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Established 1863. \$1 a Year

WAR DEMANDS ON LIVE STOCK Better Credit Facilities Needed by Live Stock Producers

A FEW weeks ago the United States Live Stock Industry Committee met with Secretary D. F. Houston and Food Commissioner Herbert Hoover in Washington, to consider certain problems of live stock production vital to the national welfare. Both Secretary Houston and Mr. Hoover requested specific suggestions from the representative live stock men on this committee relative to the growing and marketing of live stock products. Following the conference this group of live stock men prepared and submitted a statement from which we quote as follows:

"We are impressed with the seriousness of the war situation and of the obligation which rests upon all citizens to serve the common good. And for ourselves and for the sincerely patriotic live stock producers whom we represent we hereby pledge to the President of the United States and to his administrative officers our loyal co-operation in carrying out such measures as they may consider necessary to the successful prosecution of this great war for world-wide democracy.

"We approve the efforts which have been made under the leadership of the Department of Agriculture to encourage live stock production, and we believe that in this work the department should have the liberal support of federal and state authorities.

state authorities. "The live stock business is no different from all other business, in that it is governed by economic laws.» Production in a large way increases or decreases as the cost of production and the price of the finished product rise and fall. When the margin of profit is replaced by a positive loss the length of time the live stock producer can continue in business is measured solely by his financial condition.

"If there has been a reduction in live stock in proportion to the needs of the country, the cause must be sought in the unremunerative prices which the live stock produced has received in recent years. A continuation of prices which are below the cost of production will intensify the shortage. "The live stock producers will loyally

acquiesce in whatever measures the Gov ernment may find necessary to adopt and will cheerfully and as speedily as possible adjust their business to the conditions brought about by such measures. We suggest to those who must bear the heavy burden of responsibility that while liquidation of live stock can take place very rapidly, as shown by the experience of the past year, the re-establish-ment of the herds and flocks is a matter of years. If, therefore, it seems desirable to hasten an increase in our live stock production, definite policies look-ing to that end should be adopted and made known at the earliest possible date. Even with normal conditions the production and feeding of live stock is carried on under uncertainties which do not pre-vail with other kinds of business. The cost of the raw material is determined largely by the sunshine and the rain and cannot be known in advance. The price of the finished product is subject to the most violent fluctuations, caused not only by rapidly changing business con-ditions but by a system of marketing in which the seller has no voice as to in which the seller has no voice as to

the prices which shall be paid for his finished product. Under war conditions live stock market uncertainties are intensified and the cost of production is very greatly increased. Therefore, in the absence of reasonable assurance of prices which will cover the cost of production, a decrease in live stock seems inevitable.

"If in the present emergency the paramount consideration is an increase in production, we feel the Government should announce and adhere to the policy that in the huge purchases of meats and other live stock products which are to be made through a common purchasing agency of our nation and its allies, such prices will be paid as shall assure the producer a reasonable margin over the cost of production, and we believe that the Government should take effective measures through the licensing power granted in the Food Bill to see that the large packing concerns do not by their present control of the central markets deprive the producer of a just profit, and that every agency of the Government should be employed to eliminate all manipulative and speculative efforts in the handling of live stock and its products; that all waste in distribution should be ascertained and stopped, to the end that the consumer secures his meat supply at the lowest possible price consistent with sound economic principles. We believe that careful consideration should be given to the establishment of a definite relation between the values of hogs and.corn. "We thoroughly endorse Mr. Hoover's

"We thoroughly endorse Mr. Hoover's efforts to prevent reprehensible speculation in food products of all kinds.

"The work of the Department of Agriculture, based upon its study of marketing conditions, is most valuable and we urge its continuance, to the end that market abuses may be done away with and that all unnecessary expense between the producer and the consumer be eliminated.

"We feel that it is most necessary that whatever methods are adopted as war measures in connection with the live stock industry should be based on such sound economic principles as to adjust themselves readily after the war to the needs of our steadily growing population, which should be maintained as a meat-eating nation.

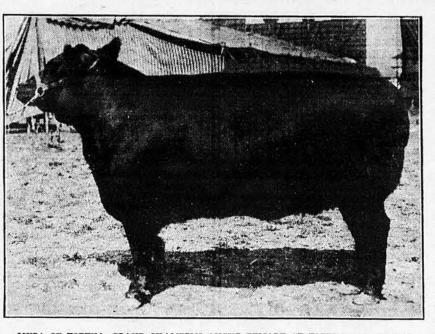
meat-eating nation. "We urge upon the Food Administration and the War Department the need of conserving both the garbage and manure produced at the various cantonments. A wise use of the garbage for hog feeding will result in the production of some millions of pounds of pork from food which would otherwise go to waste. The distribution of the manure upon lands near such cantonments will produce additional food values equivalent to from \$2 to \$5 per ton for all the manure so distributed.

so distributed. "We recommend that central retail markets under effective government control and regulation be established in the larger cities of the country where meat and meat products may be sold to the consumer at cost from the packing house plus a reasonable percentage of profit.

"We earnestly recommend the saving as far as practicable of heifer calves, ewes and sows suitable for breeding purposes.

"We urge that every possible effort should be made by the Government to stabilize conditions on the range and encourage by liberal regulations increased stock production within the national forests, the Indian reservations and on the unappropriated public lands.". In addition to these general state-

In addition to these general statements, recommendations were made relative to beef cattle, dairying, sheep production, and hog raising.



MYRA OF TOPEKA, GRAND CHAMPION ANGUS FEMALE AT TOPEKA AND JUNIOR CHAMPION AT HUTCHINSON.—OWNED BY G. F. COWDEN & SON, MIDLAND, TEXAS If the Washington authorities will consult freely with such men as constituted this committee, and listen intelligently to what they have to say, action should follow tending to stabilize this great industry and render the position of the live stock producer less hazardous. The mistake has too frequently been made of assuming that the packing interests and the producing interests are identical and can be approached from the same angle. This committee will have accomplished an important purpose if it succeeds in bringing the Food Administration to a full realization of the position occupied by the live stock producer.

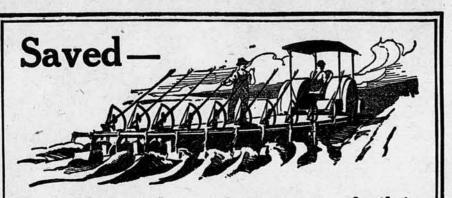
Seed for Next Year

We have just received the following statement from W. A. Boys, district agricultural agent with headquarters at Hays: "Due to the prolonged dry spell this summer, there will be a shortage of seed both of sorghums and corn. The recent rains have greatly improved the condition of these crops but it is yet a question whether seed will be produced or not. I think the majority of farmers in this part of the state now realize the value of acclimated seed. It is very important to gather and save in the best manner possible seed that is produced this year. I do not know of any work on the farm that will pay better returns than hand selection of seed for next year's planting."

Wheat at the Hays Station

The Hays Experiment Station finished its wheat threshing during the first week of September, the total yield being about 3,000 bushels and the average about six and one-half bushels to the acre. The best field averaged 15.6 bushels to the acre. A thousand bushels of this wheat was sold at once at \$2.20. The damaged wheat from the tops and bottoms of the stacks was kept separate and this was also sold at once at a considerably lower price. The balance, which tested fifty-seven pounds to the bushel, has been stored in the station elevator.

elevator. Many practical wheat growers in that section of the state have in the past refused to take the station seriously, but it is becoming more evident each year that there is something to improved methods of growing wheat under Western Kansas conditions. Within the past week a man who thought he knew remarked to the writer that there was ne wheat raised in Ellis County this year. He had made a trip over Ellis County in July and had apparently overlooked the fact that even in this year when so much wheat failed, the station had succeeded in producing a fair crop. Farmers in the west end of the state have a valuable asset in the investigations being conducted at the Hays farm and cannot afford to ignore what is being accomplished. This year the station wheat land was practically all plowed in July and early August. It required some driving work and perhaps there would have been less damaged wheat if the threshing had been done earlier, but this early work in the wheat fields will probably mean enough more wheat next year to make up many times over for the loss due to late threshing this year.



7 gallons of fuel and 10 quarts of oil in plowing 16¹/₂ acres through scientific tractor lubrication

"While operating on Gargoyle Mobiloil "B" this vapor was not noticeable..... In addition the tractor handled

"Can I too show similar savings if I change to Gargoyle Mobiloils?" A

Gargoyle Mobiloils used as speci-

fied on tractors have neveryet failed to show lowered oil and fuel con-

sumption when comparatively tested

This year progressive American farmers are striving for increased production and lowered costs. Unless you are using Gargoyle Mobiloils, the chances are that

you now waste in part your fuel and oil.

The Chart below is today recognized as the scientific guide to correct Tractor

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

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

on the container.

For information kindly address

inquiry to our

Write for Cor-

rect Lubrication

booklet contain-

ing complete

Chart and other

valuable data.

nearest office.

the load more easily."

You ask:

natural question.

with other oils.

Lubrication.

A grade for each type of motor

CORRECT TRACTOR LUBRICATION Explanation: - The four grades of Gargoyle Mobiloils for tractor lubrication,

Two successful farmers of Parshal, N. D., own a 30-60 h. p. tractor of prominent make.

They formerly used oil costing 38c per gallon. Now they find it cheaper to pay about twice as much for Gargoyle Mobiloils. Why?

Because a careful field test of Gargoyle Mobiloil "B" as specified for their tractor showed a saving of 7 gallons of fuel and 10 quarts of oil in plowing $16\frac{1}{2}$ acres.

In condensed form here was their test: With Gargoyle Mobiloil "B"

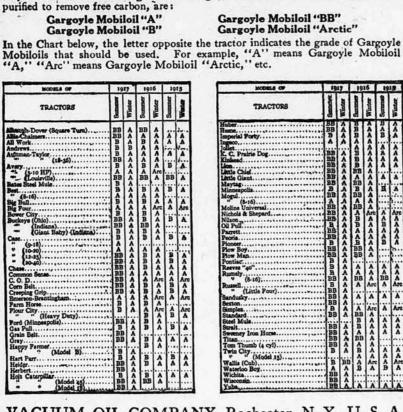
Ground plowed, 16.5 acres Oil consumption, 12 pints Fuel consumption, 28 gals.

With Competitive Oil Ground plowed, 16.5 acres Oil consumption, 32 pints Fuel consumption, 35 gals.

The engineer reported in part, "The reason we made such a good showing on fuel was on account of efficient lubrication—plus a more perfect piston-ring seal while operating on Gargoyle Mobiloil "B".

"This is more easily understood when I state that a cloud of vapor was constantly issuing from the breather holes in the crank

stantly issuing from the breather holes(in the crank case) while the engine was operating on competitive oil, this being due to gas leaking past the piston rings and consequently being wasted.



VACUUM OIL COMPANY, Rochester, N. Y., U. S. A. Specialists in the manufacture of high-grade lubricants for every class of machinery. Obtainable everywhere in the world. Demestic Branches: Detroit New York Philadelphia Minneapolis Detablistic Indianapolis Indianapolis Indianapolis

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

THE high price and scarcity of gasoline is causing an increased interest to be taken in the use of heavier fuel for internal combustion engines. E. R. Gross, of the Colorado Agricultural College, thinks it is still an open question as to whether kerosene is a thoroughly successful gas engine fuel. He points out that while many tractors are being operated on kerosene, comparative figures are not generally available as to the relative cost of the different kinds of fuel.

ferent kinds of fuel. "At the recent tractor demonstration at Fremont, Nebraska, there were a great many machines operating on gasoline. It has been a point of dispute at demonstrations for the past two years whether tractors advertised to operate on kerosene were really burning pure kerosene, or any kerosene at all. This year the fuel was measured out to the various exhibitors by an inspection force and the machines operated in the field with sealed tanks. With such regulations there was no question but that the placard on the machine gave the actual fuel used and also that all machines were using the same grade of fuel."

Conditions are such as to compel the use of lower grade fuel in operating gas engines. The ability of the operator is an important factor in making a tractor work successfully with the cheaper fuel. More and better trained tractor operators will help in many ways to bring about greater efficiency in the use of engine power. Manufacturers are making much progress in devising new improvements, but the manufacturer cannot alone solve the fuel question. The operator must do his part.

Repair Worn Machinery

The great outcry for farm production and the scarcity of machinery points to the need of some way to repair a great many implements that are now useless largely because of the neglect with which they have been treated, says the United States Department of Agriculture, which adds that the machinery manufacturers and their local sales agents should help to perform this repair service.

and their local sales agents should help to perform this repair service. Throughout the country there are thousands of binders, mowers, and other farm machines rusting in the fence corners, and many of these might be made available for further valuable service. The manufacturers of farm machinery are admittedly unable to furnish all the new machines required and are paying for full-page advertisements to influence governmental authorities to insure them necessary raw materials and transportation in competition with the demand for machines of war. The railroads of the country, accord-

The railroads of the country, according to one of their efficials, are being compelled in the present emergency to rescue practically every scrap locomotive from the old-iron graveyards and rebuild them for active service. A similar plan should be adopted, says the department, for the reclamation of this cast-off farm equipment through the agency of central repair shops where the work could be done. Many of the machines might be made available for further service with repairs of comparatively small cost.

Added to the almost sinful carelessness of some farmers there has been the attitude on the part of farm machinery manufacturers in years past to favor the abandonment of worn and disabled machines in order to sell new-ones; but now the time has arrived when it is difficult to supply the market with the necessary new machinery. The department suggests that representatives of the manufacturers, on the one hand, and of the farmers—such as farm bureau agents or county agents—on the other hand, should get together to establish the necessary farm machinery repair stations in convenient localities.

Traction Engine Operators

Trained men are required for the most successful operation of gas tractors. During the past season the engineering division of the Agricultural College has made a thorough canvass of the men who have received instruction in the operation of gas engines at that institu

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tion. At the present time when there is such great need for getting maximum efficiency from tractors, the list compiled as a result of this canvass should be of considerable value. These men are not listed because they are seeking jobs, for many of them are operating tractors of their own and few have time for outside work. In these times, however, even the man busy with his own work will make a special effort to be of some service to a neighbor needing a little assistance in getting his tractor to do its best work. This list is of value because it furnishes the names of men in each locality who have had a definite course in traction engine operation. In some counties this list is quite large. For example there are now in Clay County, Kansas, twenty-two men who have received such instruction; in McPherson County, twenty-seven; Reno County, eleven; and Montgomery County, ten.

The short courses in traction engines and shop work were first offered during the winter of 1915-1916. There is increasing demand for this sort of instruction. These courses are planned especially for men who have not the time, preparation, or means to pursue a regular college course, but who wish to learn how to successfully operate traction engines or to work in the trades as mechanics. Each year there is an increase in the use of machinery on the farms and this tends to increase the demand for men skilled in the handling of engines and other farm machinery. The war has also reduced the number of skilled mechanics available.

The traction engine short course given this college year will begin January 7, 1918, and continue for eight weeks. A short shop course will begin October 22, ending December 15. Detailed information about these courses can be obtained by addressing President H. J. Waters, Kansas State Agricultural College, Manhattan. The list of trained tractor operators referred to above may be obtained from Dean A. A. Potter of the Engineering Division, Manhattan.

