many lovely yards and gardens to be seen, so many suggestions to write down in the garden book for next year's use.

I saw a new idea lately which I thought beautiful, a yard full of golden flowers, along walks, against the foundation, and in the borders. The rest, of course, was fresh, short, green grass, and the curtains at all the windows of the white house the same golden yellow, matching the flowers.

I fancied the idea in blue or pink, or one's favorite color.

A Menu Hunt

BY LOIE E. BRANDON

THE committee should have this game prepared beforehand by cutting from old magazines, pictures of different things that are usually associated in pairs, such as ham and eggs, pork and beans, macaroni and cheese, ice cream and cake, waffles and sirup, soup and crackers, chicken and noodles, peaches and cream, bread and butter.

The pictures of each pair of objects are separated and hidden about the room and at the proper time the guests are allowed to hunt for them. The individual finding the largest number of pairs wins. Players may, however, trade halves with each other in order to complete their pairs.

Other connected objects may be used if desired, as horse and buggy, sailor and ship, organ grinder and monkey, brush and comb, or pairs of shoes may be used in this way.

Women's Service Corner

Our Service Corner is conducted for the purpose of helping our readers solve their puzzling problems. The editor is glad to answer your questions concerning house-keeping, home making, entertaining, cooking, sewing, beauty, and so on. Send a self addressed, stamped envelope to the Women's Service Corner, Kansas Farmer and a personal reply will be given.

Cannot Set Color

Can you tell me how to set the color in a blue gingham dress? I am afraid the material will fade and not be desirable.

Mary Frances.

I am sorry that I cannot tell you how to set color. There is no home process for setting color. If colors are high enough grade to be made fast they will be done so at the factory, otherwise there is no sure "cure" for fading colors.

Treatment for Pimples

Do you have names of reliable remedies for severe cases of pimples? I am bothered with these a great deal.

Jane.

A physician should be consulted in regard to the most severe cases. However, there are creams which will cure the less severe cases, and I will be glad to send you these remedies if you will write inclosing a stamped addressed envelope. Address me, Helen Lake, Beauty Editor, Kansas Farmer, Topeka, Kansas.

Beet and onion rings covered with mayonnaise make a good fall salad.

FREE PATTERN and BARGAIN CATALOG



Popular!
FREE
Send
Coupon

F-284FW9807
A beautiful afternoon dress can be made easily from this distinctive pattern with its stylish, feminine touches of design. The uneven hemline is particularly attractive. Adapted to Silks, Rayons and like materials. Misses' sizes, 16 to 20 yrs. Women's sizes, 36 to 46 in. bust. Size 36 requires 4 1/2 yds. 36-in. material; 1/2 yd. 36-in. contrasting, 2 yds. binding. Pattern FREE—send coupon.

Just mail the coupon below, or send us a postal request—we'll send you the pattern of your choice and our beautiful Fall and Winter Style Book and Family Outfitter, without a cent of cost to you. Our 338-page catalog will save you dollars on everything to wear for all the family. It will pay you to know all about our money-saving yard-goods department, and we are making you this offer so you can see for yourself what wide varieties in everything from muslins to silks you will have to select from.

Mail the Coupon—Get the FREE Pattern and the FREE Catalog!

In addition to yard-goods bargains, the Chicago Mail Order Co.'s Big Free Catalog offers you better clothes for less money, or more clothes for the same outlay of money. 338 pages of dresses, coats, millinery, women's and misses' shoes, men's and young men's suits, work clothing and shoes, children's apparel of all kinds, as well as many useful articles for the home. Lowest prices and satisfaction guaranteed.

Get Your FREE Pattern and FREE Catalog—We Pay the Postage!



FREE
Send
Coupon

F-284FW9803
Smart 2-piece street ensemble when developed in Woolens, heavy Silks, etc. Sizes, 14 to 20 years, or 36 to 44 bust. Size 36 requires 6 1/2 yards of 36-inch material; 1 1/2 yards of 40-inch contrasting, 1/2 yard of fur; 1 yard of 36-in. cambric material. Pattern FREE—send the coupon.

Trims 2-piece frock for school will develop from this 2-piece bolero jacket dress pattern. Very youthful and popular. Sizes, 8 to 14 years. Size 8 requires 2 1/2 yards of 36-inch material for bolero and skirt; 3/4 yards binding; 1 1/2 yards of 36-inch material for waist, collar, cuffs, etc. Pattern FREE—send the coupon.

Trims 2-piece frock for school will develop from this 2-piece bolero jacket dress pattern. Very youthful and popular. Sizes, 8 to 14 years. Size 8 requires 2 1/2 yards of 36-inch material for bolero and skirt; 3/4 yards binding; 1 1/2 yards of 36-inch material for waist, collar, cuffs, etc. Pattern FREE—send the coupon.

Send Coupon and Get FREE Pattern and FREE Catalog

The free pattern will mean much to a stylish, thrifty woman—the catalog will mean much more! Now you can have the pattern you want and the catalog—both absolutely FREE. Remember, we guarantee Lowest Prices and Pay Postage on every order.

EASY to MAKE



F-284FW9800
This pattern will make an attractive street or afternoon dress when developed in Silks or light-weight wash goods. Misses' sizes, 16 to 20 years. Women's sizes, 36 to 42 bust. Size 36 requires 6 1/2 yards of 36-inch material, with 1/2 yard of 10-inch contrasting material. The model shows the latest tendency of the latest tier and flare, and is easily developed. Send the coupon—get the FREE pattern and catalog.

F-284FW9797
Simple lines, rippling tiered skirt and the jaunty jabot frill gives this pattern the voguish one-sided effect. Adapted to voiles, silk or cotton prints, or similar material. Misses' sizes, 16, 18, 20 years. Women's sizes, 36 to 42 inches bust. Size 36 requires 4 1/2 yards of 36-inch material, or 5 1/2 yards of 40-inch material, in addition to 1 yard of ribbon. FREE—send coupon.

FREE
Send
Coupon

Mail This Coupon for FREE Pattern and FREE Catalog

Dept. F-284 CHICAGO MAIL ORDER COMPANY, CHICAGO, ILL.
Send me absolutely FREE, pattern No. _____ Size (Bust Measure or Age) _____
(Indicate number and size of pattern you select), and Free Style Book and Family Outfitter, for Fall and Winter, showing the newest fashions in apparel, for all the family, and dry goods. (One pattern, your choice, and our big catalog, No. 100 are to be absolutely FREE.)

PRINT NAME _____
PRINT ADDRESS _____
PRINT POST OFFICE _____
PRINT STATE _____

WE
PAY
POSTAGE

DEPT. F-284
Chicago Mail Order Co.
Chicago, Ill.

The Baby's Corner

By Mrs. Lina R. Page

Mrs. Page will be glad to help you with any of the puzzling problems concerning care and training of your children. Her advice is seasoned with experience as a farm mother and years of study. Address her in care of Kansas Farmer, Topeka, Kan.

Tomato Juice Good for Baby

FROM Mrs. R. H. we have the following: "I have been reading your articles and enjoy them very much. We have a dear baby 3 months old. I give her orange juice daily but we live in the country and oranges are not always available. How should tomato juice be given?"

"One of my most difficult problems is one that I have never heard discussed. Our baby seems to dislike being taken away. Does the draft of riding in a car cause babies to have colic or could the jarring of bumps cause it? If I keep her wrapped up too much she sweats so and we do not have a sedan so there is much wind when we ride. It seems every time we take her away she has such a crying spell when we get home. As a rule we do not handle her very much at home. Could it be that keeping her so quiet would cause her to notice the extra amount of shaking more?"

Tomato juice for a baby is prepared by stewing fresh, ripe tomatoes and straining off the juice or by straining choice canned tomatoes. The baby may have about twice the amount of clear tomato juice as she has been having of orange juice.

The draft or strong wind from riding in an open car many times causes a baby to have colic. This is in all probability the cause for your little one's crying after a ride. If you could nestle her down in a wrap that is not too heavy and then cover the opening to her face with a thin, open mesh cloth such as a medium grade of cheese cloth doubled it should help in keeping the wind out of her face. Of course, you will need to keep watch that she doesn't turn her head in the wrap so as to interfere with free breathing.

You are right about not handling or

Why Not Try Your Luck at Puzzles?

I AM 8 years old and in the fifth grade. I go to Baker school about 1/2 mile from our house. We live on a 240-acre farm. We have to go 1 mile for our mail. For pets I have a dog named Trixie and two cats named Maggie and Jiggs. I enjoy the children's page and always work the puzzles. I wish some of the girls and boys would write to me.

Caldwell, Kan. Maxine Baker.



There was some argument whether or not Grandpa Horner had a cork right leg, but the kids settled all doubt with the aid of an air rifle.

Diamond Puzzle

1. —
2. — — — —
3. — — — —
4. — — — —
5. —

1. A consonant; 2. Meadow; 3. A shrub; 4. Maturity; 5. East (abbreviated).

From the definitions given fill in the dashes so that the diamond reads the same across and up and down. Send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 girls or boys sending correct answers.

Martha Likes to Draw

I am 13 years old and live way down in the point of Texas nearly 5 miles from the Rio Grande river. I am from Kansas. I have lived in Texas three years. For pets I have a blue eyed cat. His name is Muggins. People say he is so smart even if he is deaf. I am in the eighth grade. I have blonde hair and blue eyes. I am 4 feet, 9 inches tall and weigh 98 1/2 pounds. My birthday is February 14. Do I have a twin? I can draw

fairly well. I'd like to hear from some of the girls and boys.

Martha Osa Wheeler.

Donna, Tex.

Try to Guess These

What is that which is bought by the yard and worn by the foot? A carpet.

Why is a sleepy man like a carpet? He will have his nap.

When does a cane take the place of a man's head? When he hangs his hat on it.

Why is a stick of candy like a race horse? The more you lick each the faster it goes.

What is that which you cannot hold 10 minutes, altho it is as light as a feather? Your breath.

What is that, tho blind itself, guides the blind? A staff or stick.

Why does a preacher have an easier time than a doctor or a lawyer? It is easier to preach than to practice.

When is a turkey like a ballot-box? When it is stuffed.

Which is proper to say, 5 plus 4 is

11, or are 11? Neither; 5 plus 4 are 9.

What is the very best and cheapest light, especially for painters? Daylight.

What is the most difficult key to turn? Don-key.

What is the favorite fruit of history? Dates.

What is it that runs all the way between two towns and never moves? A road.

What is that which goes up the hill and down the hill, and yet stands still? The road.

What is the difference between the Prince of Wales and the water in a fountain? One is heir to the throne, the other thrown to the air.

We Hear From Gertie

I am 9 years old and in the fifth grade. My teacher is Mrs. Akin. I live close to school so I can go home for my lunch. I have a sister 12 years old. Her name is Doris. She is in the eighth grade. My birthday is January 9. I live 13 miles from Ft. Collins, Colorado and 13 miles from

Loveland, Colorado. I enjoy the children's page very much. I always read it first. I wish some of the girls and boys would write to me.

Gertie L. Gardner.

Masonville, Colo.

How Many Sheep?

Can you help Little Bo Peep find her lost sheep? There are six of them in the picture besides the little black lamb at the foot of the tree. Send



your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 boys or girls sending correct answers.

Anne and Lindy Are Pets

For pets I have a little calf named Jack and two little Bantams named Anne and Lindy. I am 9 years old and will be in the fourth grade this fall. My birthday is December 20. I haven't any sisters but I have two brothers. Their names are Walter and Earl. I wish some of the girls and boys would write to me.

Delavinia Elnor Harding.

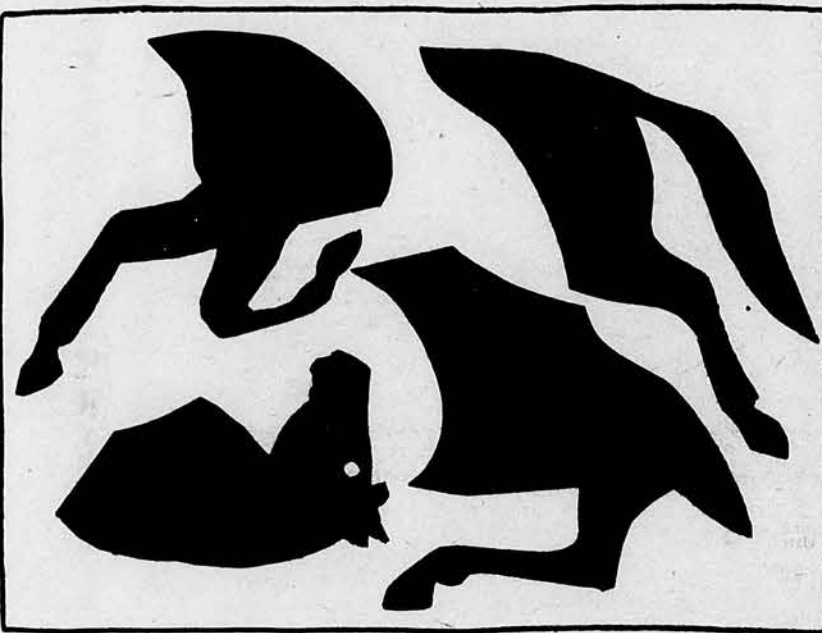
Isabel, Kan.

Helena Has Plenty of Pets

I am 14 years old. My birthday is August 23. Have I a twin? We live on a 240-acre farm 2 miles from town. I am a freshman in school. I go to Crawford Community High School. I have a fair complexion, blue eyes and blonde hair. I am 5 feet, 2 inches tall and weigh 122 pounds. I have two brothers but no sisters. Both of my brothers are in Detroit. For pets I have a dog named Sport, a pony named Spot, two cats named Lindy and Snowball. I also have a pet cow named Daisy.

Helena Eilbrecht.

Cherokee, Kan.



Cut out the black portions of this puzzle and fit them together to form the picture of an animal. When you have found what animal this is, send your answers to Leona Stahl, Kansas Farmer, Topeka, Kan. There will be a surprise gift each for the first 10 girls or boys sending correct answers.



The Hoovers—Buddy Discovers That All Flappers Don't Talk About Dances



Rural Health

Dr C.H. Lerrigo.

Proper Diet Is Important in Building Teeth That Will Last Thru the Years

OUR teeth make a lot of trouble for us. But we take pride and pleasure in them at their best, and the philosopher who can really console himself with the fact that "store teeth" require less care is about sure to be approaching senility. The time to begin the care of teeth is before birth. The kind of teeth owned by mother and father have an influence on those bequeathed to the baby. Especially is this true of the mother in the "expectant" period. The buds of the baby's teeth are forming then, and the mother's diet has its influence. It should include vegetables, fruit, milk, whole wheat bread, butter and cream, but needs little in the way of rich foods and sweets.

Do babies really have "teething sickness?" I have heard eminent doctors insist that cutting teeth is a natural process and produces no fever or other disturbance. On the other hand, what mother has not seen the sick, peevish babe blossom into a thing of health with the appearance of the pearly white corner of a new tooth? I agree that it may be a great mistake to be too complacent about a child's teething fever. It may be something else, and if the fever is continuous it surely is. But long experience has convinced me that many a baby has a fever and other disturbing symptoms with every tooth that comes thru.

Is it any good to lance the gums? I have given relief that seemed instantaneous in some cases. In others I have lanced gums with no immediate effect. But I feel that it is a safe measure when skillfully done, and anything that gives a chance for relief is well worth the attempt. However, I object to teething rings and similar devices. They cannot be kept clean and are likely to do harm.

From the time the first tooth is cut there should begin a process of daily cleansing. When the child grows old enough to wield a toothbrush he will thus acquire the habit naturally. Not only is cleanliness needed, but also milk, green vegetables, and other foods to supply tooth-building elements. And the child trained to this will never need "store teeth."

What Are Guarantees Worth?

Almost daily the Health Adviser is asked to give his opinion of some highly advertised and guaranteed product that is supposed to work wonders in healing disease or overcoming physical handicaps. In one day's mail came a letter from a short boy who was assured that a certain device would make him tall; another from the father of an epileptic daughter asking about a guaranteed cure for epilepsy; and another from an elderly man who wished to know if the virtues guaranteed for a rejuvenating "radium belt" might be depended on. "Why do you knock on all of them?" asked an editor. "Don't you ever get a good one?"

Rarely I do, and such I am happy to recommend. But the naked truth is that remedial agents of genuine value seldom or never work under guarantees. They do not have to. Their good faith is shown by the work of their products. I have never known a case in which nostrums backed by a guarantee were worth while. Neither have I ever known a case in which the guarantor did not leave a hole thru which he could crawl out. The very fact that an advertised agent is "guaranteed" may well cause you to be suspicious. If your lawyer checks over that guarantee he can show you the hole.

More Rest Might Help

I feel bloated up most all the time, especially after eating. Even milk will do it. Is milk good for everyone? Could this be ulcers of the stomach? Can it be cured with medicine?

In your case it will pay you to have a doctor examine you who can analyze the stomach contents and also take

X-Ray pictures of the stomach. In this it can be ascertained if you have ulcer of the stomach. Many cases of stomach ulcer are cured by rest, proper diet and appropriate medicine.

Go to a Surgeon

About six months ago I was operated on for the removal of a large fibroid tumor, appendix and pelvic organs. I am still quite sore thru my abdomen, but working about the same as I ever did. It hurts me more of nights when I lie still. Ought I to be sore now, and must I continue to wear a bandage?

Mrs. X. Y. Z.

After such an extensive operation nature has a lot of adjustment to make, so perhaps it is not surprising that you have soreness. However, there can be nothing much gained now by wearing bandages. In such important cases the patient has a right to go back to the surgeon for inspection and advice, and I think you should do so.

Not a "Light" Case?

I have a light case of T. B., and my local doctor has prescribed creosote taken in a glass of milk. Sometimes it burns my lips and tongue. I'm wondering if this would have any lasting harmful effect on my stomach and of what curative value it is.

Mrs. M. E. G.

Your doctor may have some special reason for giving the creosote. It is his business to make sure that the dosage will not do you harm, and I cannot tell about it. In my own opinion the best way to handle any case of tuberculosis is to enter a sanatorium and take the regular course. People often delude themselves about a case being "light."

Might Be an Abscess

Just before my baby was born a lump came in my breast. It grew larger after the birth, and my milk dried up. Baby is now 3 months old, and the lump is twice the size and hurts all the time. What do you think best to do?

Mrs. E. R.

A good doctor should carefully inspect the lump. It may be an abscess, it may be only an enlarged gland, or it may be something more serious. It is too important to neglect or be content with home treatment.

Codliver Oil an Aid

I would like to have you tell me what to do for a bronchial cough.

S. A. R.

A bronchial cough may be due to some heart trouble; it may be tuberculous, or it may be due to dilated bronchial tubes. The first essential is a definite diagnosis. Rest treatment is always helpful no matter what the cause. Many such coughs are helped by codliver oil.

