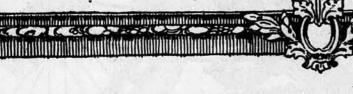
For the improvement

of the Farm and Home

Volume 51, Number 15.

TOPEKA, KANSAS,

Established 1863. \$1 a Year



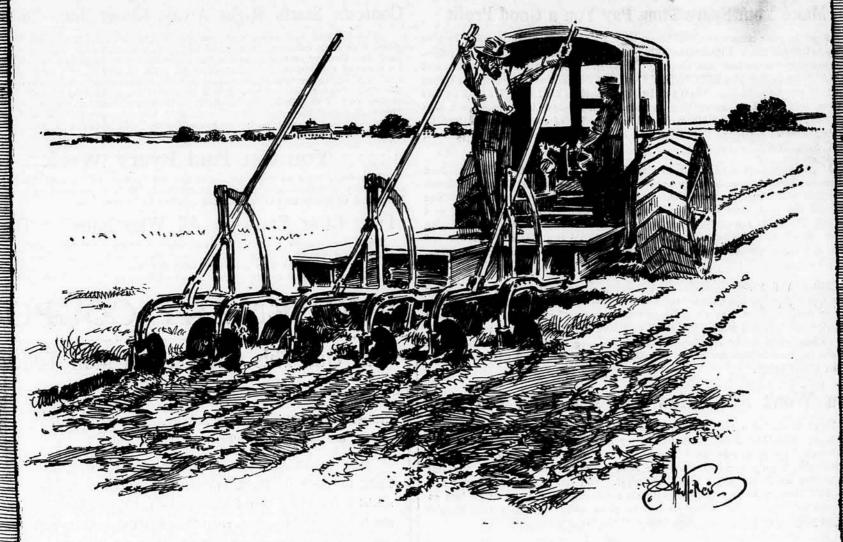
IVILIZATION begins and ends with the plow.

Emblem of the world's greatest and most fundamental industry, the plow brings man the first fruits of the earth, precedes and maintains commerce, manufacture and trade. Its use measures the nation's greatness, gauges its power and prevents an ebb in the tide of progress.

Without the plow the railroads would become streaks of rust, cities would decay, social and political power become legends, wealth would decline and the farmer's home would give way to the hunter's cabin.

But the plow is powerful only as it is used. With it continents are subdued, civilization established, wealth created and morality and religion fostered. Without it our acres become idle, weeds and brambles replace the crops, hard times come, panic presses and civilization passes away.

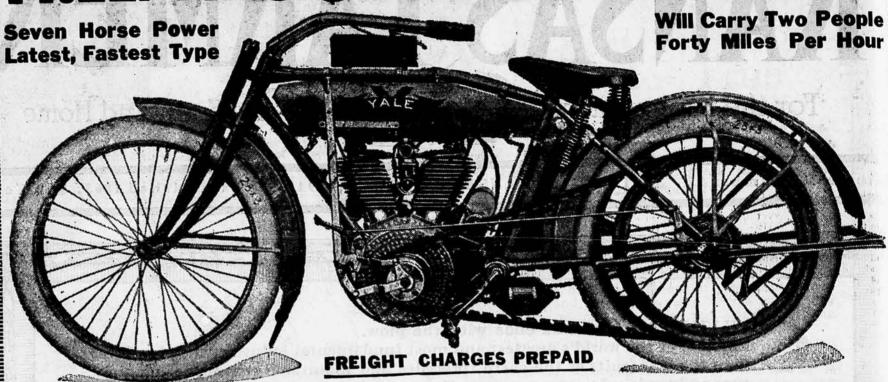
An idle acre is like an idle man-of no more use than a dead one and takes up -I. D. G.more room.



From the Crooked Stick to the Motor Driven Gang Covers the Whole of Civilization

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FREE! THIS \$275 MOTORCYCLE



It Will Be Given Away In a Big Contest Just Started by

KANSAS FARMER

We Will Pay You Liberally IN CASH For Every Subscription Secured You CAN'T Lose in THIS Contest-Start at Once, it Costs You Nothing to Enter

Make Your Spare Time Pay You a Good Profit

Send in your names and addresses, boys. Kansas Farmer is going to give away ABSOLUTELY FREE this \$275 YALE Motorcycle, with \$500 in prizes, in a subscription contest just starting. It doesn't cost you a cent to enter, and we are going to pay you LIBERALLY IN CASH for each subscription you secure and help you to earn from \$8.00 to \$18.00 per week. YOU CAN'T LOSE in this contest, and you have everything to gain. Some fellow is going to win this big, fine, \$275.00 YALE Motorcycle and make a lot of money besides, just by turning some of his spare time to a good advantage during the next few weeks. WHY NOT YOU?

If you only have a part of your time to spare, enter at once. You can turn that spare time into cash easily earned and win a speedy \$275 YALE Motorcycle that will bring you more pleasure than anything else you could own. You will not feel that your time is wasted in this contest, because you get paid liberally IN CASH for every subscription you secure, and under the special plan I will send you, subscriptions can be secured EASY and FAST. You will not know how easily you can really get this Motorcycle until you send in your name and address.

THIS COSTS YOU NOTHING. A complete description of the YALE Motorcycle and the other big prizes that will be given away absolutely free will be sent to you, together with the rules of the contest and our easy plan to secure subscriptions fast and make from \$8.00 to \$18.00 per week. If you really would like to have this dandy 7-horsepower \$275 YALE Motorcycle, 1913 model, and make money while you are earning it, send in your name and address at once on the blank below.

You Won't Know How Easy it is Until You Start

Don't think for a minute that some other fellow has a better chance than you have. HE HAS NOT. You will never know how easy it is to win in a Motorcycle Contest or how much money you can make until you enter and get started, which only requires that you send your name and address for full information about the prizes and the contest. You can have just as much fun with this Motorcycle as you could with an automobile, and you can go just as fast and as far, and just think-it will be given away absolutely free, freight charges prepaid to you home. Sign and send the blank at once to

THE CONTEST MANAGER

Kansas Farmer Motorcycle Contest TOPEKA, KANSAS 625 Jackson St.

The Contest will start right away. A certain number of points will be given with each subscription secured to Kansas Farmer for which you will be paid, and the boy or man who has the highest number of points to his credit at the close of the contest Saturday, June 28, 1913, at 6 P. M., will be awarded this \$275 YALE Motorcycle. The second highest will receive a \$75 Diamond Ring. The third highest will receive a \$50 Bicycle. The next two highest will each receive a \$50 Life Scholarship in the L. H. Strickler Business College, of Topeka. The \$275 YALE Motorcycle is guaranteed to be 7-horsepower, new, and in absolutely first class condition, by Kansas Farmer. It is sold and guaranteed by J. C. Harding & Co., dealers in Yale Motorcycles, Topeka, Kan.

Contests Starts Right Away, Closes June 28, 1913

You Get Paid Every Week

You don't have to wait until the Contest is over to be paid for the subscriptions you secure—you get paid every week. Only those residing in Kansas, Nebraska, Colorado and Oklahoma are eligible to be contestants.

Free Offer Extra to All Who Enter at Once

Don't wait—send in your name and address today on the coupon below and begin making money at once. To all those who send in their names within 20 days A FREE PREMIUM will be sent with the free outfit, and full information about the contest and description of all the prizes, so ACT AT ONCE.

FREE ENTRY COUPON

-Fill Out This Coupon and Mail Today-

Contest Manager Kansas Farmer Motorcycle Contest, 625 Jackson Street, Topeka, Kansas.

DEAR SIR:-I desire to enter your Motorcycle Contest. Please send FREE OF COST the FREE PREMIUM and FREE OUTFIT and your special EASY PLAN to get subscriptions FAST, with full information about the prizes and contest, and tell me how I can win the \$275 YALE MOTORCYCLE and earn from \$8.00 to \$18.00 per week at the same time.

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SUBSCRIPTION PRICE

\$1.00 per year; \$1.50 for two years; \$2.00 for three years. Special clubbing rates furnished on application.

ADVERTISING RATES

30 cents per agate line—14 lines to the inch. No medical nor questionably worded advertising accepted. Last forms are closed Monday noon. Changes in advertising copy and stop orders must be received by Thursday noon the week preceding date of publication.



KANSAS FARMER

With which is combined FARMER'S ADVOCATE, established 1877.

Published weekly as 625 Jackson St., Topeka, Man., by The Kansas Farmer Company.

ALBERT T. REID, President, JOHN R. MULVANE, Treasurer, S. H. PITCHER, Scoretary.

T. A. BORMAN, Editor in Chief; I. D. GRAHAM, Live Stock Editor.

CHICAGO OFFICE—First National Bank Bldg., Geo. W. Herbert, Inc., Manager. NEW YORK OFFICE—41 Park Row, Wallace C. Richardson, Inc., Manager.

Entered at the Topeka. Kansas, postoffice as second class matter.

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KANSAS FARMER aims to publish only the advertisments of reliable persons or firms, and we guarantee our subscribers against loss due to fraudulent misrepresentation in any advertisment appearing in this issue, provided, that mention was made of Kansas Farmer when ordering. We so not, however, undertake to settle minor claims or disputes between a subscriber and advertiser, or be responsible in case of bankruptcy of advertiser after advertisement appears. Claims must be made within thirty days.

OUR GUARANTEE

IRRIGATION PLANT PROGRESS.

The irrigation plants to be established the west one-third of Kansas will in the west one-third of Kansas will cost from \$2,000 to \$6,000 each. This is the determination of the irrigation board which met in Topeka and was in session practically all of last week. The board decided to select five or six locations and sites for irrigation experimental plants and next Monday the board will see out to select these sites. The comm sion will first locate these plants on what may seen the best propositions submitted by the commissioners of the several counties. There is a large number of commercial clubs and colonization companies offering to give the state from 40 acres to a half section of land upon which plants are to be established. The commission, however, cannot locate plants except under propositions made by the county commissioners in accordance with the law.

An effort will be made to scatter the experimental farms over as wide territory as possible, and at each station the experimental work will be varied so that at each plant different irrigation methods will be under way and the widest possible range of conditions investigated. Different means and methods of pumping will be employed, depending upon the depth to water, different methods of constructing reservoirs will be employed, and irrigation by flooding and underground systems will be followed.

In each instance the county must prothe commission will require a deed to not less than a quarter section of land, while 60 or 80 acres of bottom land only will be required from the counties along the Arkansas River. Before the experi-mental plants are definitely located the commission will make an inspection tour through the district and will require the commissioners in several counties to sink demonstration wells and make assurance that ample water can be located on the land the commissioners will deed to the state.

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The irrigation act applies only to that part of the state lying west of the one hundredth principal meridian, which meridian is a line drawn across the state north and south a few miles west of Norton, Hill City, Wakeeney, Ness City, and a few miles east of Dodge City. The and a few miles east of Dodge City. The act appropriates \$125,000 to be used in establishing the plants and testing the utility of the same. Not more than one plant shall be established in each county. The plant and land will be placed in charge of a competent person who is to operate the plant and cultivate the land under the direction of the board. An account is to be kept of the cost of cultivation of the cost of cultivation is to be kept of the cost of cultivation of the cost of cultivation is the product in the cost of cultivation. tivation, the value and kind of product raised, and a report made of the same The money received from the sale of the products shall be turned into the state treasury and become a part of the irrigation revolving fund, which fund was created by law by the appropriation of \$125,000 125,000.

KANSAS FARMER is extremely hopeful of great accomplishments resulting from the law and the work of the board. No man can estimate the value of practicable and successful irrigation over a considerable area in Kansas west of the one hundredth meridian. If, on the other hand, irrigation is not practical, the sooner Kansas in general, and the west-ern part of the state in particular, ascertains the fact, the better off we will all be. For years and years hopes have been entertained of the practical adapta-bility of irrigation to the western section, and much money has been spent in individual enterprises. Some of these have been successful, others have not. We are convinced in our own mind that many hundreds of small plants can be made profitable and wholly successful. indeed, there are such already. The proof of irrigation generally throughout the territory is the thing now to be most

Another advantage possessed by the parcel post is that it makes a delivery at the home of the city man and in the shortest shortest possible time. The express companies deliver within certain districts, but the parcel post in all.

APPETITE FOR SWEET CLOVER.

In Kansas Farmer the past year have been printed numerous letters from have been printed numerous letters from readers who have for years been grow-ing sweet clover both for hay and pas-ture, for hogs, horses, and cattle. While these letters have been printed, numer-ous inquiries regarding the plant have been received and such inquiries have been answered. Recently several letters have been received from readers who are decided in their views as to the adapta-bility of sweat clover to their conditions and that trials have demonstrated that it will grow and make pasture and hay under conditions under which other hay and pasture crops have failed, but that they experience difficulty in inducing live stock to eat it either as pasture or hay. It is a fact that the principal draw-

back of the utilization of sweet clover is the natural dislike which animals have for it, particularly for the older growth, unless, of course, the animals have no other feed and are starved to it. The easiest way to overcome this natural distaste is to pasture stock on the clover when it first comes on in the early spring and before the ordinary pas-turage has started. Sweet clover will afford pasturage at least two weeks ahead of our native wild grases.

In the early spring cattle, horses and hogs are hungering for anything green. The early growth of sweet clover is only slightly bitter and when once the cattle slightly bitter and when once the cattle start to eat it in the early spring, they develop a relish for it. It is stated by J. M. Westgate, a former Kansan, now agronomist in charge of the clover in-vestigations for the Federal Department of Agriculture, that instances have been noted by him in which cattle came to prefer sweet clover to other clovers and grasses. He says, too, that sweet clover prefer sweet clover to other clovers and grasses. He says, too, that sweet clover is proving a satisfactory pasturage for cattle and hogs especially, and that the early spring is the best time to start them on it, even if there be only occasional patches along the roadside available for the preliminary trial. Having once cultivated a taste for sweet clover, it is not likely that either hogs or cattle will object to eating it at any later time.

The experiences of Kansas Farmer readers indicate—as we have ventured

readers indicate—as we have ventured to remark at other times—that sweet clover has a place in the agriculture of Kansas. It is certain that it will grow on washed and clay soils on which ordinary crops will not grow, and under such conditions it will prevent further washing and will furnish pasture. It is proven, too, by our correspondents that it is a most excellent improver of the physical condition of the soil, that its roots not only fertilize but act as a subsoiler, breaking up surfaces which here-tofore it has been difficult to plow. It is apparent, too, that it will grow on sandy lands on which all other crops refuse to grow.

fuse to grow.

It seems certain, too, that in the drier sections it will supply pasturage and hay in greater quantity and with greater surety than any other hay and pasture crop yet tried.

We do not recommend the growing of great clover except under the conditions.

sweet clover except under the conditions as above and which make it a necessary and useful plant. The man who can and useful plant. The man who can grow alfalfa abundantly or even fairly well on his land cannot afford to fool with sweet clover except under contin-gencies above stated. We would not convert Kansas into one great sweet clover field, even if that were within our power. We do believe, however, that Kansas farmers of the western one-half of the state, generally, can afford to experiment with it. We think this, particularly in the worn-out prairie grass pastures. We distinctly recall one ex-perience in this regard wherein the feed had been more than doubled on a depleted prairie pasture which had been seeded, run over with a disk and the weeds kept mowed.

KANSAS FARMER is ready and willing to learn with reference to the value of The inquiries of our sweet clover. readers indicate that they are anxious to know about it. Kansas growers who have sown and pastured and cut sweet clover for hay are urged to contribute their experiences to these columns.

SCHOOL BOOK COMMISSION.

State printed text books will not be available for use in the schools of Kansas before the opening of the school year, September, 1914. It is necessary before Kansas can print her own school books, that the state printing plant be en-larged, the necessary machinery bought and installed, and the texts for the books either prepared or arrangements made for the publication of such copy-righted books as are already being printed.

It is the intention of the text book commission to have available for use in all the schools of the state by September, 1914, a treatise on agriculture, a primer, a Kansas history and a complete course of classics for the fifth, sixth, seventh and eighth grades of the com-

The text book commission established The text book commission established under a law enacted by the recent legislature has before it, in our judgment, one of the biggest jobs undertaken by Kansas. The commission, however, is competent and is capable of doing the big thing. It is the hope of Kansas people in general that the work will be well done, and we believe it will be. The big idea to work out is that of securing texts which will meet with the present day thought in supplying the boys and day thought in supplying the boys and girls attending Kansas schools with books which will have for them a practical value in excess of the texts now

CONVICTS FOR ROAD MEN.

After all, the men who live behind the walls of our prisons are but human beings. Beings who have gone wrong, it is true, but not beings who have lost their humanity entirely.

The Kansas legislature has taken this

into consideration in the passage of a law which permits the use of convicts in building roads. The county commissioners of any county may have a detail of these men by paying a certain small amount for their services, and this money goes to the relatives of the pris-

In other states, where this system has been tried, the privilege of working on the roads is made the reward for good behavior, and the men are eager to be appointed to the road squads. Their life in the open is so much appreciated that the warden of the Colorado penitentiary is quoted as saying that there are fewer desertions from the road squads than from the penitentiary, although the road squads have no armed

WE CAN GET IT.

Is there anything that you need and want to buy that is not advertised in this issue of KANSAS FARMER? We can get it or tell you where you can get it on reliable terms and of the right qual-It sometimes happens that the advertisement for the very thing you want may not be running at the moment and you may not know to whom to write. Advertisers place their advertisements at such seasons as they think will be most profitable, though some run throughout the year. Now, if you want anything, anywhere, at any time, just ask Kansas FARMER about it and we will put you next. Moreover, this service will not cost you anything, and it will be reliable.

USE THE PARCEL POST.

Now that we have the parcel post, let us make use of it. Get a list of customers in the nearest towns and then keep them posted on what you have to offer. Butter fresh from the country is appreciated by city folks no less than fresh vegetables, fruits, berries, etc. By securing suitable cartons, almost anything of these kinds may be delivered in this way. Use the phone and get the customers then name your farm and brand everything you send out with this

The big wheat farmers will find that some live stock kept about the place will not add to the expense account and will pay the bills, leaving the wheat crop as "velvet." The more live stock there is, the more velvet there will be.

KANSAS AUTO INTEREST

We did not realize that the farmers of Kansas were so much interested in automobiles until the passage of the automobile license law by the recent Kansas legislature. Scarcely a day passes but that some Kansas Farmer reader writes with reference to the onreader writes with reference to the operation of this law and in 90 per cent of the letters received we are asked the question as to whether or not a \$5 license tax on automobiles displaces the personal property tax heretofore as-sessed against such vehicles. Usually the sessed against such vehicles. Usually the letters complain to the effect that if the \$5 tax is in addition to the personal property tax, that this is double taxation, and the query is made, "Why should a man who owns an auto be taxed twice, while the man who owns a horse and buggy is taxed only once?"

The fact is that the \$5 license tax is in addition to the personal property tax.

The fact is that the \$5 license tax is in addition to the personal property tax. The new law provides that automobile owners shall pay a state license of \$5 a year, that in consideration of such amount the secretary of state shall issue a license tag which will bear the license number of the machine and the word, "Kansas." The tag will cost not more than 75 cents, and the remaining \$4.25. than 75 cents, and the remaining \$4.25, or whatever the amount may be, is added to the good roads work in the added to the good roads work in the state, each county receiving the license tax for such machines as are registered from that county. The motorcycle owners will pay an annual license of \$3, the fund to be distributed in the same manner. There are about 25,000 automobiles at this time in Kansas, it is believed and there are in the neighborautomobiles at this time in Kansas, it is believed, and there are in the neighbor-hood of 5,000 motorcycles, and it is prob-able that the new law will place not less than \$100,000 a year in the road funds of the various townships and cit-ies of the state. With the passage of this law no city licenses can be col-

The automobile license tax is made, first, because it is within the power of the state to require the payment of such license tax, and second, because of the clamor of automobile owners in general for road improvement. In other words, it is a tax permitted because it is be-lieved the traffic will bear such tax and because the tax so collected can be used

to good advantage.

Many of our correspondents write that the automobile is a benefit to the dirt roads, that it does not have the destructive effect upon roads such as does the narrow-tired, heavily loaded wagon or even buggy. Correspondents generally write, too, that they are not opposed to good roads, but favor fair means for obtaining the same, and do not believe that it is just to assess a tax against the automobile road user and which tax is not assessed against other vehicles. The same correspondents write that about 75 per cent of the present road tax fund

is now virtually wasted.

With the revised road laws and in creased assessment for road work, it should be the object of every road user to see that the road fund in his territory is properly expended and that value received is obtained for it. There is, it seems, a general demand for road improvement. Since our roads are public property every man who uses them should be interested in them and should exercise such precaution and judgment in the administration of road affairs as pended.

April 16 is "clean-up day" in Kansas. April 16 is "clean-up day" in Kansas. This, by virtue of a proclamation by Governor Hodges. On this day the schools of Kansas—city as well as country—are asked to devote an hour to the discussion of causes and prevention of fires. The city people on the same day are asked to clean up their alleys and back yards. back yards. 20 20 20

This parcel post ought to do away with a lot of the fraud which has been charged up against the commission men. By use of the parcel post the sales are made direct to the consumer, and the farmer receives more, while the con-sumer pays less. If it is a good thing let us get the good out of it.



DISKING AHEAD OF DRILL AND SEEDING ON WESTERN KANSAS FARM.

ABOUT KANSAS TRACTORS

MONTH ago KANSAS FARMER submitted to Kansas tractor users a list of questions covering the whole range of farm tractor usage. A general review of the material gathered is here given. On account of the large amount of material returned, it is impossible to print the replies in full. In the review here given we are sure that enough is given to show the practical value of the tractor in general farm operations and to convince the reader operations and to convince the reader that through the tractor may be expected, in the years to come, a revolution in farm power. Breeders of good horses need not shy at this remark. There will always be use and brisk de-

mand for good drafters.

In this inquiry we have been impressed with the promptness of reply, the genwith the promptness of reply, the generally complete and detailed replies, indicating a thorough understanding of the machine by the user and the enthusiasm with which its use is attended. Each is a thing esential to successful usage and demonstrates, too, that the tractor is so simple as to be easily understood and successful operated.

From the letters of our correspondents 56 were selected and are reviewed in this data. The above letters were chosen because the replies of these correspondents were the most complete and because they pertain to practically every use to which the tractor has been put; and further that every make of tractor used in Kansas might here be repre-sented. Users, such as threshermen, township or county boards, who own tractors for threshing, road grading or similar exclusive purposes, are not resimilar exclusive purposes, are not re-ported. The reports pertain only to those used for general farm purposes. The questions asked, of general inter-est, and the resume of the data received

in reply, follow:

What make of tractor are you using? The replies show that a great variety of tractors, both gas and steam, are in use in Kansas in general farm opera-

The makes of tractors so used and reported are: International; Rumley; Avery; Big Four; Universal; Hart-Parr; Minneapolis; Reeves; Case; John Deere; Hackney Auto Plow; Heider; Flour City; Hall; All Purpose; Ohio; Fairbanks-Morse; Nichols Shepard.

How many plows does your engine

The plow gangs reported range in size from three to fifteen bottoms, usually 14-inch plows, and in the case of disks from twelve to thirty. The depth at which both plows and disks are being operated ranges from five to eight inches

The number of plows or disks used, of course, depends upon the horse power of engine and also whether packers, drag harrows, disk harrows, or drills are attached or follow the plows, and also depends upon the condition of the field, whether old and loose ground, whether was for the first time being broken.

What work have you done with the tractor besides plowing?
The answers to this question show that on the farms of Kansas the tractor is used for a great variety of purposes. In only a few replies is it shown that the tractor has been used for plowing only. In 90 per cent of the instances the tractor has been used for plowing, disking and seeding. These seem to be the general uses to which farm tractors have been put. In other words, the tractor's usefulness is not confined to plowing, which to us is a good indication. Correspondents state that the engine has been used in addition to the above, for filing silos, grinding, that on the farms of Kansas the tracto the above, for filing silos, grinding, road grading, threshing, hulling clover,

How The Iron Horse Performs in General Farming

shredding corn, pulling hedge and tree stumps, operating saw-mill, pumping water, house-moving, filling reservoirs for irrigation, hauling on the road— Wheat, corn, baled hay and baled alfalfa. How long have you owned and used

your tractor?

The time reported ranges from nine months—which of course means that such tractors were bought for last season's plowing—to seven years. Of the 56 answers here reported, just onehalf of the number have done one season's work. One correspondent owned and operated a tractor eleven years, having used one engine seven years and the other four years. Those who have used tractors more than one year indicate by their replies that they are the most enthusiastic users. In every instance, with one or two exceptions, general satisfaction is expressed even though the machine has been used only one season. The two exceptions above mentioned, are: One man in eastern Kansas—in a rough country—says his fields are too hilly for satisfactory tractor usage. In the other instance the owner has a lame back and on account of the motion can not operate his own engine. How many acres have you plowed with

your tractor you are now using?
The number of acres reported in reply to this question range from 150 to 12,000 acres of both spring and fall plowing. Several correspondents state that they did not do all of their own plowing, having hired other power rigs to help in order that the plowing might be done early. It is notable that every tractor user is in favor of early plow-

What is your acre cost for plowing?