Whether or not the tractor is housed, all gears and other wearing surfaces should be protected from the rain by a covering of heavy grease that will not wash off. Otherwise the tractor is likely to suffer serious damage, and the operator may experience long delays in getting the machine ready for use next season.

Machine Bolts

It is the common practice to use carriage bolts in wooden parts of farm machinery, but when it becomes necessary to do repair work they are certain to make a great deal of trouble. The nuts will be rusted tight and the chances are the bolt will turn the wood when the attempt is made to remove the nut. About the only thing to do then is to crack the nut with hammer and chised or cut off the bolt with a hack saw.

Those who have had experience of this kind have often wished that the implement factories would cease using the carriage bolt. A machine bolt may not look so neat, but when it becomes necessary to remove a bolt there would be something to get hold of with a wrench to prevent the bolt from turning. When machine bolts are used in wood, two washers instead of one should be placed under the head to keep it from sinking in when the bolt is tightened.

The well-equipped farm repair shop should have a good supply of the bolts most commonly required, and after having the troublesome experience so common when carriage bolts are used it will be found a great advantage to keep in stock only the machine bolts.

The Secretary of Agriculture has just announced the apportionment of \$14.-550,000 of federal funds to be used in the fiscal year ending June 30, 1919, for road work in the various states. This is the third appropriation under the act. The first was \$4,850,000 and the second \$9,700,000. In the present distribution Kansas gets \$429,131.88.

October 6, 1917



DUTY HONESTLY PERFORMED

We wonder if the farmers of Kansas realize how insistently and with what effect President H. J. Waters of our Agricultural College has contended in high places for the agricultural interests of the state. The tender of a place on the wheat price fixing committee came the wheat price fixing committee came not as an honor or preferment, but as a stern call to duty, the honest perform-ance of which was certain to bring harsh criticism and much fault finding. We happen to know that President Waters stood out with a few others on this committee against the insistent de-and of the consuming interests for mand of the consuming interests for cheap bread. But for the effectual fight made, the price would probably have been as low as \$1.84 a bushel.

On sober second thought no one can deny that the representatives of the pro-ducers' interests performed honestly and fearlessly a most disagreeable duty in helping to establish the price to be paid for the 1917 wheat crop. "Since we are at war, it is necessary

for us all to make sacrifices, and the for us all to make sacrifices, and the smallest sacrifice anyone can make is the sacrifice of money," said President Waters recently in addressing a farm-ers and laborers' convention. "Price fix-ing is a new business to a democracy like ours and it necessarily causes some confusion and some dissatisfaction at first, particularly since it has had to come in a year when the available wheat supply was the lowest in many years and when the demand was perhaps the and when the demand was perhaps the

highest in history. "The farmer cannot help feeling that his product under unrestricted sale would bring a much higher price than the goverament dares to fix. It is to be re-membered, however, that the fixed price of \$2.20 in Chicago is for the entire 1917 crop and continues in effect until July Arop and continues in effect until July next, when the guaranty of not less than \$2, fixed by Congress, becomes operative. Moreover, while the world is short of available wheat, there actually exists a surplus of this crop." Australia has a reserve of 180,000,000 hushels which is being offered at \$1.5

bushels, which is being offered at \$1 a bushel, and there is the prospect of an additional surplus of 100,000,000 bushels at the coming harvest in that country, pointed out President Waters. In India there is in sight a surplus of nearly 100,000,000 bushels, and in Argentina of approximately 70,000,000 bushels. If active fighting should cease and peace negotiations begin, these supplies, added to what is obtainable in Canada and the United States, would be thrown imme-diately on the market, depressing the price here, as well as elsewhere, to prob-ably \$1 a bushel. This does not take into account the vast stores of wheat in Russia which cannot be reached in time to affect the sale of the 1917 crop. "The government price recently fixed

The government price recently fixed protects the American farmer against any decline in the wheat market," ex-plained President Waters. "While the present guaranty is based on a small crop and will furnish no subsidy to the farmer but will rather call for a sacri-fice on his part we are likely to have fice on his part, we are likely to have under normal crop conditions a billion and a quarter bushels next year. Under the government guaranty this will be sold for at least \$2 a bushel." DOCKAGE OF WHEAT

from reports coming in it appears that in many instances wheat is not bringing locally what it should on the basis of the prices at central markets. In many cases country grain dealers have assessed a discount against all wheat purchased, contending that such assessment was mandatory by reason of the official grain standards of the United the official grain standards of the United States under the Grain Standards Act. This contention is evidently based on the fact that official standards provide for "dockage," and the assessment is made to cover this point. The indica-tions are, however, that instead of being a legitimate dockage based on actual tests it has become an arbitrary assess-ment in the interests of the buyer, and ment in the interests of the buyer, and

in no way a carrying out of the purpose of the regulations prescribed in the Grain Standards Act.

The primary purpose in the establish-ment of the official grain standards of the United States was to provide a basis the United States was to provide a basis whereby parties to transactions involv-ing the purchase and sale of grain shipped or delivered for shipment in interstate or foreign commerce might, through being able to obtain a correct applications of such standards, arrive at the actual value and make settlement accordingly. The standards for wheat do not provide for any arbitrary assess-ment for dockage. They do provide for the determination of the amount of sand, dirt, weed seeds, weed stems and certain ment for dockage. They do provide for the determination of the amount of sand, dirt, weed seeds, weed stems and certain other matter, called dockage, which ac-tually may be present in a lot of wheat, the amount of which, if in excess of one-half of one per cent by weight is to be stated in terms of the actual per-centage as a part of the grade designa-tion of the wheat. This is called the dockage system of grading and has been in use for many years in the northwest-ern states prior to the adoption of the official standards. Ignorance of the details of the Grain Standards Act is probably to some ex-tent responsible for the arbitrary man-ner in which it has been handled. It has given rise to considerable dissatis-faction among those who have been mar-keting wheat. The transactions in ques-tion have largely been local and have not involved interstate commerce and in a way may not be within the prohibi-tione of the act.

not involved interstate commerce and in a way may not be within the prohibi-tions of the act. We are glad to learn, however, that the Department of Agri-culture is investigating the matter, and will be glad at any time to have facts which may be of value in securing the rights of the seller. If any misrepre-sentations based on the act are being made the officials of the department will made, the officials of the department will do everything in their power to bring about a discontinuance of such practices.

ENGINEERS IN PEACE AND WAR In addressing the student assembly at the Kansas Agricultural College recently, Dean A. A. Potter emphasized the fact that American engineers will of necessity have a large share in the recon-struction of the civilized world following this great war. Never in the his-tory of the world has there been a greater drain on the men trained in working out the technical engineering problems of our great industries.

"After this war is over the field of the engineer will be greater than ever before," said Dean Potter. "The engineer, in times of peace, is concerned with material and human problems in connection with the advancement of commerce, industry and transportation. In war these same forces are used by engineers as aids toward a certain goal which, rightly or wrongly, seems to be, for the present at least, the only method of set-tling differences between nations in their

"In the present crisis engineers are playing a prominent part in connection with the social, industrial and military preparedness problems. Experience in this war has shown that for every man in the field there must be at least six men on the farms and in the industries to take care of the soldiers' necessities."

A display at the Kansas State Fair deserving far more than passing mention was the apiary exhibit, which occupied a prominent place in the new agricula prominent place in the new agricul-tural building. There were not very many exhibitors in this section, but by the number and decorative effect of their exhibits the possibilities of this industry were demonstrated in the most striking manner. Professors Dean and Merrill, of the Agricultural College, who judged the apiary exhibit, said that there was nothing in the United States that equaled this display. They made a similar statement last year regarding the showing in this department, and it was even better this year. The principal exhibitors were

J. A. Ninninger and F. E. Clark, of Nick-erson; Charles D. Mize, Mount Hope; Doctor Rafington, Hutchinson, and G. E. Capewell, Cottonwood Falls. This last named exhibitor was the only one from outside of Reno County that showed in this department. Reno County showed in this department. Keno County does not possess any pronounced advan-tages over many other sections of the state for bee culture. If a group of local exhibitors can put on such a dis-play, what would happen if the whole state got into the game? There is food for thought in this suggestion. One of our wated resources is the honey which our wasted resources is the honey, which

is Nature's free gift. Kansas stood first in cereals at the International Soil Products Exposition. recently held at Peoria, Illinois, in con-nection with the International Farm Congress. The exhibits were prepared and shown by the agronomy department of our Agricultural College. The prize was a beautiful loving cup, and was won in competition with exhibits from Canada, Wisconsin, Nebraska, and many other of the cereal growing states. The state exhibit as a whole, which was eas-ily the best ever prepared, was awarded the second prize loving cup, although it ranked first in educational value and first in artistic design and arrangement. first in artistic design and arrangement. A very valuable program was carried out in connection with the Farm Con-gress meeting. Eighteen states were represented at the state roll call. There were fully two hundred thousand people at the exposition Sunday, and the at-tendance for the week days averaged close to ten thousand daily.

A worthy project known as the Over-seas Acre Fund is under way, the plan calling for putting aside the product of one acre in crops or cash for helping the suffering farmers of France. American forward are helping che farmers are being asked to pledge themselves to this fund in the manner indi-cated. The fund is under the management of honest, sincere men who have seen the serious need of the stricken farmers in France. The funds will be handled through the American Red Cross. All the administrative expenses of the All the administrative expenses of the fund are provided for by outside contri-butions so every cent of the proceeds from the acre pledged will go direct to the French farmers. Those interested should write to the Overseas Acre Fund, 219 Market Street, Philadelphia.

The inability to obtain sufficient cap-ital on the right kind of terms is a serious drawback to increased live stock production. The live stock farmer needs money on entirely different terms than the steer feeder or the wheat farmer. We are glad to note that the Food Ad-ministration has given the matter of credit for the live stock farmer some attention. A letter was sent to the chairmen of the various state bankers' associations, pointing out the important place of live stock production in our na-tion's business. The communication closed with an appeal to these banking organizations to exercise the large power and influence they possess in mak-ing live stock credits both more abundant and less expensive. In this con-nection Mr. Harding, governor of the Federal Reserve Bank, has gone on rec-ord in a letter to the Food Administra-tion, in which he says: "The Board tion, in which he says: will through the Federal Reserve Banks call the attention of member banks to the opportunity that is now afforded them to render very effective help in the present food crisis by reducing their interest charges upon cattle paper to as low a rate as possible." It will be reasonable to expect from the above that the re-discount privilege of live stock paper will be accorded the consideration its im-

will be accorded the consideration its im-portance deserves. Boost for a school fair in your com-munity. Several districts should co-operate. Eighteen such fairs will be held in McPherson County this fall.

DEMANDS ON DAIRYING

Dairy farmers of this country have felt seriously the pinch of high feed felt seriously the pinch of high feed prices and there have been numerous re-ports that herds were being cut down because of this condition. The shortage of dairy labor is also further complicat-ing the problem. In view of the condi-tions which seem to be making the con-tinuance of dairy work more difficult, the figures showing the extent of our dairy exports are of unusual interest at this time. The volume of these exports since the beginning of the war are such as to make pre-war records seem insig-nificant. The facts given are based on compilations made by the United States Food Administration. Exports of condensed milk which for

Exports of condensed milk which for a three-year period before the war aver-aged 17,792,579 pounds annually have increased to 259,102,213 pounds. This figure is for the fistal year ending June 30, 1917. The European Allies received 2.27 per cent of the condensed milk ex-ported from this country in the three ported from this country in the three pre-war years. In 1917 they received 57.2 per cent, or considerably over half of the total.

Cheese exports for the three pre-war years averaged 3,788,065 pounds. For the year ending June 30, 1917, they reached 66,087,213 pounds, a seventeenfold increase.

Exports of butter which for the three years previous to the war were 4,457,144 pounds, increased in 1917 to 26,835,092, which is more than a six-fold increase.

It is note worthy that Holland took 84.9 per cent of all the condensed milk shipped by the United States to Euro-pean neutrals. However, a large propor-tion of the amount-15,134,084 pounds in all—consigned to neutral countries during the past fiscal year unquestion-ably reached Germany through indirect channels.

With such an enormous increase in our dairy exports, dairymen in this country might well reflect on some of the condimight well reflect on some of the condi-tions affecting our production. Two years are required to raise a dairy cow and five years to bring her to maximum yield. Under normal conditions the country was prepared to go on produc-ing milk in proportion to the demand. The number of dairy cows in proportion to the population has varied but little in the past six years. In 1911 the ratio was 22.3 cows per hundred people; this year the ratio is 22.1. But the rayages of war now call for

But the ravages of war now call for a prompt increase of dairy cattle in those countries able to raise them. The world's total number of cattle has al-ready decreased more than 28,000,000. In England, France and Germany, the back or being deliberately successfue to herds are being deliberately sacrificed to supply the immediate necessity for meat. The embargo is keeping fodder from Holland to a degree that will lead to a considerable decrease in her herds.

Judging from all indications, the sac-rifice of dairy animals will be even greater as the war continues. And the greater as the war continues. And the responsibility of supplying Europe with dairy supplies will rest with increasing gravity on dairymen of this country.

Sometimes when we ask a reader of KANSAS FARMER to write and tell us of some special success he has made, we get as an answer the statement that he does not know how to fix it up for the paper. Now, we have no rules what-ever to which our readers must conform when they write and tell us about something they have done that will be of value to others. If you have a real mes-sage on any farm project, it matters not in what form it reaches us. It is part of our job to put into shape for publica-tion the many ideas that come to us in various ways. Do not hesitate to write for fear you will break some rule of punctuation, spelling, or grammar. Write out the facts in your own way and if out the facts in your own way, and if you have an idea that is of real value, we will see that it appears in a form that will do you credit.

KANSAS FARMER October 6, 1917 GENERAL FARM INQUIRIES

Something For Every Farm-Overflow Items From Other Departments

A LEAVENWORTH County reader asks for information about har-vesting ordinary navy beans. This correspondent has, out about twenty acres and would like to know if they have to stay in the field until hit by frost and how long they should be left in the field after being pulled. Also whether they should be put in a build-ing where there is no ventilation, or whether they should be put in a build-ing where there is no ventilation, or whether they should be put and left in small piles in the field until dry. There were a good many patches of beans put out last year, and as this is a crop not commonly grown, we are none to familiar with the best methods of handling them. We quote the following instructions from Alvin Keser, of the Colorado Agricultural College:

Colorado Agricultural College:

Colorado Agricultural College: "Great care must be exercised with navy beans in harvesting, because of their tendency to discolor. Navies should be allowed to get fairly ripe. This can be determined when the seed is plump and hard and the pods will usually be yellow but not yet dry and brittle. At this stage the vines should be cut and piled in small shocks to cure or dry out. Navies are likely to be discolored by rains, light snows or other moisture. Consequently it is the policy, with beans at a high price, to stack navies, making the bottom of the stack of straw, and topping out with straw, stacking always topping out with straw, stacking always if threshing is not feasible as soon as

the beans are cured. "With pintos the danger of discolora-tion is much less, but they run the same danger of loss from shattering if allowed to get too ripe. Consequently, pintos should be harvested when the pods, are yellow and the beans are plump and hard. This can be determined by break-ing open and examining the pods. If the pods are allowed to get hard and dry, a great many beans will be lost by shat-taning in bonding.