Fires Can Be Prevented

It is hard to believe that nearly 100 farm buildings in the United States and Canada burn every day—35,000 a year—but this serious fact is revealed by statistics. According to estimates, 3,500 persons are burned to death in farm fires every year, and 150 million dollars, nearly one-third of the national fire loss, occurs on farms. The loss is greater because farm buildings are often without the protection of water systems or fire departments, and usually burn to the ground when a fire starts.

The National Fire Protection Association makes the following suggestions for fire prevention:

Provide a system of running water under pressure.

Provide all buildings with proper lightning protection equipment.

Rebuild all defective chimneys and see that all heating apparatus is properly installed. Keep chimneys, flues and stoves clean.

Allow no smoking in barns, or elsewhere where combustible material is stored.

Use fire retarding roofings.

Thoroughly cure hay, pea vines and other roughage before these are stacked in barns.

Do not allow horse manure to accumulate in large piles in stables or against buildings.

Provide proper facilities for the storage and handling of gasoline and kerosene. Do not use gasoline for home cleaning or kerosene for starting fires.

Make sure all electric wiring and devices are properly installed.

The automobile has shortened the distances between all points except parking places.

At last-- the Washer I've always wanted



Washes
swiftly
gently
thoroughly

FARM WOMEN TELL US* that here at last is the washer they have wanted... the machine that really does the wash-day work... that washes clothes swiftly and thoroughly, yet so gently that the daintiest garments are unharmed.

No wonder then, that the new Horton Perfect 36 is winning such widespread favor... in farm homes particularly, where it robs the wash-day of its back-breaking, time-killing drudgery.

Besides, the Perfect 36 is so dependable that its mechanism is sealed at the factory. You'll never be bothered with the need for tinkering repairs. You may choose a copper or porcelain tub, in any of several beautiful color combinations.

Let the Perfect 36 prove its superiority, with your next washing. Your dealer will gladly arrange it, without cost or obligation. See or call him now. Or send the coupon for further information, including illustrations in actual color.

* Their letters are in our files.

EXCLUSIVE KANSAS DISTRIBUTORS

A. J. HARWI HARDWARE CO.
Atchison, Kansas

HORTON

A GOOD NAME FOR 58 YEARS

HORTON MANUFACTURING
COMPANY

937 Fry St., Fort Wayne, Indiana

Continued: Please tell me why the Horton Perfect 36 is superior, and send literature showing the washers in their actual colors.

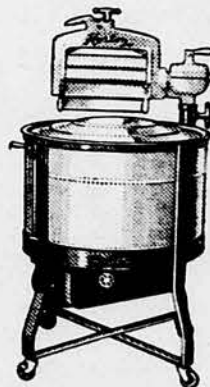
Name _____

St. or R. F. D. _____

City _____

State _____

Dealer's Name _____



The Perfect 36 may be had with a dependable four cycle gasoline engine, as pictured at the top of this ad, or with electric motor, as shown here, for standard current or farm power plants. Also available in power pulley type.

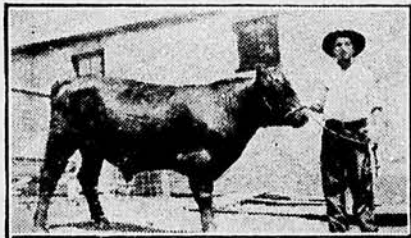
Osage Boys Win the Cups!

Overbrook Community Show, Featuring Club and Vocational Projects, Was a Big Success

BY J. M. PARKS
Manager, The Copper Clubs

NORTHERN Osage county saw the climax of a very successful year of club work and vocational training when people from several communities met at Overbrook August 31, for a stock show and fair. The achievement was the happy outcome of friendly co-operation between the Copper Clubs, the 4-H Club, headed by E. L. McIntosh, county agent for Osage county, and the department of agriculture of the Carbondale Rural High School, of which E. I. Chilcott is director. These organizations, of course, had the backing of a group of public spirited farmers in one of the most prosperous sections of the state. Overbrook secured the fair by offering to furnish a barn and to feed the stock and exhibitors free.

It was an easy matter to get plenty of stock to show, for the Carbondale vocational boys alone were feeding 21 calves and 85 pigs. Then there were some club projects in addition to



Cylvia Hammett, Marshall County, and His Angus Calf

these. The show was for club projects exclusively, and no adult breeders exhibited.

There were a number of prizes and trophies awarded, among which were two silver cups offered by Senator Capper—one for outstanding achievements in calf club work and one for outstanding achievements in pig club work. The former went to Lee Kaff, leader of the Osage Copper Club team, whose Angus calf was declared grand champion. The other cup went to Irwin Hanson, whose litter of nine 5-months old Durocs weighed 1,930 pounds, or 220 pounds each.

J. J. Moxley, of the extension department of the Kansas State Agricultural College, acted as judge. He complimented the boys on their work in the show ring as well as on the results they have achieved in the way of producing a high grade of stock. He said he did not want to encourage too high hopes but that some of the stock, especially the grand champion, would likely be heard from again.

The complete list of winners at the Overbrook Community Fair was as follows:

Shorthorn Baby Beef (Junior Yearlings) Kenneth Cooper, 1st and 8th; Harold Cooper, 2nd and 4th; Harold Supple, 5th; Corinne Supple, 6th; Russell Israel, 7th; and Charles Israel, 9th.
Shorthorn Baby Beef (Senior Calves) James Tomson, 1st and 3rd; Lewis Carriger, 2nd and 5th.
Angus Baby Beef (Junior Yearlings) Lee Kaff, 1st; Heaston Pierce, 2nd; and Francis Little, 3rd.
Hereford Baby Beef: Willis Van, 1st; and Frank Winans, 2nd.



Here You See the Trego Ramblers and the Visitors Who Met With Them for Their Club Picnic in July

Lee Kaff's Angus was acclaimed the grand champion.
Duroc Hogs (Fat Barrows) Irwin Hanson, 1st and 2nd.
Duroc Hogs (Breeding Gilt) Lee Kaff, 1st; Irwin Hanson, 2nd and 3rd; and Wallace Gardner, 4th and 5th.
Poland China Hogs (Fat Barrows) Charles Cooper, 1st; Edward Cooper, 2nd and Heaston Pierce, 3rd.
Poland China Hogs (Breeding Gilt) Lee Kaff, 1st and 3rd; Charles Cooper, 2nd; Edward Cooper, 4th; and Heaston Pierce, 5th and 6th.

So We Live and Learn

Jewell, Kansas.

Manager, The Copper Clubs.

Dear Sir:

I've had rather poor luck this month.

Some guy ran over one of my chickens when he ventured too far onto the road.

I took a pen of my chickens to the North Central Kansas Free Fair and, what do you think? Out of almost 55 roosters I picked a poor one. He was breeding back to the rose comb. One man said my pullets were fine. After we got home from the fair we looked at some more roosters' combs and they were all right.

I had never exhibited before and never thought about looking at the comb real close. I think I'll remember next time to look at all points of my roosters.

I lost my club pin. Will you please send me another?

Yours truly,
Beth Byers.

We found the following letter interesting because the writer just simply makes you see that little group of club folks get acquainted and enjoy the day together.

Garden City, Kansas.
September 2, 1929.

J. M. Parks, Manager, The Copper Clubs,

Topeka, Kansas.

Dear Club Manager:

We have had two meetings in August. I could not get time to report them earlier.

Our first meeting was held at my home on August 15, when we voted a picnic on the Beaver Creek some 50 miles north of Garden City. Everybody voted a sure go, but when the day came, just four of us members made the trip. We had a fine time, except that I had never seen a real steep, rocky hill before, and I ran up one and then fell and rolled down the other side. Sure I cried! I skinned my back and arms and bruised my head like a real wreck.

Well, I am getting my report all about me. Bobbie Becket and Lewis Wilkes went with us. They had never met before nor had we seen Lewis. Well, we got the shock of our lives. We had figured him a red headed boy because his sister had red hair. But no, Lewis was a dark haired fellow who is planning to be a real farmer of the future years in Kansas.

The boys liked each other well and in fact were almost the same size. It was Lewis' first time to meet with us, so we read a lot of the rules and all about the fair and of the winding

Products of the Farm...Potatoes



A Hard Row —
a Hoe — and a
NICHOLSON
MILL BASTARD FILE

THE city dweller seldom realizes the hard work needed to raise that food he is so dependent upon, the potato.

But the farmer does—and makes it easier by sharpening his hoe with a Nicholson Mill Bastard File.

The Mill Bastard is the file with which to sharpen most edged tools except the hand saw—for this job, of course, you use the Nicholson Slim Taper File,

At your hardware dealer's

NICHOLSON FILE CO.
Providence, R. I., U. S. A.



NICHOLSON FILES

A FILE FOR EVERY PURPOSE

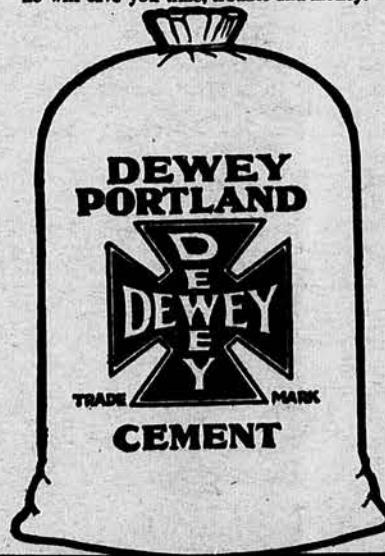
The Invisible O.K. Of Good Advice

Concrete needs no replacement when properly put in. You can be assured of the lasting benefits of this wonderful material if you

See the DEWEY DEALER

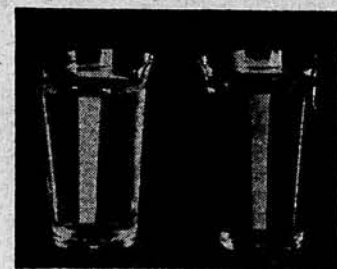
AN EXPERT ON CONCRETE

He has plans for every improvement you wish to make. His services and years of experience are yours for the asking. Take your problems, barn or hog-trough to him—he will save you time, trouble and money.



DEWEY PORTLAND CEMENT CO.
KANSAS CITY, MO. DAVENPORT, IOWA

It's all called WATER



But there are thousands of grades of water. Some is dirty, dangerous. You use only clean water, tested for purity.

And there are hundreds of grades of oyster shell. Some contain foul animal matter that cannot benefit your poultry. You can't take chances. Insist on Reef Brand . . . completely free of all animal matter, over 99% pure Calcium Carbonate. Guaranteed to increase egg-yield by furnishing necessary egg-shell material in its purest and most digestible form. Odorless, dustless. Ask your dealer.

Reef Brand
PURE CRUSHED OYSTER SHELL
FOR POULTRY

GULF CRUSHING CO., INC. NEW ORLEANS, U.S.A.

A POSTCARD WILL DO

Write the names of the magazines you are wanting to subscribe for on a postcard. Mail card to address below and we will quote you a special price that will save you money. Address, Kansas Farmer—Mail & Breeze, Topeka, Kan.

up of the year's club work, and then we ate supper before we started home. We had dinner, too, away back there in the morning just after I skinned myself up so much.

Well, folks, I wish you could all have been there. We visited the State Game Preserve and saw all its wonders. There are 640 acres of the most picturesque hills and valleys that Kansas produces.

The roads leading in from the south are graded and up-to-date with a row of white rocks along both sides for several miles that look like a white fence when you are at a distance on the hill.

Then when you enter the game preserve there is a bridge that is made of hollow iron rods, and as the car passes over them it makes a noise as tho every tire has blown out at the same time. Gee, but it frightened every one of us!

When we landed at Mr. Steele's ranch we got another shock—trees, apple trees if you please, just laden down with good, juicy apples. We bought 1 bushel of them to bring home. The Steeles were kind old folks, and Mr. Steele took us all over the place and showed us the new hydraulic ram that the state has put in to furnish water to the caretaker and to help to irrigate the place a little later.

Mrs. Steele is looking for a real city to be built in a few years right on her old rocky hillside. They have started a big dam across the creek this last week, which the state will fill with fish. This dam will be 30 feet high and 1,000 feet long. Forty men are building it.

I took in all the sights I could and would love to tell you all but I have used too much space now I expect. I will say, folks, if you ever get the chance, go see the State Game Preserve north of Scott City, on H. L. Steele's homestead. You will see wonders and get plenty of thrills. Lots of folks camp there. This trip was made the last Sunday in August and oh, I shall never forget it.

Sincerely yours,
Ruth E. Zirkle,
Leader of the Finney Stickers.



Born Third Vice-President

Ma—"I want to speak to you about Junior. He doesn't like to work and gets that Jones boy to do everything for him. I don't want to have a lazy, good-for-nothing son."

Pa—"Lazy? My stars! He shows executive ability."

Swat It First

A snake expert says if you see a snake with nine scales on its head, let it alone. It's poisonous. Yeah, but what's the snake gonna be doing while you are counting the scales on its head?

The Making of a Man

Hub—"I can't eat this stuff."
Wife—"Never mind, dear. I have some fine recipes for making up leftovers."

Hub—"In that case I'll eat it now."

Relief Man

Mrs. Newlywed—"Oh, you did splendidly with the wallpapering, darling! But what are those funny lumps?"
Mr. Newlywed—"Good Heavens! I forgot to take down the pictures."

Now You See 'Em?

If you wear a petticoat, the latest fad is to match your petticoat with your hose, if you wear hose.—Glen Elder (Kansas) Sentinel.

Masculine Ego

We read of the woman who claimed her husband was selfish because he bought himself life, accident and fire insurance all in one week.

Perils of a Sporting Life

The Colonel—"I just crept out and got the brute in my pajamas."
Dolly—"But, Colonel, how did the elephant get into your pajamas?"

Caught on the Rebound

Holiday-maker (leaving crowded boarding-house)—"I admit I don't ob-

ject to sleeping in the breakfast-room, but really I think you're going a little too far when you charge me extra for breakfast in my bedroom!"

Welcome Tears

They were talking about women friends. "Do you see Emma often?" one inquired.

"Oh, yes, quite frequently," the other replied.

"Is she happily married?"
"Is she? I should say so. Why, that girl is so happily married she has to go to the theater for a good cry."

Pants She Panted For

The will has just been proved of a man living in a southwest suburb of London who died last November, in which he left to his wife: "One pair of my trousers, free of duty, and carriage paid, as a symbol of what she wanted to wear in my lifetime, but did not."—English paper.

Change of Air

Miss Estella Smith left Tuesday for Goldsboro, as a delegate from the Red Hell Sunday School, to attend the 27th annual convention of the Sunday Schools and Christian Endeavor Societies.—Newport (Pa.) News.

Education by Ear

"Iceland," said teacher in the geography class, "is about as large as Siam."

"Iceland," wrote John at examination time, "is about as large as teacher."

Pleiades Barred

Possibly a certain leeway should be allowed to men of the sea, but the Lynn tar who has accumulated seven wives seems to have been overdoing a bit. A sailor's wife a sailor's star should be, not his constellation.

Rattling the Skeleton

Hard-Boiled Grocer—"No, sir! no checks! I wouldn't cash a check for my own brother."

Disappointed Customer—"Well, of course you know your family better than I do."

Buddying Dairyman

"Mother," asked little Jack, "is it correct to say that you 'water a horse' when he is thirsty?"

"Yes, dear," replied his mother.
"Well, then," said Jack, picking up a saucer, "I'm going to milk the cat."

We Live and Learn

Q. What was the country that is now Siberia formerly called? W. S.

A. Siberia is a Negro republic on the west coast of Africa, a country which was formerly known as Upper Guinea.—Richmond Times-Dispatch.

Slumbering Revenge

"Jimmie," said the teacher, "what is your greatest ambition?"

Jimmie considered thoughtfully. "I think," he said, "it is to wash mother's face."

Dad's Sitting Up

Mrs. F. C. —, the very proud mother of a baby daughter, has returned from the hospital. The baby and mother and father are getting along fine.—Portland (Ore.) paper.

All Ripe

Trees were uprooted in the residential section. Scores of persons were injured slightly by glass and lambs falling from trees.—Worcester Evening Gazette.

Must Have Smelt Powder

June 26 has been selected by May — as the date of her marriage to Maurice —. It will be her first marital venture.—Galveston News.

When Duty Is a Pleasure

Wife of Dentist—"What shall we give mother for her birthday?"
Dentist—"Tell her I will extract her teeth for nothing."

Rest At Last

Mrs. George — died suddenly at her home last night. She had been afflicted with the Congregational Church for the last 40 years.—Peoria (Ill.) Sunday Journal.



The scientifically accurate way to load shells



WHEN you buy shotgun shells, forget everything but the kind of game you are going to hunt. Tell your dealer you want a Remington Game Load designed especially for that kind of game.

There is a Remington Game Load for every kind of game hunted with a shotgun in North America. These loads represent the combined experience of hundreds of thousands of sportsmen.

Experience in the field developed the ideal characteristics for each load-velocity, penetration, pattern, size of shot. That is loading for exact results rather than with a fixed amount of powder. They are more uniform than loads with a specified amount of powder, because two lots of powder are seldom alike. The Remington Game Load principle furnishes the scientifically accurate method of loading shotgun shells.



REMINGTON ARMS COMPANY, Inc.
Originators of Kleanbore Ammunition
25 Broadway New York City

Remington

"I Read Your Advertisement In Kansas Farmer"—

That's what you should say when writing to advertisers. It gets quick action for you and also helps KANSAS FARMER.



Faultless Aluminum Washer

Briggs & Stratton gasoline engine power, best made. Cast Aluminum square tub agitator washer, service free mechanism, black balloon cushion rolls. Also with electric motor. Satisfaction or your money back. Ask your dealer.

Dealers and Agents, the Faultless Franchise is valuable, write

Vulcan Manufacturing Co.,
1510 Cypress St., Kansas City, Mo.

TRY THIS ON ONE PIG FREE

Your veterinarian knows and recommends SANTONIN because it is harmless yet the most effective ingredient for ridding your hogs of worms.

SANTONIN

World's Greatest Worm Destroyer
Use coupon below and send for a FREE Capsule of SANTONIN to try on one pig with worms. Follow simple directions and note results — you'll be astonished!

BOTH FREE

Send for Capsule and Booklet at once.

Make this test NOW



AMTORG TRADING CORP. Dept. 59
261 Fifth Ave., New York

Send Free Capsule of Santonin and Booklet, "225-lb Hogs in 5 Months."

Name.....

Address.....

Weight of pig.....