It seems almost impossible to arrive at a close average cost of the 56 correspondents on account of the varying bases of calculation. For instance, some operators used gasoline, others kerosene. Some did not include in their figures cost of lubricating oil and grease. Others figured on the cost of a day's work, not reporting the acres plowed in that day. The depth of the plowing also varied, likewise there were varying conditions of the land plowed and the horse power necessary to do the work varied. Under the above condition some specific answers will be given.

One corespondent reports 90 cents as acre cost, including fuel, oil, wages of one man at \$2.50 a day, wages of engineer at \$3 a day, sharpening shares, repairs, etc., but not including interest on investment and depreciation. This particular correspondent plowed 640 acres and has used his engine one year. Another correspondent answers: "Old

land \$1, sod land \$2." This man has plowed 3000 acres, uses a disk gang and has owned his plowing outfit three years.

Another correspondent reports 60 cents an acre for all items of expense, including blacksmith's bill, plowing old land 7½ inches deep, driving the engine himself and using a 5-bottom 14-inch self-lift plow. lift plow.

hen cost of fuel, oil and grease only are figured, we find the cost reported tor owner plowed, seeded and harrowed at one operation, 75 acres. It is shown by the replies that at the time of seeding all the work—harowing, disking, etc.,
—done on the field following the plowing and preparatory to seeding, was done at the same time the seed was sown. In some instances disks preceded the drill, and the drag harrow followed the drill, the three operations being completed at once.

What was the acre cost for seeding?

From the information given it is impossible to report in this article even an approximate summary of the data given.
One farmer reports 15 cents an acre for seeding 3,500 acres. He does not say whether the drill was followed or preceded by either harrow or disk. Another user reports 12 cents an acre for lister drills and 60 cents an acre for disk drilling. Another reports 35 cents for disking and drilling at one operation.



DISKING, BUT WILL PERFORM OTHER DUTY EQUALLY WELL.

ranging as low as 19 cents and as high as 40 cents.

We find in almost every instance that some other implement was drawn at the time the plowing was done. This makes it more impossible to arrive at any accurate acre cost figures.

How many acres have you seeded with the tractor?

In only two instances of the fifty-six reported in this resume, do we find that the tractor was not used in seeding. In all other instances the seeding was done by tractor power and the acreage ranging from 200 to 20,000, in the latter case the tractor having been owned and used for six years. In one instance the tracAnother reports 50 cents for the same work. Another says he can not arrive at the acre cost for seeding because when drilling he draws several other implements, such as pulverizer, leveler, packer, tandem disk and harrows.

How many acres have you harvested

and at what cost?

Of the 56 correspondents above reporting, only two have used the tractor in harvesting. Que harvested 100 acres -all the harvesting he had to do-and does not report the acre cost of harvesting. The tractor drew one binder and this it handled "like a toy," he says. Another harvested 3,400 acres and his figure is \$1.20 an acre for the grain placed in the stack. Another says he will use the tractor to draw binders this season and that he will attach disks behind the binders and expects to bind and disk at an expense of 25 cents an acre for engine cost. A number of corharvesting and that a header hitch has not yet been devised for tractor use.

Have you hired your engine for road

Of the 15 tractor owners who report on this question, eight have used their engines for road grader work and they report charges for this work, as follows: \$1 a mile for each mile run over the road; \$15 for 9 hours work; \$1.75 and hour; \$12.50 a day, everything except engineer furnished; another charges \$30 a day for pulling two graders expecting a day for pulling two graders, supplying engineer, fuel, oil and grease.

Have you done road hauling with tractor?

Of the eight correspondents who have done hauling, we have the following answers: "Yes, 125 bushels of wheat on



PLOWING UNDER CLOVER IN BROWN COUNTY.

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EIGHT-BOTTOM 16-INCH GANG, PLOWING EIGHT INCHES DEEP THROUGH TIMOTHY SOD.

its own body, 50 bushels on the wagon attached behind, over hilly roads." "Yes, pulled six wagons in high gear." "Yes, pulled six wagons in high gear easily." Several remarked that their engines too heavy to take onto the road on

are too heavy to take onto the road on account of poor culverts, bridges and bad roads, otherwise would use engine in delivering grain to market. What is your daily expense of ten

hours, for fuel?

hours, for fuel?

A thoroughbred engine man would not have asked this question. First, because the expense depends wholly upon the kind of work being done, size of engine, etc. To this question there was a great variety and a wide range of answers, due to the condition suggested. However, some of these answers will prove interesting: "With gasoline at 15 cents a gallon, grading on roads \$4.50 to \$5, and for thrashing \$5.75." "About \$3.37

Each of the 56 correspondents report in the affirmative. Some dismiss the question with the word "Yes." Others ive their reasons in the following

language:
"Yes, because of saving in expense; two men operate the engine and plows that seven would do with horses. You can plow when horses can not and there is no expense when season is over."

"Yes, because better time can be made and a more thorough job in all con-ditions of weather. In hot weather horses can not stand hard work, while the tractor can be run day and night if

necessary."

"Decidely yes one can accomplish more in a given length of time with less help, can work longer hours, no stop to rest horses—and less expensive."

"Yes, the engine never tires, is always ready, cheaper and easier handled and

busy season and too expensive to keep during the idle season."
"I do think so because the ground can be plowed when in condition and more in

"Yes, it helps out the man labor question, reduces actual cost one-half, does much better work.'

Would a lower price for tractors than they are now selling for result in the use of more tractors in general farming?

Of the 56 answers selected for this review, every one replied to this question. As would be expected, the majority express themselves as believing that a lower-priced tractor would increase the number of tractors used. This, of course, is a logical conclusion. However, the most careful correspondents state that the present quality in so far as material and workmanship are concerned, must be maintained. Usually they express the fear that in order to lower the price of the machine it would be necessary to use poorer material, a lower standard of workmanship, and that this condition should not be permitted. One correspondent writes that the tractor must stand up under the grind of herd and pondent writes that the tractor must stand up under the grind of hard and continued service with inexperienced op-erators and that the tractor now does this and to build a machine which would cost less money would be certain to detract from the durability and quality

and quantity of service rendered.

It is notable, however, that a number of correspondents think that a lighter tractor still efficient and durable, could be built and that such tractor would extend the use of this kind of nower years. tend the use of this kind of power very materially in farm operations. They have an idea that an all-around smaller machine should be made, one better adapted to the small farm and requiring less investment than under present con-

ditions. One correspondent remarks: "I believe a small tractor, large enough to pull three 14-inch plows and so built that one could cultivate, harrow or seed with it, would solve the farming problem quicker than the large tractor.

We will appreciate having you write on any other important phase of work with tractors.

This suggestion brought out a number of good ideas not touched upon by the questions above. These statements will be printed later. They are in fact more interesting than the above review, how-ever, we could not refrain from print-ing the above first, inasmuch, as it has to do with these things uppermost in the mind of the prospective purchaser. The second installment of this KANSAS FARMER tractor investigation, being no



BREAKING SOD, STAFFORD COUNTY.

less than a dozen interesting experiences in Kansas tractor farming.

Early Plowing Is What Counts. We pulled four 12-disk drills when seeding alone and two double cutaway harrows and two drills when disking and

harrows and two drills when disking and seeding. The latter work cost us 13 cents per acre for gas and lubricating oil. We like the tractor fine, and in this country, where the work has to be or should be done early and quick, we think they will pay even at the present price.

I feel sure now that I would have made enough to more than pay for my engine had I bought it in June instead of November, for the wheat on earlyworked ground is looking good and is nearly sure to make some wheat, while the late-worked ground is not even sprouted and shows a very slim chance for wheat.

I intend to list close after the header if there is any wheat to cut; if there is not, we can work our ground in May and June and have it in shape to hold moisture. We have never had a picture taken, but will when we get to listing for spring crops.—S. UTZ, Plains, Kan.

Plows Early and Well With Tractor. One of the great savings or profits in the use of the tractor is in being able to the use of the tractor is in being able to do the work rapidly when the soil is in good condition and get plowing done early and well. Last fall we had so much rain we could not plow for some time. I had two of these engines and as soon as the ground was fit to plow I put two outfits at work and plowed and packed 320 acres a week while the soil was in fine shape. This put the land in fine shape for seeding and the seed came up quickly and now looks fine.

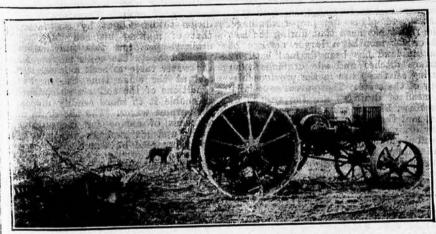
Another big saving is that when your work is done the expense stops—no horses to feed, no men to pay. But to say I would not farm at all if I could not do it with a gas tractor is enough.—J. A. KYLE, Monument, Kan.

J. A. KYLE, Monument, Kan.

I have been in tractor work for about seven years and have used different makes, both oil and gasoline, in field work.—H. J. ASTLE, Haven, Kan.

I will plow and seed about 800 acres this fall, and can then give more com-plete information.—K. M. GLIBERT. Coldwater, Kan.

The man who tries to raise hogs without pasture and forage crops for them is like a puppy chasing his own tail—he gets lots of exercise, but mighty little of anything else.



DISKING GROUND BEFORE LISTING IN BARBER COUNTY.

for thrashing, \$3 for hauling, \$4.50 for catting silage." Another, "50 gallons of galone a day when working hard." From \$1.50 to \$4.75, depending on size of load, these figures based on thrashing hard wheat." "Thrashing, plowing and gading, \$3.50, hauling and shredding, \$2.50."

What is daily expense of ten hours for lubricating oil?

The answers to this question are quite uniform, compared with other answers, ranging from \$1.50 to \$2.50 for all kinds of lubricating oil and grease and for all kinds of work. Of the 56 replies four are as low as 50 cents and eleven are

What have been your repair bills to

Practically all users who have worked tractors only one season report no exanse for repairs. Several report exfor magnetos, which are items of small consequence and which every gas engine owner knows as replacement expense necesary. The repair items run from \$15 to \$300, the latter being in the case of a large engine which has plowed 3,000 acres, and the smaller amount in the case of an acres, and the smaller amount in the case of an engine plowing 300 acres. A considerable number of correspondents apologize for their repair bills because of unfamiliarity with the engine and carelessness in the handling of same. A user who had plowed 12,000 acres, seeded 29,000 and harvested 34,000 reports a 29,000 and harvested 34,000, reports a tepair expense of \$1,200, which in proportion to the work done will at once

ppear reasonable.

Do you think the tractor is better than horses for the work you have done with it, and why?

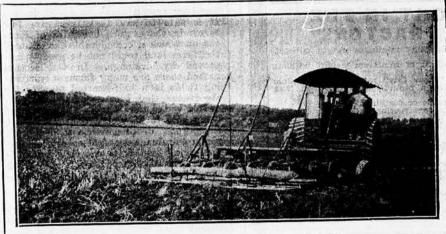
goes just where you drive it. One man can farm two hundred acres with but little help."

"Yes, it is better if you have any great amount of work to do. Some horses must be kept on the farm. If a small acreage is farmed horses are best: if a large acreage it takes too much time and expense to care for enough horses to do the work."

Because two men have control of 30 horse power, and if in a rush one can go day and night; have plowed until twelve at night with only a common

twelve at night with only a common lantern as light."

"Yes, because horses and men for drivers are too hard to get during the



PLOWING AND HARROWING IN DOUGLASS COUNTY.

Find Out The Cause and Effect of Deep Tilling!

Spalding users—on a thousand farms—are reporting their increased crops and enhanced land values. Below are a few such reports—many more are waiting for your inspection in our Experience File. All these men read about the Spalding Deep Tilling Machine a year or so ago and realized then and there that they didn't have any time to waste, so they got busy and now they can report as they do.

report as they do.

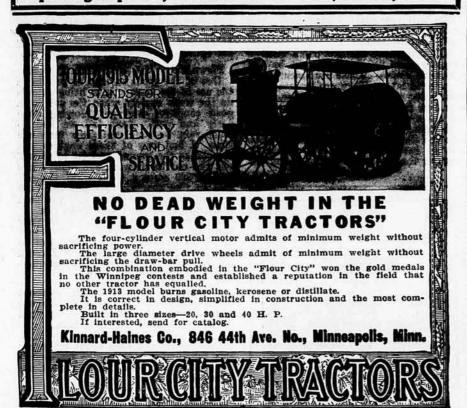
Martin City, Mo., Jan. 18, 1913.

I have plowed 150 acres in the Little Blue bottoms in Jackson County, Missouri, since the beginning of corn husking, and I am plowing 14 to 18 inches deep and turning stalks under so completely and well that you would hardly know that it is a corn field. In fact, this plow is doing the swellest job of plowing that I have ever seen. I bought a farm in this Little Blue bottoms, consisting of 283 acres, 200 acres of which was as level as a finor and 109 of this farm is shown on the U. S. 50il Survey map as being Wabash clay—(in plain words, the sticklest gumbo ever). This 100 acres had never been plowed since Columbus discovered America and was entirely covered with swamp willows. (I mean covered, too.) I took this Spalding Machine and \$5,000 worth of the biggest mules I could buy, put five head on this plow at a time, working five-hour shifts, put them into this 100

acres and the work this plow did was a wonder to know and see. It put this wilderness into a seed bed, the best you ever saw. I planted this in corn and husked from 80 to 90 bushels per acre and am now finishing plowing this field for the second time. I have completely reclaimed this land and it is worth to cultivate \$200 per acre any place in the U. S. and I feel that no other plow could do this work, and I know that I am \$10,000 better off for having known of this machine and having bought it. I consider this machine the most wonderful and valuable plece of farm machinery in existence, and its invention will do more for future farming than all the agricultural colleges in the thited States. I am now figuring on buying a tract of 680 acres of ground that can be made to raise large crops with this plow applied, which otherwise will remain wild blue stem, for reason of expense of putting into condition.

J. H. WALLACE.

Why Shouldn't You? Spalding Dept. 70, GALE MFG. CO., Albion, Mich.



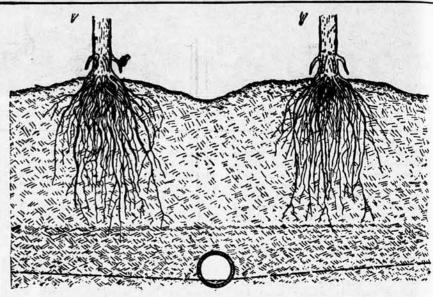
READ KANSAS FARMER'S CLASSIFIED ADVERTISING PAGE FOR READY BARGAINS

DRAIN TILE USAGE

Large Kansas Acreage Can Be Reclaimed By Tile Draining at Moderate Acre Cost

OT until within the last few years have people begun to realize the value of land drainage as a factor the further agricultural development of Kansas. Some two or three years ago the extension department of the Kansas Agricultural College took cognizance of the conditions in eastern and southeastern Kansas with reference to the necessity for drainage. To make

the ground water by gravity. In such areas the water collects in underground nools detrimental to plant life. There areas the water conects in underground pools detrimental to plant life. There are two kinds of soils, designated as "wet" and "dry." Those having a sur-plus of water are known as "wet" soils, while those containing moisture in proper proportions are known as "dry" soils. To the farmer, therefore, in considering the subject of drainage, "dry"

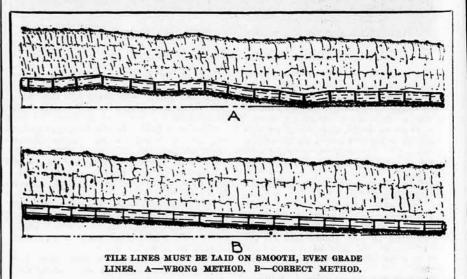


BOOT SYSTEM OF COBN GROWN IN DRAINED LAND .-ROOT SYSTEM WHICH SUPPLIES THE ADDITIONAL PLANT FOOD AS WELL AS ADDITIONAL MOISTURE DURING PERIODS OF DEOUGHT.

an extended study of the conditions in these sections and to demonstrate the remedy, that department employed a drainage engineer whose business it is to discuss with farmers the advantages of drainage and to furnish them with estimates and plans for proper drainage. The result has been that during the last 18 or 24 months a larger acreage of Kansas land has been drained both by surface ditches and tile drainage than surface ditches and tile drainage than during all the years in the previous history of the state. Those areas especially in need of drainage are the valleys of the Kaw, Blue, Marias des Cygnes, Neosho, and their tributaries. In the territory drained by these streams much loss results annually from overflow, first, and from a condition of subsoil which prevents the percolation or soaking in of the heavy annual rainfall which in this

soil does not mean a soil devoid of moisture, but a soil that contains enough water to promote plant grewth: On the other hand, a "wet" soil is saturated with water and unfavorable for the growing of crops. Therefore, the condition to be sought by the farmer is that of making his soil "dry." Tile drainage performs this function. Tile placed beneath the soil's surface causes the water table to seek a lower surface and at the same time the mechanical conditions of the soil are so changed as to enable it to more readily dispose of the surplus water. The tile drain offers a means of escape for the surplus of water and air replaces the space formerly occupied by water. ture, but a soil that contains enough

Productive soil must be thoroughly aerated. The action of the air which



sas on which a considerable per cent of the farm land could not be greatly im-proved by drainage. In the section named there are many farmers cultivating fields in a half-hearted manner for the reason that because of the surplusage of water they have no assurance of being able to harvest a crop. It is not the purpose of this article to deal with surface drainage by ditches or the protection of land from overflow by various types of levees, but to set forth some facts with reference to the benefits of tile drainage.

A large amount of land continues wet and will not produce good crops, even though good surface drainage has been secured. This condition is due to the character of the subsoil and which is such as retards the free movement of

territory ranges from 45 to 58 inches. It is safe to say that there are few farms in the eastern one-third of Kaning it to become finer and more friable. The removal of the water permits the soil to freeze to greater depths during the winter. This, because the air penetrates deeper into the soil. The increased depth of freezing aids in breaking up the compact subsoils. The soils in the fields drained will improve for years following the first placing of the tile. The improved condition of the soil following drainage, for the reasons above named, permits the cultivation of the land earlier in the spring. The drained fields thaw out more rapidly even though frozen to a greater depth. The warm air percolates through the soil more rapidly, the ground therefore warms more readily, making possible earlier cultivation and seeding. It is earlier cultivation and seeding. not expecting too much when one figures on cultivating tile drained fields at least a week or ten days earlier than

N TO MAY TO S

There are two important advantages in under-drainage aside from those men-tioned above. The first is that such in under-drainage aside from those mentioned above. The first is that such drainage prevents floods by the absorption of the rainfall through the soil, thereby materially lessening the run-off. Tile drainage also prevents surface washing by diminishing the amount of run-off, and the damage to the land by erosion is therefore lessened. Tile drainage takes the water through the soil rather than over the surface. The porosity of the soil increases from year to year after the laying of the tile. This permits the ready absorption of the rainfall and the depositing in the soil of plant food applied to the land in the form of barnyard manure or commercial fertilizers. If the field does not absorb the rainfall and the water is allowed to run off, there is a corresponding loss of run off, there is a corresponding loss of fertilizer by the rainfall running off the

In tile drainage a good quality of tile is necessary. It is to be expected that the tile should last for many years. It is not economy to use a drain tile smaller than four inches. Drainage Engineer Walker says that many farmers are inclined to use a three-inch tile for leterals in preference to the four-inch. are inclined to use a three-inch tile for laterals in preference to the four-inch, since the cost of the three-inch is about 12 per cent less. To use the small tile is poor economy. A four-inch tile will carry nearly twice as much water as a three-inch tile. The cost of laying is identical. Moreover, he says a four-inch tile can be successfully laid on a flatter grade than a three-inch tile, while imperfect laying is not half so dangerimperfect laying is not half so dangerimperfect laying is not hair so danger-ous in the larger size. The main drains should be designed to carry the water brought to them by the laterals. The size of the main drains, therefore, de-pends upon the water to be carried off by virtue of the area drained, the amount of rainfall or flood water to be expected. Laterals should be at least four inches in diameter and seldom greater in length than 800 feet before increasing to a large size.

in the hole in a thin film around all sides, it shows an open, porous soil that will readily drain. On the other hand, if the water comes in only near the surface of the ground and not in the lower part of the hole, it indicates a shallow soil underlaid by retentive subsoil, thus having poor drainage qualities. If no water raises in the hole, the profitable drainage of the field is doubtful. There are few soils, indeed, that will not be benefited by drainage, yet there are many soils that cannot be economically drained. The question of grades is important. Since lands to be drained are nearly always level, it is necessary to utilize all the fall that can be secured. Often land owners hesitate to drain their land or believe that it cannot be drained because it is too flat. However, drainage engineers say that there is little land where there is insufficient fall for tile drainage, and recommend that for an extremely flat land a survey should be made and the tile carefully laid to grade and the tile carefully laid to grade if satisfactory results are to be expected. In cases where land is properly surveyed grades as low as one-fourth inch per rod are successfully used on four-inch laterals. All tile lines should be located so that the natural fall of the land can be utilized. It is apparent, therefore, that the successful laying of tile requires careful planning laying of tile requires careful planning and the exercise of good judgment. Another factor in tile drainage is that of the correct spacing of the lines that the entire area may be perfectly drained. The depth at which the tile is placed and the spacing of lines depends of course upon the character of the soil and will vary from 60 to 200 feet, gumbo soils requiring the closer spacing. In gumbo soils requiring the closer spacing. In gumbo soils the depth at which the tile is placed is usually not over 30 inches, but authorities agree that in every case there should be at least 24 inches of dirt on the top of the tile. The spacing, too, depends more or less upon the distance of the subsoil below the surface of the ground. In fields where there is less than eight inches of where there is less than eight inches of surface soil, economical drainage of the soil is doubtful. Where there is 12 to 30 inches of surface soil it is profitable to tile drain, and the spacing would vary from 40 to 80 feet. There are many finds from 40 to 80 feet. There are many fields, too, which do not require thorough drainage. Often a single line of tile properly placed brings about the desired results.

The condition of the soil should be carefully studied before deciding to tile drain. The great variation in soils, even on a single farm, makes it impossible to at long range and without careful inspection. spection make a general plan of drainage for the farm. Engineer Walker says that nearly every farmer wishes to know if his soil will drain, and the very fact that the farmer wants to drain his field is a fair indication that it will drain.

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If it were not a productive field in seasonable years he would not care to drain it. The fact that the field is pro-

ductive when there is a proper amount of moisture would indicate that the soil

or moisture would indicate that the soil is of fair depth and consequently has—at least in the surface soil—fair drainage rpoperties. The field gets muddy. The mud is caused by excessive moisture.

If the mud gets deep it indicates that the surface soil is open and that it is a considerable distance to the subsoil. On

considerable distance to the subsoil. On the other hand, if the mud does not get deep and the water stands on the sur-face, it indicates that the soil is shal-low, the subsoil retentive and close to the surface. Such soils cannot be eco-nomically drained. Post holes dug in the field during wet seasons are valu-able to assist in determining the drain-age properties. The field gets muddy

age properties. The field gets muddy. in the hole in a thin film around all

The cost of a tile drainage system comes under four divisions—cost of tile, digging of ditches and laying tile, hauling tile, and refilling ditches. The average cost of four-inch tile, which is the most common size used, is about \$20 a

thousand feet, or two cents a foot. Un-

thousand feet, or two cents a foot. Under average conditions the cost of digging the ditches three feet or less in depth, and the laying of tile six inches or less in diameter, will be two cents a foot. The laying of tile from eight to twelve inches in diameter would cost 40 per cent more.

per cent more. The cost of hauling tile varies according to the length of haul, but an average for each ton would be about 25 cents a mile. Refilling the ditches after the tile are in will cost from two to five cents a rod. The cost

can easily be brought within these limits

if the tile are covered by shoveling only a little of the dirt into the ditch first

and then working the remainder in with a plow or scraper. In soil where tile will draw water for 100 feet, 432 feet of tile are required to drain an acre. Using the cost figures just quoted, and adding 5 per cent to the cost of tile for Y's and other connections, the cost of tiling an agree with four inch till.

of tiling an acre with four-inch tile would be \$17.44.

from a bulletin on land drainage by the extension department of the Kansas Agricultural College and which bulletin is free for the asking to residents of Kansas. Those having fields and soils

which require draining cannot afford to

be without this bulletin. As stated, the facts as above given are taken from the

bulletin, and some sentences and even

paragraphs are taken in whole. The illustrations also with this article are taken from that bulletin.