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a great many beans will be lost by shat-tering in handling. "When harvested as directed, the beans will ripen up and cure properly in the shock. When cured they may be threshed or stacked, although in our dry climate many beans are left in the field for some weeks waiting for the thresher so as to thresh out of the shock. The risk with pintos in this practice is not so great as with navies, but there is al-ways come risk when the beans are always some risk when the beans are al-lowed to stay in the field. With beans at a high price, it is usually profitable to stack, except in these cases when the thresher may be obtained as soon as the beans are mature."

Top-Dressing with Straw

Many Kansas farmers have found that spreading straw on wheat is a most val-uable practice. On the wheat farm there is probably no better way to use the surplus straw than to spread it as a top dressing on the wheat. The Missouri Experiment Station has been making a study of the results of top dressing wheat with straw, having had twenty-one plots under observation with various treatments the past year.

In early spring when most wheat looked dead and dried up, those plots which had been top dressed with manure and straw started off vigorously, showing that they were not badly dried out although all the rest had been badly out although all the rest had been bady injured. When threshing time came the highest yield — 39.4 bushels per acre — was on a plot that had been top dressed with strawy manure and all of the top dressed plots yielded well. Missouri does not often experience so dry a winter as the last one, but spreading straw on wheat in early winter not only protects it from drying out, but also tends to prevent smothering by ice sheets. It keeps the snow from blowing off, and helps materially in returning fertility to the soil.

Any source of fertility is well worth Any source of fertility is well worth considering at the present high prices of crops and fertilizers. A ton of straw contains 10 pounds of nitrogen, 1½ pounds of phosphorus and 18 pounds of potassium. At the present high cost of nitrogen and potassium in commercial fertilizers the nitrogen in a ton of straw is worth \$2.50 and the potassium is worth \$5, making the straw worth \$7.50 a ton for fertilizer in addition to the small amount of phosphorus it contains. Of course straw has additional value in that it adds vegetable matter to the soil. Until the last few years straw had to

be spread by hand and the task was somewhat laborious, but recently ma-chines have been put on the market for spreading straw rapidly and easily. The practice is gaining in popularity where the spreaders have been introduced.

Plan for Kafir Next Year

Hundreds of thousands of acres in the Southwest—comprising districts in Kan-sas, Oklahoma, Texas, New Mexico and Colorado—may be used in 1918 to surely produce a huge supply of grain of the kafirs—nutritious, good tasting human food.

The great empire is designed by Na-ture for kafir growing. Kafir yields heavy crops in lands where Indian corn and wheat are not sure crops. Econom-ically an acre of kafir is worth one-fifth more than an acre of corn.

The following table, compiled from the official records of the state board of ag-riculture and printed in Borman's "Sor-ghums: Sure Money Crops," gives the value per acre of the two crops in Kan-

president of the State Farmer's Union. We have talked with B. Needham, present master of the Kansas State Grange, and know that he also feels that it would be a serious mistake for the Grange to sanction this political movement. Mr. Reardon says: "In my various travels and visits at Grange meetings during the summer I have found parties talking to members of the Grange about the Non-Partisan League which was organized in North Dakota last year. This is a political organization, as I would understand it from its purposes and accomplish-ments. Now, as an old member of the Grange, having had the experience of many years in Grange work, I venture a few words of advice to our members on their attitude toward this new move-ment. I firmly believe we have in our organization a common meeting place where we can get together and unite for the building up of our agriculture, where we can learn to know each other better socially, educationally, and financially, where we can command the respect of our fellow man, and where we are all



FARM RESIDENCE OF WILLIAM NEWLIN, PRESIDENT OF THE KANSAS STATE DAIBY ASSOCIATION .- ONE OF THE MANY MODERN FARMHOUSES OF RENO COUNTY .---- "GRANDPA" NEWLIN IN FOREGROUND

sas for each of the las		years,
with their totals and av	erages:	
Years	Kafir	Corn
1901 (Very dry year)	8 10.32	\$ 3.23
1902	12.69	11.20
1903	9.30	8.74
1904	9.72	7.81
1905	9.94	10.11
1906	9.18	9.89
1907	11.13	9.25
1908	10.88	11.70
1909	11.23	10.77
1910	12.92	8.89
1911 (Very dry year)	15.72	7.68
1912	13.80	12.12

Totals.\$136.83 \$111.39 Averages. \$11.40 \$9.28 Wheat raising in the dry Southwest has been the ruination of thousands of farmers, has kept as many more poor, and has interfered with the development of one of the finest bits of country the sun shines upon. "Grow wheat and get rich quick" has been the cry that could not be resisted.

Kafir growing requires effort and thought, the same as any other crop; it repays effort and attention better than any other crop.

Now is the time to plan for kafir acreage for 1918. Plan to plant corn only on bottom lands. Put every acre of bottom not used for corn into alfalfa. Put grass on washy soils, hillsides, rough places, alkali land. Put kafir on the smooth, tillable uplands. Give us kafir to replace wheat in 1918.

The Non-Partisan League

We are glad to be able to publish an expression of the view of Past Master A. P. Reardon of the Kansas State Grange on the Non-Partisan League which is striving to gain a foothold in Kansas. KANSAS FARMER took a stand on this question last week and quoted from the

benefited. We are not a political or-ganization with a treasury to supply our needs, and we feel under no obligation whatever to join some political party. There are no slackers in our bunch. We are all patriotic and true to our nation. are all patriotic and true to our nation. The Grange brings together practical men and women seeking the greatest good to the greatest number. We as a Grange are not ready to assist in the promotion of a political organization, but wish to push along in the even tenor of our way, being built upon absolute merit. We as an order are not looking so much after the financial welfare of so much after the financial welfare of our members. Our aims are directed to higher ends than simply dollars and cents.

"The principal Grange asset at its start was the courage, the devotion and the spirit of its founders. Upon these has been our chief reliance in the successes of the past, and upon these same attributes must our plans for the future always depend. We have organizations enough in Kansas for the welfare of our farmer citizens."

Controlling Corn Ear Worm

This is a fall in which a large of fall plowing should be done. Checking insect pests is one of the results of fall plowing not given sufficient consid-eration. It is about the only practical control measure that can be applied to the corn ear worm.

The corn ear worm does a vast amount of injury each year to valuable garden and field crops. It is practically the only insect which injures the ears of field corn, and it is decidedly the worst insect pest of sweet corn. This worm does considerable damage to tomatoes by horing into the gran and right by boring into the green and ripening fruit and is known to the grower as the tomato fruit worm. It bores into the "bud" or unfolding leaves of tobacco and

is known to the planter as the tobacco bud worm; and it is also one of the serious pests of cotton in the South, where it is called the cotton boll worm, from its habit of boring into the cotton bolls.

The full-grown worms are variable in markings and color, but usually they are a dull greenish or brownish color, with indistinct stripes or spots, and are about one and one-half inches long. Winter is passed in the pupa or resting stage in the soil. When the worm bestage in the soil. When the worm be-comes full grown it burrows down in the soil about three inches and con-structs a tube or gallery nearly to the surface of the ground for the use of the moth which will come out later. The worm retires to the bottom of the gallery and changes to the pupa or resting stage. It is in this stage and under such surroundings that the insect passes the winter.

According to T. J. Talbert of the Mis-souri College of Agriculture, one of the best means of control is fall plowing best means of control is fall plowing and harrowing or disking in order to break up the opening tubes or exit gal-leries of the soil. This also brings the resting stage (pupa) of the insect nearer the surface where the alternate freezing and thawing during the winter will have a greater effect in destroying it. Fall plowing and cultivation have been found almost 100 per cent effec-tive for the area covered.

How to Gather Seed Corn

Gathering seed corn should be a spe-cial task, preceding and not incidental to husking.

At corn-ripening time the forehanded farmer drops all other farm business and selects twice as much seed corn as he selects twice as much seed corn as he thinks he will need. The job is too im-portant to be conducted incidentally while husking, and demands the entire attention of the farmer w' is ripe—likewise the corn. Get the very best to be serve it well, because int.

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will return more profit than any other work that can be done on the farm. The one and only proper way to select seed corn is from the stalks standing

seed corn is from the stalks standing where they grow, as soon as ripe and before the first hard freeze. As soon as the crop ripens the man who fully appreciates the value of such work will go through the field with seed-picking bags, and husk the ears from the stalks that have produced the most corn without having any special advantages such as snace moisture or fertility. He such as space, moisture, or fertility. He will pass by the large ears on stalks standing alone with an unusual amount of space around them. Strains that do well in competition for light, and mois-ture, and soil fertility are likely to re-peat under the same conditions. The most important consideration is to se-lect seed from these plants which here

most important consideration is to se-lect seed from those plants which have the ingrained ability to furnish the larg-est quantity of dry shelled corn. Early maturity is a desirable quality, and so are short, thick, wind-firm stalks; top-heavy ones with ears borne too high are likely to mean losses. Breeding ex-periments have proved that the tendency to produce suckers is hereditary in corn. to produce suckers is hereditary in corn. Other things being equal, take the seed from suckerless stalks.

Feterita-a Dry-Year Friend Wherever we see late-planted feterita

while this year, it is showing good results. While this crop really does well in years of abundant moisture, the seed is so tender that under conditions which usually prevail in April and May it is hard a stand feterita when t seed of kafir and milo may give good results. But when seeding conditions are so extremely unfavorable that all c grain sorghums fail, except those planted after June 1, we often find feterita head-ing the list of late-planted crops. Some of the best crops of feterita we have seen were planted after July 1. We have not seen any immense yields of have not seen any immense yields of feterita, but when it has a chance to make a quick growth in summer, it makes a grain crop which is cheaply produced, and which is dependable.

By many, the feeding value of feterita is thought to be very low, but I have seen it used profitably for fatten-ing hogs.—J. E. PAYNE, Oklahoma.

Calves From Best Cows Kaise W. J. Fraser, Professor of Dairy Farming, Illinois University

CONOMY, conservation and efficiency have no worse foe than the ineffi-cient farm animal. Animals are cient farm animal. Animals are expensive producers of human food for the reason that they consume more di-gestible nutrients in their food than they return in animal products. Even the very best animals return only a small percentage of the food value of the grain consumed in the form of food for man. For this reason, in these times of high grain prices, only the most efficient anigrain prices, only the most efficient ani-mals should be raised if we are to main-tain the proper balance between differ-ent needed food products and prices paid for them.

Some go so far as to say we should eliminate our animals almost entirely to secure the most efficient results. But those who make this statement fail to realize that from the crops raised in the realize that from the crops raised in the ordinary rotation necessary for the best production of grain, less than one-half of the total digestible nutrients contained in all of these crops is available for the food of man. Therefore, the by-products from our different agricultural crops must be at least partially utilized in the feeding of farm animals if we are to conserve to the best advantage and keep a proper balance of the food supply from our farms. To obtain the best results, then, animals must be considered in our farming methods, or a large amount of the food value of our agricultural crops will be wasted. But, as the demand for human food becomes greater, it is in-creasingly important to feed these products to such animals as are capable of returning the largest possible percentage of the energy which these foods contain.

of the energy which these foods contain. Since a certain amount of animal food is essential to the well-being and health of the people; as babies and invalids can not be properly nourished on grain and vegetable food alone, and as the good dairy cow is the most economical producer of human food of any of our domestic animals she is to be considproducer of human food of any of our domestic animals, she is to be consid-ered in the production of animal prod-ucts at the present time, and is a vital the country's food supply. efficiency of the cow that is g a efficiency of the cow that is even greater importance un-conditions than in times past, mere ever was a time since the world began when the production of every individual cow should be deter-mined and not only the inefficient ones, but their offspring as well, go to the

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but their offspring as well, go to the shambles, it is now. To substantiate this statement, let us look at some of the conditions actually existing in the dairy herds.

dairy herds. This department has tested a large number of dairy cows in the dairy herds in different parts of the state. The poorest one-third of these cows, pro-duced an average of 3,654 pounds of milk and 134 pounds of butterfat annu-ally, each cow lacking about \$7 annually of naving for her keep. Like begets like. of paying for her keep. Like begets like, so wherein lies the wisdom of saving heifer calves from such cows as these, where a portion of the feed consumed only helps to augment the manure pile? only helps to augment the manure pile? While grains have increased in price, the price of dairy products has not kept pace with them in the same ratio, and why sell grain at \$20 per ton to the dairy cow when the price at the elevator or the feed store is two or three times this amount? This is only a monetary consideration and takes no account of the actual loss of grain consumed. Why should anyone want to expend his time, energy and money in raising heifers from only helps to augment the manure pile? energy and money in raising heifers from such poor cows, or even continue keeping cows which not only fail to pay for their keep, but lose money for their owner, besides wasting grain so much needed in these trying times? Yet it has been ad-vocated recently that all heifers should be raised.

The essential thing in farming operation is balance. The man who keeps such cows as these and raises the heifer ... calves from them fails to balance his montput with his income. In other words, he fails to compare the cost of grain, labor, time, etc., consumed in keeping an inefficient cow with the income received from her dairy products.

As there are about twenty-two million dairy cows in the United States, the poorest one-third would comprise over seven million of that number. This means that the poorest one-third of the dairy million beat fifty million dairy cows is losing about fifty million dollars a year to the dairymen of the nation. The country would actually be

better off were these cows all slaugh-tered. No thinking man is going to raise heifer calves from cows of this sort and spell failure for himself, besides being labeled a waster of needed food.

The middle third of cows averaged 5,000 pounds of milk and 198 pounds of fat. It will take practically all of the profit made on this middle third to make up for the loss on the poorest one-third. On the other hand, in contrast with the On the other hand, in contrast with the poorest one-third, the best one-third of the cows averaged 6,765 pounds of milk and 278 pounds of butterfat, each cow making an annual profit of about \$27, besides paying market price for her feed and all items included in her keep. The production and profit from the best third of the cows tested shows that we have of the cows tested shows that we have

an enormous number of high-producing, profitable cows from which the dairy herds should be replenished.

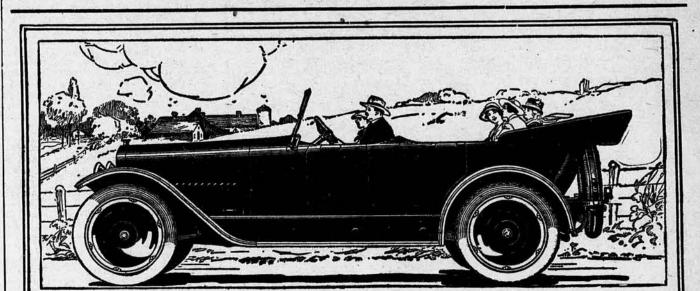
Under past conditions there has been a tremendous waste of energy caused by a tremendous waste of energy caused by keeping poor cows, and if there was ever a time when this great waste should be stopped it is now. It would be the worst possible economy to raise the heifer calves from poor cows in these times of high grain prices, and the dairymen who did so would simply be intensifying their chances for failure. Under ordi-nary conditions, it is certainly not wise to save the heifer calves from the losing half of the cows and under present con-ditions it is criminal to consider raising ditions it is criminal to consider raising the heifer calves from anything but cows whose production is on the credit side of the balance sheet and which will pay

and labor and leave a profit besides. Life is not always smooth, easy sail-ing, and it is for our best development that it is so. Many of our troubles come

from attempting to do what should not be done. A good part of our study in agriculture is an attempt to learn how to adapt our efforts to nature. The dairy farmer has one of these lessons strongly pointed out to him at present.