20 FOR YOUR OLD SEPARATOR

REGARDLESS OF AGE MAKE OR CONDITION

NEW LOW MODEL MELOTTE

30 DAYS FREE TRIAL

Trade-in your old cream separator NOW! Get \$20.00 cash for it!—in trade for the wonderful NEW Low Model Ball Bearing Melotte. Write for free Melotte catalog. Get details of our special offers—\$20.00 Trade Offer—30 Days Free Trial Offer—\$5.00 per Month Terms Offer. Write us today—NOW!—before these special offers close!

The MELOTTE SEPARATOR, Dept. 28-28
H. S. Babson, U. S. Mgr.
2823 W. 19th Street, Chicago
2425 Prince Street, Berkeley, Calif.

\$500 DOWN AFTER 30 DAYS FREE TRIAL

Ground Limestone

For Agricultural Purposes

Write for prices and FREE sample

DOLESE BROS. COMPANY

220 W. 2nd St., Wichita, Kansas.
Plant: El Dorado, Kansas.

BROWNING

THE ONLY
16 GAUGE
Automatic
The Lightest
12 Gauge
Automatic

No longer is it necessary to purchase a day's fun at the price of a sore shoulder and headache. The Browning shotgun is made of the finest materials in Belgium.

For Supreme SHOOTING COMFORT

An original and ingenious built-in Shock Absorber—one of the remarkable achievements of John M. Browning, the world's foremost firearms inventor—absorbs the brunt of the recoil before the jar gets to your shoulder. It is easily adjustable for heavy or light loads.

Get Complete Descriptions

Before you buy any gun, get our catalog—it explains all exclusive Browning features.

Write us as fully as you like on any questions dealing with shotguns or hunting in general.

The following Browning inventions have been adopted by the U. S. Army: Browning Automatic Machine Gun, light Browning Automatic Machine Gun, heavy Browning Automatic Machine Rifle, and Browning Automatic .45 Calibre Pistol.

BROWNING ARMS CO.
Founded 1870 by John M. Browning
Ogden, Utah

Mail the Coupon NOW!

Please send your illustrated catalog on Browning Automatic Shotguns. No obligations on my part.

M

Street

City

State

Farm Crops and Markets

Producers Are Busy Preparing Land for Wheat; There is Little Volunteer Growth

THE preparation of the wheat fields for seeding is well under way in Kansas, altho this work has been delayed considerably in some communities by dry weather. There is far less volunteer than usual in the fields, which is at least one cheerful item. Livestock is in good condition, taking the state as a whole, and the fall crop of pigs is arriving. Silo filling has been one of the main farm jobs recently.

Business was unusually active during the winter months, moved forward vigorously in the spring, maintained its vitality during the summer, and entered the autumn season on a sound basis with prospects for continued prosperity for the remainder of the year. Industrial profits in practically all lines for the first six months surpassed by a substantial margin the highly prosperous first half period of 1928. Despite this phenomenal performance, general commodity prices have fluctuated within a narrow range, inventories, except in isolated cases, have not been burdensome, and for the most part production schedules have been kept within fairly reasonable bounds.

These accomplishments in industry and trade have exceeded even the most optimistic forecasts made in the early part of the year. In view of the prolonged period of general prosperity, the question naturally arises as to its possible continuance. To even the most casual observer the performance of the last few years has represented more than the mere increment of growth which comes with a normal increase in population and a gradual development in industry. A combination of forces has brought about revolutionary changes. This upward movement has not only multiplied our wealth many fold, but it also has transformed practically every phase of our industrial, trade, and financial structure. With the exception of possible setbacks, prospects are that this prosperity will continue.

The steel industry has had a spectacular performance since the first of the year. Even during the usual slack summer months operations were maintained at about 80 per cent of capacity, while at the present time they are at 95 per cent of capacity. Earnings of the steel industry have been most gratifying. Unfilled orders now on the books assure a high level of activity for the next few months.

Following several months of reduced activity, building operations turned briskly upward in July, with contracts awarded the second highest in record and 12 per cent above July of last year. Based upon preliminary reports, this rate was well maintained in August. The accumulated deficits resulting from subnormal construction before many months have passed for the first six months approximately 50 per cent above the same period of 1928, the recent reduction in factory schedules was in line with expectations. Despite the unprecedented activity, however, stocks of cars and trucks are not considered unduly burdensome, as sales have kept pace surprisingly well. A substantial decline in motor vehicle production likely will take place during the present quarter, as is usual for this season.

Among textiles, the silk and woolen industries during July showed good gains in production over the preceding month, while cotton mills registered a very active season is anticipated by all three industries.

The upturn in shoe factory schedules came earlier than usual, and many plants in New England are already in full swing. According to trade reports the shoe industry will enjoy an unusually heavy business during the fall months. Indications are that production as well as the distribution of goods for the third quarter will show substantial gains over a year ago. Even though a recession should come in the last quarter, it probably would be of minor importance, as business is better equipped than ever before to make quick adjustments and to retrench without causing a general disruption.

The 1929 Cattle Outlook

Supplies of cattle available for slaughter during the next 12 months are expected to equal those of the last year. While marketings of cattle this fall probably will differ little from those of the fall of 1928, the proportion going for slaughter may be larger. Early winter marketings probably will be smaller than those of last winter. No marked change in the present active demand for beef is anticipated. Importations of cattle and beef, altho increasing, are not expected to amount to more than a small proportion of the domestic production. Demand for feeder and feeder cattle, however, is not likely to equal the unusually strong demand prevailing in the summer of 1928. The seasonal trends in cattle prices are expected to be more nearly normal than those of the fall and winter of 1928-29. Peak prices for fed cattle probably will occur later in the season this year than last, while prices of other cattle probably will follow the usual downward seasonal trend. The increase in cattle numbers which now appears to be underway is expected to be moderate.

Inspected slaughter of cattle during the first seven months of 1929 was 3 per cent less than in the corresponding months of 1928. 13.4 per cent less than in 1927 and 17.1 per cent less than in 1926. Calf slaughter in the same months decreased 5.4 per cent from that in 1928, and 12.7 per cent from that in 1926.

The decrease in cattle slaughter as compared with a year earlier was entirely in cows and heifers. For the six months, January to June, steer slaughter showed a slight increase over the first half of 1928, but was 13.4 per cent smaller than the heavy slaughter in the first half of 1927. Slaughter of cows and heifers decreased 10 per cent, and was the smallest in seven years, being almost 22 per cent below the heavy slaughter of the first half of 1926. Slaughter of cattle during the fall of 1929 may exceed that of the corresponding period of 1928, but calf slaughter probably will be less. The estimated number of cattle on feed on August 1 was a little larger than on that date last year. Reports on the probable marketings this fall from the western range states indicate a small decrease. With market supplies little changed, total slaughter will be affected by the number of cattle taken out for feeding and restocking.

Available information early in August indicated that Corn Belt feeders probably would not take out any more cattle this fall than last. Corn prospects on August 1 were much more uncertain than on that date last year, at which time it was fairly certain that a crop of good size and quality would be produced in most of the Corn Belt states. High temperatures and lack of moisture during August and early September this year would reduce materially August 1 prospects.

Range and feed conditions in the western states are much less favorable than a year ago, and in some areas conditions are the worst that have prevailed since the widespread drought of 1919. Winter range prospects are poor over large areas of the Northern Plains and Rocky Mountain states, and hay and forage production will be considerably below normal. The hay situation is made more serious by the fact that the carryover of old hay in all the western states is the smallest in some years, the heavy feed requirements of last winter being responsible for that condition.

In some of these states forced marketings of cattle undoubtedly will occur, but it is still too early to forecast how large such marketings will be or how much the feed situation will affect total cattle movements. Altho there is evidence that cattle numbers are tending to expand, cattle and calf slaughter in 1930 probably will not be greatly different from that of 1928 and 1929. Some increase is to be expected, however, in 1931 and 1932.

Imports Will Increase?

Imports of cattle and beef during the next 12 months are expected to exceed the levels of the last two years, but they will still represent only a small proportion of total beef production in the United States.

Imports of live cattle and calves during the year ended June 30, 1929, amounted to 573,236 head, an increase of 61,433 head over the 510,803 head imported last year, according to the Bureau of Animal Industry. The 1928-29 imports were equivalent to 4.2 per cent of the total federally inspected slaughter of cattle and calves in the United States during that year. Almost 60 per cent of these cattle came from Mexico, and were largely stockers. Imports from that country were considerably larger than in 1927-28. In the imports from Canada during 1928-29, slaughter cattle almost equaled feeder cattle in numbers. Drought and short crops in Canada may result in heavier shipments of feeder stock in the next few months.

Imports of fresh beef and veal amounted to 62,480,000 pounds during the year ending June 30, 1929, compared with 47,650,000 pounds in the previous year, an increase of about 30 per cent. Imports for 1928-29 were equivalent to only about 1.3 per cent of the total beef and veal produced from federally inspected slaughter in the United States during that period. Imports of fresh beef and veal from New Zealand showed a substantial increase in 1928-29, and constituted our total imports.

Imports from Canada decreased. In addition to the imports of live animals and dressed meat, there were imported into the United States during the 12 months ended June 30, 1929, approximately 65,737,000 pounds of canned beef, compared with 39,222,000 during the previous year. This canned beef came largely from Argentina. Imports of pickled and cured beef are also increasing, amounting to about 8 million pounds in 1928-29, about equally divided between Argentina, Uruguay and Canada.

No significant change in production in the principal beef exporting countries next year is expected. Altho no definite information is available as to present cattle numbers in Canada and New Zealand, slaughter in both countries for the first half of 1929 was considerably less than during the corresponding period in 1928. New Zealand has exported less beef thus far this year than in 1928, but the decrease occurred in shipments to the United Kingdom, since exports to the United States were larger.

Cattle numbers in Northern Mexico appear to be increasing, but in South America definite reductions in numbers are apparent with current beef production considerably below last year. Beef imports into the United States from South America are limited to canned and cured products. However, exports of chilled and frozen beef from South American countries affect the domestic market indirectly by limiting the British outlet for Canadian beef, and thus diverting it to the United States.

Altho shipments of beef from exporting countries have been declining in the last two years and show signs of an immediate increase, there is definite evidence of a decreasing demand for such beef in European markets. On the Continent increases in cattle numbers are a factor in this situation. This may tend to increase the total beef coming to the United States.

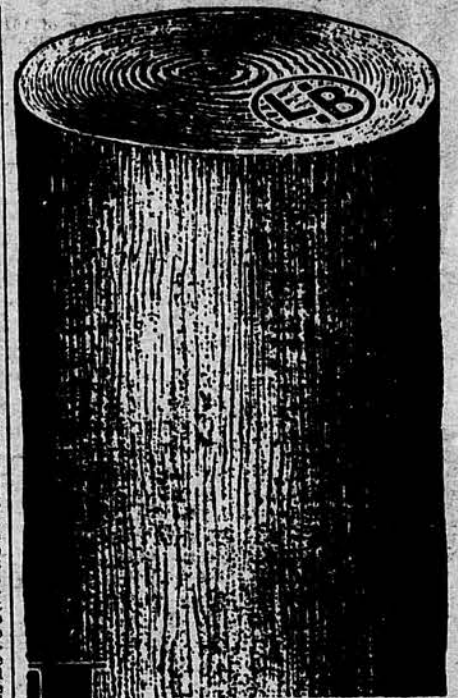
Consumer demand for beef as indicated by the relationship between per capita consumption of beef from inspected slaughter and the average retail price, was greater during the first half of 1929 than during any corresponding period since 1921. From 1921 to 1928 demand has shown a gradual annual increase. During the first six months of 1929 a further increase apparently occurred. Altho a decrease of 2.3 per cent in apparent per capita consumption took place, this was accompanied by an advance of about 10 per cent in retail beef prices. The increased demand was due largely to higher prices for other meats and to the high level of industrial activity which resulted in increased purchasing power of consumers.

The Price Outlook

General business activity continued to increase during the first half of 1929, but it is doubtful that the present unusually high level will be maintained during the remainder of the year. No marked decline, however, is anticipated. Because of the volume of consumer purchasing power which has developed and a probable continuation of relatively high prices for other meats, no reduction in the demand for beef is expected during the remainder of the year, but it is not likely that it will continue to increase during 1930, as it has in recent years.

The generally unprofitable results from cattle feeding last fall and winter is expected to reduce the demand for feeder cattle this fall. Also the unusual speculative activity on the part of dealers that prevailed last fall is not in evidence this fall.

Average prices of slaughter cattle and calves during the first half of 1929 were the second highest on record for the period.



LONG-BELL
creosoted fence posts, modern farm buildings and labor-saving machinery — appreciated and accepted by the Farmer of Today — are all important to efficient farm operation, contributing an increasing share to farm profit year after year.

Ask Your Lumberman about **The Long-Bell Post Everlasting**

Creosoted Full Length Under Pressure

and **NEVER-CREEP FENCE ANCHORS**

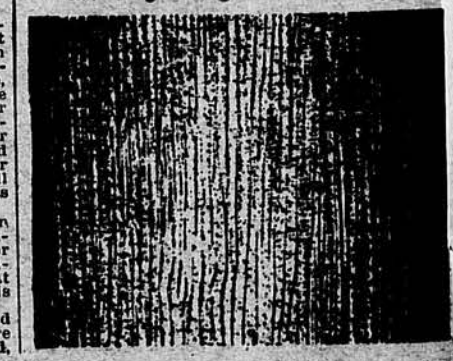
Make Sturdy Fences That Stay Put

— write for **FREE Literature**

The Long-Bell Lumber Company

Established 1875

209 R. A. Long Building Kansas City, Mo.



being only exceeded by the average of 1919. Cattle prices averaged \$11.04, compared with \$10.69 in the first half of 1928, \$8.40 in 1927 and \$6.22 in 1922, the low point in the general depression of cattle values which occurred from 1921 to 1926. Prices of calves averaged \$13.17, compared with \$12.00 in 1928, \$10.44 in 1927, and \$8.45 in 1924 and 1922, the low points in the depression.

The present cattle supply situation indicates a continuance, during the next 12 months with seasonal variations, of the general level of slaughter cattle prices which prevailed in 1928 and 1929. Should unfavorable feed conditions, however, force heavier marketings of cattle this fall than now seems probable, the price situation might be considerably changed.

The seasonal downturn in prices of the better grades of fed cattle this fall is expected to occur later than the decline which started in September, 1928. Prices of fed cattle next winter probably will average higher than last winter. Prices next spring and early summer are not expected to differ greatly from those in the corresponding period this year. Prices of stocker and feeder cattle probably will average lower in the last half of 1929 than during the last half of 1928.

Cattle slaughter in 1929 probably will be but little different from the total in 1928, but calf slaughter will be somewhat smaller. However, if feed conditions in some of the western states force heavy marketings, and other sections of the country do not take those cattle, total slaughter for this year may be equal to that of last year. The estimated number of cattle and calves on farms changed but little during 1928, births and importations about offsetting slaughter and death losses. With total slaughter this year somewhat less, and importations about as large, some increase in numbers may result.

The increase in cattle numbers seems to be taking place in the principal cattle states of the Corn Belt area. Records of movements into that area show that in-shipments thru markets for 12 months ending June, 1929, were 160,000 head larger than for the preceding 12 months, and that marketings from that area for the nine months, October, 1928, to June, 1929, decreased 850,000 head from the same period a year earlier. Undoubtedly the possibilities for expansion are larger in the states of this area than elsewhere. Unless there is a reduction in sheep numbers in the western states the possibilities of expansion of cattle numbers there are limited. This situation also applies to a large area in Texas. Present indications are that the increase in cattle numbers during the next six years will be much less rapid than that which occurred from 1912 to 1918, when production was stimulated by war conditions, and numbers increased from 55 million to 71 million head.

Altho some decline from the present high level of cattle prices is to be expected within the next three years, there seems little possibility that this decline will carry prices to the low levels prevailing from 1921 to 1926.

Allen—The weather has been quite satisfactory; rain would be of help, but the corn is green and is holding its own quite well. The county produced a fine crop of prairie hay. A considerable interest is being taken in road building. Eggs, 28c; corn, \$1.10; alfalfa, \$2.00; milk, \$2.40; 4 per cent fat—T. F. Whitlaw.

Anderson—A considerable acreage of prairie hay was baled this year and shipped right from the field. A good general rain would be appreciated by the folks. There was a large peach crop, altho the peaches were rather small. Corn, 96c to \$1; wheat, 96c to \$1.06; eggs, 28c; cream, 39c; heavy broilers, 21c.—O. C. Slocum.

Barton—A rain of 1 inch here a few days ago was of great value to growing crops and to wheat seedbeds. Considerable road work is being done. A great deal of interest was shown in the county fair, held last week. Butterfat, 39c; eggs, 28c to 37c; wheat, \$1.09; corn, 92c.—Alice Everett.

Clay—Farmers have been busy preparing land for wheat, and some men have been filling silos. The fodder is in excellent condition for supplying little feed, altho it has little grain, except in the southern part of the county, where the corn was helped considerably by some local showers. A few farm sales are being held; horses and mules move at low prices. Wheat, \$1.03; corn, 94c; cream, 42c; eggs, 28c.—Ralph Macy.

Douglas—A sudden drop in temperature last week reminded us that winter will soon be here! Light showers have fallen recently but a good rain is needed on the wheat. Farmers have been filling silos, putting up hay and cutting corn.—Mrs. G. L. Glenn.

Kills—Very little wheat seeding has been done so far, as the farmers are waiting for a good rain. The pastures are dry, and corn yields will be light. A few public sales are being held, with good prices. Wheat, \$1.05; corn, 80c; eggs, 23c; butterfat, 37c.—C. F. Erbert.

Graham—The weather has been dry and windy, with no moisture. Row crops need a good rain. The soil is dry, and farmers will mostly delay wheat seeding until rain comes. Livestock is still doing well on pasture. Farm sales are numerous; everything sells at good prices. Wheat, \$1.05; corn, 85c; barley, 45c; cream, 42c.—C. F. Welty.

Jefferson—Cutting corn, preparing ground for wheat and rye and alfalfa seeding are the main farm jobs. Considerable interest was shown in a terracing demonstration a few days ago which was held near Oskaloosa. Rain is needed, especially for the fall pastures.—J. J. Blevins.

Johnson—Recent rains have been very spotted. Temperatures have been moderate for 10 days. Considerable alfalfa has been sown this fall—which is a fortunate thing, as the county needs a larger acreage of this legume. Farmers believe that hay will be selling for a good price before spring. Corn, \$1.10; white shorts, \$1.85; bran, \$1.40; eggs, 32c; potatoes, \$2 a cwt.—Mrs. Bertha Bell Whitlaw.

Lane—Wheat drilling is underway, altho the soil is rather dry. A good general rain is needed—crop yields have been reduced considerably by the dry weather. A good many wide furrow wheat drills are being used this fall.—A. R. Bentley.