The above facts are taken very largely

then working the remainder in with

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THE FARM

Haying time will soon be here—atmost before we realize it. Kansas grows a tremendous acreage of hay and forage crops although not so large an acreage of hay crops, particularly alfalfa, as the best and most economical feeding of our live stock requires. However, in harvesting our forage as well as hay, much of the feeling value is lost; first, because of our failure to harvest at the right time, and second because we do not properly take care of the crop after harvesting. The first crop to be cut for hay, will be alfalfa. An occasional field will be cut too early and much of it will be cut too late. We are confident that alfalfa can be profitably cut when the first blooms appears and if not cut until after 10 per cent of the blooms appear it is certain that before the cutting is completed the feeding value will suffer maing of our live stock requires. However, certain that before the cutting is completed the feeding value will suffer materially. It is our admonition, therefore, to begin cutting the first crop of alfalfa as soon as it begins to bloom. Cut at this stage, the stems are least inclined to be woody and furthermore a larger percentage of the leaves will be saved. Alfalfa is especially susceptible to mistreatment through the loss of leaves. It pays to cure alfalfa hay of first class product. Such hay has fine, small stems, the leaves remain on the stem and the hay has a bright pea-green color. The first cutting of alfalfa can profitably be made earlier than is necessary in succeeding cuttings. This, on account of the rank growth. The first cutting is not regarded—and in fact is not—as good quality as succeeding cuttings only because of the coarseness of the hay. This will be overcome in a measure if the cutting is done early. In the first crop the lower leaves have a much more decided tendency to turn yellow and fall than in the case of succeeding crops. Early cutting will save a large percentage of the lower leaves. Likewise, early cutting will result in a less woody stem and more of the hay will be eaten.

The earlier the cutting, to be sure, the greater the difficulty in curing. However, curing, unless the weather is rainy, is puerly a mechanical operation and be successfully taken care of. The first crop is the most difficult to cure. Profitcuring can be aided very materially by the use of the hay tedder and it is worth while to own such implement on every alfalfa-growing farm for use in caring for the first crop. If the tedder is not used and the alfalfa is allowed to lie sufficiently long to thoroughly dry for stacking, the hay on top and exposed to the supply have been see the results. to the sun will have been so thoroughly dried by the time that lying on the ground is ready for stacking, that the top portion will have lost considerable of its value. Stirring with the tedder will accomplish even and quick curing. There is a difference, as explained in these columns, between making hay dry enough to stack and properly curing. Under favorable weather conditions the hay should not remain on the ground or in the wind row long, but should be put into cocks of medium size and there left to cure. In this way the hay is cured and is not excessively bleached by the sun. The time the hay should be left in the cock will depend upon the condition in which it was cocked-whether the cocks are large or small and upon the weather. The hay should be sufficiently cured so that it will not shrink or mould.

Another object in cutting the crop early is to stimulate the growth of the succeeding crop. Every alfalfa grower recognizes this condition. It is not at all unusual for delay in cutting the first crop to decrease the yield of the second crop fully 50 per cent. If weather conditions are not the most favorable—or even unfavorable—when the first cutting is ready, it is well to proceed with the cutting even though it is almost certain that the hay will be rained upon. For this reason it is well to get into the field and remove the first crop even thought it is not ready, provided the weather conditions are favorable for saving it without rain. This, in a general way, applies also to succeeding crops, although not to the same extent.

In a considerable portion of Kansas—that being the Eastern half of the State—we have not yet thoroughly mastered the art of taking care of this alfalfa

cutting. We believe that in seven of every ten years the first cutting is pretty generally rained upon. Even so, the hay has quite satisfactory feeding value provided it is cut early and dried out. If properly dried it can be stacked in a condition which will prevent stack burning, and when so saved, it is palatable and makes a good feed. In some instances growers have bought silos into which the first crop will be placed in case it is rained upon. It is their plan to feed out such siloed alfalfa when pastures get short and before the corn, kafir or cane is ready for siloing. This is a good arrangement but applies only to those growers who have the live stock necessary to consume the alfalfa silage. This plan does not help the man who grows alfalfa for sale. This, however, is an argument in favor of the alfalfa grower keeping live stock. The first crop produced in eastern Kansas does not sell on the markets to the best advantage. The first crop of alfalfa will make the grower by far the most money when fed on his farm.

Through the Kansas Agricultural College comes the information that many wheat fields in Northeastern Kansas and along the Kaw valley from Bonner Springs to Salina, are so badly infested with Hessian flies that the prospects are poor for a crop from these fields. G. A. Dean, the State Entomologist, expresses the belief that such fields should be plowed under at once and he recommends that every Kaw valley farmer growing wheat should make a careful examination for these insects and determine for himself whether the infested field will be worth saving. The Agri-cultural College observation is discouraging, if the conclusions are correct. However, it must be kept in mind that the Agricultural College through these columns last fall issued a warning to the effect that eastern Kansas farmers must adopt measures against the Hessian fly or serious results from such pest should be expected this spring. The admonition last fall, was that the land be plowed early and the flax seeds, from which the flies hatch, be buried at least six inches below the surface and that care should be taken that the stubble and thrash be covered completely. In and thrash be covered completely. In addition to this it was recommended that farmers observe the so-called safe dates for sowing wheat as determined from four years of experimentation in the various sections of Kansas by the entomologists. It was stated that in Eastern Kansas at the north line of the state wheat should not be sown putil state, wheat should not be sown until October 1 and that on the south line of the state seeding should not be done until October 14 or later, the fly-free date for any locality in Kansas being one day later than October 1 for every 14 miles south of the north line.

These recommendations were given wide publicity through Kansas Farmer and we received a number of letters to the effect that we were overdoing the caution in these columns. Suffice it to say that Kansas Farmer was giving its readers the results of four years' investigation by the state entomologists, who had been particularly active in determining methods of combatting the Hession fly. We had no other information on the subject to give, other than that we printed. That was the best we knew. That was the best anyone knew. As a rule, none of us do as well as we know. If we did, the results would be quite different. In the eastern one-half of the state, generally speaking, the early fall rains put the fields in fine condition for seeding and seeding was done earlier than the above dates. On the other hand, the early summer, generally speaking, was dry and plowing could not or was not done as early as it should have been done to give the greatest set-back to the flax seeds from which the fly hatches. The time will come in Kansas when we will sow wheat—and for that matter sow and plant other crops—only when conditions with reference to soil and insect pests, are favorable. So long as we disregard the work of our scientists and disregard those things which we know augur against our success, we must be prepared for and at least willing to accept the results.

The farmer can at this time determine whether his growing wheat is infested by making a careful examination of the plants. At this season the flies are small, brown, oval, flax seed shaped objects, less than one-fourth inch long. They will be found lying lengthwise of the stems between the leaf sheath and the stalk, just above the ground. Pull up a bunch of wheat, roots and all, and strip down the leaves of the stalk. In this examination short, dead wheat stalks will be noticed and these dead stalks will show that they are worse infested with flies than others. These stalks are dead because they are infested. The flies have passed the winter in this condition. Beginning with the first week in April and continuing through the month, these flax seeds will develop into mosquito-like flies, which lay their eggs on the blades of the growing wheat. These eggs will hatch and the little red maggots will make their way down the plants as in the fall, with the difference, however, that the wheat being older the joints above which they come to rest will be higher on the plant. The more backward the wheat when the spring brood of flies are on the wing, the lower down on the plant their maggots will be found. Here they feed, grow, turn white, reach maturity and transform to flax-like bodies about harvest time. This is the damaging brood. This is the brood that causes the falling of the wheat a week or two before harvesting time. Mr. Dean says that This is the brood that causes the falling of the wheat a week or two before harvesting time. Mr. Dean says that nothing can be done at this date to divert injury in the infested fields. If the field is so infested as to give small promise for a crop, the wheat should be plowed under and the land used for other planting. Oats or corn may be seeded and planted on the ground without danger of infestation from this pest.

This is the best information KANSAS FARMER is able to gain on this subject at this time. In fact it is the best opinion and the best practice we have. We urge upon our readers to make an examination of their fields and determine for tion of their fields and determine for themselves whether or not it is the part of wisdom to allow the growing crop to stand and whether the ground can be utilized to better advantage by the growing of other crops. No condition of weather between this date and harvest time will have the effect of in any way decreasing the ravages of this pest. If a wheat crop is lost this year on account of the Hessian fly, due diligence should be exercised next summer and fall in plowing and the fly-free seeding dates should be observed.

Farmers' Elevator Company.
The Farmers' Grain Dealers' Association of Kansas was launched at Hutchinson recently, with the following officers and directors: President, J. A. Lyons, Langdon; vice president, D. Sommers, Abilene; secretary and treasurer, G. W. Lawrence, Larned.

Waste in Kansas Roads.

The roads in Kansas use 220 acres in each township which should produce crops. This would make a good-sized crops. This would make a good-sized farm. Farmers should set their fences out 12 1-2 feet. This would add six cultivatable acres to every section, and it would add many dollars to the wealth that Kansas produces annually. The roads would still be wide enough for the

This idle land produces every year an immense crop of noxious weeds that detract from the appearance of the farm and scatter seeds on adjoining fields. The over-wide road is an excellent breeding ground for insects, such as grasshopper. If any native bunch grass grows on the roadsides the chinch bugs are sure to use it for winter quarters.

A farmer has to work to make both ends meet. Why force him to destroy weeds or fight insects that propagate on the roadsides? Why not mow the weeds? Many do this, but often the farmer is too busy to cut the weeds before they go to seed fore they go to seed.

The railroad right-of-way not used by tracks could be leased to owners of adjoining land. This would stop another

Almost all the available land is under cultivation. The population is increasing rapidly, and the cost of living is going higher every year. It is time that this immense waste of land was stopped.—S. A. K. in Industrialist.

Organic Matter in Soil.

e e e g s e militation e d

Analyses of samples of virgin and adjacent cultivated soils collected in different sections of the state show a considerable decrease in organic matter in the older cultivated soils. In some cases nearly half the organic matter has been lost. In some of the sandy types of soils, the organic matter, originally low, has fallen still lower.

Along with the loss of organic matter

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plant food associated with the organic matter, the loss being considerably greater than in the soil taken as a whole.

When fresh organic matter decays in intimate contact with the soil, the processes of decay give rise to a large amount of carbonic acid and to other organic acids in lesser amount. Hence fresh organic matter, during decay, acts more energetically upon the mineral matter of the soil and by its solvent action increases the amount of available plant food. In course of time only the plant food. In course of time only the portion of organic matter that is more resistant to decay, remains. This is composed largely of the more resistant nitrogenous matter; but while higher in nitrogen than the original organic matter, its nitrogen is iess available as plant food. of great importance both directly and indirectly.

It has been conclusively proven that the addition of organic matter to the soil greatly increases its water-holding capacity. This increase in water supply has been sufficient in many cases to carry a crop through a dry season, and thus prevent crop failure.

The addition of organic matter im-proves the texture of the soil, thus producing the desirable tilth in a well-worked soil, enabling the roots of the plant to penetrate the soil more easily plant to penetrate the soil more easily and thus obtain a greater supply of plant food than would otherwise be possible. In fact all the physical properties of the soil are improved by the addition of organic matter. The sup-

has gone the loss of the more available. Hence the effect of organic matter upon ply of barnyard manure is often inadeplant food associated with the organic the supply of available plant food is quate to keep up the supply of prognic e plant food is quate to keep up the supply of organic matter properly and maintain the soil in the best condition possible. In addition to stable manure, provision should be made for systematic green manuring. This can be arranged for in a rotation by plowing under the second crop of clover which is especially valuable for the purpose of increasing the nitrogen

the purpose of increasing the introgen supply.

By returning straw, or plowing under corn stalks an additional increase of organic matter may be obtained. Whenever it is possible, avoid burning any plant growth, as this destroys most of its value to the soil. If plowed under in time to decay thoroughly enough to avoid interfering with cultivation, soilwashing is thus checked and the soil's organic matter is increased.



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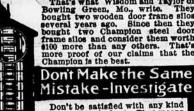
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A visiting dairyman and the editor engaged in a friendly controversy in our office the other day as to the weight of a gallon of cream. We have since come across figures in Hoard's Dairyman which we have every reason to believe are correct. They are as follows: A gallon of cream testing 20 per cent weighs 8.4 pounds; 25 per cent, 8.36 pounds; 30 per cent, 8.3 pounds; 40 per cent, 8.22 pounds; 50 per cent, 8.1 pounds. It will be noted from the above that the higher the test of cream the less is weighs per gallon. This is hear less is weighs per gallon. This is be-cause the fat in the cream is not as heavy as the milk. It is for this reason that the fat in the milk rises in the shape of cream.

During the past year 150 railroads in the United States have, in connection with the agricultural colleges and ex-perimental stations, operated lecture and demonstration trains, on which trains dairying has been the subject of prime importance. This is mentioned for no purpose other than to show the manner in which dairying is generally regarded as an essential to the permanent and highest prosperity of the average farmer in all states. There is no getting away from the fact that the sale of milk or cream and the growth of feed for the cow, gives the farmer the quickest cash return for his labor and crop. A quick money return and constant through the year, is the need of the average farmer. Dairying supplies this.

Cheese has three times the food value of porter-house steak. This is the statement of Dr. Thom, cheese expert of the Dairy Division of the Federal Department of Agriculture. Cheese is one of the staple articles of diet among the Europeans. Especially is this true of the poorer classes. In these days of high cost of living above a should have a warmen of the poorer classes. cost of living cheese should have a prominent place among our foods here in America. It is a comparatively cheap food, rich in nitrogen or body building material. When we buy porter-house steak at 30 cents a pound, we pay at the rate of 80 cents a pound for nitro-gen, while in cheese at 20 cents a pound, we pay 29 cents a pound for the nitro-genous or body building material. The dairy cow has long been reputed as the most economical producer of human food. This is only more proof in evidence.

Dairymen in several states are not satisfied with the test reports received from buyers of milk and cream and are agitating means by which the state will supervise the operation of the Babcock test. Kansas passed this point of worry and dissatisfaction some seven or eight years ago upon the passage of the law creating a dairy commissioner and which law requires the commissioner to exam-ine for their qualifications in handling the Babcock test, all cream buyers, milk buyers, etc., issuing permits to the same. In Kansas all such must pass an examination for efficiency in handling the test to secure such permit. This has given sellers confidence in the test by eliminating incompetents by withdrawing the permits from those who have been found to violate the law. Under the Kansas method all testers are uniform in the methods employed and protect buyer and seller alike. We recommend to neighboring states the adoption of the Kansas or similar law.

While this is not strictly a dairy item, it will nevertheless be of interest to dairymen to know that Prof. N. E. Hansen of South Dakota was recently voted fifth trip to Siberia \$10,000 for a fifth trip to Siberia in search of alafalfas of value to the cold and semi-arid sections of the United States. Four trips have already been made by Professor Hansen under the direction of the Federal Department of Agriculture and his work in Dakota with the varieties of alfalfa he has obtained that his state legisla-\$10,000 for has so resulted that his state legislature not only appropriated the sum above named, but \$15,000 in addition to develop the alfalfas after they are imported. Kansas Farmer has printed some of the results of Professor Hansen's work with the varieties of alfalfa obtained above. The work, however, has not progressed so far as to result in seed for general distribution. However, the farmers of Dakota are now beginning to realize many of the benefits of

his labor. Soon these benefits will have accumulated to such point that seed may be obtained for other sections.

KANSAS FARMER has urged upon its readers the use of pure bred sires both for beef and dairy herds of Kansas, believing that such herds can most eco-nomically, most certainly and most rapidly be improved by their use, than in any other way. The Agricultural College entertains the same view. That institution says it has been demonstrated repeatedly by communities and individual breeders, that the use of the pure bred sire is the surest and best way to success. With this idea in view, the extension department has suggested to the 400 farmers' institutes of Kansas that the April meetings be devoted to a dis-cussion of the advisability of the use of pure bred sires as above stated, and the April institutes will discuss these questions: What points should be considered in selecting a good sire of the beef type? What points should be considered in selecting a good sire of the dairy type? Where can animals of the right type be secured? How long should one sire be used in the herd? How can farmers cooperate in securing and using better sires for and in their community? Why not extend the usefulness of good sires by community breeding and by exchange of animals?

It is claimed by a recognized dairy authority that 90 per cent of the calves that die before they are six weeks old, succumb either to indigestion or to poisoning caused by feeding from dirty pails. It will have been noted by readers of Kansas Farmer that in every calf feeding inquiry we have answered—and there have been many lately—that we have insisted upon feeding from clean pails. We know in our own experience that a dirty pail is responsible for a larger number of deaths and for the failure of hand-fed calves to do well, than any other one cause. The wooden pail should not be used. A galvanized iron pail is not the best. If a pail must be used, it should be of tin and kept clean. When calves are fed in stanchions, a wide shallow jar or even a crock is the best receptacle in which to feed milk. In the crock or jar there are no crevices in which dirt can lodge and the hungry calf will lick the receptacle absolutely clean. If the tin pail is used, dirt will lodge in the seam only. Tin pails designed for calf feeding can be smoothly soldered on the inside in the seams and so made easy to keep in condition. years past, but not so much now, hand reared calves have been poorly reared. At least so long as they were drinking milk. This condition is largely due to dirty pails. It is worth while to give the calf a good start and this cannot be done by any method of feeding from a dirty pail.

There is a lack of definite scientific information in regard to the transmission of milk-producing qualities. Recognizing this, Dr. Woods, director of the Maine Experiment Station, has started an investigation that will be of interest to breeders of dairy animals. In this to breeders of dairy animals. In this connection it is interesting to note that Advanced Registry cows have been recorded on their own performance, while bulls have been recorded on the performance of their daughters. In discussing the proposed investigation, Dr. Woods says that the present available data suggests that the "excess factor in milk production, whatever it may be physiologically, is transmitted from the mother only to her sons and not to her daughters." He says that dairy cattle breeders in Germany have long enter-tained this idea and have bred their anito her sons and not to her tained this idea and have bred their animals on the assumption that the females do not transmit milking quality to their daughters, but only to their sons. The breeding practice following this idea, it is claimed, has been attended in that country with much success. It is the purpose of the Maine station to study wilk production in pure had animals of milk production in pure bred animals of the different dairy breeds. It will be many years before results from this in-vestigation can be noted and in answer to our subscriber who made inquiry regarding this matter, having seen the subject discussed in a dairy paper, we can say that he should proceed along the present breeding practice-the best





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known at the present time. If he is not too old he may live to realize some benefit from Dr. Woods' work.

Best Calf Dehorner.

Instead of dehorning calves by the painful method of sawing or clipping, caustic potash should be applied as soon as the "button like" horns can be felt, after the calf is three days old. There is no danger that the calves will suffer from blood poisoning or other infection of the wound. The College of Agricul-ture of Wisconsin has used this treatment for the past few years with greatest success

The application of the caustic potash should not be postponed, or it may give unsatisfactory results. To apply the potash, the hair is removed from about the horns close to the skin. The potash is moistened slightly and rubbed over the skin which covers the point of the horns, until the skin is white.

It is not necessary to rub the skin until blood comes as this will cause unnecessary soreness. One such treatment is usually sufficient to prevent the growth of the horns.

The following precaution should be taken: The caustic should be wrapped in heavy paper to protect the hands of the operator. It should not be moistened the operator. It should not be moistened too much, or else the liquid will run down the side of the calf's head and cause unnecessary pain. The calf must be securely fastened so that the head may be held still to avoid applying the caustic anywhere except over the horns. One stick of caustic potash, if preserved in a tightly corked bottle, will serve to deborn many calves. dehorn many calves.

Cow Testing Organization.

It will be interesting, in view of the organization of cow testing associations, to know the nature of constitution and to know the nature of constitution and and by-laws governing each organization. From these will be understood the objects and the method of control. Here are the by-laws and constitution of the Dickinson County Pioneer Cow Testing Association, the first organization in Kansas and reported to Kansas Farmer last week:

We, the undersigned, by the subscrib-

We, the undersigned, by the subscribing of our names, wish to organize ourselves into a cow testing association. Name and object hereinafter described.

The name by which this association shall be known is "Dickinson County Pioneer Cow Testing Association."

ARTICLE II The purpose for which it is formed is generally to promote the dairy interests of its members and particularly to provide means and methods for improvement of the dairy ment of the dairy qualities of cows, and for the testing of the cows of its mem-bers periodically.

ARTICLE III.

Its principal office and place of business shall be at Abilene, Kansas.

BY-LAWS.

Article 1.—An annual meeting of this association shall be held at Abilene, on the first Saturday after the first day of January of each year for the purpose of electing officers and transact-

purpose of electing officers and transacting of such business as may necessarily come before the meeting at such time.

Special meetings may be called by the President and Secretary, notification being given each member, stating the object of such meeting.

Article 2.—Whenever any vacancies occur in the offices of this association, occur in the offices of this association, by death, resignation or otherwise, a special meeting may be called for the purpose of filling such vacancy. The person so chosen shall hold office until the next annual meeting, or until his successor be elected and qualified.

Article 3.—The officers of this association,

Article 3.—The officers of this association shall consist of President, Vice President, Secretary and Treasurer. The offices of Secretary and Treasurer may be held by the same person. The officer shall be elected by direct vote of its members, a majority vote of the members chall analysis and shall are chall as a chall bers shall constitute an election.

Article 4.—Twelve members sha stitute a quorum for the transaction of

Article 5 .- The business of the President shall be to preside at meetings and in his absence the Vice President shall

assume such position.
Article 6.—The business of the Secre-Article 6.—The business of the Secretary shall be to keep a correct account of the proceedings of each meeting, and of the business of the association.

Article 7.—The business of the Treasurer shall be to keep a correct account

of all moneys paid in, or paid out, and to see that each individual member fulfills his financial obligations to the as-

Article 8.—These by-laws may be amended or added to, by a majority vote of the members present at the annual meeting, or at a special meeting called for the purpose.

SEPARATORS

Save Their Cost Every Year of Use

If you are thinking about buying a cream separator, and have only a small amount of ready cash to invest, don't be tempted to put your money into one of the so-called "cheap" machines.

Why pay your hard-earned money for a "cheap," trashy machine, when you can buy a reliable De Laval upon such liberal terms that

It will more than save its cost

while you are paying for it.

When you buy a De Laval you have positive assurance that your machine will be good for at least twenty years of service, during which time it will save every possible dollar for you and earn its original cost over and over again.

If you purchase the so-called "cheap" separator, you must pay cash in advance and then take the chance of the machine becoming worthless after a year or two of use, to say nothing of the cream it

will waste while it does last. More De Laval machines are in use than any other make. There is a reason. Be sure to see the local De Laval agent and SEE and TRY a De Laval before you buy any cream

separator. The new 72-page De Laval Dairy Hand Book, in which important dairy questions are ably discussed by the best authorities, is a book that every cow owner should have. Mailed free upon request if you mention this paper. New 1913 De Laval catalog also mailed upon request. Write to nearest office.

THE DE LAVAL SEPARATOR COMPANY

NEW YORK

CHICAGO

SAN FRANCISCO

SEATTLE

Keep the Grain Out of Your Straw Pile

All threshing machines are not alike. There is one different from all others. It has a different way of taking the grain out of the straw. It beats it out just as you would do by hand with a pitchfork. All other machines depend upon its

This one different machine is the Red River Special and you should insist upon having it do your threshing. It will save all your grain and waste none of your time.

It saves the Farmer's Thresh Bill.

It has the Big Cylinder, the "Man Behind the Gun," the patented Grate and Check Plate, the greatest separating devices ever built.

The Big Cylinder drives the intermingled raw, chaff and grain against the separating rate, beating the grain through where the check late catches it and delivers it to the grain pan and mill.

Ninety-five per cent of the grain is taken out

The straw goes over upon the shakers which hold it and beat it until all the grain is beaten out.

In all other kinds the straw is hurried out of the lachine and the grain is expected to drop out.

It doesn't. Thousands of green straw stacks every year loudly say it doesn't.

The Red River Special saves all this. Insist upon its doing your work this year.

It will save your thresh bill. Write for proof.

I. J. Knudson, farmer, of McHenry County,
North Dakota, do depose and say that during
the summer of 1998 I bought of Nichols &
Shepard Company a threshing outfit, consisting of one Zhorse power, double cylinder
traction engine and one 32x52 Red River Special Separator with wind stacker, self-feeder
and the stack of old straw that had
been threshed in 1907 by a
separator, and
to stretch the belts on the new machine in
caused a small load of old straw from the stack
in question to be run through the new machine
and was surprised to get over sixteen bushels
of oats from this load of straw
I afterward threshed out the balance of this
stack and got 347 bushels of grain.

(Signed) JAMES KNUDSON. (Signed) JAMES KNUDSON.

To Whom It May Concern:

scribed and sworn to before me, a No-ublic, in and for McHenry County, North a, this 6th day of Feb., 1909. J. EDGAR WAGAR. Notary Public.

My commission expires March 27, 1914.

NICHOLS & SHEPARD COMPANY, Battle Creek, Michigan Builders of Threshing Machinery, Engines and Oil-Gas Tractors

RETURN APRON ENDLESS APRON AND LOW DOWN



ers. Wide seat, comfortable foot rest.