To keep the dairy herds replenished with future cows, it is necessary to save the heifer calves from only the best third of the cows, and these are the ones, if of good parentage on the sire's side, that will play their part in making a living for the milk producer and a better food supply for the world.

One Kansas county agricultural agent has been offered the management of a farm of 3,000 acres on a profit-sharing basis, in the county in which he is now serving. The owner of the land, in speaking of the county agent, said: "Our farm bureau is doing good work and is worth many times its cost to the county."



More Than You Ask In a Car-But You Need It

It is evident that Mitchells offer more than buyers ask. Were it not so, all fine cars would need to have these extras.

The usual margin of safety is 50 per cent over-strength. Mitchells are built to the standard of 100 per cent over-strength. That is, each part is twice as strong as need be.

That means costly steels. It means oversize parts. It means toughened steel

in more than 440 parts. It means \$100,000 yearly for radical tests and inspections. Gears are tested for 50,000 pounds per tooth. Springs are so tested that in two years not one rear spring has broken.

But it means to you a lifetime car. Two Mitchells that we know of have al-ready been run over 200,000 miles each. And it means repair cost reduced by at least 75 per cent.

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There are 31 features in Mitchells which nearly all cars omit. Things like a power tire pump, reversible headlights, shock-absorbing springs, etc. They are more than you ask, but every feature is something that you need.

There is beauty and luxury in costly extreme. We build our own bodies, and

\$1525

Mitchell a roomy 7-passen-ger Six, with 127-inch wheelbase and a highly de-

Three-Passenger Roadster, \$1490. Club Roadster, \$1560 Sedan, \$2275-Cabriolet, \$1960 Coupe, \$2135-Club Sedan, \$2185

Also Town Car and Limousine.

veloped 48-horsepower motor.

thus save a vast amount. All of that saving goes into added luxury. In the Mitchell you find every known attraction.

Yet a Lower Price

Yet the Mitchell prices are far below other cars of like size and class. Note that \$1250 buys a 40-horsepower Six, with a 120-inch wheelbase.

The reason lies in a model factory, built under John W. Bate. By efficiency methods he has cut our labor cost in two. Every machine is designed to build this one type at the lowest factory cost. With our mammoth output, this sav-

ing is enormous. Part of it goes into extra values—into over-strength, extra fea-tures, added beauty. And part of it shows in the lower price.

Here is the greatest value to be found in the fine-car field. You can see that at a glance. But the years will show you more than you can see.

Our latest models will amaze you by their beauty and completeness. For your own sake, go and see them. If you do not know our nearest dealer, ask us for his name.

MITCHELL MOTORS COMPANY, Inc. Racine, Wis., U. S. A.



\$1250 Mitchell Junior-a 2 or 5-Six on similar lines, with 120-inch wheelbase and a 40-horsepower motor. 14-inch smaller bore.

Club Roadster, \$1280 Sedan, \$1950—Coupe, \$1850 All Prices f. o. b. Racine.



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READ KANSAS FARMER'S CLASSIFIED **ADVERTISING PAGE FOR READY BARGAINS** Kansas Farmer Dairy Club Keeping Feed Record

BEGINNING with October 1 every member of the Dairy Club should be keeping an accurate account of the feed eaten by his cow. October 1 is the last date for beginning a year's record, and whether your cow is fresh or not, you must begin charging her with feed. As soon as she freshens, start the milk record. Blanks for keeping these records have been furnished to all members.

A sample feed record is given on this page to show you how it should be kept. The grain is to be weighed at each feeding. You have accurate scales for weighing the milk and can use these same scales for the feed. If you are feeding several different kinds of grain and mix it before feeding, you can weigh the mixed ration and then on the record separate it in the different col-umns. If you settle on some certain mixture as the most common and satis-factory and expect to feed it for some factory and expect to feed it for some time, it saves trouble in feeding to prepare a quantity and store it in some safe blace such as a barrel or box, being careful to cover it as to keep out mice and rats. If you do this you can record the weight of the mixture fed in one of the unheaded columns and make a note of what the mixture is in the blank at the top of the column or at the bottom of the record. For example, you might note something like this: "October 1 to Oc-tober 10 fed a grain mixture four parts corn chop, two parts bran, and one parts cottonseed meal by weight. Remainder of month linseed oil meal in place of cottonseed meal." When you total the grain fed for the month and figure its cost, separate this mixture. For example, if you fed during the first ten days of October one hundred pounds of the mixture mentioned above, four-sevenths, or fifty-seven and one-seventh pounds, of it would be corn chop; two-sevenths, or twenty-eight and four-sevenths pounds of it would be bran, and one-seventh, or fourteen and two-sevenths pounds, cot-tonseed meal. Keeping the records will furnish you some very practical prob-lems in arithmetic. It will not be nec-essary to note the prices you pay for feeds, as is done on the sample record, although that is a good place to make this sort of a notation.

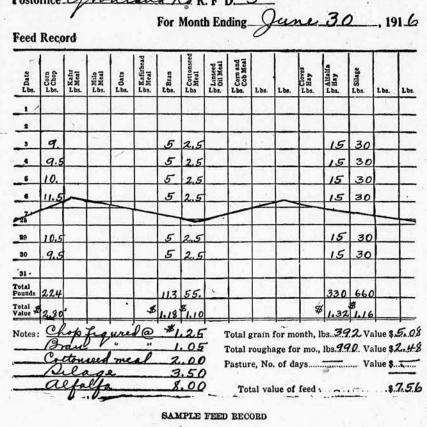
In figuring your feed costs for the club records, you are to use the prices furnished on the uniform price slips which all members now have. These prices may not agree with what you have to pay, but it is necessary for all to figure alike so that no one will have any advantage because able to buy feed cheaper than some other member. You cannot weigh the rough feed your cow eats every day, or at least we are not requiring you to do this. You must learn, however, to estimate the amount as accurately as possible. This does not mean that you are simply to make a guess. If you feed hay to your cow in the barn, you can weigh for a few times the amount she eats. By doing this you will soon learn about how much a cer-tain sized forkful weighs and can estitain sized forkful weighs and can esti-mate the amount in feeding her in the future. It is easier to keep account of siture. It is easier to keep account of silage. If you feed it in a bushel bas-ket, weigh a basketful a few times. Some of the boys and girls last year weighed the silage at every feeding and perhaps a good many can do that in the present club.

Be sure to put down on the record blank everything your cow eats. If she runs out in the yard with other cows and can eat hay and fodder from a rack, make notation of that fact on the blank and try to figure out some way to estimate how much she eats. If the whole herd is fed some sort of fodder in bundles, weigh a few bundles. By count-ing the total number of bundles fed, you can figure out about how much each cow eats. To be fair to other members in the club, each must do his best to keep his records absolutely right. If you should carelessly neglect to charge your cow with all the feed she eats, it would cow with all the feed she eats, it would be most unfair to other members who do keep accurate records. Nothing is gained by keeping a record that is not complete or accurate. We weigh feed and milk because we want to know whether the cow is profitable or not. That is far more important than having the credit of a good record. If you keep records carelessly, you may fool yourself into believing you have a profit-able cow when as a matter of fact she is not

At the end of each month total all feeds and figure the exact cost of each, feeds and figure the exact cost of each, completing the record as shown in the sample. Then make a copy in ink and send it with your completed milk record to the Kansas Farmer Dairy Club, care of KANSAS FARMER, Topeka, Kansas Perhaps your banker will want a copy of the records. Ask him shout it and of the records. Ask him about it and if he does, make a copy for him also, Remember, the rules require you to re-port to the bank not later than the tenth of the month, and we also expect copies of your completed records before that date.

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Kansas Farmer Dairy Club Name of Contestant alice Austin Name of Cow Beauty Postoffice Goodland Ke R. F D. 3_



What to Feed

We have the following letter from Claude Carter at Meriden:

"I am very proud to report that my cow has a nice big heifer calf, mostly white. It has a few black spots on its head. I wish you could see it. I will try to send you a picture of my cow and calf. I will need the milk scales. Will you please order them for me? I will begin keeping my record October 1. My cow will get a good start by that time. She is giving from six and a half to seven gallons of milk a day and has been increasing during the past week. Will you send me a good ration? I will begin feeding silage later. I am now feeding alfalfa hay, oats, and some brown shorts. She seems to like this very well." "I am very proud to report that my very well."

Claude has the cow Glen Romig milked last year and the calf is sired by a pure-bred bull with exceptionally good pro-duction records back of him. Glen wanted to get started in pure-breds and so sold this grade Holstein to Claude, who will milk her in the Dairy Club this year. This cow has large capacity for milk production, and that means she will consume a lot of feed. It takes feed to make milk, and the best milk cows nearly always have big appetites. To feed a cow economically, she should have feed a cow economically, she should have all the good palatable rough feed she will eat. Alfalfa is especially valuable because cows like it so well and it con-tains a large amount of digestible pro-tein, and protein is very necessary to milk production. Silage is another val-uable feed for milk production. A cow giving seven gallons of milk a day can-not eat enough alfalfa and silage, how-ever, to make that amount of milk, and some more concentrated feed is necessome more concentrated feed is necessary. Oats contain a little more diges-tible nutrients than bran and cost little if any more a pound at the present time. Oats and shorts make a good combina-tion for milk production. It will prob-ably pay to feed this cow twelve or fourteen pounds a day of the oats and shorts mixed. Linseed oil meal or cot-tonseed meal both contain large amounts of directible vertices and reacher of the section of digestible protein and nearly always it pays to feed high producing cows a little of one or the other of these rich feeds. Glen found last year that Daisy

did not like cottonseed meal or oil meal. did not like cottonseed meal or oil meal. He tried getting her to eat a little more, but she simply balked and would not eat her grain without mincing over it. She fell off in milk while he was making this experiment. Cows have their likes and dislikes just like people and we have to humor them a little especially the to humor them a little, especially the big milkers that need a lot of feed to keep up their milk flow.

keep up their milk flow. It is necessary to be a little careful in feeding shorts to cows. The fine shorts gets sticky and gummy in their mouths and is not so good for that reason. To feed shorts successfully it is sometimes necessary to mix enough bran with it to overcome this sticky tendency. A good rule to follow in feeding grain to a high-producing cow is to first be sure she gets all the hay, silage, and fodder she will eat, and then give her in addition each day about a pound of

in addition each day about a pound of a good grain mixture for each four pounds of milk she gives. If good dairy cows are underfed you may fail to real-ize it for a time because they will keep on giving about the same amount of on giving about the same amount of milk. If the underfeeding continues, they will finally begin to run down in flesh and will begin to fall off in milk. It will take good feeding for some little time to get them back again.

Father Helps Buy Cow

The fathers and mothers of the boys and girls of the club are largely respon-sible for the kind of work that is done. There are so many ways in which they can encourage and direct you with your work. This is especially true of the younger members. In the club work of the past year we have found that the parents took a great deal of interest and parents took a great deal of interest and helped in many ways. The following letter from the father of Gary Cook, of Easton, Leavenworth County, illustrates the interest parents are taking. Gary is barely old enough to get into the club. Mr. Cook says: "Gary has today bought his cow and wants to start his record at once. He has the most promising heifer I ever saw and is just ready to begin the rec-ord, as the calf is two weeks old. Please send the record blanks at once

send the required record blanks at once and he will fill them out and send them in. I never saw a boy so anxious to

FARMER KANSAS

get a cow and get into the work. He has asked every day when we were go-ing to get his cow. We certainly had a time finding a good cow for him."

Why Milk Tests Vary

A knowledge of how milk tests vary and why is of value to dairymen. The test refers to the percentage of butter fat found in milk and, as butter fat is the part necessary in the making of but-ter it is the most valuable mattion of the part necessary in the making of but-ter, it is the most valuable portion of the product. All dairymen like to have high testing cows, but it must never be forgotten that a high test alone does not necessarily make a cow valuable. She must give a large quantity of milk in order to produce a large quantity of butter fat. butter fat.

If you have never had milk from any of your cows tested regularly, you will learn in your year's work that there are variations in test which are hard to explain. Some weeks ago we explained in the Dairy Club department some of the variations which are likely to occur and what causes them. The Missouri Ex-periment Station has been investigating for a number of years the causes of variations in the composition of milk. This is a subject of considerable importance not only to the manufacturer of dairy products but to the producer, and special significance in connection has with the use of milk as food for infants.

It is often observed that milk is poorer in fat in summer and becomes richer again in the fall and the farmers have generally assumed this to be due to the watery condition of grass as compared with the dry feed received during the winter. Tests have shown that the cause of this is not grass feeding but the temperature. For some reason there is a tendency for the milk to be richer in fat during cold weather and to be-come poorer when the weather becomes very warm, regardless of the feed consumed.

A second factor of importance as influencing the richness of milk is the fat-ness of the cow at time of freshening. A cow high in flesh at calving time gives very much richer milk for some time than would be the case were she thin. This knowledge is now made use of by every breeder of dairy cattle who

can clean the Barn

in a Jiffy now

desires to make the largest possible rec-ord for milk and butter fat production. Another interesting discovery is that when a cow is underfed she temporarily gives richer milk rather than thinner as might be expected. This is of great im-portance in connection with making tests of cows and a failure to under-stand this effect has resulted in wrong conclusions from many experiments con-ducted with cows in the past.

Breed Comparisons

Holstein cows were found to eat less Holstein cows were found to eat less feed for a given amount of milk pro-duced than Jerseys in co-operative dairy work conducted among farmers through the Ohio Agricultural Experiment Sta-tion, but in economy of butterfat pro-duction the Jerseys led. More than 150 cows of each breed owned by farmers who sent records to the experiment station were included in this study. The Jerseys at 106 pounds

the experiment station were included in this study. The Jerseys ate 106 pounds of digestible nutrients for each hundred pounds of milk produced, while the Hol-steins consumed but 91 pounds. For each pound of butterfat produced the Holsteins consumed 26[±] pounds of di-gestible nutrients and the Jerseys only 19[±] pounds. The Jerseys ate 1814 per cent more

The Jerseys ate 18% per cent more digestible nutrients and produced 1% per cent more milk and 59f per cent more butterfat than the Holsteins on the basis of a thousand pounds live weight for each animal. The Holsteins were assumed to average 1,200 pounds in weight and the Jerseys 850 pounds.

The value of the National Dairy Show from an instructive standpoint can hardly be overestimated, and the future hardly be overestimated, and the future influence which it will exert over this industry is destined to be of the great-est. To see the well groomed dairy cat-tle, to meet the intelligent breeder, to watch the discriminating judge, to in-vestigate the latest dairy machinery, and to advertise the real worth of dairy products, affords an inspiration with which one can not return home without becoming a more progressive dairyman, a more constructive farmer, and a more valuable citizen in his community. This show will be held in Columbus, Ohio, October 18-27. October 18-27.

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cold and slushy, and cows are kept up longer. Relieve yourself of worry about the present great labor shortage; cut the time and labor of barn cleaning and stock LOUDEN

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Barn cleaning and stock feeding is an especially hard and disagreeable job in winter time, when days are short and the weather

feeding in half, and make what's left of the work more agreeable for yourself or the boy.