Marshall—We had a fine rain here recently which was very helpful to the crops and to the folks who are preparing to sow wheat. Corn, \$1; wheat, 99c; cream, 42c; eggs, 27c.—J. D. Stoss.

McPherson—The corn crop will be light this year, due to the dry weather, except on the river. Farmers have been busy filling silos. The third cutting of alfalfa was light. I think that the wheat acreage planted this year will be smaller than that planted last season. Quite a few public sales are being held.—F. M. Shields.

Pratt and Kiowa—We have had some local showers, but a good general rain is needed by the crops, and also to pack the seedbed for the wheat which are rather loose. Livestock is in good condition. A few public sales are being held, with satisfactory prices. There is an especially

good demand for milk cows. Farm help is scarce.—Art. McAnarney.

Ness—A few local rains have fallen over the county, but a good, general rain is needed. The yields of the feed crops will be light. A few public sales are being held.—James McHill.

Riley—We have been having some showers which have been enough to keep the corn and grass green. Farmers have been busy preparing the land for wheat. The prairie hay crop here was of excellent quality this year, but was not quite so large as last year. Farmers are busy cutting corn.—Hogs, \$10.90; wheat, \$1; corn, 96c; oats, 45c.—Ernest H. Richner.

Rooks—Many farmers are sowing wheat, even if it is early. Feed cutting will start soon. The dry weather reduced the probable corn yield about 50 per cent. Corn, 82c; wheat, \$1.—C. O. Thomas.

Rush—Spring crops are drying up rapidly; a general rain is needed. Silo filling is the main farm job. Eggs, 25c; butterfat, 39c.—William Crotinger.

Smith—The dry weather was broken by local showers amounting to from 1/4 to 2 1/4 inches. The rain came too late to help the corn greatly, but it was of value to the pastures, and to the folks who were preparing land for wheat. Livestock is doing well. More silos than usual will be filled this year. A great deal of road work is being done. Wheat, \$1 to \$1.10; corn, 83c; oats, 55c; eggs, 24c to 30c; butterfat, 41c; hens, 20c; bran, \$1.50; shorts, \$2.—LaRoy McCall.

Trego—We are in need of a good general rain. Threshing is completed, and a large part of the corn was cut for feed. All the feed crops were damaged badly by the dry weather. About the usual acreage of wheat will be planted this fall. Wheat, \$1.08; barley, 40c; eggs, 24c.—Charles N. Duncan.

Wallace—Local showers have kept the corn and grass in fairly good condition, and put the ground in condition for wheat seeding. Considerable road work is being done.—Everett Hughes.

Farm Price Index Higher

The index of the general level of farm prices advanced from 140 to 143 per cent of the pre-war level from July 15 to August 15, according to the farm price index of the Bureau of Agricultural Economics. At 143, the index is 4 points higher than in August a year ago, the increase being the result of higher farm prices of wheat, oats, rye, flaxseed, hay, potatoes, apples, hogs, beef cattle, veal calves, butter, chickens and eggs. Lower farm prices are reported, however, for corn, barley, cotton and cottonseed, sheep and lambs, butterfat, wool and horses than in August 1928.

Wheat prices advanced 8 per cent from July 15 to August 15, cotton prices climbed 1 per cent; flaxseed, 11 per cent; and the farm price of potatoes, 59 per cent.

Changes in the indices of farm products from July 15 to August 15 by groups were: fruits and vegetables advanced 24 points; poultry and poultry products, up 8 points; grains up 1 point; dairy products up 2 points, and cotton and cottonseed up 1 point. The farm price index for meat animals declined 2 points.

The United States average farm price of hogs declined about one-half of 1 per cent from July 15 to August 15, the result of a 1.5 per cent decline in hog prices in North Central states, that more than offset the continued price advance in the remainder of the country, which ranged from 2 per cent in the North Atlantic and South Central divisions to 4 per cent in far Western states.

The downturn in the farm price of hogs has been due primarily to the very large increase in marketings over the corresponding period of a year ago. Receipts at seven primary markets during the four-week period ended August 15 were approximately 17 per cent larger than during the corresponding period in 1928. Despite larger marketings this year, however, the farm price of hogs was about 3 per cent higher on August 15 than a year ago, due probably to the higher prices of hog products and the greater export demand for lard and pork in recent months.

From July 15 to August 15, the corn-hog ratio declined from 11.10 to 10.7 for the United States, and from 13.1 to 11.9 for Iowa.

The farm price of beef cattle, at \$9.62 a hundred, on August 15, was approximately 2 per cent lower than on the same date a month before. The price decline was accompanied by a seasonal increase in receipts. Cattle receipts at seven primary markets during the four-week period ended August 17 were about 17 per cent larger than during a corresponding period ended July 13.

A 50 per cent reduction in commercial stocks of corn during the month ended August 17, was accompanied by a 5 per cent advance in the farm price of corn from July 15 to August 15. The advance in corn prices was fairly general over the country as a whole. A continuous drought over much of the Corn Belt during the latter part of July and the early part of August lowered crop prospects and favored the farm price advance.

The farm price of wheat advanced generally over the country from July 15 to August 15, the average increase in price amounting to approximately 8 per cent. A marked reduction in 1929 production prospects due to hot weather has apparently favored the price advance.

From July 15 to August 15, the farm price of potatoes again showed a greater change than the farm price of any other commodity. Potato prices doubled during this period in the North Atlantic states, advanced 81 per cent in the North Central Division, 27 per cent in the far West, and 11 per cent in South Atlantic states. These price advances were partially offset by a 3 per cent decline in South Central states, but the average farm price for the United States was 59 per cent higher on August 15 than a month previous. This was the sharpest price change in the 20 years for which farm prices have been recorded.

The advance in the farm price of potatoes was accompanied by a sharp seasonal decline in shipments and the completion of the shift in reported prices to a new crop basis in all sections of the country. Carlot shipments of potatoes during the four-week period ended August 17, were about 40 per cent below those in a corresponding period ended July 13. A further decline in prospects for potato production during July has also favored the sharp advance in the farm price.

Foreign Market Conditions Improved

Basic factors affecting the Continental European market for American agricultural products have shown signs of improvement the last two months, but conditions in the United Kingdom have been less favorable. General industrial conditions thruout Western and Central Continental Europe are reported to be fairly good with the almost universal exception of textiles, especially cotton. There has been a decrease in continental unemployment, but in the United Kingdom actual and threatened strikes have been a serious factor. The improved general purchasing power on the continent is expected to be maintained a few weeks, and the purchasing power of the continental farm (Continued on Page 33)



"CAUSE UNKNOWN"

—but the neighbors have their suspicions

Many farm fires—listed under "Cause Unknown"—would be known as arson or incendiary fires if neighbors having suspicions, or possessed of certain facts, would only inform the authorities.

If you have the least bit of evidence against a man suspected of setting fire to valuable property, you owe it to yourself and the community to tell what you know.

Legislators in more than half our states have amended their laws to more effectively check the operations of criminals who endanger the lives of others in their desperate efforts to gain revenge or profit illegally.

Stock Fire Insurance companies are doing everything in their power to shield honest property owners from such practices. Lives and property are becoming safer as a result of ceaseless vigilance against this crime of crimes.

But your cooperation is needed. More gratifying results will follow a keener realization of the menace and cost of self-set fires. Your aid is solicited in making the lot of the arson fiend so hard that he cannot live in any honest community.

Write for free copy of "Burning Up Farm Wealth"

FARM INSURANCE COMMITTEE

1029 Insurance Exchange

175 West Jackson Blvd., Chicago

STOCK

(Legal Reserve)

FIRE INSURANCE

MARKETING

THE ETERNAL FARM PROBLEM

After you've had a good crop, you have the worry of selling it at a price that will bring you a reasonable profit.

And in the small produce of your farm the same problem faces you. On items where no large market exists to set price scales, what can you do? The answer is simple—an ad in the "Farmer's Market Place" in Kansas Farmer will find you buyers.

Almost anything you have to sell, be it produce or household goods, land or houses, can be sold through Kansas Farmer.

DETAILED RATES ON REQUEST

POWER
FROM THE
Lightest
Breeze

OIL
ONCE A
YEAR

TIMKEN
BEARINGS

BALL-BEARING
TURN TABLE

DEMPSTER ANNU-OILED WINDMILL

A never-failing water supply is yours when you own a Dempster Annu-Oiled Windmill. Starts easier and runs smoother. Oil it once a year, then forget it. Pumps 25% more water in lightest winds. Has perfect balance. Ball-bearing turntable keeps the wheel in the wind. Timken Bearings and Machine Cut Gears eliminate friction.

DEMPSTER MILL MFG. CO., 719 S. 6th St., Beatrice, Nebraska



LICE

DON'T say it's up to the hens to fight the torturing, blood-sucking pests. Lice come in hordes — it's an unequal battle.

Dr. Hess Instant Louse Killer kills lice on stock and poultry.

Bring Instant Louse Killer and lice together, and no guilty louse escapes.

Make it a rule to keep Instant Louse Killer in the dust bath always. Hens work it into the feathers, down to the skin where the lice are. That's the end of Mr. Louse and his quick-breeding family.

For special treatment, sift Instant Louse Killer into the feathers. Sprinkle it in the nests, on the roosts, dropping boards and floors.

Comes in handy sifter-top cans.

Guaranteed

DR. HESS & CLARK, Inc.
Ashland, Ohio

Dr. Hess Instant LOUSE KILLER

BRIGGS & STRATTON
Fullpower
4-CYCLE GASOLINE ENGINE
AMERICAN'S
FINEST WASHING MACHINE ENGINE!
The majority of leading washing machines advertised in this publication are equipped with Briggs & Stratton gas engines. These washing machine manufacturers are giving you easy starting with dependable power. We guarantee Fullpower engines for one year.
Fullpower engines are sold separately for general farm use. Write Dept. KF16 for Free Booklet.
BRIGGS & STRATTON CORP.
MILWAUKEE, WISCONSIN

His Motor Balked Until—

A road contractor in New England bought a grader powered with a Fordson motor.

It didn't work right—the motor refused to pick up quickly when the load went on—because of faulty governing control.

After trying two other governors, the problem of power when needed, was solved with a Pickering Governor.

In fact the problem was so well solved that the contractor ordered two more machines provided they were Pickering Governor equipped.

Put a Pickering Governor on your tractor. Then you are sure of plenty of power, instantly available, smaller fuel bills and longer tractor life.



Pickering Governors are built for McCormick-Deering, Huber "Super Four," Rumely "Oil Pull," Minneapolis, Twin City, Hart-Parr, Fordson and all other tractors.

Clip coupon for free pamphlet which tells how Pickering Governors add 20 to 25% more power, save 3 to 5 gallons of fuel a day, do away with engine racing.

The Pickering Governor Co., Portland, Conn.
Send me FREE copy of your pamphlet 81L.

Name

Address

Tractor

Economy, the Feed Saver

Feed is money. When thrown on the ground much is wasted. Patented design and moisture proof, rat proof construction of Economy prevents the slightest wastage or spoilage. Economy fed hogs "eat it all" and gain faster.
See dealer or write
See Melroe Sile & Mfg. Co.
(The Harrows Co.) 482 N. V. Ave., See Moines, Iowa

Kansas Poultry Talk

by Raymond H. Gilkeson

It Cuts Down on the Profit When You Make Too Many Hens Live Together

THERE is danger in over-crowding the poultry flock. There are a lot of "don'ts" in this business, but it pays to heed them. At any rate the folks who are following the advice of poultry experts and flock owners of long experience are making the most money. It is an easy matter to discount a lot of the good work you have done with the poultry by making too many of them live together. Your efforts to get purebred stock, start them right from the standpoint of feeding, rear them on clean ground and your care thru the hot summer to see that they were properly developed will not reap the most profit this fall and winter if you overcrowd.

A great many Kansas houses are too small to allow best results from the flocks they shelter. Or let's put it another way: Perhaps the houses are all right for their size, but too many birds are kept in them. The light breeds should have 3½ square feet of floor area for every bird, while the heavy birds require not less than 4 square feet. It won't take you long to get out your paper and pencil and figure exactly how many birds should be in your laying houses. Keep the right number there and they will have better feeding, drinking, laying and breathing facilities.

If you decide sometime that you built your poultry house entirely too high—that is, with too much head room—and there isn't a straw loft in it already, it won't cost much in time and labor to put one in. And does a straw loft pay? All you have to do to find out is to visit the two types of houses in cold weather—or in hot weather either—to note the difference. You will be more concerned about winter temperatures now, as they will roll around almost before we know it. Go into a straw-loft house this winter when it is really cold. You will find the temperature moderate and free from moisture. Then step into a strawless-loft house of just the average build. You will feel the cold, damp air and the flock very likely will show the effects of conditions that are short of ideal.

An Early Producer

I am sending you a little item in regard to poultry, and good material for an argument. I have a White Leghorn pullet of the English Barron Strain that was hatched March 23, 1929, and laid her first egg July 27, when she was 4 months and 4 days old. If anyone can produce a younger pullet in production, of any breed, I would be glad to hear from them.

This pullet was fed a balanced ration with plenty of buttermilk to drink, and cabbage, cucumbers and tomatoes as green material. Also I have a number of other pullets of the same age in production now. I always read the poultry items first when the paper arrives.

Mrs. R. W. Frailey.

Elk Falls, Kan.

Balances the Fall Income

To be successful in raising baby chicks, sanitation cannot be over-emphasized. The brooder house should be sprayed with a disinfectant. The floors and equipment should be scrubbed with hot lye water.

We used with success the Kansas all-mash ration for baby chicks, changed this at 8 and 16 weeks old as advocated, and found they made quick growth, had good feather development and excellent vitality. At present we are feeding only 5 per cent meat scrap to retard egg production. At 3 weeks the chicks were roosting on wire-covered roosts. This stops chick loss from smothering.

Worms were controlled by keeping the chicks off the ground until 8 weeks old. They are kept in an open front brooder house and fed codliver oil. All sickly birds are killed and burned, thus eliminating from the flock the chance of spreading disease.

At 6 or 8 weeks old the cockerels are separated from the pullets. The

surplus cockerels are sold as soon as the market will buy them. It does not pay to keep them, as the price goes down as they gain more weight, and the cost of feeding cuts down the profit. The pullets and cockerels are put in separate summer shelters. In this way the brooder house can be disinfected and used for a second brood of chicks.

Hatching pullets 8 weeks apart balances the fall income when the hens are going out of production. The early pullets start laying about September and the later pullets in November, when the hens are moulting.

Our chicks are hatched from our flock. The first cost is not so much as buying chicks already hatched, and we can control the quality of our flock by breeding. We also sell day-old chicks as a sideline.

Ernest Hite.

Peck, Kan.

Now Flock Pays Better

This is a good time to check up on our poultry business to see what methods have been profitable and which ones should be changed. Poultry raising with me always has been a sideline, because my work as a housekeeper has not left me much time for anything else.

Some years I have depended on buying all my setting eggs, but it never has been satisfactory. One cannot always get them at the right time, and often the chickens are not as good as one wants. I still buy 50 or 100 eggs from some accredited flock, and in this way breed up my own flock. The surplus cockerels always can be sold to other breeders.

This year I wanted more chickens at one time, so hired a neighbor to hatch some eggs in an incubator. This was a loss to me, however, as only a small per cent of the eggs hatched and many of the chicks were too weak to eat. Three-fourths of them died, while the hen-hatched chickens, brooded under exactly the same conditions, did well. It prejudiced me temporarily against incubators, but I reasoned that there are thousands of incubator chickens every year that do thrive and that there must have been some serious fault with the machine or its operation.

A few people in this community have tried taking eggs to a hatchery for incubation, with varying results. There has been considerable complaint about hatchery chicks, but I am convinced that if we buy from reliable hatcheries and take proper care of the chicks on the way home, that we shall have better success with them. The big advantage in buying hatchery chicks is in having them all at the same time. This year I spent all my spare time during March, April and May hatching and raising 400 chickens, while if I could have had them all at one time, the biggest part of the job could have been done in one month instead of three.

I believe in culling the year round. All slow-maturing and off-color chickens are sold or eaten. I never have had much time to cull layers, but I do try to watch for persistent setters and sell them; and early in the summer I sell at least half the old hens—culling them mostly by the looks of their heads. They are replaced in the fall with pullets.

This year was my first time to use a brooder. I like it much better than hens. One can raise 250 chickens in a 10 by 12 brooder house with as little work as it requires to raise 50 with hens. I used ordinary coal and it caused a lot of grief until I got nut coal, then I learned to keep a steady fire on one filling for eight hours.

I like to start chicks on cracked wheat and change gradually to mixed grain or feterita. Commercial chick grain is too expensive. Feterita is a wonderful grain for poultry. It is so soft that little chickens can safely eat it from the first, and a large part of it gets cracked in threshing. I begin feeding a home-mixed mash at 2 weeks

Now A Blended Anthracite
Standard Briquets
A Blended Anthracite
Ideal for Arcolas, Heatrols, Baseburners, Stoves, Brooders and any type of furnace.
Easy to use and economical. No lumps to break up. Smokeless—Odorless—Dustless—Sootless.
Best by every test. Get a trial load of Standard Briquets from the dealer in your community.
TUNE IN!
on WIBW To-
nights every
week at 6 P. M.
for official weather
forecast by the
Standard Weather
man.

Do You Know That—

You can find almost anything you need in the Classified Section. Poultry, Cattle, Honey, Dogs, Hogs, Lumber, Machinery, Farms.

Read the Classified Advertisements.

KANSAS ONLY STATE FAIR KANSAS STATE FAIR HUTCHINSON SEPTEMBER 14-20

The GREATEST
EDUCATIONAL and
ENTERTAINMENT FEATURES
EVER OFFERED in KANSAS.

\$40,000.00 in Prizes
Thousands of Exhibits

HAGENBECK-WALLACE
CIRCUS
TWICE DAILY
FIREWORKS
EACH EVENING

E. E. FRIZELL, pres. A. L. SPONSLER, secy.

—the K. S. A. C. formula. While the all-mash method would save work, it is not practical for me, as we have no grinder and must hire our grinding done. Feeding commercial mash would eat up my profits. We feed home-grown grain as much as possible. My experience, too, has been that it is hard to get chickens to eat grain at all unless they have it from the first. I put a lot of emphasis on sour milk. No water is given at all the first 15 days. They should have all the milk they will drink all the time.

There is good money in raising broilers if one keeps a heavy breed. On May 8, I sold chickens for 75 cents each. This year, springs weighing 2½ pounds were worth more a pound than broilers. Mine were fattened eight days on cornmeal, moistened with milk. We have sold a few dressed chickens on special order to people in town who are too busy to dress them.

While the Leghorns are wonderful layers, I believe the Buff Orpingtons

or probably any other heavy breed with good laying ability, are more profitable for the farmer the year around. They make the best of table fowls, and are better winter layers.