Appleton Manure Spreaders always give long service; spread even, pull easy; because they are perfectly designed and honestly constructed. An Appleton Manure Spreader is a profitable machine for you to buy. Its use keeps your land healthy and in highest productive condition—that means paying crops. Write today for Free Catalog illustrating and describing our 10 styles.

A complete line of machines in stock in your territory.

APPLETON MANUFACTURING CO., 219 Fargo St., Batavia, Ill.





"Kuhn California Project"

In the Sacramento Valley

The canal, drainage and road construction completed, these lands are now being sold in small subdivisions. The soil, a deep alluvial silt loam, the best in the valley.

RAILROAD PASSES THROUGH THE LAND Towns, Schools and Churches Near At Hand

CROPS—All kinds of fruits (including oranges and lemons); vegetables, seeds, berries, alfalfa, cattle, hogs and chickens.

WATER SUPPLY-Unlimited. Water delivered to boundary of every 40 acre tract. Canal and

TRANSPORTATION-Both by rail and river n to the great metropolitan centers.

LAND PRICES-Low, and terms of payment easy. If you want to secure a home in Cali-

fornia, where climate, soil and water combine to work for you overtime, fill in this advertisement, and mail to us for full particulars.



Check off on this list what you are particularly interested in;

Citrus Fruits, Deciduous Fruits, Dairying, ogs, Poultry, Nuts, General Farming, Al-ifa, Berries, Bees, Garden Truck. TEN YEARLY PAYMENTS

YOUR VALUABLE ANIMAL INSURED Against Death from Disease or Accident?

DO NOT CARRY YOUR OWN RISK. NO MAN IS RICH ENOUGH TO DO THAT. LET US SEND YOU INFORMATION AND TESTIMONIALS. NÖRTHWESTERN LIVE STOCK INSURANCE COMPANY, DES MOINES, IOWA

ADVERTISING PAGE FOR READY BARGAINS READ KANSAS FARMER'S CLASSIFIED

LIVE STOCK



Ninety-five car loads of manure were shipped out of the Kansas City stock yards during March. Hutchinson, Kan., 219 miles distant, took 30 car loads. The longest shipment, 225 miles, was to an Arkansas point.

The Bureau of Animal Industry of the United States Department of Agriculture has modified its rulings so as to give official recognition to the stud book published by the Canadian Kennel Club, Dr. Alfred Boultbee, Secretary, 111½ Jarvis Street, Toronto, Canada.

Kansas City papers report that ship-ments of cattle from that market to the country are much larger than one year ago. The feeders are compelled to compete with the packers for light and half-fat stuff and the movement to the country would be greater if there were more cattle.

A notable accession to the aristocracy of Kansas Jersey cattle has been recently made in the purchase of the prize win-ning bull, Noble Peer of Oaklands, by Mr. John T. Higgins of Abilene, Kansas. This bull was a prize winner in five state fairs and at the Iowa state and the National Dairy Shows. Mr. Higgins is getting together a choice herd of Jersey cattle and feels that he has done the right thing for himself in the purchase of this splendid young bull.

A good many Holstein people are leaning very strongly toward the color craze. It happens, for the moment, that white is the fashionable color and efforts are being made to breed these cattle as nearly white as possible. Of course, this is merely a fad which will run its course in time, but it may work injury while doing so. The color of the hair on an animal ought not to be so important as it has been made in other breeds in the past. Quality should speak first and loudest. Breeding for certain colors is likely to lead into the temptation of putting the color as a first qualification at the expense of quality, and this in turn is likely to result in the deterioration of the individual.

If you have not already built a suitable rail in your farrowing pens or cots, it should be done at once. There are two things that will help to save the young pigs perhaps more than any other. These are to give the sow plenty of range beare to give the sow plenty of range be-fore farrowing and to provide a suitable rail in the cot for the little pigs. An-other very vitally important matter is to use care in feeding. While the sow needs suitable feed, overfeeding will bring about a feverish condition which will react on the pigs unfavorably if not fatally. Give the sow a thin slop and plenty of fresh water for several days after farrowing and then gradually in-crease her feed.

KANSAS FARMER received a letter from reader living in another state, who said that his filly had suffered from lice to such an extent that they had eaten the hair off her neck. Probably his diag-nosis is not correct, but it revealed a condition which ought never to exist on any farm. No colt can do well that has lice, and lice need not exist where ordinary care in sanitation is taken. Spray pumps and dips are so cheap and so easily handled that there seems to be no excuse for not using them. It is use-less to try to free a colt from lice until the premises are cleaned up. It is useless to try to get a cold into condition that is lousy. It is worse than useless to spend your good corn, alfalfa and oats in feeding lice.

The Kansas laws, while intended to be wholesome in themselves, sometimes operate to the inconvenience of people of other states. There are a number of Missouri farmers and feeders who find it more convenient to buy their stock hogs at the Kansas City stock yards, but as these hogs cannot be shipped to Missouri farms until they have been properly quarantined, at least one feeder maintains a farm in Kansas on which to keep his hogs until they have been vaccinated and are free from disease. Such hogs can be vaccinated in the yards at Kansas City and rendered immune from the disease, but this would not

prevent them from carrying the germs in their hair or on their hoofs, so that they must be quarantined whatever their final disposal.

Good colts are about as paying an advertisement as a farmer can have, and vertisement as a farmer can have, and one of the strongest incentives toward getting good colts is a determination to show them at the Grange fair, the county fair, or the state fair. This determination results in increased interest in the individual animal and better care and feed for the colt and its dam. In giving this care the farmer is training giving this care the farmer is training himself, and is learning how to develop a prize colt. He should know that late foals or those in poor condition are not likely to show well alongside of early ones or those which have been well cared for. The first six months of a colt's life into expensive to the owner, and such colts find a ready sale at good and such colts find a ready sale at good figures, but of course the little added expense to bring him to a yearling more than pays for itself. Is there anything more profitable than a good draft colt?

Compromised Alleged Oleo Frauds.

Compromised Alleged Oleo Frauds.

Former Secretary McVeagh, just before going out of office, compromised for the government in the alleged oleomargarine frauds. According to the terms of the agreement signed by the retiring secretary, 12 companies will have to pay fines aggregating \$101,000. This was in settlement of internal revenue tax amounting to a million dollars or more as claimed by the government in the coloring of oleo, on which the 10-cent a pound tax was not paid as required pound tax was not paid as required by law.

Reduces Feed Bill a Half.

Reduces Feed Bill a Half.

"Two years ago I built a silo of 150 tons capacity. Last year I added another and I will build the third silo this year, when I expect to buy more land on which to keep on planting more silos," quotes a daily paper from J. F. Douglas of Beloit, Kan., who is feeding about 300 head of cattle. "We simply must feed silage, or quit the business. I use kafir to fill mine, finding that a sure and safe crop for silage. In feeding cattle of any kind, in roughing them through the winter, or in full feeding in a dry lot, silage will cut the expense down just one-half."

High Herefords.

In the five best public sales of Hereford cattle so far this year 377 head of registered Herefords were sold at a general average of \$320 per head. While the figures for all of the other sales are not available, it is probably safe to say that all of the Hereford cattle sold at that all of the Hereford cattle sold at auction this year have made a general average of around \$250 per head. These prices are easily 50 to 75 per cent higher than values prevailing a year ago this spring. Most breeders believe that a still further advance will be made before the year is closed.

Breeding Army Remounts.

The government stallions bought for the purpose of breeding horses for army use and which were mentioned in these columns, will be available for public service on liberal terms. The owners of sound mares, with a square trotting gait, may breed such mares free of charge, provided they give the government an option on the foal during the year it is three years of age at \$150. However, the government will not hold the breeder of a foal to his option if he wishes to be released, but will allow him to cancel the option at any time by paying the service fee. This fee will be \$25 for mature stallions, and less for those under five years of age. In buying the colts the War Department has agreed to purchase both mares and geldings. No service fee will be charged unless the course place to grand his option. If owner elects to cancel his option. If the government buys the colt, no fee is charged; if the colt is offered to the government and purchase refused, no fee is charged.

How much real difference would a change in the wool tariff make to the flockmaster? How much protection does he get from the present tariff? Ask the prices you have been getting for your wool.

Run Your Binder with a Cushman Engine

-no failures to bindwork goes right

> Horses Simply Draw Machine The engine does all the work of operating. 4 h.p. Weight under 200 lbs. Speeds to 5 h. p. easily. Automatic throttle governor measures out fuel according to work. The original binder engine and more in use than all others combined. Detach and use for all-purpose farm power, Easy to handle, fits in anywhere. We also build 6-8 and 20 h.p. engines with same high efficiency—engines for all heavy duty. Write for free catalogue. CUSHMAN MOTOR WORKS, 2048 N St., Lincoln, Neb.

Farm Cushman The Original Binder Engine

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15-25 H. P.

The power of 15 horses concentrated in a single machine.

Easily handled—everything that requires the operator's attention in easy reach.

Single Lever Control. This patented feature simplifies handling and makes stripping gears absolutely impossible.

Economical. Develops more than rated power on Kerosene, Gasoline or Distillate.

Engine is our well-known horizontal type, used by farmers everywhere. Simple. Dependable. You can handle it from the start.

Details of construction and actual service records gladly forwarded on request. State size of your farm and general character of soil. Ask for Catalog No.FM 898

Also build 30-60 H. P.

Also build 30-60 H. P.

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LIGHTNING PROTECTION 7

Everyone admits the necessity of light-ling rods. They are recognized by insurance companies as being a great factor in reducing companies as being a great factor in reducing the fire risk.

"Made-Right" Lightning Cable is of the best quality copper and is extra heavy, as shown by the illustration. Sold direct to 8½C the user, freight prepaid, foot Don't wait. We save you 50% of the cost of rodding your buildings and give you full directions for putting them up so that you can do it as well as anyone. Write for circular giving particulars. IOWA LIGHTMING ROB CO., 211 E. Lecui St., DES MOINES, IA.







Nothing the Matter With Kansas What the matter with old Kansas? Some fellers seem to know— Think it's lack of rain in summer, And in winter lack of snow.

Yes, we know the hot wind scorches 'Way out yonder on the plains;
In old Kansas 'tis no wonder
People think it never rains.

But I'll tell you, Brother Farmer-Livin' out there in the West, Planting corn, wheat and barley— Yes, we know that isn't best.

Why not plant more cane and milo?
For you know we have the proof;
Put your kafir in the silo,
Fill it clean up to the roof.

Then in winter when it's stormy,
And you're wondering what is best;
Just you read "Old Kansas Farmer,"
It will tell you all the rest.
—CHESTER WARD GRISWOLD,
KINGMAN, KAN. Kingman, Kan.

Guernsey Test Rules.

Commencing April 1, 1913, the rules of the advanced register for Guernseys regarding the period of testing each month will be as follows:

month will be as follows:

The per cent of butter-fat shall be determined by the Babcock test for one full day of 24 hours, or for two or more full consecutive days of 24 hours each, for every month during the yearly record.

The owner shall at the time the application is made, designate the number of days per month he wishes the test or days per month he wishes the test to be made. All animals under test on any farm shall be supervised for the same number of days and the published records shall show the number of days in each month the test was supervised.

The supervisor shall be present at the last regular milking preceding the beginning of the test period and shall satisfy himself that the cow is milked dry at that time. He shall note the hour at which the milking is made and thour at which the milking is made and the final milking on the test period must be made at the corresponding hour

on the last day of test.

After such designation the number of days may be changed only with the permission of the secretary, a 60-day notice of such request having been filed in writing with the secretary.—American Guernsey Cattle Club. STOCK

Kansas Holstein Breeders Organize.

At the meeting of a dairy institute at Mulvane, Kansas, the Holstein-Friesian Breeders' Association of Southern Kansas was organized. Those interested in this breed of cattle met after the intitute hed adjourned and comterested in this breed of cattle met after the institute had adjourned and com-pleted their organization, making George B. Appleman, president and A. Howard, secretary. The association is organized similar to the Western Reserve As-sociation of Ohio, which is known wherever Holstein-Friesian cattle are wherever Holstein-Friesian cattle are appreciated. It is the intention of this Kansas organization to canvass that section of the country, inviting all those who are interested in these cattle to become members. The object is to advance the interest of the breed and to cancer the use of registered stock. vance the interest of the breed and to encourage the use of registered stock just as largely as possible. Testing associations will be organized and undoubtedly the work of this meeting will have an influence that will be felt all through that section.

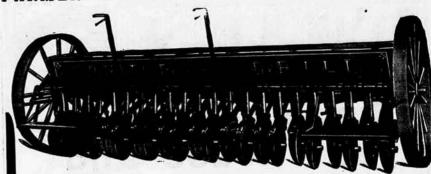
Colorado in Silo Business.

The silo insect is surely at work in Colorado and we are going to see a lot more of these life preservers put up this season. All a fellow has to do is to sit down and figure up what his losses have been for the last ten, fifteen or twenty years as the case may be because he neg-lected to put in a silo. The experts are very fond of telling us that siloed feed goes twice as far in results as we have gotten from the old way, while the milk yield is practically doubled during the winter months. This seems actually to be the case and the sooner we get down to a busines basis in economic feeding the better it will be all around the board. -Field and Farm.

Real Dairy Shorthorns.

There has lately been brought to Kan-There has lately been brought to Kansas a car load of real dairy Shorthorns. These cattle were purchased by W. C. Parker of Oskaloosa from the herd of May and Otis of Willoughby, Ohio, and form the foundation of the first herd of pure dairy Shorthorns in the state. In the opinion of Mr. Parker this class of cattle should exactly suit the farmers of the corn helt for besides be-

farmers of the corn belt for, besides being remarkably good at the pail, there is nothing better in the food lot



MONITOR DOUBLE DISC DRILL Increases the Yield Raises the Grade Saves 20% of the Seed

Hundreds of farmers have carefully tested out the MONITOR DOUBLE DISC DRILL and in every case have found that it increases the yield, usually from three to seven bushels to the acre—raises the grade and saves at least 20% of the seed. It will actually save its cost in a single season.

THE MONITOR WAY IS THE ONLY RIGHT WAY

It deposits the seed on the downward turn of the disc -at the bottom of the furrow-in two rows, one inch apart and covers it with moist soil and not dry top earth as is done by other drills.

Owing to its uniform depth the seed all comes up at the same time—ripens evenly, insuring better grade—increased yield with less seed—it pays

The MONITOR DRILL cannot be clogged in any soil, mud, gumbo or in weedy or cornstalk ground, and its draft is one-third lighter than any other.

Our FREE Illustrated Book on Monitor Drills will interest you. Write for it today.

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Extra thick, tough tread and superior body construction have made them first choice for hard service for nearly 14 years.

Ask your dealer—and write us for H. S. Firestone's book, "What's What In Tires."

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Mutual Buggies, Surreys, Wagons, etc., are the highest quality, handsomest, most stylish vehicles built. The only line guaranteed 5 years. We sell built. The only line guaranteed 5 years. We sell direct at wholesale prices—and save you 22.00 to \$100.00. Write for catalog and delivered prices.

MUTUAL HARNESS at \$5.85 per set up: double \$14.10 up; work harness \$19. up, all genuine leather; highest quality; Fully Guaranteed 25 to 50% cheaper than retail. Catalog Free. Write today. MUTUAL CARRIAGE & HARNESS MFG. CO., Station 16DE. St. Louis, Ill. or Station 16-D, 6 E. Eleventh St., Kansas City, Mo.

HIGH GRADE SEED CORN and SEEDS

ASK FOR QUOTATIONS GEO. T. FIELDING & SONS, MANHATTAN, KAN. Send Postal New Water &

asking for Supply Plan.

It will bring you a Hundred Pictures of it in actual use.

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Aermotor Co., 2nd and Madison Sts., Oakland, Cal. Aermotor Co., 1213 W. 8th St., Kansas City, Mo. Aermotor Co., 332 1st St., North, Minneapolis, Minn.



with new Cradle Spring Frame. Make it part of the equipment of your farm. Always ready for any trip, long or short. Takes you there and back at any pace from 4 to 50 miles an hour. Strong, reliable, easy to control. Low upkeep cost. Most economical and practical means of conveyance the farmer can have

The Indian 1913 type is a wonder for comfort and general efficiency. Plenty of reserve power for hilly country, Takes you over roads not possible to any other vehicle. Ten other important improvements.

Prices {4 H.P. Single Cylinder \$200 } f.o.b. Factory

Ask us for name of nearest agent where you can get a demonstration. THE HENDEE MANUFACTURING CO.

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Alfalfa Covers Free. They Will Pay For Themselves the First Rain. . . .

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BEATRICE, NEB.

When writing our advertisers say you saw the advertisement in Kansas Farmer. That insures to you the full benefit of the publishers' guarantee. See top of editorial page.

OULTRY

Spring is now here in earnest, and the hatching of chicks can now go on without danger of a serious setback to the

Owing to the prolonged cold weather the hatching season has been greatly re-tarded, and the eggs for hatching busi-ness has been rather dull up to the first of April. But now that warm weather has come, the breeders are hoping for a great trade in eggs and doubtless they will not be disappointed in their expecta-tions. The quantity of chickens raised last year was considerably below normal and there ought to be an extra demand for eggs for hatching purposes, so as to get the quantity of fewls up to the nor-

The health of the fowls is paramount to everything else. Watch for any indication of sickness and make some effort to discover the cause. The dropfort to discover the cause. The droppings form one means of diagnosing a case. The normal droppings should be of a semi-solid nature, dark in color but capped with gray. The comb also is an indication of health or sickness. When healthy, the fowl's comb is a bright red; when sick, the comb turns pale and sometimes black. Keep the birds in health and you will get strong, fertile germs, with but few losses in incubation.

Damp quarters are a bane to successful poultry work. Fresh air and sunshine are necessary in order to keep your birds in good health. During the summer frequently clean out all the accumulations in the coops, and let the air and sun work for the purifying of the house. Birds that are kept in houses where the sun never gets a chance houses where the sun never gets a chance to shine in will be out of condition, no matter how well they are cared for in other ways.

We have often written of the good qualities of charcoal for the fowls, but believe it is rarely provided for them. It will pay to burn some cobs or wood, then smother with earth before they are fully humed out. From the refuse of a fully burned out. Even the refuse of a bonfire makes good picking in the way of charcoal for the fowls. If breeders only realized the cleansing qualities of charcoal and how it keeps the digestive organs of the fowls in good condition, they would surely keep it before them all the time.

In answer to Mrs. H.'s inquiry, would say that the swelling on the bottom of the fowl's foot is what is called "bumble the fowl's foot is what is called "bumble foot," an ulceration arising from a bruise in the sole of the foot. Heavy breeds which have roosts that are too high frequently bruise their feet by jumping down on a hard floor. The remedy is to watch the swelling until it becomes somewhat soft in the center and then with a charm knife comp it freely to require the state of the state of the swelling until the center and then with a charm knife center and then with a charm knife cent if freely to rewith a sharp knife open it freely to re-lease the pus that has formed under the thick skin of the sole of the foot. Wash with castile soap and water and bind up, after having applied carbolated vase-line. Keep the patient on soft litter, away from other fowls, for a few days. As a preventive, lower your roosts to a height not exceeding 18 inches.

How I Raise Turkeys.

Everyone knows that the way to have a good house is to begin at the have a good house is to begin at the foundation and work up. That is the first thing to be done in the poultry business, and then breed for the best results. Therefore I try to get my young turkeys off as strong as I can, and in order to do so I put fewer eggs under the hens. I put nine eggs for a chicken hen and 13 under a turkey hen. I raise them with either hens, but I would rather use turkey hens. I think where we fall down in raising turkeys is in making too much work out of it. I don't think they need anything after they are off the nest. I put the poults with the turkey hen and let her take all the care of them. I had one hen two years ago that I put off with 24 little ones, and she had 23 of them in the fall. I always have them roost at the house. I don't feed them anything after they are three or four days old. I would give them something if they seemed hungry. Of course I have a good place for them, lots of meadow for them to rove over and that is a good place for them. I have raised turkeys off and on for 40 years, and of course they are off the nest. I put the poults

have learned some things in that time. I take pride in nice fowls and good stock of all kinds. I believe it pays to have the best of what you do have. I know there is money in poultry and there is no place where you can raise it as well as on the farm.

I know the farm flock has more vigor, and I would rather have eggs from free range fowls. I don't believe in but one range fowls. I don't believe in but one kind of turkeys, or one kind of any fowl on a place. Then I am sure there will be no mixing. I like my flock to be composed of one or two-year-old hens, not any older, and I want a young tom. Now there are some people who doctor their poultry to death. I don't believe in doctoring till they get sick, and they won't be sick if you have kept the lice and nits off them. I grease the little poults a few times while they are with the hens, and I never had anything as good as to whitewash the house with lime, made real yellow with copperas. It is claimed that it is good to keep the rats and mice away, but as to that I won't vouch for. I will close by saying, everybody try hard to raise poultry this year.—Mrs. J. E. Bundy, Goodrich, Kan.

Line Breeding.

A subscriber wishes to know how he can practice line breeding, and would like to see an article on that subject in

KANSAS FARMER.

Line breeding is no easy matter, and unless a man is systematic and careful he had better leave it alone and depend on others for the new blood necessary to improve his flock every year. Line breeding is a system of inbreeding to perpetuate and intensify in their off-spring the good qualities of individuals, and at the same time avoid the diffi-culties and failures that often result

culties and failures that often result from too close inbreeding.

I. K. Felch, probably the most prominent poultry breeder and writer in the United States, has made a study of line breeding, and we shall give a few of his ideas. He says that it makes no difference whether two breeds are crossed or two specimens of a breed of widely different parentage, the progeny will be more prolific than the original fowls. That is one reason why new breeds of fowls are generally good layers. These results can be obtained in one's own yard, if one starts right and keeps his head, his arithmetic and his records clear. Health, size and shape must be secured, and must also be constantly maintained. With these laws to govern us, we may take with us to isolated ranges a single pair of unrelated fowls, and from them in three years have our flock number thousands of the same type, sizes, color, and productive merit, and by following these methods the process or two specimens of a breed of widely by following these methods the process

by following these methods the process of line breeding can be continued indefinitely, with no deterioration from the quality of the original pair.

The first season female No. 1 mated to male No. 2 gives you group 3, which contains one-half the blood of each of your Adam and Eve in poultry. That is the prolific first step toward full fruition in breeding. Then as you breed pullets from No. 3 back to their sire, No. 2, you create three-fourths the blood of Adam, or group 5. Breeding a cockerel of No. 3 back to his dam, No. 1, the Eve of your flock, you create group No. 4, having three-fourths of the blood of Eve. Now, by the mating of specimens of

having three-fourths of the blood of Eve.

Now, by the mating of specimens of
groups 4 and 5, you create group 7,
which have half the blood of No. 1 and
half of No. 2. The fowls of this group,
No. 7, are the grandchildren of Adam
and Eve, and will be just as prolific as and Eve, and will be just as prolific as those of group 3. Again, a male from No. 4 mated to Eve, No. 1, produces group No. 6, with seven-eighths of the blood of Eve. Pullets from group 5 mated to Adam, No. 2, produce group No. 8, which have seven-eighths of the blood of Adam.

Following the laws of English breeding, these seven-eighths bloods can be reckoned as full bloods, and used as were the original pair, so that the mating of groups 6 and 8 produces group No. 10, another half-blood group. Thus, groups 3, 7 and 10, and also group 13, are of the same blood, having been reduced to a new strain, which in procreative vigor and egg production maintain the health, type, strength and size of the Adam and Eve of the flocks. Of course, with every new mating, care must be exercised to use only such birds as are strong, healthy

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At Wholesale Prices-Freight Prepaid Save hig money buying direct from the maker. Here is one item: Hatter, 1/, inch wide, extra heavy, three copper rivets each lap, \$1.50 retail, our price \$1.00.

FREE Simply send name for hig free illustration of the composition of the compos H. & M. HARNESS SHOP, Dept. 257 Stock Yards, St.Joseph, Mo.

Tells Why Chicks Die

J. C. Reefer, the poultry expert of 1649

Main St., Kansas City, Mo., is giving away
free a valuable book entitled "White Diarrhoea and How to Cure It." This remarkable book contains some new scientific facts
on white diarrhoea and tells how to prepare
a simple solution that cures this terrible
disease over night; everyone interested in
poultry should certainly write Mr. Reefer
for one of these free books.

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Use.
Wood Mills
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For mailing 3 dozen eggs.

Each egg has cotton lined compartment.

Be first to keep your grocer supplied with fresh eggs. Price, 90c; 3 for \$2.50, postpaid.

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By the Gerst Patent Litter Conveyor. The greatest time, labor, money saver, and most modern, up-to-date and sanitary Litter Carrier on the market today. Local agents wanted. For prices, terms, etc., address Sanitary Barn Enquipment & Mfg. Ints., Sioux City, Iowa.