LITTER AND FEED CARRIERS roll along the overhead track from stall to stall-connect your feed alley direct

roll along the overhead track from stall to stall—connect your feed alley direct with granary or silo, and your manure alley direct with pit or spreader. Box carries a big load every trip, but powerful hoisting gear and roller bearing trolleys enable a twelve-year-old boy to handle it easily. Louden Carriers are built in various styles and sizes to suit any kind or size of barn. They are simple, strong, durable. You can install them yourself with very little trou-ble and make your daily barn work easy instead of a hardship.

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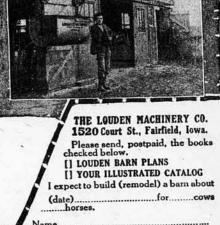
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What is Pratts Poultry Regulator?

A positive tonic and conditioner for poultry of all kinds and ages. A health-builder and health-preserver. Not a food.

What does it contain?

Roots, herbs, spices, mineral substances, etc. Each ingredient performs a certain duty. The combina-tion spells "health insurance."

What does it do?

Pratts Poultry Regulator makes and keeps poultry healthy, vigorous and productive. It sharpens the appetite, improves digestion and circulation, hastens growth and increases egg-production. It saves feed by preventing waste due to poor digestion. It prevents disease by keeping the birds in condition to resist the common ailments.

Has it been fully tested?

Yes! In general use for nearly fifty years. The original poultry conditioner. Imitated, but unequalled.

Does it give general satisfaction?

Positively! Satisfaction guaranteed or money refunded. Test it at our risk. Increased egg-production will prove that "Pratts makes hens lay."

How is it best used?

Daily, in small quantities. For adults, a tablespoonful daily for 10 birds. Younger stock in proportion. Mix with dry or moist mash.

What does it cost?

Nothing, because it pays big profits. One cent a month per hen is the investment required.

Where can I get it?

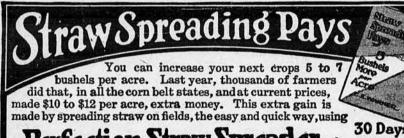
From 60,000 Pratt dealers. There is one near you. Direct from the manufacturer, prepaid, if your dealer can't supply you.

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INT.

Interest in sheep is spreading in Kan-as. A county sheep breeders' associasas. A county sheep breeders' associa-tion has been organized in Marshall County and the county agricultural agent reports that a membership of fifty is expected. Sheep clubs for the boys are being started in Kinger boys are being started in Kingman

County as a result of the interest in these animals in the county. Several farmers' have called on the emergency demonstration agent to discuss the possibilities in sheep, and several inquiries for good grade ewes have been received by him.



Saving Manure Waste

K ANSAS farmers lose millions of dollars annually through the improper handling of barnyard ma-This statement was recently made nure. by R. I. Throckmorten, of the Kansas Experiment Station. According to Mr. Experiment Station. According to Mr. Throckmorton's figures, barnyard ma-nure is worth \$4.76 a ton. A product having such a high value is well worth storing in such a way as to prevent the leaching away of its valuable constitu-ents. This value placed on manure has been determined by experiments con-ducted on the station farm where alfalfa has been grown continuously since 1910. has been grown continuously since 1910, having an application of five tons of manure each year. The above value has been returned on the basis of the in-crease in yield of hay last year at only. States a ton \$8 a ton.

Manure is one of the perishable farm products, and under ordinary conditions it is impossible to return all of this ma-terial to the land. In fact, the average farmer returns only about half the fertility contained in manure, and many men fall far short of this. The decrease in the value of manure in the farmyard is due to several causes, but the leaching away of the soluble material during rains is one of the most common sources of loss. Experiments carried on at various experiment stations show that where manure is exposed to the weather for a period of five or six months no less than 50 per cent of the fertility is lost. The average farm animal uses only a small portion of the mineral elements con-sumed in the feed and on the average sumed in the feed and on the average about 80 per cent of the nitrogen, 70 per cent of the phosphorus and 75 per cent of the potassium is avoided in the manure. These elements, especially the potassium and nitrogen, are in very soluble form and are readily leached away by rain water. The phosphorus is slightly more stable and a smaller percentage of it is lost, however its loss is not so important because it is present in much smaller quantities and its selling price per pound is far below either

of the other two elements. The greatest loss from leaching will occur where animals are fed in open lots. Here a very large percentage of the manure is directly exposed to the rainfall and the loss may be even greater if the lots are located on hillsides where much of the material may be carried away by or the material may be carried away by erosion. This greatly impoverishes the manure and lessens its ability to pro-duce crops. A three years' test at the New Jersey station showed that fresh manure gave 40 per cent greater increase in the yield of crops than did leached manure manure.

The common practice on many farms is to leave the manure heap exposed to the rain, which washes out very large portions of its most valuable constitu-ents. It has been estimated that the value of manure produced on the farms in Kansas each year from the various classes of live stock is \$91,587,370. Professor Throckmorton estimates that fully one-third of this value is lost through improper handling.

The best and most practical means of avoiding this loss is to spread all ma-nure as it is produced. If it is necessary to permit manure to accumulate, a good way to avoid loss is to construct a water-tight concrete bin which will be large enough to hold that produced during the summer season. On some farms sheds are built and as much of the manure as possible is accumulated under these sheds. In view of the great need of our farms for fertilizer, it would be well worth while to plan to cut out as much of this manure waste as possible.

Missouri Corn Crop

Missouri is producing war crops of 280 millions of bushels of corn, 42 millions of oats and 22.7 millions of wheat, to help feed more than a dozen allied to help feed more than a dozen allied nations, as shown by the September crop report of Secretary Jewell Mayes, issued from the office of the State Board of Agriculture, indicating the record-break-ing oats crop of fourteen years, the big-gest corn crop since 1902, and fall plant-ing of wheat 128 per cent compared to this year's harvesting. Of this year's corn crop less than 2

per cent is already cut for silage and fodder, and the portion to be cut is 40 per cent. Averaging the hundreds of reports from 114 counties, corn is ex-pected to sell at \$1.02 per bushel at

pected to sell at \$1.02 per bushel at gathering time. The 1917 corn total is 280,000,000 bushels on eight million acres—thirty-five bushels per acre, a big gain over 27.6 the seventeen-year average. The 1902 acre yield was forty bushels. At \$1.02 the 1917 acre return on corn will be \$35 70 \$35.70.

Shocked Corn Silage

If your silo is not ready when the crop is ready, the corn can be put in the shock and later run into the silo. Nearly every fall there are some who did not get the silos finished in time and find it necessary to handle the crop in this way in order to use it as silage. In this year of high priced feeds many will be interested in refilling silos after they have been emptied. Shocked corn can have been emptied. Shocked corn can be used for this second filling and con-siderable more good be obtained from the fodder than by feeding it in the ordinary way. During the fall and win-ter of 1913 and 1914 the Missouri, Ex-periment Station filled three small siles periment Station filled three small silos with corn fodder at different dates, using varying amounts of water. Visits were also made to ten or twelve farmers who had successfully used silage made of shocked corn and samples were taken from their silos for analysis.

The opinions of the men who had used silage made of shock corn may be sum-marized as follows: It is a satisfactory feed and animals find it more palatable and appear to do better on it than when fed shock corn. Silage made in this way fed shock corn. Silage made in this way is not equal to that made by putting corn into the silo at the proper stage. Refilling a silo in the middle of the winter with corn fodder prevents the loss in feeding value which occurs, es-pecially toward spring, when fodder is left in the shock. It is more convenient to feed from the silo than from the shock. Cattle eat more of the stalk when it is in the form of silage, thus conserving a large amount of feed which, as shock corn, would be wasted. It is doubtful if putting dry corn fod-der into the silo will ever become a gen-eral practice on account of the large

eral practice on account of the large amount of water which is required to put it in proper condition. On most farms it is entirely out of the question to consider putting the dry corn into the silo because of not having an abundant and convenient water supply. The studies made at the Missouri College of Agriculture with different amounts of water show that corn which has stood in the field until it has thoroughly dried requires about a ton of water for each ton of corn fodder. This amount of water gives the silage about the normal composition found when corn is put into the silo at the right stage. If, on ac-count of wet weather, the fodder is damp of water may be reduced a little, but if this amount is much less than equal parts with the fodder used, more or less mould will develop in the silage. Fail-ure to add enough water was the most common fault found with the silage made from corn fodder in the ten or twelve silos visited.

Country Marketing of Grain

The business of marketing grain and handling a country elevator involves more factors than appear on a cursory examination of the subject. The business is attended by many nazards which should be carefully weighed in advance by those conterning weighed in advance by those contemplating engaging in it. This advice is contained in a recent publication of the Federal Department of Agriculture, Bulletin 558, "Marketing Grain at Country Points." The bulletin, which contains much information of inwhich contains much information of interest to producers, shippers, dealers, and consumers of grain and grain prod-ucts throughout the United States, re-ports the results of a survey of grainhandling methods in the states of the middle west.

Pointing out a common fallacy of buy-ing, the Government investigators de-clare that the producer of high-quality

October 6, 1917

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grain often receives less than it is worth grain often receives less than it is worth in order that the buyer may pay an equal price to a grower of grain of in-ferior quality. If grain could be cleaned it not only would demand top prices, but screenings worth \$10 to \$25 a ton for feed would be saved on the farm. The specialists believe that farmers who deliver grain of inferior quality should deliver grain of inferior quality should not expect to receive a price equal to that paid for high-quality grain. In some sections of the country many

elevators are open only during the har-vest season. The Government investigators believe that, prices and other factors being equal, farmers should encourage elevators which remain open and provide a local market throughout the year.

The middleman, the experts say, may serve a double purpose. Under the pres-ent methods of distribution he may find the most favorable outlet for the producer and secure for the buyer grain of the quality he desires. But it is also pointed out that in its course from the producer to the consumer grain may be passed through the hands of so many persons who may be called middlemen that their efforts may become a burden and add needlessly to the cost of mar-totime.

keting. Speaking of the storage of grain on the farm, the specialists have found that to determine whether such practice would be profitable, it is necessary to consider the interest on the investment, interest on the grain in store, natural s by rodents Shrinkago convenience of marketing, condition of roads at time of delivery, price at harvest time, and the probable price at some future date. In the past the natural shrinkage in corn has been so great as to show little profit from storage, while if a long-time average is taken into consideration, oats and wheat have been stored at a profit.

Wichita Wheat Show

The Wichita Wheat Show is now on in full swing. While this has come to be known as the wheat show, wheat is not displayed to the exclusion of other farm products. It is an all-round farm products show and all held under cover. products show and all held under cover,

FARMER KANSAS

KANSAS a space 300 feet long by 800 feet wide being occupied by the various exhibits. A new feature introduced this year is an exhibit by the Federal Farm Loan Board. This consists of a model farm loan bank, experts from the United States Treasury Department being sent from Washington to conduct it. This is especially interesting because the lec-turers are able to explain in detail how borrowers may obtain loans. Demon-strations are being given in domestic science, food preservation, lectures to women on household subjects, in Red Cross and Boy Scout activities, and along many other interesting and in-structive lines. structive lines.

Co-operation Through Agent

Co-operation Through Agent One of the advantages of having an agricultural agent in the county is that in going about his work he learns where animals, seeds, or feed can be bought and sold and many times in one such trans-action he can save the buying farmer enough expense to pay his farm bureau dues for a number of years, and because of this demand for his products the sell-ing farmer, too, receives a valuable service. service.

service. F. J. Robbins, agricultural agent of Franklin County, in one week brought farmers of his county together on two bull calves. The probabilities are that without his help the purchases would have been made outside the county and provide the county and have been likewise the animals would have been shipped out of the county at a sacrifice because of their unknown value.

War Duty of Boys

War Duty of Boys "Should I go back to school this fall? Shouldn't I be doing something for my country in the war?" These questions undoubtedly are in the minds of thou-sands of American boys. Upon the authority of the President, the Secretary of War, the Secretary of the Navy, the Postmaster General, other government officials, war leaders and college presi-dents, The American Boy gives the an-swer in its September issue. This answer is: "Do both—go back to school; that will be a service to your country—the greatest you can give." Such counsel, given on such authority, will help to solve a problem that nat-urally has vexed not only boys but parents. "You want to know reasons; you want to be shown," says the magazine in an article besed on the latters of a spon

"You want to know reasons; you want to be shown," says the magazine in an article based on the letters of a score of eminent men. "Think of the war first. This isn't a war merely of num-bers of soldiers and their sheer brute force. It's a war of trained men—a war that is fought largely by mathemati-cians, skilled mechanics, electricians, aeronauts, seamen, chemists, sanitation experts, surgeons, business men. Thou-sands and thousands of these educated leaders in the war have been killed or leaders in the war have been killed or lost to the service through wounds; other thousands may be destroyed. Who will take their places if the war con-tinues long? Certainly it will not be the boys who have dropped out of school.

"The work of the world will go on after this war has ended. War or no war there must be skilled mechanics, electricians, aeronauts, seamen, chemists, sani-tation experts, surgeons, business men. There will be fewer such after the war. That means there will be an unusually That means there will be an unusually good opportunity for you to gain suc-cess and distinction in your chosen line of work. But you can't succeed, you can't gain distinction, if you have been a 'slacker' in school. "The best reason for your staying in school we haven't given yet. It is not

school we haven't given yet. It is not only that you can earn more money, when you are a man, if you stay in school; it is not only that you will have a better chance to succeed, as an educated man, because so many educated men will have been lost. It is that, after this terrible war with its tragic destruction, the world will have to be rebuilt. That will be your job; that is, you must do a part of the job. Which part will it be? Will it be an impor-tant part because you are fitted by ed-worthing to do a part of the to yet. ucation to do an important part, or will ucation to do an important part, or will you just drift along, doing what others tell you to do, a follower, if not a bungler? Going to school now, this year, and sticking through, are the first es-sentials. Don't drop out. Don't be a slacker. Don't be a quitter. 'Carry on!' Do it for your country's sake."

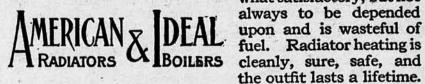
The call of the young man under 21 is not to the colors but to the colleges. -JOSEPHUS DANIELS.

R HEA' ead of a	ll others-

The outline plan of the house shows heat distribution when winter wind is blowing, as shown by arrow. Notice that heat is even in all rooms with IDEAL Boiler and AMERICAN Radiators.

Uneven Heat

The above diagrams give a clear idea how your home should be heated. The "spotty" heating of stoves is disagreeable, dirty, and uncertain. Furnace heat is some-



Even Heat

what satisfactory, but not always to be depended the outfit lasts a lifetime.

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The slight difference in first cost of Radiator heating is very soon repaid to you in the great fuel savings over other kinds of heating, the greater comfort of your whole house and the increased satisfaction and better health of yourself and family.

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A No. 1-22-W IDEAL Boiler and 422 sq.ft. of 38-in, AMERICAN Rediators were used to heat this farm house.

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Feed the Fighters! Win the War! **Save the Yields!** Harvest the Crops!

On the battlefields of France and Flanders the United States boys and the Cana-dian boys are fighting side by side to win for the World the freedom that Prussian-ism would destroy. While doing this they must be fed and every ounce of muscle that can be requisi-tioned must go into use to save this year's crop. A short harvest period requires the combined forces of the two countries in team work, such as the soldier boys in France and Flanders are demonstrating.