I never have sold eggs on a grade basis. I offered a case of first grade eggs to merchants on several occasions but could get no better price than for ungraded eggs. Recently the merchants tell us they are supposed to buy them on a graded basis but have been too busy to grade them. I always use the small and uneven eggs at home anyway on general principles. If we sell only first quality eggs it eventually will raise the price the producer receives.

My hens netted me a profit over feeding cost last year of about \$2 a hen. That is better than any other year when I kept records, due, I believe, to better care and the use of a balanced ration.

Mrs. A. R. Bentley.
Pendennis, Kan.

Egg Standardization, and Quality

By George H. Powers

THE system of paying all producers of eggs a flat price based on their average quality offers no incentive to produce eggs of best quality. In actual practice it penalizes the producer of good eggs and offers a premium to the producer of poor eggs.

Eggs vary in interior quality and other factors which affect their market value. Because of this, egg dealers have recognized the need of definite standards for measuring in a practical way the quality of eggs. To be of greatest value, these standards must be adequate, and readily and universally applicable as a measure of egg quality. This means egg standardization. Standardization makes it possible to furnish the consumer with the quality of eggs he demands and to pay the producer for his eggs on a quality or graded basis.

In 1921 the Bureau of Agricultural Economics began to study this problem for the purpose of establishing national quality standards for eggs. In 1924 these standards were submitted to the egg trade for comment and criticism and were adopted at a meeting of the trade held in Chicago under the auspices of the National Poultry, Butter and Egg Association. These standards are known as the United States standards of quality for individual eggs.

Quality in eggs is commercially determined by candling. The factors considered in determining egg quality are the condition of the shell, air cell, yolk, white and germ. Here are the specifications for these factors in each of the four qualities of eggs of clean, sound shell as provided in the United States Standards.

United States Standards of Quality for Individual Eggs

Quality factors	Specification of each quality factor for—			
	United States Special	United States Extra	United States Standard	United States Trade
Shell.....	Clean, sound....	Clean, sound....	Clean, sound....	Clean, sound....
Air cell.....	One-eighth inch or less, localized, regular.	Two-eighths in. or less, localized, regular.	Three-eighths in. or less, localized, may be slightly tremulous.	May be over three-eighths inch, may be bubbly or freely mobile.
Yolk.....	May be dimly visible.....	May be visible....	May be visible, mobile.	May be plainly visible, dark in color, freely mobile.
White.....	Firm, clear.....	Firm, clear.....	Reasonably firm.....	May be weak and watery.
Germ.....	No visible development.	No visible development.	Development may be slightly visible.	Development may be clearly visible but no blood showing.

In addition to the standards for eggs of clean shell, two standards for eggs with dirty shells, United States Standard Dirties and United States Trade Dirties, have been defined. These are the same as those for United States Standards and United States Trades except for the dirty shells.

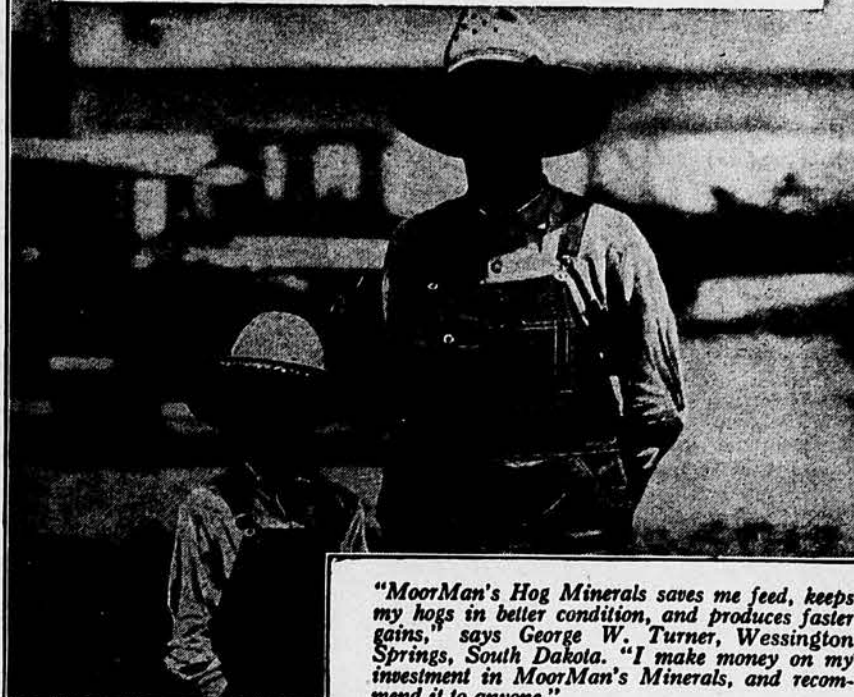
The standards of quality for individual eggs are used as a basis for formulating grades. The factors which determine the grade of a lot of eggs are quality, size and weight, package and style of packing, and uniformity. Uniformity in quality, size, and color of the eggs in a case or in a carton is an important factor in grading, but the prime factor in grading is quality. Market men usually look for quality first and then consider the other factors.

In applying the United States standards of quality to a lot of eggs to determine its grade, the eggs are candled, and the percentage of eggs conforming to each quality standard is determined. Since the United States grades consist of specified percentages of the various standards of quality, it is a simple matter to determine from the candling record the United States grade into which the lot falls.

The United States standards of quality for individual eggs are used as a basis for grading eggs by a number of the leading exchanges, several farmers' co-operative marketing associations and shippers, and some retail organizations. They are the basis of the mandatory New York State retail grades for eggs and of permissive grades for eggs in several states. They are coming into more general use every year.

Egg standardization, to be of greatest benefit to the egg industry, must begin with the producer and carry thru to the consumer. Under these circumstances it permits a more enlightened marketing program to be effected, which results in the buying and selling of eggs on an equitable quality basis. Producers of eggs are encouraged to produce and market better-quality eggs because standardization provides a basis on which they can be rewarded for their extra effort by an increased price for the better quality. Dealers can handle a standardized product of known quality at lower cost and with greater satisfaction to the outlets which they supply. Consumers will purchase eggs with more confidence and in greater quantity when they are sure of being able to buy a dependable product at all times. Standardization means dependability, which is essential in developing consumer confidence with its increased consumption of eggs, which will make possible a more extensive and more stable poultry industry.

"I make money"



"MoorMan's Hog Minerals saves me feed, keeps my hogs in better condition, and produces faster gains," says George W. Turner, Wessington Springs, South Dakota. "I make money on my investment in MoorMan's Minerals, and recommend it to anyone."

MoorMan's Hog Minerals helps cut hog costs

Feed MoorMan's Hog Minerals and you will save feed, get faster gains, farrow stronger litters, help prevent disease. There are eight MoorMan Mineral Feeds—for livestock and poultry. Talk it over with your local MoorMan Man when he drops around.

Moorman Mfg. Co., Quincy, Ill.

MoorMan's

Seeds of Ideas

Advertisements are selected seeds of ideas planted in the soil of your mind. If cultivated thoughtfully, these ideas will produce greater comforts and better methods of accomplishing your aims. These selected seeds of advertising can help you to live more fully at less cost.

The advertisements in this publication are a record of what the manufacturers are doing for you. They will give you many new ideas and will tell you what you want to buy. And they will help you to get the most for your money.

The advertisements are news. They are interesting. Form the habit of reading them carefully and regularly. It will pay you to keep informed of the daily progress of business.

For full value—buy standard products.
Manufacturers stand back of advertised goods.



PLAYFORD Concrete Stave Silos

have no superiors, erected by us, fully guaranteed. BLIZZARD ENSILAGE CUTTERS are guaranteed to cut and elevate their rated amount of green ensilage into any silo regardless of height, operated by any power that will maintain the rated speed. Light running, large capacity, adjustments to take care of wear. Gears running in oil. Rockwood drive pulley. Full stock of repairs carried here at Salina by us. Write for catalog.

Concrete Products Co., Salina, Kan.

Do You Know That—

you have not read all the paper until you have looked over all the classified advertisements?



Just Paint it on the Roosts!

—Before the chickens perch. Only a small paint brush and a can of "Black Leaf 40" are needed. While chickens roost, fumes are slowly released and penetrate the feathers, killing lice. Eliminates individual handling of birds. Ask your dealer or write us. Tobacco By-Products & Chemical Corp., Inc., Louisville, Ky.

"Black Leaf 40"
Kills Poultry Lice

Copper Engraving
WRITE FOR PRICES ON CATALOGS & LETTERHEADS
ARTISTS ENGRAVERS DEPT. M TOPEKA-WICHITA



Our FARMERS MARKET Place



Sell thru our Farmers' Market and turn your surplus into profits

RATES 8 cents a word if ordered for four or more consecutive issues, 10 cents a word each insertion on shorter orders or if copy does not appear in consecutive issues; 10 words minimum; when display headings are desired or white space around ads ordered, charges will be based on 70 cents an agate line (\$9.80 an inch single column) for one insertion or 60 cents an agate line per insertion (\$8.40 an inch single column) for four or more consecutive issues; 7 lines minimum. Count abbreviations and initials as words and your name and address as part of the advertisement. Copy must reach Topeka by Saturday preceding date of publication.

REMITTANCE MUST ACCOMPANY YOUR ORDER

Buy thru our Farmers' Market and save money on your farm products purchases.

TABLE OF RATES					
Words	One time	Four times	Words	One time	Four times
10.....	\$1.00	\$3.20	25.....	\$2.60	\$8.32
11.....	1.10	3.52	26.....	2.70	8.64
12.....	1.20	3.84	27.....	2.80	8.96
13.....	1.30	4.16	28.....	2.90	9.28
14.....	1.40	4.48	29.....	3.00	9.60
15.....	1.50	4.80	30.....	3.10	9.92
16.....	1.60	5.12	31.....	3.20	10.24
17.....	1.70	5.44	32.....	3.30	10.56
18.....	1.80	5.76	33.....	3.40	10.88
19.....	1.90	6.08	34.....	3.50	11.20
20.....	2.00	6.40	35.....	3.60	11.52
21.....	2.10	6.72	36.....	3.70	11.84
22.....	2.20	7.04	37.....	3.80	12.16
23.....	2.30	7.36	38.....	3.90	12.48
24.....	2.40	7.68	39.....	4.00	12.80
25.....	2.50	8.00	40.....	4.10	13.12

DISPLAY Headings

Display headings are set only in the size and style of type above. If set entirely in capital letters, count 15 letters as a line. With capitals and small letters, count 22 letters as a line. One line or two line headings only. When display headings are used, the cost of the advertisement is figured on space used instead of the number of words. See rates below.

RATES FOR ADS WITH WHITE SPACE OR DISPLAY HEADINGS (Single Column)					
Inches	Time	Four Times	Inches	Time	Four Times
1/2.....	\$ 3.35	\$ 13.40	3.....	\$31.50	\$126.00
1.....	6.70	26.80	3 1/2.....	38.75	155.00
1 1/2.....	10.05	40.20	4.....	46.00	184.00
2.....	13.40	53.60	4 1/2.....	53.25	213.00
2 1/2.....	16.75	67.00	5.....	60.50	242.00
3.....	20.10	80.40			

The four time rate shown above is for each insertion. No ads accepted for less than one-half inch space

RELIABLE ADVERTISING

We believe that all classified livestock and real estate advertisements in this paper are reliable and we exercise the utmost care in accepting this class of advertising. However, as practically everything advertised has no fixed market value and opinions as to worth vary, we cannot guarantee satisfaction. We cannot be responsible for mere differences of opinion as to quality of stock which may occasionally arise. In cases of honest dispute we will endeavor to bring about a satisfactory adjustment between buyer and seller but our responsibility ends with such action.

POULTRY

Poultry Advertisers: Be sure to state on your order the heading under which you want your advertisement run. We cannot be responsible for correct classification of ads containing more than one product unless the classification is stated on order.

BABY CHICKS

FALL CHICKS—RHODE ISLAND REDS, White and Barred Rocks, \$10.00 per 100. Live delivery. Ship prepaid. Jones Hatchery, 2226 Ida, Wichita, Kansas.

MATHIS QUALITY CHICKS, HEAVY layers, leading breeds, \$7.50 hundred up, 100% alive. Catalogue free. Chicks guaranteed. Mathis Farms, Box 108, Parsons, Kan. PEERLESS SUPERB CHICKS FROM AC-CREDITED flocks, Rocks, Reds, Wyandottes, Orpingtons, \$10.00. Leghorns, Anconas, Heavy Assorted, \$3.00. Prepaid. Guaranteed delivery. Peerless Hatchery, Wichita, Kan.

ACCREDITED CHICKS 64c UP, BIG, healthy, quick maturing money makers. Two weeks guarantee to live. Leading varieties. Free catalog. Booth Farms, Box 615, Clinton, Mo.

FALL CHICKS: S. C. WHITE, BROWN and Buff Leghorns \$3.00; Barred Rocks, Reds, Buff Orpingtons, White Rocks, White Wyandottes, S. L. Wyandottes, White Minorcas, White Langshans and Light Brahmas \$10.00; Heavy Assorted, \$3.00. Assorted All Breeds, \$1.00. Live Delivery. Nevada Hatchery, Nevada, Missouri.

CHICKS—SEPTEMBER DELIVERY. BRED from strong healthy flocks that are blood-tested and accredited. This positively insures you of disease free chicks that will grow quickly and profitably. Barred and White Rocks, R. I. Reds, Buff Orpingtons, White Wyandottes. Only \$12.00 per 100. C. O. D. if desired. Master Breeders Farms, Cherryvale, Kansas.

BABY CHICKS

LEGHORNS, ANCONAS, \$8 HUNDRED: Reds, \$9; assorted, \$6.50. Jenkins Hatchery, Jewell, Kan.

ANCONAS

EARLY APRIL COCKERELS FROM KAN-sas certified Ancona flock; \$1.50 each. Mrs. Frank Williams, Marysville, Kan.

DUCKS

MALLARD DUCKS, WHITE—EGG LAY-ers, \$3.75 pair. H. M. Sanders, Baldwin, Kan.

LANGSHANS

WHITE LANGSHAN COCKERELS FROM Nichols' Superior Stock, \$1.50. Carl Olson, Lenora, Kan.

LEGHORNS—WHITE

SINGLE COMB WHITE LEGHORNS, 200 February pullets, laying, \$1.60. One hundred pullets ready to lay, \$1.35. Sixty yearling hens, \$1.25. Pure Tanager strain. Mrs. Nina Gray, Englewood, Colo.

WHITE LEGHORN HENS AND MALES now half price. Thousands of laying pullets. Also baby chicks and eggs. Trapped, pedigreed foundation stock, egg bred 29 years. Winners at 20 egg contests. Records up to 320 eggs. Catalog and special price bulletin free. I ship C.O.D. George B. Ferris, 949 Union, Grand Rapids, Michigan.

MINORCAS—BUFF

VERY BEST QUALITY, VIGOROUS, BIG type Buff Minorca early May cockerels. During September, \$1.50 each. The Thomas Farms, Pleasanton, Kan.

POULTRY PRODUCTS WANTED

SHIP EGGS and poultry direct for Best results. "The Copes," Topeka.

PREMIUM PRICES PAID FOR SELECT market eggs and poultry. Get our quotations now. Premium Poultry Products Company, Topeka.

MACHINERY—FOR SALE OR TRADE

ONE 4 1/2 HORSE POWER WITT ENGINE wood saw attachment. L. P. Stewart, Colby, Kan.

FOR SALE—NO. 5 SANDWICH CYLINDER Sheller Complete. Want 32x52 Red River Separator. F. A. Brewster, Lucerne, Kan.

NOTICE—FOR TRACTORS AND REPAIRS. Farmalls, separators, steam engines, gas engines, saw mills, boilers, tanks, well drills, plows. Write for list. Hay Machinery Co., Baldwin, Kan.

ALL KINDS OF BARGAINS IN WHEEL type tractors, most any make, practically new. Fordsons \$150 up. McCormick-Deering \$300 up. H. W. Cardwell Co. "Caterpillar" Dealers, 300 S. Wichita, Kan.

SEEDS, PLANTS AND NURSERY STOCK

WANTED TO BUY POPCORN. SEND SAM-ple. Hayes Seed House, North Topeka, Kan.

TESTED ALFALFA SEED, \$12.50 BU., UN-tested, \$3.50. Robert Snodgrass, Augusta, Kan.

PEONIES AND IRIS: SEND FOR CATA-logue and prices. Clark's Nursery, Chariton, Iowa.

ALFALFA AND SWEET CLOVER, FIRST cleaning, highly fertile, dependable seed. Write for samples and prices. J. Jacobson, Formoso, Jewell Co., Kansas.

PURE, CERTIFIED, RECLEANED, AND graded Kanred seed wheat for sale. Samples and quotations upon request. Fort Hays Experiment Station, Hays, Kan.

HARDY ALFALFA SEED 90% PURE \$10.00 bushel; Sweet clover 33% pure \$2.00. Return seed if not satisfied. Geo. Bowman, Concordia, Kan.

ALFALFA, \$9.00; SWEET CLOVER, \$3.75; Timothy, \$3.25; all per bushel. Bags free. Send for free samples and special price list. Standard Seed Company, 19 East Fifth Street, Kansas City, Missouri.

DOGS

WHITE COLLIE PUPS 3 1/2 MO. OLD, LOU Dreier, Newton, Kan.

SHEPHERD PUPS, THE WORKING KIND. Chas. Teeter, Fairfield, Neb.

FOR SALE—FINE COLLIE PUPS—SABLE. L. Barrington, Rt. 2, Moline, Kan.

GOOD BRED COLLIE PUPS, MALES \$5 each. George McAdam, Holton, Kan.

PRICES SMASHED—SIX GLOSSY PRINTS, 18 cents. Young's Studio, Sedalia, Mo.

NICELY marked Pure Bred German Police male pups, \$10 each. C. H. May, Roca, Nebr.

WANTED—100 WEEK; WHITE SPITZ puppies; Fox Terriers, Sunnyside Kennels, Onaga, Kan.

COLLIE PUPS ELIGIBLE TO REGISTER, as good as the best, \$15 each. U. A. Gore, Seward, Kan.

RAT TERRIER PUPPIES, BRED FOR ratters. Satisfaction guaranteed. Crusaders Kennels, Stafford, Kan.

WANTED—SPITZ AND FOX TERRIER pups about 7 weeks old. Whole litters. Brockway Kennels, Baldwin, Kan.

POLICE PUPPIES MALES 10, FEMALES \$5, sprayed \$7.50, tried matrons \$15. Registered. Paul C. Fechner, Alta Vista, Kan.

FOR SALE—TWO YEAR OLD WHITE, registered police dog \$15.00. Nine months old black and tan female police dog \$10.00. Box 52, Plains, Kan.