Beloit Seed House White Cap, Boone County, and all leading varieties seed corn. Alfalfa, millet, and full line of garden seeds. Write for catalog.

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55 BREEDS Chickens, Ducks, Geese, Turkeys, and Collie Dogs. Send 4c for large Poultry book Incubator Catalog and Price List. H.H. HINIKER, Box 57 Mar

White Plymouth Rocks

Again prove their superiority as egg layers in the National Egg-Laying Contest, one White Rock hen laying 281 eggs; 645 hens competing. I have bred White Rocks exclusively for 20 years and have them as good as anybody. Eggs from three high-scoring pens, \$2.00 per 15; \$5.00 per 45, delivered free by parcel post or express. Safe delivery guaranteed. A limited number of eggs from a specially fine mated pen, \$5.00 per 15. You will get what you order, or money refunded.

Station B. THOMAS OWEN,
Topeka, Kansas

and vigorous, and that are ideal in type, then egg production and all utility pur-poses will take care of themselves, as

poses will take care of themselves, as long as you can create groups representing half the blood of the original Adam and Eve as reservoirs from which to draw new blood for your matings.

The grand secret of this method of line breeding is that in each generation we create a half-blood group, as seen in 3, 7, 10 and 13.

As has already been shown, in groups 6 and 12 we virtually have the full blood of the original female, No. 1, and in 8 and 14 the full blood of the original male, No. 2. So that when we reach No. 6 and No. 8, the original process is repeated, only that groups are mated instead of single fowls. We are now ready for the trade and for future line breeding for all time to come, and we have secured these results from a single have secured these results from a single

pair. From this it will be seen that there is a good deal of study and calculation con-nected with line breeding, and unless one is a specialist in a certain breed and intends making poultry breeding a life study and business, it would not pay to go into it.

Fruit Trees Yield \$1,000 Per Acre.

I shall hardly forget the incredu-lity which greeted my theory, first pro-posed at a nurserymen's meeting eigh-teen years ago, that we can greatly im-prove the size, flavor, color and quality of fruit, make trees come into bearing several years earlier, cause them to bear full crops every favorable year instead of biennial, and render them largely resistant to certain insect enemies and diseases, by means of a simple process which takes effect at once, without the uncertainty and enormous waste of time

uncertainty and enormous waste of time involved in cross breeding.

This method is simply the propagation of fruit trees by means of buds taken from mature trees of perfect health and known record of production instead of using buds from young nursery trees which have never borne fruit or shown individual merit

individual merit.

For example, you ordinarily have to wait ten years for apple trees to come into bearing, yet I have some Duchess apple trees only three years set, which bore last year all the apples they could be sofully courty simple because they were bore last year all the apples they could safely carry, simple because they were propagated from a particular Duchess tree that came into bearing several years earlier than its companions. This fact would justify a revolution in nursery practice, for, while not all varieties will remember to be remembered as a safe as the Duchess come into bearing as early as the Duchess, I am convinced that practically every new orchard in the country could be made to produce a profitable crop two or three years earlier than at present if the trees were all budded from individuals that had come into bearing that much earlier than their companions. Our nursery practice is directly responsible for much of the privation and suffering which fruit growers often endure while waiting for their trees to come into bear-

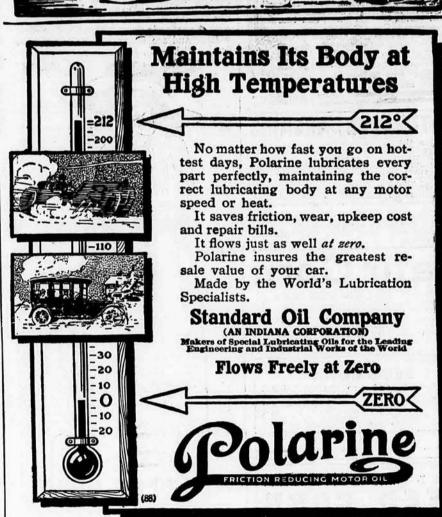
ing.

The additional profit that could be gained if everybody were to use early-matured stock would run into millions of dollars.

Yet such a revolution will hardly come in our lifetime, because it costs more to propagate trees in this way, and begin-ners in fruit culture almost invariably buy the cheapest trees which of course, are the dearest in the end. The original are the dearest in the end. The original cost of even the highest-priced trees is nothing compared with the expense of caring for them until they bear fruit. Moreover, the extra expense of "pedigree" trees need not exceed ten cents a tree expense of them for 35 or 40 gree' trees need not exceed ten cents a tree, as you can get them for 35 or 40 cents each by the hundred. Yet it is only the intelligent few, I believe, who will grasp this principle and reap a splendid profit, because it is hard for any new idea to make its way against that inexorable economic law which impels people to hiv what seems to be the pels people to buy what seems to be the

I heard of one King apple tree in Tompkins County, New York, that had five remarkable peculiarities. At thirty five remarkable peculiarities. At thirty years it showed no sign of crown disease or canker, although it had never been sprayed and many of the other trees about there were commonly diseased. It had never been pruned, but was still shapely. It had never missed bearing fruit according to local tradition. It bore great quantities of large, highly colored fruit. And lastly, the apples were believed to be of finer quality than other Kings of equal size. Thereupon, I employed Mr. C. E. Chapman, then of Freeville, to drive all over Tompkins County to see if he could find a better tree. He found nothing that could comtree. He found nothing that could compare with this tree and so I bought enough buds for my fifty-tree orchard. All these characteristics, apparently, have been transmitted."—G. F. POWELL, in Country Life In America for March.





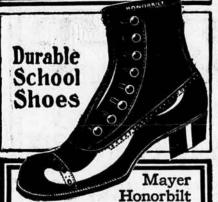
WHY INCUBATOR CHICKS DIE

The book entitled "The History of White Diarrhoea, or Why Incubator Chicks Die," will be sent absolutely free by return mail, to anyone sending us the names of 7 to 10 of their friends that use incubators. This book can save you \$100 this summer. It describes white diarrhoea or bowel trouble, the cause, and tells the cure.

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are made with special regard to the fit and comfort of growing children—fit perfectly and are handsome looking. Your school shoe money will last longer if you buy Mayer Honorbilt Shoes.

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WARNING—Be sure and look for the Mayer name and trade mark on the sole.

We make Mayer Honorbit Shoes in all styles for men, women and children; Dry-sox, Yerma Cushion Shoes, and Martha Washington Comfort Shoes,

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Shoes—we will send you free,
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of Martha or George Washington. F. Mayer Boot & Shoe Co.



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Send us this ad with \$10.00 Money Order and we will ship you one first-class New 40-pound Feather Bed; one pair 6-pound New Feather Pillows, worth \$2.50; one 6-pound New Feather Bolster, worth \$2.50; and one one pair Full Size Blankets, worth \$3.50; all for \$10.00. All New goods and no trash. Biggest bargain ever offered. Satisfaction guaranteed. This offer is good for a short time only. Mail money order now or write for circular and order blanks. Reference, American Exchange National Bank. Address Southern Feather and Pillow Co., Dept. 55, Greensbord, N. C.

Kafir Corn

Select Dwarf Blackhull White Kafir. A heavy yielding, drouth resistant crop. Matured for us and was harvested in 105 days from date of planting. Price, sample and 1913 Seed Book mailed free.

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Boone County White and Reid's Yellow Dent. Well matured and well selected. Shelled and graded, \$2.25; in ear, crated, \$2.75.

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Plant the best, I have Boone County White, Hildreth's and Reid's Yellow Dent. Carefully selected, thoroughly tested, and graded. Write for prices and samples. I sell only my own growing. Money back if not satisfactory upon receipt of shipment.

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OME CIRCLE



few shreds of candied lemon peel will give a delicious flavor to bread pud-

Piano keys man be cleaned by a soft rag dipped in lemon juice and then in silver whiting.

Wiping the shelves with oil of cedar is said to be a good way to keep the mold from books.

In house decoration the pieces of brass and copper ware should be used to light up dark rooms or halls.

Crackers covered with greated cheese and toasted in the oven are good served with salad for luncheon.

Eggs may be kept by packing them, when new laid, in salt, with the small end downward.

Olives, stoned and chopped and mixed with fresh butter or heavy cream, and cream cheese make one of the most delicious sandwich fillings.

Helps to Buy Machine.

"Do you believe that money makes the mare go?" asked Dubbleigh.

"Sure," said Wiggley. "As soon as a man gets money he buys an automobile and the mare goes for what she's worth." -Spokane Chronicle.

Time Savers.

Three time savers in the kitchen are a bill hook for the grocer's checks, a box where tissue paper may be kept, neatly folded to be used for polishing glass, mirrors, etc., and a large wire hook for all empty paper bags.

To Clean a Fowl.

To Clean a Fowl.

If you have never tried this, you'll be surprised how much dirt and soil you have been leaving on your chickens. Pick and singe in the usual way; before breaking skin take a handful of meal, unsifted, wet it and rub thoroughly on every part of fowl. Wash in several waters and see how white and clean the fowl will be — I. B. fowl will be.-L. B.



No. 6090—Ladies' Dress. This costume closes at the front and may be made with long or short sleeves. The turndown colar is a pretty feature. The skirt is cut in four gores and may be made with empire or regulation waist line. The pattern, No. 6090, is cut in sizes 34 to 42 inches bust measure. Medium size requires 5½ yards of 36-inch material and % yard of 45-inch batiste or net. Price of pattern, 10 cents.

Big Directory.

One of the most remarkable documents ever published by the government is the check list, just issued in Washington, says the Argonaut. It records every publication of the government from its foundation down to and including 1909. It contains more than 1500 ing 1909. It contains more than 1,500 pages, and approximately 15 years were required in its preparation.

Meringue That Will Not Fall.

Meringue That Will Not Fall.

The secret of making a perfect meringue for lemon pies, etc., is in the sugar. Use granulated instead of powdered sugar, and the frosting will neither fall nor become tough. For a large pie take the stiffly beaten whites of two eggs and two tablespoons granulated sugar. After adding the sugar beat the mixture hard for a few minutes, spread it ture hard for a few minutes, spread it over the top of the pie, set it in the oven and leave it for about 15 minutes. The oven must be just warm enough to brown the meringue gradually.



No. 6055—Boys' Dress. Here is a clever little dress for the young lads. It is easy to make and may have long or short sleeves. The garment closes at the front and a belt holds it in place. The collar, cuffs and belt are of contrasting material. The pattern, No. 6055, is cut in sizes 1, 2 and 3 years. Medium size requires 1% yards of 36-inch material and % yard of 27-inch contrasting goods. Price of pattern, 10 cents.



No. 6073—Misses' Sult. A clever suit for the young girl is here shown. This suit is also designed for the small woman. The coat is double-breasted and the skirt is cut in three gores. Good style is combined charmingly with a certain simplicity that makes the suit all the more attractive. The pattern, No. 6073, is cut in sizes 14, 16 and 18 years. Medium size requires 3½ yards of 54-inch material and ½ yard of 24-inch velvet. Price of pattern, 10 cents.



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MORE HEAT

WITH LESS FUEL
ou willing to pay \$25 to \$15 more for a fur
not nearly as good as the Kalamazoo
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We're gled to mail it free—write a request on
a postal,—ask for catalog No. 922. Kalamazoo Stove Co., Mfra., Kalamazoo, Mich.
We have two other catalogs, one describinHeating and Cooking Stoves, the other describing Gas Ranges. Which one do you wish?

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Grow Artichokes
FOR YOUR HOGS
Make fat, thrifty, healthy swine
Jerusalem Artichokes are easily grown
very productive. Can remain inground
over winter. Do not have to be
harvested-hogs root them up.
New Rose Colored Artichoke—
French novelty, imported and grows
on our farms. Smoother than the
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productive and beats the old kind
Introduce them in your locality
Found, 50c; 3 pounds, \$1.00, postpaid
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catalog for 1918. By express, not
prepaid, peck, \$1.85.

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HYDROZO— Better Than Paint—It's Waterproof

For Cement Blocks, Stucco, Brick, Cisterns, Shingles, Floors, Buggy Tops, Tents or other porous material. Becomes part of the substance treated. Indestructible. Used by U. S. Government. Low cost. High quality. Saves you paint money. Write for prices and FREE Samples. Address quality. Saves you paint money. Write for price and FREE Samples. Address
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OMAHA TORNADO DISASTER

Book of 48 interesting views taken in the path of the great storm that visited Omaha Easter Sunday, March 23. Sent postpaid for 50c.

BAKER BROS. ENGRAVING CO. 1205 Howard Street, Omaha, Neb.

TRENT'S First prize six consecutive years at Manhattan—state Corn Show—proves I have best strains Seed Corn in the West. Reld's Yellow Dent, Boone Co. White, fire dried, tested and guaranteed.

SPECIAL PRICE FOR MARCH ONLY.

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Box K, Hiawatha, Kansas.

SEED S Fire dried SEED CORN, husked before the frost, dried steam heat. Sure to grow, because germ is preserved. Also Clover, Alfalfa, Oats, Rye and Garden Seeds. Write at once for FREE catalog, and also receive free useful souvenir.

FRED ECHTENKAMP,

Box A. Arlington, Neb.

Bees Need little attention and pay big profits. If you are interested in them send for a sample copy of Gleanings in Bee culture. Also a bee supply Farm catalog. THE A. I. ROOT CO. Medina, Ohio.

SEED CORN.
Reid's Yellow Dent. Manhattan test, 94.5; yield per acre, 75 bushels. Selected from field before frost. Also Pride of Holton, White, test 100, yield 113 per acre. This is the best corn I ever saw. Price per bushel, sacked, \$1.50, f.o.b.

H. F. ERDLEY, Holton, Kan.

KAFIR IN HEAD.

Black hulled white, high yielding type, free from smut, high germination test. The 1912 crop yielded 80 to 100 bushels an acre and 19 tons silage. Price, 20 pounds or more, 5 cents a pound.

J. W. BERRY, Jewell City, Kan.

PURE SEED CORN. Hildreth, Kansas Sunflower, Boone County, Commercial White, White Pearl, Kafir. Fully guaranteed. Write for sample and circular. J. M. McCRAY, Manhattan, Kan.

EGGS — EGGS — EGGS — EGGS —
Cornish Games and Rose Comb Rhode Island
Reds. Farm range birds, separate farms.
Eggs, \$1.00 for 15. L. L. Clark, Meriden,
Kan.

THE FLYING SWEDE SOARS HIGH

Farm Inquiries

Sweet Clover for Kearny County.
J. J., Kearney County, asks if sweet clover will grow on his upland on which it is 80 to 100 feet to water.

Sweet clover will grow under such conditions. It is a dry weather and hot weather plant. It will do better, to be sure, under more favorable conditions. Will this subscriber please read the statement of G. L., Barton County, in this

Silo Insurance.

A Wabaunsee County subscriber asks for the name of a company carrying tor-nado or wind insurance on silos.

There are no companies carrying wind insurance on silos alone, so far as we are able to ascertain. All companies writing tornado insurance will carry the risk on a silo when it is insured with and covered in the same policy with other farm buildings. We understand that some silo manufacturers maintain an arrangement for insuring silos against wind, but they arrange for a blanket policy covering a large number of silos distributed over a large area and so reduce the risk to a minimum and at the same time collecting a large premium. writing tornado insurance will carry the

The individual who would insure his silo should include it with a policy in-suring all his farm buildings against wind.

Kafir Seed and Cultivation.
Subscriber, C. E. J., Neosho County, writes: 'I have been reading with much interest the letters and articles in Kansas Farmer about kafir and its value as a forage and grain crop in the southeastern as well the western sections of Kansas Kafir is a sure dry weather Kansas. Kafir is a sure dry weather crop, and like W. R. C., Wilmore, Kan., who wrote in issue of March 22, I am

who wrote in issue of March 22, I am desirous of obtaining seed of pure variety and high yielding type.

"If we can get better seed we can improve our kafir a great deal. It is necessary to maintain the quality of seed, to go through the field after the kafir is ripe and before heading and cut and gather the largest and best heads on the short and thick set stalks. We should select heads that are well filled with large, plump and well matured seed. I have improved my kafir to a great extent in this way in the last few years. tent in this way in the last few years. I never fail to get a good stand and a good yield. I do not shell and clean my kafir seed until just before planting

"I plant kafir immediately after planting my corn. If the season is favorable this is between May 1 and 20. I plant the red kafir. I find it a harder grain and better keeper than the white for spring and summer feeding. Here in Neosho county we should plant kafir

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By ordering from us direct, instead of paying BIG TRUST PRICES to their AGENTS for OLD LINE STYLE MACHINES. We guarantee our goods to be superior to OLD LINE TRUST MADE, or at least to satisfy you or you don't settle for them; you can order now and pay October and January 1st. We can supply about \$800,000.00 worth of goods this year if you send your order in early. We don't charge interest on machines ordered before July 1st. Stocks carried at La Salle; Marseilles; Kansas City; Wichita; Council Bluffs and Minneapolis. We want a good farmer in each vicinity to write to us at once for net prices and Catalogue No. 8 net prices and Catalogue No. 8

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sistent. As a grain crop it is far super-ior to cane and for grain is admirably

9. L. C. LINES ARE AS GOOD AS EVERY CLAIM MADE FOR THEM

adapted to dry land farming.

The dwarf milo is planted the same as kafir or standard milo and is cultivated kafir or standard milo and is cultivated like corn. Stock like the grain. Its effect on the digestive apparatus is laxative, being the opposite of the effect of kafir. Dwarf milo differs from the standard in that it grows shorter and ranges in height from three to five feet, according, of course, to the climate and soil conditions. It has a straight neck and this is advantageous in harvesting the heads and in cutting and feeding the

The development of a straight neck is work which has been done by man. It is the result of breeding and the dwarf milo will of course have a tendency to revert to the crooked neck type from which is was propagated. It is neces-

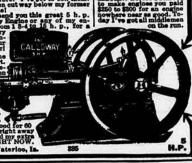


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co-operative offer—all FREE. Don't wait. Write me TODAY — RIGHT NO. d I'll send you my latest price-slashing offer, my big engine book and m -operative offer—all FREE. Don't wait. Write me TODAY -- RIGHT m. Galioway, Pres., WM. GALLOWAY CO., 385 Galloway Sta., Wate





STEAM PLOWING IN BIG WHEAT FIELD, THOMAS COUNTY.

just a little thicker than we plant corn. I think about five pounds of good clean seed an acre will give the best results seed an acre will give the for grain. Such plant makes a stalk large and coarse with large heads. If the kafir is planted too thick the stalks will be slender and the heads smaller and the crop lighter and more difficult to haves. to harvest."

Dwarf, Straight Necked Milo.

C. S. B., Finney County, asks for information regarding the dwarf, straight

This is a new variety of mile in Kan-as. The seed came from the federal Department of Agriculture two or three years ago and on account of the limited quantity of available seed not a great deal of it has been grown. It is earlier than kafir or standard milo. The yield ranges from 60 to 100 bushels. It is fully as drouth resistent as cane and by some growers is claimed to be more re-

sary, therefore, in selecting seed that seed be saved and planted only from the straight-necked heads.

Coloring Oleo.

Subscriber G. W. D., Greenwood County, asks how much more of a fraud it is to color oleo than to color butter.

In the past oleo has been colored for no purpose in the world other than to fool the consumer and so deceive him into buying or eating oleo in the place of butter. The present law provides that oleo in its natural color be taxed onefourth cent a pound. This is the same tax as is imposed upon process butter and is imposed for no purpose other than to provide for the inspection given the two products by the Bureau of Animal Industry which bureau inspects all animal products prepared for consumption in the packing plants. The present law provides that oleo colored in semblance

(Continued on Page Twenty-two.)

THRILLING STORY AND VIEWS OF THE OMAHA TORNADO DISASTER

New Hundred-Page Book Just Issued, With Thirty-Two Full-Page Pictures From Actual Photographs of the Destruction Wrought, Death Traps Found and Freaks Played. Tells You All About It.

Found and Freaks Played. Tells You All About It.

"THE THRILLING STORY OF OMAHA'S TORNADO." A book of 100 pages, containing 32 full-page views, fully describing the terrible storm that visited Omaha, Eastern Nebraska and Western lowa, on Easter Sunday, has just been secured by KANSAS FARMER and is ready for distribution. It is a thrilling and realistic story and is illustrated with 32 FULL PAGE VIEWS reproduced from Actual Photographs taken immediately after the storm.

The story is written by a well known newspaper man who witnessed the work of the storm and visited the scene of disaster within a few moments after its occurrence. The writer's first hand knowledge of the awful scenes which followed the storm, where human beings were pinned by wreckage in burning buildings, where frightened victims huddled together, were rescued half drowned in the terrible rain which followed, all make a most thrilling narrative that has never been equalled in any fiction ever written. A cyclone plays peculiar pranks and works many miracles, and these and dozens of other things, including the noble response of help from men and women everywhere, and Omaha's quick recovery from the disaster, from men and women everywhere, and Omaha's quick recovery from the disaster, from men and women everywhere, and Omaha's quick recovery from the disaster, are all recounted most entertainingly in this book. A full list of the dead is given, together with other interesting statistics. The illustrations form an illuminating addition to the story.

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Send only 25 cents for a four months trial subscription to KANSAS FARMER, the oldest and best weekly farm paper published west of the Missouri River, and this 100-page book will be sent to you FREE and POSTPAID.

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The "Big Three" Poultry Farms

The "Big Three" Poultry Farms
MYERS & STOVER, FREDONIA, KAN.
R. C. E. I. BED CHICKENS—Cholcest
birds of correct color, shape and markings.
52 premiums—30 firsts—color and shape
specials and silver specials, in this season's
shows. Five pens headed by Kansas State
Show and other show winners. Eggs, \$1.00
to \$5.00 per 15; \$4.50 per 100.
INDIAN RUNNEE DUCKS, American
standard, light, fawn and white. Eggs,
\$1.50 per 15; \$8.00 per 10. Pure White
Runners, eggs, \$3.00 per 12. Both varieties
are high class, prize winning birds. Oft
showed—never defeated. Erect, racy carriage, heavy layers, white eggers.
HOURBON RED TURKEYS—Big, hardy,
domestic as chickens. Fine color, yearling
breeders. Eggs, \$3.00 per 11. Free catalog.

ORPINGTONS.

CRYSTAL WHITE ORPINGTONS—EGGS \$1, \$3 and \$5 for 15. Mating list tells al about them. Chas. Amos, Peabody, Kan.

WHITE ORPINGTON EGGS, \$2.00 PER 15—\$10.00 per 100. Special price on larger amounts. Ed. LeClere, Central City, Iowa.

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EGGS — WHITE BLACK LANGSHANS, \$3.00 per 50, \$5.00 per 100. Bronze Tur-keys, \$2.00 per 11. Toulouse Geese, \$1.50 per 7. Rouen Ducks, \$1.25 per 13. W. L. Bell, Funk Neb. per 7. Rouen D Bell, Funk, Neb.

ANCONAS.

MOTTLED ANCONA EGGS, 15, \$1.50; 50, \$3.50. Hens, \$1.00. Mrs. Del Fitch, Burt,

PRIZE WINNING MOTTLED ANCONAS.
Eggs and baby chicks. Circular free. W.
Hardman, Frankfort, Kan.

BUFF COCHINS.

FOR SALE—BUFF COCHINS OF QUALITY. Send for mating catalog. J. C. Baughman, Topeka, Kan.

BUFF COCHIN EGGS, \$2 AND \$3 PER of teen. Mrs. L. O. Housel, Smith Center,

PURE BRED POULTRY

DUCKS AND GEESE.

INDIAN RUNNER DUCK EGGS, 20 FOR \$1.00. D. Flesher, Princeton, Kan.

TOULOUSE GOOSE EGGS, 25c EACH. T. Atkinson, Arkansas City, Kan.

INDIAN RUNNER DUCKS—FIFTEEN eggs, \$1.25. Gertrude Haynes, Meriden, Kan

INDIAN RUNNERS, FAWN AND WHITE, Eggs, \$1 per 15. Baby ducks, 25c each. J. W. Fretz, Bosworth, Mo.

FAWN AND WHITE RUNNERS—EGGS, 3, \$1.25; 40, \$3.25. W. Hilands, Culver,

WHITE INDIAN BUNNER DRAKES, Fishel strain, \$2.00 each. J. B. Hunt, Oswego, Kan.

INDIAN RUNNERS — BLUE RIBBON fawn and white. Color, shape and size right. George Wasson, Anness, Kan.

INDIAN RUNNER DUCK EGGS—FAWN and White, strictly white-egg strain, \$1.25 for 13. M. F. Rickert, Seward, Kan.

WHITE INDIAN RUNNERS—THIRTY-nine premiums. Cleared \$50 per duck. Book-let free. I. H. Drake, Nickerson, Kan.