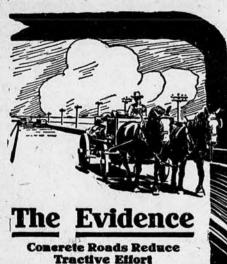
THE COMBINED FIGHTERS IN FRANCE AND FLANDERS AND THE COMBINED HARVESTERS IN AMERICA WILL BRING THE ALLIED VICTORY NEARER

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

HELP YOUR CANADIAN NEIGHBORS WHEN YOUR OWN CROP IS HARVESTED Canada wants 40,000 Harvest Hands to take care of its 13 Million Acre Wheat Field

One cent a mile railway fare from the International Boundary line to destination and the same rate returning to the International Boundary. High wages, good board, comfortable lodgings. An Identification Card issued at the boundary by a Canadian Immigration Officer will guarantee no trouble in returning to the United States. AS SOON AS YOUR OWN HARVEST IS SAVED, move northward and assist your Canadian neighbor in harvesting his; in this way do your bit in helping "Win the War."

For particulars as to routes, identification cards and place where employment may be had, apply to Superintendent of Immigration, Ottawa, Canada, or to GEO. A. COOK, Canadian Government Agent, 2012 Main St., Kansas City, Mo.

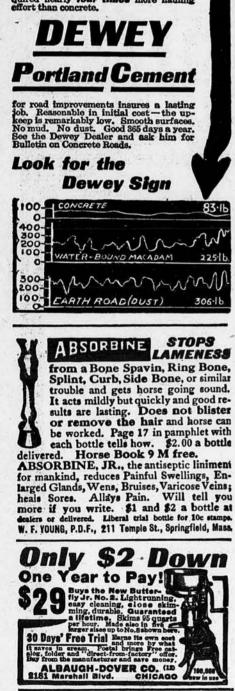


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Here's the Proof

The Good Roads Bureau of the California Automobile Association in co-operation with the Agricultural Engineering Division of the University of California, has just completed an exhaustive series of tests on all kinds of road surfaces.

Concrete showed the lowest tractive re-sistance. The table below shows how concrete compares with two well known road surfaces—water-bound macadam and the ordinary dirt road. Concrete offered about one-ingot the resistance of water-bound macadam and the earth road re-guired nearly four times more hauling effort than concrete.



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Profit in Fattening Hogs

WEN at present prices of feeds, hogs can be profitably fattened, accord-ing to the results obtained in the hog feeding demonstrations carried on at the St. Joseph Stock Yards. These demonstrations in feeding hogs, cattle, and sheep are being conducted under the supervision of the Kansas and Missouri experiment stations and in econception supervision of the Kansas and Missouri experiment stations and in co-operation with the Buchanan County Farm Bu-reau. A very complete and finely illus-trated report of the second series of demonstrations which closed last spring has recently been published by the Stock Vards Company

Yards Company. In figuring the actual average cost of producing a hundred pounds of pork, the following prices for feeds were used: Corn, \$2 a bushel; tankage, \$4.50 a hun-dred; linseed meal, \$3 a hundred, and shorts, \$2.50 a hundred. The results of four successive ninetx-day feeding perfour successive ninety-day feeding per-iods show that in the lot where the hogs iods show that in the lot where the hogs were fed shelled corn and tankage it re-quired 389 pounds of shelled corn and twenty-eight pounds of tankage to the hundred pounds of gain. The cost of this gain was \$15.15. In the lots fed shelled corn and linseed meal it re-quired 415 pounds of shelled corn and twenty-seven pounds of linseed meal to make a hundred nounds of gain, the cost

twenty-seven pounds of linseed meal to make a hundred pounds of gain, the cost being \$15.63. Both of these demonstra-tions are the result of averaging four ninety-day periods. In one period of feeding, shelled corn, tankage, and shorts showed approximately the same cost of gain as the shelled corn and tankage. It will be noted that even at the pres-ent high feed prices the gains on these hogs were made at about three dollars a hundred less than the present market value of pork. This is a very satisfac-tory margin of profit, and it would seem that corn could be fully as profitably marketed in the form of pork as if sold on the open market. In all probability on the open market. In all probability corn will not be as high as was figured in these feeding demonstrations. It appears to be the unanimous opinion of the best authorities that the present high best authorities that the present high prices of hogs will continue for some time owing to the great demand for pork and its products. This is of course brought about to some extent by the large use made of pork products in pro-vicioning armias visioning armies.

Crude Oil for Hogs

Crude oil or residium oil should be used on every farm where hogs are handled. Parasites are a great drain in the business of making pork. The use of the oil is_a standard treatment for lice, mange, and other skin troubles, points out John M. Evvard, of the Iowa Experi-ment Station in the Iowa Cariculturiat ment Station, in the Iowa Agriculturist. He also mentions the fact that oil ap-He also mentions the fact that oil applied to dusty quarters settles the dust and thus indirectly prevents a great deal of the coughing caused by dust. Ordi-nary dips may be used strong enough to kill lice, but they will not destroy the nits, therefore a second dipping is nec-essary in from eight to fourteen days following the first. In the winter time the use of oil min-imizes the "chill," inasmuch as it does not evaporate. Ordinary dips, composed of 95 per cent or more of water, chill the animals considerably, this being es-pecially true in the "dead of winter," because water evaporating from the skin surface abstracts much heat in so doing.

surface abstracts much heat in so doing. Crude oil "sticks" to the animal's hair and skin in good shape, ofttimes re-maining for a week or two in suitable weather. Too, when the hogs go into their nests with this crude oil covering, they help to disinfect and cleanse their sleeping quarters. With the ordinary dips this benefit is not so noticeable. Of course, it is true that crude oil "rub" marks on nicely painted buildings are not desirable, and that is an objection.

Crude oil can be purchased from practically any of the oil companies, it cost-ing from \$5 to \$8 a barrel ordinarily. A barrel of crude oil, however, will keep an ordinary herd of swine free from lice for a year or two unless it happens that

the infestation is especially bad. The method of applying this oil is simply to herd the hogs up in one cor-ner by means of hurdles, then when they are closely packed together sprinkle

them with crude oil, using an ordinary sprinkling can. A broom may be pressed into service for this purpose, dipping the same in the crude oil and shaking the oil out of it over the pigs. The broom is also useful in supplementing the "can" method in that the crude oil may be rubbed onto the backs and sides and

"can" method in that the crude oil may be rubbed onto the backs and sides and bellies and legs and heads of the hogs. If the lice get into the ears, take an oil can full of the crude oil and simply squirt a little of the black lice killing stuff around the inner rim of the ear; or take a cob, dip it in the crude oil and give the ears a good "cob" oiling. The lice find the ear cavity a "snug haven of safety" in emergencies, this being es-pecially true when the hogs have access to a mud wallow. The ear is seemingly a most welcome avenue of escape from the deadly lice eradicating mud bath, but the crude oil will get to them. For blistered pigs crude oil of the milder sorts is of much value. Simply apply the oil to the blistered portions in as gentle a manner as is consistent with e arous is of much value are

in as gentle a manner as is consistent with a good job. When the pigs get their skins sore from running in wet and dewy forage such as rape and tall alfalfa, we find the crude oil treatment focilitates and concurrents healing in facilitates and encourages healing in that it softens the wounds, prevents the water from adhering and thus indirectly prevents further blisters and discourages the flies. Crude oil is used quite extensively in

automatic hog oilers. This is good prac-tice. Care must be taken, however, to purchase a reliable and satisfactory oiler. Some of the "self oiler" concerns put out a refined oil or grease for use and these are, so far as we know, good and of merit; but the especially pre-pared oils and greases are ofttimes quite expensive. Most of the hog oiler manu-factures are avious to put their ma-

expensive. Most of the hog oiler manu-facturers are anxious to put their ma-chines out on trial, thus insuring that the prospective customer be satisfied be-fore he pays his money. The successful hog oilers are worthy of consideration. The dipping tank may be used to ap-ply crude oil. The usual method is to place an inch or two of crude oil on top of a tank full of water, running the hogs through the same. They take on a layer of oil as they go down and as they come up, this method being practically as ef-fective as if crude oil only is used. In the winter, to prevent undue chilling the winter, to prevent undue chilling after dipping, the tank is preferably filled with oil. The disadvantage of this, however, is the expense. With the layer of oil on top of water method, the hogs get practically an all oil covering without any adhering water. The pigs carry very little more oil away with them when the tank is filled solid with oil than where a one or two-inch layer only is present on top of the water, but considerably more oil is necessary to fill

considerably more oil is necessary to fill the tank completely than where the layer scheme is practiced. A large dripping platform upon which the hogs may stand from five to fifteen minutes after dipping is a great saver, the surplus drippings being returned to the original dipping tank. The dipping tank is, however, quite a nuisance in some respects, and the swine soon learn to fight shy of it, much to the discom-fort of the herdsman, who must labori-ously immerse the herd, one by one.

ously immerse the herd, one by one. To try a good grade of crude oil is to be convinced of its louse-killing, mangedestroying, coat-smoothing, dust-allay-ing, odor-eliminating and general healing properties.

Starting with Ewe Lambs

Good breeding ewes are selling high. Lower prices are unlikely, as the demand is strong and the available supply is small. With probable high prices for mutton and wool in the future the farmer who understands sheep and will properly care for them from the start has good prospects of success. For those inexperienced in sheep rais-

ing, particularly, there are several important advantages in purchasing ewe lambs instead of mature breeding ewes. In the first place, the ewes of breeding age that are offered for sale are mostly western ewes with a long wool cross while the ewe lambs coming from the West are mostly black-faced lambs, thus



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The amount of brains you put into your work determines the amount of pleasure and profit you will get out showing a cross of some of the down breeds which is the kind of blood most farmers wish to have in their flocks. By farmers wish to have in their flocks. By buying such ewe lambs one gets the ad-vantage of starting with the first cross of the type to be used in grading up a flock to the mutton type. While breeding stock is selling high, the ewe lambs can be bought at about \$5 per head less than breeding ewes.

\$5 per head less than breeding ewes. This is an important point in starting **a** flock, although until the lambs came to a breeding age no returns from the flock will be forthcoming except the wool clip. However, for the beginner in sheep hus-bandry, no better plan of obtaining ex-perience could be adopted than in car-ing for a flock of ewe lambs for a year. The experience gained in wintering ewe The experience gained in wintering ewe lambs and managing the flock through-out the summer season would be invaluable.

Investment in a flock of ewe lambs will give the advantage of the first cross of blood of the down breeds, lower price, and nccessary experience. The wool and necessary experience. The wool clip, which will at least offset the first cup, which will at least offset the first year's keep, and the yearling ewes will be a benefit to weedy pastures next spring if moved frequently and not stocked so heavily as to eat the grass into the ground.

Fat Steers at Hutchinson

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Worm Remedies

If hogs are to make the greatest profit, they must be kept free from worms. Hogs become infested with worms by taking them up with food or drink. Hence, well-drained, clean lots reduce the chances for them to become infested. It is best to keep a good worm preventive before them at all times. Any tested commercial remedy may be Any tested commercial remedy may be used, but the following preparation is very successful: Air-slaked lime, two parts; salt, two parts; charcoal, two parts; and pulverized copperas, one part. Where the herd is badly infested, use for each hundred pounds of shoat, eight

grains santonin and six grains calomel thoroughly mixed with a thin slop. Let the shoats miss a feed in the evening, and give them a treatment in place of the regular feed the following morning. If necessary, repeat in one week.

Advertising Pure-Bred Stock

All of us who have observed closely All of us who have observed closely have noted how few of the men who start in the business of breeding pure-bred live stock stay at it for any great length of time. Anyone who has been familiar with a given territory for twenty-five or more years has seen many go in and out of pure-bred live stock during this period. Too many of the men who fail in pure-bred live stock went in when prices were exceptionally were exceptionally went in when high, for at such times this business alrigh, for at such times this business al-ways makes its strongest appeal. The beginner sees and hears of the high prices being paid for pure-bred animals and begins to figure immediately on having such animals to sell himself in the course of a short time. It is not the fault of the business, however, that such a considerable number of these who such a considerable number of those who

have tried it have failed to make it go. Perhaps one of the common causes of A great many men can become success-fullure is the inability to appreciate the value of the right kind of advertising. A great many men can become success-ful breeders of pure-bred stock who can-not sell them at profitable prices unless

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it is during a time when a special boom is on. It requires considerable ability to market pure-bred stock at a profit under ordinary circumstances. The man who would succeed must persistently keep his business before the public and be able to back it up with animals of real merit. We do not recall many instances where breeders able to pro-duce animals of merit have failed, providing they used judgment in letting the public know that they had such stock for sale. Those who invest in pure-bred stock must learn this lesson in advertising at the start, and consider advertising ing at the start, and consider advertising of some sort as a part of their invest-ment. By this we do not mean that they should be plungers, but it is a part of the business to systematically adver-tise, and it is only by doing this that the fullest possible success can come from breeding pure-bred stock.

Co-operation in Buying Bulls

Nothing will so quickly and so cheaply improve the cattle of a community as improve the cattle of a community as the use of high-class bulls. Too often on the farms where only a small num-ber of cattle are kept the difficulty is in being able to own a high-class sire. Farmers having small herds have long felt the need for better cattle because of the discrimination against their stock at the various markets. The desire for better live stock has received a strong better live stock has received a strong stimulus due to the high prices which have prevailed for feed of various kinds during the past year or two. It cer-

FARMER

tainly does not pay to feed expensive feed to scrub animals.

Farmers in Ripley County, Missouri, have recently made a move toward se-curing better breeding sires co-oper-atively. Even after they had decided that live stock improvement was neces-sary, they did not know what breed was best adapted to their condition or where to obtain the animals after they had decided what breeds to purchase. They were assisted in their co-operative efforts by a banking firm which called together a committee of farmers and of-fered to lend them money with which to purchase pure-bred bulls. This offer of the bank to co-operate with the farm-ers was accented and a committee of ers was accepted, and a committee of two was selected to represent the pur-chasers. This committee together with chasers. This committee together with D. C. Welty of the Iron Mountain Rail-way and S. T. Simpson of the Missouri College of Agriculture made a trip through several states in search of the unrougn several states in search of the right kind of bulls. As a result, two carloads of Hereford and Red Polled bulls were purchased. A few registered cows were included, and these will be used to form the foundation stock for future herds of pure-bred cattle.

Through continued co-operation in the purchase and exchange of breeding sires, the men of this community can do much to improve the type of cattle grown.

Loud talking, swearing, and rough handling are not permitted in a well-managed dairy. Dairy cows will in-

crease their milk flow if always quietly and gently handled.

Before Deciding On Your Engine

Engine - Look up the question of construction, first cost, quality, power, speed regula-tion and fuel used. Learn what pro-duces good compression, powerful igni-tion, easy starting, durability and long life. Read about the advantages of vertical valves, high-tension magnetos, kerosene as a fuel, preheating fuel, etc. These subjects and many others vital to the engine user are fully explained by word and illustration in Ed. H. Witte's new (copyrighted) book, "How to Judge Engines."