HUNDRED HUNTING HOUNDS, TRIAL, C. O. D. Fur Finders. Running Fit. Other remedies, \$1. Collar name, \$1. Horns, \$2. Feed, \$5. Agents wanted. Catalog. Kaskaskia, M34, Herrick, Illinois.

COONHOUNDS, COMBINATION FUR Hunters, Foxhounds, Champion Rabbit-hounds, Dog Feed, Horns, Supplies, Run-ning Fits remedy guaranteed \$1.00. Cata-logue. Riverview Kennels, Ramsey, Ill.

CORN HARVESTERS

RICH MAN'S CORN HARVESTER, POOR man's price—only \$25.00 with bundle tying attachment. Free catalogue showing pic-tures of harvester. Process Co., Salina, Kan.

LUMBER

LUMBER—CAR LOTS, WHOLESALE prices, direct mill to consumer. Prompt shipment, honest grades and square deal. McKee-Fleming Lbr. & M. Co., Emporia, Kansas.

PATENT ATTORNEYS

PATENTS, BOOKLET AND ADVICE FREE Watson E. Coleman, Patent Lawyer, 724 9th St., Washington, D. C.

PATENTS—TIME COUNTS IN APPLYING for patents; send sketch or model for in-structions; or write for free book, "How to Obtain a Patent" and "Record of Inven-tion" form; no charge for information on how to proceed. Clarence A. O'Brien, Reg-istered Patent Attorney, 150-X, Security Sav-ings & Commercial Bank Building, Wash-ington, D. C.

RABBITS

CHINCHILLAS—YOUNG STOCK FROM pedigree registered parents. Mrs. A. Millyard, Lakin, Kan.

MAKE BIG PROFITS WITH CHINCHILLA Rabbits. Real money makers. Write for facts. 888 Conrad's Ranch, Denver, Colo.

RUG WEAVING

BEAUTIFUL RUGS CREATED FROM OLD carpets. Free circular. Kansas City Rug Co., 1518 Virginia, Kansas City, Missouri.

TOBACCO

TOBACCO, THIRTY-SIX 10c CHEWING cuts \$2.50; thirty-six 10c packages Smok-ing \$2.50; fifty Cigars \$1.95. Pay when re-ceived. Satisfaction Guaranteed. National Tobacco Co., Dept. C, Paducah, Ky.

YARN

YARN: VIRGIN WOOL, FOR SALE BY manufacturer at bargain. Samples Free. H. A. Bartlett, (Dept. B.) Harmony, Maine.

AGENTS—SALESMEN WANTED

WANTED—MAN WHO KNOWS FARM life to travel in country. Steady work. Good profits. McConnon & Company, Room A-4309, Winona, Minn.

KODAK FINISHING

TRIAL ROLL DEVELOPED, SIX GLOSSI-tone prints, 25c. Day Night Studio, Se-dalia, Missouri.

EDUCATIONAL

LEARN AUCTIONEERING AT HOME. Every student successful. School, Box 707, Davenport, Iowa.

HONEY

EXTRACT HONEY 60 LBS. \$5.50; 120, \$10.00. T. C. Veirs, Olathe, Colo.

SWEET CLOVER HONEY, PURE—60 lbs., \$6.00. R. W. Russell, Marysville, Kan.

EXTRACTED HONEY, 60 LB. CAN, \$5.50; 2 cans, \$10.00; sample, 15c. C. Martineit, Delta, Colo.

QUALITY CLOVER HONEY, 10 POUND pail, \$1.30, six, \$7.00; 60 pound can, \$6.25, two, \$12.00; bulk comb, 10 pound pail, \$1.40, six, \$7.50. Fred Peterson, Alden, Iowa.

PHOTO TINTING

THE MODERN TREND IS TO COLOR. IT applies to portrait photographs. We will tint in natural colored oils any size photo you send us. Price \$2.00. Return postage paid. Christopher Studio, 632 Kansas Ave., Topeka, Kan.

LIVESTOCK

CATTLE

FOR GUERNSEY DAIRY HEIFER CALVES, write L. Terwilliger, Wauwatosa, Wis.

FOR HIGHEST QUALITY GUERNSEYS write Brookhill Farms, Elm Grove, Wis.

FOR SALE—CHOICE REGISTERED Brown Swiss bull calves and one yearling bull. Leslie Linville, Winona, Kan.

REGISTERED HOLSTEINS, HEIFERS FOR sale. Some to freshen this fall, others younger. Hugh Wright, Onaga, Kan.

FOR GUERNSEY OR HOLSTEIN DAIRY calves, from heavy, rich milkers, write Edgewood Dairy Farms, Whitewater, Wis.

ELEVEN REGISTERED AYRSHIRES \$1500, 6 three-year-old fresh Sept. and October, 2 six-year-old, 1 two years, 1 four months, bull coming 2 years. T. B. Tested free from disease. Clyde Hamacher, Rt. 1, Lawrence, Kan.

HOGS

CHESTER WHITE SPRING BOARS AND gilts. F. L. Hartman, Lawrence, Kan.

CHOICE CHESTER WHITE SPRING Boars. Henry Murr, Tonganoxie, Kan.

BERKSHIRES, WEANLINGS, \$17.50, SOWS \$40. Guaranteed. Fred Luttrell, Paris, Mo.

CHESTER WHITE PIGS, AND SPRING boars. Immune, Pedigreed. H. W. Chest-nut, Chanute, Kan.

REGISTERED CHESTER WHITE BRED gilts, Sept. farrow. Spring boars. Ray Lowe, Newton, Kan.

O. I. C. AND CHESTER WHITE PED-igreed pigs \$24 per pair, no kin. Write for circulars. Raymond Ruebush, Sciota, Ill.

SHEEP AND GOATS

150 SHROPSHIRE YOUNG EWES. BEN Miller, Newton, Kan.

FOR SALE: SHROPSHIRE RAMS, GOOD. Write Richard Johnson, Geneseo, Kan.

THIRTY REGISTERED SHROPSHIRE yearling and lamb rams. W. T. Ham-mond, Portia, Kan.

FOR SALE—REGISTERED SHROPSHIRE rams, also a few young Registered ewes. J. W. Alexander, Burlington, Kan.

200 SHORT-MOUTHED NEW MEXICO ewes, \$6.50, 10 Purebred Hampshire rams \$40 choice. C. C. Wyckoff, Luray, Kan.

Our Mechanical Age

Since 1920 the number of tractors on farms has more than tripled, according to the United States Chamber of Commerce. Larger and improved types of farm implements have been placed on the market for us, both with trac-tors and with horses. The one-way disk plow has added greatly to the ef-ficiency of seedbed preparation, par-ticularly in some sections of the Mid-dle West. Where planting and culti-vation of row crops once were done largely with one-row machines, these operations more and more are coming to be performed with two, four and even six-row machines.

Spectacular developments have oc-

curred in the field of harvesting ma-chinery. The combined harvester-thresher, together with the tractor and the motor truck, have revolutionized the wheat growing methods in the Western Great Plains. The mechan-ical corn picker is coming into common use in those sections of the Corn Belt where the corn is husked from the standing stalk. In the western part of the Cotton Belt the cotton "sled," or stripper, has reduced the cost of har-vesting cotton \$10 a bale.

We learn from the press that the Rockefeller Foundation recently gave Yale 7 1/2 million dollars. This should entitle John D. to one seat on the 10-year line.

Fires Cut Forest Values

On the 389,498,960 acres of forest land under protection last year, fires burned over a total of 4,428,500 acres, causing damage estimated at \$8,583,620. Of the 178,855,050 acres of unprotected land 39,502,810 acres were burned over during the year, the damage being placed at \$74,350,000.

Of the 568,354,010 acres of forest land in the United States 68.5 per cent last year had some sort of or-ganized protection, either by the Fed-eral Government, the private owners, or by federal, state and private agen-cies co-operating under the Clarke-Mc-Nary law. There were, however, 178,855,050 acres, or 31.5 per cent of the

total area, still in need of protection. The fact that the fire damage on the protected 68 1/2 per cent of the total forest area was less than one-eighth that on the unprotected 31 1/2 per cent is a striking demonstration of the value of organized protection in sav-ing forest values.

The Boston Globe says, "France has swapped horses again in midstream." We are gradually picking up an im-pression that M. Briand lives in mid-stream.

Children nowadays are said to grow taller than their parents. They prob-ably get a good start in early years trying to reach their mothers' skirts.

Answers to Legal Questions

BY T. A. McNEAL

A and B marry. A has some money and other property but no children. B has some money and a large family of children. B died first, leaving a will. Contrary to the terms of the will it is probated. The widow got one-half and the children the other half. If when the widow dies she still has the property she had before their marriage and some money, can her children claim and receive what A leaves as her legal children? Or are her nearest relatives her heirs? Or can they claim what B left or can they have anything? Can A will all she leaves to her nearest blood relatives or can she will what she has to whomsoever she chooses regardless of B's children? Or must they be included in her will? What is the Kansas law regarding wills? When the will is broken should A receive only half?

THE separate property of A and B remains their property after marriage. At the death of either, the survivor under the Kansas law inherits one-half of the property of the deceased. Only one-half can be willed away from the survivor. However, so far as the children are concerned, either of them can will their property as they see fit. They may disinherit these children entirely. The surviving wife would be under no legal obligation to will any of her property to her deceased husband's children. They, of course, would inherit whatever their father left them, either by will, or if he did not make a will, they would inherit one-half of this property if they were all the children he had. If he had children by his second wife, they would inherit equally with the children by his first wife. The surviving wife could, however, will her property to her other relatives if she saw fit to do so.

Court Action Is Needed?

A and B were brothers, and also equal partners in the ownership of land. A died, leaving a wife and family but no will. B is a bachelor, but has sisters living. Could B's sisters break B's will or would it be necessary for B to deed this to A's wife? A. H.

There is nothing in the question to indicate that B has made a will, and if he has there is no reason that I know of why his sisters could break it. I do not understand why there should be any litigation about the matter. A dies, leaving an undivided interest in certain real estate. Under our Kansas law this undivided interest goes to his surviving wife and children. If they desire to have a division of this estate they may go into court and ask for a partition, have the court under the partition proceedings set off to B his undivided interest and to the widow of A and the children their undivided interest.

Bond Can Be Replaced

If a fraternity bond of a national organization which matures in 1930 is lost thru the mail and was not insured, can it be replaced by the organization? The secretary says not. If not, why not? Y. Z.

I can think of no reason why it should not be replaced by another bond. There may be some bylaws in this organization that forbid the issuing of a new bond. But my opinion is if it can be definitely shown that the bond was issued, paid for and lost, that the organization could be compelled to replace that bond. Of course, it would be entitled to protection, so that if the lost bond should turn up it could not be compelled to pay both the lost bond and the new bond.

Write to Your Congressman

Can a debt be collected from a man who has joined the United States army and is stationed in the Panama zone? A. R. B.

I do not think there is any provision for garnisheeing the wages of a soldier. Probably if you took this matter up with the War Department some pressure might be brought to bear on this soldier to set aside part of his monthly pay and apply it toward the payment of his debt. You might take this matter up with your member of Congress and see if he can make some such arrangement thru the War Department.

What the Rules Say

When your time is out on a paper does the editor stop it, or is he supposed to send it on? If the editor sends the paper on and on can he collect if you did not subscribe for it? Mrs. B. F. O.

Our postal department requires that papers shall not permit their subscriptions to be in arrears more than six months. That is not exactly a law, but has almost the force of a law. It has been held in the past at times that where one permits a paper to come without protest even after the time for

which the subscription was made, the subscriber could be compelled to pay. I hold that in view of the regulation of the postal department an editor could not compel a subscriber to pay for a greater length of time than the postal department permits the paper to go on under this regulation. I am strongly in favor of holding a subscription right down to the time for which it is given, and if a paper continues to send its paper indefinitely after the subscription has expired, the subscriber should not be required to pay for it, and I would advise him not to pay. I hold that if the editor or proprietor sends his paper after the time for which it is subscribed he should send it at his own risk.

Who Plants the Wheat?

Here is part of a lease we do not understand, so we wish you would print the explanation. This lease between A and B reads as follows: "To have and to hold the same from the first day of March, 1927, to February 28, 1929, with an option for an additional term of one year from March 1, 1929, providing, that unless by supplemental agreement made on or before the first day of July, 1928, it shall be mutually agreed that said party of the second part shall rent and occupy said premises for another year, said party of the first part shall have a right to put out a crop of fall wheat on any or all portions of said land from which said crop shall have been harvested."

There was no agreement whatever made on or before July 1 nor until June 24, 1929, when B got notice to give up possession of the wheat and of the ground July 1, 1929. Who has the right to put out this crop of wheat?

In this case, B, the renter, entered into a rental contract with A to rent the premises for one year from March 1, 1927, to February 28, 1929, with an option to rent the land for another year and also with the provision that unless a supplemental agreement might be made on or before the first day of July, 1928, that the renter shall rent and occupy said premises for another year, and said land owner shall have the right to put out a crop of wheat on any part of the said land from which the spring crops shall have been harvested. I must assume that the party of the second part here refers to the renter, and this supplemental agreement seems to be that while he has the option of continuing to rent and occupy the premises, he grants to the landlord unless he exercises such option the privilege if he desires to exercise it of coming on the place and putting in wheat on any of the ground which had been put in spring crops and from which the spring crops had been harvested. It seems that no such agreement was made, and therefore this part of the rental contract becomes null and void. But nearly a year afterward on June 24, 1929, the renter, B, got notice to give up possession of the wheat and of this ground on July 1. According to the terms of this rental contract he could be compelled to give up possession of this particular land because the original option had expired.

Hill Crest Farm Notes

BY CHARLES W. KELLOGG
Smith County

There has been a marked difference in the temperature most of the time since the big rain came a week ago Sunday. We have had quite a bit of cooler weather. In many fields where the corn was green it has made a great recovery, and is still green. But on our trip to the county-seat Saturday we noticed a large number of fields that were pretty well dried up, and several fields in which fodder was being cut. It seems as if the farmers there did not get so much rain as we did early in July, nor as much by half as we received last week.

These rains will give folks who have their stubble ground blank listed a chance now to work it down preparatory to sowing wheat, and a number are at it. The owner of the 160 acres that lies near us that was in wheat had his stubble ground blank listed late in July with an all-purpose tractor and two-row lister, and now it is being leveled down with a monitor. This field, altho quite dry then, was listed in a little more than four days. I was told it is costing him \$1.75 an acre to have it prepared for wheat sowing. This gives the tractor owner about \$30 a day for his services, which is not all clear, but leaves him a good profit for his work after all his living and tractor expenses are paid.

The Real Estate Market Place

RATES—50c an Agate Line
(undisplayed ads also accepted
at 10c a word)

There are five other Copper Publications which reach 1,446,847 Families. All widely used for Real Estate Advertising. Write For Rates and Information

KANSAS

FARMS for sale at bargain prices and on easy terms. Send for list. Humphrey Inv. Co., Independence, Kan.

EASTERN Kansas Farm Bargains. All sizes 20 acres up. Write us your wants. Buy land now. Mansfield Loan Co., Ottawa, Kan.

CHOICE wheat and corn land for sale; one crop will pay for land. A golden opportunity for you. Phone 188, A. C. Bailey, Syracuse, Kansas.

FOR Quick Sale—140 A. 3 1/2 mi. high school. Smooth upland. fair improvements. \$40. Creek bottom, 120, well improved, \$50. T. B. Godsey, Emporia, Kansas.

FOR SALE—Well Improved Dairy Farm; about 100 acres. Joining town with good high school. Write or see owner. Phone 33, P. O. Box 33, Woodbine, Kan.

BUSHELS PER ACRE instead of cash per acre for Western Kansas farms; no mortgage; no interest; no payment when crops fail. Wilson Investment Co., Oakley, Kan.

152 A. STOCK and Grain Farm—on a State Road, 2 1/2 mi. good town in Eastern Kansas. Fair improvements. Extra good barns, \$6,000. Must sell by Sept. 20. J. E. Anderson, Waverly, Kansas.

LAND FOR SALE—480 Acres in Decatur Co., Kan. Good improvements; 300 acres under cultivation. 1 1/4 mi. from Swedish Mission Church. No trades. Write Emma Myers, Danbury, Neb., or Claude Anderson, Oberlin, Kansas.

KANSAS, the bread basket of the world, is the world's leading producer of hard winter wheat. Kansas ranks high in corn. It leads all states in production of alfalfa. Dairying, poultry raising and livestock farming offer attractive opportunities because of cheap and abundant production of feeds and forage, and short and mild winters which require a minimum of feed and care. The U. S. Geological Survey classifies Kansas lands as first grade. These lands are available at reasonable prices and easy terms. Write now for our free Kansas Folder. C. L. Seagraves, General Colonization Agent, Santa Fe Railway, 990 Railway Exchange, Chicago, Ill.

COLORADO

SMOOTH wheat land in Eastern Colorado. \$6.25 per acre. Hackley, Lamar, Colo.

EASTERN Colorado wheat-corn land for sale. Box 387, Cheyenne Wells, Colorado.

BARGAINS—Eastern Colo. Brandon Valley. Shallow water, level land, imp. or Unimp. Get list, R. T. Cline, Brandon, Colo.

SOUTHWEST COLORADO—contains irrigated and non-irrigated farms. National forest, Mesa Verde National Park, oil fields, gold mines, saw mills, trout streams. One of best farming. Livestock and dairying sections in west. Free literature. Montezuma County Chamber of Commerce, Dolores, Colorado.

MISSOURI

LAND SALE. \$5 down \$5 monthly buys 40 acres. Southern Missouri. Price \$200. Send for list, Box 22-A, Kirkwood, Mo.

MISSOURI

POOR MAN'S CHANCE—\$5 down, \$5 monthly buys forty acres grain, fruit, poultry land, some timber, near town, price \$200. Other bargains. Box 425-O, Carthage, Mo.

MINNESOTA

YOU'LL DO BETTER in Minnesota—Make more money—have more enjoyment. Locate in America's greatest butter state. Succeeded as never before in general farming and dairying. Farms priced low on easy terms. Fertile soil—plenty of rainfall—fine pastures. Good roads, schools, churches, communities. FREE BOOK tells all. Ten Thousand Lakes-Greater Minnesota Assn., 1410 University Avenue, St. Paul, Minn.

SOUTH CAROLINA

SOUTH CAROLINA FOODS AND THE GOITER PROBLEM. Medical authorities recognize iodine as being a powerful preventive of goiter. South Carolina farms produce food products, vegetables and fruits high in iodine content. Tracts of 50 to 500 acres may be purchased on attractive terms. Write N. B. Gamble, Box 1318, Columbia, South Carolina.