WHITE INDIAN RUNNERS—EGGS, \$3 per 12; \$5 per 24; fawn and white, \$1 and \$1.50 per 12. Circular. Mrs. E. F. Lant, Dennis, Kan.

INDIAN BUNNERS OF QUALITY—Light fawn and white. White egg strain. Send for egg circular. Ed H. Killan, Manhattan, Kan.

INDIAN RUNNER DUCKS, AMERICAN Standard light fawn and white. Prize winners. White eggs, \$1.50 per 15, \$4.00 per 50. Mrs. D. A. Pryor, Route 3, Fredonia, Kan.

INDIAN RUNNER DUCK EGGS—FAWN and white, both light and dark. Heavy layers of white eggs. \$1.50 for 13 eggs, \$5, \$6 and \$7 per 100. Mrs. Annie E. Kean, Route 1, Carlton, Kan.

INDIAN RUNNERS, AMERICAN STAND-ard and English Penciled. Great laying ducks, mated to racy type drakes. Eggo-15, \$2: 30 \$3.75, charges prepaid. Mrs. Ed Bergman, Route 9, Paola, Kan.

SEVERAL BREEDS.

PURE-BRED EGGS, SIXTY VARIETIES, Quick delivery. Catalog free. Jordan Poul-try Farm, Coffeyville, Kan.

EGGS FROM BLUE RIBBON WINNERS—Single Comb White Leghorns and Orpingtons, Fawn and White Indian Runner Ducks. Thol R. Wolfe, Conway Springs, Kan.

55. BREEDS PURE-BRED CHICKENS, ducks, geese, turkeys, Collie dogs. Catalog free. Belgrade Poultry Farm, Mankato, Minn

PRIZE-WINNING WHITE-EGG WHITE Indian Runners, and pure-bred Buff Orping-ton chickens. Eggs reasonable. Mrs. G. W. Goudy, Stromsburg, Neb.

FOR SALE OR EXCHANGE—ONE 8-months-old Collie bitch and several pups sired by Imp. Ornskirk Sample. Want poultry or offer, no \$5 dogs. A. G. Hillman, Red Oak, Iowa.

HARRY INMAN & SONS, ROUTE 1, KEO-kuk, Iowa, can furnish you eggs for hatch-ing from Black Javas, Reds, Hamburgs, White Polish Bantams and Indian Runner Ducks. Write for mating list.

FOR QUICK SALE — EGGS — STOCK from Moore's Partridge Columbian Silver Penciled Buff, Barred and White Plymouth Rocks; Cochin Bantams. Eggs prepaid. Favorite Poultry Farm, Stafford, Kan.

BOOK YOUR ORDERS FOR EGGS OF Barred, Buff, White Rocks, White and Brown Leghorns, Wyandottes, Langshans, Brahmas, Orpingtons, R. I. Reds, Geese, Ducks, Turkeys and Guineas with the Monroe Poultry Yards, Monroe, Iowa.

EGGS—BARRED, WHITE, BUFF ROCKS; Reds, Wyandottes, Langshans, Brahmas, Orpingtons, Leghorns. 15, \$1.25; 100, \$5.00. Toulouse Geese, \$1.75 per ten. Turkeys, \$2 per seven. Monroe Poultry Yards, Monroe, Iowa.

EGGS—EGGS—FROM THOROUGHBRED Toulouse and Emden Geese: Turkeys; Pekin, Muscovy and Runner Ducks; Houdan, Rhode Island Reds, Wyandottes, Hamburgs, Orpingtons, Games, Plymouth Rocks, Langshans, Cochins; Pearl and White Guineas; Bantams. Hen eggs, 15 for \$1.00; by the hundred reasonable. Also rabbits. All kinds of fancy pigeons. Say what you wish and get a free circular. D. L. Bruen, Platte Center, Neb.

BIG SNAP IN WHITE PLYMOUTH
Rocks.—Two of the finest pens in the state
must be sold quick—and the price is low.
1912 hatched, fully developed and over
Standard weight. Pullets laying. Good
enough to show and win. Buy now and
have them for this year's breeding. This is
unquestionably the White Rock bargain of
the year. J. E. Spalding, Care Kansas
Farmer, Topeka, Kan.

TURKEYS

BOURBON RED TURKEYS—GOOD SIZE and color. Nine eggs, \$3.00; eleven, Mrs. J. E. Bundy, Goodrich, Kan.

BRONZE AND BOURBON TURKEYS, Runner Ducks, White Wyandottes, Light Brahmas. Stock and eggs. Mrs. Emma Ahlstedt, Roxbury, Kan.

EGGS FROM PRIZE WINNING M. B. turkeys at Kansas State Show. \$3.00 for nine. Also Buff Orpington eggs. Mrs. E. D. Ludwig, Waynoka, Okla.

BRAHMAS.

LIGHT BRAHMA EGGS, \$1.50 AND \$3.00 per 15. Chicks, \$3.00 and \$5.00 per dozen. Exhibited at nine shows, won 30 firsts, 19 seconds. A. P. Woolverton, 623 Monroe, Topeka, Kan.

WE WON THE BLUE ON LIGHT BRAH-mas last three Missouri State Shows; 60 recent prizes. Our customers win. 93 to 95 point birds only. 15 eggs, \$1.50 to \$3.00; 100, \$7.00. No misrepresentations. Mrs. Oscar Felton, Blue Mound, Kan.

When writing advertisers, please mention

BARGAINS IN LAND

BARGAINS in Ness County land, large and small tracts. Write now for lists and literature. C. H. Brassfield, Ness City, Kan.

EXCHANGES EVERYWHERE. Get our fair plan of making trades all over the United States. Graham Bros., El Dorado, Ms.

WE TRADE OR SELL ANYTHING ANY-where. The Realty Exchange Co., 18-22 Randall Bidg., Newton, Kan.

KINGMAN 1,120 a. solid body, 350 cult., 500
COUNTY
KANSAS
RANCH
LAND CO., Kingman, Kansas.

WILL TRADE my \$3,700 automobile for a Kansas farm. Must be unincumbered. Auto is in good condition. One of best Farmer, Topeka, Kan.

TWO BARGAINS.

100 acres near Olathe, well improved, fine, \$110.00 per acre.

Fifty-seven acres, improved, best of Kaw bottom land, greatest bargain in the county, AT KANSAS CITY'S DOOR. Write for lists.

T. H. MILLEE, Olathe, Kansas.

DESIRE TO BUY

Ten quarters of western land for cash. Must be cheap. Give numbers and full descrip-tion. M. W. CAVE, Salina, Kan.

FORCED SALE—480 acres improved, 160 in cult., balance in pasture, plenty of water; a good home, close to Catholic church and school. Price, \$8.00 per acre.

I. F. Carter, Bended Abstracter, Leoti, Kan.

A Big Irrigated Farm in Western Kansas for Sale at a Bargain

205 acres Kearny County, 1½ miles from R. R. station. All improvements for stock and grain. 100 acres now in alfalfa. Private irrigating plant goes with farm. Failure of owner's health only reason for selling. Will sacrifice to quick buyer. Terms, half cash, bal-ance long time at a low rate of interest.

L. E. LATTA,

1790 Broadway, New York City.

CENTRAL KANSAS FARMS—320 a., fine large buildings, good well and wind mill, at \$50 per acre. 160 a. cultivated only, would make a fine home, for \$9,000, and others,

close in. WALDO HANCOCK, Beverly, Kan.

160 ACRES adjoining Edna, Kan. 120 acres in tame grass, two-story house, splendid orchard. Want hardware. Give full particulars. Address M. W. CAVE, Salina, Kan.

REAL ESTATE SALES

Are found by those who advertise in these columns. Excellent sales from small ads are the results obtained from using these columns. There are plenty of good chances to do business with the class of replies received from these columns. Write us for special land advertising rates. ising rates. KANSAS FARMER, TOPEKA, KAN.

OUR RED LETTER SPECIAL. Will trade your property. Get into touch with live wires. Guaranteed deal. List to-day. Write for particulars. MID-WEST REALTY EXCHANGE, Riverton, Nebr.

PURE BRED POULTRY

POULTRY WANTED.

PAYING 13c FOR HENS, 20c FOR broilers and turkeys. Cope's Sales System, Topeka, Kan.

FIELD NOTES

Eggs Cheap.

This issue of Kansas Farmer contains the announcement of L. L. Clark of Meriden, Kan. Mr. Clark offers eggs from his purebred Cornish Games and Rose Comb Rhode Island Reds for the low price of \$1 per setting. Write him quick.

J. H. Brown of Oskaloosa. Kan., starts a card in this issue offering choice boars and gilts of September farrow, strictly big-type, carefully fed and handled, for the low price of \$25 each.

Branic Changes Date.

Owing to the short time in which to get out catalogs and other advertising, Mr. C. L. Branic of Hiawatha, Køn., has changed his sale date from April 23 to Wednesday, May 7. Remember this sale and either come or send bids to auctioneers or fieldmen.

There is an unusual offer being made in the classified page of Kansas Farmer by Percy S. Walker, Sixth and Jackson Streets, Topeka, Kan. He is offering to develop and print the first roll of kodak films free to anyone who will send business to him. He is able to do all kinds of developing work and is especially anxious that a great many will take advantage of this offer.

In another column we are starting a breeder's card for F. M. Glitner, Winfield, Kan. Our Mr. Devine has seen his Poland Chinas and can say to anyone needing a herd boar or a sow to write Mr. Glitner and he will treat you right. His pigs are by the same boar and same sows as the first prize pigs and young herds in the state of Kansas in both 1911 and 1912. Some of the pigs he showed at Hutchinson State Fair weighed 255 pounds when under six months of age. Write him. He guarantees his hogs as represented or your money back.

BEST TOWN TO LIVE IN.

If you would like to live in the most beautiful city in the West, with unsurpassed educational, business and religious advantages, in a city clean, progressive, where real estate values are low but steadily advancing, where living expenses are reasonable, a city with natural gas at lowest price, address the address the SECEETARY of the COMMERCIAL CLUB, Topeks, Kansas.

FINE DAIRY FARM

240 Acres, highly improved, in high state of cultivation; good orchard, silo, alfalfa; near best college town, \$52 per acre. Write for farm list. T. B. GODSEY, Emperis, Kan.

FOR SALE — A BARGAIN

Eighty to 160 acres in the famous Membres Valley of N. M. Have two farms and can not farm both. Farms well improved. Address Lock Box 462.
SAM S. McADAMS, Deming, New Mexico.

Live Trades Would you trade if suited? Write for our list of snappy exchanges and listing blank. Describe property first letter. Eberhard & Mellor, Whitewater, Kan.

BUY or Trade with us—Exchange book free. BERSIE AGENCY, El Dorado, Kan.

FARMERS, TAKE NOTICE.

Do you want to sell, exchange or buy farms? I can locate you in any state.
W. F. Broadus,
P. O. Bex 77.
Leavenworth, Kan.

LAND BARGAIN EXTRAORDINARY.

I have two 160-acre farms that must sell by May 1. Either one is priced at just two-thirds of its actual value. One-half the wheat goes. Will be cut and threshed inside of 90 days. Will take the half crop and guarantee you 10 per cent in advance. Do you know a bargain? Let's see.

F. L. NEWTON, Clay Center, Kan.

EXCHANGE—Will trade my equity in 80 acres, Saline County; 6-room house, barn, well and mill, cistern, chicken house, some fenced hog-tight, 50 acres cultivated, 1½ miles to school, 3% miles to two towns; mortgage, \$3,500, at 6 per cent. For live stock, hardware, or clear rental.

ED. A; DAVIS, Minneapolis, Kansas.

3½ miles of paved streets of Ottawa, Kan. Six-room house, barn 40x50, 15 acres hogight, 15 acres clover, 40 acres fine bluegrass, remainder in cultivation. Price, \$75 per acre. Terms to suit. Don't wait to write, come at once. Owner must sell.

MANSFIELD, Ottawa, Kan.

FINE 160 A. FARM, lime stone soil, good house, barn, etc. Nicely located. Will produce wheat, corn, clover, alfalfa. Part cultivated, balance pasture, meadow. Close to Fredonia, Kan., in oil gas belt. Will take \$40 a. and is worth \$75. Address Owner, Lock Box 307, Fredonia, Kan.

9-room house, two well-built chicken houses, large granaries and other outbuildings and stables; lots of shade and fruit trees; 160 cult., bal. pasture, some alfalfa, all tillable land. Price now is \$7,000, about half cash. Buxton Land Co., Utlea, Ness Co., Kansas.

ABILENE, KANSAS.

106 acres, unimproved, all fine river bottom land, no overflow, 1½ ml. to good R. R. town; rich black loam soil; 86 acres now in wheat, all to go to purchaser if soid soon. Good terms at 5 per cent. Write for list. Briney, Pautz & Danford, Abilene, Kan.

\$1.75 PER MONTH
For ten months, buys level, well located lot
in Plains, Kan. "Special bargains." Only a
few to be sold at this low price. Act

few to be sold at this low price. Act quickly.

JOHN W. BAUGHMAN.

Plains, Kan.

320 A., 3 mi. from shipping point, 5 mi. from Hamilton; 150 a. of it is fine bottom land; part in alfalfa now; 5 s. timber, about 200 a. in cult., 9-room house, good barns. A fine farm, worth \$18,000.

A. F. DOVE, Hamilton, Kan.

FARM—One section for sale, 3 miles town. 400 acres wheat, 100 alfalfa, 100 pasture, bal. spring crop. All goes. Possession this spring. For price and terms write S. A. Y., Box 75, R. F. D. 3, Plainville, Kan.

The Mayer Boot & Shoe Co., Milwaukee, now has this daily capacity in their complete, large, new building to be used exclusively for making Martha Washington Comfort shoes. Milwaukee's great shoe manufacturing company, the F. Mayer Boot & Shoe Co., has just completed another large factory building consisting of seven stories and basement 50x150 feet, which is to be used exclusively in the manufacture of Martha Washington Comfort shoes. Including the new Mayer Martha Washington building, the Mayer factories now have facilities for manufacturing the enormous quantity of 20,000 shoes per day. The remarkable growth of the F. Mayer Boot & Shoe Company is a striking tribute to the sterling qualities of Mayer Honorbilt Shoes as well as to the value of this paper as an advertising medium. Mayer Honorbilt Shoes have been advertised in our columns for years. Our readers must be familiar with them and no doubt many are wearers of Mayer shoes. Martha Washington Comfort Shoes especially enjoy a tremendous sale.

Time to Care for the Garden and Lawn. 20,000 Shoes a Day.

Time to Care for the Garden and Lawn.
You'll need garden and lawn tools this month—let us offer all our readers a little advice. Whatever you buy—grass scythes, lawn trimmers, lawn mowers, forks, rakes, etc.—do invest your money in good tools. Quality pays big dividends. The person who buys Keen Kutter tools can be absolutely sure that he has bought the finest tools in America. These tools have been on the market for over 45 years and have earned a nation-wide reputation for quality and durability. Keen Kutter tools are made by the Simmons Hardware Co., and are sold by dealers in practically every city, town, village and crossroads in the country. These dealers are authorized to sell you Keen Kutter tools on the unqualified guarantee that if they are not absolutely perfect your money will be refunded. We urge our readers to see that the Keen Kutter trade mark is on every tool before they buy. Time to Care for the Garden and Lawn.



Your Handiest Helper

If you want an all round tractor for the spring and summer rush—a tractor that can stand any pace, that will work for you 24 hours a day—the machine to buy is the



This tractor is built to use every day, for any power job on small or large farms.

It has plenty of power, pulls up to 6 plow bottoms in stubble, will plow and disc 10 to 14 acres a day-builds roads, saws, bales, threshes, shreds—does the work of four men and a dozen horses.

The OilPull is built to be used with profit on small farms, and it's a mighty handy machine on a big one, too. It is the only tractor that burns kerosene or distillate successfully at all times—a real fuel saver.



See your dealer about it or write for OilPull Data-Book No.355. RUMELY PRODUCTS CO. (Incorporated)

Power-Farming Machine lansas City, Mo.; Wichita, Kan, Dallas, Texas.



I'M WILLING TO SEND YOU

THE RESCHKE DISK SHARPENER FOR 30 **FREE TRIAL**

I'm that sure of its worth to you. I want you to test for yourself the efficiency of my Disk Sharpener. I want you to see for yourself the saving in money and time in sharpening your own disks. My Sharpener is so simple a boy of 12 can operate it. It sharpens the disks the way they should be sharpened, by factory process. A machine costing five times my price can not possibly do better work than mine. My special price to you for 30 days is \$\frac{1}{2}\$. Every Sharpener is returnable at its full value if not perfectly satisfactory. Write for full information today.

Wm. F. RESCHKE **MACHINE WORKS**

910 N. Washington. Wichita, Kan.

A \$90-700 lb. "STANDARD" Cream Separator For 56.50 Spot Cash

You can't beat our prices on the "standard" Separator. You can't beat "standard" quality.



See the "STANDARD" at your saler's or write for Catalog 4 30,000 Standard Separator Co., Milwaukee, Wis,

GRANGE The DIRECTORY OF THE KANSAS STATE

NATIONAL GRANGE OFFICERS. Master......Oliver Wilson, Peoria, Ill. Lecturer.....N. P. Hull, Diamondale, Mich. Secretary..C. M. Freeman, Tippecanoe City, Sec'y....C. M. Freeman, Tippecanoe City, O.

From Secretary Wedd.

Having received numerous calls for instructions to deputies, I note the following from the National Grange:

"We recommend that the master of "We recommend that the master of the National Grange prepare or have prepared a deputies' handbook, which shall contain full and specific directions as to the proper procedure in organiz-ing and reorganizing Granges, and con-taining helpful suggestions to deputies or other organizers, and that proper data adapted to conditions in different states may be secured."

The recommendation was accepted and adopted. So if the book is not ready now, it probably soon will be.

Beautifying Farm Homes.

Mr. C. D. Steiner, supervisor of Boys' Clubs for the Agricultural College, has a fine lecture on the above subject and has sixty slides loaned by the U. S. Department of Agriculture. The college desires to arrange some circuits for Mr. Steiner for April and May with the Mr. Steiner for April and May with the Granges or other organizations of the state. There will be no charge except for traveling expenses and if a circuit of six or more places can be made the share of each will be very small. The lectures should be given at night. Correspondence should be addressed to Superintendent Edward C. Johnson, Kansas State Agricultural College, Manhatsas State Agricultural College, Manhattan, Kansas.

Program Outlines. For the first meeting:

Song.
Roll call, responded to by each member naming a fact about the month of

the meeting. Instrumental duet.

Co-operative credit, or land banks. A paper or talk followed by questions and discussion.

Book review.

Solo.

Closing music. Second meeting:

Music. Roll call, responded to by current

What can this Grange do to promote co-operative producing, buying and selling?"

Discussion.

Recitation.

Song in character. Hints on how to cheer an invalid, or

shut-in person. Music.

Flowers are God's smiles, His bene-diction to His children.

diction to His children.

Let us make our homes beautiful by the planting of flowers and vines and shrubs, and then planting more flowers and vines and shrubs, and now is the appointed time; but here, as in all things else, we must get our measure and not undertake more than can be well done.

well done. The hardy penennials give the greatest returns for the time and labor expended on them and once well established will almost care for themselves, but they appreciate cultivation and attention and will return greater dividends when not

neglected. he hardy flowering vines and shrubs are still less exacting and will yield an abundance of bloom in their season, asking nothing in return but to be well grounded in good soil. The vines, of course, must have some support, but they are not particular and will cover up some ugly old stump or fence corner

if only given a chance. Encourage the boys and girls to plant flowers and see that they are not disappointed by being allowed to plant a dozen where one should grow. Guide them toward one of the greatest pleasures of their lives—the memory of

childhood's flowers. My dear old four o'clocks and zinias, morning glories and scabiosa (mourning bride as we called it) I love them, and any flower that I knew in childhood is doubly dear. Let every Grange add to the world's blessings by planting and caring for something that is a thing of beauty and a joy forever.—A. B. H.

Classified Advertising

Advertising "bargain counter." Thousands or people have surplus items or 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 300,000 readers for 4 cents a word for one week; 8 cents a word for two weeks; 12 cents a word for four weeks, Additional weeks after four weeks, the rate is 3½ cents a word per week. No "ad" taken for less than 50 cents. All "ads" set in uniform style, no display. Initials and numbers count as words. Addeness 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.

HELP WANTED.

RAILWAY MAIL CLERKS WANTED— \$900 first year, promotion to \$1,800. Exam-inations May 3 in every state. Common ed-ucation sufficient with my coaching. Full information free. Write for booklet V809. Earl Hopkins, Washington, D. C.

WANTED — RAILWAY MAIL CLERKS, \$90 month. Examinations everywhere May 3. Write for vacancy list. Franklin Insti-tute, Dept. M 85, Rochester, N. Y.

WANTED — RAILWAY MAIL CLERKS. Examination May 3. Splendid salaries. I conducted gov't exams. Can help you pass. Trial lesson free. Write Ozment, 44R, St.

FREE ILLUSTRATED BOOKLET TELLS about 300,000 protected positions in U. S. service. Thousands of vacancies every year. There is a big chance here for you, sure and generous pay, lifetime employment. Just ask for booklet S-609. No obligation. Earl Hopkins, Washington, D. C.

MEN AND WOMEN WANTED FOR GOVernment parcel post and other government positions, \$90 month. Annual vacations. Short hours. Thousands appointments coming. "Pull" unnecessary. Farmers eligible. Write immediately for free list of positions open. Franklin Institute, Dept. M 85, Rochester, N. Y.

SALESMAN—TO SELL HIGH GRADE guaranteed groceries at wholesale direct to farmers, ranchmen and all consumers. Earn \$4\$ to \$10\$ and up per day. A big chance to get into business for yourself. Save the buyers the retailer's profit. Every customer is a permanent one. Demand constantly increasing. Latest plan. K. F. Hitchcock Hill Co., Chicago.

GOOD PAY AND PERMANENT BUSIness connection for one man in each county
in Kansas, Nebraska and Oklahoma to look
after established business. \$25 or better per
week at start can be made, working small
towns and rural routes. Good chance for
rapid advance in earnings. Complete outfit
free and credit given. Previous experience
unnecessary. Write at once. Fireside
Agency, 625 Jackson St., Topeka, Kan.

SEEDS AND PLANTS.

SEED CORN-LAPTAD STOCK FARM, Lawrence, Kan.

ALFALFA SEED, GARDEN AND FIELD seeds. Grubb & Purmort, Enid, Okla.

BOONE COUNTY WHITE SEED CORN, fine quality, \$1.50 bushel. J. B. Hunt, Oswego, Kan.

FOR SALE—100 BUSHELS OF WHITE Wonder seed corn. Call or write to E. S. Sayler, Route 3, St. John, Kan.

MAMMOTH BLACK-HULLED WHITE kafir, hand-threshed. Selected for early maturity, 17 years. J. G. Mitchell, Lafon-taine Kan.

KAFIR — HIGH YIELDING, EARLY, black-hulled, white. Absolutely pure. \$1.00 bushel. Jeff Burt, Macksville, Kan.

DWARF BLACK-HULLED WHITE kafir seed for sale, \$1.25 bu. Amount lim-ited. I. N. Farr, Stockton, Kan.

YODER'S CORN MULCHER IS A NEW invention for corn growers. Write for circular. M. S. Yoder, Shipshewana, Ind.

CATALPA TREES FOR SALE, 1 YEAR old. Genuine Speciosa, \$4.00 per thousand. H. G. Adams, Maple Hill, Kan.

WHITE-HULLED KAFIR, GROWN from heads selected in 1911. Cleaned and graded, \$1.00 per bushel. Schuyler Nichols, Herington, Kan.

SEED SWEET POTATOES — YELLOW, bushel, 75c; Red River Ohios, Early Rose, Burbanks, 75c. Cope's Sales System, To-peka, Kan.

PURE BLACK HULLED RECLEANED kafir corn seed, free from smut. Write for sample and price. August Johnson & Sons, Norwich, Kan.

BLACK HULLED KAFIR SEED, FANNED, sacked, \$1.00 per bushel. Heaviest yield in county. Clawson States, Route 4, Lawrence, Kan.

SELECTED WHITE KAFIR SEED, black hulled variety, \$1.75 a bushel; big yielder. Hallgren Bros., Route 2. White City, Kan.

CHOICE BLACK-HULLED WHITE Kafir and Dwarf Milo, recleaned and graded. Kafir, \$1.00; Milo, \$2.00 per bushel. A. L. Beeley, Coldwater, Kan.

BOONVILLE NURSERIES — TREES, plants, vines, from nursery to planter at wholesale. Buds from best bearing trees. Finest varieties, best assortment. Satisfaction or money back. Boonville Nurseries, Boonville, Mo.

PLANT OUR KAFIR CORN. RIPE, selected seed from 80-acre field, averaged 56 bu. per acre. \$1.00 per bu. sacked. Topeka. Grand Champion white seed corn from \$280 prize corn, \$3.00 per bu. Snyder Seed Co., Topeka, Kan.