Any subscriber who is interested in an Any subscriber who is interested in an engine for any purpose, should read this book. It's the original "How-to-Judge-an-Engine" book—written from an ex-perience of over 31 years in the business. Ed. H. Witte is the most successful in-dividual gas engine manufacturer in the U. S. today, owning and operating the largest exclusive, direct-selling engine factory in the world. You get the in-side story of engine making by a practi-cal engine man and inventor of engines. He tells you what to do with an engine

cal engine man and investor of engines. He tells you what to do with an engine and "How to Make Money" with one. If you want to know the "Why" of high-grade gas engine construction, send your name and address, today, to the Witte Engine Works, Dept. 1600, Kan-sas City, Mo., or 1600 Empire Bldg., Pittsburgh, Pa.-(Adv.)

All Farm Animals Need And Crave **CAREY-IZED** STOCH TONIC Stock Tonic Brick

Your hogs, cows, sheep and horses "take their medicine voluntarily, eagerly, regularly, when you place it before them in the form of Carey-ized Stock Tonic Brick. You do not have to force it down their throats, or starve them to make them take it in their feed. They will absolutely take care of their own health with no bother to you whatever. Just place Carey-ized Stock Tonic Brick in the feed lot or troughs where animals can have access to it all the timethey do the rest.

Eight Different Health Promoting Medicines Which Animals Need All the Time

Carey-ized Stock Tonic Brick is made up according to a formula scientifically worked out by chemists of highest standing. It is more than a specific for some particular ills. Its purpose is To Prevent All Disease—to keep the animal system in such vigorous health that it repels all attacks of disease germs of every description.

Carey-ized Stock Tonic Brick is a combination of powdered gentian root, sulphate of iron, bi-carbonate of soda, sulphur, carbonized peet, guassia, charcoal and pure dairy salt. Contains absolutely no harmful sub-stance—animals can't eat too much of it.

These ingredients, properly proportioned, constitute an unfailing worm destroyer and conditioner, keep stomach and bowels in order, aid digestion, promote healthy activity of kidneys and liver, purify and in-vigorate the blood.

Carey-ized Stock Tonic Brick has stood the severest feeding tests by leading stock raisers, and has the unquali-fied endorsement of high veterinary authorities. Let us give you the names of enthusiastic stock feeders whose hogs and other animals have been saved from disease and death by this great health medicine.

Solid Brick Form makes it economical to feed — preserves its medicinal value till the last particle is eaten. Animals eat only when they need it and as much as they need—there's no waste. Supplies them regularly with salt, as well as other needed medicines.

Our 30-Day Trial Offer the Most Liberal Ever Made We positively guarantee Carey-ized Stock Tonic Brick to be and do all we claim for it and we want you to verify our guarantee by your own experience and entirely at our risk. Order a dozen or more Carey-ized Stock Tonic Brick from your dealer; let your live stock have free access to it for 30 days. If you are not satisfied with the result, return what you have left and get all your money—no charge for what you have used. We stand behind our dealers with our guarantee.

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If your dealer does not handle Carey-ized Stock Tonic Brick write us his name and we will see that you are supplied. Fill out and mail us the coupon or write us a postal, and we'll send you full information and valuable booklet "Making Live Stock Pay." CAREY SALT COMPANY

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

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

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

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

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

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1892 Santa Fe Bldg., Topeka, Kansas.

KANSAS FARMER



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

Time is infinitely long, and each day is a vessel into which a great deal may be poured—if one will actually fill it up. —GOETHE.

Refinishing Furniture

Miss Nellie M. Killgore, of the Colo-rado Agricultural College, says that the appearance of worn articles of furniture may be greatly improved by a small amount of labor. Most varnished fur-niture in the course of time needs seri-ous attention, and most furniture is varnished. Sometimes the varnish can be rubbed down with boiled linseed oil and rubbed down with boiled inseed oil and pumice stone, giving a duller polish, but more often the varnish should be re-moved. To do this, get a prepared var-nish remover. Apply to surface with a brush, let stand about thirty minutes. Apply the second time, let stand fifteen Apply the second time, let stand fifteen or twenty minutes, scrape off with putty or case knife, or steel scraper. Another application of remover which can be wiped off with a cloth may be necessary. Then sandpaper surface, using medium to fine paper. Then rub down with oil and pumice stone, wiping off all oil and polish, using a woolen cloth. The piece can then be waxed, using a mixture of can then be waxed, using a mixture of turpentine and beeswax or floor wax. It is better to rub down with oil several

times before applying wax. This gives a beautiful finish, to old mahogany or walnut and brings out the beauty of the wood. Many an old piece could be made a thing of beauty by this treatment.

So much furniture is finished in golden oak and is unpleasantly shiny. Try re-finishing a piece and see how it im-proves the looks. It may need a coat-ing of stain to even up the color where

it has been scraped. Any furniture finished in a wax or fumed surface should be rubbed down with oil a few times a year to preserve the finish. Be sure and wipe off all superfluous oil. Some of the most beau-tiful old English furniture never had any other finish but frequent treatments of linseed oil.

Canning Inquiry

Mrs. C. B. M., Crawford County, asks: "Has any reader had experience in put-ting up squash for winter use? We are very fond of the white squash fried in egg batter, and we like the crock-necked ones baked, but we do not like them stewed. Can I fry the white ones and can without water, and can the crock-necked ones be baked before canning? Can anyone tell me whether or not turnip tops and mustard cooked together will keep in the old-fashioned tin cans?"

Having had no experience in the can ning of squash fried in egg batter, we submitted this inquiry to Otis E. Hall, state club leader, who probably has had more experience in canning than has any woman in the state. Mr. Hall's reply is as follows:

as follows: "We have never tried canning squash in egg batter, but believe that it would not be practical. In fact there is no reason for canning it this way, for the squash can be canned in the shell or in the usual way and then fried in the egg batter when opened. This recipe has been used with success. been used with success:

"Wash clean while whole, then cut into quarters or eighths—it is not neces-sary to pare or peel. Scrape out seeds and fibers. Steam until pulp can be scraped from shell with spoon, which will take possibly 90 minutes over false bottom in a hot-water bath outfit, or 30 minutes under five to ten pounds of steam. Remove and let cool or plunge quickly into cold water, but never allow the products to stand or soak in the cold water. With spoon scrape pulp from rind or shell, work out the water thor-oughly, mash with potato masher if lumps are present. Place rubber in position on can, then pack squash in jars. Add one level teaspoonful of both salt and sugar, but no water. Place tops in position. Partially seal. Sterilize one hour—provided the squash was steamed —if using hot-water bath outfit, or 35

minutes if steam-pressure outfit under minutes if steam-pressure outlib under 5 to 10 pounds steam. If squash was not steamed, sterilize 2½ hours in hot-water bath outfit or 60 minutes under 5 to 10 pounds of steam. Do not let cool air strike the jars while hot. "Baked summer squash can be canned. Cut the squash in thin slices. Bake in a hot oven until almost ready for the table. Then pack into the jar while hot.

table. Then pack into the jar while hot. Do not add any water. Make sure that the jar is filled. Put on rubber and lid and sterilize in hot-water bath one hour. Most people like to sweeten the baked squash, as this seems to give a better flavor to the canned product.

"Turnip tops and mustard should not be canned in tin cans, unless the cans are enamel-lined or lacquered. It is not safe to can greens of any kind in tin, as the acid from the greens will attack the tin, but greens can be canned success-fully and safely in glass or enamel-lined cans."

Valuable Bulletin

"Home Storage of Vegetables" is the subject of Farmers' Bulletin 879 of the U. S. Department of Agriculture. This is an especially valuable pamphlet, and we would suggest that those who will have vegetables to store write for a copy at once, addressing Division of Publica-tions, U. S. Department of Agriculture,

Washington, D. C. The storing of late vegetables is an economy for those who grow them in sufficient quantity for the needs of the family.

To care for the surplus vegetables in many cases requires nothing more than the use of existing facilities in or near the home.

Often the late vegetables from a small garden may be stored with no outlay of money.

When considerable quantities of vege-tables are grown it is frequently advisable to construct permanent storage fa-cilities in the form of a storage room in the basement of the dwelling or under an outbuilding or to build an out-door cellar of wood or masonry.

If permanent facilities are not avail-able, late root crops can be kept in out-door pits or banks, requiring no cash outlay except for labor.

Jelly Making

At this time of the year many of our readers are busy with jelly making, and some of them may have found more or less difficulty in getting some kinds of fruit juice to jell. Two requirements for the process of jelly making are the presence of acid and pectin in the fruit juice. Some fruits naturally have too little acid, but, if they contain pectin, jelly can be made by adding some other acid fruit juice. Fruits for jelly making should be gathered while a little under-

ripe. Pectin is naturally abundant in some fruits and lacking in others. It is a good plan to test the fruit juice to determine its amount of pectin. This may be done by adding to one tablespoonful of the juice extracted by cooking, one table-spoonful of grain alcohol. Mix in a glass, let it stand a few minutes, and note the amount of jelly-like material which settles at the bottom. By per-forming this test plane with a test of forming this test along with a test of. a juice which is known to yield good jelly and comparing the relative amounts of pectin, it is possible to determine the jelly-making quality of any fruit juice. The white inner skin of lemon and orange peel contains considerable pectin which may be extracted and added to fruit juices which the test shows to be deficient in it.

To extract pectin from oranges and lemons, cut or scrape the yellow outer peel from the white inner skin, remove the white portion, and pass it through the white portion, and pass it through a food grinder. Soak in sufficient water to cover. Let it stand for two hours or longer, then cook slowly for about two hours and strain through a jelly bag. This may be made in quantities and kept on hand for use with any fruit



and saved for use in jelly making.

October 6, 1917



POULTRY RECORDS KEEP

SAY, does your husband ever growl about the cost of feeding chickens? Does he state in not very mild terms that "Those fool hens eat their heads off; it costs more to keep them than so many hogs," etc.? Well, we'll fix him.

Think so many noge, court with work fix him. You make a business agreement with him to loan you enough money to buy one year's feed for your chickens and let you have all the profits from the aforesaid fowls. Be sure you have a good laying strain of hens, then get out your little book and keep track. Do you have scrambled eggs for breakfast, roast chicken for dinner, angelfood cake for supper? Mark 'em down at market price. When you trade that big basket of eggs for groceries, mark it down. By the end of the year you can pay him back and have an account to show that will encourage the good man to build you that new chicken house. Here is where you crow.

you that new chicken house. Here is where you crow. But you really can't blame him very much for thinking the hens a nuisance. Whenever he goes to feed the hogs and cattle the feed troughs are overflowing with greedy hens. They are everywhere under his feet, and when he leads that skittish little mare into her stall out flies an excited "biddy" from her man-ger nest, squawking and flapping her wings right under the horse's nose. It is provoking. Perhaps if you fed your flock well morning and night at a con-siderable distance from the stables they would not be so ravenously hungry, but would "wait patiently in the bread line." line.'

line." Of course a good rustling hen picks up much of her living in the feed lot, but if she is fed besides she will not be so eager for the pigs' feed. Notice the hog trough at feeding time—hungry chickens fluttering around stealing the grain. Mister Piggy gets mad and bites. Chicken meat tastes good. "Wee-wee," says this little pig, "I want some more," and a chicken-eating hog soon knocks the profit out of the poultry business.— MRS. N. L. HARRIS.

The fall of the year is the time to avoid possible colds and their resulting roup troubles. A very good plan just about now is to visit the roosting quar-ters at night when the birds are on the posts and listen to the breathing. If there is any tendency to colds it can be detected in the breathing. Any birds that have a thick or wheezy breathing should be located and removed. It may be that they show no particular signs of cold but it will do no harm to dispose of cold but it will do no harm to dispose of such birds, as it may save a disastrous outbreak of roup later in the year. In these times of high feed prices it does not pay to run any risks. Cull closely, disposing of all inferior or weak appear-ing birds, but do not sell the thrifty, well developed pullets. They will more than pay for their keep this winter. In the spring there will be such a shortage of hens for breeding purposes as we have never seen before. have never seen before.

From what I have been able to learn, I believe that from 30 to 50 per cent of the fowls and older stock in this coun-try have been marketed. That accounts for the great amount of poultry in storage and the present low price of poul-by meat. It seems to be the opinion of practically all that those who have kept their poultry have done the right thing and will make a greater net profit this coming wint make a greater new promo-this coming winter and next spring than ever they have made in any previous year. There will be a scarcity of breeding stock and the man who has stock or hatching eggs is certain to have a great demand at profitable prices. Missouri, Kansas, Iowa, Indiana and the other great grain producing states, are going to profit more than some of the other sections, but there is no state in the Union where eggs cannot be produced at a reasonable profit, and in many cases at a handsome profit.-T. E. QUISEN-BERRY.

Poultry exhibits at the Free Fair oc-cupied all the available space in the poul-try building. A show of this kind means far more to the actual business of poul-

try production than a fanciers' show. Breeders of poultry have found that it pays to exhibit at a big fair where peo-ple from all over the country attend. People of the farms have learned from long experience that poultry is a most profitable side line, and such exhibits of utility stock as were found at the To-peka fair are helping to drive the scrub flocks from the farms of the state. Eggs will prohably he worth more this comwill probably be worth more this com-ing season than ever before, and it pays to have well-bred stock. Feed is ex-pensive and there is little profit in main-taining a poor producing flock.

To make profitable returns this win-ter, hens will require good care and shelter. This means the construction of snetter. This means the construction of good buildings or remodeling of many of those now in use. It also means feed-ing with an eye to egg production. In order to produce the greatest possible number of eggs it is necessary to give highly concentrated feeds in as large quantities as the fowl can digest properly. In our eagerness to make a big showing all the hens are thus treated. Now it is a well known fact that a hen thus fed and worked is in no condition to produce eggs the following spring that contain strong vigorous germs and that will hatch. Or if these eggs do hatch, the chicks will not grow rapidly, if at all.

Poultry buyers everywhere are com-plaining that the farmers are selling their young pullets. This is a good rea-son for holding all well developed birds. A good rule to follow is not to follow' the crowd. When all the people are sell-ing a commodity is a good time to hold on to that article. A shortage of breed-ing state is a sell to be ing stock is sure to come next spring. Egg prices will soar this winter and there will be a rush for eggs for setting purposes when the season opens. Will purposes when the season opens. you be in shape to reap your share of the profits?

In many small flocks it is a question of sacrificing either winter eggs or hatchability, and as a rule the hatch-ability suffers. This in a large degree accounts for the better per cent hatches among farm flocks as against those raised by the fancier or small breeder. From the average farm flock very few eggs are gathered in the winter months. Conditions are not such during the cold snowy days as to induce egg production. Eggs in the spring from hens that have Eggs in the spring from hens that have rested part or all winter are those from which to hatch strong vigorous chicks.

You know your flock has plenty of room and chickens and quarters are absolutely free from vermin, you say, but still they die. You will probably find upon investigation that there are worms in the intestines. Burn all dead chick-ens and feed to the rest a bran mash containing one tablespoonful of Epsom salts to a gallon.

There will be very few cockerels for sale next spring. Better buy what you will need for breeding purposes this fall. The breeder who winters cockerels will have to get a long price for them in the spring in order to pay him for his feed. For this reason he will sell at a reason-the former this fall able figure this fall.