MISCELLANEOUS LAND

OWN A FARM in Minnesota, North Dakota, Montana, Idaho, Washington or Oregon. Crop payments or easy terms. Free literature. Mention state. H. W. Byerly, 81 Nor. Pac. Ry. St. Paul, Minn.

RENT OR PURCHASE IMPROVED FARM. Crop payments, low prices. Minnesota, North Dakota, Montana offer good opportunities. Purchase like renting, one-fourth of crop to pay principal and interest. A good farmer can pay out in a few years with cattle, sheep and hogs. Clover, alfalfa grow luxuriantly. Feed crops very successful. Make a vacation trip and see the country. We can help you find a location. Write for free book, list and detailed information. Low excursion rates. E. C. Leedy, Dept. 500, Great Northern Railway, St. Paul, Minn. Free Zone of Plenty book tells about Washington, Idaho, Oregon.

SALE OR EXCHANGE

BARGAINS—E. Kan., W. Mo. farms, sale or exch. Sewell Land Co., Garnett, Kan.

WANTED TO LIST REAL ESTATE

WANTED—To hear from owner having farm for sale. H. E. Busby, Washington, Iowa.

WANT FARMS from owners priced right for cash. Describe fully. State date can deliver. E. Gross, N. Topeka, Kan.

SELL YOUR PROPERTY QUICKLY for cash, no matter where located, particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Nebraska.

REAL ESTATE WANTED

BUY, SELL or trade your farm or business. thru a man who gets results. Wranosky, Haddam, Kan.

received the same price for their cream when sold that the old line creameries paid their customers for cream they bought. Since paying these patronage dividends the number of cream customers at the elevator has increased.

Farm Crops and Markets

(Continued from Page 29)

population to be greater than that of last year's, due largely to higher wheat prices. European wheat markets, reports the bureau, were active during July and early August, with prices moving up, but some recessions appeared, as the latter month advanced. European wheat crop conditions improved somewhat over the period indicated, but the crop reported to date is still about 7 per cent under that of 1928. A crop of rye relatively larger than that of wheat has resulted in an unusually wide spread between prices of the two grains.

Spinner demand for new crop cotton has been limited, altho a rather better demand for the remaining suitable lots of old crop cotton has been in evidence. European sales of cotton goods have been fairly good in Western Europe, but slow in the central regions. In the pork markets the generally stronger tone of recent months continues, with the British market for cured products showing a somewhat easier tendency. British market supplies of these products have been increased from continental countries other than Denmark.

Europeanlard prices remain below last year's, but imports are larger. Fruit crop conditions on the Continent thru July indicated an apple crop better than in 1928, but a less favorable situation in pears. Indications are that, given continued favorable conditions, the Continent will be less dependent than last year upon American apples, with the market for volume shipments opening late.

Well maintained shipments of cream and milk from Canada are reported as still of chief interest in the foreign trade of the United States in dairy products. The seasonal year just closing in New Zealand has been one of remarkably heavy dairy production, the production of butterfat during the 11 months ended June 30, being estimated at a point 11 per cent larger than in the corresponding period of the preceding season.

Interested in Oats?

Oats in the North Central States, Farmers' Bulletin No. 1581, just issued, may be obtained free on application to the Department of Agriculture, Washington, D. C.

The captain of the Bremen hopes to break his own record on his next outward voyage. Sea-hog!



KANSAS LIVESTOCK NEWS

J. R. JOHNSON
1015 Franklin Ave.
Wichita, Kansas

J. W. JOHNSON
% Kansas Farmer
Topeka, Kansas



A Holstein Owned by H. A. Dressler Produced 1,180 Pounds of Butter in 11 Months

BY J. R. JOHNSON

COFFEY county, located in the Bluestem Belt of Kansas has long been looked upon as beef cattle territory, and a few years ago the farmer foolhardy enough to own a dairy bull was looked upon with considerable scorn by his neighbor. The first settlers farmed on horseback, and their sons held to the idea that native grass was intended to produce beef instead of butterfat.

Coffey county is still a big beef production county. There are more than 21,000 beef cattle within its borders. But the prejudice against the lowly dairy cow has been broken down. Several years ago H. A. Dressler of Lebo dreamed dreams that are now coming true. It is easy now to believe in high production Holsteins, but when Mr. Dressler traveled to Wisconsin to invest in foundation stock, no doubt he had hard work to keep himself organized. He bought five females and one bull. Altho his first 13 calves were bulls, he now has a herd of nearly 50, all but one bred by him and all of them tracing to the cow Piebe Estata Dora.

The 15 cows he now has on official test average 450 pounds of fat for eight months, and the cow Dora Pearl Veeman in 11 months has produced 945 pounds of fat, the equivalent of 1,180 pounds of butter. She is still making 2½ pounds of fat a day, and lacks only a few pounds of beating the yearly state record—and still has a month to go on.

Her twin sister, also in the test, has two 20-pound seven-day records, and is headed for the 1,000-pound mark. This cow's 2-year old heifer also is within 10 pounds of the state record. Seven cows in the herd have averaged more than 30 pounds of butter in seven days, and one of the cows has two daughters that average over 31 pounds.

Big Fair at Belleville

BY J. W. JOHNSON

More than 125,000 people passed thru the gates at the North Central Kansas free fair grounds at Belleville last week, and it was estimated that 40,000 people were on the grounds Thursday, with 10,000 automobiles parked around the big exposition. It surpassed any like gathering ever held in North Central Kansas.

There were 215 head of cattle in the big cattle barn, 142 of them of the beef breeds and 73 of them dairy cattle. Herefords and Shorthorns were about equally divided in numbers, and the quality of both breeds was very good. There were 30 head of 4-H club calves, both beef and dairy breeds, and an indication of the high quality of the calves was shown when Miss Vivian Rosseter of Hollis received fourth place.

The judge, B. M. Anderson of the agricultural college, remarked to the audience that Miss Rosseter's calf was better than the calf that took first at Des Moines this year. Ljungdahl Bros. of Manhattan, took all of the firsts in the fat cattle classes. In the hog divisions there were 604 head.

The Black Polands showed 186 head, which was more than double the number shown by any other breed. The Poland China futurity show, which was financed exclusively by the North Central Kansas Fair Association, had 20 nominations in the show, and J. H. McKeever, Mahaska, was first; Isaac Tyson, Olathe, second; Charles Ship, Belleville, third; Wayne Gilliland, Superior, Neb., fifth; Homer Alkire, Belleville, sixth; J. L. Griffith, Riley, seventh; Earl Erick-

son, Clyde, eighth; Ward Gilliland, Superior, ninth, and J. M. Bolton, Smith Center, tenth.

Other breeds were represented as follows: Spotted Polands, 70; Durocs, 95; Hampshires, 76; Chester Whites, 25; Tamworths, 25; Yorkshires, 21 and Berkshires, 41. In the 4-H club classes there were 20 Black Polands, 11 Spotted Polands, six Durocs, 15 Chester Whites, and 12 fat barrows. The sheep show was not up to former years, but the quality was good. There were 134 shown. The poultry show was a dandy despite the fact that there were not the number of fowls raised this year that there were last. About every breed of fowls to be found in this section was shown, and there were 937 birds in the big show. E. C. Branch was the judge again this year. The water fowl show was exceptionally large.

Many forms of entertainment are provided, but the horse pulling contests seem to grow in favor every year, and this year the entries were much heavier in both the light and heavy classes. On Wednesday a 2-inch rain fell during the forenoon, but did not delay the excellent program in front of the grandstand, and after 3 o'clock the races were put on and the big night show went on as usual. Thursday and Friday professional auto racing was on the program in the afternoons. The North Central Kansas Free Fair at Belleville is the third largest fair in the state.

I have just received a letter from G. M. Shepherd of Lyons written from the hospital at Rochester, Minn., where he is recovering from a very severe operation. His hundreds of friends in many parts of Kansas will be glad to know his condition is favorable and that he will probably be home with his family by the time this is in print.

W. H. Ling, one of the very successful Duroc breeders of Eastern Kansas writes me that he has had good success showing at the county fairs in the east half of the state this year. At Chanute he had senior, junior and grand champion sow besides a lot of firsts, and at Iola, his own home fair, junior and grand champion sow, also first aged herd and first young herd.

George Vincent, Hutchinson, owner of one of the strongest herds of Jersey cattle in Central Kansas, will hold a dispersion sale sometime during the first ten days of October. Mr. Vincent has bred along the most fashionable island blood lines now for over ten years and has one of the most uniform herds I have ever seen. He has retained and wholesaled milk in Hutchinson for many years and the quality of his milk is well known. He is entitled to a rest and is dispersing for no other reason. More complete information will appear in future issues of Kansas Farmer.

J. M. Wandler, Berryton, Kan., will disperse his herd of 21 registered Holsteins at a public sale to be held at the farm near that place, Wednesday, Oct. 2. Mr. Wandler is retiring from the business and is selling his entire herd, consisting of 20 females, about 10 which are now in milk and 10 yearling and two-year old heifers and a yearling herd bull he purchased recently. The sale follows the big Northeast Kansas Association sale at the fair grounds on Tuesday and you can make this sale by staying over another day. The sale will be advertised in Kansas Farmer next week.

Kansas farmers and breeders, especially beginners, have never had a better opportunity to buy well bred registered Shorthorns than will be afforded at the W. C. Edwards, Jr. sale to be held on the state fair grounds at Hutchinson during the fair. The date of sale is Thursday, Sept. 19. The offering is high class in both breeding and individuality. One of the outstanding attractions is the red bull, Willonga Masterkey, a son of Masterkey and out of Columbia 6th, a daughter of Anoka Omega. This young bull is good enough to head any herd and it is hoped he will stay in Central Kansas.

After seeing the offering I am convinced the cattle that go in the W. T. Meyer dispersion sale at Sylvan Grove, Kansas Oct. 18 are the greatest lot of registered Herefords that have been sold in one sale in the western half of the state for many years. The offering of 235 head comprise 100 head of great young cows, all of them with calves at foot and rebred. The calves by and the cows bred again to the great breeder of Uniformity Beau Questor, a great lot of two-year old heifers by the above bull and bred to the Double Domino bull Domino 18, a lot of yearling heifers and young bulls make up the offering. If I were a young man and thinking of founding a herd of registered Herefords I would attend the Meyer sale. Catalog for the asking.

Everyone expecting to buy registered Holsteins in the near future should be interested in the Northeast Kansas Holstein Breeders' Association sale to be held in the livestock judging pavilion at the fair grounds, Topeka, Tuesday, Oct. 1. This sale is under the management of Robert Romig, Topeka, Kan., who is president of the association and who will be glad to mail you a sale catalog upon request and the catalogs are ready to mail right now. The offering of 40 cattle has been selected from

16 association herds and as has been previously stated is the first sale to be held by the association and will be the best lot of cattle ever sold in Eastern Kansas. There will be 30 cows and heifers, all heavy in milk or freshening between now and the first of the year. The 10 bulls, all of serviceable ages, are worth your consideration if you are in the market for a real bull. The sale will be advertised in Kansas Farmer, next week. Better write today for the sale catalog to Robert Romig, Topeka, Kan.

Public Sales of Livestock

Shorthorn Cattle
Sept. 19—W. C. Edwards, Jr., Burdette, Kansas sale at Hutchinson, Kansas.
Oct. 16—A. C. Shallenberger, Alma, Nebraska.
Oct. 17—S. B. Amcoats, Clay Center, Kan. and Bluemont Farm, Manhattan, Kan. Sale at Clay Center.
Oct. 22—Purdy Bros., Harris, Mo.
Nov. 8—Allen County Shorthorn Association, S. M. Knox, Humboldt, Kan., sale manager.
Nov. 13—Kansas National Sale, Wichita, Kan. John C. Burns, Manager.

Hereford Cattle
Oct. 18—W. T. Meyer, Sylvan Grove, Kan.

Holstein Cattle
Sept. 25—R. E. Thomas, Andover, Kan.
Oct. 1—Northeast Kansas Holstein Breeders' Asso. Sale at Topeka, Robt. Romig, Sale Manager.
Oct. 2—J. M. Wandler, Berryton, Kan.
Oct. 10—Dr. C. A. Branch, Marion, Kan.
Oct. 21—W. E. Hinkins, Topeka, Kan. W. H. Mott, sale manager, Herington, Kan.
Oct. 22—M. H. McConnell, Downs, Kan. W. H. Mott, Sale Manager, Herington, Kan.
Nov. 5—Walter Clark, Garfield, Kan. W. H. Mott, sale manager, Herington, Kan.
Nov. 14—Wichita Show Sale, Wichita, Kan. W. H. Mott, sale manager, Herington, Kan.

Jersey Cattle
Sept. 18—S. G. Monsees, Sedalia, Mo.
Sept. 26—E. T. and J. Howard Comp, White City, Kan.

Ayrshire Cattle
Oct. 30—L. A. Poe, Hunnewell, Kan.

Duroc Hogs
Oct. 10—W. H. Hilbert, Corning, Kan.
Oct. 19—W. H. Ling, Iola, Kan.
Oct. 24—Lapard Stock Farm, Lawrence, Kan.

Poland China Hogs
Oct. 11—Arden Clawson, Lawrence, Kan.
Oct. 15—Otho G. Smith, Colony, Kan.

A Dairy Herd Pays!

It isn't difficult to make a dairy herd pay if you use the sense of business needed in other lines." Charles W. Dingman, Topeka, has qualified himself to make such a statement by being on both sides of the fence. He has been and still is a dairyman at heart and in practice. And he also is the president of an insurance company that has written 7 million dollars' worth of business on its books in the last two years. He enlarged on his first statement by adding, "A man can make any farming proposition pay by applied business principles."

Is he right? Hundreds of Kansas farmers answer in the affirmative by their successes—some of them already have been pointed out as masters of their chosen work. But, Mr. Dingman, will you give us something more tangible regarding what you mean by "applied business principles?"

He turned his back on a deskload of other important matters for an hour or more. He talked records and blood lines and told of his ambitions for Kansas of seeing cows produced in



Charles W. Dingman

the state that could not be outclassed. "Why should we feel that we must go outside of the state for good producers?" he questioned. "We have the conditions and intelligence to be the leader."

"When I apply the same business principles to my dairy herd that are essential in my insurance business I make money, regardless of whether I am in the game for butterfat production or for the production of breeding animals primarily. I think the successful man must study the build-

DUROC JERSEY HOGS

Sunflower Herd DUROCS

25 March boars and gilts for sale, sired by Sunflower Siltas. Remember this boar is a real boar and a son of the two times world's champion. Boars and open gilts priced right. Chas. Stuckman, Kirwin, Kan.

Bred Sows and Gilts

Registered, Immuned and shipped on approval. Write for prices and description. STANTS BROTHERS, ABILENE, KANSAS

Ansbaugh's Profitable Durocs

Size, type and vigor. 25 big farm range boars. Tops from 50 head best of blood lines. Priced right. GEORGE ANSBAUGH, Ness City, Kansas

We Offer 24 March Boars

Big husky fellows carrying the blood of some of the best sires and dams of the breed. Good boars priced worth the money. Write for descriptions and prices. M. STENSAAS & SONS, CONCORDIA, KAN.

Big Strong Duroc Boars

20 selected from our spring crop. By Top Sissors and Sissors Broadcaster. Out of big mature sows. Satisfaction guaranteed. W. A. Gladfelter & Son, Emporia, Kansas

Big Heavy Well Balanced

Pork producing spring boars. Reg., Immune. Shipped on approval. Describe your wants. D. M. THOMPSON, Eskridge, Kan.

CHESTER WHITE HOGS

Blue Grass Stock Farm

Clover Leaf big type Chester Whites. 40 big, well grown type boars and gilts for sale. CLYDE COONSE, HORTON, KANSAS

Eskridge Blue Grass Herd

March and April boars. Very typey and well grown. Open and bred gilts. Weanlings. Write for prices. RICHARD GRIFFITH, ESKRIDGE, KAN.

SPOTTED POLAND CHINA HOGS

DANDY SPOTTED POLAND BOARS

of service age at \$30 and up. Also spring boars and bred gilts. Located in Crawford Co. Drive over or write WM. MEYER, FARLINGTON, KAN.

TAMWORTH HOGS

20 Picked Boars

for our old customers and new ones. We can please you. Address:

P. A. WEMPE, SENECA, KANSAS

BERKSHIRE HOGS

Cedar Croft BERKSHIRES

Spring boars. Open and bred gilts. Weanling pigs in pairs and trios not related. A. L. PINET, ONAGA, KAN.

SHEEP AND GOATS

REG. SHROPSHIRE

Yearling rams for sale. 100 Registered Ewes bred to choice rams. Delivery Oct. 1st. GEO. D. MERRITT, HAVEN, KANSAS

ing up of his herd and then put into practice himself the things he has learned if he is to make the most out of his herd. The best blood lines bring the most money. And when you get an outstanding animal, individual study of and attention to it are essential. It is far better to keep a few good cows than a lot of poor ones. I believe in eliminating numbers in favor of producers. Scales always in readiness behind my cows help in this work.

"Fifty per cent of the production is in blood lines and the other half depends on handling. In the hands of a poor manager a good cow becomes a poor one. It pays to provide adequate shelter, warm water in winter—Kansas dairymen know these facts as well as I. We must remember to apply them in our work.

"I have found that the law of averages will produce enough common cows, so it isn't necessary to buy them. And I firmly believe the average farmer can purchase at sales or private treaty exactly what he wants—and exactly what he thinks he is getting. I believe there is less falsification in the livestock business than in any other. Real breeders have built and are building on a foundation of honest representation. I have found that the majority of farm folks are mentally honest—they seem to be on a higher plane than the average of other business. How much business on the farm is done by verbal contracts? A tremendous amount, and few of them are broken. Ninety per cent of all trouble and dissatisfaction in any business on the farm comes thru misunderstanding. I believe agriculture as a whole is winning thru honest effort."

Mr. Dingman has a good many thousands of dollars invested in his dairy project. "It requires faith in honest

effort," he said, "but go in right and work it hard and success will result." Applied business principles can be wrapped up in a very short statement Mr. Dingman made: "If a job requires 15 minutes and you have an hour in which to do it, do it in the first 15 minutes," he said. "My mother taught me that when I was just a lad, and she was right." And a slogan he keeps handy in his mind and office and on his business letterheads is this: "Break faith with no one."

Mr. Dingman, you may remember, has been in the Holstein business at Clay Center for some years. He had about the first registered stock in Clay county, and the first A. R. O. cow. A daughter of one of the six original cows he purchased back in 1900, was the first in the state to make 1,000 pounds of butter. This man is a Holstein booster and has offered many prizes to help put Kansas Holsteins ahead of those in other states. Every year, he offers \$1,000—\$500 in cash as designated by the officers of the Northeast Kansas Holstein Breeders Association, \$500 for the calf of the first cow to produce 1,000 pounds of butterfat in the state, and cups and other cash prizes for cow testing associations and individuals over the state.