NICE WHIPPOORWILL COW PEAS, \$2.75 per bushel, sacked. Four varieties of native seed corn—Reid's Yellow Dent, Hildreth's Yellow Dent, Ninety-Day Old Yellow, and Boone County White, shelled, cleaned and graded, put up in even weight sacks of 2 bushels each, \$1.45 per bushel, freight prepaid. Brooks Wholesale Co., Ft. Scott, Kan.

HOGS.

I HAVE SOME VERY NICE DUROC Jersey pigs, either sex. 6 months old, \$12 and \$15, out of Osage Chief, he by Tatarrax by Ohio Chief. Enoch Lungren, Osage City, Kan.

CATTLE.

FINE REGISTERED HOLSTEIN BULL calf for sale. J. T. Meierdircks, Marion, Kan.

FOR SALE—ONE VERY NICE D. S. Polled Durham bull, 12 months, dark red, \$125.00. Enoch Lungren, Osage City, Kan.

SOME CHOICE JERSEY BULLS THAT must be sold quick. Two nearly ready for service. Chester Thomas, Waterville, Kan.

FOR SALE—THIRTY HEAD EXTRA selected high-grade Holstein cows and heif-ers; two registered bulls, "yearlings." Ar-nold & Brady, Manhattan, Kan.

REGISTERED AYRSHIRES FOR SALE, one 6-months-old bull and helfer calves from 4 to 10 months old, from good milkers. Best of breeding. Geo. A. Nelson, Militown, Wis.

I NOW OFFER FOR SALE MY GREAT Polled Durham herd bull You Know X 5624, Shorthorn 276023. A prize winner an a sure dehorner even to horned cows. Excellent breeder. C. M. Albright, Overbrook, Kan.

FOR SALE — 35 COWS, JERSEYS, Guernseys and Holsteins, all young, with milk records. A few fawn Jersey heifers, bred. Will sell reasonable. Satisfaction guaranteed. Jack Hammel, 215 Adams St., Topeka, Kan.

REAL ESTATE.

FOR SALE—EIGHT CHOICE BUILDING ots adjoining college grounds. Riley Ingraham, Manhattan, Kan.

SELL YOUR PROPERTY QUICKLY FOR cash, no matter where located. Particulars free. Real Estate Salesman Co., Dept. 77, Lincoln, Neb.

VIRGINIA FARMS FOR SALE BY owner, cheap. Easy terms. Healthy sec-tion. House and store for rent. Chas. Wit-mer, Nottoway, Virginia.

TEXAS STATE LANDS, \$1.50 TO \$5.00 acre; one-fortieth down, balance 40 years. Information and Texas map free. Journal Publishing Co., Houston, Texas.

BARGAIN—A NICE SMOOTH 80 ACRES of tillable land, only 7 miles from Salina; \$3,200.00. Write for list. V. E. Niquette, Salina, Kan.

LAND SALE AT A BARGAIN IN RICE County, Kan. Suburban tract of about 4 acres, hog and chicken ranch, well im-proved. Possession. For particulars address this office. E. R. McWilliams, Chanute, Kan.

WEST FLORIDA — GARDEN SPOT OF the Gulf Coast. Write for free copy Pensa-cola Journal's special Walton County edi-tion. Geo. K. Armes, Secretary Commercial Association, DeFuniak Springs, Fla.

STOCKMEN AND FARMERS—I MUST sacrifice 480 acres very choicest land in this valley. Rich, level, 6 miles from new growing town of Brandon, adjoining splendid free open range. Shallow water. Good wheat and corn land. \$10 per acre, Good terms. S. S. Sanger, Brandon, Colo.

PATENTS

PATENTS SECURED. YOUR INVENTION may be small but valuable if patented. Cook & Cook, Victor Bldg., K, Washington, D. C.

SEND FOR FREE BOOKLET, ALL about patents and their cost. Shepherd & Campbell, Patent Attorneys, 500-R Victor Bldg., Washington, D. C.

PATENTS SECURED. IDEAS BRING wealth. Prompt service. Personal atten-tion. Harry Patton Co., 323 McGill Bldg., Washington, D. C.

MISCELLANEOUS.

E. R. BOYNTON HAY CO., KANSAS City, Mo. Receivers and shippers. Try us. ROOFING COMPOSITION, SLATE, TILE, sheet metal, tinwork. Rinner & Warren, Topeka, Kan.

WE PRESS, CLEAN, DYE, MAKE AND repair clothes. Glenwood Cleaners, Topeka, Kan.

APPLES FOR SALE—BARREL, \$2.00; not culls. Walnut Grove Farm, Vinland.

H. W. BOMGARDNER, FUNERAL DI-rector. Excellent new chapel. Best atten-tion. Topeka, Kan.

MAIL PRESCRIPTIONS TO GIBLER'S drug store. Filled correctly, sent parcel post. Topeka.

SEND KODAK FILMS TO US TO BE finished. Will develop and print first roll free. Percy S. Walker, Sixth and Jackson, free. Percy a Topeka, Kan.

FOR SALE — MARLIN REPEATING shotgun, 12-gauge; two sets barrels, one for ducks, one for quali; good condition, little used. First check for \$25 takes gun. A. M. Graham, 625 Jackson St., Topeka, Kan.

DOGS.

WANTED — WHITE ESKIMO SPITZ pupples under 8 weeks old. Brockway's Kennels, Baldwin, Kan.

SCOTCH COLLIES - WESTERN HOME Kennels, St. John, Kan.

SCOTCH COLLIE DOGS AND PUPS. near Deer Creek, East Sixth, or write A. W. Smith, 1200 East Sixth, Topeka, Kan.

TYPEWRITERS

OLIVER VISIBLE TYPEWRITER FOR sale cheap. Perfect condition and does nice writing. Could send on trial. Charley Rickart, Route 5, Rosedale, Kan.

Big Boned Spotted Boars

We have some fine ones of September row to close out at \$20.00. Gilts all sold. ooking orders spring pigs. Get our prices. so Jersey Cattle, Buff Orpington Chickens.

THE ENNIS FARM, Horine Station, Mo. (30 Miles South of St. Louis.)

STRAUS SPOLAND CHINAS Model Bill 54624 heads our herd, assisted Model Wonder, one of the largest yearl-boars of the breed. Fifteen spring ars for sale, priced to move them oars for sale, priced to move them.
O. R. STRAUSS, Route 1. Milford, Kan.

POLAND OHINA HOGS—BOTH SEXES
Full brothers and sisters to first prize young
herds in the state in 1911 and 1912. Farrowed last fall. Priced worth the money.
Also pure Black-Huiled White Kafir Corn
Seed, \$1.00 per bushel.
F. M. GHINEE, Winfield, Kan.

10 — BIG-TYPE POLAND BOARS—10
September and October farrow, just right
for hard service. Sired by Gold Standard
Jr. and Wonder Ex. \$30 each. First money,
first choice. Representations guaranteed.
WALTER HILDWEIN, Fairview, Kan.

FALL BOARS FOR SALE

Of the large type, with quality. Heavy honed, well balanced pigs at right prices. JAS. ARKELL, Houte 4, Junction City, Han.

HEED BOAR FOR SALE.

Because I cannot use him longer I will sell my herd boar, Colossus Pan, a son of Colossus and out of the noted Expansion sow, Queen Over Pan. Also fall pigs, either sex. Hubert J. Griffiths, Clay Center, Kan.

J.H.Brown Choice Polands, either sex. Sept. farrow. \$25 each. OSKALOOSA, KAN.

SATISFACTION OR MONEY BACK.
For sale, 12 young boars, will make herd
headers; 30 choice gilts; 100 spring pigs.
Prices reasonable.
W. A. BAKER & SON, Butler, Mo.

IMMUNE SPRING PIGS.

Seventy-five Poland Chinas, out of 700 and 800-pound sows. Booking orders now, \$25 each, either sex; \$45 per pair, when old enough to weam.

J. L. GRIFFITHS, Riley, Kansas.

DUROC JERSEYS

Choice Fall Gilts

By Tatarrax and G. M.'s Tat. Col. at very reasonable prices. Will keep them and breed them for fall litters. Some fine fall boars left at farmers' prices. HAMMOND & BUSKIRK, Newton, Kan.

FOR SALE—Duroc March pigs, \$9.00 and ap, by Model Again, Long Lad, or Tatarrax Box. Five railroads. B. W. BALDWIN. Conway, Kan.

DUROC BARGAINS

Durocs with length, bone and quality. Some good males for sale, also a few choice sows to farrow in June. Immuned against G. Ditmars & Company, Turney, Missouri.

QUIVERA HERD OF DUROC JERSEYS A few choice summer boars and gilts by Quivera 106611 and M. & M.'s Col. 111095, for sale. E. G. MUNSELL, Route 4, Herington, Kan.

DUROC JERSEY BOARS
Of serviceable age. Also 40 fall pigs selected both sexes, at reasonable prices Inspection invited.
HOWELL BROS., Herkimer, Kan.

PERFECTION STOCK FARM DUROC JER-SEY HOGS.

For Sale—20 Spring Duroc Jersey gilts and spring boars, pairs and trios, not related. We sell at farmers' prices. CLASSEN BROS., Union, Okia.

GOLDEN RULE DUROG JERSEYS

Headed by the great Dreamland Colonel ows; carry the blood of noted ancestors. Stock for sale. LEON CARTER, Asherville, Kan.

Crow's Durocs

wenty-one good Duroc boars from 125 to pounds. All vaccinated. Price reason-W. R. CROW, Hutchinson, Kansas.

MARSH CREEK DUROCS.

Bred gilts all sold. Choice fall boars and its at current prices. Choice breeding and individuality.
R. P. WELLS, Formoso, Kan.

OHIO IMPROVED CHESTERS

I. C.—125 Head Hogs

Pigs in pairs. Bred sows, and 40 boars ready for service. Fifty fall gilts.
W. H. LYNCH, READING, KAN.

WOLFE'S O. I. C. SWINE.
Large, prolific kind, March and April
oars. Glits bred or open. Fall pigs. Prices
ow. Pedigrees free. Write your wants.
D. W. WOLFE, Route 2, Carrollton, Mo.

II. W. HAYNES, MERIDEN, KANSAS.

MULE FOOT HOGS

THOMPSON'S growthy Mule Foot Hogs have won more first prizes than any herd in America. Stock of all ages for sale, sired by or bred to my 6 State Fair first prize winning males. Prices low, quality high. Write for prices and information. CHAS. K. THOMPSON, Letts, Ind.

When writing advertisers, please mention Kansas Farmer.

FIELD NOTES

FIRLD MEN.

O. W. Devine......Topeks, Han. Jesse R. Johnson....Clay Center, Kan. W. J. Cody.......Topeks, Kan.

PURE BRED STOCK SALES.

May 21-J. C. Robison, Towards, Han-Oct. 21-22, 1913—Woodlawn Farm, Sterling,

Shorthorns.

April 22—John Burruss & Son, Miami, Mo.
April 24—W. H. Graner, Lancaster, Kan.
June 6—C. S. Nevius & Sons, Chiles, Kan.

May 5-M. A. Sullivan and others, at Humphreys, Mo. B. C. Settles, Palmyra, Mo.,

manager.

May 7—R. F. Tesson at Clayton, Mo. B. C.
Settles, Palmyra, Mo., manager.

May 24—R. M. Ball, Birmingham, Ala.

C. Settles, Manager, Palmyra, Mo.

June 11—H. J. Morris at New Cambria, Mo.

B. C. Settles, Palmyra, Mo., Manager.

Poland Chinas.

April 18—W. F. Fulton, Waterville, Kan.
April 24—W. B. Wallace, Bunceton, Mo.
May 7—C. L. Branic, Hiawatha, Kan.
May 27—H. C. Graner, Lancaster, Kan.
Oct. 21—H. B. Walter, Emngham, Kan.
Oct. 22—H. C. Graner, Lancaster, Kan.
Oct. 23—Walter Hildwein, Fairview, Kan.
Feb. 10—H. B. Walter, Emngham, Kan.
Feb. 11—H. C. Graner, Lancaster, Kan.

Nov. 4—H. D. DeKalb, DeKalb, Iowa. Sale at Council Bluffs, Iowa.

May 5—S. W. Alfred & Son, Enid, Okla.

Note the offer of two Percheron stallions and one jack by Isaac C. Lohman, Route 3, Turney, Mo. One of these stallions is five years old and weighs 1,700 pounds and the other is seven years old and weighs 1,900. The jack weighs 1,000 pounds at seven years.

Erdley Has Seed Corn.

This week we start advertising for H. F. Erdley, seed corn breeder of Holton, Kan. Mr. Erdley has a fine lot of Reid's Yellow Dent and Pride of Holton white corn. The Reid's Yellow Dent is from a field that make 75 bushels per acre; the White from a field making over 100 bushels per acre. This seed was all picked before frost and is very high testing.

Our Printing Suits.

I want you to know that I appreciate the efforts of the printing department of Kansas Farmer in getting out my sale catalog. I think this catalog was a main factor in making my sale a success. In fact a number of breeders told me this was so. I commend both the rapidity and correctness of your work.—JNO. T. HIGGINS, Breeder of Jersey Cattle and Duroc Jersey Hogs, Abilene, Kan.

Good Shorthorn Bulls.

Good Shorthorn Bulls.

G. A. Laude & Sons of Rose, Kan., this week offer two splendid bulls fit for heavy service. Such bulls are scarce and anyone in need of something that can be turned out with a good sized herd should write Laude & Sons at once. These bulls are 19 and 27 months old, fairly well grown, and in just the best possible condition for good results. They also offer a fine show prospect, 10 months old, and a nice young bull that will serve a small herd of cows. This offering is all good. Look up their ad and write them at Rose, 125 miles southwest of Kansas City. Shipments on Missouri Pacific, Santa Fe or Katy.

Valley Falls Polands,

Walley Falls Polands.

M. T. Williams, the very successful Poland China breeder located at Valley Falls, Kan., asks us to claim October 30 as the date for his fall sale. It will be remembered that Mr. Williams made about the best sale of the territory two years ago. Last year, owing to the fact that he bought a new farm and moved onto it, he was unable to raise enough pigs to make a sale, but this year he has his usual good bunch and invites prospective buyers to see them any time during the summer. Mr. Williams now has a farm with all natural advantages for raising hogs, and the ground is being seeded to grass as rapidly as possible. It is located about six miles from Valley Falls. The spring pigs, of which there are a choice lot, were sired by the boars, Mammoth Ideal and Golddust Hadley, a pair of as good boars as can be found. The pigs are out of a line of sows unexcelled for big blood lines and splendid individuality. Several were bought and added to the herd during the past winter. Mr. Williams, besides being a good feeder and all around hog man, is a fine fellow, and it is a pleasure to deal with him. He has on hand, besides spring pigs, a few fall boars that are all right for service. When corresponding with him about hogs, always mention Kansas Farmer.

Burruss & Son's Shorthorn Sale.

Burruss & Son's Shorthorn Sale.

John Burruss & Son, of Riverside Farm, Carroll County, Missouri, claim April 22 as the date of their dispersion stock sale. This dispersion sale will include 40 head of double standard Polled Durham and Shorthorn cattle. This herd was established in 1873 and is without a doubt one of the best bred herds now in existence, and every animal to go in the sale, with the exception fo the herd bull. was bred on the farm. They have been culled down to six choice noted families. Barrington, Kirklevington, Rose of Sharon. Young Mary, Loudon Duchess, and Bloom, and the cattle in this sale represent the very best branches of their respective families. They range in ages from four months to six years, and all cows and helfers of breeding age are bred. The offering will include a number of choice young bulls, also a number of imported cows. Breeders will find this entire offering a choice lot of individuals, and the blood lines represented are the best of the breed. Burruss & Son are the only breeders in that section of Missouri, and breeders from a distance will have a rare opportunity to secure breeding stock that is absolutely right in every way at prices that will be reasonable. Riverside Farm is near Miami Station, on the Wabash Railroad, 80 miles east of Kansas City. They will also sell 40 head of fine mules. Send for catalog at will interest you. Please mention Kansas Farmer when writing.

POLAND CHINAS

POLAND CHINAS

Dean's Mastodon Polands The big-boned type, will weigh when mature 300 sale. ALL IMMUNIZED BY DOUBLE TREATMENT AND ARE IMMUNE. Phone, Dearborn; Station, New Market, and Postoffice, Weston, Mo. Address CLARENCE DEAN, WESTON, MO.

WRAY & SON'S BIG TYPE POLAND CHINAS

Herd headed by Sterling Prince, one of the largest and best 2-year-old boars of the breed. Assisted by Chief Price's Wonder, one of the best sons of the great breeding boar, Chief Price Again. Young stock for sale. Better than your grandpa ever raised.

B. T. WRAY & SONS, Hopkins, Me.

EXPANSIVE CHIEF, BY OLD EXPANSIVE, FOR SALE.

Owing to the fact that I own another good son of Expansive and have considerable of his get, I will sell EXPANSIVE CHIEF. Will be glad to show this boar and his get to any breeder that desires to place an outstanding boar at the head of his herd. Also 15 fall boars, sons of Expansive Chief, Long King's Best and Expansive Wonder. Inspection invited.

H. B. WALTER, EFFINGHAM, KAN.

BRED SHROPSHIRE EWES Both imported and American bred, and all matter to the best imported rams obtainable. These rams have won many important English prizes, as well as the most coveted American blue ribbons, and now head the flocks at Henley Ranch.

Our flocks are large and we can offer you the best values on all classes of Shropshires. We absolutely guarantee all stock shipped. Place your order with us early, while the ewes can be safely handled.

HENLEY RANCH, GREENCASTLE, MO.

Members American Shropshire Registry Association. Henley & Vrooman, Managers.

A New Advertiser.

Recently a Kansas Farmer representative visited L. L. Clark of Meriden, Kan. Mr. Clark breeds big-type Poland China swine and two varieties of poultry. The swine herd was established about two years ago. The herd boars are Big Four Wonder and Orange Model 2d, the last named boar being owned jointly with W. E. Long. Big Four Wonder gives promise of growing into a boar of immense size, and he is already proving himself a breeder of correct type pigs. He was sired by Mouw's Tecumseh, owned by Peter Ellerbroek and standing next to the great A Wonder. The dam of Big Four Wonder was Ellerbroek's Pride, sired by A Wonder. This sow is also in Mr. Clark's herd and is suckling a fine litter now by Orange Model 2d, the great son of Big Orange. Mr. Clark has about 40 choice pigs sired by the boars already mentioned and out of sows bred along about such lines, one being a daughter of Ellerbroek's Pride. One of them is a daughter of Long's A Wonder. Mr. Clark has an ideal hog farm, with plenty of shade, water, etc. The poultry consists of Cornish Games and Rose Comb Rhode Island Reds. Eggs are offered for the low price of \$1 per setting. See advertisement in this issue and write, mentioning Kansas Farmer.

write, mentioning Kansas Farmer.

Why Horses Should Be Clipped.

Horses represent a substantial investment and deserve good care. In their natural state they were not obliged to work. Since they are required to do labor they should be kept in the best condition for it. Few, if any, horses are at their best when the time of changing the coat comes. Unnatural conditions should be provided against by clipping. How to properly care for work horses is much better understood now than ever before, and those who have studied the horse most carefully and tried different remedies are agreed that a good clipping is very beneficial to work animals. The skin is a most important organ for the elimination of waste and it cannot properly perform its functions if it is not kept in a healthy condition with pores open, etc. Animals performing work with a long coat suffer an unnecessary drain on the system. The sweat of the horse is not a simple mixture of water and saits, but of water, proteid and saits, and has observed loss of flesh which follows horses being worked unclipped, as was the practice a generation ago, is thus readily explained. The stable of an unclipped animal, with a long winter coat, have not been exaggerated. This covering, which, in a state of nature was admirable, becomes, under artificial conditions, a source of positive danger to him. Unless the circumstances are exceptional, all horses should be clipped, and it will be found as a result that they feed, thrive and work better and are less subject to colds and coughs. Many farmers claim, and we know they do so correctly, that it insures a freedom from coughs and colds that they did not enjoy before its practice was commenced on their teams.

Graner Shorthorn Sale.

Graner Shorthorn Sale.

On Thursday, April 24, at his farm one mile north of Lancaster, Kan., Mr. W. H. Graner will sell 50 head of pure-bred Shorthorn cattle. Of this number 20 are choice young bulls ranging in age from 8 to 24 months. About all of them are nice roans and all but a very few were sired by Mr. Graner's great breeding buil. Ballechin Archer, by Captain Archer and out of the great imported cow. Ballechin Maid. Thirty head of females are included, quite a number with calves at foot and the others all bred to the bull already mentioned. Also a choice lot of heifers by the same bull. The cows are for the most part Young Marys and Rose of Sharons. They have lots of scale and represent good milking strains. Mr. Graner is an old-time breeder, and since he has been breeding Shorthorns he has sold, by actual count, nearly 1,000 bulls. His bulls have given quality to the herds of Northeast Kansas, and this sale, being held at a time when the future is so bright, certainly affords a most excellent opportunity, for good cattle men to buy the best. For full information write Mr. Graner, mentioning Kansas Farmer.

Branic Will Disperse, May 7.

Branic Will Disperse, May 7.

One of the greatest events of its kind for the time of year will be the big dispersion Poland China sale to be held at Hiawatha, Kan., by L. C. Branic of that place on Wednesday, May 7. Mr. Branic has decided to take this step after much hesitancy and only because of sickness in his family, and the further fact that his business in the early fall makes it almost impossible for him to give the hogs the attention they must have. However, the time should be opportune on account of the big shortage in hogs and the few pigs saved by most breeders, Mr. Branic has for several years been spending lots of money and time in getting together a herd of sows that suited his ideas, and about a year ago went out and bought one of the greatest boars ever brought into the state. And so with these facts in view it is no wonder that Mr. Branic should make this sale with considerable reluctance. But he is convinced that it is the best thing to do. and he is going to be satisfied with whatever the stock brings. Of the 60 head to be sold about 12 are outstanding herd sows sleed by some of the most noted boars that have lived within the past dozen years. These

HAMPSHIRE HOGS



ECLIPSE FARM HAMPSHIRES,
Tried sows and
gilts for sale, bred
for spring farrow. A
few fall pigs left. A. M. BEAR, Medora, Kan.

High quality Hampshires. Herd headed by T. R. Fancy, prize winner 1912. Boars and gilts, January farrow, priced right.

S. E. SMITH, LYONS, KANSAS.

HOLSTEIN CATTLE

M. E. MOORE & CO.

Cameron, Missouri.

A special bargain in registered young buils, sired by our herd buil, and tuberculin tested. Females all sold at present.

BUTTER BRED HOLSTEINS.
A few choice registered cows and heifers for sale at very reasonable prices. All have A. R. O. records and the best pedigrees. Write me your wants today, as these bargains will not last long.
J. P. MAST, Scranton, Kan.

MISSOURI HOLSTEINS.

Largest herd of Holsteins in the state.
Nothing but registered stock for sale. Eighty head to choose from. Twenty-five bulls, all ages. Will sell one to a carload. Write us just what you want and we will describe and price some to pick from.

S. W. COOKE & SON, Maysville, Mo.



CHENANGO VALLEY GRADE HOLSTEINS Fifty extra fine, well bred, nicely marked young cows to freshen in two months. Also high grade, well bred heifers coming two and three years old and bred to registered bulls.

F. J. HOWARD, Bouckville, N. Y.

HOLSTEINS FOR SALE.
Fifty head of registered helfers and bulls;
also 75 head bred helfers and young cows,
\$58.50 up. Come and see them.
M. P. KNUDSEN, Goncordia, Kan.

CORYDALE FARM HERD. Holsteins. For sale, three registered bull calves, 1 to 5 months old. Also 20 head of % or better grade Holstein cows and heifers.
L. F. CORY, Belleville, Kansas.

HOLSTEIN BULL CALVES always on hand, and worth the price.
H. B. COWLES, Topeka, Kansas.

sows were selected with considerable care and at long prices. They are now just in their prime and should be eagerly sought after by breeders of at least three states. These sows have litters which will be sold, and the sows themselves will be bred for fall litters. Included in the offering is a very choice lot of fall boars and glits sired by O. K. Lad. This part of the offering should prove real attractions; the boars for use and the glits should be bought by breeders to fill in winter sales. The fall stuff has gone through the winter in nice shape and the entire offering will be sold in the best possible condition for good breeding results. Write now for catalog, mentioning Kansas Farmer.

Kansas Farmer.