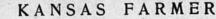
The price of young spring chicks has taken a slump. This will be a good thing for the egg market next winter. When the price of chickens is high in the fall the temptation is to sell off all the fail the temptation is to sell off all that can be spared. This tends to a shortage of layers the coming winter. The present high price for eggs and the correspondingly low prices for hens and springs may tend to keep down the price of eggs this winter. of eggs this winter.

The hen is an economical transformer of food into a finished product. A hen laying 200 eggs a year is not at all un-usual. A four-pound hen laying this number will produce six times her weight in eggs. To do this she will require from seventy to eighty pounds of feed.

OTTAWA, KANS.



13



Advertising "bargain counter." Thousands of people have surplus items of stock for sale—limited in amount or numbers hardly enough to justify extensive display advertising. Thousands of other people want to buy these same things. These intending buyers read the classified "ads"—looking for bargains. Your advertisement here reaches over 60,000 farmers for 5 cents a word per week. No "ad" taken for less than 60 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Address counted. Terms, always cash with order. SITUATIONS WANTED ads, up to 25 words, including address, will be inserted free of charge for two weeks, for bona fide seekers of employment on farms.

POULTRY.

PET STOCK.

STRAWBERRY PLANTS.

EVERBEARING, \$2 PER HUNDRED; common varieties, \$1 per hundred. Choice thrifty stock. State inspected. Pedigreed. J. A. Dowden, North Bend, Neb.

REAL ESTATE.

WANTED-TO HEAR FROM OWNER OF good farm for sale. State cash price, full particulars. D. F. Bush, Minneapolis, Minn.

WOULD YOU SELL YOUR FARM IF you got your price? Sell direct; no com-missions; particulars free. Chas. Renich, G-46, Woodstock, Ill.

OWNER OFFERS STOCK AND DAIRY ranch in prosperous Southwest Kansas. Land of opportunity. Terms. S. W., care Kansas Farmer.

NORTH CENTRAL KANSAS, OSBORNE County seed, grain and stock farms, \$20. Best wheat and corn land, \$35 to \$50. "Here is the place." J. F. Baum, Natoma, Kansas.

FABMS AND FARM LANDS FOR SALE. All kinds of soils; rain-belt, dry farming or irrigable. Lands five miles or less from railroad. H. M. Madison, General Farm and Immigration Agent, San Antonio & Aransas Pass Ry., San Antonio, Texas.

YOUR CHANCE IS IN CANADA.—RICH lands and business opportunities offer you independence. Farm lands, \$11 to \$30 acre; irrigated lands, \$35 to \$50; twenty years to pay; \$2,000 loan on improvements, or ready made farms. Loan of live stock; taxes aver-age under 20 cents an acre; no taxes on im-provements, personal property, or live stock. Good markets, churches, schools, roads, tele-phones; excellent climate — crops and live stock preve it. Special homesekers' fare certificates. Write for free booklets. Allan Cameron, General Superintendent Land Branch, Canadian Pacific Ry., 234 Ninth Ave., Calgary, Alberta.

Real Estate For Sale

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

W. W. TRACEY - ANDERSON, MISSOURI BEAUTIFUL SHAWNEE COUNTY KANSAS FARMS NEAR TOPEKA

HELP WANTED.

THOUSANDS U. S. GOVERNMENT JOBS open to farmers-men and women. \$65 to \$150 month. Vacations. Common education sufficient. Write immediately for list posi-tions open. Franklin Institute, Dept. H-82, Rochester, N. Y.

CATTLE.

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

NINE HEAD HIGH GRADE HOLSTEIN cows due to calve in October. They are bred to a registered bull whose nearest two dams average over 900 pounds butter. R. E. Stuewe, Alma, Kansas.

FOR SALE — VERY CHOICE HIGH-grade Holstein calves, either sex, three tc six weeks old, at \$20 per head, crated for shipment. Or if you want dairy cattle of any age, I will buy them at a commission from the best herds in Southern Wisconsin. Albert M. Hanson, Whitewater, Wisconsin.

HIGHLY BRED HOLSTEIN CALVES, either sex, 15-16th pure, from heavy milk-ers, five to seven weeks old, beautifully marked, \$23, crated and delivered to any station, express charges paid here. Send orders or write. Lake View Holstein Place, Whitewater, Wisconsin.

GUERNSEY BULL EIGHT MONTHS OLD, show type and bred for high production. At county fair won sweepstakes as best dairy bull any age or breed in a class of five, two Guernseys, one Jersey and two Holsteins, Mr. Fairchild of the Kansas Agricultural College judging. Dam and both granddams have good production records and he repre-sents blood lines that are now engerly sought. A registered cow and an imforted heifer also for sale. J. W. Marley, Oswego, Kansas.

DOGS.

TRAINED BEAGLES, RABBIT HOUNDS, foxhounds, coon, opossum, skunk dogs, set-ters, pointers, house, farm dogs. Forrets, Catalog 16c. Brown's Kennels, York, Pa.

FULL BLOOD RUSSIAN WOLF HOUND pups, six months old. White with lemon markings. \$15 each. Irish stag pups, \$10 each. Geo. E. Hineman, Dighton, Kansas.

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

FOR SALE — HIGH CLASS FOX AND coon hounds. The kind that can deliver the goods. Bred right and broken right. If you want a good one, write me. Price rea-sonable. A. F. Sampey, 317 E. Mt. Vernon St., Springfield, Missouri.

TREES, SEEDS AND PLANTS.

FULCASTER SEED WHEAT FOR SALE, \$2.50 per bushel. Sacks extra. J. C. Starr, Vinita, Oklahoma.

SWEET CLOVER REASONABLE. SOW on wheat and get two crops. J. Lewis, Route 1, Madison, Kansas.

FOR SALE—ONE CAR PURE TURKEY seed wheat, \$2.25 per bushel. Alfalfa seed, \$8 per bushel, f. o. b. Grantville, Kansas, S. E. Wilson.

TREE PLANT THIS FALL. NEVER A better time. Save money and get our terms. Write today for fruit book and information about growing fruits. Buy direct—it pays. Headquarters for well selected seeds. Box No. R. Wichita Nurseries & Seed House, Wichita, Kansas.

BUSINESS CHANCES

FREE FOR SIX MONTHS-MY SPECIAL offer to introduce my magazine, "Investing for Froft." It is worth \$10 a copy to any one who has not acquired sufficient money to provide necessities and comforts for self and loved ones. It shows how to become richer quickly and honestly. Investing for Profit is the only progressive financial jour-nal and has the largest circulation in America. It shows how \$100 grows to \$2,200. Write now and I'll send it six months free, H. L. Barber, 431,28 W. Jackson Boulevard, Chicago.

MISCELLANEOUS.

1,024 YEARS AMERICAN HISTORY, 800 postpaid. Elias Pelton, Hudson, Kansas.

GOOD PAYING BUSINESS PROPERTY now rented. Want to trade for young mules, Jno. O. Evans, Asherville, Kansas.

ONE NEW ALMO FARM ELECTRIC 60-light plant, cheap. Kern & Mead, Great Bend, Kansas.

HOGS.

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CHESTER WHITES - MAY PIGS AT farmers' prices. Gust Claussen, Bunker Hill, Kansas. FOR SALE — HAMPSHIRE PIGS FROM sire and dam, first and fourth prizes, To-peka Fair. Roy Crawford, Topeka, Kansas.

TANNING.

LET US TAN YOUR HIDE: COW, HORSE or calf skins for coat or robe. Catalog on request. The Crosby Frislan Fur Co., Roch-ester, N. X.

Brown's Big Bone Type POLAND CHINA HOGS WILL SELL AT PERRY, KANSAS WHITE ROCKS, SIZE AND QUALITY. Prices reasonable. G. M. Kretz, Clifton, Kansas.

> This great offering sired by such noted boars as King Joe

One of the best offerings to be held in Kansas this fall. Breeding and individuality of the best. A variety of breeding seldom equaled in any one sale. An all top offering selected with the utmost care for this sale and presented in just the right breeding condition. Everything immune. O. W. Devine will represent Kansas Farmer at this sale. The only Gerstdale Jones blood to sell in Kansas this fall at public auction. Auctioneers-Col. Chas. Crews, Col. Jas. Tom McCulloch

WALTER BROWN, Perry, Kans.

Charles L. Taylor, of Olean, Missouri, is making a groat success with his Duroc Jer-sey hogs. Mr. Taylor's herd has been a consistent winner of a large portion of the premiums at the Missouri State Fairs for the past five years, and the herd has to its credit more state fair champions than any other herd in Missouri. At the head of the herd is the champion boar, Show Me. This hog was champion of the Missouri State Fair in 1916 and is one of the greatest breed-ing boars of the breed. A feature of the herd at this time is fifty choice spring boars, mostly sired by Show Me and out of the best herd sows on the farm.

The Deming Ranch showed a well fitted herd of Polands at the Kansas State Fair at Hutchinson, winning the junior cham-pionship on Big Bob Jumbo; fourth on sen-ior boar pig, Futurity Wonder; first and sec-ond on junior pig, Designer's Wonder and D. S. King; third on junior sow pigs, D's Queen; and on aged sow, first, champion and reserve grand champion on Big Maid, a sow that was shown last year and raised a fine spring litter. A notable feature of the Deming show herd is that they have all been bred and raised by Mr. Sheldon on the Deming farms.

G. M. Shepherd, of Lyons, Kansas, showed at the Topeka and Hutchinson fairs one of the strong show herds of Durocs, and won a good share of the premiums in all classes shown. A feature of his herd at this time is thirty-five spring boars sired by G. M.'s Crimson Wonder, Crimson Wonder Again Jr., Illustrator 2d, Critic D and Great Wonder, and out of some of the best herd sows on the farm.

Bert E. Hodson, of Ashland, Kansas, showed the grand champion Poland boar, McGath's Big Orphan, at both Topeka and Hutchinson fairs. This massive hog, weigh-ing more than eleven hundred pounds in his two-year-old form, is a splendid specimen of the big-type Poland China hog. A fea-ture of the herd at this time is thirty-five spring boars sired by McGath's Big Or-phan, that are real herd header prospects.

Howard Palmer, the ten-year-old son of C. B. Palmer, Marion, Kansas, won the \$10 prize offered by the state fair management at the Kansas State Fair of 1917 for the best junior pig shown by boys. This pig was well fitted and was a splendid speci-men of the Poland China breed.

R. L. Hurst, of Bolckow, Missouri, has announced November 1 for a Duroc sale. Thirty spring boars and ten spring gilts will be included in this sale. The offering is a splendid lot that are sired by Col. Crimson and Unceda Wonder, the second prize year-ling at the Topeka fair.

B. R. Anderson, of McPherson, Kansas, won first prize at the Kansas State Fair on his junior yearling herd boar, Royal Grand Wonder. Mr. Anderson is contemplating holding a bred sow sale and will sell a draft of good sows bred to this great hog.

W. I. Bowman & Co., of Ness City, Kan-sas, showed one of the well fitted herds of Hereford cattle at both the Kansas fairs this year. This firm has announced Novem-ber 19 for a public sale of 110 head of Here-

ford cattle to be held on the state fair grounds at Hutchinson. It is a great source of satisfaction to Bowman & Company to offer only cattle in this sale that have been bred and raised on the Bowman & Company farms in Ness County, which are becoming known as one of the largest breeding estab-lishments of Hereford cattle in the West.

ULUUUCI Vy APA.

Catalogs are out for Walter B. Brown's Poland China sale to be held at Perry, Kansas, October 17. Fifty head of spring boars and glits of the best big-type blood lines in axistence have been catalogued for this sale. The offering includes grandsons and granddaughters of Gerstdale Jones. It also includes descendants of other noted boars of the breed. A representative of Kansas Farmer visited Mr. Brown's farm recently and found a herd of big-type Polands that is remarkable for choice big-type breeding and also for great size and quality. Inquiries for catalogs indicate un-usual interest among Poland China breeders in this sale and the prospects are that it will be one of the Poland China sale events of the season. of the season.

Fred G. Laptad, of Lawrence, Kansas, a widely known breeder of high class Poland China and Duroc hogs, has announced a sale of hogs selected from his famous herds. The date if this sale will be October 24. It will be Mr. Laptad's tenth, semi-annual sale and fifty head of carefully selected Polands and Durocs of the best blood lines of the respective breeds will be catalogued for this offering.

E. C. Berry, of Harris, Missouri, owner of one of Missouri's great herds of Spotted Polands, reports his herd doing well. This year Mr. Berry saved a choice lot of March and April pigs that have grown out fine. These pigs were sired by Spotted Mike, a great young boar that weighed 600 pounds as a yearling and that is proving a great breeder.

W. T. McBride, of Parker, Kansas, owner of one of the richly bred Duroc herds in Kansas, reports his hogs doing fine. A feature of his herd at this time is a choice lot of Pathfinder and Orion Cherry King boars.

B. A. Shehi, of Westmoreland, Kansas, owner of one of the good herds of Spotted Polands in Kansas, reports his herd doing well. Mr. Shehi has built up a herd of gootted Polands that have the size and quality that make profitable foeding hogs and this year he has raised a very fine loi of April and May pigs that have grown out well.

GOING TO COLLEGE?

Our young readers who contemplate attending business college this fall or winter will find it to their advantage to write KANSAS FARMER for information that will be valuable to them.

It will cost you nothing but a postal card or a two-cent stamp to find out what our proposition is. Address

DESK D, KANSAS FARMER Topeka, Kansas

160 a. farm, \$80; 160 a. farm, \$65; 43 a. farm, \$3,800. Can fit you out inany size farm desired. E. Z. terms. J. E. THOMPSON (The Farmer-Land Man) Tecumseh, Kansas BUY PROSPECTIVE OKLAHOMA OIL LAND SURE INCOME. Rent from Pasture, Farm-ing, Coal, Gas or Oil will pay for land. ONLY CONDITION, Annual Payments, Will buy for you and rent. Information Free, Write immediately. Joseph Clark Indean Land Purchasing Agent

Joseph Clark, Indian Land Purchasing Agent Tulsa, Oklahoma 202 ACRES BOTTOM FARM

Highly improved, 6½ miles of Lawrence, Kansas; 175 a. under cultivation, 25 a. al-falfa, 25 a. timothy, 50 a. wheat, 75 a. in corn, balance timber; ¾ mile of school. Priced to sell at \$20,000. For particulars write F. M. Buchheim, Real Estate 521 West Street, Topeka, Kansas.

217 ACRES, 3 mi. city, this county, 1,500, 160 a. strictly first class dry black bottom land in cult; no overflow; bal. pasture; fair improvements. 350 per acre. Terms. SOUTHERN REALTY CO., McAlester, Okla.

Crickets and grasshoppers often cause serious trouble by eating the twine used in tying up fodder. This can be pre-vented by treating the twine as it is used with a mixture of one gallon of kerosene and three cupfuls of creolin or other stock dip.

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Gerstdale Knight by Gerstdale Jones Anderson's Big Bone by Long Big Bone

Wednesday, October 17 SALE AT RESIDENCE IN TOWN

Model Big Bob PROFITABLE EASY MARKETING. Coops and cases loaned free. Daily remit-tances. Poultry and eggs wanted. The Copes, Topeka. WANTED — CANARIES, ALL KINDS. State kind, price, etc. Halfin's Pet Shop, 3111 Olive, St. Louis, Mo.

Write for catalog and mention Kansas Farmer.

FARM AND HERD.