High Red Clover Yields

BY E. A. HOLLOWELL

Red clover seed production is influenced by a number of factors, biological and economic. The structure of the individual flower of a Red clover head is such that the pollen is liberated below the stigma, and without the help of insects to carry it upward to the stigma pollination cannot be effected. Red clover flowers are mainly self-sterile—that is, the pollen does not often fertilize the ovule of a flower on the same head or on any other head. For fertilization it is necessary that the pollen be carried on a stigma of another plant.

In open flowers the stigma and anthers are inclosed in a structure that prevents free shedding of the pollen until the flowers are tripped; this is accomplished by insect visits. As the flower is tripped, the somewhat sticky pollen adheres to the mouth parts and body hairs of the insect, and thus it is carried from one flower to another. While many insects are seen visiting Red clover flowers, the different species of bumblebees are the chief cross-pollinators in the Eastern and Middle Western states.

In many localities there has been an alarming decrease in the amount of seed set from fields where large yields of seed were expected. This decline may be attributed to a decrease in the bumblebee population, brought about by extensive campaigns to clean up fence rows, the plowing of permanent meadows, and the clearing of woodlots, all of which measures tend to decrease the number of bumblebees' natural homes. A continual decrease in seed production in the future may be expected where such activities are carried on.

Various species of bees, moths and butterflies also help in cross-pollinating Red clover flowers, but the activity of all of these, with the exception of the honeybee, is of minor importance except in certain restricted locations. In irrigated sections of the western states large yields of clover seed are being produced; the honeybee is largely responsible for the cross-pollination. In the western states the absence of flowering plants at the time that Red clover blooms may be one reason for honeybees' visits to the Red clover flowers. In the Middle Western and Eastern states honeybees also sometimes act as cross-pollinators of Red clover when dry environmental conditions limit the number of flowers available for bee visitations. Therefore the factors which affect insect activity must be considered in a study of Red clover seed production.

That damp and rainy weather is detrimental to the setting of seed is a general conclusion of producers of Red clover seed. Recent experiments, however, indicate that large amounts of atmospheric and soil moisture do not limit the setting of seed so far as the plant itself is concerned, provided the pollen is successfully transferred from plant to plant. An excessive amount of moisture indirectly influences the setting of seed by affecting the activity of pollinating insects. Bumblebees

caught visiting Red clover flowers, wet with dew and rain, have been examined, and apparently the pollen had been washed from their tongues and body parts, thus minimizing the chances for cross-pollination.

Seed has been obtained, however, when Red clover flowers were artificially cross-pollinated under such moisture conditions. Under such conditions the flights of the bees are reduced and the health and increase of the colony impaired. After heavy rains followed by hot weather, pollen often disintegrates, and insects visiting the flowers do not secure sufficient quantities of viable pollen for cross-pollination. Bumblebees have a tendency to visit the older flowers rather than the young ones, even when the tissues of the former are browning. In such flowers the quantity of viable pollen for cross-pollination is reduced, and in many cases it is likely that the ovules have become nonfunctional.

The setting of seed depends on the activity of pollinating insects, but destructive insects also are very numerous in some localities and in some seasons. These insects may limit the quantity of seed produced by destroying the ovules or the plants themselves before the seed is formed. The chalcid fly, the clover-flower midge, the clover-seed caterpillar, the lesser clover-leaf weevil, and the root borer are some of the more important destructive insects. A management practice whereby the first growth of clover is harvested for hay when the plants are in full bloom may help to control the midge and the seed caterpillar. Rotations where the occurrence of clover crops on the same soil are widely separated will aid in the control of the root borer.

Economic factors also are important in regulating the total volume of Red clover seed produced, but these factors can only be touched upon here. When the price of clover hay is high, the second growth clover may be used for that purpose instead of being saved for seed, or conditions may point to its profitable utilization as a green-manure crop. How much of the clover acreage is left for seed in any one year is largely determined by the requirements of the farm. At the present time it would appear that the harvesting of a seed crop should be a profitable enterprise, because of the high price and scarcity of adapted seed.

For the Truck Growers

Preparation of Bunched Beets, Carrots and Turnips for Market, Farmers' Bulletin No. 1,590, just issued, may be obtained free from the Department of Agriculture, Washington, D. C.

Powerful Motive

It was the young barrister's first case, and he was bubbling over with pride and enthusiasm as he stood in court.

"Now," said he, addressing the defendant, "you say you came to town to look for work? I put it to you there was another, a stronger motive that brought you all this distance."

"Well," hesitated the defendant, "there was—"

"Ah!" cried the barrister, triumphantly. "And what was it?"

"A locomotive."

THEFTS REPORTED

Telephone your Sheriff if you find any of this stolen property. Kansas Farm Protective Service offers a reward for the capture and conviction of any thief who steals from its members.

Mark Fleharty, Fontana. Between 40 and 50 White Leghorn hens.

Mrs. B. F. McKim, Morrill. Fifty White Rock pullets and cockerels, weighing three to four pounds.

Mrs. J. W. Troutman, Lewis. German female police pup, brown and tan, seven months old.

J. D. Fair, Sharon. Thirty White Plymouth Rock cockerels and pullets weighing about 5 pounds apiece.

John W. Davis, North Topeka. Set of Concord harness. Two inch piece broken off the hip strap.

William L. Chalker, Herington. Brown leather saddle, leather over horn was ripped open, front girth strap on left side had been broken and was riveted with two copper rivets. Stirrup on left side was narrow and the stirrup on the right was wide. Picture of a horse on skirt of saddle. Black-snake whip, iron handle broken about five inches from end.

D. H. Rutschman, Elbing. Thirty gallons of gasoline, bucket of cup grease, six oilers and a large funnel.

C. Arthur Johnson, Salina. Purebred White Turken weighing between 8 and 10 pounds, one white and four Barred Rock, young turkens.

Rena Gravatt, Bushong. Male police dog, nine weeks old, answers to name of "Hoover". Leroy Howard, Williamsburg. Red cow. Charles H. Glace, Clay Center. Two bronze turkey hens and two young turkeys.

Willdon Place Shorthorns

Sale at Kansas State Fair

JUDGING PAVILION

Hutchinson, Kan., Thursday, Sept. 19

17 BULLS, 23 BRED COWS, 7 CALVES including our great 3-yr-old stock bull

WILLTONGA MASTERKEY 1447441

Red bull, calved May 19, 1926. Bred at Baker Shorthorn Farms. A double grandson of Anoka Omega. No better proven sire will be sold this year.

SIRE

Masterkey 1058144

(F. C. Merry)

DAM

Columbia 6th 1058148

(F. C. Merry)

Anoka Omega 698327 Anoka Farms

Queen of Beauty 31st 242038 Bellows Bros.

Anoka Omega 698327 Anoka Farms

Columbia 4th 770897 Bellows Bros.

Our herds of 200 Registered Shorthorns, bred for beef and milk are located in Pawnee and Hodgeman counties and represent thirty years of constructive development in producing quality Shorthorns of the type the Kansas Farmer most desires. We believe our battery of herd bulls are breeding your kind of cattle. Sni-A-bar Regent, by Supreme Archer (Bellows) dam Edellyn Lavender (Edellyn) WILLTONGA COMMANDER, by Supreme Commander (Bellows) dam Columbia 6th (Merry) WILLTONGA MASTERKEY, by Masterkey (Merry) dam Columbia 6th (Merry) WILLDON BALLYLIN, by Ballylin Rodney (Black) dam Augusta Jewel (Ditmire). Write for catalog mentioning Kansas Farmer.

WILLDON PLACE FARMS, BURDETT, KAN.

W. C. EDWARDS, Jr., Owner

HOWARD G. JONES AND W. B. JACKSON, Herdsmen.

Boyd Newcom, Wichita, Kan., Auctioneer.

Jesse R. Johnson, Fieldman.

Jersey Cattle Dispersion Sale

White City, Kansas

Thursday, Sept. 26

The entire herd of Everett T. Comp and a strong consignment from the herd of J. Howard Comp consisting 9 head of top individuals. Over half of offering in milk or near freshening. Few high class young bulls and the herd bull, OXFORDS MAY BOY, a register of merit sire of great merit. Everything in sale sired by or bred to above sire. His daughters will be bred to the young herd bull, JOEY MOLINA, a great son of Imp. Molinas Fairy Boy. Offering includes the present butter and milk Champ, Jersey of state as 3 year old and several state champions and Gold and Silver Medal cows and their produce. The catalog gives all information. Free for the asking. One of the biggest of class offerings of Reg. Jerseys ever sold in Kansas.

E. T. & J. Howard Comp.
White City, Kansas



Auctioneer, Col. Jas. T. McCulloch
Fieldman, Jesse R. Johnson

MILKING SHORTHORN CATTLE

ROAN, SIX MONTHS OLD

For sale, great grandson of Queenston Duke, sire of U. S. Champion Milking Shorthorn cow. Also females. W. K. HEATON, AMITY, COLO.

POLLED HEREFORD CATTLE

Riffel's Polled Herefords

We offer outstanding Polled Hereford bulls, six to 24 months old and some cows and heifers. JESS RIFFEL, ENTERPRISE, KANSAS

GUERNSEY CATTLE

Reg. Guernseys

yearling heifers and bulls for sale. A few high grade springer heifers. Fed. accredited herd. FRANK GARLOW, Concordia, Kan.

To Reduce Our Herd

We offer 30 long two year old Guernsey heifers that will freshen in September and October and some nice young cows. Also three two year old bulls. Address, WOODLAWN FARM, Rt. 9, Topeka, Kan.

POLAND CHINA HOGS

PEARL BOARS

Private Sale

Our 1929 spring boars at attractive prices to move them soon. Most popular blood lines and they are splendid individuals. Write for prices and further information. Address ELMER PEARL, WAKEENEY, KAN.

Boars and Gilts, Private Sale

119 boars and gilts raised, and we offer the tops to early buyers at attractive prices. Well bred and well grown. Farm joins Corn-ing. E. H. KEMPLAY, CORNING, KANSAS

We Guarantee Our Boars

to please you. We offer our 1929 tops at farmers prices and our gilts we will sell open. Let me hear from you if you want a well bred boar that has been raised right. Chas. Holtwick, Valencia, Kansas

Boars and Gilts at Private Sale

Boars by Armistice Over and Super Knight. Also some choice October yearling gilts, bred to farrow this month and next. JOHN D. HENRY, LECOMPTON, KANSAS

HAMPSHIRE CATTLE

Whiteway Hampshires

on Approval

A very choice lot of early spring

boars for sale sired by prize

winning sires and out of prize

winning boars.

F. B. Wempe, Frankfurt, Ks.



JERSEY CATTLE

Reg. Jersey Cows and Heifers

Several head for sale, also one yearling bull. Owl-interest breeding. J. E. Barnes & Son, Mound City, Kansas

Jersey Dispersion Sale

Wednesday September 18

ACCREDITED HERD

The Monsees herd of registered Jerseys has long been regarded as one of the leading herds in the Central West. Careful breeding and selection coupled with register of merit testing has placed this herd in the forefront as one of Missouri's best herds. There will be sold 23 cows, with register of merit or cow testing association records, 7 bred heifers to be fresh this fall, 8 heifer calves and 2 proven bulls.

TYPE, PRODUCTION, and HEALTH Catalogues Now Ready, Write,

R. T. Lee, Sales Mgr., Iowa City, Ia. or S. G. Monsees, Owner, Sedalia, Mo.

O. W. Devine, Fieldman H. S. Duncan, Auct. Creston, Ia.

Rate for Display Livestock Advertising in Kansas Farmer

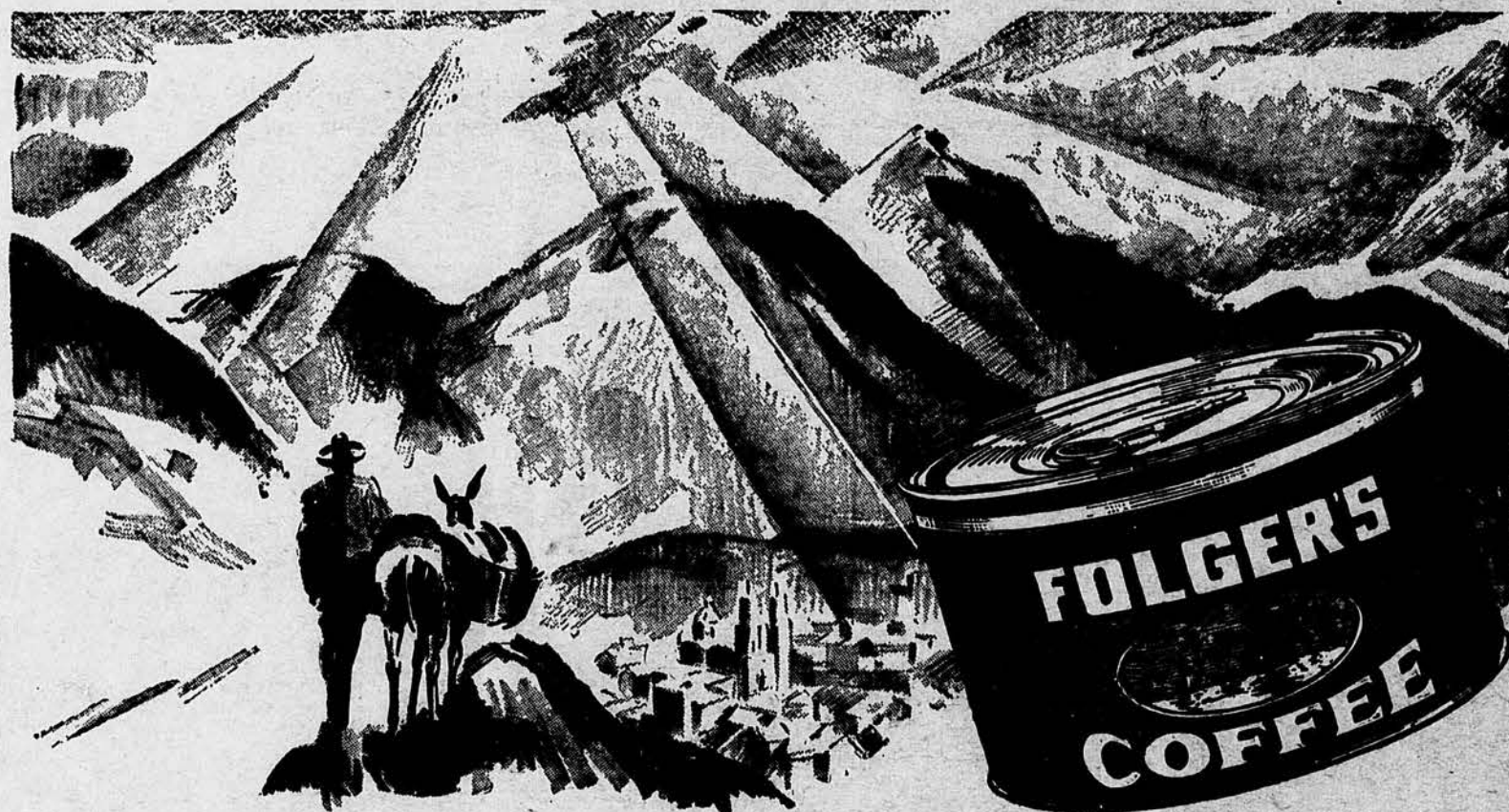
\$7.00 per single column inch each insertion.

Minimum charge per insertion in Livestock Display Advertising columns \$2.50.

Change of copy as desired.

LIVESTOCK DEPARTMENT Kansas Farmer, Topeka, Kansas

Coffee . . . From The Mountains Of Central America With A Flavor That's Different



Have you tried these coffees whose rare tang and full-bodied flavor, experts agree, are not duplicated anywhere else in the world? Never "flat" or "thin."

IF you are tired of having coffee turn out "flat" or "weak" and tasteless, no matter how carefully you make it, it will pay you to read this through.

In the high volcanic districts of Central America grows a coffee that leading experts concede is not duplicated anywhere else in the world. It has the tangiest flavor, the richest, mellowest body of probably any coffee known today.

No matter how you make it, women say, this mountain coffee always gives a full, rich flavor that can only be described in one way—*good coffee*.

We don't want to tell you how good it is. We suggest that you try it and see for yourself why thousands of women are turning to this particular coffee in place of all others.

Seventy-nine years ago Folger & Co. imported

their first cargo of Central American mountain coffees to San Francisco. Travelers who first tasted it in the famous Bohemian restaurants of that city were captivated by its rare flavor. They wrote back for shipments, because it was unobtainable anywhere else. Thus its fame spread. In a few years, solely because of its unusual flavor, it became one of the world's most sought coffees. Today two great roasting plants are required to supply the demand here and abroad.

What Makes the Flavor

Ordinarily when you change from one brand of coffee to another, you note little difference in taste. That is because 70% of all coffee sold in the United States today (regardless of brand names) is of one common type, grown in the same general region. Hence Nature has given it the same common flavor. So-called "blending" and special roasting processes (in

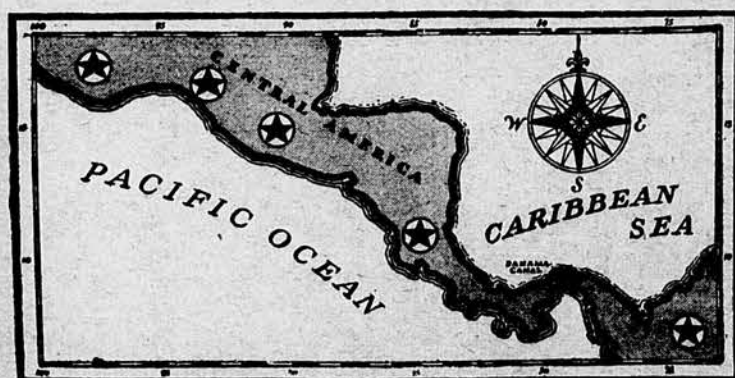
spite of advertising talk) can not change it. For roasting coffee merely brings out whatever flavor Nature has already put in.

It is a different *type* of coffee that makes Folger flavor different—the rare mountain coffees of Central America.

Compare the Taste

Get a pound of Folger's Coffee from your grocer today. Drink it tomorrow morning. The next morning drink the coffee you have been using. The third morning drink Folger's again. Then decide which you like best. If, for any reason, you do *not* choose Folger's, your grocer will gladly refund the full purchase price. We will pay him. That's fair, isn't it? You risk nothing—so why not order Folger's now for the test?

FOLGER COFFEE COMPANY
Kansas City San Francisco Dallas



FOLGER'S COFFEE

VACUUM PACKED