W. E. Long's Polands.

W. E. Long, the old reliable breeder of Mastodon Poland Chinas at Meriden, Kan., claims February 12 for a winter sale and will dispose of his boars at private treaty. Mr. Long has a good bunch of pigs for quality and size, but his numbers are not large. However, he has some good fall stuff, both in boars and gilts, and is selling now without any advertising and mostly to his old customers that he has dealt so fairly with in the past. A big per cent of the spring pigs were sired by Mr. Long's herd boar, Expansive Wonder, by Expansive, the top boar sold at H. B. Walter's sale last fall. He is a full brother to Expansive Chief and individually one of the best of the Expansives. His pigs show up well and Mr. Walter has on his farm some fall boars by him that are outstanding. This boar is sure to prove a great success when mated with big Mastodon sows, such as Mr. Long has in his herd. He breeds lots of quality, combined with size, and, mated with such sows, is sure to bring splendid results. Others of the pigs are by Orange Model 2d, a very large-type boar bred in Iowa and owned jointly by Mr. Long and L. L. Clark of Meriden. A few are also by King Mastodon 2d. If writing Mr. Long any time about his Polands, please mention Kansas Farmer.

HORSES AND MULES

PRAIRIE VIEW JACK FARM

LAWSON, MO.

eadquarters for Missouri, Kentucky
Tennessee Jacks; sold singly or in
lots. I guarantee more size, more
bone and more good jocks and
jennets than any breeder in
Missouri. Every one black and
from 15 to 16 hands high. Have
them all ages. Thirty-five years
doing business with the public,
never had a lawsuit with one of
customers.

ED BOEN, Lawson, Mo. on 28 Miles from Kansas City.



JACKS AND JENNETS

17 head large mammoth black jacks for sale, ages from 2 to 5 years; large, heavy-boned, broken to mares and prompt servers. Prices reasonable. Come and see me.

PHIL WALKER, Moline, Elk Co., Kansas.

Thompson's Mammoth Jacks

Forty head of Mammoth Jacks and Jennets. Ten big, high-class Jacks ready for service, from 15 to 16 hands high. Black with white points. Herd headed by Gen. Wood 850, winner U. S. hamplonship cup, 1907. Jacks sold on a uarantee and priced right.

C. D. THOMPSON, Brimson, Missouri.

E. SMITH STOCK FARM.



Black Mammoth Jacks and Jennets, Percheron Horses. You will find what you want in large boned, registered, 15 to 16 hands standard. Special prices on fall sales. Both phones. AL. E. SMITH, Lawrence, Kan.

to \$1,000, two higher. All draft breeds.
Reference: Any banker in Creston.
FRANK L. STREAM,
Creston, Iows.

EXCELSIOR SHETLAND PONIES. Registered stock. Ponies for sale, reason-ble prices. Spotted and solid colors. W. Fulcomer, Belleville, Kan.

JERSEY CATTLE

Register of Merit Bull—Born May 11, '12. Solid fawn, black tongue and switch. Sire, Flora's Golden Fern 69584 (son of Golden Fern's Lad), sire of four in R. of M. Dam, Sultan's Beauty 231914, R. of M. 1719, test 512 ibs. 1 oz. butter 6ne year, 23 months old at start of test. Daughter of Oakland's Sultan. Sire 3 in R. of M. Second dam an imported granddaughter of Miss Viola, P. S. 9644, H. C. (sister of Noble of Oaklands). Cannot be excelled. Price, \$150.00.
R. J. LINSCOTT, Holton, Kansas.

GOLDEN RULE JERSEYS.

Richly bred heifers and bull calves for sale. The blood of Golden Lad and other noted sires. Farm one mile north of town.

60 HEAD of solid fawn-colored Jersey cows and heifers of fashionable breeding. Will make special prices on car lots. Most of them in calf to "Blue Boy Baron," sired by half brother to Noble of Oakland. His five nearest dams on mother's side made 102 pounds butter in 7 days. A few light fawn bull calves. S. S. Smith, Clay Center, Kan.

BANKS' FARM JERSEYS

Quality with milk and butter records.
One of the best sons of CHAMPION FLYING
FOX, imported, at head of herd. Stock for

W. N. BANKS, Independence, Kan.

WINELAND FARM JERSEYS.

One of the strongest official record herds in the west. For sale, 10 choice young bulls, sired by Imp. "Duke's Raleigh," and other good bulls. Out of cows now undergoing or having authenticated tests. Also, 25 females of different ages. H. C. YOUNG, Lincoln,

REGISTERED JERSEYS AND POLANDS
Best strains and individuality. Fed and
handled intelligently. Stock for sale always.
O. E. NICHOLS, Abilene, Kan.

JERSEYS FOR PROFIT AMERICAN JERSEY CATTLE CLUB, 324 W. 23d St., New York.

SHORTHORN CATTLE

Choice Young Shorthorns

Several blocky, sappy bulls, in age from 7 to 12 months. Females all sold. 25 choice strictly big type Poland China fall boars and gilts. \$20 to \$25 each. IMMUNE FROM CHOLERA.

S. B. AMCOATS, Clay Center, Kan.

PEARL SHORTHORN HERD.

One of the oldest and strongest herds in the west. Scotch and Scotch-topped. Reds and roans. Good individuals and tracing to noted ancestors. Choice young bulls for sale. Sold out on females. Can ship over Rock Island. Santa Fe or Missouri Pacific. Inspection invited.

C. W. TAYLOR, Abilene, Kan.

High Class Bulls

Two, fit for heavy service, in just right condition. \$150 each. Extra show prospect, fit to head Shorthorn herd, for light service, at \$150. Nice one for light service at \$100. G. A. LAUDE & SONS, Rose, Kan,

INOUIRIES FARM

Continued From Page Sevent

of butter shall be taxed ten cents a of butter shall be taxed ten cents a pound. The object of this tax is to make the coloring of oleo prohibitive and so prevent the imposition of a fraud upon the consumer. The Haugen and Lever bills, now pending, and which if enacted into law will take the place of the present law, provide only for the taxing of oleo at the rate of one-fourth cent a pound but the Haugen bill, the dairy-man's measure. limits oleo to a certain man's measure, limits oleo to a certain color and which is the natural color of the animal fats entering into oleo

to the acre. I am sowing 30 acres every spring and plow under 30 acres every summer. It has paid me well every year. summer. It has paid me well every year. If the farmers of Kansas will grow sweet clover where it is not practical to sow alfalfa or clover, and plow the same under and sow the ground to wheat and follow with corn, the year's crops will show up better. It will put the hardest soil in fine plowing condition and will keep the sand from blowing.

"This is a practical experience and not a theory. The price of a bushel will



SIX BINDERS DRAWN BY A SINGLE ENGINE GET OVER THE GROUND RAPIDLY.

and which color will not approximate the color of butter to such an extent as to deceive the consumer and so cause him to pay butter prices for a product which

is not butter at al.

The natural color of butter is yellow and the standard color for butter is the shade of yellow which the cow herself gives it when she is on grass. During the season when cows are on grass the creameries use no color in butter. When cows are on dry feed the butter is colored so that the shade of yellow is as near that of grass butter as is possible. The consumer of butter demands yellow butter. He wants uniform color. This is one of the demands of the trade. Since the cow colors butter herself a part of the year and can not avoid so doing, it is regarded as fair when she is on dry feed, that her product be colored to the grass shade.

The artificial coloring of oleo permits a fraud and it is to prevent this that the laws are made governing the color-

Twenty Years Growing Sweet Clover. Our subscriber G. L., Barton County, says he has been growing sweet of ever for 20 years. He writes in answer to a KANSAS FARMER subscriber:

"Sweet clover does not have the feeding value of alfalfa, neither will it produce as much hay. I wouldn't advise any one to plant it for feeding purposes alone. On soil that will not raise alfalfa or clover I would plant it the same as alfalfa or clover. It can be sown in wheat or oats during the winter.

"Cut the first year's crop for hay when the first blossoms begin to show; do not wait for 10 per cent of the sweet clover to blossom. If you wish to keep the land in sweet clover cut one crop and let second crop stand for seed crop. If you want it for hay alone, cut another crop and let it stand for winter and it will make some fair fall and winter pasture.

"I had a pretty good stand on my pasture. It is the first to show up in the spring it makes fine horse and cattle pasture. In fact it will be good all summer for horses and cattle. It will taint the milk so it will not be good for your milk cows. Hogs do well on it, but don't forget that it dies out the second year. I have cut prairie hay that had year. I have cut prairie hay that had about 20 per cent sweet clover in it. The horses ate it much better than prairie hay alone. "For field manuring sweet clover can

not be beaten. By sowing about 10 pounds the last time through the corn, it will make a good stand and furnish early spring pasture and can be plowed under that summer for wheat. This will produce a crop of wheat equal to sod wheat.

"Sweet clover is not hard to start. It grows even in sandy soil. Three years ago I had about 14 acres of land on which I could not raise enough to pay for the work I put on it. I sowed two bushels on the 14 acres in the spring. I got a good stand and pastured it all summer and part of the next spring. I plowed it under in July and sowed it to wheat that fall, It made 23 bushels of wheat

not break you. Try it the same as you would alfalfa or clover."

BOYS! KANSAS FARMER IS GOING TO GIVE AWAY A \$275 YALE MOTORCYCLE FREE.

You Can Win It and Earn a Cash Salary of from \$8 to \$18 per Week at the Same Time.

KANSAS FARMER is going to give away a \$275 Yale Motorcycle, a \$75 Diamond Ring, a \$50 Bicycle and two \$50 College Scholarships a total of \$500 in prizes, scholarships a total of \$500 in prizes, in a subscription contest just starting on this paper and closing June 28, 1913. Send in your names and addresses, boys, this is a fine chance to win a fine, speedy 7-horsepower Motorcycle and MAKE MONEY WHILE DOING IT.

A different kind of a contest than any A different kind of a contest than any you ever heard about before. You get paid for every subscription you secure in this contest while you are earning one of these valuable prizes. You can't lose in this contest. You can make a cash salary of from \$8 to \$18 per week just working during spare time. It costs you nothing to enter, and each contestant who enters during the next twenty days will receive a FREE PREMIUM and FREE OUTFIT and our special plan to secure subscriptions FAST and make from \$8 to \$18 per week. See the full from \$8 to \$18 per week. See the full page announcement and picture of the motorcycle on page 2 of this issue, then send in your name and address at once to Contest Manager, KANSAS FARMER Motorcycle Contest, 625 Jackson St., Topeka, Kan.

Roy Johnston's Poland Chinas Average \$50.
On April 3, Roy Johnston of South Mound, Kan., pulled off a very successful sale. The bred sows and gilts averaged \$50. A. E. Dougherty of Stilwell, Kan., topped the sale at \$107 for No. 6 in catalog. The sale was a quick, snappy one, and the prices received were very satisfactory. Following is report of all selling for \$30 or more:

2—R. M. Dolesar \$61.00
3—Ed Shuky, Home, Mo. 50.00
4—I. E. Knox \$60.00
5—S. N. Hodson, Parker, Kan. 42.00
5½—A. E. Dougherty, Stilwell, Kan. 50.00
6—A. E. Dougherty, Stilwell, Kan. 50.00
8—C. E. Bean, Garnett, Kan. 71.00
9—I. L. Swing, Independence, Kan. 44.00
10—Ed G. Caroot, Thayer, Kan. 41.00
11—H. W. Hook, Attica, Kan. 60.00
12—A. N. Jones, Lawrence, Kan. 51.00
13—W. H. Charter & Son, Colony, Kan. 65.00
14—A. E. Dougherty \$70.00
15—H. E. Johnson, St. Paul, Kan. 43.00
16—I. L. Sweeney \$1.00
17—H. W. Hook \$1.00
19—J. B. Moore, Americus, Kan. 48.00
20—H. W. Hook \$1.00
21—Ed G. Caroot \$4.00
22—H. W. Hook \$1.00
23—Harry Wales, Peculiar, Mo. 46.00
24—H. W. Hook \$4.00
25—Deming Ranch \$4.50
25—Deming Ranch \$4.50
26—B. D. Moore, Americus, Kan. 52.00
31—I. L. Sweeney \$4.00
28—H. W. Hook \$4.00
29—J. B. Moore, Americus, Kan. 52.00
31—I. L. Sweeney \$4.00
31—I. L. Sweeney \$4.00
32—B. R. Johnson, Erle, Kan. 50.00
31—I. L. Sweeney \$4.00
31—I. E. Knox, South Haven, Kan. 50.00
31—I. E. Bean \$4.00
314—I. E. Knox, South Haven, Kan. 40.00
314—I. E. Enean \$4.00
314—I. E. Knox, South Haven, Kan. 40.00
315—I. E. Enean \$4.00
316—I. E. Fazler \$4.00
3176—I. E. Knox, South Haven, Kan. 40.00
3176—I. E. Knox, South Haven, Kan. 40.00
3

RED POLLED CATTLE

PHILIPS COUNTY RED POLLS. For Sale—Cows and heifers, sired by the great Launfal and bred to Cremo 22d. CHAS. MORRISON & SON, Philipsburg, Kan.

AULD BROTHERS Red Polled Cattle

Five head of bulls from 11 to 17 months old, ready for service and for sale right. Herd headed by Prince, one of the best sons of Actor. AULD BROS., Frankfort, Kansas

Coburn Herd of Red Polled Cattle and
Percheron Horses.

25 extra good young buils and 7 first class young stallions for sale at bargain prices. Also young cows and helfers.

GEO. GROENMILLER & SON,
Pomona, Kansas.

SHROPSHIRE SHEEP

Twenty Yearling and Two-Year-Old Shropshire Rams, sired by imported sire and out of registered ewes, priced right for quick sale.

ED GREEN, Howard, Kan.

POLLED DURHAM CATTLE

ROAN HERO, THE INTERNATIONAL CHAMPION, AND ARCACIA PRINCE X 8079-308159

the first prize winners, head my herd of Double Standard Polled Durhams. M. P. Ry. 17 miles S. E. of Topeka, Kan. Farms adjoins town. Inspection invited.

D. C. VAN NICE, Bichland, Kan,

POLLED DURHAMS.

One yearling bull and several bull calves sired by Roan Choice (junior champion of 1911), also a few young cows and heifers from the greatest show and prize winning herd in Kansas, priced reasonable.

C. J. WOODS, CHILES, KANSAS.

GALLOWAY CATTLE

SMOKY HILL RANCH.

Largest Galloway. Herd in the West.

Twenty-five coming yearling bulls. Also
trained Russian wolf hounds. Orders booked
for pupples when old enough to wean. First
orders will have choice.

E. J. GUILBERT, Wallace, Kansas.

OXFORD DOWN SHEEP

Largest flock west of Mississippi River. Fifty rams, 100 ewes for sale. All stock sired by imported rams, 140 ribbons at the Iowa State Fair in last-eight years, Call on or address, John Graham & Son, Eldora, Ia.

AUCTIONEERS.

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Will sell you a Home Study Course on Practical Auctioneering for \$5.00 per month for ten months, or \$40.00 cmh. Particulars free. W. B. CARPENTER, President, 1400 Grand Ave., Kansas City, Mo.

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W. B. CARPENTER Live Stock and Real Estate Auctioneer 14th and Grand Ave., Kansas City, Mo.

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JOHN D. SNYDER, Kansas Live Stock Auctioneer. Write or wire for date. Hutchinson, Kan.

Col. N. E. Leonard Live Stock and General Auction-eer. Use up-to-date methods. Pawnee City, Nebraska,

BRANIC'S DISPERSION POLAND CHINA SALE

HIAWATHA, KANSAS, WEDNESDAY, APRIL 23, 1913

SIXTY — HEAD OF FOUNDATION HERD SOWS, FALL BOARS AND GILTS — SIXTY

Owing to sickness in my family and for business reasons I am compelled at this time to disperse my entire herd of registered Poland Chinas. I am loath to take this step, but feel that the breeding fraternity will appreciate the great sows that are being catalogued and buy them at least so I can afford to sell, and the buyer make money and lots of it, for the conditions were never better.

Twelve Foundation Herd Sows, sired by such boars as Gold Metal, O. K. Lad, Union Leader, Prince Hadley, Nebraska Jumbo, etc. All of these have litters at foot by the great O. K. Lad. They will also be bred back for fall litters.

Twelve Extra Choice Fall Boars, sired by O. K. Lad.

The remainder Summer and Fall Gilts, choice individuals, good buys for breeders wanting sows for next winter's sales.

O. K. LAD WILL BE OFFERED PRIVATELY SALE DAY.

COL. CHARLES SCOTT, Auctioneer.

L. C. BRANIC, Hiawatha, Kansas COL. CHARLES SCOTT, Auctioneer. TESSE JOHNSON, Fieldman.

FULTON'S REGISTERED BIG TYPE POLAND AUCTION WATERVILLE, KANSAS, FRIDAY, APRIL 18, 1813

THIRTY HEAD IN ALL, COMPRISING EIGHT CHOICE FALL BOARS, TEN BRED SOWS AND GILTS, TWELVE OPEN GILTS.

Sired by such boars as Chief Hutch 61094, Bell Boy 58287, Cavitt's Masterpiece 61916, and Copeland's Hadley 56995. Out of wonderfully big sows of Hutch and Expansion breeding. I regret to make this sale, but am compelled to because I haven't the room to care for them properly, otherwise they would not be for sale. I will also sell one five-year-old fresh pure-bred Jersey cow, and offer privately eggs from high-scoring prize-winning S. C. Minorca chickens. Write for catalog, and either come or send bids to auctioneer or fieldman in my care at Waterville.

AUCTIONEER-T. E. GORDON. FIELDMAN-JESSE JOHNSON.

W. F. FULTON, WATERVILLE, KANSAS

DEIERLING & OTTO'S

BIG WINNING JACKS

40 HEAD OF MAMMOTH JACKS 40



We are showing the best lot of big, high-quality jacks that can be found anywhere. They are from 2 to 5 years old, from 15 to 16 hands high, and are all black with white points.

Our offering includes our prize winners at Missouri, Iowa and Illinois State Fairs, 1912. We have the big, high-quality kind that make good. We sell our jacks on a positive guarantee. Queen City is on the Moberly-Des Moines branch of the Wabash Railway. Good train service. Barns in town. Come, let us show you.



let us show you.

DEIERLING & OTTO, QUEEN CITY, MISSOURI



I have now for sale a lot of personally selected coming 2 and 4-year-olds as good as France and Belgium can produce. Good heavy bone. Straight draft-type with quality and the best of breeding. I give a giltedge guarantee, good for two years, with each horse sold. All in just good breeding condition and will be a good investment to the purchaser. I can save you some money on a stallion. Barns four blocks from the A. T. & S. F. depot.

W. H. RICHARDS, - - EMPORIA, KANSAS

STALLIONS AND MARES AT BARGAIN PRICES

Forty Percheron Stallions, 2 to 4 years old; several a ton or over.

Fifteen Belgian Stallions, the good kind.

Thirty Percheron Mares, 22 showing heavy with foal. Ten Shere Mares and Stallions.

Ten head of good Jacks.

If you want a Stallion, Mare or Jack, come and get a bargain. I mean business.

L. R. WILEY,

EMPORIA, KANSAS

For Sale at Riverside Stock Farm—Registered Percherons.

10 head of young stallions from 2 to 3 years old. 4 head coming 3 years old that weigh from 1650 pounds to 1800 pounds. 4 head coming 2 years old that weigh from 1500 to 1600 pounds, blacks and dark greys. They are the big bone kind. 2 head standard bred and weigh from 1250 to 1250 pounds. 4 head of large kind. 2 head standard bred and weigh from 1250 to 1950 pounds. 4 head of large kind. 2 head standard bred, from 15 to 15½, well broke. 2 black registered Peryoung Jacks, Mammoth bred, from 15 to 15½, well broke. 2 black registered Peryoneron mares and 1 imported German Coacher, Mikus 4861 (133105), weight 1550, cheron mares and 1 imported German Coacher, Mikus 4861 (133105), weight 1550, cheron mares and 7 years old. A warrantee goes with every animal as to soundness and breeding.

50-PERCHERON STALLIONS-50

Bishop Brothers have 50 big boned stallions that weigh 1,700 to 2,100 pounds that bey can and will sell for less money than any firm in the business, quality condered. Write us what you want.

BISHOP BROS., TOWANDA, KAN.

PARK & FIRKINS' PERCHERONS AND JACKS.

Imported and American-bred stallions. All blacks and grays, all registered in P. S.

America. Some ton 3-year-olds. Also Kentucky and Missouri Mammoth Jacks from
15 to 154 hands high, heavy bone and good performers, registered. Everything sold
with safe breeding guarantee. Barns in town, 50 miles north of Kansas City, on Rock
Island Railroad, 35 miles east of St. Joseph on Burlington Railroad.

J. E. PARK AND A. A. FIRKINS, CAMERON, MO.

AT LANCASTER, KANSAS, THURSDAY, APRIL 24, 1913

Twenty bulls, in age from 8 to 24 months, mostly roans. Nice individuals and sired for the most part by my herd bull, BALLECHIN ARCHER 308225 by Ceremonious Archer and out of Imp. Ballechin Maid.

Thirty choice cows and heifers, mostly sired by this bull or in calf to him, a number with calves at foot by him. The cow herd all trace to Young Mary and Rose of Sharon. The offering will be presented in ordinary flesh and sold absolutely upon merit. Write for catalog.

W. H. GRANER, LANCASTER, KANSAS

At Bethany, Missouri, April 24, 1913. Forty head of cows and heifers, choice individuals and best blood lines of the breed. A chance to buy Jerseys that are right at your price. For catalog address

CRESCENT JERSEY FARM CO., Bethany, Mo.

R. R. Bailey, Auctioneer.



Sunflower Herd Holstein-Friesians

An A. R. O. herd, where records are made, and since December, 1912, am placing all A. R. O. cows in semi-official yearly test. Inka Hijiaard DeKol 76076 has produced from December 1 to March 1 over 6,700 pounds milk and over 200 pounds butter fat and still milking above 70 pounds a day. Cows in this herd have A. R. O. records as high as 18 pounds butter seven days at under two years to 25 pounds at full age. Young bulls and service bulls from this herd will add materially to the value of your present herds.

Several nice straight, registered cows for sale that are due to calve soon. Tirania Lady Aouda 5th King 61250 and Sir Pontiac Artis De Kol 77152—head this herd, a combination hard to beat.

F. J. SEARLE, Prop. Oskaloosa, Kans.

R'S PERCHER

A CHOICE LOT OF STALLIONS AND MARES TO SELECT FROM.

Owing to this time of season, we are quoting prices that will certainly interest you. Also 15 good Kentucky Jacks.

INQUIRE ABOUT THEM.

C. W. LAMER & COMPANY, SALINA, KAN.

Imported Stallions: Percheron, Shire, Belgian

Each year we show our new importation the same month they land. Each year they win more than all other exhibitors combined. At the American Royal this year they won second on 4-year-old Percheron; first, third and fourth on 3-year-old; first and third on 2-year-old, and first and champion group of five stallions. Our horses are handsome and the best to buy; our guarantee and insurance the very best. PERCHERON IMPORTING CO., Chas. R. Kirk, South St. Joseph, Missouri.

Imported and Home Bred Stallions and Mares

PERCHERONS—BELGIANS—SHIRES



Percherons—Belgians—Shires
The best importation we ever
made is now in our barns
ready for inspection. The
mares include some of the best
fillies that came out of the
Perch this year. See what we
have before buying elsewhere.
Address, HART BROS., Osceola, Iowa.

HORSES and JACKS

FOR SALE—Two Percheron Stallions, aged 5 and 7 years. Will weigh 1,700 and 1,900 pounds. Both are fine breeders. Also one 7-year-old jack, weight 1,000 pounds; black with white points. A good performer and fine breeder. All priced to sell quick.

ISAAC C. LOHMAN, R. 3, Turney, Mo.

MENTION KANSAS FARMER WHEN YOU WRITE.



Increased orders over 100%

THE leading agricultural states of our own country, and the three principal agricultural provinces of Canada, have already contracted for over 100% more Overlands than they did a year ago. They wanted even more than this but we could not supply the demand.

American farmers have already taken more than twice as many Overlands as they bought last year—and the season is only half gone.

A few of the individual increases for Overlands for 1913, over 1912, by states and provinces, are as follows: North Dakota, 152%; Kansas, 134%; California, 101%; Colorado, 93%; South Dakota, 85%; Texas, 84%; Minnesota, 78%; Iowa, 61%; Oklahoma, 61%; Nebraska, 54%; Saskatchewan, Canada, 150%; Alberta, Canada, 150%; Manitoba, Canada, 150%.

We are shipping over 150 cars a day.

In spite of that, we are over 5000 cars behind our "immediate shipping orders."

If you are in the market for a car examine this Overland at once.

It costs 30% less than any other similar car made, and in most cases is bigger, better made, more powerful, more comfortable, more serviceable and more completely equipped than any of the average \$1200 cars manufactured.

There is an Overland dealer near you. Look him up and ask to see this car—the best buy in America. Catalogue on request to the factory. Please address Dept. 82

The Willys-Overland Company, Toledo, Ohio

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Completely equipped

Self-starter
30 Horsepower
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Completely equipped

Remy Magneto
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Vision Wind-Shield
Prest-O-Lite Tank